IMPORTANT NOTICE

THIS OFFERING (AS DEFINED BELOW) IS AVAILABLE ONLY TO INVESTORS WHO ARE EITHER (1) QUALIFIED INSTITUTIONAL BUYERS ("QIBs") WITHIN THE MEANING OF RULE 144A ("RULE 144A") UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR (2) PERSONS WHO ARE OUTSIDE THE UNITED STATES IN ACCORDANCE WITH REGULATION S ("REGULATION S") UNDER THE SECURITIES ACT (AND, IF INVESTORS ARE RESIDENT IN A MEMBER STATE OF THE EUROPEAN ECONOMIC AREA (THE "EEA") OR THE UNITED KINGDOM, NOT AN EEA RETAIL INVESTOR OR A UK RETAIL INVESTOR (EACH AS DEFINED BELOW).

IMPORTANT: You must read the following before continuing. The following applies to the preliminary offering memorandum following this notice (the "offering memorandum"), and you are therefore advised to read this carefully before reading, accessing or making any other use of the offering memorandum. In accessing the offering memorandum, you agree to be bound by the following terms and conditions, including any modifications to them any time you receive any information from us as a result of such access. The offering memorandum has been prepared in connection with the proposed offering and sale of the securities described therein (the "offering"). The offering memorandum and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other person.

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER OF SECURITIES FOR SALE IN ANY JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE SECURITIES HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE SECURITIES ACT OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR ANY OTHER JURISDICTION AND THE SECURITIES MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES, EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS.

THE OFFERING MEMORANDUM MAY NOT BE FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THIS DOCUMENT, IN WHOLE OR IN PART, IS UNAUTHORIZED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS. IF YOU HAVE GAINED ACCESS TO THE OFFERING MEMORANDUM CONTRARY TO ANY OF THE FOREGOING RESTRICTIONS, YOU ARE NOT AUTHORIZED TO, AND WILL NOT BE ABLE TO, PURCHASE ANY OF THE SECURITIES DESCRIBED HEREIN.

Confirmation of your representation: In order to be eligible to view the offering memorandum or make an investment decision with respect to the securities described therein, investors must be either (1) QIBs or (2) persons who are outside the United States in an offshore transaction outside the United States in reliance on Regulation S; *provided* that investors resident in a member state of the EEA or the United Kingdom are not retail investors (as defined herein). The offering memorandum is being sent at your request. By accepting the e-mail or other electronic transmission and accessing the offering memorandum, you shall be deemed to have represented to each of the Initial Purchasers (as defined in the offering memorandum), being the senders of the offering memorandum, that:

1. you consent to delivery of the offering memorandum by electronic transmission; and

2. either you and any customers you represent are:

   (a) QIBs; or

   (b) the e-mail address that you gave us and to which the electronic transmission has been delivered is not located in the United States, its territories and possessions (including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and the Northern Mariana Islands), any state of the United States or the District of Columbia; and

3. if you are resident in a member state of the EEA or the United Kingdom, you are not a retail investor. Prospective purchasers that are QIBs are hereby notified that the seller of the securities may be relying on the exemption from the provisions of Section 5 of the Securities Act pursuant to Rule 144A.

You are reminded that the offering memorandum has been delivered to you on the basis that you are a person into whose possession the offering memorandum may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not, nor are you authorized to, deliver the offering memorandum to any other person.

The materials relating to the offering do not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law. If a jurisdiction requires that the offering be made by a licensed broker or dealer and an initial purchaser or any affiliate of an initial purchaser is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by such initial purchaser or such affiliate on behalf of

CTEC II GmbH (the "Issuer") in such jurisdiction. Under no circumstances shall the offering memorandum constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of, these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful.

The offering memorandum has not been approved by an authorized person in the United Kingdom and is for distribution only to, and is directed only at, persons who (i) have professional experience in matters relating to investments (being investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order")), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations, etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 (the "FSMA")) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This offering memorandum is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this offering memorandum relates is available only to relevant persons and will be engaged in only with relevant persons. No part of this offering memorandum should be published, reproduced, distributed or otherwise made available in whole or in part to any other person. No person may communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the securities other than in circumstances in which Section 21(1) of the FSMA does not apply.

Prohibition of Sales to EEA Retail Investors: The securities described in the attached offering memorandum are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the EEA. For these purposes, a retail investor means a person who is one (or more) of (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"), (ii) a customer within the meaning of Directive 2016/97/EU (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II, or (iii) not a "qualified investor" as defined in Regulation (EU) 2017/1129 (as amended, the "Prospectus Regulation"). Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the securities or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

The attached offering memorandum has been prepared on the basis that any offer of securities in any Member State of the EEA that is subject to the Prospectus Regulation will be made pursuant to an exemption under the Prospectus Regulation from the requirement to publish a prospectus for offers of securities. The attached offering memorandum is not a prospectus for the purpose of the Prospectus Regulation.

Prohibition of Sales to UK Retail Investors: The securities described in the attached offering memorandum are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (the "EUWA"); (ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in the Prospectus Regulation as it forms part of domestic law by virtue of the EUWA (the "UK Prospectus Regulation"). Consequently, no key information document required by the PRIIPs Regulation as it forms part of domestic law by virtue of the EUWA (the "UK PRIIPs Regulation") for offering or selling the securities or otherwise making them available to retail investors in the UK has been prepared and, therefore, offering or selling the securities or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

The attached offering memorandum has been prepared on the basis that any offer of the securities in the UK will be made pursuant to an exemption under the UK Prospectus Regulation from a requirement to publish a prospectus for offers of securities. The attached offering memorandum is not a prospectus for the purpose of the UK Prospectus Regulation.

MiFID II Product Governance / Professional investors and ECPs only target market: Solely for the purposes of the product approval process of the manufacturers, the target market assessment in respect of the securities described in the offering memorandum has led to the conclusion that: (i) the target market for such securities is eligible counterparties ("ECPs") and professional clients only, each as defined in MiFID II; and (ii) all channels for distribution of such securities to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending such securities (a "distributor") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of such securities (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels. CTEC II GmbH is not a manufacturer or distributor for the purposes of the MiFID II product governance rules.

UK MiFIR Product Governance / Professional Investors and ECPs Only Target Market: Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the securities has led to the conclusion that: (i) the target market for the such securities is only eligible counterparties, as defined in the FCA

Handbook Conduct of Business Sourcebook, and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; and (ii) all channels for distribution of such securities to eligible counterparties and professional clients are appropriate. Any distributor should take into consideration the manufacturers' target market assessment; however, a distributor subject to the FCA Handbook Intervention and Product Governance Sourcebook is responsible for undertaking its own target market assessment in respect of such securities (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels. CTEC II GmbH is not a manufacturer or distributor for the purposes of the FCA Handbook Conduct of Business Sourcebook product governance rules.

The offering memorandum has been sent to you in electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of electronic transmission and consequently none of the initial purchasers, any person who controls the initial purchasers, the Issuer, or the Guarantors (as defined in the offering memorandum), nor any of the respective directors, managers, officers, employees, agents or affiliates of the foregoing entities or persons, accepts any liability or responsibility whatsoever in respect of any difference between the offering memorandum distributed to you in electronic form and the hard copy version available to you on request from the initial purchasers.

This e-mail and the attached document are intended only for use by the addressee named herein and may contain legally privileged and/or confidential information. If you are not the intended recipient of this e-mail, you are hereby notified that any dissemination, distribution or copying of this e-mail and the attached document is strictly prohibited. If you have received this e-mail in error, please immediately notify the sender by reply e-mail and permanently delete all copies of this e-mail and destroy any printouts of it.

SUBJECT TO COMPLETION, DATED JANUARY 14, 2022

PRELIMINARY OFFERING MEMORANDUM
STRICTLY CONFIDENTIAL

NOT FOR GENERAL DISTRIBUTION
IN THE UNITED STATES

CeramTec
THE CERAMIC EXPERTS

CTEC II GMBH

€515,000,000 % Senior Notes due 2030

CTEC II GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany, having its registered office at Schwanthalerstraße 73, c/o SCUR24 Holding GmbH, 80336 Munich, Germany and registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267748 (the "Issuer"), is offering €515,000,000 in aggregate principal amount of its % Senior Notes due 2030 (the "Notes"). The proceeds of the offering of the Notes (the "Offering") will be used in connection with the proposed acquisition (the "Acquisition") of CeramTec TopCo GmbH (the "Target") and its consolidated subsidiaries (together, the "Target Group") by the Sponsors (as defined herein).

The Notes will bear interest at a rate of % per annum. The Notes will mature on , 2030. The Issuer will pay interest on the Notes semi-annually in arrears on and of each year, commencing on , 2022, which will be after the Escrow Longstop Date (as defined herein).

On the Issue Date, the Initial Purchasers (as defined herein) will deposit the gross proceeds of the Notes into an escrow account (the "Escrow Account") in the name of the Issuer but controlled by the Escrow Agent (as defined herein) pending consummation of the Acquisition and pledged on a first-ranking basis in favor of the Trustee (as defined herein) on behalf of the holders of the Notes pursuant to the terms of an escrow agreement (the "Escrow Agreement"). The release of the Escrowed Property (as defined herein) will be subject to the satisfaction of certain conditions, including that the funds required to pay the consideration for the Acquisition will be applied within five business days. The consummation of the Acquisition is subject to the satisfaction of certain conditions, including, among others, certain regulatory approvals and the performance of certain closing actions. If the conditions to the release of the escrowed proceeds have not been satisfied on or prior to the Escrow Longstop Date (as defined herein) or upon the occurrence of certain other events, the Notes will be subject to a special mandatory redemption. The special mandatory redemption price of the Notes will be equal to 100% of the aggregate issue price of the Notes, plus accrued and unpaid interest and additional amounts, if any, to, but excluding such special mandatory redemption date.

All or a portion of the Notes may be redeemed at any time prior to , 2025, at a redemption price equal to 100% of the principal amount of the Notes redeemed, plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the redemption date, plus a "make-whole" premium, as described in this offering memorandum. At any time prior to , 2025, up to 40% of the aggregate principal amount of the Notes (including any additional Notes issued) may be redeemed with the net proceeds of one or more specified equity offerings at a redemption price equal to % in respect of the Notes plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the redemption date. The Notes may be redeemed at any time on or after , 2025, at the redemption prices set forth in this offering memorandum. In addition, in connection with certain tender offers for the Notes, if holders of not less than 90% in aggregate principal amount of the Notes validly tender and do not withdraw such Notes in such tender offer and the Issuer, or any third party making such a tender offer in lieu of the Issuer, purchases all of the Notes validly tendered and not withdrawn by such holders, the Issuer or such third party will have the right to redeem the Notes that remain outstanding in whole, but not in part, following such purchase at a price equal to the price offered to each other holder of such Notes. See "*Description of the Notes—Optional Redemption*."

Upon the occurrence of certain defined events constituting a change of control or upon certain asset sales, each holder of Notes of any series may require the Issuer to repurchase all or a portion of the Notes at a price equal to 101% of their principal amount plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the redemption date. In the event of certain developments affecting taxation, the Issuer may elect to redeem all, but not less than all, of the Notes. See "*Description of the Notes*.".

On the Issue Date and subject to the terms of the Intercreditor Agreement (as defined herein), the Notes will be guaranteed by the Issue Date Guarantors (as defined herein) on a senior subordinated basis. Within 120 days from the business day immediately after day on which the Acquisition is consummated (the "Acquisition Closing Date"), subject to and in accordance with the Agreed Security Principles (as defined herein) and certain material limits pursuant to applicable laws, and substantially concurrently with the Guarantees granted in favor of obligations under the Senior Secured Credit Facilities, the Notes will be guaranteed by the Post-Closing Guarantors (as defined herein) on a senior subordinated basis. On the Issue Date, the Notes and the Note Guarantees (as defined herein) thereof will be secured by (a) a first-ranking pledge over the Escrow Account and (b) subject to and in accordance with the Agreed Security Principles, by (i) first-ranking security interests in the SUN Collateral (as defined herein) and (ii) junior-ranking security interests in the Shared Collateral (as defined herein) that will also secure the obligations under the Senior Secured Credit Facilities Agreement (as defined herein) on a first-ranking basis. The validity and enforceability of the Note Guarantees and the security and the liability of each Guarantor (as defined herein) and security provider will be subject to certain limitations. See "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and Security Interests*." The security interests in favor of the Notes and the Note Guarantees may be released under certain circumstances.

There is currently no public market for the Notes. Application will be made to The International Stock Exchange Authority Limited (the "Authority") for the listing of and permission to deal in the Notes on the Official List of The International Stock Exchange (the "Exchange"). There can be no assurance that the Notes will be listed on the Official List of the Exchange, that such permission to deal in the Notes will be granted or that such listing will be maintained. Settlement of the Notes is not conditional on such admission. The Exchange is a market designated for professional investors. The Authority has not approved or verified the contents of this offering memorandum. The Exchange is not a regulated market pursuant to the provisions of Directive 2014/65/EU on markets in financial instruments, as amended.

Investing in the Notes involves a high degree of risk. See "Risk Factors" beginning on page 32.

Issue price for the Notes: % plus accrued interest, if any, from the Issue Date

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None of the Notes and the Note Guarantees thereof have been, or will be, registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), or the securities laws of any other jurisdiction. The Notes may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons, except to qualified institutional buyers in reliance on the exemption from registration provided by Rule 144A under the Securities Act ("Rule 144A") and in offshore transactions in reliance on Regulation S under the Securities Act ("Regulation S"). You are hereby notified that sellers of the Notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. See "Notice to Certain Investors" and "Transfer Restrictions" for additional information about eligible offerees and transfer restrictions.

The Notes will initially be issued in the form of registered global notes. The Notes will be issued in registered form in minimum denominations of €100,000 and in integral multiples of €1,000 in excess thereof. The Notes are expected to be delivered to investors in book-entry form through Euroclear Bank SA/NV ("Euroclear") and Clearstream Banking S.A. ("Clearstream"), in each case, on or about , 2022 (the "Issue Date"). See "*Book-Entry, Delivery and Form.*"

Joint Bookrunners

Morgan Stanley	**BofA Securities**	**Nomura**
Deutsche Bank	**MUFG**	**UBS Investment Bank**

The date of this offering memorandum is , 2022.

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In making an investment decision, you should rely only on the information contained in this offering memorandum. None of the Issuer, the Guarantors or any of Morgan Stanley Europe SE, BofA Securities Europe SA, Nomura Financial Products Europe GmbH, Deutsche Bank Aktiengesellschaft, MUFG Securities (Europe) N.V. and UBS Europe SE (the "Initial Purchasers") has authorized anyone to provide you with information that is different from the information contained herein. If you receive any other information, any such information should not be relied upon. None of the Issuer, the Guarantors or any of the Initial Purchasers is making an offer of the Notes in any jurisdiction where this Offering is not permitted. You should not assume that the information contained in this offering memorandum is accurate as of any date other than the date on the front cover of this offering memorandum. The business or financial condition of the Target, along with the other information contained in this offering memorandum, may change after this date.

IMPORTANT INFORMATION ABOUT THIS OFFERING MEMORANDUM

THE NOTES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT AND MAY NOT BE OFFERED OR SOLD IN THE UNITED STATES OR TO U.S. PERSONS UNLESS THE NOTES ARE REGISTERED UNDER THE SECURITIES ACT, OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT IS AVAILABLE. SEE "*PLAN OF DISTRIBUTION*" AND "*TRANSFER RESTRICTIONS*." INVESTORS SHOULD BE AWARE THAT THEY MAY BE REQUIRED TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME. PROSPECTIVE PURCHASERS ARE HEREBY NOTIFIED THAT THE SELLER OF ANY SECURITY MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A UNDER THE SECURITIES ACT.

You should rely only on, and base your decision to invest in the Notes solely on, the information contained in this offering memorandum. None of the Issuer, the Guarantors, the Sponsors or any of the Initial Purchasers have authorized anyone to provide prospective investors with different information, and you should not rely on any such information. You should assume that the information contained in this offering memorandum is accurate only as of the date on the front of this offering memorandum or otherwise as of the date specifically referred to in connection with the particular information.

This offering memorandum does not constitute an offer to sell or an invitation to subscribe for or purchase any of the Notes in any jurisdiction in which such offer or invitation is not authorized or to any person to whom it is unlawful to make such an offer or invitation. No action has been, or will be, taken to permit a public offering in any jurisdiction where action would be required for that purpose. Accordingly, the Notes may not be offered or sold, directly or indirectly, and this offering memorandum may not be distributed, in any jurisdiction except in accordance with the legal requirements applicable in such jurisdiction. You must comply with all laws that apply to you in any place in which you buy, offer or sell any Notes or possess this offering memorandum. You must also obtain any consents or approvals that you need in order to purchase any Notes. None of the Issuer, the Guarantors, the Group (as defined herein), the Sponsors or any of the Initial Purchasers are responsible for your compliance with these legal requirements.

The Notes are subject to restrictions on transferability and resale, which are described under the caption "*Transfer Restrictions*." By possessing this offering memorandum or purchasing any Notes, you will be deemed to have represented and agreed to all of the provisions contained in that section of this offering memorandum. You should be aware that you may be required to bear the financial risks of this investment for an indefinite period of time. None of the Issuer, the Guarantors or the Initial Purchasers are making an offer to sell the Notes in any jurisdiction where the offer and sale of the Notes is prohibited. Neither the Issuer nor any Guarantor makes any representation to you that the Notes are a legal investment for you. No action has been, or will be, taken to permit a public offering in any jurisdiction where action would be required for that purpose.

None of the Issuer, the Guarantors, the Group, the Sponsors or the Initial Purchasers or any of their respective representatives are providing you with any legal, business, tax or other advice in this offering memorandum. You should consult with your own advisors as needed to assist you in making your investment decision and to advise you whether you are legally permitted to purchase the Notes.

You should base your decision to invest in the Notes solely on information contained in this offering memorandum. This offering memorandum contains summaries believed to be accurate with respect to certain documents, but reference is made to the actual documents for complete information. All such summaries are qualified in their entirety by such reference. Copies of certain of the documents referred to herein will be made available to prospective investors upon request to us or set forth under the caption "*Where You Can Find Other Information*."

By purchasing the Notes, you will be deemed to have acknowledged that you have reviewed this offering memorandum and have had an opportunity to request, and have received, all additional information that you need from us. No person is authorized in connection with any offering made pursuant to this offering memorandum to give any information or to make any representation not contained in this offering memorandum or any pricing term sheet or supplement and, if given or made, any other information or representation must not be relied upon as having been authorized by the Issuer, the Group, the Sponsors or the Initial Purchasers. Neither the Trustee, the Security Agent, the Paying Agent, the Registrar, the Transfer Agent (each as defined herein) nor any other agent acting with respect to the Notes is responsible for the contents of this offering memorandum or expresses any opinion as to the merits of the Notes under this offering memorandum.

The information contained in this offering memorandum is accurate as of the date hereof. The Issuer's and the Guarantors' business, financial condition or other information contained in this offering memorandum may change after the date hereof. Neither the delivery of this offering memorandum at any time after the date of publication nor any subsequent commitment to purchase the Notes shall, under any circumstances, create an implication that there has been no change in the information set out in this offering memorandum or in our business since the date of this offering memorandum.

None of the Initial Purchasers, the Trustee, the Security Agent, the Paying Agent, the Registrar, the Transfer Agent, the Group, the Sponsors or any other agent acting with respect to the Notes accept responsibility for and make no representation or warranty, express or implied, as to the accuracy or completeness of the information set out in this offering memorandum and nothing contained in this offering memorandum is, or should be relied upon as, a promise or representation by the Initial Purchasers, the Trustee, the Security Agent, or any other agent acting with respect to the Notes as to the past or the future. By receiving this offering memorandum, you acknowledge that you have not relied on the Initial Purchasers, the Trustee, the Security Agent, the Paying Agent, the Registrar, the Transfer Agent, the Group, the Sponsors or their respective directors, managers, affiliates, advisers and agents in connection with your investigation of the accuracy of this information or your decision whether to invest in the Notes. The Initial Purchasers disclaim all and any liability whether arising in tort, contract or otherwise which they may otherwise have in relation to this offering memorandum or any information contained herein. The Initial Purchasers do not undertake to review the financial condition or affairs of the Issuer or any Guarantor during the life of the Notes or to advise any investor or potential investor in the Notes of any information coming to the attention of any Initial Purchaser. Nothing contained in this offering memorandum is, or shall be relied upon as, a promise or representation by any of the Initial Purchasers as to the past or future.

We reserve the right to withdraw the Offering at any time. We and the Initial Purchasers each reserve the right to reject any offer to purchase the Notes in whole or in part and to allot to any prospective purchaser less than the amount of the Notes sought by it. The Initial Purchasers and certain of their respective related entities may acquire, for their own accounts, a portion of the Notes.

This offering memorandum is a confidential document that we are providing only to prospective purchasers of the Notes and has only been prepared in connection with the Offering. You must not make copies of any part of this offering memorandum or give a copy of it to any other person, or disclose any information in this offering memorandum to any other person.

By accepting delivery of this offering memorandum, you agree to the foregoing and agree not to use any information herein for any purpose other than considering an investment in the Notes. This offering memorandum may be used only for the purpose for which it was published.

The Notes will be available in book-entry form only. The Issuer expects that the Notes offered and sold in the United States to qualified institutional buyers in reliance upon Rule 144A will initially be represented by beneficial interests in one or more permanent global notes in registered form without interest coupons attached (the "Rule 144A Global Notes"). The Notes sold outside the United States in offshore transactions in reliance on Regulation S under the Securities Act will initially be represented by one or more global notes in registered form without interest coupons attached (the "Regulation S Global Notes" and together with the Rule 144A Global Notes, the "Global Notes"). On the Issue Date, the Global Notes will be deposited upon issuance with a common depositary and registered in the name of the nominee of the common depositary for the accounts of Euroclear and Clearstream.

In this offering memorandum, unless otherwise specified or the context otherwise requires, a reference to a law or a provision of law is a reference to that law or provision as extended, amended or re-enacted.

The information set out in relation to sections of this offering memorandum describing clearing and settlement arrangements, including the section entitled "*Book-Entry, Delivery and Form*," is subject to any change in or reinterpretation of the rules, regulations and procedures of Euroclear or Clearstream currently in effect. We will not, nor will any of our agents, have responsibility for the performance of the respective obligations of Euroclear and Clearstream or their respective participants under the rules and procedures governing their operations, nor will we or our agents have any responsibility or liability for any aspect of the records relating to, or payments made on account of, book-entry interests held through the facilities of any clearing system or for maintaining, supervising or reviewing any records relating to these book-entry interests. Investors wishing to use these clearing systems are advised to confirm the continued applicability of their rules, regulations and procedures.

There is currently no market for the Notes. Application will be made to the Authority for the listing of and permission to deal in the Notes on the Official List of the Exchange. There can be no assurance that the Notes will be listed on the Official List of the Exchange, that permission to deal in the Notes will be granted or that such listing will be maintained, and settlement of the Notes is not conditioned on obtaining this listing.

STABILIZATION

IN CONNECTION WITH THE OFFERING, MORGAN STANLEY EUROPE SE (THE "STABILIZING MANAGER") (OR PERSONS ACTING ON ITS BEHALF) MAY OVER-ALLOT NOTES OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL OTHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL. HOWEVER, THERE IS NO ASSURANCE THAT THE STABILIZING MANAGER (OR PERSONS ACTING ON ITS BEHALF) WILL UNDERTAKE ANY STABILIZING ACTION. ANY STABILIZING ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE FINAL TERMS OF THIS OFFERING IS MADE. SUCH STABILIZING ACTION, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME, BUT MUST BE BROUGHT TO AN END NO LATER THAN THE EARLIER OF 30 CALENDAR DAYS AFTER THE ISSUE DATE AND 60 CALENDAR DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES. ANY STABILIZATION OR OVER-ALLOTMENT MUST BE CONDUCTED BY THE STABILIZING MANAGER (OR PERSONS ACTING ON THE STABILIZING MANAGER'S BEHALF) IN ACCORDANCE WITH ALL APPLICABLE LAWS AND RULES. FOR A DESCRIPTION OF THESE ACTIVITIES, SEE "*PLAN OF DISTRIBUTION*."

NOTICE TO CERTAIN INVESTORS

United States

None of the U.S. Securities and Exchange Commission, any state securities commission or any other regulatory authority has reviewed or approved or disapproved of the Notes or the Note Guarantees, and none of the foregoing authorities have passed upon or endorsed the merits of the Offering or the accuracy or adequacy of this offering memorandum. Any representation to the contrary is a criminal offense under the laws of the United States and could be a criminal offense in certain other jurisdictions.

Each purchaser of the Notes will be deemed to have made the representations, warranties and acknowledgements that are described in this offering memorandum under "*Transfer Restrictions*." The Notes have not been and will not be registered under the Securities Act or the securities laws of any state of the United States and are subject to certain restrictions on transfer. Prospective purchasers are hereby notified that the seller of any Note may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. For a description of certain further restrictions on resale or transfer of the Notes, see "*Transfer Restrictions*."

Canada

This offering memorandum constitutes an "exempt offering document" as defined in and for the purposes of applicable Canadian securities laws. No prospectus has been filed with any securities commission or similar regulatory authority in Canada in connection with the offer and sale of the Notes. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon this document or on the merits of the Notes and any representation to the contrary is an offence.

The Notes may be sold only to Canadian purchasers purchasing, or deemed to be purchasing, as principal that are "accredited investors," as such term is defined in Section 1.1 of National Instrument 45-106 Prospectus Exemptions or, in Ontario, as such term is defined in Section 73.3(1) of the Securities Act (Ontario), and are "permitted clients," as such term is defined in section 1.1 of National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Each Canadian purchaser who purchases the Notes will be deemed to have represented to the Issuer, the Initial Purchasers and to each dealer from whom a purchase confirmation is received, as applicable, that the purchaser (i) is purchasing as principal, or is deemed to be purchasing as principal in accordance with applicable Canadian securities laws, for investment only and not with a view to resale or redistribution; (ii) is an "accredited investor"; and (iii) is a "permitted client."

Any resale of Notes acquired by a Canadian purchaser in the Offering must be made in accordance with applicable Canadian securities laws, which may vary depending on the relevant jurisdiction, and which may require resales to be made in accordance with Canadian prospectus requirements, a statutory exemption from the prospectus requirements, in a transaction exempt from the prospectus requirements or otherwise under a discretionary exemption from the prospectus requirements granted by the applicable local Canadian securities regulatory authority. These resale restrictions may under certain circumstances apply to resales of the Notes outside of Canada.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this offering memorandum (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights, or consult with a legal advisor.

Canadian purchasers are advised that this document has been prepared in reliance on Section 3A.3 of National Instrument 33-105 Underwriting Conflicts ("NI 33-105"). Pursuant to section 3A.3 of NI 33-105, this document is exempt from the requirement that the Issuer and the Initial Purchasers in the Offering provide Canadian purchasers with certain conflicts of interest disclosure pertaining to "connected issuer" and/or "related issuer" relationships as would otherwise be required pursuant to subsection 2.1(1) of NI 33-105.

Upon receipt of this offering memorandum, each Canadian purchaser hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the Notes described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. *Par la réception de ce document, chaque investisseur Canadien confirme par les présentes qu'il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d'achat ou tout avis) soient rédigés en anglais seulement*.

European Economic Area

Prohibition of Sales to EEA Retail Investors

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the EEA. For these purposes, a retail investor means a person who is one (or more) of (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"), (ii) a customer within the meaning of Directive 2016/97/EU (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II, or (iii) not a "qualified investor" as defined in Regulation (EU) 2017/1129 (as amended, the "Prospectus Regulation"). Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

This offering memorandum has been prepared on the basis that any offer of Notes in any Member State of the EEA that is subject to the Prospectus Regulation will be made pursuant to an exemption under the Prospectus Regulation from the requirement to publish a prospectus for offers of securities. This offering memorandum is not a prospectus for the purpose of the Prospectus Regulation.

MiFID II Product Governance

Solely for the purposes of the product approval process of the manufacturers, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties ("ECPs") and professional clients only, each as defined in MiFID II; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of such securities (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels. CTEC II GmbH is not a manufacturer or distributor for the purposes of the MiFID II product governance rules.

United Kingdom

This offering memorandum has not been approved by an authorized person in the United Kingdom and is for distribution only to, and is directed only at, persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 (the "FSMA")) in connection with the issue or sale of any Notes may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "Relevant Persons"). This offering memorandum is directed only at Relevant Persons and must not be acted on or relied on by persons who are not Relevant Persons. Any investment or investment activity to which this offering memorandum relates is permitted only by Relevant Persons and will be engaged in only with Relevant Persons.

No part of this offering memorandum should be published, reproduced, distributed or otherwise made available in whole or in part to any other person. No person may communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the Notes other than in circumstances in which Section 21(1) of the FSMA does not apply to us.

Prohibition of Sales to UK Retail Investors

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (the "EUWA"); (ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in the Prospectus Regulation as it forms part of domestic law by virtue of the EUWA (the "UK Prospectus Regulation"). Consequently, no key information document required by the PRIIPs Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the "UK PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and, therefore, offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

This offering memorandum has been prepared on the basis that any offer of the Notes in the UK will be made pursuant to an exemption under the UK Prospectus Regulation from a requirement to publish a prospectus for offers of securities. This offering memorandum is not a prospectus for the purpose of the UK Prospectus Regulation.

UK MiFIR Product Governance

Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the securities has led to the conclusion that: (i) the target market for the such securities is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook, and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; and (ii) all channels for distribution of such securities to eligible counterparties and professional clients are appropriate. Any distributor should take into consideration the manufacturers' target market assessment; however, a distributor subject to the FCA Handbook Intervention and Product Governance Sourcebook is responsible for undertaking its own target market assessment in respect of such securities (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels. CTEC II GmbH is not a manufacturer or distributor for the purposes of the FCA Handbook Conduct of Business Sourcebook product governance rules.

Germany

The Offering is not a public offering in the Federal Republic of Germany. The Notes may not be offered and sold in the Federal Republic of Germany except in accordance with the provisions of the Securities Prospectus Act of the Federal Republic of Germany (*Wertpapierprospektgesetz*) (as amended, the "German Securities Prospectus Act"), the Prospectus Regulation and any other laws applicable in Germany. This offering memorandum has not been and will not be submitted to, nor has it been nor will it be approved by, the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) ("BaFin"). BaFin has not obtained and will not obtain a notification from another competent authority of a member state of the European Union (each a Member State), with which a securities prospectus may have been filed, pursuant to Article 25 of the Prospectus Regulation. The Notes must not be distributed within Germany by way of a public offer, public advertisement or in any similar manner, and this offering memorandum and any other document relating to the Notes, as well as information contained therein, may not be supplied to the public in Germany or used in connection with any offer for subscription of Notes to the public in Germany. Consequently, in Germany the Notes will only be available to, and this offering memorandum and any other offering material in relation to the Notes is directed only at, persons who are qualified investors (*qualifizierte Anleger*) within the meaning of Section 2 No. 3 of the German Securities Prospectus Act in connection with Article 2 lit. e of the Prospectus Regulation. Any resale of the Notes in Germany may only be made in accordance with the German Securities Prospectus Act, the Prospectus Regulation and other applicable laws.

THIS OFFERING MEMORANDUM CONTAINS IMPORTANT INFORMATION WHICH YOU SHOULD READ BEFORE YOU MAKE ANY DECISION WITH RESPECT TO AN INVESTMENT IN THE NOTES.

FORWARD-LOOKING STATEMENTS

This offering memorandum contains forward-looking statements within the meaning of the securities laws of the United States and certain other jurisdictions, including statements about market consolidation and our strategy, investment program, future operations, prospects, growth, goals, targets, industry forecasts, expected acquisitions, transactions and investments, and target levels of liquidity, leverage and indebtedness. Forward-looking statements provide our current expectations, intentions or forecasts of future events as at the date of such statements or information. We caution you that the assumptions used in the preparation of such information may prove to be incorrect. Forward-looking statements include statements about expectations, beliefs, plans, objectives, intentions, assumptions and other statements that are not statements of historical fact. In some cases, words or phrases such as "aim," "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "forecast," "guidance," "intend," "may," "ongoing," "plan," "potential," "predict," "project," "seek," "should," "target," "will," "would" or similar words or phrases, or the negatives of those words or phrases, may identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking.

Forward-looking statements are subject to known and unknown risks, uncertainties and other factors and are based on potentially inaccurate assumptions that could cause actual results to differ materially from those expected or implied by the forward-looking statements. Our actual results could differ materially from those expected in our forward-looking statements for many reasons, including the factors described in "*Risk Factors*." In addition, even if our actual results are consistent with the forward-looking statements contained in this offering memorandum, those results or developments may not be indicative of results or developments in subsequent periods. For example, factors that could cause our actual results to vary from those referenced in forward-looking statements include, but are not limited to:

- the ongoing COVID-19 public health pandemic;
- the level of competition in the hip joint implant market for us and our key customers and intense competitive pressures in the Industrials markets;
- our reliance on a limited number of large medical customers;
- our dependence on the image and reputation of our BIOLOX® products;
- our ability to retain and attract new customers;
- the impact of changes on regulations application to our manufacturing processes and facilities and our key medical customers;
- failure by our customers to obtain or maintain governmental approvals or clearances that enable them to sell our products;
- adverse medical events, the discovery of serious safety issues or any recalls that could impact our products or image;
- the impact of inadequate coverage and reimbursement policies or changes in health care reimbursement systems;
- liability for damages arising out of product liability claims;
- the impact of global economic conditions and the political climate, in particular, in Germany and Europe, such as uncertainty surrounding Brexit or changes to the composition of the Eurozone, and conditions in the end-markets we serve;
- the successful innovation and introduction of our new products;
- exposure to local business risks in different countries;
- price increases or interruptions in the supply of raw materials, including as a result of increased shipping costs, any failure to renew agreements with material suppliers and fluctuations in energy costs;
- unforeseen business interruptions and other operational problems at our production facilities;
- inadequate insurance coverage, or increased insurance costs;
- our ability to maintain efficiency and manufacturing quality;

- risks related to changes to, and compliance with, laws and regulations, including extensive environmental, health and safety laws, anti-corruption laws of the European Union, the United States and various other jurisdictions, anti-terrorism laws and regulations, applicable trade embargoes and export controls;
- any requirement to repay public subsidies or grants as a result of a failure to meet specified conditions;
- our ability to protect our intellectual property and know-how;
- the risks of litigation, lawsuits for infringing the intellectual property rights of third parties and other claims;
- our dependence on good relationships with our employees and employee representative bodies and any inability to recruit and retain key personnel, including qualified scientific, technical and sales employees;
- any defects from the outsourcing certain productions steps and counterparty risk;
- failure of our risk management policies to mitigate our risk exposure;
- risks related to security threats, security breaches or breakdowns in our information technology systems, and to the handling of personal data;
- failure to realize the anticipate benefit of acquisitions or identify suitable acquisition targets to implement our growth strategy;
- risks related to our pension plans;
- tax-related risks;
- exchange rate fluctuations;
- climate change and related regulatory responses;
- risks related to the Transactions, our capital structure, our indebtedness and the Notes; and
- other factors discussed under "Risk Factors."

These risks are not exhaustive. Other sections of this offering memorandum describe additional factors that could adversely affect our financial position, results of operations and liquidity and developments in the markets and industries in which we operate. New risks can emerge from time to time, and it is not possible for us to predict all such risks, nor can we assess the impact of all such risks on our business or the extent to which any risks, or combination of risks and other factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Given these risks and uncertainties, you should not rely on forward-looking statements as a prediction of actual results. We urge you to read this entire offering memorandum, including the sections entitled, "*Risk Factors*", "*Management's Discussion and Analysis of Financial Condition and Results of Operations*", "*Industry*" and "*Business*" for a more complete discussion of the factors that could affect our future performance and the industry in which we operate.

Any forward-looking statements are only made as at the date of this offering memorandum, and we do not intend, and do not assume any obligation, to update forward-looking statements set out in this offering memorandum. You should interpret all subsequent written or oral forward-looking statements attributable to us or to persons acting on our behalf as being qualified by the cautionary statements in this offering memorandum. As a result, you should not place undue reliance on these forward-looking statements.

INDUSTRY AND MARKET DATA

In this offering memorandum, we rely on and refer to our market position or market share in the various markets or regions in which we operate and compete and the size and growth rates of the various markets or regions in which we operate and compete. These references represent our best estimates at the time of this offering memorandum and are based on management's knowledge of the industry and the market data and other statistical information obtained from a variety of other public and private sources including, but not limited to independent industry publications, statistics from governmental agencies, reports by market research firms, including industry and market reports by independent international consultancy firms, and other published independent sources. None of the Issuer, the Guarantors or the Initial Purchasers accepts responsibility for the factual correctness of any such statistics or information obtained from third parties.

Certain market and industry data included in this offering memorandum, including the size of certain markets, are based on estimates of management and commissioned reports, including a report from a leading international consultancy firm. These estimates have been derived from management's knowledge and experience in the markets in which we operate, as well as information obtained from commissioned reports and from our customers, distributors, suppliers, trade and business organizations and other contacts in the markets in which we operate. We also provide certain estimates of the growth of markets and certain other projections related to our business. This information is inherently speculative and subject to risk. Because such data is often incomplete, multiple sources are typically triangulated to develop consensus estimates. Market data and statistics, including information regarding penetration rates and growth, volume and growth and other information about particular regions or markets, are inherently predictive and speculative and are not necessarily reflective of actual market conditions. Such statistics are generally based on market research, which itself is based on sampling and subjective judgments by both the researchers and the respondents. In addition, the value of comparisons of statistics of different markets is typically limited by many factors, including that (i) the underlying information was gathered by different methods with varying levels of access and information available in different markets and (ii) different assumptions were applied in compiling the data. Market studies are frequently based on information and assumptions that may not be exact and their methodology is by their nature forward-looking and speculative.

Accordingly, the market statistics included in this offering memorandum should be viewed with caution and no representation or warranty is given by any person, including us and the Initial Purchasers, as to their accuracy. We believe that the sources of such information in this offering memorandum are reliable, but there can be no assurance that any of these assumptions are accurate or correctly reflects our position in our industry, and none of our internal surveys or information has been verified by any independent sources. Furthermore, certain forward-looking statements contained in such industry and certain market data may not fully include the impact of the COVID-19 pandemic or other related developments, including the impacts of future national or local lockdowns or other measures implemented by national and/or local authorities. There can be no assurance that such forward-looking statements would not have been materially different if such developments related to the COVID-19 pandemic had been taken into account. See "*Forward-looking Statements*." Further, please be aware that data and statistical information in this offering memorandum, may differ from estimates made by our competitors or from information found in current or future studies conducted by market research institutes, consultancy firms or independent sources. While we are not aware of any misstatements regarding the industry or similar data presented herein, such data involves risks, assumptions and uncertainties and are subject to change based on various factors, including those discussed under the heading "*Risk Factors*."

TRADEMARKS AND TRADE NAMES

The Target Group owns or has rights to certain trademarks, trade names or service marks that it uses in connection with the operation of its business. The Target Group asserts, to the fullest extent under applicable law, its rights to its trademarks, trade names and service marks. Each trademark, trade name or service mark of any other company appearing in this offering memorandum belongs to its respective holder. The trademarks which the Target Group owns or has the right to use include, among others, BIOLOX®, SPK®, Ceramdisc® and ZERAMEX®.

Solely for convenience, certain trademarks, trade names and copyrights referred to in this offering memorandum may be listed without the TM, ® and © symbols.

CERTAIN DEFINITIONS

In this offering memorandum:

"Acquisition"	means the direct or indirect acquisition of the Target from the Seller by Bidco pursuant to the Acquisition Agreement;
"Acquisition Agreement"	means the sale and purchase agreement (including all exhibits and schedules thereto) dated August 16, 2021, between the Seller and Bidco relating to the sale by the Seller and the purchase by the Purchasers of the Target Business;
"Acquisition Closing Date"	means the date on which the Acquisition is consummated;
"Agreed Security Principles"	has the meaning ascribed to such term under "*Description of the Notes*";
"BC Partners"	means BC Partners LLP, BC Partners XI Lux Platform S.à. r.l., BC XI AGE LUXEMBOURG SCSP, BC Partners XI GE-2 LP, BC XI AGD LUXEMBOURG SCSP, BC PARTNERS XI GD 2 LP, BC PARTNERS XI LE-3 SCSP, BC PARTNERS XI LE-2 FEEDER SCSP, BC PARTNERS XI LE-2 SCSP, BC PARTNERS XI LE-2 FEEDER SCSP, BCEC MEMBER CO 1 LIMITED, BC PARTNERS XI LE-1 SCSP, BC PARTNERS XI LUX GP SARL, BCEC MEMBER CO 1 LIMITED, BC PARTNERS XI LUX AGGREGATORS GP SARL, BC PARTNERS XI GE-1 LP and/or BC PARTNERS XI GD-3 LP and/or any of its affiliates or related funds;
"Bidco"	means CTEC III GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany, having its registered office at Schwanthalerstraße 73, c/o SCUR24 Holding GmbH, 80336 Munich, Germany and registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267814;
"CAGR"	means compound annual growth rate;
"ceramic-on-ceramic"	refers to the combination of ceramic ball heads and ceramic cup inserts in a hip prosthesis as further described under "*Business—Our Business—Medical markets—Materials for Hip Implant Components*";
"ceramic-on-polyethylene"	refers to the combination of ceramic ball heads and a polyethylene cup insert in a hip prosthesis as further described under "*Business—Our Business—Medical markets—Materials for Hip Implant Components*";
"Clearstream"	means Clearstream Banking S.A. or any successor thereof;
"Collateral"	means the Escrow Charge, the SUN Collateral and the Shared Collateral, collectively;
"COVID-19"	means the infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2);
"CPP Investments"	means Canada Pension Plan Investment Board;
"EEA"	means the European Economic Area;
"Equity Contribution"	refers to the expected equity contributions from the Sponsors and other co-investors, in each case, in the form of equity and/or subordinated shareholder funding, contributed to Bidco through intermediate holding companies;
"Escrow Account"	means the escrow account of the Issuer into which the Initial Purchasers will deposit in certain circumstances the gross proceeds of the Notes on the Issue Date, to be controlled by the Escrow Agent and charged in favor of the Trustee on behalf of the holders of the Notes as further described under "*Description of the Notes*";

"Escrow Agent"	means Deutsche Bank AG, London Branch;
"Escrow Agreement"	means the agreement to be dated on the Issue Date between the Issuer, the Trustee and the Escrow Agent relating to the Escrow Account;
"Escrow Charge"	means the charges over the Escrow Account in favor of the Trustee, which will secure the Notes and the Issue Date Guarantees on a first-ranking basis as of the Issue Date until released in accordance with the provisions of the Escrow Agreement;
"Escrow Longstop Date"	means August 31, 2022;
"Escrowed Property"	refers to the initial funds deposited in the Escrow Account, and all other funds, securities, interest, dividends, distributions and other property and payments credited to the Escrow Account (less any property and/or funds paid in accordance with the Escrow Agreement);
"Escrow Release Date"	means the date upon which the Escrowed Property is released from the Escrow Account to the Issuer (or its designees) upon the satisfaction of certain conditions described in the Escrow Agreement;
"EU"	means the European Union as of the Issue Date;
"EU-5"	means Germany, France, Spain, Italy and the United Kingdom;
"Euroclear"	means Euroclear Bank SA/NV or any successor thereof;
"Existing Credit Facilities Agreement"	means the senior secured credit facilities agreement, dated December 14, 2017, consisting of (i) a senior secured term loan facility in the aggregate principal amount of $175,000,000 and €1,145,000,000 and (ii) a senior secured revolving credit facility in an aggregate principal amount of up to €75,000,000 with, *inter alios*, Deutsche Bank AG, London Branch as agent and security agent;
"Existing Notes"	means the €406,000,000 5.25% Senior Notes due 2025 issued by CTC BondCo GmbH pursuant to an indenture dated December 14, 2017;
"Existing Shareholder Loan"	means the existing shareholder loan granted by the Seller to CeramTec Bondco GmbH that will be transferred to Bidco as lender, in connection with the Transactions;
"FDA"	means the U.S. Food and Drug Administration;
"Financial Statements"	means the Audited Financial Statements and the Unaudited Interim Financial Statements;
"Guarantors"	means Bidco and the Post-Closing Guarantors, collectively;
"Group"	means the Issuer together with its subsidiaries from time to time;
"HGB"	means the German Commercial Code (*Handelsgesetzbuch*);
"HPC"	means high performance ceramics;
"IFRS"	means International Financial Reporting Standards, as adopted by the EU;
"Indenture"	means the indenture governing the Notes, dated as of the Issue Date, by and among, *inter alios*, the Issuer and the Trustee;
"Industrials markets"	refers to all of our end-markets other than Medical markets;
"Initial Purchasers"	means Morgan Stanley Europe SE, BofA Securities Europe SA, Nomura Financial Products Europe GmbH, Deutsche Bank Aktiengesellschaft, MUFG Securities (Europe) N.V. and UBS Europe SE, collectively;

"Intercreditor Agreement"	means the intercreditor agreement to be entered into by and among, *inter alios*, the Bidco, the Issuer, the Trustee, the Security Agent and certain lenders and arrangers under the Senior Secured Credit Facilities Agreement (as amended from time to time);
"Issue Date"	means , 2022, the date of the issuance of the Notes;
"Issue Date Note Guarantee"	means the guarantees provided by Bidco on the Issue Date pursuant to the Indenture;
"Issuer"	means CTEC II GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany, having its registered office at Schwanthalerstraße 73, c/o SCUR24 Holding GmbH, 80336 Munich, Germany and registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267748;
"Lux Topco"	means CTEC Global S.à r.l., a private limited liability company (*société à responsabilité limitée*) organized under the laws of Luxembourg, having its registered office at 18 rue Erasme, 1468 Luxembourg, and registered with *Registre de Commerce et de Sociétès* of Luxembourg under registration number B 257940.
"Medical markets"	refers to the markets covered by our Medical products business reported in the Financial Statements and the medical equipment markets;
"Member State"	means a member state of the EEA;
"Note Guarantees"	means the Issue Date Note Guarantee and the Post-Closing Note Guarantees, collectively;
"Notes"	means the €515,000,000 % Senior Notes due 2030 offered hereby;
"OEM"	means original equipment manufacturer;
"Offering"	means the offering of Notes and the use of proceeds therefrom;
"Parent"	CTEC I GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany, having its registered office at Schwanthalerstraße 73, c/o SCUR24 Holding GmbH, 80336 Munich, Germany, and registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267745;
"Post-Closing Note Guarantees"	means the guarantees provided by the Post-Closing Guarantors;
"Post-Closing Guarantors"	means certain members of the Target Group that will guarantee the Senior Secured Credit Facilities Agreement, subject to and in accordance with the Agreed Security Principles and to certain material limitations pursuant to applicable laws, within 120 days from the business day immediately after the Acquisition Closing Date;
"R&D"	means research and development;
"Regulation S"	means Regulation S under the Securities Act;
"Revolving Credit Facility"	means the €250.0 million multicurrency revolving credit facility established under the Senior Facilities Agreement;
"Securities Act"	means the U.S. Securities Act of 1933, as amended;
"Security Agent"	means Deutsche Bank AG, London Branch, as security agent under the Notes;
"Seller"	means CTEC Acquisition S.à r.l. as seller under the Acquisition Agreement;

"Senior Secured Credit Facilities"	means the Revolving Credit Facility and the Senior Term Facility, together;
"Senior Secured Credit Facilities Agreement"	means the senior facilities agreement to be entered into by and among, inter alios, Bidco as original borrower and as original guarantors, certain financial institutions as original lenders, Deutsche Bank AG, London Branch as agent and the Security Agent;
"Senior Term Facility"	means the €1,430 million senior secured term loan facility made available under the Senior Secured Credit Facilities Agreement;
"Shared Collateral"	has the meaning ascribed to such term in "*Summary—The Offering—Collateral*";
"Sponsors"	means (a) one or more funds, limited partnerships and other entities managed by or otherwise advised by BC Partners; and (b) one or more funds, limited partnerships and other persons managed by or otherwise advised by CPP Investments;
"SUN Collateral"	has the meaning ascribed to such term in "*Summary—The Offering—Collateral*";
"Target" or "CeramTec"	means CeramTec Topco GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) under the laws of Germany, registered with the commercial register of the local court of Stuttgart under HRB 764651, having its corporate seat in Plochingen, Germany;
"Target Group"	means the Target together with its consolidated subsidiaries;
"Transactions"	means the Offering, the Acquisition and the related transactions (including the financing in connection with the Acquisition), and the payment of fees and expenses in connection therewith as further described in "*Summary—The Transactions*";
"Transaction Security Documents"	has the meaning ascribed to such term under "*Description of the Notes*";
"Trustee"	means Deutsche Trustee Company Limited, as trustee under the Indenture;
"United Kingdom" or "UK"	means the United Kingdom and its territories and possessions;
"United States" or "U.S."	means the United States of America and its territories and possessions;
"U.S. dollars," "dollars," or "$"	means the lawful currency of the United States; and
"we," "us," "our" or similar terms	refer to the Target Group, and following the completion of the Acquisition, the Group, unless the context suggests otherwise. The use of these terms is not intended to imply that the Acquisition will be completed on certain terms, or at all.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

The Issuer

The Issuer was incorporated on July 13, 2021 to facilitate the Transactions. As of the date of this offering memorandum, the Issuer has no material assets or liabilities, does not have any revenue-generating activities of its own and has not engaged in activities other than those related to its incorporation and in preparation of the Transactions. As a result, no historical financial information of the Issuer is included in this offering memorandum, except for certain limited as adjusted financial data presented to reflect certain effects of the Transactions.

Historical Financial Information

All historical financial information presented in this offering memorandum is that of the Target and its consolidated subsidiaries. Accordingly, unless otherwise stated, all references to "we," "us," "our" or the "Target Group" in respect of historical financial information in this offering memorandum are to the Target and its consolidated subsidiaries collectively.

The financial information included in this offering memorandum is not intended to comply with applicable accounting requirements of the Securities Act and the related rules and regulations of the SEC which would apply if the Notes were being registered with the SEC.

Financial Statements

This offering memorandum includes our historical consolidated financial statements listed below (the "Financial Statements"):

- the condensed consolidated interim financial statements of the Target as of and for the nine months ended September 30, 2021, including comparative information for the nine months ended September 30, 2020, prepared in accordance with the International Financial Reporting Standards, as adopted by the EU ("IFRS"), applicable to interim financial reporting (International Accounting Standard 34 Interim Financial Reporting ("IAS 34")) (the "Unaudited Interim Financial Statements");

- the English-language translation of the original German-language audited consolidated financial statements of the Target as of and for the year ended December 31, 2020, and the related notes thereto, prepared in accordance with IFRS and the additional requirements of German commercial law pursuant to section 315e, paragraph 1, HGB, including comparative information for the year ended December 31, 2019 (the "2020 Audited Financial Statements"); and

- the English-language translation of the original German-language audited consolidated financial statements of the Target as of and for the year ended December 31, 2019 and the related notes thereto, prepared in accordance with IFRS and the additional requirements of German commercial law pursuant to section 315e, paragraph 1, HGB, including comparative information for the year ended December 31, 2018 (the "2019 Audited Financial Statements" and together with the 2020 Audited Financial Statements, the "Audited Financial Statements"). The actual figures as of and for the year ended December 31, 2018 presented in this offering memorandum have been extracted without adjustment from the comparative column in the 2019 Audited Financial Statements.

The Audited Financial Statements have been audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Friedrichstraße 14, 70174 Stuttgart, Germany, a member of the German Chamber of Public Accountants (*Wirtschaftsprüferkammer*), Berlin ("PwC"), independent auditors, who issued independent unqualified auditor's reports thereon.

The label "unaudited" is used in this offering memorandum to indicate financial information that (i) has not been taken, but derived from the Audited Financial Statements, (ii) has been taken or derived from the Unaudited Interim Financial Statements, (iii) has been taken or derived from the Target's accounting records or (iv) has been taken or derived from the Target's internal management reporting systems. Such financial information should be read in conjunction with our Financial Statements and "*Management's Discussion and Analysis of Financial Condition and Results of Operations*." The financial information indicated as "audited" in tables in this offering memorandum has been taken from the Audited Financial Statements.

Prospective investors are advised to consult their professional advisors for an understanding of: (i) the differences between IFRS and U.S. GAAP and other frameworks for generally accepted accounting principles and how those differences might affect the financial information included in this offering memorandum and (ii) the impact that future additions to, or amendments of, IFRS may have on our results of operations or financial condition, as well as on the comparability of the prior periods.

Comparability of the Financial Statements

The Acquisition of CeramTec Holding GmbH in 2018

On March 8, 2018, a consortium led by funds advised by leading private equity firm BC Partners, including The Public Sector Pension Investment Board and Ontario Teachers' Pension Plan acquired CeramTec Holding GmbH ("CeramTec Holding") and its subsidiaries from its former owner, Cinven. In connection with this acquisition, CeramTec AcquiCo GmbH (in the following "CeramTec AcquiCo") acquired all of the shares in CeramTec Holding. CeramTec AcquiCo is a 100% subsidiary of CeramTec BondCo GmbH ("CeramTec BondCo"), which is a 100% subsidiary of the Target. The Target indirectly obtained control of the operating group's business as from the acquisition date. As a result, the Target's statement of comprehensive income and consolidated statement of cash flows information for the year ended December 31, 2018 include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Target Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. Given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income and consolidated statement of cash flows for the year ended December 31, 2018 are not directly comparable to the statement of comprehensive income or consolidated statement of cash flows for any subsequent period.

Consequently, for the benefit of readers and in order to aid comparability, certain *pro forma* statement of comprehensive income and consolidated statement of cash flows information, including revenue, operating income, amortization, depreciation and impairment charges on non-current assets, EBITDA, Management Adjusted EBITDA, Management Adjusted EBITDA margin, Capital Expenditures, Cash Generation, Cash Conversion Ratio, is provided in order to compare the performance of operations including operating advanced ceramics business for the entire period. The unaudited *pro forma* statement of comprehensive income and consolidated statement of cash flows information for the year ended December 31, 2018 is based on and derived from a *pro forma* aggregation of two analysis periods for the two different ultimate parents, to enable a consistent view of the operating entities in the consolidated group: (i) for the period January 1, 2018 to February 28, 2018 for the consolidated group of the former ultimate parent CeramTec Holding GmbH; and (ii) for the period March 1, 2018 to December 31, 2018 for consolidated Target Group. Such unaudited *pro forma* statement of comprehensive income and consolidated statement of cash flows information of the Target for the year ended December 31, 2018 is presented in this offering memorandum for illustrative purposes only and should not be considered indicative of the actual results that would have been achieved had the acquisition of CeramTec Holding been completed January 1, 2018. Such unaudited pro forma statement of comprehensive income and consolidated statement of cash flows information has not been prepared in accordance with the requirements of Regulation S-X of the U.S. Securities Act, the Prospectus Regulation, IFRS or any other generally accepted accounting standards. Neither the assumptions underlying the pro forma adjustments nor the resulting unaudited *pro forma* statement of comprehensive income and consolidated statement of cash flows information have been audited or reviewed in accordance with any generally accepted auditing standards. The unaudited *pro forma* statement of comprehensive income and consolidated statement of cash flows information should be read in conjunction with the information included elsewhere in this offering memorandum under the captions "*Summary Historical Financial and Other Data*" and "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and the Financial Statements included elsewhere in this offering memorandum.

The Acquisition of Dentalpoint AG

On January 4, 2021, we acquired Dentalpoint AG, a corporation based in Spreitenbach, Switzerland, supporting our investment in the fast-growing future market for ceramic dental implants and further expanding our Medical product offering. The preliminary purchase price of €51.0 million was paid using cash and cash equivalents, while, following a reduction agreed in September 2021, the final purchase price equaled €49.9 million as a result of post-closing adjustments (or €49.0 million, net of cash and cash equivalents taken over). As a result, our consolidated financial information may not be comparable following the date of such acquisition. See note 1.3 to the Unaudited Interim Financial Statements for further information.

Changes in Accounting Standards.

The Target adopted IFRS 16 (*Accounting for Leases*) on January 1, 2019. In accordance with IFRS 16, the lessee is required to recognize a right-of-use asset (or "RoU asset") and a corresponding lease liability for all leases. At the commencement date, the amount of the RoU asset corresponds to the amount of the lease liability. In the subsequent periods, the RoU asset is (apart from some exceptions) measured at its cost less any accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liability.

The net carrying amount of the right-of-use assets amounted to €4.1 million as of December 31, 2019 whereas the corresponding lease liabilities to the right-of-use assets amounted to €4.2 million as of December 31, 2019. The expenses from the right-of-use assets and the lease liabilities in accordance with IFRS 16 were €2.5 million depreciation and €0.2 million interest expenses for each of the years ended December 31, 2019 and 2020.

For the years ended December 31, 2019, payments for capitalized leases were made in an amount of €2.7 million and €2.9 million, respectively. Finance leases capitalized in prior years according to IAS 17 were included in the statement of financial position as of December 31, 2019 in an amount of €1.2 million net carrying value in property, plant and equipment and €1.2 million in the lease liabilities.

See note 4.14 to each of the Audited Financial Statements for further information on the adoption of IFRS 16.

No other changes to accounting standards and no announced but not-yet-adopted accounting standards had, or are expect to have, a significant impact on the Target Group during the periods included in this offering memorandum. See note 2.4 to each of the Audited Financial Statements for further information.

Impact of COVID-19

The impact of the COVID-19 pandemic on our operations limits the comparability of our results for the nine months ended September 30, 2020 and the year ended December 31, 2020 with the relevant corresponding period in 2019, and may impact comparability with future periods. See "*—Key Factors Affecting Our Results of Operations—The COVID-19 Pandemic*" and "*Summary—Recent Developments—COVID-19 Update*."

The Transactions

None of the financial information in this offering memorandum has been adjusted to reflect the impact of any changes to the statement of comprehensive income, statement of financial position and consolidated statement of cash flows that might occur as a result of the Acquisition. We will account for the Acquisition using the acquisition method of accounting under IFRS. Only certain limited as adjusted financial data of the Issuer is presented to give pro forma effect to the Transactions, including the Offering. See "*—As Adjusted Financial Information*" below and "*Capitalization*." Under IFRS 3 (*Business Combinations*), the consideration transferred in an acquisition is measured as the fair value of the assets transferred by the acquirer on the date of the acquisition, any liabilities incurred by the acquirer to the former owners of the target and any equity interests issued by the acquirer, including the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred, except for deferred costs related to the acquisition of debt or equity securities. Identifiable assets acquired and liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The excess of the aggregate of the consideration transferred and the amount of non-controlling interests in the target over the identifiable net assets on the acquisition date is recorded as goodwill. The application of the acquisition method is likely to result in different carrying values for existing assets and new assets may be added to the Target's statement of financial position, which may result in different amortization and depreciation expenses.

Due to these and other potential adjustments, our future consolidated financial statements could be materially different once the adjustments are made and may not be comparable to the Target's consolidated financial statements included in this offering memorandum. In the future, we may report our consolidated financial condition and results of operations at the level of another entity in the holding structure. In accordance with IFRS, we have a measurement period of up to twelve months from the acquisition date to finalize the allocation of the purchase price. Due to these and other potential adjustments, future financial statements for the Group could be materially different and may not be comparable to our Financial Statements included elsewhere in this offering memorandum. See also "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Factors Affecting the Comparability of Our Financial Statements—Impact of the Transactions*" and "*Risk Factors—Risks Related to Our Business—The value of goodwill, brand names or other intangible assets reported in our financial statements may need to be partially or fully impaired as a result of revaluations*."

Financial Information Presented for the Twelve Months ended September 30, 2021

The summary unaudited consolidated financial information for the twelve months ended September 30, 2021 set forth in this offering memorandum was derived by adding the Target's consolidated financial information for the year ended December 31, 2020 to its consolidated financial information for the nine months ended September 30, 2021 and subtracting its consolidated financial information for the nine months ended September 30, 2020. The summary unaudited consolidated financial information for the twelve months ended September 30, 2021 has not been audited or reviewed and is not required by, or presented in accordance with, IFRS, HGB or any other generally accepted accounting principles and has been prepared for illustrative purposes only. This information is not necessarily representative of our results of operations for such period or any future period or any financial position at any past or future date. See also "*—Non-IFRS Financial Measures*".

As Adjusted Financial Information

This offering memorandum also includes certain unaudited as adjusted financial information of the Issuer as of and for the twelve months ended September 30, 2021, including as adjusted net senior secured indebtedness, as adjusted net indebtedness and as adjusted interest expense, which has been prepared to give effect to the Transactions as if they had occurred (i) on September 30, 2021, for the purposes of calculating as adjusted net senior secured indebtedness and as adjusted net indebtedness and (ii) on October 1, 2020, for the purposes of calculating as adjusted interest expense. The as adjusted financial information as of and for the twelve months ended September 30, 2021 has been prepared for illustrative purposes only and does not represent what the Issuer's indebtedness or interest expense would have been had the Transactions occurred on September 30, 2021 or October 1, 2020, respectively, nor does it purport to project the Issuer's indebtedness or interest expense at any future date. The as adjusted financial information as of and for the twelve months ended September 30, 2021 has not been prepared in accordance with IFRS, the requirements of Regulation S-X under the Securities Act, the Prospectus Regulation or any other generally accepted accounting standards. Neither the assumptions underlying the adjustments nor the resulting as adjusted financial information as of and for the twelve months ended September 30, 2021 have been audited or reviewed in accordance with any generally accepted auditing standards. See also "*—Non-IFRS Financial Measures*."

Non-IFRS Financial Measures

In this offering memorandum, we present certain financial measures that are not recognized by IFRS or any other generally accepted accounting principles and that may not be permitted to appear on the face of the Financial Statements or footnotes thereto. The primary non-IFRS financial measures used in this offering memorandum include Capital Expenditures, Cash Generation, Cash Conversion Ratio, EBITDA, Management Adjusted EBITDA, Management Adjusted EBITDA Margin, Pro Forma Adjusted EBITDA, Adjusted Cost of sales, Adjusted Gross profit, Adjusted Selling costs, Adjusted Research and development costs, Adjusted General administrative costs and Adjusted Other income and expenses, net, certain leverage and coverage ratios and other figures (the "Non-IFRS Measures"). Each of the EBITDA-based and net income-based measures presented in this offering memorandum is defined and calculated differently from the definition of "Consolidated Net Income" and "Consolidated EBITDA" presented in the Indenture.

Our primary Non-IFRS Measures are as follows:

- "Capital Expenditures" is defined as the sum of additions to intangible assets and additions to property, plant & equipment (excluding right-of-use assets);
- "Cash Generation" is defined as Management Adjusted EBITDA minus Capital Expenditures;
- "Cash Conversion Ratio" is defined as (i) Management Adjusted EBITDA minus Capital Expenditures, divided by (ii) Management Adjusted EBITDA;
- "EBITDA" is defined as net profit for the period before taxes on income, financial result and depreciation and amortization;
- "Management Adjusted EBITDA" is defined as EBITDA before certain costs and expenses which our management considers exceptional or non-recurring, such as restructuring costs, foreign exchange conversion effects that are accounted for in our operating income, additional contributions to pensions, certain acquisition and transaction-related costs, purchase price accounting on inventories, start-up losses, discontinued operations and certain other non-recurring items;
- "Management Adjusted EBITDA Margin" is defined as the ratio of Management Adjusted EBITDA to revenue:
- "Pro Forma Adjusted EBITDA" is defined as Management Adjusted EBITDA, adjusted for certain adjustments and expected cost savings identified by us and the Sponsors as described under "*Summary—Summary Financial and Other Data—Other Financial and Operating Information*";
- "Adjusted Cost of sales", "Adjusted Gross profit", "Adjusted Selling costs", "Adjusted Research and development costs", "Adjusted General administrative costs" and "Adjusted Other income and expenses, net" are defined as Cost of sales, Gross profit, Selling costs, Research and development costs, General administrative costs and Other income and expenses, net, respectively, adjusted for depreciation and amortization and certain costs and expenses which our management considers exceptional or non-recurring; and
- "Adjusted Gross profit margin" is defined as the ratio of Adjusted Gross profit to revenue.

For a detailed reconciliation of these measures to the closest comparable IFRS measure, see "*Summary—Summary Financial and Other Data—Other Financial and Operating Information*."

By eliminating potential differences in results of operations between periods or companies caused by factors such as depreciation and amortization methods, historical cost and age of assets, financing and capital structures and taxation positions or regimes, we believe Capital Expenditures, Cash Generation, Cash Conversion Ratio, EBITDA, Management Adjusted EBITDA, Management Adjusted EBITDA Margin, Pro Forma Adjusted EBITDA, Adjusted Cost of sales, Adjusted Gross profit, Adjusted Selling costs, Adjusted Research and development costs, Adjusted General administrative costs and

Adjusted Other income and expenses, net, can provide a useful additional basis for comparing the current performance of the underlying operations being evaluated. We believe a presentation of Capital Expenditures and Cash Conversion Ratio is useful to investors to assess our liquidity. These Non-IFRS Measures are presented in this offering memorandum because they are measures our management used to assess operating performance, because we believe that they and similar measures are widely used in our industry as a means of evaluating a company's operating performance and financing structure, and because we believe they present helpful comparisons of financial performance between periods by excluding the distorting effect of certain non-recurring items.

Our Non-IFRS Measures and ratios are not measurements of our performance or liquidity under IFRS or any other generally accepted accounting principles and should not be considered as alternatives to performance measures derived in accordance with IFRS or any other generally accepted accounting principles. Our Non-IFRS Measures may not be comparable to other similarly titled measures of other companies and have limitations as analytical tools. They should not be considered in isolation or as a substitute for analysis of our operating results as reported under IFRS. Some of the limitations of Non-IFRS Measures are that:

- they do not reflect our cash expenditures or future requirements for capital investments or contractual commitments;
- they do not reflect changes in, or cash requirements for, our working capital needs;
- they do not reflect the significant interest expense or cash requirements necessary to service interest or principal payments on our debt;
- they do not reflect any cash income taxes that we may be required to pay;
- they are not adjusted for all non-cash income or expense items that are reflected in our statement of comprehensive income;
- they do not reflect the impact of earnings or charges resulting from certain matters we consider not to be indicative of our ongoing operations;
- although depreciation and amortization are non-cash charges, assets are depreciated or amortized over differing estimated useful lives and often have to be replaced in the future, and these measures do not reflect any cash requirements for such replacements;
- some of the exceptional items that we eliminate in calculating certain EBITDA-based Non-IFRS Measures reflect cash payments that were made, or will be made in the future:
- they may be illustrative in nature and do not reflect an actual period of historical performance: and
- other companies in our industry and analysts may calculate these measures differently than we do, limiting their usefulness as comparative measures.

Because of these limitations, our Non-IFRS Measures should not be considered as measures of discretionary cash available to us to invest in the growth of our business or as measures of cash that will be available to us to meet our obligations. You should compensate for these limitations by relying primarily on the Financial Statements and using these Non-IFRS Measures only to supplement evaluation of our performance.

Rounding

Certain numerical figures set out in this offering memorandum, including financial data presented in million or thousand and percentages, have been subject to rounding adjustments and, as a result, the totals of the data in this offering memorandum may vary slightly from the actual arithmetic totals of such information. In addition, as a result of such rounding, the totals of certain financial information presented in tabular form may differ from the information that would have appeared in such totals using the unrounded financial information. Percentages and amounts reflecting changes over time periods relating to financial and other data set forth in "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" are calculated using the numerical data in thousands in the Financial Statements contained in this offering memorandum, as applicable, and stating the rounded amount on a million basis.

In respect of financial data set forth in the main body of this offering memorandum, a dash ("—") signifies that the relevant figure is not available, while a zero ("0") or nil signifies that the relevant figure is available but has been rounded to zero. By contrast, no such differentiation has been made in respect of the financial data set forth in the financial information section of this offering memorandum beginning on page F-1. In the financial information section, zero ("0") is used to signify both unavailable figures and figures which are either exactly zero or have been rounded to zero.

SUMMARY

The following summary contains basic information about us and this Offering and is qualified by, and should be read in conjunction with, the more detailed information appearing elsewhere in this offering memorandum. This summary is not complete and does not contain all the information that you should consider before investing in the Notes. For a more complete understanding of this Offering, we encourage you to read this entire offering memorandum carefully, including "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business" and the Financial Statements and the notes thereto contained elsewhere in this offering memorandum. In this offering memorandum, references to "we," "us," "our" or similar terms are, prior to the consummation of the Acquisition, to the Target Group and, following the completion of the Acquisition, the Issuer and its consolidated subsidiaries, unless the context suggests otherwise.

Overview

We are a leading global med-tech platform with a focus on high performance ceramics ("HPC") solutions. Our HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological, mechanical, thermal, chemical, electric, magnetic or optical properties compared to competing products made from metal, alloys of cobalt and chrome or polymers (plastics). We have been engaged in the HPC industry for over 100 years, with operational expertise and experience in creating innovative system solutions for longstanding customers at an industrial scale. We offer hip joint prostheses components, dental implants and a growing range of other adjacent medical products to serve our Medical markets. We believe that our BIOLOX® brand has become the "gold-standard" for ceramic hip replacement implants. Based on the number of implants sold globally, on average a hip joint replacement with a BIOLOX® component is implanted every 30 seconds. We are focused on broadening our Medical portfolio and relationships, complemented by our Industrials product portfolio, which offers a wide range of HPC solutions to mobility markets, electronics markets and industrial applications markets, including actuators in engine valves for fuel injection systems, high-end substrates for power electronics, high speed cutting tools and sensoring solutions for different applications. Our end-market driven approach in our Industrials markets strives to actively focus on themes for development in the largest and most attractive industrial segments while our growth strategy in the Medical markets centers on organic growth and M&A, particularly in dental, orthopedics, complementary materials and digital solutions.

Our leading R&D infrastructure with over 600 patents and over 200 trademarks, as well as more than 150 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally enables us to stay at the forefront of innovation. Throughout our R&D activities, we closely collaborate with customers during the entire development and commercialization cycle of our products and become embedded within our customers' innovation processes by offering value-added solutions. Within the last five years, we have introduced many new products including key innovations in areas of new materials and processes as well as new medical solutions, such as BIOLOX CONTOURA®, a new generation of licensed ball heads cleared for marketing by certain of our customers by the U.S. Food and Drug Administration ("FDA") for use in certain prosthetic hip replacements without bone cement, and a ceramic core for the Simplify®Disc spinal disc implant by Simplify Medical (now part of the NuVasive group). Simplify®Disc received FDA approval for use in certain 1-level implants in 2020, and approval for use in certain 2-level implants in 2021.

Although 63.6% of our revenue was generated from customers based in Europe for the twelve months ended September 30, 2021, 19.7% of which was generated with customers based in Germany, we have a global infrastructure with production facilities in 11 countries across Europe, North America, Asia and South America, and over 3,400 full-time equivalent ("FTE") employees as of September 30, 2021. Further, many of our customers have a strong export-focus which positions us as a company with a global sales footprint.

For the twelve months ended September 30, 2021, we generated revenue of €629.4 million. The Issuer's Pro Forma Adjusted EBITDA for the twelve months ended September 30, 2021 was €275.9 million. Our Cash Conversion Ratio consistently remained above 80% during the last two years.

Our operations focus on two markets: Medical markets and Industrials markets.

Medical Markets

We develop and manufacture advanced ceramics, which are designed to perform their functions in critical medical applications, including hip replacements, other orthopedic implants and dental implants to serve Medical markets. In these markets, we primarily focus on ceramic components for hip joint prostheses, such as ball heads and cup inserts used in hip replacement procedures.

We believe that practitioners recognize our HPC components for medical implants, namely in hips, as a superior solution with proven benefits versus other materials such as metal alloys of cobalt and chrome. As a result, ceramic materials are replacing traditional materials for hip joint prosthetic components such as metal which have documented safety concerns and can trigger physical reactions in patients including, for example, allergic reactions resulting from metal sensitivity. In particular, HPC components are not only highly biocompatible, but also extremely wear resistant and durable and thus, have the ability to improve patients' lives through appropriate immunological response, corrosion resistance, infection prevention, lowest wear of all bearings and best clinical outcomes. Consequently, ceramics penetration in global medical implant markets is steadily rising leading to increased growth for our ceramic components. More than 20 million of our BIOLOX® ceramic components have been implanted in patients globally as of the date of this offering memorandum. We estimate that nearly one in two hip joint implant systems sold worldwide includes at least one ceramic component. Our customers are orthopedic implant OEMs, including the top orthopedic implant OEMs who together have a strong presence in the global hip implant market. We believe that our BIOLOX® brand has come to symbolize high quality and innovation and is increasingly preferred by surgeons and other medical professionals. We believe that in the future, the superior characteristics of ceramic materials will drive the rapidly growing market for dental implants, in which we have been active for many years and are further ramping up our presence with our DENSILOX® and ZERAMEX® brands. The penetration of ceramics in the dental implants market is rapidly increasing from a low starting point (according to a leading international consultancy firm, the ceramic share in the dental implant market in the US and EU-5 was equal to 7% in 2019) as patients not only become more focused on aesthetics and biocompatible implants, but also as new product innovations have closed the gap with titanium implants in terms of product quality, primarily relating to wearability and longevity. Since 2020, our HPC solutions have been used for spine disc implants and, over the coming years, we expect to bring our BIOLOX® technology to more orthopedic applications, such as implants for knee and shoulder. We also have a strong presence in ceramic solutions for medical equipment markets, including medical glove formers. In particular, we focus on ultrasound equipment, flow sensors, disposable medical glove formers and other applications in the medical field such as hermetic products for medical, pharmaceutical or laboratory environments.

Industrials Markets

We develop, manufacture and supply a broad range of highly specialized, performance critical HPC solutions for customers catering primarily to mobility, electronics and industrial applications to serve our Industrials markets.

We are a leading HPC manufacturer with a portfolio comprised of many different solutions used across various end-markets. Our dedicated teams of scientists and engineers collaborate closely with customers to develop tailor-made solutions and production processes to fulfill distinct functionality and performance requirements. We believe that we are one of the few advanced ceramics manufacturers with a full-range of HPC materials and manufacturing processes with a global reach. Our HPC solutions are often used in performance-critical components. For example, our cutting tools have a longer life and faster cutting speeds compared to non-HPC cutting tools, allowing our customers to save costs and reduce downtime. In mobility engineering, HPC products, including our piezo ceramic components, play a vital role in increasing safety and are increasingly being used to meet the high performance requirements of electronics components in hybrid and full electric vehicles. They also improve cost-effectiveness and enhance comfort in vehicles. Our ceramic substrates are used for a variety of purposes in the electronics and telecommunications sector, including measurement and control technology and entertainment electronics. We believe that the specialized, mission-critical nature of our solutions, our long-standing customer relationships and our highly diversified portfolio of solutions and customer base, reduce the exposure of our business to the Industrials markets to any single industry or product.

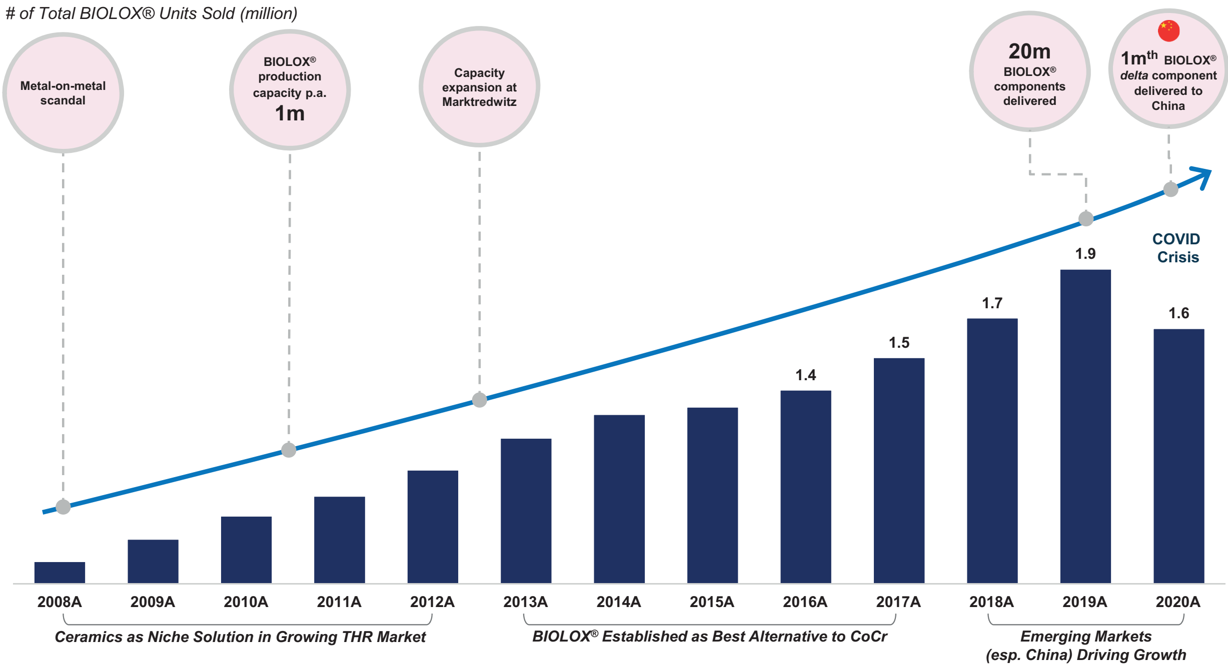
Our Competitive Strengths

A high growth med-tech platform with defensible industry leading position

We are the innovation leader of ceramic components for medical implants, addressing a €8.1 billion market based on global sales in 2019, according to a leading international consultancy firm. The global addressable orthopedics implant market, consisting of hip, spine, knee and shoulder and veterinarian orthopedic implants, amounted to €3.5 billion in 2019, and its growth is driven by an aging population, increasing life expectancy, increasing prevalence of overweight and chronic diseases, increasing access to healthcare, favorable demographics factors and increasing number of pet owners (for veterinarian implants), among others. Further, global growth in the hip total addressable market by volume of hip implant surgeries is expected to grow at a CAGR of approximately 5% from 2022 to 2026. We believe practitioners recognize our high performance ceramic components for medical implants as a superior solution with proven benefits and a superior clinical record as compared to other materials such as metal alloys of cobalt and chrome. As a result, ceramics penetration in global medical implant markets is steadily rising, leading to increased growth for our ceramic components. For example, in hip implants, the ceramic volume share of hip ball heads is expected to increase from approximately 47% in 2019 to approximately 58% in 2026, with a longer-term penetration potential of 100% and increasing penetration by 18% from 2016 to 2026, according to a leading international consultancy firm. The global addressable dental implant market is estimated to amount to €4.6 billion in 2019 and to grow at a CAGR of approximately 6% between 2022 and 2026 driven by an aging population, higher disposable income and increased aesthetic consciousness, with ceramic dental implant EU-5 and US markets growing at a CAGR of approximately 10% for the same period, according to a leading international consultancy firm, driven by an aging population, higher disposable income, and increasing awareness of dental aesthetics. The volume share of ceramic dental implants for the EU-5 and US dental implant fixtures and abutments is expected to grow from a mere 4% in

2019 to 6% in 2026, with a mid-term ambitious penetration potential of 20% to 25% in the US and 20% to 30% in EU-5, according to a leading international consultancy firm.

BIOLOX® is our key brand and product line for our orthopedics business. Our BIOLOX® product line has been in the market since 1974, growing from approximately 0.6 million units sold per year in 2008 to approximately 1.6 million units sold for the year ended December 31, 2020 (which includes the impact of procedure postponements during COVID-19-related lockdowns), as shown by the graph below:



As of the date of this offering memorandum, well over 20 million BIOLOX® components have been delivered to medical OEMs worldwide. We believe that our BIOLOX® components are the "gold-standard" for hip implants with a unique market position, and hip implant systems containing our BIOLOX® components have become the product of choice for surgeons around the globe. OEMs, hospitals, surgeons, patients and regulators all expect consistent and flawless performance, which we believe we can demonstrate on the basis of significant in-body performance and our unmatched clinical record.

We also have a highly defensible position in dental implants. With the acquisition of Dentalpoint in 2021, we have added ZERAMEX®, a well-established, certified implant systems brand with a long-standing clinical history, to our high-quality, innovative ceramic implants brand, DENSILOX®. Both DENSILOX® and ZERAMEX® are 100% metal-free and cement-free solutions: ZERAMEX® has FDA and CE clearance and long-standing clinical history.

Defensible market position due to strong customer loyalty and stickiness, unmatched scale and quality track record as well as high regulatory hurdles

We have over 45 years of experience in the orthopedics market and have established strong and long-standing relationships with our customers, including all of the top orthopedic implant OEMs. We believe we are a key supplier of ceramic components to the top orthopedic implant OEMs. We are able to achieve significant economies of scale and regularly implement productivity improvements, which helps us to effectively compete given that players in this industry require scale in order to cover fixed costs. OEMs typically prefer suppliers with capacity to increase volumes, react flexibly to volume changes and sign longer-term contracts. We are also able to manage costs through our strong supplier base built up over a number of years. We believe our customers are highly loyal as we have a strong reputation with surgeons and care providers. In addition, our ceramic hip components represent only a small portion of the total price of an implant system for an OEM, typically comprising less than 10% of the overall cost, but are critical to the performance of these products. As a result, customers tend to be less sensitive to the cost of these components and primarily focused on quality. Ceramic hip components also have a high potential of being more cost-efficient over the course of their lifecycle than metal components due to their durability (regardless of the patient's age) and other safety concerns. In addition, responsibility to bring a new device to the market typically lies with the OEM, as the marketing authorization is granted not for the component but for an entire hip implant system. This process requires substantial financial efforts and time since obtaining marketing authorization from regulators can take 18 months or longer for ceramic-on-polyethylene products or up to six years for ceramic-on-ceramic products across geographies. Therefore, replacing one part in a hip implant system could require new or additional regulatory authorizations or delay the regulatory review process, which incentivizes customers to use an established and proven product like ours. We also maintain a regulatory and quality team of over 50 people as of September 30, 2021, in an effort to ensure a smooth process and efficient assistance both to our customers and to our internal organization. Given the associated liability risks for OEMs in relation to any quality issues, we believe that OEMs prefer our well-trusted BIOLOX® brand to others.

We actively engage in promoting our brand among key opinion leaders in the medical industry, including surgeons and hospitals by regularly organizing technical training sessions and attending medical seminars on clinical outcomes and material properties of ceramics. We believe BIOLOX® is a globally recognized brand in hip implant solutions among surgeons and considered the industry “gold-standard” for hip replacement procedures. As a result, our leading market position enhances continuing customer loyalty.

Strong R&D capabilities and track record of medical manufacturing excellence

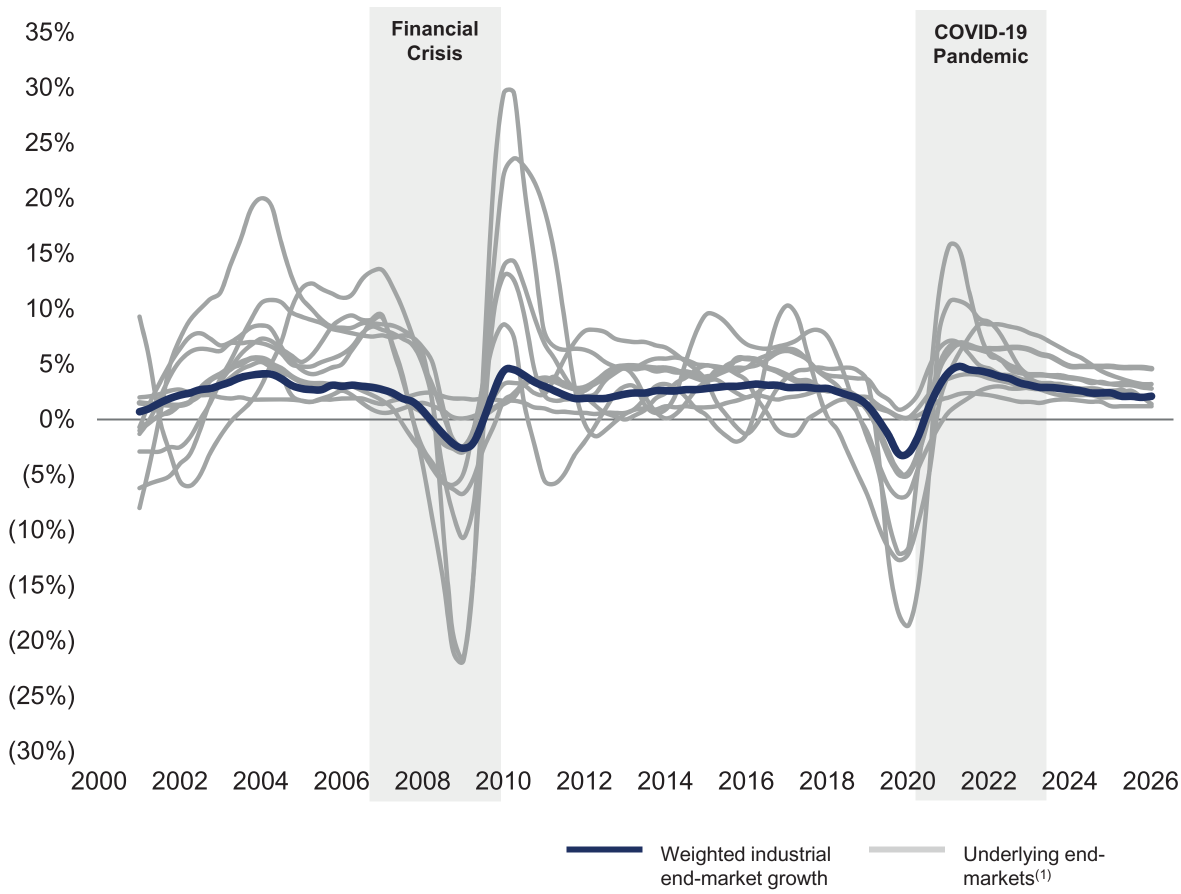
Our decades of experience as a leading manufacturer of high performance ceramic components with a broad coverage of different ceramic materials has provided us with an unmatched combination of R&D infrastructure, process excellence and regulatory expertise. Throughout our R&D activities, we closely collaborate with customers during the entire development and commercialization cycle and become embedded within our customers’ innovation processes by offering value-added solutions. Our leading R&D infrastructure with over 600 patents and over 200 trademarks (registered across Germany, the European Union, the United Kingdom, the United States and China) as of the date of this offering memorandum, as well as more than 150 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally enables us to stay at the forefront of innovation. Within the last five years, we have introduced many new products including key innovations in areas of new materials and processes as well as new medical solutions, such as BIOLOX CONTOURA®, a new generation of licensed ball heads cleared by the FDA for marketing by certain of our customers for use in certain prosthetic hip replacements without bone cement, and a ceramic core for the Simplify®Disc spinal disc implant by Simplify Medical (now part of the NuVasive group). Simplify®Disc received FDA approval for use in certain 1-level implants in 2020, and approval for use in certain 2-level implants in 2021. Furthermore, our unique combination of know-how, experience and equipment has allowed us to optimize our high-volume production process with units undergoing quality tests at every stage. We have a robust ability to produce and deliver clinical grade ceramic solutions at scale, with the ability to produce more than two million BIOLOX® hip components per year, and we have delivered well over 20 million BIOLOX® components in total as of the date of this offering memorandum. With our nimble setup, we are able to react quickly to changing customer demands, meet peak increases in demand as well as rapidly progress from prototyping to large volume production. Our production facilities in Marktredwitz, Lauf and Plochingen (all in Germany), and our Spreitenbach facility in Switzerland (operated by our subsidiary, Dentalpoint AG) are equipped with highly automated machine park manufacturing equipment dedicated to developing prototypes and made-to-order batches or pilot series, which we believe makes us the only hip component player capable of providing ceramic hip components at scale. Our dual-site manufacturing footprint for hip components fulfills the critical sourcing requirements of our customers and manifests us as a preferred supplier. Our culture and track record of quality control has also contributed to our being awarded various quality and industry certifications.

Customer-centric, profitable and resilient Industrials markets

We complement our product offering and solutions for the Medical markets with those for the Industrials markets, offering highly specialized solutions to select industrial markets and applications, in particular mobility, electronics and industrial applications. Revenue from Industrials markets represented 51.9% of our revenue for the twelve months ended September 30 2021.

We believe ourselves to be the partner of choice for a diverse base of blue-chip customers across various end markets, which has resulted in growth of approximately 3% per annum since 2000, despite the financial crisis and the impact of the COVID-19 pandemic during this period, demonstrating the stability, resilience and solid profitability of our Industrials markets. In addition, as demonstrated in the graph below, the growth dynamics of our addressable Industrials end-markets for the periods presented are largely uncorrelated.

Global YoY Growth of Core End Markets(1) (%)



Source: a leading international consultancy firm

(1) Industries shown include aerospace, motor vehicles & parts, electrical equipment manufacturing, consumer electronics, machine tools, basic chemicals & fertilizers, textiles, oil & natural gas extraction, construction of buildings, public administration, defense & social security.

In recent years, we have positioned ourselves as a customer-centric solutions provider in the Industrials markets. Due to the specialized nature, manufacturing complexity and quality requirements of our products, we enjoy customer relationships spanning decades with many Industrials customers. The collaborative nature of our development processes often means that we are the sole supplier of a particular solution with high contract renewal rates, as co-developing specifications often requires years of validation. Further, while our solutions are typically mission-critical, these usually account for a small portion of the overall cost of our customers' end-products. Our diverse base of customers includes leading blue-chip customers such as Bosch, Brembo, Hella, Schaeffler, BASF, Rogers, Heraeus, Scientific Design, Cepheid, Federal Mogul, Oerlikon, Berliner Glas and Volkswagen.

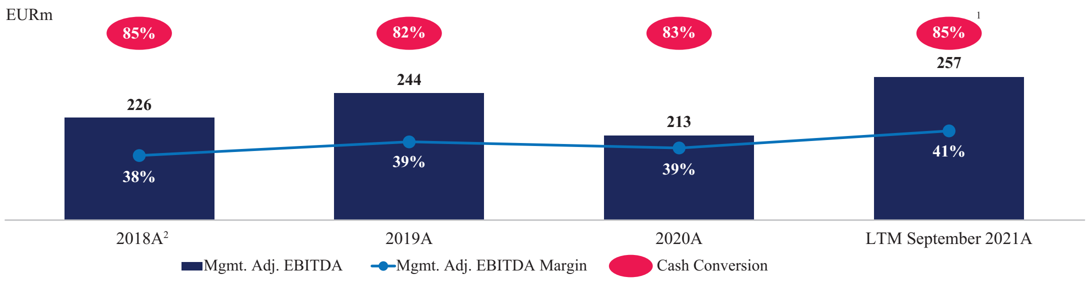
Our business from the Industrials markets benefits from our focus on attractive, growing and broad range of end-markets. For example, in the mobility market, we expect the rise of electric vehicles and autonomous driving to facilitate the use of piezo-ceramic components, used in a wide range of sensors, as well as the increased use of substrates for various demanding power electronic solutions. In particular, hybrid electric vehicle ("HEV") drivetrains include ceramic components for both internal combustion engine ("ICE") and electric vehicle ("EV") drivetrains. The decline in demand for ICE should be more than compensated by HEV demand, which is expected to grow by approximately 30% between 2020 and 2026 and to represent a market value of approximately €0.7 billion to €1.0 billion by 2026 (compared to an expected total market value for drivetrain technology of between €1.2 billion and €1.4 billion in 2026) according to a leading international consultancy firm. HEV production is expected to be 47 million vehicles per year by 2026 according to a leading international consultancy firm, with the ceramic value per hybrid vehicle representing approximately between €16 to €21 per vehicle in the same period, making it an attractive growing market. The transition to EV also increases ceramics intensity for this category of vehicles (power electronics, passive and active components, circuit protection, circuit boards) to approximately €15 to €19 per vehicle. The EV market is expected to reach a production level of 12 million vehicles by 2026 and to represent a market value of approximately €180 million to €220 million by 2026, according to a leading international consultancy firm. We also believe we are well-placed to capitalize on trends driving growth in other industrial end-markets besides mobility such as electronics and industrial applications.

Strong financial profile supported by sustained profitability and highly attractive cash generation

We have evolved into a leading high-growth medical company with a highly resilient financial profile. Between 2007 and 2019, we were able to grow revenues by approximately 5.4% per year, on average, which was driven by secular growth, steadily increasing ceramics penetration across our end-markets and targeted growth initiatives. Our Management Adjusted EBITDA margins were 37.7%, 39.4%, 38.6% and 40.7% in 2018, 2019, 2020 and the twelve months ended September 30, 2021, respectively, bolstered by a differentiated and highly specialized product offering, operational excellence and a standout ability to profitably scale up production in a highly regulated industry. Our prudent approach to cost management in sales and other supporting functions has contributed to strong operating leverage and has allowed us to increase profitability.

In addition, our well-invested manufacturing footprint allows us to operate with modest maintenance capital expenditure requirements, which typically comprise half of our total capital expenditures. While our total capital expenditures are subject to the viability of growth projects during the period, our flexible R&D approach and growth capital expenditure projects provide us with the flexibility to defer a significant part of planned expenditures to later periods.

Our business is also highly cash generative and has a track record of delivering strong financial results with a Cash Conversion Ratio of 85.3%, 82.1%, 82.8% and 84.9% in 2018, 2019, 2020 and the twelve months ended September 30, 2021, driven by growth and margin expansion as well as a well-invested asset base and capital expenditures focusing on attractive growth projects. We intend to maintain a disciplined approach in using such cash, while preserving attractive margins. We believe that the stability and resilience of our business has been demonstrated in particular during the economic slowdown resulting from the COVID-19 pandemic. For example, we recorded a resilient Cash Conversion Ratio of 82.8% in 2020 as a result of strict cost control measures, including effective cost reduction programs. This was driven in part by the strength of our team, our flexible cost base as well as the highly diversified portfolio of end-markets we serve and customer base of our business. The graph below shows our Management Adjusted EBITDA, Management Adjusted EBITDA Margin and Cash Conversion for the period between 2018 and the twelve months ended September 30, 2021:



(1) Excluding €50 million of purchase price payment related to the acquisition of Dentalpoint AG.
(2) Figures for 2018 are presented on a *pro forma* basis, giving effect to the acquisition of CeramTec Holding and its consolidated subsidiaries in 2018 as if it had occurred on January 1, 2018. See "*Presentation of Financial and Other Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of Ceramtec Holding GmbH in 2018*."

Highly experienced management team with track record of profitably growing the business

Our management team combines deep and long-standing industry knowledge and extensive experience working for other global organizations such as Biomet, Daimler, Johnson Controls, Eaton and Siemens. Our CEO Dr. Hadi Saleh is a surgeon by profession and thus, has an excellent and hands-on understanding of our customers' needs. The managerial excellence of our management ranges from regulatory compliance and process excellence to audit tests as well as an uncompromising attitude of quality and integrity. In particular during the COVID-19 pandemic in 2020, our management showcased its track record of operational excellence driving margin and cash conversion stability. The senior team is further supplemented by a highly capable, committed, and specialized second level management with proven track records of developing and commercializing innovative HPC solutions, especially accelerating our medical platform. We also benefit from a highly productive and loyal over 3,400-strong employee base as of September 30, 2021, with very low employee turnover as well as good relationships with all work councils and unions.

Our Business Strategy

Drive growth of leading hip implant offering

We will continue to drive the penetration of BIOLOX® in orthopedic hip replacement implants and continued education of end-users about the benefits of ceramic components. According to a leading international consultancy firm, the market for ceramic hip implants is expected to grow at approximately 8% per year between 2022 and 2026, driven by an overall increase in underlying hip replacement surgeries (5%) and increased ceramics penetration (3%). Growth is expected to be particularly pronounced in underpenetrated markets such as China and Rest of World markets (i.e., excluding China, EU-5 the US). China is one of the fastest growing markets for hip replacements with an expected CAGR of 13.4% for ceramic hip components from 2022 to 2026, according to a leading international consultancy firm. We intend to partner with local players in China to drive further penetration and achieve scale through domestic geographic expansion. As such, we are currently involved in multiple projects with leading Chinese OEMs. Our established footprint and customer suite in China provides a proven playbook for other high growth geographies such as India. In addition to regular upgrades of existing products, we also focus on introducing new products centered around hip implants leveraging our global leadership position. For example, we successfully launched a new generation of licensed ball heads cleared by the FDA for marketing by certain of our customers for use in certain prosthetic hip replacements without bone cement, BIOLOX CONTOURA®, in 2019 and are in the process of launching a ceramic resurfacing solution with two ongoing projects in clinical trials and anticipate CE marking in 2022. Beyond introducing new products, we are also able to monetize our unique position as an innovation leader by offering adjacent services to our customers such as the shipping of our components in sterilized packages, regulatory services on the back of our extensive experience with regulatory bodies globally (e.g., technical file preparation and submission) and engineering services (wide range of services to facilitate collaboration across component interfaces and process steps, e.g., 3D scanning, CAD Modelling).

Increase our presence in the dental market

We are a leading manufacturer of ceramic dental implants with our ZERAMEX® brand's long-standing clinical history, and together with our DENSILOX® brand, we offer 100% metal-free and cement-free components with high corrosion resistance, hardness and toughness. In addition, our highly-specialized portfolio includes FDA-cleared and CE-marked products. In doing so, we pursue a three-pronged go-to-market strategy offering a comprehensive one-stop shop solution consisting of white label and custom-designed products for OEMs, custom-made partnerships with OEMs and branded products via direct sales channels or distributors, respectively. Our offering is supplemented by key services across product development, digital solutions, quality control, manufacturing and regulatory affairs. We have strong conviction in the future growth trajectory of the ceramics dental implant market, as tooth replacement procedures with biologically sound implant materials which are free of metallic parts and superior aesthetic outcomes continue to grow in popularity as a premium solution. While ceramic dental implants are still a relatively niche product within the titanium-dominated dental implant market, with a 7% share of the €2.6 billion market (EU-5 and US markets) in 2019, according to a leading international consultancy firm, ceramic penetration is expected to significantly increase resulting in average growth of the ceramic dental implant EU-5 and US markets by approximately 10% per year between 2022 and 2026. We believe that our strong product portfolio and broad market access will allow us to grow over-proportionally, driven by the underlying growth in dental procedures as well as increasing penetration of ceramics in the dental market. We believe we can leverage our well-established market position, track record of operational excellence and production at unmatched scale in other ceramic applications, to take market share in the dental market. We have high volume and high-quality manufacturing capabilities with flexible production routes in place to ramp-up production as demand increases. Our regulatory expertise as well as clinical trial and documentation history will help us to scale-up our product offering. We are also planning to expand our product offering to other implant treatments such as full dentures or implant fixation and are rolling-out our digital workflow offering for full digital service provisions to end-customers.

Increasing Growth in Medical Equipment

We aim to grow our presence in medical equipment markets on the back of strong end-market demand. In particular, we intend to focus on ultrasound equipment, flow sensors and medical glove formers.

The ultrasound equipment market is expected to grow in terms of value by 4% per year between 2022 and 2026, according to a leading international consultancy firm, driven by increasing healthcare spend due to ageing population and focus on proactive diagnosis. We also expect a shift away from MRI/CT imaging and increasing adoption in clinical applications to drive long-term growth in ultrasound equipment. We intend to leverage our piezo-ceramic knowledge to grow our presence in ultrasound imaging equipment and high-powered ultrasonic transducers.

The market for medical delivery systems is expected to grow 6% per year between 2022 and 2026, according to a leading international consultancy firm, driven by a strong demand for insulin and infusion pumps. We believe that we can capitalize on this growth given our strong relationships with the leading OEMs, to expand our presence in this market.

The global disposable glove market is expected to grow between 7% to 9% per year between 2022 and 2026, according to a leading international consultancy firm, driven by increased health and safety awareness globally, particularly due to the COVID-19 pandemic, which is expected to continue to drive long-term growth. We have a dedicated facility in Seremban, Malaysia for manufacturing glove formers, capable of coping with growing demand and located in close proximity to the its key customer. We intend to further capitalize on our brand and visibility to strengthen our position in this market.

Notwithstanding the above areas, we will also continue to monitor attractive opportunities to enter other medical equipment markets that cater to our unique expertise and capabilities.

Leverage our BIOLOX® technology to expand into other adjacent orthopedic markets

We believe that superior characteristics of HPC materials will open up the market for other orthopedic implants, such as spine, knee and shoulder. For spines, we developed and launched on the market the ceramic core for the Simplify® Disc implant in cooperation with Simplify Medical in 2020, and have received FDA approvals for use in certain 1-level implants in 2020, and approval for use in certain 2-level implants in 2021. The global market for artificial spinal disc implants is projected to grow by approximately 9.5% per year between 2022 and 2026, according to a leading international consultancy firm. Ceramic components are expected to reach up to 10% market share by 2026, according to a leading international consultancy firm, driven by clinical benefits of the Simplify® Disc solution with our ceramic core over comparable cervical disc implants due to its slim design, MRI compatibility, use of biocompatible materials and unique articulation designed to restore natural motion, together with the strong marketing capability of NuVasive, a large spine-focused OEM that acquired Simplify Medical in 2021.

We also view ceramic knee implants as a logical next step for us, given the similar market dynamics and success factors when compared to hip implants. The market for knee implants was €1.6 billion in 2019 and expected to grow at approximately 4% per year between 2022 and 2026, according to a leading international consultancy firm. While virtually all current replacement implants are made of metal alloys, we expect that similar issues as with hips, such as wear, infections, allergic reactions and ultimately, removal surgeries, are likely to provide a significant market opportunity for ceramic implants. We believe the opportunity for a new generation BIOLOX® knee is particularly attractive due to the anticipated significant ceramic penetration in combination with our existing orthopedic expertise and brand awareness amongst OEMs and end-users. Our new BIOLOX® delta knee implants are currently in the design phase, and we expect clinical trials to commence in 2023 and go-to-market in the United States in 2027.

In addition, ceramic shoulder implants and other orthopedic solutions for extremities present further attractive adjacencies for growth that we will explore in the medium- to long-term. The global market for shoulder implants amounted to €212 million in 2019 and is projected to grow by approximately 7% between 2022 and 2026, according to a leading international consultancy firm. The market currently comprises almost 100% metal implants, with two challenger OEMs providing insignificant volumes of ceramic components. However, we expect that ceramic shoulder implants could comprise up to approximately 10% of the shoulder implant market in the medium term and up to 50% in the longer-term, primarily due to the superiority of ceramic shoulders compared to metal, further driven by surgeons, who would specifically recommend a ceramic shoulder implant for patients who are hypersensitive, young or undergoing total shoulder replacements. We have designed a new ceramic shoulder head to be used for both anatomic as well as reverse shoulders. We currently have an agreement with one OEM in place that will shortly start clinical trials to gain market approval and another OEM that has the design on hand.

Focused product strategy targeting selected high growth and profitable industrial end-markets

We continuously monitor additional value-add services for existing solutions in the Industrials markets (e.g., lazering, metallization) and new solutions in targeted high-growth markets (e.g., electronics and e-mobility) in order to consider how best to apply our materials expertise, manufacturing know-how and regulatory experience to develop relevant HPC solutions that can be successfully commercialized. For example, we are actively managing the auto transition by expanding our broad range of products tailored to ICE and HEV drivetrains to also include new thermal and electronic HPC applications for the growing electronic and autonomous vehicle markets. According to a leading international consultancy firm, the total ceramic value per hybrid or EV drivetrain is estimated to be above that of ICE drivetrains (currently at approximately €16 for hybrid and €15 for EV drivetrains, as opposed to €10 for ICE drivetrains, and expected to grow by 2026 to a range of approximately €16 to €21 for hybrid drivetrains and approximately €15 to €19 for EV drivetrains, while total ceramic value per vehicle is expected to remain stable at approximately €10 for ICE drivetrains). We expect to benefit from the ramp up in hybrid and EV adoption as the annual total market value for hybrid and EV drivetrain technology is expected to have outgrown the total market value of ICE drivetrain technology by 2026, according to a leading international consultancy firm. We further believe the growth in power electronics and renewable energy, more specifically wind energy and electrical output from larger turbines, pose attractive potential opportunities for our HPC substrates.

Driving excellence and digitalizing our business

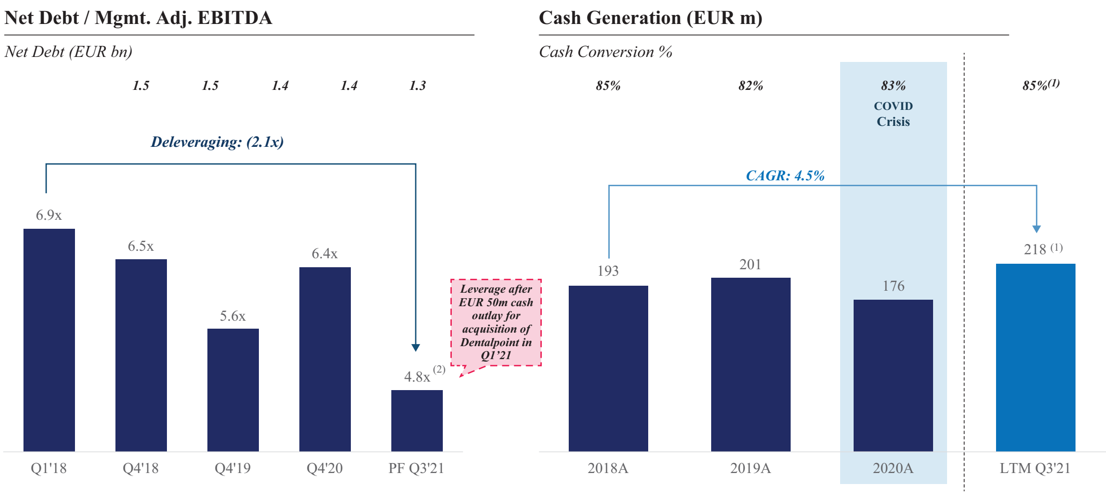
We intend to maintain our position as the partner of choice in our end-markets by continuing to focus on initiatives that drive excellence in all aspects of our business, in particular our commercial & operational excellence and continued digitalization efforts. Specifically, we apply value-driven pricing and provide new service functions as we continue to strive to be closely attuned to our customers' needs. The successful roll-out of our global CRM system and an aligned commercial process will allow us to continually enhance the customer experience and build meaningful partnerships. Furthermore, we continue to optimize our global operations and supply chain management, realizing productivity improvements based on a performance-enhancing lean manufacturing/lean enterprise methods to achieve annual productivity improvements and to reduce manufacturing inefficiencies including, among others, defects, extra-processing, over-production, and inventory costs ("Lean Principles") and focused employee engagement. Concurrently, we have implemented modern tools such as integrated planning, digital factory and visual shop-floor management systems to increase asset utilization and reliability of supply. A further focus of our growth strategy has been digitalization initiatives. In particular, we intend to build out the use of our digital sales channels to drive market and customer accessibility (e.g., self-configuration tool and digital marketing). Digitalization will also serve as a tool to further streamline our organization and automate various processes.

Pursue value accretive M&A

We have, in the past, engaged in M&A activity to strategically position our business for future growth. We have a successful track record of executing and integrating multiple bolt-on acquisitions, including our most recent acquisition of Dentalpoint AG, the electrochemical business from Morgan Advanced Materials plc and DAI Ceramics Inc. Going forward, for our business related to the Medical markets, we aim to leverage our brand strength, our strong regulatory know-how as well as customer relationships across the globe, and focus on potential targets in ceramics and adjacent non-metal advanced materials. As part of the targeted growth strategy for the Industrials markets, we may pursue selective bolt-on acquisition opportunities in industrial growth segments.

Maintain a disciplined approach to cash generation

Supported by our well-invested manufacturing footprint and overall growth, our business is highly cash generative, with Cash Conversion Ratios of 82.1% and 82.8% in 2019 and 2020, respectively. We intend to maintain a disciplined approach in using such cash while preserving attractive margins. Further, we have historically been successful at reducing our indebtedness as demonstrated by the constant decrease from a ratio of 7.3x adjusted net debt to Management Adjusted EBITDA in the third quarter of 2017 in connection with the financing for the acquisition in 2018, to a ratio of 4.8x adjusted net debt to Pro Forma Adjusted EBITDA as of September 30, 2021, prior to giving effect to the Transactions. This decrease is further illustrated by the graph below:



(1) Excluding €50 million of purchase price payment related to the acquisition of Dentalpoint AG.

(2) Based on the Issuer's €275.9 million Pro Forma Adjusted EBITDA for the twelve months ended September 30, 2021.

We reduced our leverage, despite COVID-19 due to continued Management Adjusted EBITDA growth across the period and strong cash generation. We anticipate that our future uses of cash include engaging in value accretive M&A and maintaining an optimal capital structure.

The Transactions

The Acquisition

On August 16, 2021, CTEC III GmbH ("Bidco"), an entity beneficially owned by a consortium led by funds advised by BC Partners and CPP Investments (the "Sponsors"), entered into the Acquisition Agreement with CTEC Acquisition S.à r.l., (the "Seller") to acquire all the issued and outstanding capital stock of the Target (the "Acquisition"). In addition, the existing shareholder loan (the "Existing Shareholder Loan") granted by the Seller as lender to CeramTec Bondco GmbH will be transferred on or about the Acquisition Date, to Bidco as lender in connection with the Acquisition. We currently expect the Acquisition to complete by February 28, 2022, subject to the satisfaction of certain closing conditions, which include receipt of the approval by relevant merger and foreign investment control authorities. Under the terms of the Acquisition Agreement, Bidco has agreed to take all necessary steps to obtain the required clearances with regard to certain entities. If closing has not occurred by April 16, 2022 or by such other date as agreed by the parties to the Acquisition Agreement (the "Acquisition Longstop Date"), the Acquisition Agreement may be terminated, or if the actions to be undertaken at the scheduled date of consummation of the transaction are not conducted by one of the parties, the other party may withdraw from the Acquisition Agreement.

The Acquisition Agreement contains customary warranties given by the Seller as to capacity, title and certain business matters as well as customary covenants given by the Seller regarding, among other things, the conduct of the business and affairs of the Target Group pending consummation of the Acquisition. The Seller's liability for any breach of a warranty is subject to certain thresholds and limitations.

The Issuer will indirectly acquire the Target through its subsidiary, Bidco. See "*—Summary Corporate and Financing Structure*." Prior to the Acquisition Closing Date, the Issuer will not have control over the Target Group and the Target's board will be required to manage the Group under its own responsibility and in a manner that is in the best interests of the Target Group. See "*Risk Factors—Risks Related to the Transactions—The Issuer does not currently control the Target Group and will not control the Target Group until the Acquisition Closing Date*."

Sources and Uses for the Acquisition

The funding for the consideration payable for the Acquisition, the repayment of certain existing debt of the Target Group, including the outstanding indebtedness under the Existing Credit Facilities and the Existing Notes, and the payment of related fees and expenses and other costs related to the Transactions consist of proceeds from the following sources:

- equity contributions from the Sponsors and other co-investors to the Issuer in the form of subscription to ordinary equity shares of the Issuer equaling approximately €1,888 million and contributed to Bidco through intermediate holding companies (the "Equity Contribution");
- drawings under the Senior Term Facility in an aggregate amount of €1,430 million; and
- the proceeds from the Offering of the Notes offered hereby.

The notional sources and uses necessary to consummate the Transactions are shown in the table below. Actual amounts will vary from estimated amounts depending on several factors, including the actual Acquisition Closing Date, the actual purchase price for the Acquisition, the amount of cash available to the Target Group, the actual amount of existing indebtedness of the Target Group being repaid and actual amounts outstanding under the Existing Credit Facilities, Existing Notes and other existing indebtedness of the Target Group on the Acquisition Closing Date (including any accrued and unpaid interest thereon and any other prepayment premiums), any fluctuations in currency exchange rates for amounts not denominated in euro, the amount of the Equity Contribution or other available sources of cash and differences between estimated and actual fees and expenses related to the Transactions. In particular, the purchase price under the Acquisition Agreement is subject to certain notified cash leakage items and certain other adjustments required under the Acquisition Agreement. Any changes in these amounts may be funded through other sources available to the Group, including drawings under the Revolving Credit Facility or other cash sources. The table below should be read in conjunction with "*Capitalization*" and "*The Transactions*."

Sources of Funds	Amount	Uses of Funds	Amount
(in € million, unaudited)			
Senior Term Facility(1)	1,430	Total cash consideration for Acquisition and repayment of existing debt(4)	3,719
Notes offered hereby(2)	515	Transaction fees and expenses(5)	114
Equity Contribution(3)	1,888		
Total sources	3,833	**Total uses**	3,833

(1) Represents the euro-equivalent aggregate principal amount we expect to draw under the Senior Term Facility on or about the Acquisition Closing Date. In connection with the Transactions, Bidco is expected to enter into a Senior Secured Credit Facilities Agreement which will provide for up to €1,680.0 million (equivalent) of committed facilities, including (i) the Senior Term Facility in the amount of up to €1,430.0 million and (ii) a €250.0 million Revolving Credit Facility. See "*Description of Certain Financing Arrangements—Senior Secured Credit Facilities Agreement*." Any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Revolving Credit Facility.

(2) Represents the estimated gross proceeds of the Notes offered hereby.

(3) Represents the expected Equity Contributions from the Sponsors and other co-investors to the Issuer in the form of subscription to ordinary equity shares of the Issuer. The amount of the Equity Contribution may be reduced by the amount of cash available to the Target Group on the Acquisition Closing Date to prepay or redeem amounts outstanding under the Existing Credit Facilities and the Existing Notes.

(4) Represents the agreed consideration payable to the Seller pursuant to the Acquisition Agreement, as adjusted for our estimates of certain notified cash leakage items and certain other adjustments required under the Acquisition Agreement, and the estimated amount to prepay or redeem in full all outstanding net indebtedness under the Existing Credit Facilities and the Existing Notes. Actual consideration paid on the Acquisition Closing Date will vary due to factors, including, among others, the date of consummation of the Acquisition, the amount of cash available to the Target Group, the amount of Target Group cash that is used to repay existing indebtedness, the amount of accrued interest on the Existing Credit Facilities and the Existing Notes from September 30, 2021 to the Acquisition Closing Date and any adjustments to the cash consideration paid pursuant to the Acquisition Agreement on the Acquisition Closing Date.

(5) Represents estimated fees and expenses associated with the Transactions, including commitment, underwriting, financial advisory, legal, accounting, ratings advisory, other advisory fees, consortium fees, and other transaction costs and professional fees (but excluding net interest expense and other fees that will accrue on proceeds of the Notes while held in the Escrow Account). These fees and expenses have been estimated as of the date of this offering memorandum and are subject to change.

Escrow Account

Pending the consummation of the Acquisition, the Initial Purchasers will deposit the gross proceeds from the Offering into the Escrow Account in the name of the Issuer. The initial funds deposited in the Escrow Account, and all other funds, securities, interest, dividends, distributions and other property and payments credited to the Escrow Account (less any property and/or funds paid in accordance with the Escrow Agreement) is referred to as the "Escrowed Property." The Escrow Account will be controlled by the Escrow Agent and will be pledged on a first-priority basis in favor of the Trustee on behalf of the holders of the Notes pending release or special mandatory redemption as described below. See "*Summary—The Offering—Collateral*." The release of the Escrowed Property from the Escrow Account is subject to the satisfaction of certain conditions, including that the funds required to pay the consideration for the Acquisition will be applied within five business days. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*." If these conditions are not satisfied on or before the Escrow Longstop Date or upon the occurrence of certain other events, the Notes will be subject to a special mandatory redemption. The special mandatory redemption price for the Notes will be equal to 100% of the aggregate issue price of the Notes plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the date of such special mandatory redemption. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*" and "*Risk Factors—Risks Related to the Transactions—If the conditions precedent to the release of the Escrowed Property are not satisfied, the Issuer will be required to redeem the Notes, but the Escrow Account may not have sufficient funds to cover such redemption without relying on funding from the Parent*."

In the event of a special mandatory redemption, the Parent will have committed to fund the Issuer in such aggregate amounts as are required in order to enable the Issuer to pay any funding shortfall, including Escrow Account fees, negative interest on the Escrow Account's balances, costs and accrued and unpaid interest and additional amounts, if any, owing to the holders of the Notes on such special mandatory redemption date. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption" and "Risk Factors—Risks Related to the Transactions—If the conditions precedent to the release of the Escrowed Property are not satisfied, the Issuer will be required to redeem the Notes, but the Escrow Account may not have sufficient funds to cover such redemption without relying on funding from the Parent*."

The Issuer

The Issuer is a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany. The Issuer has no material assets or liabilities and has not engaged in any activities other than those related to its formation and the Transactions. The Issuer is indirectly controlled by the Sponsors. The Issuer is registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267748. The Issuer's registered office is at Schwanthalerstraße 73, c/o SCUR24 Holding GmbH, 80336 Munich, Germany.

The Sponsors

BC Partners

BC Partners is a leading alternative global investment firm focused on private equity, credit, and real estate, that is currently investing its eleventh flagship private equity fund. BC Partners is one of the most experienced private equity firms in Europe and has continually operated for over three decades as a pan-European partnership with a strong presence in North America. BC Partners currently advises 11 successive funds, and since inception has completed 124 private equity investments representing €161 billion of enterprise value across 18 countries. BC Partners is highly committed to the healthcare sector, with 18 investments globally and a proven track record of supporting its portfolio companies to deliver profitable growth. BC Partners operates across four core sectors including Industrial & Business Services, consumer & retail, healthcare and TMT and employs an investment team of 67 professionals with over 540 years of combined private equity experience operating from four offices: New York, London, Paris and Hamburg.

CPP Investments

CPP Investments is a professional investment management organization that manages the Fund in the best interest of the more than 20 million contributors and beneficiaries of the Canada Pension Plan. In order to build diversified portfolios of assets, investments are made around the world in public equities, private equities, real estate, infrastructure and fixed income. Headquartered in Toronto, with offices in Hong Kong, London, Luxembourg, Mumbai, New York City, San Francisco, São Paulo and Sydney, CPP Investments is governed and managed independently of the Canada Pension Plan and at arm’s length from governments. At June 30, 2021, the Fund totaled C$519.6 billion.

CPP Investments’ Direct Private Equity team is a committed long-term investor with permanent capital, a focus on sizeable investments alongside aligned partners, the ability to invest across the full spectrum of ownership from minority positions up to full control platforms, and the ability to shape the duration and underwriting approach of investments to support longer-date return on investment initiatives. With 59 investment professionals globally, it has deployed more than C$43 billion across 139 investments since inception, of which 11 in the healthcare sector. At March 31, 2021, its portfolio consisted of 88 investments valued at C$53.3 billion.

ESG and sustainability focus to support profitable growth

Sustainability is embedded in our corporate culture and is integral to the worldwide CeramTec Group. We have implemented a corporate social responsibility policy (the “CSR Policy”) that supports our aim to achieve profitable, global growth, conserve energy and protect natural resources. In addition, we recently appointed an ESG manager, and are in the process of setting long-term ESG targets and strategy. We aim to achieve sustained, profitable growth for continued successful business development characterized by responsible business practices and integrity. We are committed to making the world a greener place by keeping our ecological footprint as small as possible by conducting environmentally-friendly, professional and safe operations. This includes conserving scarce resources such as raw materials, energy and water as well as avoiding and reducing carbon dioxide emissions and waste. For example, we have reduced our carbon dioxide emissions per euro of revenue since 2017. Our fair, ethical and environmentally-friendly approach incorporates everything from the management of our company and the manufacturing of our products to the procurement of resources and even our investments in buildings and facilities. Furthermore, developing products made from advanced ceramics reflects our sense of responsibility when it comes to the future. We create sustainable solutions that are used worldwide in a variety of industries and fields of application. They improve quality of life, increase efficiency, enhance productivity, save energy and protect the environment all while supporting our customers in reaching their own sustainability targets. We consistently implement our basic principles of sustainable, responsible business management. Our efforts clearly pay off by conserving energy and protecting the environment and our natural resources. For example, we implemented an energy management system (DIN ISO EN 50001 certified) which focuses on increasing energy efficiency and sustainably reducing energy consumption across our facilities and production processes. In addition, we implemented a DIN ISO 14001 certified environmental management system, which assists in the promotion of environmental protection, the prevention of pollution and the application of environmentally-sensitive approaches in our manufacturing and procurement processes. Our approach to sustainability is also reflected in our social commitment to people in the community and our employees, as can be seen in our training programs, equal opportunities, focus on sustainable development and growth and health and safety.

Our Response to COVID-19

The global COVID-19 pandemic has had a material impact on economic activity across our markets and on our business in 2020 and the beginning of 2021. We experienced decreased volumes as non-essential surgeries were postponed and customers had to cancel orders or shift delivery dates given the lower demand from clinics, which negatively impacted our revenue. Performance in Industrials markets has been impacted by the global industrial down-cycle since 2019 that was further exacerbated by the COVID-19 pandemic in 2020. We experienced a 22.8% decrease in revenue from the first quarter of 2020 to the second quarter of 2020. During 2020, however, revenues in our medical equipment markets were supported by a spike in market growth for our ceramic formers used in manufacturing disposable medical gloves and by sales of components for COVID-19 test kits in the second half of 2020. Overall, we experienced a decrease in revenue of 10.9% in 2020 as compared to 2019. Despite the revenue decline, our cash flow from operating activities was €163.4 million in 2020, as compared to €190.1 million in 2019.

We also experienced COVID-19 related involuntary plant closures, which negatively impacted revenue and EBITDA during 2020. Our factories in Malaysia were required to shut down in March and April of 2020, and again in July 2021, following general government directives. Our factory in China also had to close for two weeks at the beginning of February 2020, which negatively impacted sales. In India, lockdowns in March and April 2020 that extended to mid-May 2020 in some regions and subsequent production slowdowns negatively impacted our business until August 2020, and again in July 2021. We also experienced a slowdown at most of our facilities as a result of delays in orders from our customers. For example, one of our subsidiaries operating in mobility end-markets, Emil Müller Group, has had to slow production following shutdowns at its major customer due to lack of raw materials and other components, which negatively impacted revenue. As of the date of this offering memorandum, all of our factories have reopened.

Our EBITDA margins remained resilient throughout the period as we continued to implement various cost optimization measures. We started numerous initiatives in February 2019 to streamline our organization and focus on an Industrials market-based approach, with the aim of reducing organizational complexity and overhead costs. In addition, following the outbreak of COVID-19, we deployed further cost reduction measures including multiple employee lay-offs, and the decrease or postponement of investing outflows and capital expenditures with regard to non-essential projects. We also used short-time work (*Kurzarbeit*) measures and short-time work compensation (*Kurzarbeitergeld*) from the German government's employment agency (*KUG*), which compensated employees for a reduction in working hours as a result of the COVID-19 pandemic, for certain periods in 2020 and to a lower degree in 2021, which significantly reduced our costs per fulltime-equivalent employee in 2020. We expect that costs will increase in 2021, partially due to the reduction of short-time work benefits. We also deferred UK VAT due to the COVID-19 pandemic. We received government support of €1.1 million mainly comprised of short-time work related social security contributions in 2020.

Since the third quarter of 2020, we have begun to experience pre-pandemic rates of growth. Our revenue in the first quarter of 2021 were approximately 2% higher than in the first quarter of 2019 and approximately 5% higher in the second quarter of 2021 as compared to the same period in 2019. Year-to-date trading is benefitting from post-COVID-19 tailwinds as the result of key customers restocking and increasing orders following postponements and cancellations in 2020. The strong performance in the nine months ended September 30, 2021 reflects surgery volumes recovering to pre-pandemic levels in most regions and further strong ceramic penetration momentum. We still remain vulnerable to further lockdowns and COVID-19-induced adverse events in the short-term, which could result in increasing volatility during 2022, but we expect the decline in demand in 2020 and early 2021 from postponements and cancellations of elective procedures to continue to reverse during 2022. Separately, we are also subject to the current trends affecting global shipping and energy prices. For more information, see "*Risk Factors—Risks Relating to Our Business and Industry—Price increases or interruptions in the supply of raw materials, including as a result of increased shipping costs, could have a significant impact on our ability to sustain and grow earnings*" and "*Risk Factors—Risks Relating to Our Business and Industry—Fluctuations in energy costs could have an adverse effect on our results of operations.*"

In 2021, our business has experienced a clear recovery, as revenue for the nine months ended September 30, 2021 has increased by approximately 4.3% as compared to the same period in 2019. We expect that our revenue from Medical markets will recover from the COVID-19-induced low in 2020 in the near to mid-term as a result of catch-up effects as the underlying market dynamics of long-term growth in procedures, the non-cyclical nature of the business and the continuing shift towards the use of ceramics as this trend did not change as a result of the COVID-19 pandemic. We expect that the Medical markets will return to the historically high growth rates, though we expect these to be slightly below our historical averages due to lower expected hip penetration rates as compared to rates in periods prior to 2020. We expect there to be a longer recovery to pre-COVID-19 levels in Industrials markets particularly given the market dynamics as the end-markets are more cyclical in nature (e.g., mobility, electronics).

Our continued post-COVID-19 normalization has been further supported by a strong order book in 2021. COVID-19 had a clear impact on our order intake and order book in 2020, especially between April and June 2020. Our order intake and order book grew in the months following September 2020, demonstrating a clear recovery. Order intake in the first nine months of 2021 was higher than the equivalent periods in 2019 and 2020 and the order book in September 2021 has substantially increased compared to our order book as of September 30, 2019.

Protecting the health and safety of our employees has been a key priority during the COVID-19 pandemic. We have implemented a large number of measures to minimize the impact of the pandemic on our business, including, among others, providing all employees at our German sites with free FFP2 masks, distributing two free COVID-19 self-tests per week, allowing all indirect employees to work from home over an extended period and implementing hygiene measures for direct shop-floor employees, such as separation walls. In addition, we eliminated business travel for our employees, adopted restrictions regulating visits of third-party staff to our facilities and, for a period of time, tested our own staff regularly before allowing entry to our facilities. We also implemented short-time work (*Kurzarbeit*) measures to reduce working hours in certain of our plants, from time to time, depending on the specific situation affecting the relevant plant and our customers. As of the date of this offering memorandum, we continue to enforce safety measures depending on both country-specific regulations and plant-specific requirements, reviewing on a regular basis any changes to the measures implemented at a given time, in order to quickly adjust to changing scenarios. We also follow the advice from the authorities with respect to the pandemic and invite regulators to our sites to review safety protocols.

Although the ultimate impact of the COVID-19 pandemic upon our business will depend upon the severity and duration of the pandemic as well as actions taken by governmental authorities and other third parties in response, each of which is uncertain, rapidly changing and difficult to predict, our business has remained resilient throughout the pandemic. For more information regarding the risks and associated uncertainties related to COVID-19 and its potential effect on our business and results of operations, see "*Risk Factors—Risks Related to Our Business—Our business, financial condition and results of operations have been, and may continue to be, adversely affected by the current COVID-19 public health pandemic*."

Recent Developments

Preliminary Financial Results for the eleven months ended November 30, 2021

Based on unaudited accounting records and preliminary management reporting, we estimate that for the eleven months ended November 30, 2021, our revenue was in the range of €600 million and €605 million as compared to approximately €517 million for the eleven months ended November 30, 2020. In addition, we estimate that for the eleven months ended November 30, 2021, our Management Adjusted EBITDA was in the range of €247 million and €249 million as compared to approximately €205 million in the eleven months ended November 30, 2020.

This information is based on preliminary financial results that are not for an entire fiscal period and have not been subject to our normal quarter-end closing and review procedures and adjustments. This information has been prepared by, and is the responsibility of the management. Our independent auditors have not audited, reviewed, compiled or performed any procedures with respect to such unaudited preliminary financial information for the purpose of its inclusion herein and accordingly, they have not expressed an opinion or provided any form of assurance with respect thereto for the purpose of this offering memorandum. Such results should not be viewed as a substitute for full interim financial statements prepared in accordance with IFRS and reviewed by our independent auditors. The preliminary financial results are based on several assumptions that are subject to inherent uncertainties and subject to change. In the course of preparing and finalizing financial statements for the year ended December 31, 2021, the preliminary estimates for the eleven months ended November 30, 2021 will be subject to change and we may identify items that will require us to make adjustments to our preliminary estimates described above. For these and other reasons, the actual results for this period may differ materially from these preliminary estimates. In addition, such results do not purport to indicate our results of operations for any future period beyond the eleven months ended November 30, 2021. As such, you should not place undue reliance on the preliminary information set forth above. See "Forward-Looking Statements," "Presentation of Financial and Other Information—Other Financial Measures" and "Risk Factors" for a more complete discussion of certain of the factors that could affect our future performance and results of operations.

Payment under the Existing Shareholder Loan

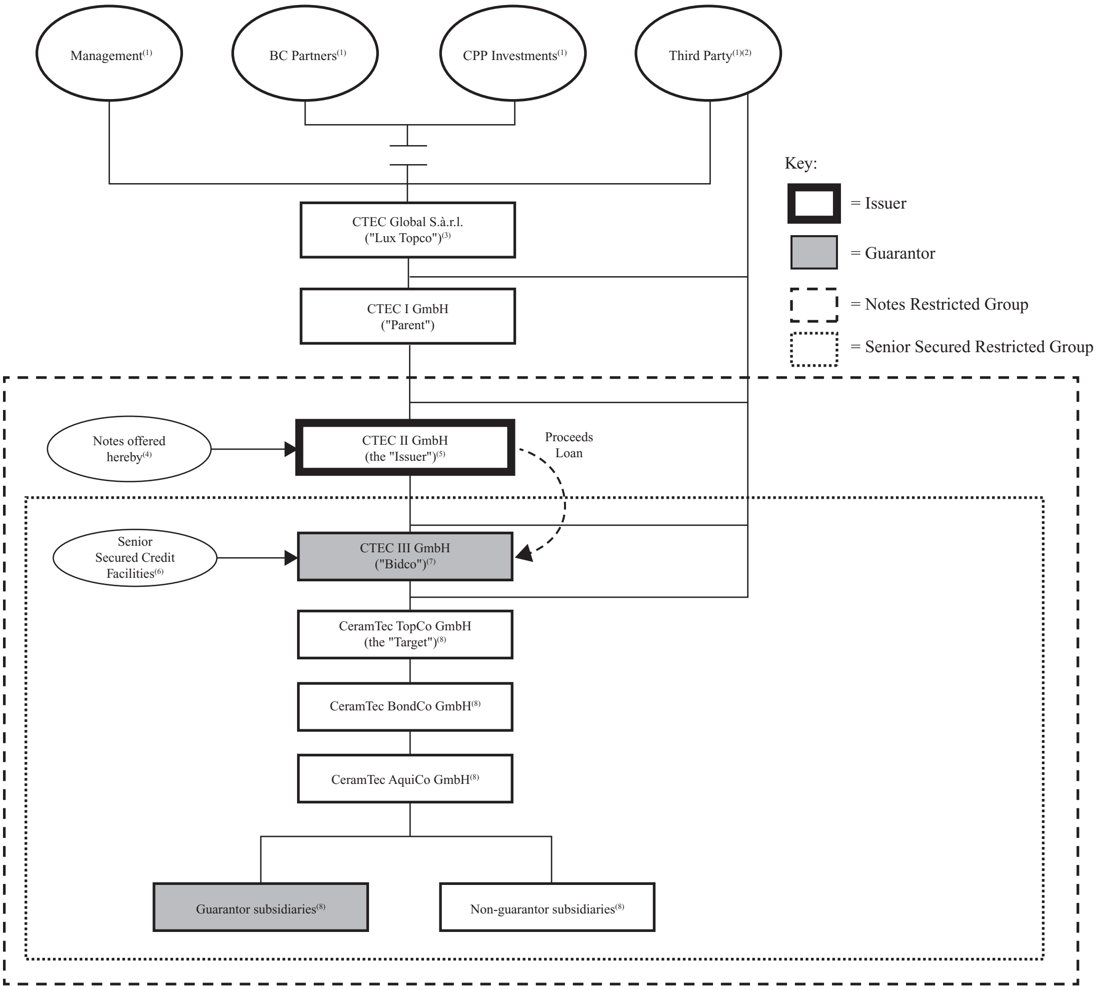
In October 2021, the Target agreed to make a payment to the Seller under the Existing Shareholder Loan in aggregate the amount of €5.1 million, consisting of €4.8 million of principal and €0.3 million of interest.

Change in auditors

On October 28, 2021, CeramTec appointed Deloitte GmbH as independent auditors for the annual financial statements as of and for the year ended December 31, 2021.

SUMMARY CORPORATE AND FINANCING STRUCTURE

The following simplified chart sets forth certain aspects of our corporate and financing structure, adjusted to give effect to the Transactions. Please see “*Capitalization*,” “*Description of Certain Financing Arrangements*” and “*Description of the Notes*.” All entities shown below are 100% owned unless indicated in the below footnotes. Actual amounts may vary from estimated amounts depending on several factors.



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(1) Prior to the Acquisition Closing Date, 13184374 Canada Inc. will acquire a participation in Bidco, so that approximately 99.996% of the issued share capital in Bidco will be held by the Issuer and 0.004% of the issued share capital will be held by 13184374 Canada Inc. On the Acquisition Closing Date, the Sponsors will acquire the Target through their indirect subsidiary, Bidco. See “*—The Transactions*.” On or about the Acquisition Closing Date, the Sponsors intend to establish the structure for a management equity participation program pursuant to which the subscribing managers will directly or indirectly hold 9.3% of the issued ordinary shares in Lux Topco and 1.7% of preferred instruments. The capitalization at an indirect holding company of the Issuer includes preferred equity. See “*Management—Management of the Target Prior to the Completion of the Acquisition—Managing Directors’ Compensation*.” On or about the Acquisition Closing Date, we expect that the Sponsors, any co-investors and 13184374 Canada Inc. collectively, will directly or indirectly hold approximately 90.7% of the ordinary shares and voting rights in Lux Topco, and management will directly or indirectly hold up to 9.3% of the ordinary shares in Lux Topco. The foregoing shareholding percentages are indicative and may be subject to variations. See “*Principal Shareholders*.”

(2) 13184374 Canada Inc. is an independent third party that will acquire voting rights restricted to the appointment and removal of directors in the Issuer, Bidco and the Target and nominal economic rights on or prior to the Acquisition Closing Date.

(3) On the Acquisition Closing Date, the Sponsors and other co-investors and management, will indirectly through Lux Topco provide the Equity Contribution to the Issuer in the form of subscription to ordinary equity shares of the Issuer equaling approximately €1,888 million, which will be contributed to Bidco. See “*Principal Shareholders*.”

(4) The Issuer is offering €515.0 million in aggregate principal amount of its Notes. The Notes will be senior obligations of the Issuer and will (i) rank pari passu in right of payment with all of the Issuer’s existing and future senior indebtedness, (ii) rank senior in right of payment to all of the Issuer’s existing and future indebtedness that is expressly subordinated in right of payment to the Notes, (iii) be effectively subordinated to all of the Issuer’s existing and future indebtedness that is secured by liens that do not secure the Notes, to the extent of the value of such property and assets securing such indebtedness and (iv) be structurally subordinated to any existing or future indebtedness of the subsidiaries of the Issuer that do not guarantee the Notes, including their obligations to trade creditors. On the Issue Date, the Notes and the relevant Note Guarantees will be secured (i) by a first-ranking pledge over the Escrow Account and (ii) subject

to and in accordance with the Agreed Security Principles, (x) on a first-priority basis, by the SUN Collateral and (y) on a junior-priority basis, by security interests in the Shared Collateral. Upon the definitive release of the Escrowed Property, the first-priority security interests over the Escrowed Property will be released. The security interests in favor of the Notes and the Note Guarantees may be released under certain circumstances.

(5) The Issuer was incorporated as a holding company for the purpose of the Acquisition, has no independent business operations, other than those in connection with their incorporation and the Transactions, and has no significant assets, other than the equity interest each of these companies holds in its subsidiaries and, as of the Issue Date, the Escrowed Property pending consummation of the Acquisition. Prior to the Acquisition Closing Date, the restrictive covenants in the Indenture will only apply to the Issuer and Bidco. On the Acquisition Closing Date, the Issuer intend to use the proceeds from the Offering, together with borrowings under Senior Term Facility and the proceeds from the Equity Contribution, (i) to fund the consideration payable for the Acquisition and to repay certain existing net indebtedness of the Target Group, including amounts outstanding under the Existing Credit Facilities and the Existing Notes, and (ii) to pay the fees and expenses incurred in connection with the Transactions. See "*Use of Proceeds*."

(6) In connection with the Transactions, Bidco is expected to enter into a Senior Secured Credit Facilities Agreement which will provide for up to €1,680.0 million (equivalent) of committed facilities, including (i) the Senior Term Facility in the amount of up to €1,430.0 million and (ii) a €250.0 million Revolving Credit Facility. On the Issue Date, Bidco will guarantee the Senior Secured Credit Facilities on a senior basis, senior to its guarantee of the Notes. Within 120 days from the business day immediately after Acquisition Closing Date, subject to and in accordance with the Agreed Security Principles, and certain material limitations pursuant to applicable laws, the Senior Secured Credit Facilities will be guaranteed by the Post-Closing Guarantors (as defined herein) on a senior basis, senior to each such entities guarantee of the Notes. The Shared Collateral will also secure the obligations under the Senior Secured Credit Facilities on a first-ranking basis.

(7) On the Issue Date and subject to the terms of the Intercreditor Agreement and subject to and in accordance with the Agreed Security Principles, the Notes will be guaranteed on a senior subordinated basis by Bidco. The validity and enforceability of the Note Guarantees and the security and the liability of each Guarantor and security provider will be subject to certain limitations. See "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and Security Interests*."

(8) Within 120 days from the business day immediately after the Acquisition Closing Date, subject to and in accordance with the Agreed Security Principles and certain material limitations pursuant to applicable laws, and substantially concurrently with the Guarantees granted in favor of obligations under the Senior Term Facility Agreement, the Notes will be guaranteed by the Post-Closing Guarantors on a senior subordinated basis. The validity and enforceability of the Note Guarantees and the liability of each Guarantor will be subject to certain limitations. See "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and Security Interests*." As of and for the year ended December 31, 2020, the Post-Closing Guarantors accounted for 79.8% of total assets of the Target Group (before giving effect to purchase price allocation adjustments and minor top level adjustments, but after giving effect to intercompany eliminations other than intercompany profit eliminations), 78.3% of the revenue (before giving effect to consolidation adjustments) and 88.7% of the EBITDA (before giving effect to consolidation adjustments) of the Target Group. Following the Acquisition Closing Date, certain entities in the Target Group's holding structure, including CeramTec TopCo GmbH and CertamTec BondCo GmbH, may be merged into CTEC III GmbH or otherwise eliminated. For a list of the Target Group's subsidiaries as of September 30, 2021, see note 1.4 to the Unaudited Interim Financial Statements.

THE OFFERING

The following is a brief summary of certain terms of the Offering. It may not contain all the information that is important to you. For additional information regarding the Notes and the Note Guarantees, see "*Description of the Notes*" and "*Description of Certain Financing Arrangements—Intercreditor Agreement*."

Issuer	CTEC II GmbH
Notes Offered	€515,000,000 % Senior Notes due 2030.
Issue Date	, 2022.
Issue Price	%
Maturity Date	, 2030.
Interest Rate	% per annum.
Interest Payment Dates	Interest on the Notes is payable semi-annually in arrears on and of each year, commencing on , 2022, which shall be no earlier than the Escrow Longstop Date. Interest on the Notes will accrue from the Issue Date.
Form and Denomination	The Notes will be issued in minimum denominations of €100,000 and in integral multiples of €1,000 in excess thereof maintained in book-entry form.
Guarantors	The Notes are expected to be guaranteed on a senior subordinated basis (i) on the Issue Date, by Bidco and (ii) within 120 days from the business day immediately after the Acquisition Closing Date, subject to and in accordance with the Agreed Security Principles and to certain material limitations pursuant to applicable laws, by certain members of the Target Group that will guarantee the Senior Secured Credit Facilities Agreement (collectively, the "Post-Closing Guarantors" and together with Bidco, the "Guarantors"). Such members of the Target Group granting such Note Guarantees are currently expected to be CeramTec GmbH and CeramTec North America LLC. As of and for the year ended December 31, 2020, the Post-Closing Guarantors accounted for 79.8% of total assets of the Target Group (before giving effect to purchase price allocation adjustments and minor top level adjustments, but after giving effect to intercompany eliminations other than intercompany profit eliminations), 78.3% of the revenue (before giving effect to consolidation adjustments) and 88.7% of the EBITDA (before giving effect to consolidation adjustments) of the Target Group.
Ranking of the Notes	The Notes will: • be general senior obligations of the Issuer; • rank pari passu in right of payment with any of the Issuer's existing and future indebtedness that is not subordinated in right of payment to the Notes; • rank senior in right of payment to any of the Issuer's existing and future indebtedness that is expressly subordinated in right of payment to the Notes; • be effectively subordinated to any of the Issuer's and its subsidiaries' existing and future indebtedness or other liabilities that is secured by property or assets that do not secure the Notes (including obligations under the Senior Secured Credit Facilities), to the extent of the property and value of the assets securing such indebtedness or liabilities; and

- be structurally subordinated to any existing and future indebtedness and other liabilities, including preferred stock and obligations to trade creditors, of the subsidiaries of the Issuer that do not guarantee the Notes.

Ranking of the Note Guarantees . . . . The Note Guarantees will:

- be general senior subordinated obligations of such Guarantor;
- be subordinated in right of payment to any existing and future senior indebtedness of that Guarantor, including its obligations under the Senior Secured Credit Facilities;
- rank pari passu in right of payment with any existing and future indebtedness of such Guarantor that is not subordinated in right of payment to the Note Guarantee of such Guarantor;
- rank senior in right of payment to any existing and future indebtedness of such Guarantor that is expressly subordinated in right of payment to the Note Guarantee of such Guarantor;
- be effectively subordinated to any existing and future indebtedness of such Guarantor and its subsidiaries that is secured by property or assets that do not secure the Notes or the Note Guarantees, or that is secured on a first-priority basis over property or assets that secure the Notes or the Note Guarantees on a junior-priority basis (including obligations under the Senior Secured Credit Facilities), to the extent of the value of the assets securing such indebtedness or liabilities; and
- be structurally subordinated to any existing and future indebtedness and other liabilities, including preferred stock and obligations to trade creditors, of the subsidiaries of such Guarantor that do not guarantee the Notes.

Collateral . . . . On the Issue Date, the Notes and the Note Guarantees thereof will be secured on a first-priority basis by the Escrow Charge. Upon the definitive release of the Escrowed Property, the first-priority security interests over the Escrowed Property will be released.

In addition, on the Issue Date, subject to and in accordance with the Agreed Security Principles, the Notes and Note Guarantees thereof will be secured by (i) first-ranking pledges of the shares in the Issuer and any structural intercompany receivables owed to the Parent by the Issuer (collectively, the "SUN Collateral"), and (ii) second-ranking pledges of the shares in Bidco and any structural intercompany receivables owed to the Issuer by Bidco (collectively, the "Shared Collateral" and, together with the SUN Collateral and the Escrow Charge, the "Collateral").

On the Issue Date, the Notes and the Notes Guarantees will, pursuant to the Intercreditor Agreement, be secured by the Shared Collateral on a junior-priority basis to the Senior Secured Credit Facilities. See "*Description of Certain Financing Arrangements—Intercreditor Agreement*."

The security interests may be limited by applicable law or subject to certain defenses that may limit their validity and enforceability. For more information on the security interests granted, see "*Description of the Notes—Security*," and for more information on potential limitations to the security interests, see "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and Security Interests*" and "*Risk Factors—Risks Related to the Notes*."

The security interests may be released under certain circumstances. See "*Risk Factors—Risks Relating the Notes—There are circumstances other than the*

	repayment or discharge of the Notes under which the Collateral securing the Notes and the Note Guarantees will be released automatically without your consent or the Trustee or the Security Agent obtaining your further consent," "*Description of Certain Financing Arrangements—Intercreditor Agreement*" and "*Description of the Notes—Security—Release of Liens*."
Use of Proceeds	The proceeds from the Offering, together with borrowings under the Senior Term Facility and the proceeds from the Equity Contribution, will be used to (i) fund the consideration payable for the Acquisition and repay certain existing net indebtedness of the Target Group, including amounts outstanding under the Existing Credit Facilities and the Existing Notes, and (ii) pay the fees and expenses incurred in connection with the Transactions. See "*Use of Proceeds*."
Additional Amounts	Any payments made by the Issuer or any Guarantor with respect to the Notes or Note Guarantees will be made without withholding or deduction for taxes unless required by law. If such withholding or deduction is required by law in any "relevant taxing jurisdiction," the Issuer or the relevant Guarantor, as applicable, will pay the additional amounts necessary so that the net amounts received by the holders of the Notes after the withholding or deduction is not less than the amount that would have been received in the absence of the withholding or deduction, subject to certain exceptions. See "*Description of the Notes—Withholding Taxes*."
Optional Redemption	All or a portion of the Notes may be redeemed at any time prior to , 2025, at a redemption price equal to 100% of the principal amount of the Notes redeemed plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the redemption date plus a "make-whole" premium, as described in this offering memorandum. See "*Description of the Notes—Optional Redemption*." At any time prior to , 2025, up to 40% of the aggregate principal amount of the Notes may be redeemed with the net proceeds of one or more specified equity offerings at a redemption price equal to %, plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the redemption date. See "*Description of the Notes—Optional Redemption*." The Notes may be redeemed at any time on or after , 2025, at the redemption prices set forth under "*Description of the Notes—Optional Redemption*."
Optional Redemption for Tax Reasons . . .	In the event of certain developments affecting taxation that become effective on or after the Issue Date, the Issuer may redeem the Notes in whole but not in part, at any time, upon giving written notice, at a redemption price of 100% of the principal amount, plus accrued and unpaid interest, if any, and additional amounts, if any, to, but excluding, the date of redemption. See "*Description of the Notes—Redemption for Taxation Reasons*."
Change of Control	Upon the occurrence of certain defined events constituting a change of control or upon certain asset sales, each holder of Notes may require the Issuer to repurchase all or a portion of the Notes at a price equal to 101% of their principal amount plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the redemption date. See "*Description of the Notes—Change of Control*."
Escrow of Proceeds; Special Mandatory Redemption	Concurrently with the closing of the Offering, and pending consummation of the Acquisition, the Initial Purchasers will deposit the gross proceeds of the Offering into the Escrow Account, held in the name of the Issuer. The Escrow Account will be controlled by the Escrow Agent, and pledged on a first-priority basis in favor of the Trustee on behalf of the holders of the Notes. The release of the proceeds deposited in the Escrow Account will be subject to the satisfaction of certain conditions, including that the funds required to pay the consideration for the Acquisition will be applied within five business

days of release. Upon delivery to the Trustee and the Escrow Agent of an officer's certificate stating that the conditions to the release of the proceeds from escrow are satisfied, the Escrowed Property will be released to the Issuer and utilized as described in "*Use of Proceeds*" and "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*." If the conditions to the release of the Escrowed Property have not been satisfied on or prior to the business day immediately following the Escrow Longstop Date, or upon the occurrence of certain other events, the Notes will be subject to a special mandatory redemption.

The special mandatory redemption price of the Notes will be equal to 100% of the aggregate issue price of the Notes, plus accrued and unpaid interest and additional amounts, if any, to, but excluding, such special mandatory redemption date.

In the event of a special mandatory redemption, the Parent will be required to fund the Issuer in such aggregate amounts as are required in order to enable the Issuer to pay any funding shortfall, including Escrow Account fees, negative interest on the Escrow Account's balances, costs and accrued and unpaid interest and additional amounts, if any, owing to the holders of the Notes on such special mandatory redemption date.

In addition, the conditions applicable to the special mandatory redemption may be waived by holders of the Notes representing a majority in aggregate principal amount of the Notes outstanding.

See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*" and "*Risk Factors—Risks Related to the Transactions—If the conditions precedent to the release of the Escrowed Property are not satisfied, the Issuer will be required to redeem the Notes, but the Escrow Account may not have sufficient funds to cover such redemption without relying on the Escrow Equity Commitment*."

Certain Covenants .... The Indenture will limit, among other things, the ability of the Issuer and the restricted subsidiaries to:

- incur or guarantee additional indebtedness and issue certain preferred stock;
- create or incur certain liens;
- make certain restricted payments;
- make certain investments;
- impose restrictions on the ability of their subsidiaries to pay dividends or make other payments to the Issuer;
- engage in certain transactions with affiliates;
- transfer, receive or sell certain assets including subsidiary stock;
- consolidate or merge with other entities; and
- impair the security interests for the benefit of the holders of the Notes.

Each of the covenants in the Indenture is subject to significant exceptions and qualifications. See "*Description of the Notes—Certain Covenants*."

Certain of the covenants will be suspended if and for as long as we achieve investment grade ratings. See "*Description of the Notes—Certain Covenants—Termination of Covenants on Achievement of Investment Grade Status*."

U.S. Federal Income Tax Considerations	For a discussion of certain U.S. federal income tax considerations of an investment in the Notes to U.S. holders, see "*Certain Tax Consequences—Certain U.S. Federal Income Tax Considerations*." You should consult your own tax advisor to determine the U.S. federal, state, local and other tax consequences of an investment in the Notes.
Transfer Restrictions	The Notes and the Note Guarantees thereof have not been registered under the Securities Act or the securities laws of any other jurisdiction and will not be so registered. The Notes are subject to restrictions on transferability and resale. See "*Transfer Restrictions*." Holders of the Notes will not have the benefit of any exchange or registration rights.
Risk Factors	Investing in the Notes involves substantial risks. You should consider carefully all the information in this offering memorandum and, in particular, you should evaluate the specific risk factors set forth in the "*Risk Factors*" section before making a decision whether to invest in the Notes.
No Prior Market	The Notes will be new securities for which there is currently no market. Although the Initial Purchasers of the Notes have advised us that they intend to make a market in the Notes, they are not obligated to do so and they may discontinue market making at any time without notice. Accordingly, there can be no assurance that an active trading market will develop for the Notes.
Listing	Application will be made to the Authority for the listing of the Notes on the Official List of the Exchange. There can be no assurance that the Notes will be listed on the Official List of the Exchange, that such permission to deal in the Notes will be granted or that such listing will be maintained. The Exchange is not a regulated market pursuant to the provisions of Directive 2014/65/EU on markets in financial instruments, as amended.
Governing Law	The Indenture, the Notes and the Note Guarantees will be governed by the laws of the State of New York. The Intercreditor Agreement will be governed by the laws of England and Wales. Each Transaction Security Document will be governed by applicable local laws.
Trustee	Deutsche Trustee Company Limited.
Security Agent	Deutsche Bank AG, London Branch.
Paying Agent	Deutsche Bank AG, London Branch.
Transfer Agent	Deutsche Bank AG, London Branch.
Registrar	Deutsche Bank Luxembourg S.A.
Escrow Agent	Deutsche Bank AG, London Branch.
Listing Agent	Carey Olsen Corporate Finance Limited.

SUMMARY FINANCIAL AND OTHER DATA

The following tables present our summary financial information and have been derived from, and should be read in conjunction with, the Financial Statements that have been prepared in accordance with IFRS and are included elsewhere herein and the sections entitled "Presentation of Financial and Other Information," "Management's Discussion and Analysis of Financial Condition and Results of Operations, "Use of Proceeds" and "Capitalization."

The Issuer was incorporated in order to facilitate the Transactions and as of the date of this offering memorandum, has no material assets or liabilities, does not have any revenue-generating activities of its own and has not engaged in activities other than those related to its incorporation and in preparation of the Transactions. As a result, no historical financial information of the Issuer is included in this offering memorandum, except for certain limited as adjusted financial data presented to reflect certain effects of the Transactions. The historical financial information presented in this offering memorandum is that of the Target Group. Following the Transactions, we may consolidate our financial results at a different entity. See "Presentation of Financial and Other Information."

The financial information for the twelve months ended September 30, 2021 presented below was derived by adding the Target Group's consolidated financial information for the year ended December 31, 2020 to its consolidated financial information for the nine months ended September 30, 2021 and subtracting its consolidated financial information for the nine months ended September 30, 2020. The summary unaudited consolidated financial information for the twelve months ended September 30, 2021 is not required by or presented in accordance with IFRS, HGB or any other generally accepted accounting principles and has been prepared for illustrative purposes only and is not necessarily representative of our results of operations or our financial condition for any full year period or at any future date. See "Presentation of Financial and Other Information—Financial Information Presented for the Twelve Months ended September 30, 2021."

The statement of comprehensive income and consolidated statement of cash flows information of the Target for the year ended December 31, 2018 include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income and consolidated statement of cash flows for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. Consequently, for the benefit of readers and in order to aid comparability, certain pro forma statement of comprehensive income information and cash flow statement data, including revenue, EBITDA, Management Adjusted EBITDA, Management Adjusted EBITDA margin, Capital Expenditures, Cash Generation, Cash Conversion Ratio, is provided in order to compare the performance of operations including operating advanced ceramics business for the entire period. See "Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018."

We present below certain financial measures, certain performance indicators, ratios and other non-financial operating measures that are not recognized by IFRS or any other generally accepted accounting principles and that may not be permitted to appear on the face of the Financial Statements or footnotes thereto or that may derived from management estimates and are not part of our financial statements or our accounting records. Prospective investors should bear in mind that Non-IFRS Measures, certain performance indicators, ratios and other non-financial operating measures that we report herein are not measurements of our performance or liquidity under IFRS or any other generally accepted accounting principles, should not be considered as substitutes to performance measures derived in accordance with IFRS or any other generally accepted accounting principles, may not be comparable to other similarly titled measures of other companies, have limitations as analytical tools and should not be considered in isolation or as a substitute for analysis of our operating results as reported under IFRS. See "Presentation of Financial and Other Information—Non-IFRS Financial Measures."

Summary Consolidated Statement of Comprehensive Income Data

(in € million)	Year Ended December 31,			Nine Months Ended September 30,		Twelve Months Ended September 30,
	2018[(a)]	2019	2020	2020	2021	2021
		(audited)		(unaudited)		(unaudited)
Revenue	496.9	620.4	552.7	418.3	495.1	629.4
Cost of sales	336.6	356.2	334.9	251.3	275.1	358.8
Gross profit	**160.3**	**264.1**	**217.8**	**167.1**	**219.9**	**270.7**
Selling costs	81.1	95.2	87.3	65.8	72.8	94.3
Research and development costs	18.6	23.3	20.6	15.6	17.0	22.0
General administrative cots	28.3	27.1	24.5	17.7	19.1	25.9
Other income and (expenses), net	(11.2)	(342.9)	(139.0)	(136.5)	3.2	0.7
Operating income	**21.2**	**(224.5)**	**(53.6)**	**(68.6)**	**114.2**	**129.1**
Interest income and other finance income	1.6	2.1	6.8	2.4	26.1	30.5
Interest expenses and other finance costs	125.0	100.4	99.5	85.5	65.3	79.4
Financial result	**(123.4)**	**(98.3)**	**(92.7)**	(83.1)	(39.2)	(48.8)
Profit / (loss) before income tax	**(102.2)**	**(322.8)**	**(146.3)**	(151.7)	74.9	80.2
Income tax benefit / (expense)	15.1	(16.5)	(2.8)	(1.9)	(24.2)	(25.1)
Net profit / (loss) for the period	**(87.1)**	**(339.3)**	**(149.2)**	**(153.6)**	**50.7**	**55.1**

(a) The statement of comprehensive income information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

Summary Consolidated Statement of Financial Position Data

(in € million)	As of December 31, 2018	2019	2020	As of September 30, 2021
		(audited)		(unaudited)
Assets				
Goodwill	1,341.4	1,011.7	874.6	898.2
Other intangible assets	1,105.7	1,038.5	976.5	954.5
Property, plant and equipment	289.0	289.4	278.7	282.2
Other financial assets	21.1	25.2	10.3	24.8
Other assets	1.3	1.1	4.1	3.9
Deferred tax assets	0.4	1.2	0.9	0.7
Non-current assets	**2,758.8**	**2,367.1**	**2,145.1**	**2,164.3**
Inventories	96.5	97.1	91.6	98.3
Trade receivables	57.9	52.7	51.9	74.7
Trade account receivables from affiliates	—	0.0	—	—
Income tax receivables	3.2	2.8	3.0	2.9
Other financial assets	2.4	3.1	3.3	1.8
Other receivables and assets	8.7	8.0	8.3	9.3
Cash and cash equivalents	21.1	64.4	244.1	276.0
Current assets	**189.7**	**228.1**	**402.1**	**462.9**
Total Assets	**2,948.6**	**2,595.3**	**2,547.2**	**2,627.2**
Equity and liabilities				
Issued capital	0.0	0.0	0.0	0.0
Capital reserves	500.4	780.4	780.4	780.4
Accumulated losses	(96.1)	(442.8)	(598.1)	(539.0)
Accumulated other comprehensive income	1.3	0.9	(1.3)	(0.3)
Equity	**405.6**	**338.5**	**181.0**	**241.0**
Provisions for pension obligations	100.2	113.4	124.4	115.0
Other provisions	4.9	5.5	2.8	2.8
Financial liabilities to affiliate	552.7	256.3	273.5	288.7
Financial liabilities to third parties	1,471.8	1,433.3	1,597.1	1,604.5
Other liabilities	—	0.0	3.8	1.1
Deferred tax liabilities	318.2	298.4	270.1	267.7
Non-current liabilities	**2,447.8**	**2,107.0**	**2,271.6**	**2,279.6**
Other provisions	20.2	17.8	15.8	21.4
Provisions for taxes	6.3	4.4	3.9	7.5
Financial liabilities to affiliates	—	55.2	0.3	—
Financial liabilities to third parties	22.2	25.4	24.0	29.5
Trade payables	34.9	30.3	29.0	24.8
Other liabilities	11.5	16.7	21.6	23.3
Current liabilities	**95.2**	**149.8**	**94.6**	**106.5**
Total liabilities	**2,543.0**	**2,256.8**	**2,366.2**	**2,386.2**
Total equity and liabilities	**2,948.6**	**2,595.3**	**2,547.2**	**2,627.2**

Summary Consolidated Statement of Cash Flows Data

(in € million)	Year Ended December 31, 2018[(a)]	Year Ended December 31, 2019	Year Ended December 31, 2020	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2021	Twelve Months Ended September 30, 2021
	(audited)			(unaudited)		(unaudited)
Net profit/ net loss for the period	(87.1)	(339.3)	(149.2)	(153.6)	50.7	55.1
Income tax expenses / (benefit)	(15.1)	16.5	2.8	1.9	24.2	25.1
Interest result (without changes in fair value of derivatives)	92.5	97.0	74.9	56.1	60.3	79.1
Amortization, depreciation and impairment charges on non-current assets	122.6	447.2	244.2	217.3	82.4	109.3
Losses on disposal of property, plant and equipment and intangible assets	0.2	1.1	0.8	0.0	0.3	1.1
Increase/(decrease) in provisions (excluding deferred taxes)	(2.6)	(0.8)	(3.5)	0.6	6.7	2.5
Income tax payment	(29.2)	(36.0)	(28.8)	(22.0)	(28.7)	(35.6)
Other non-cash expenses/(income), net	30.7	(1.6)	11.7	22.3	(22.6)	(33.1)
(Increase)/decrease in inventories	7.1	(0.6)	5.5	3.1	(2.5)	0.0
(Increase)/decrease in trade receivables	0.7	5.1	0.9	(13.2)	(22.1)	(8.1)
(Increase)/decrease in other receivables and (financial) assets	33.0	0.6	(4.0)	(1.8)	0.6	(1.5)
Increase/(decrease) in trade payables	(42.4)	(6.8)	0.3	(4.5)	(1.7)	3.1
Increase/(decrease) in other (financial) liabilities	0.6	7.7	7.8	(4.3)	3.9	16.0
Cash flow from operating activities	**110.8**	**190.1**	**163.4**	**101.9**	**151.6**	**213.1**
Cash received from disposals of property, plant and equipment	0.6	0.4	0.6	0.2	0.2	0.7
Cash (paid) for investments in property, plant and equipment	(25.0)	(38.4)	(34.3)	(24.7)	(24.4)	(34.0)
Cash (paid for) investments in intangible assets	(1.9)	(3.0)	(3.9)	(2.4)	(2.7)	(4.2)
Cash paid for the acquisition of entities	(2.467.7)	—	—	—	(49.0)	(49.0)
Cash flow from investing activities	**(2,493.4)**	**(41.1)**	**(37.6)**	**(26.9)**	**(75.8)**	**(86.6)**
Cash received from contribution to capital reserve	500.4	—	—	—	—	—
Cash received from issuance of bond	392.4	—	—	—	—	—
Cash received from / (paid) for the sale/repurchase of bond	(4.8)	5.2	—	—	—	—
Cash received from syndicated loan	1.084.7	—	168.2	—	—	168.2
Cash (paid) for amortization of syndicated loan	—	—	—	—	—	—
(Repayment) of syndicated loan	(45.3)	(53.9)	—	—	—	—
Interest (paid)	(47.7)	(54.6)	(90.8)	(80.7)	(42.8)	(53.0)
Cash received from drawing of revolver loan	—	—	—	—	—	—
Cash received from / (repayment) of shareholder loan	523.8	—	(19.6)	(19.6)	—	—
Cash paid for capitalized leases (right-of-use assets)	—	(2.7)	(2.9)	(2.0)	(2.6)	(3.5)
Cash flow from financing activities	**2,403.6**	**(106.0)**	**54.8**	**(102.2)**	**(45.4)**	**111.7**
Change in cash and cash equivalents	**21.0**	**43.1**	**180.6**	**(27.2)**	**30.4**	**238.2**
Net foreign exchange difference	—	0.3	(0.9)	(0.7)	1.5	1.2
Cash and cash equivalents at the beginning of the period	0.0	21.1	64.4	64.4	244.1	36.5
Cash and cash equivalents at the end of the period	**21.1**	**64.4**	**244.1**	**36.5**	**276.0**	**276.0**

(a) The consolidated statement of cash flows information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

Other Financial and Operating Information

(in € million, unless otherwise specified)	As of and for the year ended December 31, 2018[(a)]	2019	2020[(b)]	As of and for the nine months ended September 30, 2020	2021	As of and for the twelve months ended September 30, 2021
	(unaudited)			(unaudited)		(unaudited)
Revenue Medical markets[(c)]	205.6	282.4	265.1	202.6	240.8	303.3
Revenue Industrials markets[(c)]	291.8	338.3	287.9	215.9	254.6	326.6
Total Revenue	496.9[(d)]	620.4[(d)]	552.7[(d)]	418.3	495.1	629.4
EBITDA[(1)]	183.4	222.7	190.5	148.7	196.6	238.4
Management Adjusted EBITDA[(1)]	226.3	244.3	213.1	163.5	206.9	256.5
Management Adjusted EBITDA margin (%)[(2)]	37.7%	39.4%	38.6%	39.1%	41.8%	40.7%
Capital Expenditures[(3)]	33.3	43.6	36.7	21.9	24.0	38.7
Cash Generation[(4)]	193.0	200.7	176.4	141.6	182.9	217.7
Cash Conversion Ratio (%)[(5)]	85.3%	82.1%	82.8%	86.6%	88.4%	84.9%
Number of units sold (ball-heads and inserts) (in million)	1.7	1.9	1.6	1.2	1.5	1.9
Adjusted Cost of sales[(6)]		293.5	273.0	205.0	229.7	297.7
Adjusted Gross profit[(6)]		326.9	279.7	213.3	265.3	331.7
Adjusted Selling costs[(6)]		43.2	35.4	27.1	31.4	39.7
Adjusted Research and development costs[(6)]		20.1	17.4	13.2	13.6	17.8
Adjusted General administrative costs[(6)]		18.5	18.1	13.3	14.5	19.3
Adjusted Other income and expenses, net[(6)]		(0.6)	4.2	3.8	1.1	1.7

(a) The statement of comprehensive income and consolidated statement of cash flows information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income and the consolidated statement of cash flows for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income and the consolidated statement of cash flows for any subsequent period. For the benefit of readers, we present EBITDA, Management Adjusted EBITDA, Management Adjusted EBITDA margin, Capital Expenditures, Cash Generation and Cash Conversion Ratio on a *pro forma* basis in order to compare the performance of operations included the advanced ceramics business for the entire period. Revenue Medical markets, Revenue Industrials markets and Total Revenue presented on a *pro forma* basis for the year ended December 31, 2018 giving effect to the acquisition in 2018 as if it had occurred on January 1, 2018 amounted to €249.0 million, €351.8 million and €600.2 million, respectively. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

(b) Our financial and other operating information for the year ended December 31, 2020 includes the impact of procedure postponements during COVID-19-related lockdowns and is expected to recover to a pre-COVID-19 growth trajectory in the near- to mid-term.

(c) Revenue from Medical markets consists of revenue from the Medical products business reported in the Financial Statements plus revenue from medical equipment markets. Revenue from the Industrials markets consists of revenue from the Industrial business reported in the Financial Statements minus revenue from medical equipment markets.

(d) These figures are audited.

Revenue by Regions

(in € million)	Year Ended December 31, 2018[(a)]	2019	2020	Nine Months Ended September 30, 2020	2021	Twelve Months Ended September 30, 2021
	(audited)			(unaudited)		(unaudited)
Europe (excluding Germany)	215.8	270.3	233.7	174.2	216.6	276.0
Germany	125.7	141.9	111.7	84.8	97.2	124.1
Asia	75.1	100.4	105.4	77.7	89.9	117.6
North America[(b)]	65.0	91.8	91.2	73.4	87.6	105.4
Rest of World	15.2	16.0	10.7	8.2	3.8	6.4
Total Revenue	**496.9**	**620.4**	**552.7**	**418.3**	**495.1**	**629.4**

(a) The statement of comprehensive income information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

(b) Revenue in North America consists of revenue in the United States, Canada and Mexico.

Revenue by Markets

(in € million)	Year Ended December 31, 2018[(a)]	2019	2020	Nine Months Ended September 30, 2020	2021	Twelve Months Ended September 30, 2021
		(unaudited)		(unaudited)		(unaudited)
Medical markets[(b)(7)]	205.6	282.4	265.1	202.6	240.8	303.3
Industrials markets[(b)(7)]	291.8	338.3	287.9	215.9	254.6	326.6
Consolidation adjustments	(0.5)	(0.3)	(0.3)	(0.2)	(0.1)	(0.3)
		(audited)		(unaudited)		(unaudited)
Total Revenue	**496.9**	**620.4**	**552.7**	**418.3**	**495.1**	**629.4**

(a) The statement of comprehensive income information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

(b) Medical markets revenue consists of revenue from the Medical business as reported in the Financial Statements plus revenue from medical equipment markets. In our Financial Statements, revenue from medical equipment markets was included in revenue from our Industrials business. We present revenue based on end-market in this offering memorandum as we believe it is more consistent with our market-based approach to our business.

As Adjusted Financial Information of the Issuer

(in € million)	Twelve Months Ended September 30, 2021
	(unaudited)
Pro Forma Adjusted EBITDA[(1)]	275.9
As adjusted net third-party senior secured indebtedness[(8)]	1,430
As adjusted net third-party indebtedness[(9)]	1,959
As adjusted cash interest expense[(10)]	
Ratio of As adjusted net third-party senior secured indebtedness to Pro Forma Adjusted EBITDA[(1)(8)]	5.18x
Ratio of As adjusted net third-party indebtedness to Pro Forma Adjusted EBITDA[(1)(9)]	7.10x
Ratio of Pro Forma Adjusted EBITDA to As adjusted cash interest expense[(1)(10)]	x

(1) For a definition of our EBITDA-based metrics, see "*Presentation of Financial and Other Information—Non-IFRS Financial Measures*." We believe that our EBITDA-based measures are useful to investors in evaluating our operating performance and our ability to incur and service our indebtedness. Our EBITDA-based measures and ratios are not measurements of our performance or liquidity under IFRS and should not be considered as alternatives to performance measures derived in accordance with IFRS or any other generally accepted accounting principles. Our EBITDA-based measures may not be comparable to other similarly titled measures of other companies and have limitations as analytical tools and should not be considered in isolation or as a substitute for analysis of our operating results as reported under IFRS. Because of these limitations, our EBITDA-based measures should not be considered as measures of discretionary cash available to us to invest in the growth of our business or as measures of cash that will be available to us to service our indebtedness. You should compensate for these limitations by relying primarily on our Financial Statements included elsewhere herein and using these non-IFRS measures only to supplement evaluation of our performance. See "*Presentation of Financial and Other Information—Non-IFRS Financial Measures*."

Set forth below is a reconciliation of each of EBITDA, Management Adjusted EBITDA and Consolidated Pro Forma EBITDA to operating income.

(in € million)	Year Ended December 31, 2018[(a)]	Year Ended December 31, 2019	Year Ended December 31, 2020	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2021	Twelve Months Ended September 30, 2021
	(unaudited)	**(audited)**		**(unaudited)**		**(unaudited)**
Operating income	**47.0**	**(224.5)**	**(53.6)**	**(68.6)**	**114.2**	**129.1**
Amortization, depreciation and impairment charges on non-current assets	136.4	447.2	244.2	217.3	82.4	109.3
				(unaudited)		
EBITDA	**183.4**	**222.7**	**190.5**	**148.7**	**196.6**	**238.4**
Restructuring costs[(b)]	3.6	7.6	5.9	4.3	2.3	3.9
Other non-recurring costs[(c)]	8.0	7.3	10.4	8.6	7.5	9.3
Foreign exchange conversion effects[(d)]	—	0.7	0.9	(0.6)	(1.3)	0.2
Additional contributions related to pensions[(e)]	2.1	—	0.1	0.2	—	(0.1)
Acquisition costs[(f)]	0.2	0.3	1.4	0.2	0.5	1.7
Transaction-related costs[(g)]	12.6	0.4	0.4	0.3	0.3	0.4
PPA on inventories and fixed assets[(h)]	16.5	—	0.8	—	1.0	1.8
Start-up losses[(i)]	—	0.9	1.3	0.9	1.6	2.0
Discontinued operations[(j)]	—	4.5	1.4	0.8	(1.6)	(1.0)
Management Adjusted EBITDA	**226.3**	**244.3**	**213.1**	**163.5**	**206.9**	**256.5**
Normalization of COVID-19 Impact[(k)]			31.2			19.5
Run-rate adjustments[(l)]			1.9			1.4
Constant currency adjustments[(m)]			(1.8)			—
Other adjustments[(n)]			1.3			(1.5)
Pro Forma Adjusted EBITDA			**245.7**			**275.9**

(a) The statement of comprehensive income and consolidated statement of cash flows information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income and the consolidated statement of cash flows for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income and the consolidated statement of cash flows for any subsequent period. For the benefit of readers, we present operating income, amortization, depreciation and impairment charges on non-current assets, EBITDA and Management Adjusted EBITDA, on a *pro forma* basis in order to compare the performance of operations included the advanced ceramics business for the entire period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

(b) Restructuring costs in 2018 and 2019 mainly comprise costs related to our productivity initiatives as well as additional costs for management changes, in particular, those related to the market and customer-centric realignment of our operations focused on Industrials markets (which included the combination of various independent reporting units into larger, more streamlined commercial units and the consolidation of operations in Europe). Restructuring costs in 2020 and the nine months ended September 30, 2020 mainly comprise severance payments for the reduction of staff at CeramTec GmbH and CeramTec-ETEC GmbH relating to restructuring initiatives and also partly related to staff and factory adjustment related to the COVID-19 pandemic. Restructuring costs in the nine months ended September 30, 2021 relate to further severance payments as well as other factory and product adjustments / terminations.

(c) Other non-recurring costs (i) in 2018 mainly comprise strategic consulting services and reorganization costs, (ii) in 2019 mainly comprise consulting and litigation expenses, (iii) in 2020 and the nine months ended September 30, 2020 mainly comprise non-recurring consulting and litigation expenses and COVID-19-related measures to safeguard employees' health, additional IT spending to adjust to changed work environment, costs of plant shutdown following partly government enacted plant closures or closures related to customers closing their facilities as well as short-time working impact and (iv) in the nine months ended September 30, 2021 mainly comprise redundancy costs, non-recurring consulting and litigation expenses and costs related to plant shutdowns partly as a consequence of government-mandated plant closures.

(d) Represents certain impacts such as operating conversion effects from fixed deposits, clearing accounts, bank accounts and trade receivables and trade payables related to currency conversion effects that are accounted for in our Operating income and corresponds to "foreign currency results" of the line item "Other income and expenses, net" as shown in the respective notes to the Financial Statements.

(e) Additional contribution related to pensions represent the expenses relating to the pension plan at Pensionskasse Dynamit Nobel VVaG, which was closed at the end of 2014 but with a continuing contractual obligation to cover potential underfunding. On July 20, 2016, the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) approved the solvency plan dated June 24, 2016 in favor of Pensionskasse Dynamit Nobel VVaG. The provision was based on the planned payments until 2021. Additional contributions in 2018, 2019, 2020 are based on annual projection by the German Federal Financial Supervisory Authority.

(f) Acquisition costs (i) in 2018, represent certain costs related to the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc, which was completed in April 2017, (ii) in 2019 and 2020, represent M&A-related consulting and (iii) in the nine months ended September 30, 2021, mainly comprise costs related to the acquisition of Dentalpoint AG.

(g) Transaction-related costs comprise certain impacts due to the acquisition of CeramTec Holding by CeramTec AcquiCo that completed and became effective on March 8, 2018.

(h) PPA on inventories and fixed assets comprises consumption and write-downs of, respectively, step-ups at transactions, finished goods, work in progress inventories and fixed assets calculated based on customary asset valuation methodology.

(i) Start-up losses reflect the ramp-up cost of our knee and dental businesses.

(j) Discontinued operations mainly comprise the exit or discontinuation of some product groups and applications for the Industrials markets.

(k) Represents the normalization for the net impact of the COVID-19 pandemic, including:

(i) an adjustment adding back the loss of revenue based on Management Adjusted EBITDA in 2019 of €14.6 million for the year ended December 31, 2020 and €3.3 million for the twelve months ended September 30, 2021 related to order postponements and cancellations, primarily related to our business related to the Medical markets, resulting from decreased demand caused by COVID-19 in 2020;

(ii) an adjustment of €2.6 million for the year ended December 31, 2020 and €0.0 million for the twelve months ended September 30, 2021 related to lost revenues based on the difference between actual and budgeted sales and EBITDA resulting from COVID-19-related production facility shutdowns in India, Malaysia, China, the United Kingdom and the Emil Müller Group;

(iii) an adjustment of €(2.0) million for the year ended December 31, 2020 and €(0.5) million for the twelve months ended September 30, 2021 reflecting the increase in Medical markets revenue related to sale of components for COVID-19 test kits than management considers to be non-recurring;

(iv) an adjustment of €(3.8) million for the year ended December 31, 2020 and €(0.9) million for the twelve months ended September 30, 2021 related to management's estimates of the additional costs for employee bonuses in 2020 without the adverse impact of the COVID-19 pandemic;

(v) an adjustment of €15.3 million for the year ended December 31, 2020 and €16.6 million for the twelve months ended September 30, 2021 related to the long-term growth of the market for hip implants without the adverse impact of the COVID-19 pandemic as the long-term market growth drivers (e.g., growth in procedures and growth in penetration rates of ceramic products) were largely unaffected by the pandemic. This adjustment is presented net of order postponements and employee bonuses adjustments.

(vi) an adjustment of €4.4 million for the year ended December 31, 2020 and €1.1 million for the twelve months ended September 30, 2021 reflecting manufacturing cost under-absorption as a result of the underutilization of our production facilities focused on Industrials markets, which, for the twelve months ended September 30, 2021, includes an assumption of linear unwinding of the effect in 2020.

(l) Represents the run-rate positive impact on EBITDA from (i) expected purchasing synergies from integrating current suppliers of Dentalpoint AG with suppliers of the Target Group and (ii) management's estimated revenues resulting from significant investments in production facilities and new products and a significant ramp-up in new customer acquisitions in CeramTec Malaysia and CeramTec-ETEC GmbH.

(m) Constant currency adjustments bring translational and transactional FX effects on EBITDA in line with budget to allow comparison on a consistent basis.

(n) Other adjustments include:

(i) adjustments to align timing and phasing between periods, including adjustments to eliminate the timing effect resulting from one-off bad debt income and expenses recognized for the same matter in different periods, adjustments for the release of provisions to match the timing of the set-up and related release of such provision, adjustments for employee bonuses to eliminate the release of bonus provisions in a given period and the correspond costs in prior periods and adjustments for consumer bonuses (including both expenses from year-end bonuses to customers and income from malus arrangements) have been re-phased to eliminate out-of-period effects;

(ii) a reversal related to COVID-19 shutdown sale losses included in Management Adjustment EBITDA, which have been included in the adjustments described in footnote (j) above;

(iii) a reversal of factoring fees and interest expenses for factoring arrangements that are expected to remain in place following the Transactions;

(iv) an adjustment for one-off costs for the depreciation of overstocked material related to the Industrials markets; and

(v) an adjustment to remove the EBITDA impact of the Nektar business in North America.

(2) Management Adjusted EBITDA margin is defined as the ratio of Management Adjusted EBITDA to revenue.

(3) Capital expenditures is defined as the sum of additions to intangible assets and additions to property, plant & equipment (excluding the right-of-use assets). The following table shows the calculation of Capital expenditures:

(in € million)	Year Ended December 31,			Nine Months Ended September 30,		Twelve Months Ended September 30,
	2018[(a)]	2019	2020	2020	2021	2021
	(unaudited)	(audited)		(unaudited)		(unaudited)
Additions to intangible assets	1.9	3.0	3.9	2.4	2.7	4.2
			(unaudited)			
Additions to property, plant and equipment (excluding right-of-use assets)	31.4	40.6	32.8	19.5	21.3	34.5
Capital expenditures	**33.3**	**43.6**	**36.7**	**21.9**	**24.0**	**38.7**

(a) The statement of comprehensive income and consolidated statement of cash flows information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income and the consolidated statement of cash flows for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income and the consolidated statement of cash flows for any subsequent period. For the benefit of readers, we present Capital Expenditures on a *pro forma* basis in order to compare the performance of operations included the advanced ceramics business for the entire period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

(4) Cash Generation is defined as Management Adjusted EBITDA minus Capital Expenditures.

(5) Cash Conversion Ratio is defined as (i) Management Adjusted EBITDA minus Capital Expenditures, divided by (ii) Management Adjusted EBITDA.

(6) We define Adjusted Cost of sales, Adjusted Gross profit, Adjusted Selling costs, Adjusted Research and development costs, Adjusted General administrative costs and Adjusted Other income and expenses, net, as Cost of sales, Gross profit, Selling costs, Research and development costs, General administrative costs and Other income and expenses, net, respectively, adjusted for depreciation and amortization and certain costs and expenses which our management considers exceptional or non-recurring, as set forth below.

The various "adjusted" cost measures are not calculated on the basis of IFRS or any other generally accepted accounting principles and should not be considered as alternatives to cost measures presented in accordance with IFRS. As Non-IFRS Measures, these measures may not be comparable to other similarly titled measures of other companies, as not all companies calculate these financial measures in the same manner, and have limitations as analytical tools and should not be considered in isolation or as a substitute for analysis of our operating results as reported under IFRS. You should compensate for these limitations by relying primarily on our consolidated financial statements and using these Non-IFRS Measures only as supplemental measures to evaluate our performance. In calculating these financial measures, we make certain adjustments that are based on assumptions and estimates that may prove to have been inaccurate. In addition, in evaluating these financial measures, you should be aware that in the future we may incur expenses similar to those eliminated in this presentation. Our presentation of "Adjusted" cost items should not be construed as an inference that our future results will be unaffected by unusual or non-recurring items. For additional information on these cost measures and our use and presentation of those measures and the related risks, see "*Presentation of Financial Information—Non-IFRS Financial Measures*."

The following table reconciles Adjusted Cost of sales, Adjusted Gross profit, Adjusted Selling costs, Adjusted Research and development costs, Adjusted General administrative costs and Adjusted Other income and expenses, net, to Cost of sales, Gross profit, Selling costs, Research and development costs, General administrative costs and Other income and expenses, net, respectively for each of the periods presented.

(in € million)	Year Ended December 31,		Nine Months Ended September 30,		Twelve Months Ended September 30,
	2019	**2020**	**2020**	**2021**	**2021**
	(audited)		**(unaudited)**		**(unaudited)**
Revenue	620.4	552.7	418.3	495.1	629.4
Cost of sales	356.2	334.9	251.3	275.1	358.8
			(unaudited)		
thereof Depreciation and amortization	(55.9)	(55.8)	(42.0)	(42.5)	(56.3)
thereof Other extraordinary items[(a)]	(6.8)	(6.1)	(4.3)	(2.9)	(4.7)
Adjusted Cost of sales	**293.5**	**273.0**	**205.0**	**229.7**	**297.7**
Adjusted Gross profit	**326.9**	**279.7**	**213.3**	**265.3**	**331.7**
	(audited)		**(unaudited)**		**(unaudited)**
Selling costs	95.2	87.3	65.8	72.8	94.3
			(unaudited)		
thereof Depreciation and amortization	(48.0)	(48.2)	(36.1)	(37.0)	(49.1)
thereof Other extraordinary items[(a)]	(4.1)	(3.7)	(2.5)	(4.4)	(5.6)
Adjusted Selling costs	**43.2**	**35.4**	**27.1**	**31.4**	**39.7**
	(audited)		**(unaudited)**		**(unaudited)**
Research and development costs	23.3	20.6	15.6	17.0	22.0
			(unaudited)		
thereof Depreciation and amortization	(1.8)	(1.5)	(1.1)	(1.6)	(1.9)
thereof Other extraordinary items[(a)]	(1.4)	(1.8)	(1.4)	(1.8)	(2.2)
Adjusted Research and development costs	**20.1**	**17.4**	**13.2**	**13.6**	**17.8**
	(audited)		**(unaudited)**		**(unaudited)**
General administrative costs	27.1	24.5	17.7	19.1	25.9
			(unaudited)		
thereof Depreciation and amortization	(1.5)	(1.4)	(1.1)	(1.4)	(1.8)
thereof Other extraordinary items[(a)]	(7.1)	(5.0)	(3.4)	(3.3)	(4.9)
Adjusted General administrative costs	**18.5**	**18.1**	**13.3**	**14.5**	**19.3**
	(audited)		**(unaudited)**		**(unaudited)**
Other income and expenses, net	(342.9)	(139.0)	(136.5)	3.2	0.7
			(unaudited)		
thereof Depreciation and amortization	(340.0)	(137.3)	(137.1)	—	(0.2)
thereof Other extraordinary items[(a)]	(2.2)	(6.0)	(3.2)	2.1	(0.7)
Adjusted Other income and expenses, net	**(0.6)**	**4.2**	**3.8**	**1.1**	**1.4**
Operating income	**(224.5)**	**(53.6)**	**(68.6)**	**114.2**	**129.1**

(a) Other extraordinary items include: (i) restructuring costs, (ii) other non-recurring costs, (iii) foreign exchange conversion effects, (iv) additional contributions related to pensions, (v) acquisition costs, (vi) transaction-related costs, (vii) PPA on inventories and fixed assets, (vii) start-up losses and (viii) discontinued operations.

(7) Medical markets revenue and Industrials markets revenue represent external revenue to third parties.

(8) As adjusted net third-party senior secured indebtedness represents the as adjusted consolidated third-party senior secured financial debt of the Issuer (comprising drawings under the Senior Term Facility) less the as adjusted consolidated cash and cash equivalents of the Issuer, as set forth under "*Capitalization*." As adjusted net third-party senior secured indebtedness excludes any drawings under the Revolving Credit Facility. Any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Revolving Credit Facility. See "*Use of Proceeds*" and "*Capitalization*."

(9) As adjusted net third-party indebtedness represents the as adjusted consolidated third-party financial debt of the Issuer (comprising drawings under the Senior Term Facility, the Notes offered hereby, lease liabilities and other third-party financial debt) less the as adjusted consolidated cash and cash equivalents of the Issuer, each as set forth under "*Capitalization*." As adjusted net third-party senior secured indebtedness excludes any drawings under the Revolving Credit Facility. Any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Revolving Credit Facility. See "*Use of Proceeds*" and "*Capitalization*."

(10) As adjusted cash interest expense represents the estimated cash interest expense (excluding any drawings under the Revolving Credit Facility and amounts related to the undrawn commitments under the Revolving Credit Facility) of the Group on an as adjusted basis for the twelve months ended September 30, 2021, after giving effect to the Transactions as if they had occurred on October 1, 2020, subject to the assumptions set forth under "*Use of Proceeds*." See "*Capitalization*." As adjusted interest expense is presented for illustrative purposes only and does not purport to represent what our interest expense would have actually been had the Transactions occurred on July 1, 2020, nor does it purport to project our interest expense for any future period or our financial position at any future date.

RISK FACTORS

An investment in the Notes involves a high degree of risk. Prospective investors in the Notes should carefully consider the risks described below and the other information contained in this offering memorandum before making a decision to invest in the Notes. Any of the following risks, individually or together, could materially adversely affect our business, financial position, results of operations and prospects, and accordingly the value of the Notes and our ability to pay all or part of the interest and principal thereon when due. This section describes the risks and uncertainties that we believe are material, but these risks and uncertainties may not be the only ones that we face. Additional risks and uncertainties, including those of which we are currently unaware or those which we deem immaterial, may also result in decreased sales, assets and cash inflows, increased expenses, liabilities or cash outflows or other events that could result in a decline in the value of the Notes, or which could have a material adverse effect on our business, financial position, results of operations and prospects. The order in which the risks are presented does not necessarily reflect the likelihood of their occurrence or the magnitude of their potential impact on our business, financial position, results of operations and prospects or on the value of the Notes.

This offering memorandum also contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those anticipated in those forward-looking statements as a result of various factors, including the risks described below and included elsewhere in this offering memorandum. For more information, see “Forward-Looking Statements.”

Risks Relating to Our Business and Industry

Our business, financial condition and results of operations have been, and may continue to be, adversely affected by the current COVID-19 public health pandemic.

The ongoing COVID-19 pandemic has had, and any possible future outbreaks could have, an adverse effect on us. The COVID-19 pandemic, and the reactions of governmental and other authorities to contain, mitigate or combat the pandemic, have severely restricted the level of economic activity worldwide, and have impacted, and are expected to continue to impact, our operations. Further, the nature, extent and duration of the impact of COVID-19 or any future disease or adverse health condition is highly uncertain and beyond our control. In response to the COVID-19 pandemic, many governments have taken preventative or protective actions, such as imposing lockdowns, curtailing travel, school closures, prohibitions of mass gatherings, mandatory remote working, and in some countries, limitations on the ability to access production facilities and office buildings. The COVID-19 pandemic has also caused significant economic dislocation in many of the countries in which we operate and sell our products, which has resulted in an unprecedented slowdown in economic activity and a related increase in unemployment. Were a recession to occur as a result of the economic impact of the COVID-19 pandemic, we cannot predict the length of such recession or the short- and long-term impact it may have on the global economy or our business specifically. Resurgences or further outbreaks of COVID-19 are also likely to occur. We cannot predict when or where any further outbreaks may occur, their duration, how far into the future we may experience outbreaks nor can we predict with any certainty the impacts of such subsequent outbreaks, including the impacts of future national or local lockdowns or other measures implemented by national and/or local authorities. As of September 2021, COVID-19 outbreaks were significantly affecting many countries, including Germany, the United States and other countries in which we operate, with cases rising markedly and with new, more contagious strains of the virus emerging. Any or all such consequences may have a material adverse effect on our business, financial condition, results of operations and prospects.

The global COVID-19 pandemic has had a material impact on economic activity across our markets and on our business in 2020 and at the start of 2021. In this period, we experienced decreased volumes as non-essential surgeries were postponed and customers had to cancel orders or shift delivery dates given the lower demand from clinics, which negatively impacted our revenue. Performance in Industrials markets has been impacted by a global industrial down-cycle that started in 2019 that which was further exacerbated by the COVID-19 pandemic. We also experienced COVID-19 related involuntary plant closures between the February 2020 and August 2020, and again in July 2021, which negatively impacted revenue and EBITDA for the respective periods. In particular, our factories in Malaysia were required to shut down in March and April of 2020, and again in July 2021, following general government directives. Our factory in China also had to close for two weeks in the beginning of February 2020, which negatively impacted sales. In India, lockdowns in March and April 2020 that extended to mid-May 2020 in some regions and subsequent production slowdowns negatively impacted business until August 2020. In addition, we experienced a slowdown in most of our facilities as a result of delays of customer orders, while one of our subsidiaries operating in mobility end-markets, Emil Müller Group, also had to slow production following shutdowns at its major customers due to the lack of raw materials and other components, which negatively impacted revenue. Our manufacturing costs were also impacted by COVID-19 pandemic, including as a result of such factory closures, costs for cleaning and safety measures, illness rates and quarantines. As a result, revenue decreased by 22.8% from the first quarter of 2020 to the second quarter of 2020. Overall, we experienced a decrease in revenue of 10.9% in 2020 as compared to 2019.

We implemented a large number of measures to minimize the impact of the COVID-19 pandemic on our business, including among others providing all employees at our German sites with free FFP2 masks, distributing two free COVID-19 self-tests per week, allowing all indirect employees to work from home over an extended period and implementing hygiene measures for direct shop-floor employees, such as separation walls. In addition, we eliminated business travel for our employees, adopted restrictions regulating visits of third-party staff to our facilities and, for a period of time, tested our own staff regularly before allowing entry to our facilities. We also implemented short-time work (*Kurzarbeit*) measures to reduce working hours, from time to time, depending on the specific situation affecting the relevant plant and our customers. We have also incurred certain costs in connection with implementing these mitigating measures. As of the date of this offering memorandum, we continue to enforce safety measures depending on both country-specific regulations and plant-specific requirements, reviewing on a regular basis any changes to the measures implemented at a given time, in order to quickly adjust to changing scenarios. However, these actions may not fully mitigate the impact of the COVID-19 pandemic on our business, or adequately protect against any outbreaks of COVID-19 at our facilities and offices. We also still remain vulnerable to further lockdowns and COVID-19-inspired adverse events in the short-term, which could result in increasing volatility during 2022. We cannot predict the degree to, or the period over which, we will be affected by the COVID-19 pandemic. Given evolving government policies and the emergence of new variants of COVID-19 and despite the development and ongoing rollouts of vaccines, there may be further impacts on the economies or the consumer purchasing power of the countries where we operate.

Any of the foregoing including any resulting deterioration in general economic conditions or change in consumer behavior, could have a material adverse effect on our business, financial condition and results of operations. To the extent the COVID-19 pandemic adversely affects our business, financial condition, liquidity or results of operations, it may also have the effect of heightening many of the other risks described in this "*Risk Factors*" section. For more details on how COVID-19 has impacted, and may continue to impact, our business, see "*Summary—Recent Developments—Our Response to COVID-19.*"

If there are new entrants in the hip joint implant market, the level of competition for our key customers and for us may increase in the future and our profitability may be impacted.

A significant part of our EBITDA is derived from sales of our ceramic components for hip implant systems. As ceramic penetration in global medical implant markets is steadily rising, leading to market-leading growth for ceramic components, new competitors may aim to enter this market. For example, in 2016 and 2017, two of our competitors launched ceramic ball head products. These companies may in the future gain market share in the U.S., Europe, Asia or elsewhere. We are also susceptible to changes in the Medical market dynamics of the industry in which our customers operate. For example, in the past there has been consolidation in the medical implant industry and in the future, there may be further consolidation, which may impact our revenue. As a consequence, we might be faced with price pressure which could result in lower revenue and could particularly impact our margins, which could have a material adverse effect on our business, financial condition and results of operations.

We rely on a limited number of large customers, in particular in the Medical markets, for a significant part of our revenues and our business and results of operations may be materially adversely affected if our relationship with any of our key customers deteriorates or ends.

We depend on a limited number of large customers that contribute a significant share of our total revenue, in particular in the Medical markets. The customer base for our hip joint implants is highly concentrated. For the year ended December 31, 2020, the top four Medical markets customers made up 44% of our Medical markets revenue and the top ten customers accounted for 63% of its revenue. Our customers are orthopedic implant OEMs, including the top orthopedic implant OEMs who together have a strong presence in the global hip implant market. Any consolidation in our customer base for hip implant products could result in further pricing pressure which in turn could have a material adverse effect on our business, financial condition results of operations and prospects.

We maintain good and long-standing customer relationships with all large orthopedic hip implant OEMs. If our relationship with one or more of our largest customers deteriorates or if we fail to extend our contractual relationships with any of our key customers at favorable terms, or at all, this could have a material adverse effect on our results of operations, financial condition and results of operations.

Our business is dependent on the image and reputation of our BIOLOX® products.

We are dependent on the image, perception and recognition of our BIOLOX® product offering, which, in turn, depends on many factors such as the quality of our BIOLOX® products, their design, the results of our customers' clinical trials for newly developed innovations, enduring customer and surgeon loyalty, and our general corporate and market profile, which can be adversely affected for reasons within and outside our control. Our BIOLOX® products are considered an industry benchmark in the market for ceramic joint replacements. The success of our BIOLOX® products is largely dependent on our close collaborative partnerships with orthopedic manufacturers, material scientists and surgeons, and any negative perception of the quality of these products could have a material adverse impact on our business.

Furthermore, potential product failures and recalls, negative claims or publicity involving us or our products, or the production methods of any of our suppliers or the materials we source, could seriously damage our reputation and brand image, regardless of whether such claims or publicity are accurate. See also "*—Our medical products may cause or contribute to adverse medical events that we or our customers are required to report to the FDA and to regulatory authorities in other countries. The discovery of serious safety issues with our medical products, or a recall, either voluntarily or at the direction of the FDA or another governmental authority, could have a negative impact on us*," and "*—We may be liable for damages arising out of product liability claims.*"

We do not have long-term contractual arrangements with some of our customers and depend on continuous technological innovation and successful commercial introduction of new products to retain existing customers or attract new ones.

Although we have decades-long relationships with many of our key customers, they are often commercial relationships and we do not have long-term contracts with them. With some of our customers, we have short-term contracts that will soon expire if not renewed. See also "*—We rely on a limited number of large customers, in particular in the Medical markets, for a significant part of our revenues and our business and results of operations may be materially adversely affected if our relationship with any of our key customers deteriorates or ends*." While negotiations for the renewal of these contractual relationships are currently ongoing, the relevant customers may decide not to renew their contract with the Group. Any loss of such a customer could have a material adverse effect on our revenues and the inability to retain such customers, or to replace business generated by such customers, may have an adverse effect on our results of operations. As a result, the loss or deterioration of such relationships could have a material adverse effect on our business, financial condition results of operations and prospects.

In addition, we believe that our customers are increasingly looking for strong, long-term relationships with a few key suppliers that help them improve product performance, reduce costs, or support new product development. This is largely due to our customers' needs for tailored products that very often require joint development efforts. However, even in cases where we co-develop a product with a customer, it will be for one application only. If our customer develops or upgrades a product or process, we need to offer a newly tailored product meeting our customer's new specifications. This may require us to invest more in research and development and to increase marketing costs so that we can strengthen existing customer relationships as well as attract new customers. If our key competitors are able to innovate faster, spend more on R&D, or generally develop technology for ceramic products or comparable products from substitute materials more cost effectively or with a higher quality, our customers may opt to work with our competitors instead of us. Inability to keep key customers and failure to attract new customers due to a perceived lack of innovation could materially affect our reputation which would further reduce our ability to compete.

We believe that product quality, product specifications, innovation and customer service are key competitive factors for our business. If we are unable to develop, produce or market our products effectively to our existing or new customers, we may lose key customers or fail to acquire new customers. As a result, any of the foregoing could have a material adverse effect on our business, financial condition results of operations and prospects.

Some of our products, as well as our manufacturing processes and facilities and medical customers are subject to extensive regulation under applicable law, by the FDA or by other governmental agencies. Changes in these regulations or failure by us or our customers to comply with them could adversely affect our business.

Regulatory requirements for our medical products as well as components for such medical products are complex, costly and far reaching. Any failure to comply with them could subject us and/or our customers to fines, injunctions, civil penalties, lawsuits, recall or seizure of products, total or partial suspension of production, denial of government approvals, withdrawal of marketing approvals and criminal prosecution. Any of these actions could adversely impact our revenue, undermine goodwill established with our customers, damage commercial prospects for our products and materially and adversely affect our results of operations. Globally, our products are marketed in more than 65 countries and each of these countries may regulate our products and processes differently. In the United States, before we or our customers can market a new medical device, or a new use of, new claim for or significant modification to, an existing product, we or they must first receive either clearance under Section 510(k) of the Federal Food, Drug, and Cosmetic Act or approval of a premarket approval (or "PMA"), from the FDA, unless an exemption applies. Certain of our DENSILOX® implant products have received marketing authorization pursuant to the 510(k) clearance process, and our OEM customers have obtained 510(k) clearances and PMA approvals for certain products that utilize our BIOLOX® components. Obtaining FDA clearances or approvals for any new medical devices or modifications to existing medical devices can be time consuming and can be delayed or rejected by the FDA for many reasons.

In the United States, the manufacture and supply of our ceramic ball head and cup inserts for hip joint prostheses systems is subject to the FDA's Quality System Regulation, which imposes current Good Manufacturing Practice requirements on the manufacture of medical devices. While we have successfully completed FDA audits and audits by our customers in the past, there can be no assurance that we will continue to do so in the future. In addition, our medical device customers to whom we supply our ceramic ball head and cup inserts are subject to FDA regulation, including premarket approval and post market compliance requirements of their hip joint prostheses systems.

In the EU, our medical products are required to comply with the essential requirements under the EU Medical Devices Regulation, which entered into force in May 2021. This new regulation generally increases standards applicable to conformity assessment procedures and requires more stringent scrutiny by notified bodies when conducting audits, among other things. Compliance with these requirements entitles us and our customers to affix a CE mark to the medical devices verifying products meet EU safety, health or environmental requirements. As implantable devices for hip joint prostheses, certain of our medical products are considered high risk medical devices falling within Class III. Our customers therefore have to undergo a recurring conformity assessment procedure including stringent audits by a so called “notified body” for these products. Unless our customers successfully complete this conformity assessment, they do not have the right to carry the CE mark. Without the CE mark, the customers’ medical devices cannot be commercialized in the European Union. Compliance with relevant regulations is monitored by the respective authorities of EU member states. Furthermore, our customers are subject to other legal regulatory requirements in additional end-markets, such as, for example, China, which we continuously monitor. Changes to these regulations or non-compliance by our customers or by us can lead to market withdrawals of our products and may have a material adverse effect on our business, financial condition and results of operations

The FDA may take several years or longer to grant premarket approval of our or our customers’ new medical devices, if at all. European conformity assessment procedures are equally challenging and time consuming. Further, our competitors may seek pre-market approval for products that compete with our medical products for ceramic hip joint prostheses. At any time, our customers’ total hip prostheses systems may be withdrawn from the market either voluntarily by our customers or as a result of the FDA’s or a foreign equivalent’s withdrawal of marketing approval or removal of such products for a number of reasons including safety, current Good Manufacturing Practice or Quality System Regulation problems with our products or our customers’ final products. For example, a customer initiated a voluntary recall in August 2010 of its hip implant system. Any such regulatory action could significantly impact our revenue and may have a material adverse effect on our business, financial condition and results of operations.

If our customers fail to obtain and maintain necessary governmental approvals or clearance for medical devices which include our products, they may be unable to market and sell our products in certain jurisdictions.

Medical products such as ours and the hip joint prostheses systems of our customers are extensively regulated by the FDA in the United States and by other federal, state, local and foreign authorities. Specifically in the United States, certain of our customers’ hip joint prostheses systems have obtained PMA approval or 510(k) clearance from the FDA. Governmental regulations relate to the testing, development, manufacturing, labeling, design, sale, promotion, distribution, importing, exporting and shipping of our products. We cannot assure you that any regulatory clearances or approvals, either foreign or domestic, will be granted or maintained for our key medical customers’ new products that include our products on a timely basis, if at all. If our key medical customers are unable to obtain regulatory approvals or clearances for use of their medical devices, the commercial success of our products could be limited. Regulators may also limit the claims that we or our customers can make about our products.

Approval processes differ in the United States, Europe, Asia and other jurisdictions and the approval in the U.S. or any other single jurisdiction does not guarantee approval in any other jurisdiction. Obtaining foreign approvals for our customers’ medical devices could involve significant delays, difficulties and costs for our customers, which could adversely affect the commercial success of our products.

If the FDA or any other regulatory authority does not grant the necessary marketing authorizations for our customers’ medical devices, due to deficiencies of our products or any other component used in our customers’ medical devices, our customers may no longer be able to market their medical devices in their markets or may even choose to switch to another supplier. As a result, our results of operations, financial condition and cash flows could be materially and adversely affected.

We and our customers are required to pass inspections and to comply with applicable regulatory requirements in order for our customers to continue to sell their hip joint prostheses systems. Any failure to pass an inspection or to comply with regulatory requirements could adversely impact our operations through a recall or seizure of products, an issuance of warning letters and operating restrictions or the suspension or revocation of the authority necessary for the production or sale of hip joint prostheses systems. In addition, we could incur substantial remediation costs. Any one of these adverse events, even if it does not involve our products directly, could result in a material adverse effect on our business, financial condition and results of operations.

Our medical products may cause or contribute to adverse medical events that we or our customers are required to report to the FDA and to regulatory authorities in other countries. The discovery of serious safety issues with our medical products, or a recall, either voluntarily or at the direction of the FDA or another governmental authority, could have a negative impact on us.

We and certain of our customers are subject to the FDA’s medical device reporting regulations and similar national and international regulations, which require manufacturers to report to the FDA upon becoming aware of information that reasonably suggests that their medical devices may have caused or contributed to a death or serious injury or severely malfunctioned. We also have a contractual obligation to inform our customers if we become aware of any of our products exhibiting adverse medical effects. If we or our customers fail to comply with applicable reporting obligations, including as a result of failure to timely report any adverse medical effects of which we become aware, the FDA could take action, which could result in civil penalties or criminal prosecution, revocation of our customers' device clearance or seizure of products. This in turn could adversely affect our reputation as well as our product sales.

The FDA and other national regulatory bodies have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture of a product or in the event that a product poses an unacceptable risk to health. The FDA's authority to require a recall must be based on a finding that there is reasonable probability that the device could cause serious injury or death. We or our medical customers may also choose to voluntarily recall a product if any material deficiency is found. A government-mandated or voluntary recall by us or our customers could occur as a result of an unacceptable risk to health, component failures, malfunctions, manufacturing defects, labeling or design deficiencies, packaging defects or other deficiencies or failures to comply with applicable regulations.

A recall announcement could harm our reputation with customers, potentially lead to product liability claims against us and negatively affect our sales.

The existence of adequate coverage and reimbursement is important for the sales of our products. Inadequate coverage and reimbursement policies and changes in health care reimbursement systems in the U.S. and elsewhere could reduce our revenues and profitability.

Sales of medical devices largely depend on the reimbursement of patients' medical expenses by government health care programs and private health insurers. Without the financial support of government reimbursement or third-party insurers' payments for patient care, the market for our medical customers' hip joint prostheses systems, and in turn, our products, will be limited.

In the United States and in certain other jurisdictions, there have been a number of legislative and regulatory reforms that have changed the regulatory and healthcare systems in ways that could impact our ability to sell our products profitably. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the "Affordable Care Act" or the "ACA")) was enacted, which significantly impacted the medical device industry in the United States. Among other things, the Affordable Care Act imposed an annual excise tax of 2.3% on any entity that manufactures or imports medical devices offered for sale in the United States, with limited exceptions, beginning in 2013 (the "Medical Device Excise Tax" or the "MDET").

In addition, the Centers for Medicare & Medicaid Services, the Federal agency responsible for administering the Medicare program, establishes payment levels for hospitals and physicians on an annual basis, which can increase or decrease payment to such entities. The ACA also established a new Patient-Centered Outcomes Research Institute to oversee and identify priorities in comparative clinical effectiveness research in an effort to coordinate and develop such research, and created an independent payment advisory board to submit recommendations to reduce Medicare spending if projected Medicare spending exceeds a specified growth rate. Other legislative changes have also been proposed and adopted since the Affordable Care Act was enacted, which include, among other things, reductions to Medicare payments to providers, as well as changes made by third-party payors to the reimbursement amounts and/or payment methodologies used to determine such amounts, any of which could have a negative effect on those selling products to hospitals, ambulatory surgery centers and surgeons, including medical device manufacturers. Any reduction in such payment amounts could result in reduced demand for our products or additional pricing pressures.

However, there have been recent executive and legislative actions to amend or impede the implementation of the Affordable Care Act, and ongoing efforts to repeal, replace or further modify the Affordable Care Act which may adversely affect our business, financial condition, and results of operations.

For example, the MDET was suspended for 2018 and 2019 as a result of the enactment of the Consolidated Appropriations Act of 2018. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, certain bills affecting the implementation of certain taxes under the ACA have been signed into law. In particular, on January 22, 2018, former President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the MDET on non-exempt medical devices. Since then, The Further Consolidated Appropriations Act 2020, signed into law on December 20, 2019, repealed the MDET. Congress has also enacted laws that modify certain provisions of the Affordable Care Act such as removing penalties, starting January 1, 2019, for not complying with the Affordable Care Act's individual mandate to carry health insurance and delaying the implementation of certain fees mandated by the Affordable Care Act. In addition, former President Trump signed additional executive orders and other directives designed to delay the implementation of certain provisions of the Affordable Care Act.

Further, on December 14, 2018, a Texas U.S. District Court Judge ruled that the Affordable Care Act is unconstitutional in its entirety because the individual mandate was repealed by Congress as part of the Tax Cuts and Jobs Act of 2017. Additionally, on December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the District Court ruling that the individual mandate was unconstitutional and remanded the case back to the District Court to determine whether the remaining provisions of the Affordable Care Act are invalid as well. On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states, without specifically ruling on the constitutionality of the ACA.

The full impact on our business of the ACA and other new laws is uncertain. Nor is it clear whether other legislative changes will be adopted, if any, or how such changes would affect the demand for our products. Future actions by the U.S. administration and the U.S. Congress including, but not limited to, repeal or replacement of the ACA could have a material adverse impact on our results of operations or financial condition. Additionally, all or a portion of the ACA and related subsequent legislation may be modified, repealed or otherwise invalidated through other judicial challenge. Prior to the Supreme Court’s decision, President Biden issued an executive order to initiate a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace, which began on February 15, 2021 and remained open through August 15, 2021. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is unclear how other healthcare reform measures of the Biden administration or other efforts, if any, to challenge, repeal or replace the ACA, will impact the ACA or our business.

The current presidential administration and Congress may pursue significant changes to the current healthcare laws. We face uncertainties that might result from modifications or repeal of any of the provisions of the Affordable Care Act, including as a result of current and future executive orders and legislative actions. The impact of those changes on us and potential effect on business is currently unknown. Changes in healthcare policy could increase our costs and subject us to additional regulatory requirements that may interrupt commercialization of our current and future solutions. Any changes to the Affordable Care Act are also likely to have an impact on our results of operations, and may negatively affect our business, financial condition and prospects. We cannot predict what other healthcare programs and regulations will ultimately be implemented at the federal or state level or the effect of any future legislation or regulation in the United States may negatively affect our business, financial condition and results of operations.

The net effect of the Affordable Care Act, as currently in effect, on our business is subject to a number of variables, including the law’s complexity, lack of complete implementing regulations and interpretive guidance, and the sporadic implementation of the numerous programs designed to improve access to and the quality of healthcare services. Additional variables of the Affordable Care Act impacting our business will be how states, providers, insurance companies, employers, and other market participants respond during this period of uncertainty surrounding the future of the Affordable Care Act.

Further, sales of medical devices in China are subject to importation authorizations and purchasing tender processes governed by local authorities. In 2021, Chinese authorities published a new system regulating official tenders for medical devices. The growth of our sales volumes in China is dependent on acting in accordance with the relevant purchasing tender authorizations, as applicable from time to time. However, the timing and the magnitude of any changes or updates to these official tender systems remain uncertain, and we may continue to experience significant variability as it relates to our sales in China.

In addition, on an international level, medical reimbursement systems vary significantly from country to country, with some countries limiting medical centers’ spending through fixed budgets, regardless of the levels of patient treatment, and other countries requiring application for, and approval of, government or third party reimbursement. Uncertainties regarding future healthcare policy, legislation and regulation, as well as private market practices, could affect our customers’ ability to sell their hip implant system in commercially acceptable quantities at profitable prices and therefore could also impact our revenues, profit margins, operating cash flows and results of operations.

Due to the nature of our business and products, we may be liable for damages arising out of product liability claims.

The sale of our products involves the risk of product liability claims. For example, we may be notified by a customer, patient, treating surgeon, or hospital, alleging that the relevant surgery resulted in the implantation of a medical device that includes a defective component produced by the Group. We have been named as defendants in a number of product liability lawsuits in Europe, substantially all of which alleged various claims against our ceramic hip joint components and, in the past, we were named in lawsuits in the United States relating to broken artificial hip joints. See “*—We are subject to the risk of litigation and other claims*” and “*Business—Legal Proceedings*.”

In addition many of our products are integrated into our customers’ products, and we may be requested to participate in or share in the costs of a product recall conducted by a customer. For example, we supply products to customers in the mobility industry. In the event one of these customers conducts a product recall that it believes is related to one of our products, we may be asked to participate in or fund in whole or in part such a recall. Our customers often require us to represent that our products conform to certain product specifications provided by our customers. Any failure to comply with such specifications could result in claims or legal action against us.

We are unable to estimate our exposure, if any, to the above-mentioned product liability lawsuits at this time. While we do not believe we have any material liability associated with our current litigation and that our provisions for the lawsuits will be sufficient, there can be no assurance that we will not be exposed to material liability. We may be subject to future claims with regard to these suits or others like them and we may not be able to avoid significant product liability exposure. In addition, any such claims may be costly to defend. While we maintain insurance against product liability claims, this insurance is limited to €100 million and there can be no assurance that a claim will be covered. A successful product liability claim or series of claims against us for which we are not otherwise indemnified or insured could materially increase our operating costs or prevent us from satisfying our financial obligations. We may not have sufficient cash flow from operations or assets to pay a judgment resulting from a product liability claim or product recall, if any, for which there is inadequate insurance coverage. Any such judgment or product recall could materially increase our operating costs or prevent us from satisfying our financial obligations and materially adversely affect our results of operations, financial condition and cash flows. Additionally, lawsuits relating to alleged deficiencies in our medical products, specifically our ceramic hip replacement components, could materially impact our reputation as a manufacturer of high-quality ceramic components and could lead to the loss of our customers' FDA market authorizations for hip implants that include our ceramic components or the loss of other regulatory approvals in other jurisdictions and could prevent or delay approvals for future products that include our ceramic components. As a result, any of the above factors could have a material adverse effect on our business, financial condition and results of operations.

Our business performance is impacted by global economic conditions, specifically in Europe (including Germany), and, by conditions in the end-markets we serve.

Our business is generally significantly affected by changes in the overall global economy and, in particular, economic conditions in Europe. In the twelve months ended September 30, 2021, our revenues from customers based in Europe together accounted for 63.6% of our total revenue, with customers based in Germany accounting for 19.7% of our total revenue.

Since early 2020, the primary factor in increased uncertainty globally from an economic and social perspective has been the COVID-19 pandemic, which has resulted, and may continue to result, in materially increased volatility and declines in financial markets and weaker demand in the global economy. Measures implemented, or intended to be implemented, by governments or governmental bodies in response to the COVID-19 pandemic have had, and could continue to have, an adverse effect on supply chains resulting, for instance, in plant closures or increases in the cost of raw materials, and generally impact business operations across the economy both as a result of weakened economic activity and the employees being affected. Furthermore, global economic conditions have been, and are likely to continue to be, affected by concerns over increased geopolitical tensions as well as international political developments, such as the United Kingdom's decision to leave the European Union ("Brexit") on January 31, 2020, the threat of escalated trade disputes on a global level and the collapse of the Afghan government in August 2021.

It is difficult to predict how economic conditions will develop, as they are impacted by macro movements of the financial markets and many other factors, including the stock, bond and derivatives markets as well as measures taken by various governmental and regulatory authorities and central banks. Uncertainty remains in the global markets and the global economy could experience another recession, or a depression, which could be more prolonged or have a greater financial impact than the global recessions that began in 2008. Any downturns in general economic conditions that impact consumer spending, particularly in the countries where we sell a significant portion of our products, could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, the mobility, electronics, construction and other industrial end-markets we serve are cyclical, and both general macroeconomic and other factors beyond our control could reduce demand from any one of these markets for our products. Demand for our products is significantly affected by the business success of our OEM customers as well as end users that purchase products from those OEM customers. For example, weak economic conditions could depress new car sales, negatively impacting our mobility customers, thereby reducing demand for our ceramic components in automobiles and engines. Similarly, reduced global economic activity could hinder global industrial output, which could decrease demand for our ceramic cutting tools and textile components. General economic or industry-specific downturns could have a material adverse effect on our business, financial condition and results of operations.

If we are not able to continue our technological innovation and successful commercial introduction of new products, our profitability could be adversely affected.

We operate in markets that are subject to continuous technological developments that lead to more demanding industry standards and can result in rapidly evolving customer needs and preferences. For example, the industries and end-markets into which we sell our products experience rapid technological change and product improvement, evolving standards, rules and regulations, evolving patient and surgeon needs. Manufacturers in the high performance ceramics business periodically introduce new generations of products or require new technological capacity to develop customized products. In order to remain competitive, we will need to anticipate and respond to these changes, which requires continued investment in, and time spent on, innovation and research and development.

While we strive to maintain strong technological capabilities to remain at the forefront of the markets we operate in, the process of developing new, high technology products and services and improving existing products and services is however complex and uncertain. Any failure to anticipate, identify and keep pace with the changing needs of patients, surgeons and OEMs and emerging technological trends, growing use of alternative materials to ceramics such as metal or polymer as materials in the hip implant market, as well as any failure to introduce attractive and innovative products and services, could lead to a decline in the use of the our products and services which could in turn significantly damage our market share and economic results. For example, polyethylene and polymer liners are cheaper than ceramics, while their resistance to wear, when highly cross-linked, is almost equivalent of that of ceramics. In addition, any delay in offering new products and services, or failure to differentiate our products and services or accurately predict and address market trends and demand, could render our products and services less desirable or even obsolete, which, in turn, could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our products could also become obsolete sooner than we expect and be replaced by a new solution, product or material. For example, an alternative treatment to hip joint replacement for osteoporosis patients could be developed or new products that we are currently developing for dental, spine, knee and shoulder implants may not reach the market according to our current planned timeline. Furthermore, the penetration of our hip implant insert components might not grow as expected due to technological improvements of Polyethylene inserts, surgeon preferences, or any perceived issues related to ceramic-on-ceramic hip implants.

We must anticipate and respond to industry and customer changes, including by taking advantage of the growing use of ceramic in dental and other orthopedic implants in addition to hip, in order to remain competitive. We may be required to make investments to develop new technologies before knowing whether predictions will accurately reflect customer preferences, or if we are not able to develop the necessary technologies internally, we may have to incur expenses in an attempt to obtain a license or acquire technologies from third parties.

Our future growth will depend on our ability to gauge the direction of the commercial and technological progress in all our key end-markets and upon our ability to fund and successfully develop, manufacture and market products for our OEM customers who compete in such changing end-markets. We will have to continue to effectively identify, develop, market and in certain cases, secure regulatory approval for, innovative products on a timely basis to replace or enhance existing products. Because of the lengthy and costly development process, technological challenges and intense competition, we cannot assure you that any of the products and/or technology we are currently developing, or could begin to develop in the future, either alone or with third parties, will result in a technically viable product and achieve substantial commercial success. While we develop products and services that we expect will address new market opportunities that are not yet fully developed (including, for example, the dental implant, spine, knee and shoulder implant markets), there is no guarantee that these new opportunities will develop as we currently anticipate. There is also no guarantee that our products and services will secure broad acceptance from OEMs and surgeons, that such products and services will be consistent with developing industry standards, that we will succeed in gaining market share in these new markets or that we will fully recover investments made in acquiring or developing such products. For example, it is expected that the growth of the usage of ceramics in dental implants will be driven by a combination of factors, including better aesthetics and biocompatibility. However, we may not be able to develop or market technological advances and introduce new products in a manner and to an extent sufficient to remain competitive in this sector. More specifically, we may not be able to invest the human and financial resources required to develop these products or make mistakes or incorrect assessments in our planning with regard to these sectors or encounter difficulties in launching the products. Furthermore, we may not be able to meet the product development and delivery schedules due to unforeseen problems during the design, development or production stages of new products and the introduction of new technologies.

Delays in product development may also require further investments in research and development. If there is an increase in costs associated with the development of new products and the improvement of products for which we will not achieve sufficient revenue, the development costs of new products may not be recoverable. An increase in costs or a decrease in revenue from new products, or both, could have a material adverse effect on the Group’s business, financial condition, results of operations and prospects. Failure to maintain innovation or the introduction of new or updated technologies that respond to needs and preferences of patients, surgeons, OEMs in Medical markets, or our customers in the Industrials markets, or regulatory requirements could have a material adverse effect on our competitiveness and could cause us to lose market share, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we fail to keep pace with the evolving technological innovations in our end-markets on a competitive basis or our product pipeline fails to meet expectations, our results of operations, financial condition and cash flows could be materially and adversely affected.

We are subject to intense competitive pressures in the Industrials markets.

In the Industrials markets as well as in part of our medical equipment markets, we operate in a fragmented and competitive industry with many players in niche applications. We face substantial competition from our primary competitors, but also from many other international, national, regional and local competitors of various sizes. Competition is particularly intense in the mobility, electronics and several niche industrial end-markets where product-oriented competition is acute. Various competitors such as 3M Company, Coorstek or Kyocera are larger than us and have greater financial resources. Other competitors are smaller and may be able to offer more specialized products.

As such, we face substantial risk that certain events, including new product development by our competitors, changing customer needs, production advances for competing products or the replacement of ceramic products with products made from different materials could result in declining demand for our products and reduce our market shares as our customers switch to our competitors' products or undertake to manufacture such products on their own. In particular, increasing competition from competitors in Asia may lead to lower prices for our products. Our failure to effectively compete or increased use of substitutes for HPC products could result in a material adverse effect on our results of operations, financial condition and cash flows.

As a global business, we are exposed to local business risks in different countries.

We have significant operations in many countries, including production facilities, research and development facilities, sales personnel and customer support operations. Currently, we operate facilities in countries such as Germany, the United States, Brazil, India, China, Czech Republic, Malaysia, Mexico, Poland, Switzerland and the United Kingdom. Our products are also distributed, directly or indirectly, in more than 65 countries, and our operations are affected directly and indirectly by global regulatory, economic and political conditions. Thus, we are exposed to a range of factors that we cannot easily influence and that could have an impact on our business activities in these countries. These factors include the following:

- changes in the rate of economic growth;
- political, social, economic, financial and market instability and volatility;
- war, terrorist activities or other armed conflict;
- foreign currency controls and foreign currency exchange volatility;
- changes in government policies and regulations or imperfect application of such regulations;
- trade regulations affecting production, pricing and marketing of products;
- inadequately developed and inconsistent legal and administrative systems, which can lead, for example, to expropriations, the inadequate protection of intellectual property rights or can jeopardize the enforcement of receivables and other claims;
- burdensome tariffs and other trade barriers and delays associated with customs procedures, including increased security requirements applicable to foreign goods and measures related to COVID-19 and Brexit;
- imposition of confiscatory taxation or adverse taxes, other charges and restrictions on imports, currency, interest and exchange rate risks, changes in double tax treaties;
- managing and obtaining support and distribution for local operations;
- increased costs and availability of raw materials, transportation or shipping;
- credit risk, financial conditions and compliance risk of local customers, distributors and other agents;
- risks related to labor practices increasing minimum wages and inflationary pressures, national and regional labor strikes;
- increased risk of fraud and corruption; and
- the risk that regulations will become less favorable to our business.

We may not succeed in developing and implementing policies and strategies to counter the foregoing factors effectively in each location where we do business. Our failure to do so could limit our ability to sell products, compete or receive payments for products sold in such locations. As a result, the foregoing risks could have a material adverse effect on our business, financial condition, results of operations and prospects.

Price increases or interruptions in the supply of raw materials, including as a result of increased shipping costs, could have a significant impact on our ability to sustain and grow earnings.

Our manufacturing processes consume significant amounts of raw materials, the costs of which are subject to worldwide supply and demand as well as other factors beyond our control. All raw material costs constituted approximately one third of our cost of products sold. Because the properties we require from our raw materials are highly specific and the properties of these raw materials reflect their manufacturing processes, as well as the specific properties and distinctive characteristics of their precursors, we typically source each type of raw materials only from a single supplier. We have identified more than one suitable raw material supplier only in the case of a few specific raw materials. We keep additional safety stock for most single-sourced raw materials, and our risk management monitors critical suppliers and attempts to identify suitable alternative supply channels, but there can be no guarantee that we any such mitigation efforts will be successful or that our stock will be sufficient in the case of supply chain disruptions. Supplier capacity constraints, supplier production disruptions or the unavailability of certain raw materials could result in supply imbalances that may have a material adverse effect on our results of operations, financial condition or cash flows.

Increases in the price of resources, such as natural gas, petrol, electricity and water, whether as a result of inflation, shortages or interruptions in supply, or otherwise, could also materially affect our business, financial condition, results of operation and prospects. Our ability to respond to increased costs for raw materials by increasing our prices or implementing alternative processes and supply chains will depend on our ability to anticipate and react to such increases in the contest of the prevailing general economic conditions, as well as the responses of our suppliers, competitors and customers. Each of these factors is difficult to predict and beyond our control. Accordingly, increased costs, and the uncertainty related thereto, could have a material adverse effect on our business, financial condition, results of operations and prospects.

We generally purchase raw materials based on supply agreements, in which prices are fixed for no longer than 12 months. As a result, we may be subject to fluctuations in raw materials prices. These fluctuations limit our ability to accurately forecast future raw material costs and hence our profitability. Our ability to increase the prices of our products in order to pass-on any increases in raw materials costs to our customers is dependent upon our contractual arrangements and economic conditions. If we are not able to fully offset the effects of higher raw materials costs, our financial results could deteriorate.

Separately, we are subject to the current trends affecting global shipping. Shipping costs have grown significantly since 2020, due to a number of factors, including imbalances in global trade and countries locking down and reopening at different times due to varying patterns of local COVID-19 outbreaks. In addition, while global demand for shipping has increased robustly over the past year following the easement of lockdown measures due to COVID-19 and the gradual reopening of numerous economies, shipping continued to suffer delays due to port congestion, port closures (including the protracted closures affecting the Ningbo-Zhoushan port in China in August 2021), vessel delays and extraordinary accidents such as the March 2021 Suez Canal closure. In addition, disruptions to or increases in the cost of local, regional domestic or international transportation services for our products due to shortages of vessels, barges, railcars or trucks, weather-related problems, flooding, droughts, accidents, mechanical difficulties, bankruptcy, strikes, lockouts, bottlenecks or other events could increase our costs, temporarily impair our ability to deliver products to our customers on time or at all and might, in certain circumstances, constitute a force majeure event under our customer contracts, permitting our customers to suspend taking delivery of and paying for our products or resulting in a charge to us for our customers' lost profits as a result of our failure to timely deliver our products.

We have experienced an increase in raw material, energy and shipping costs and have experienced delays of deliveries of parts and components from our global suppliers, and of products to our customers, due to which we have recently increased, and plan to further increase, prices for a broad range of products and customers. While these delays and cost increases are not currently at a level that they have caused a material disruption or negative impact to our profitability, these delays and costs may increase to a point that they may negatively impact our financial results and ability to grow our business.

Any events leading to price increases and scarcity of raw materials, packaging materials, utilities or freight required to deliver raw materials to our facilities could disrupt our operations, or negatively impact demand for our products if we pass such price increases onto customers and subsequently have a material adverse effect on our business, financial condition, results of operations and prospects, either temporarily or permanently.

Fluctuations in energy costs could have an adverse effect on our results of operations.

Energy costs are a significant component of our operating expenses and increasing energy costs, unless offset by more efficient usage or other operational responses, may impact our profitability. Energy purchases in 2020 constituted approximately 5% to 6% of our cost of sales. Energy prices have been volatile in the past and may increase in the future, also given current geopolitical conditions. In addition, energy prices (including the prices for crude oil and natural gas), are subject to a variety of factors beyond our control, such as the domestic and foreign supply dynamics, consumer demand, local regulation and tax regimes and market expectations regarding supply and demand. For example, we recorded a recent dramatic increase in natural gas prices in September of 2021, as global supplies were depleted by a series of extreme weather events (including, most recently, heatwaves in Europe and the US, and Hurricane Ida which forced a production halt in many gas production facilities located in the Gulf of Mexico). In addition, our shipping costs have also increased due to fuel and freight prices affected by the above-mentioned trends. We may not be able to recover these rising costs through increased prices charged to our customers.

In addition, if we are unsuccessful in attempts to protect against these increases in energy costs through long-term energy contracts, improved energy procurement, improved efficiency and other operational improvements, the overall costs of operating our stores will increase, which could impact our profitability, financial condition and results of operations.

Fluctuations in the price of energy limit our ability to accurately forecast future energy costs and consequently our profitability. Our management expects electricity costs in Germany, where we maintain the majority of our production volumes and energy consumption to increase over the coming years. Rising energy costs may increase our production costs and negatively impact our customers and the demand for their products. These risks will be heightened if our customers or production facilities are in locations experiencing severe energy shortages. If energy prices fluctuate significantly, or we experience severe energy shortages, our business or results of operations may be adversely affected.

Our operations may be disrupted by accidents, equipment malfunctioning or other unexpected events and the complexity of our manufacturing process may lead to production curtailment or shutdowns.

We operate 19 production facilities globally, seven of which are located in Germany, while the remaining sites are located in Brazil, China, Czech Republic, India, Malaysia, Mexico, Switzerland, Poland, the United Kingdom and the United States. If one or more of our production facilities were to suffer a serious accident, breakdown, equipment malfunction or other unexpected events, a part of our production capacity could be jeopardized and our sales would be materially adversely affected until we repaired or found a replacement for any such facility and/or machinery. Further, our production was reduced or halted in 2020 and 2021 as a result of the COVID-19 pandemic, which had a significant impact on our business and results during that period.

While we maintain insurance to cover property damages and other material damages, depending on the risk and type of asset or property insured, any losses related to a serious accident, equipment malfunction or other unexpected event could exceed the amount of this coverage. Further, any interruption in our production capabilities, generally, will inevitably increase our production costs and reduce our sales and earnings for the affected period. Moreover, any interruption in production capability may require us to make significant capital expenditures to remedy the problem, which could have a negative effect on our profitability and cash flows. We may sustain a loss in revenue in excess of any recoveries we make under our business interruption insurance coverage. Longer-term business disruption could result in a loss of customers, which could have a material adverse effect on our results of operations, financial condition or cash flows. In addition, the refurbishment or reconstruction of any of our production facilities or the construction of new facilities could be subject to regulatory approval in the jurisdictions in which they are located, which could result in significant delays in the resumption of product manufacturing.

If any of the above risks were to materialize, it could have a material adverse effect on our business, financial condition and results of operations.

The insurance we maintain may not fully cover all potential exposures and insurance premiums may increase.

While we maintain insurance coverage in relation to a number of risks associated with our business activities, including, among others, product liability, property, business interruption, cyber and casualty insurance, such insurance may not cover all risks associated with the operation of our business and may not be sufficient to offset the costs of any losses, lost sales or increased costs experienced during business interruptions. Further, agreed limits and other restrictions (for example, exclusions) within the insurance coverage may prove to be too low or inadequate for compensating potential damages or losses, ultimately resulting in a gap in the insurance coverage. There can moreover be no assurance that our insurance providers will continue to grant coverage on commercially acceptable terms or at all. For some risks, we may not obtain insurance if we believe the cost of available insurance is excessive related to the risks presented. As a result of market conditions, premiums and deductibles for certain insurance policies can increase substantially and, in some instances, certain insurance policies may become unavailable or available only for reduced amounts of coverage. As a result, we may not be able to renew our insurance policies or procure other desirable insurance on commercially reasonable terms, if at all. In addition, there are risks left intentionally uninsured (such as, but not limited to, customer or supplier insolvency, industrial disputes or specific natural hazards), and we therefore have no insurance against these events. If we sustain damages, losses or liabilities for which there is no or insufficient insurance coverage, if we encounter a delay in the payment of insurance proceeds, or if we have to pay higher insurance premiums or encounter restrictions on insurance coverage, this may have a material adverse effect on our business, financial condition and results of operations.

Unless we maintain operational efficiency and manufacturing quality, our future profitability could be adversely affected.

HPC products involve highly complex processes and require precise, high-quality manufacturing and significant know-how. A significant portion of our products is subject to intense end use conditions and high performance requirements, such as high temperatures, wear and corrosion. Achieving precision and quality control requires skill and diligence by our personnel. We continuously modify operational processes in an effort to improve efficiency, performance and production yields. Defects or other difficulties in the manufacturing process can lower yields. Our operational efficiency will be an important factor in our future profitability, and we may be unable to maintain or increase our efficiency level to the same extent as our competitors or cost-effectively manufacture in accordance with necessary quality standards, which would materially adversely affect our results of operations, financial condition and cash flows.

Compliance with existing laws and regulations, including extensive environmental, health and safety laws, or changes in any such laws, could require material expenditures or changes in our operations.

We operate in a range of international markets and are subject to a variety of laws and regulations and we routinely incur costs in complying with these laws and regulations. For example, our operations are subject to extensive environmental, health and safety laws and regulations at national, international and local levels in numerous jurisdictions. New laws or regulations or changes in existing laws and regulations, particularly those health and safety or environmental protection, may conceivably require extensive system and operating changes that may be difficult to implement and could increase our cost of doing business. In addition, our production facilities require operating permits that are subject to renewal. The nature of our industry exposes us to risks of liability under these laws and regulations due to the production, storage, transportation, disposal and sale of materials that can cause contamination or personal injury if released into the environment. In 2020, our capital expenditures for safety, health and environmental matters were €1.2 million.

Compliance with environmental laws such as air emission or water protection laws generally increases the costs of manufacturing, the cost of registration/approval requirements, the costs of transportation and storage of raw materials and finished products, as well as the costs of the storage and disposal of wastes, and could have a material adverse effect on our results of operations. We may incur substantial costs, including fines, damages, criminal or civil sanctions and remediation costs, or experience interruptions in our operations, for violations arising under these laws or permit requirements as well as in connection with subsequent orders, the withdrawal or revocation of permits and the renewal of permits. Furthermore, environmental laws are subject to change and have tended to become stricter over time. This is particularly the case with regard to changes in connection with the Industry Emissions Directive (Directive 2010/75/EU) and subsequent national legislation by EU member states transforming this directive which imposes additional and stricter obligations such as further specified basic obligations, notification obligations of the installation operator and stricter emission thresholds. Such changes in environmental laws or their interpretation, or the enactment of new environmental laws, could result in materially increased capital expenditures and compliance costs.

Potential changes in laws and regulations, more stringent enforcement or alternative interpretation of existing laws and regulations in jurisdictions in which we currently operate can change the legal and regulatory environment, making compliance with all applicable laws and regulations more challenging. Various governments and intergovernmental organizations could introduce proposals for tax legislation, or adopt tax law, that may have an adverse effect on our worldwide effective tax rate, or increase our tax liability, the carrying value of deferred tax assets, or our deferred tax liabilities. Changes in laws and regulations in the future could have an adverse economic impact on us by tightening restrictions, reducing our freedom to do business, increasing our costs of doing business, or reducing our profitability. In addition, the compliance costs associated with such evolving laws and regulations may be significant. We have experienced certain limited instances of non-compliance in the past, which were addressed or are in the process of being addressed. Failure to comply with applicable laws or regulations can lead to civil, administrative or criminal penalties, including but not limited to fines or the revocation of permits and licenses that may be necessary for our business activities. We could also be required to pay damages or civil judgments in respect of third-party claims.

In addition, the discovery of contamination arising from historical industrial operations at some of our former and present properties has exposed us, and in the future may continue to expose us, to cleanup obligations and other damages. For example, soil and groundwater contamination is known to exist or to potentially exist or to have existed at seven of our current facilities (for example, concentrations of trichloroethylene and hydrocarbon were identified at our Ruabon site in the UK), however, we have not identified regulatory drivers for further soil and groundwater investigation or remediation as some of these sites have already met the relevant remediation targets, or impacts with material costs implication. We have received indemnities from previous owners of our sites related to remediation works undertaken by them, but there can be no assurance that such indemnities will fully cover any liabilities associated with those sites. In addition, we maintain liability for the ongoing water treatment and associated measures at our former manufacturing facility located in Wallkill, NY, which was disposed in 2000. Based on the most recent monitoring conducted in October 2016, this former site recorded high levels of residual VOC concentrations. We allocate approximately $25 thousand to $30 thousand on a yearly basis, to cover any remaining soil and groundwater contamination related expenses at this former site. In addition, as of December 31, 2020, we have provisions set up for environmental risks and claims in the amount of €0.3 million. There can be no assurance that these provisions will be sufficient to fund our portion of any clean-up costs.

Regulatory changes in the key markets in which we will operate can also have an impact on our business. For example, new regulations may require the mandatory usage of lead-free piezo ceramics in the near future, or introduce other requirements affecting the materials which we utilize in our daily operations for the manufacturing of our products. Our success will depend on our ability to develop new technologies and to adapt to technological changes and the evolution of regulatory requirements, which may require major research and development activities, entailing associated research and development costs. We might not have, or might not be able to attract, the personnel necessary for such research and development activities. Any failure to keep up with innovation could have a material adverse effect on our business, financial condition, results of operations and prospects.

Any of these developments, alone or in combination, could have a material adverse effect on our business, financial condition and results of operations.

We could be required to repay public subsidies or grants if specified conditions are not met.

We have in the past and may in the future from time to time receive subsidies or grants from public bodies, which are usually subject to our compliance with the conditions set by the relevant body providing such grant or subsidy. For example, in 2020 we received a governmental grant of €1.1 million in short-time work funds, mainly comprised of social security contributions. In addition, we have received subsidies in the past from public bodies in Germany in relation to the development of certain R&D cooperation projects (*Verbundprojekt*). Governmental subsidies may be subject to certain conditions, such as the creation and maintenance of a certain number of permanent jobs until the end of a certain given period. If we fail to meet conditions for any future public subsidy or grant, which we may receive from time to time, and are forced to repay amounts received under such subsidy or grant, this could have a material adverse effect on our financial condition, cash flows and results of operations.

We may have only limited protection for our intellectual property and know-how and if it were copied by competitors, or if they were to develop similar intellectual property independently, our results of operations could be negatively affected.

We own a large portfolio of international intellectual property rights and business is dependent on our ability to protect and promote our patents and other intellectual property rights. Our success depends significantly upon our ability to protect and preserve our intellectual property rights and technological know-how and expertise, including, in particular, our medical products. Though we have a large number of patents, we do not possess patent protection for all of our key products such as, for example, our BIOLOX® ceramic hip implant products, and instead, for such products, we rely heavily on our manufacturing know-how, which is not a legally registered right, to protect our market position. We conduct research and development activities with third parties and co-develop certain intellectual property. The confidentiality and patent assignment agreements with our employees and third parties to protect the confidentiality, ownership and use of intellectual property may be breached, may not be enforceable, or may provide for joint ownership or ownership by a third party. In addition, we may not have adequate remedies for a breach by the other party, which could adversely affect our intellectual property rights.

The use of our intellectual property rights or intellectual property similar to ours by others or our failure to protect such rights could reduce or eliminate any competitive advantage we have developed, adversely affecting our revenue. The steps we take to protect our intellectual property, including patents, proprietary technology and trademarks, may not be successful and may be challenged by third parties. For example, since 2013 we have been involved in a series of legal proceedings against C5 in Germany, the United States and France in relation to our trademarks for the distinctive pink color of our ceramic hip implant component BIOLOX® delta, in respect of which we incurred significant expenses and which remain ongoing. See "*Business—Legal Proceedings*." In addition, Dentalpoint AG, and one of our German subsidiaries are involved in separate intellectual property litigation proceedings. If we must sue to protect, defend or enforce our intellectual property rights, any suits or proceedings could result in significant costs and diversion of company resources and management attention, and we may not prevail in such action. In addition, a failure to obtain and defend our trademark registrations may impede our marketing and branding efforts and competitive position. We cannot be sure that the actions we have taken to establish and protect our patents and other proprietary rights will be adequate to protect our rights, or that any of our intellectual property will not be challenged or held invalid or unenforceable, and we may not be able to prevent imitation of our products by others or to prevent others from seeking to block sales of our products as a violation of the trademarks and proprietary rights of others. We may not always be able to secure protection for, or stop infringements of, our intellectual property, and may need to resort to litigation to enforce our intellectual property rights. Any litigation or dispute involving the scope or enforceability of our intellectual property rights, however, as well as any allegation that we infringed upon the intellectual property rights of others, could be costly and time-consuming.

In addition, if we are unable to protect our technology and intellectual property, or if key products are not subject to sufficient or any intellectual property protection, our competitors may, even temporarily, misappropriate our technologies and intellectual property rights and develop competing products, which could also have a material adverse effect on the our business, financial position, results of operations and prospects.

Any of the above factors, and our inability to protect our intellectual property rights or other uses of our property (including for any of our key products that do not have patent protection) could have a material adverse effect on our competitive advantage or our ability to create innovative solutions for our customers, which will adversely affect our revenue and our relationships with our customers. As a result, our business, financial condition and results of operations may be materially adversely affected.

If we are sued for infringing intellectual property rights of third parties, it will be costly and time consuming, and an unfavorable outcome in any litigation would harm our business.

We cannot assure you that our activities will not, unintentionally or otherwise, infringe on the patents or other intellectual property rights owned by others. While intellectual property litigation is not prevalent in most of our end-markets presently due to the niche nature of the applications and products, as competition increases, such as in the Medical markets, the niche markets in which we operate may become IP-protected markets. We may spend significant time and effort and incur significant litigation costs if we are required to defend ourselves against intellectual property rights claims brought against us, regardless of whether the claims have merit. We may also be required to cease development, use or sale of the relevant products or processes, or we may be required to obtain a license on the disputed rights, which may not be available on commercially reasonable terms, if at all. If we are found to have infringed on the patents or other intellectual property rights of others, we may be subject to substantial claims for damages, which could have a material adverse effect on our business, financial position, results of operations and prospects.

Failure to renew agreements with our material suppliers on acceptable terms or the termination of such agreements by material suppliers could harm our business.

Failure to renew contracts with certain material suppliers could negatively impact our business. Whenever a contract expires or is due for renewal, suppliers may seek price adjustment from us. In addition, under the terms of certain contracts, suppliers may seek a price adjustment when their business experiences significant volume changes. Further, certain suppliers may seek to increase prices previously agreed with us due to pricing competition or other economic needs or pressures being experienced by the supplier. If our contracts are terminated by a material supplier, or if we are unsuccessful in retaining high renewal rates and contract terms that are favorable to us, this can cause delays and may have a material adverse effect on our business, financial condition and results of operations.

We are subject to the risk of litigation and other claims.

In the ordinary course of our business we are, or may from time to time become, involved in various litigation matters and governmental or regulatory investigations, prosecutions or similar matters arising out of our current or future business, including personal injury, wrongful death claims, property damages and product liability claims, warranty obligations claims, alleged violations of environmental, health and safety laws, criminal proceedings (such as those relating to injuries suffered by our employees, which could result in criminal liabilities of our legal representatives and administrative penalties against us), labor law related claims by employees, temporary workers, or other external workers, claims by distributors, advisors and others. In addition, third-party litigation, including litigation related to competition law, anti-trust law, tax law and patent law could have an indirect, materially adverse impact on us and the market environment in which we operate.

When we determine that a significant risk of a future claim against us exists, we record provisions in an amount equal to our estimated liability. As of December 31, 2020, we set aside total provisions for legal disputes in an amount of €0.5 million and total provisions for tax-related disputes under other liabilities in an amount of €3.2 million. Further, as of December 31, 2020, we have set aside provisions in an amount of €3.4 million to cover for claims related to breach of warranties and product liability. See “*Business—Legal Proceedings*.” However, the amount of total provisions for tax and legal disputes in our financial statements for future periods could increase. Our insurance or indemnities or amounts we have provisioned may not cover all claims that may be asserted against us, and any claims asserted against us, regardless of merit or eventual outcome, may harm our reputation. There can be no assurance that we will be successful in defending ourselves in pending or future litigation claims or similar matters under various laws or that product specific provisions will be sufficient to cover litigation costs. Moreover, it may be difficult for us to obtain and enforce claims related to existing litigation under the laws of certain countries in which we operate at affordable costs and without any materially adverse effects on our business in such country. In the aftermath of public health measures implemented in the jurisdictions in which we operate as well as our temporary personnel initiatives due to the impact of COVID-19, we could be subject to an increase in litigation, in particular in relation to our suppliers and our employees, including with respect to health and safety measures.

Any of the above-mentioned risks could result in considerable costs, including damages, legal fees and temporary or permanent bans on the marketing of certain products and this could have a material adverse effect on our business, financial condition and results of operations.

We may be unable to recruit and retain key personnel, including qualified scientific, technical and sales employees.

Our operating results depend in significant part upon the continued contribution of our key senior management and of highly qualified technical, scientific, financial, sales and operations personnel. The loss of any senior manager or key employee may significantly delay or prevent the achievement of our product development or business objectives. Further, our directors, officers, senior managers and other key employees may retire as they near retirement age, which could also impact our hiring and recruitment needs. Due to the specialized nature of our business, we are highly dependent upon our ability to continue to attract and retain qualified scientific, technical and sales personnel. The market for qualified personnel is competitive and we may not succeed in recruiting additional personnel, or may fail to replace departing personnel with suitable successors. There may be a limited number of persons with the requisite skills to serve in the relevant position we seek to fill and there can be no certainty that we will be able to identify or employ qualified internal or external candidates within a reasonable timeframe. Loss of the services of, or failure to recruit, key management, scientific, technical or sales personnel could be materially detrimental to our business and financial condition. In addition, loss of employees engaged in our research and development activities may lead to a loss of know-how and research progress, with a consequent increase of costs. We face competition for scientific and technical personnel from other companies, academic institutions, government entities and other organization. Such competition is enhanced by changing population demographics, influencing the recruitment of skilled and executive personnel, and the reduction of specialized personnel in certain key functional areas, such as in the case of engineers in Germany. Our efforts to retain and develop personnel may also result in additional expenses (such as higher wages), which could adversely affect our profitability. We therefore cannot guarantee that key personnel, including executive officers, will remain in their employment or that we will be able to attract qualified personnel in the future.

The loss of any key personnel and/or the inability to attract, recruit and retain highly skilled employees required for our activities could have a material adverse effect on our business, financial condition and results of operations.

Defects resulting from outsourcing processes can adversely affect our production yields and operating results.

We ordinarily outsource certain production steps, often to sole source suppliers or a limited number of suppliers. Several suppliers have manufacturing processes which are very complex and require a long lead-time. Occasional delays may affect our ability to obtain products. Our production of these products will also be materially and adversely affected if the outsourced production is unreliable, late or of inferior quality. In addition, any reduction in the precision of these products will cause delays and interruptions in our production cycle.

Within our production facilities, minute impurities, difficulties in the production process or other factors can cause a substantial percentage of our products to be rejected or be non-functional. This can result in unexpectedly low production yields and increased scrap rates, which delay product shipments and may materially adversely affect our results of operations, financial condition and cash flows. Because the majority of our manufacturing costs are relatively fixed, production yield and capacity utilization rate are critical to our consolidated results of operations, financial condition and cash flows. For example, we have only two plants that produce components for the Medical markets and capacity utilization or production yield problems at either plant may significantly impact our results of operation.

We are dependent on good relationships with our employees and employee representative bodies and stakeholders.

We are dependent on good relationships with our employees, employee representative bodies other stakeholders to successfully operate our business. Personnel expenses make up a significant portion of our costs and we are obliged to comply with various works council and other agreements that are in place with works councils and other employee representative bodies. In addition, we are a member of the employers' Association of the Ceramic Industry e.V. (*Verband der keramischen Industrie e.V.*) and are therefore bound by the collective bargaining agreements (*Tarifverträge*) entered into the employers' association and the mining, chemical and energy industrial union (*Industriegewerkschaft Bergbau, Chemie, Energie*).

As of September 30, 2021, we had approximately 3,400 FTE employees worldwide, consisting of sales, technical, manufacturing, operations, supply chain and customer service personnel, excluding approximately 350 contract labor (*Leiharbeiter*) workers. All of our employees in Germany and a substantial number of our employees globally are covered by labor agreements, including works agreements. Employees at our German locations have traditionally been heavily unionized and we regularly conduct, or are involved in, negotiations with the relevant employee representative bodies. For example, we recently renegotiated employee tariffs applicable at certain of our German production facilities. Any deterioration of these relationships could adversely impact our business operations. In the future, we may be subject to potential union campaigns, work stoppages, union negotiations and other potential labor disputes.

While we believe that we have good relations with unions and employees generally, there can be no assurance that our relations will not deteriorate and that we will not experience labor disputes in the future. Any such strikes, conflicts, work stoppages or other industrial actions may, which could in turn have a material adverse effect on our business, financial condition, results of operations and prospects. Additionally, future negotiations with unions or works councils in connection with existing labor agreements may result in significant increases in our cost of labor, divert management's attention away from operating our business, disrupt our production and sales activities, damage our reputation, adversely affect our customer relations or break down and disrupt operations. Further, we may be subject to work stoppages at our suppliers or customers that are beyond our control. There can also be no assurance that our employees will not make claims or that we will not incur work stoppages in the future. In addition, works council and collective agreements may impose obligations and restrictions on us that may adversely affect our flexibility to undertake adjustments to our workforce, restructurings, reorganizations and similar corporate actions. Any of the preceding outcomes could have a material adverse effect on our business, financial condition and results of operations.

Our failure to comply with the anti-corruption laws of the European Union, the United States and various other jurisdictions could negatively impact our reputation and results of operations.

We operate and sell products in, and source materials from, a number of countries throughout the world, including countries known to have a reputation for corruption. Doing business on a worldwide basis requires us to comply with international, EU, U.S., UK and other national and local laws, and our failure to successfully comply with these rules and regulations may expose us to liabilities. These laws and regulations apply to companies, individual directors, officers, employees and agents, and may restrict our operations, trade practices, investment decisions and partnering activities. In particular, our international operations are subject to U.S. and foreign anti-corruption laws and regulations, such as the U.S. Foreign Corrupt Practices Act ("FCPA"), the U.K. Bribery Act of 2010, as well as anti-corruption laws of the various jurisdictions in which we operate. The FCPA and other laws prohibit us and our officers, directors, employees and agents acting on our behalf from offering, promising, authorizing or providing anything of value to foreign officials for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. As part of our business, we deal with state-owned business enterprises and, to a lesser degree, with governmental authorities, the employees and representatives of which may be considered foreign officials for purposes of the FCPA. We are also subject to the jurisdiction of various governments and regulatory agencies outside of the United States, which may bring our personnel into contact with foreign officials responsible for issuing or renewing permits, licenses or approvals or for enforcing other governmental regulations. In addition, some of the international locations in which we operate lack a developed legal system and have elevated levels of corruption (for example, Brazil or China). Our employees may be tempted to win business with illegal practices, in particular corruption, certain sales incentives or violation of antitrust laws. In some of the countries in which we operate, such practices may be the custom or expected, and our competitors may undertake such practices, increasing the pressure on us and our employees. Our global operations expose us to the risk of violating, or being accused of violating, the foregoing or other anti-corruption laws. Such violations could be punishable by criminal fines, imprisonment, civil penalties, disgorgement of profits, injunctions and debarment from government contracts, as well as other remedial measures. Investigations of alleged violations can be very expensive and disruptive.

In addition, some jurisdictions in which we operate also have anti-corruption laws in place that specifically address interactions with healthcare professionals.

For example, in the U.S., the federal healthcare anti-kickback statute prohibits persons from knowingly and willfully soliciting, offering, receiving, or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order, or recommendation of, any good or service for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid. Violations are subject to potential criminal penalties and exclusion from participation in the programs. Claims for payment in violation of the anti-kickback statute are also subject to the federal False Claims Act, which imposes civil penalties against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent. Many states have analogous state laws applicable to their Medicaid programs and in some cases, private health insurance.

Similarly, German criminal law (Sec. 299a and 299b of the German Criminal Code, StGB) specifically addresses corruption in the health care sector. Essentially, the acceptance or grant of a benefit (which does not necessarily have to be a direct payment of money) in exchange for a healthcare professional giving undue preference to the products of a specific producer is criminally sanctioned. Our interactions with healthcare professionals are subject to these restrictions. Any failure to comply with applicable restrictions on interactions with healthcare professionals could subject us to fines and criminal liability and could have a material adverse effect on our results of operations, financial condition and cash flows.

We maintain and regularly update a group-wide compliance management system, which provides a structure to identify and mitigate potential compliance risks, including certain policies and procedures. Certain of our employees have taken and may in the future, take actions in violation of our policies and procedures (or otherwise in violation of the relevant anti-corruption laws, anti-money laundering laws and sanctions regulations). There can be no assurance that our policies and procedures will be sufficient in preventing such instances or that we will not ultimately be held responsible for violations of applicable anti-corruption and sanctions regulations by our employees, directors, managers, officers, partners, agents and service providers. Violations of anti-corruption laws and sanctions regulations could lead to financial penalties being imposed on us, limits being placed on our activities, authorizations or licenses being revoked, damage to our reputation and other consequences that could have a material adverse effect on our business, financial condition, results of operations and prospects. Furthermore, detecting, investigating, and resolving actual or alleged violations is expensive and can consume significant time and attention of our senior management. In addition, litigation or investigations relating to alleged or suspected violations of anti-corruption laws or sanctions regulations could be costly. We cannot guarantee that our compliance and internal controls will protect us against actions taken by our officers, managers, directors, employees and agents that might be determined to be in violation of law.

Our risk management policies and procedures may not be fully effective in mitigating our risk exposure.

Our risk management policies and procedures may not be fully effective in identifying, controlling and managing the risks to which they are exposed. Some of our risk assessment methods depend on information provided by third parties and public information related to markets, customers or other elements that are not otherwise available. In some cases, this information may not be accurate, complete or up to date. If our policies and procedures are not fully effective, or if they are unable to detect all the risks which we are or could be exposed to, we could suffer damage to our reputation or be involved in litigation or be exposed to regulatory measures and/or fines and penalties that could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our international operations require us to comply with anti-terrorism laws and regulations and applicable trade embargoes and export controls.

We are required to comply with trade and economic sanctions laws and other restrictions on exports and international trade. The United States and other governments and their agencies impose sanctions and embargoes on certain countries, their governments, and designated parties. For example, in the United States the economic and trade sanctions programs are principally administered and enforced by the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC"). Currently, OFAC maintains comprehensive trade and economic sanctions against certain countries and territories such as the Crimea region of the Ukraine, Cuba, North Korea, Iran and Syria, among others. Furthermore, there are U.S. and EU targeted sanctions against Russia. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses, which could adversely affect our business, financial condition and results of operations. We cannot assure you that our compliance policies will effectively prevent violations, particularly as the scope of certain laws may be unclear and may be subject to changing interpretations.

We also manufacture certain products for the defense industry which are subject to regulation by the U.S. Department of State under its International Traffic in Arms regulations ("ITAR") as well as European and other equivalent arms control regulations. In addition, we also manufacture certain commercial or dual-use products that are subject to export restrictions under the Export Administration Regulations ("EAR") administered by the U.S. Commerce Department. Sanctions, trade restrictions and export controls particularly focus on such defense and dual use related products, which are subject to the ITAR and other arms control regulations. If our defense and dual use related products were found to be directly or indirectly exported to countries which are subject to trade restrictions and sanctions, or exported to any destination without required ITAR or other export licenses, we may be subject to civil or criminal penalties and other costs and measures and could lose key customer relationships in the defense industry.

In addition, materials and products imported into the European Union, the United States and other countries are subject to import duties. While we have implemented internal measures to comply with applicable customs regulations and to properly calculate the import duties applicable to imported products, customs authorities may disagree with our claimed tariff treatment for certain products, resulting in unexpected costs that may not have been factored into the sales price of such products and our expected margins. In addition, we cannot predict whether future domestic and foreign laws, regulations, or specific or broad trade remedy actions, or international agreements may impose additional duties or other restrictions on the importation of products from one or more of our sourcing venues. Any such changes in legislation and government policy may have a material adverse effect on our business, including the imposition of tariffs on certain materials which could increase our product costs. For example, in recent periods, the US government has announced various import tariffs on goods imported from certain trade partners, such as the European Union and China, which have resulted and may continue to result in reciprocal tariffs on goods exported from the United States to such trade partners. Trade barriers and other governmental action related to tariffs or international trade agreements around the world have the potential to decrease demand for our products, negatively impact suppliers and adversely impact the economies in which we operate. Trade barriers and other governmental action related to tariffs or international trade agreements could increase the cost of materials and components used in certain of our products, which could in turn increase our cost of goods sold.

We cannot predict the nature, scope or effect of future regulatory requirements to which our international sales and manufacturing operations might be subject or the manner in which existing laws might be administered or interpreted. Future regulations could limit the countries in which some of our products may be manufactured or sold, or could restrict our access to, or increase the cost of obtaining, products from foreign sources. The occurrence of any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

Uncertainty surrounding the United Kingdom's withdrawal from the European Union could have a material adverse effect on our business.

On June 23, 2016, the United Kingdom held a referendum in which voters approved an exit from the European Union (commonly referred to as "Brexit"). On January 31, 2020, the United Kingdom withdrew its membership in the European Union and on December 24, 2020, the European Union and United Kingdom announced that they had reached the EU—UK Trade and Cooperation Agreement, which was implemented on December 31, 2020 and entered into force provisionally on January 1, 2021 until its entry into force on May 1, 2021. Despite the implementation of the EU—UK Trade and Cooperation Agreement, there remains significant uncertainty as to how the agreement will affect relations between the United Kingdom and the European Union. For example, the Northern Ireland Protocol covering the special status of Northern Ireland remains controversial, and developments surrounding its application may affect businesses that conduct operations in both the United Kingdom and Ireland. While the EU and the United Kingdom agreed a comprehensive, zero-tariff, zero-quota free trade pursuant to the EU—UK Trade and Cooperation Agreement, the end of the transition period on that date has, among other things, led to increased customs, health and safety checks at the border, which has delayed and disrupted the movement of goods between the EU and the United Kingdom and may undermine bilateral cooperation in key policy areas, significantly disrupt trade between the United Kingdom and the EU and cause political and economic instability in other countries of the EU. Additionally, following the end of the transition period, the United Kingdom has ceased to be a member of the EU single market, which has ended the free movement of services and workers between the United Kingdom and the EU and may make it more difficult for our United Kingdom operations to do business with customers or suppliers that are based in the EU.

For the year ended December 31, 2020, approximately 3% of our revenue was generated with customers based in the United Kingdom, while our UK subsidiary employed 274 FTE personnel. The impact of the EU—UK Trade and Cooperation Agreement and the resulting effects on the political and economic future of the United Kingdom, remain uncertain. Economic instability and uncertainty in Europe, has and may continue to have a material adverse effect on our business, financial condition and results of operations.

We could be adversely affected by changes to the composition of the Eurozone.

If one or more countries in the Eurozone default on their debt obligations and/or cease using the euro, there may be significant, extended and generalized dislocation in the financial markets and in the wider European economy, which may negatively affect our business, results of operations and financial condition. The departure of one or more countries from the Eurozone may lead to the imposition of exchange rate control laws. The departure or risk of departure from the euro by one or more Eurozone countries could increase our exposure to changes in exchange rates and have negative effects on our existing relationships with our suppliers or customers, resulting in a negative impact on our business, financial condition and results of operations. In addition, the possible dissolution of the euro entirely, or the threat of such dissolution, could lead to increased market volatility, which in turn could have an adverse effect on our business. Should the euro dissolve entirely, the legal and contractual consequences for holders of euro-denominated obligations and for parties subject to other contractual provisions referencing the euro would be determined by laws in effect at such time. These potential developments could adversely affect our operations.

Market perceptions concerning the instability of the euro and the potential re-introduction of individual currencies within the Eurozone could also have adverse consequences for us. Financial markets and the supply of credit may be negatively impacted by fears surrounding the sovereign debts and/or fiscal deficits of several countries in Europe, the possibility of further downgrading of or defaults on sovereign debt, concerns about a slowdown in growth in certain economies and uncertainties regarding the overall stability and sustainability of the euro given the economic and political circumstances in individual member states.

A deterioration in general economic conditions caused by instability in the Eurozone could have a material adverse effect on our business, financial condition, results of operations and prospects.

Security threats, security breaches or breakdowns in our information technology systems could result in a significant disruption of our business.

Like many other internationally operating organizations, our operations, including research, development, manufacturing, accounting, storage and delivery, are highly dependent on our information technology systems. Such systems are vulnerable to a number of threats, such as equipment damage, deficient database design, power outages, software or hardware malfunctions, malicious hacking, physical damage to vital data centers computer virus infection and a range of other hardware, software and network problems. We have experienced temporary outages in our IT systems in the past. Although it is impossible to predict the occurrence or consequences of security threats or security breaches, they could result in reduced demand for our products, data breaches, information loss, make it difficult or impossible for us to deliver products to our customers or distributors or to receive raw materials from suppliers, and create delays and inefficiencies in our supply chain. While we have countermeasures in place to prevent malfunctions and interruptions, any such malfunctions or interruptions could compromise the operational integrity of these systems and networks should our countermeasures fail in the future. There can be no assurance that the internal controls, which we have designed to restrict access to our information technology systems will prevent unauthorized access through cyber-attacks, theft and other security breaches.

We also rely on systems and websites that allow for the secure storage and transmission of proprietary or confidential information regarding our customers, suppliers, employees and others. Our systems, websites, data (wherever stored), software or networks, and those of third parties (including data centers), are vulnerable to security breaches, including unauthorized access (from within our organization or by third parties), computer viruses or other malicious code and other cyber threats that could have a security impact. We may not be able to anticipate evolving techniques used to effect security breaches (which change frequently and may not be known until launched), or prevent attacks by hackers, including phishing or other cyber-attacks, or prevent breaches due to employee error or malfeasance, in a timely manner, or at all. Cyber-attacks have become far more prevalent in the past few years, leading potentially to the theft or manipulation of confidential and proprietary information or loss of access to, or destruction of, data on our or third-party systems, as well as interruptions or malfunctions in our or third parties' operations.

In addition, our IT systems have been in the past, or in the future may be, the target of cyber-attacks or other security breaches. We implement mitigation measures from time to time, as we identify new threats and risks. We cannot assure you that such measures will be effective or that breaches or other cyber-attacks, including industrial espionage or ransomware attacks will not occur in the future. Failure to effectively prevent, detect and remediate security breaches, including attacks on our IT infrastructure by hackers, viruses, employee error or misconduct, or other disruptions could seriously harm our operations and the operations of our customers. Such breaches may result, among other things, in unauthorized access to trade secrets, confidential business information and personal information, data losses, business interruptions, non-compliance with legal requirements, legal claims or proceedings, deterioration in customer relationships and reputational harm. In addition, due to the constantly evolving nature of security threats, we cannot predict the form and impact of any future incident, and the cost and operational expense of implementing, maintaining and enhancing protective measures to guard against increasingly complex and sophisticated cyber threats could increase significantly. While we regularly review our network security, backup and disaster recovery, enhanced training and other security measures to protect our systems and data, security measures cannot provide absolute security or guarantee that we will be successful in preventing or responding to every breach or disruption on a timely basis.

In addition, our information technology system needs regular upgrading to accommodate expansion of our business and maintain the efficiency of our operations. If we face a breakdown in our system, we could experience significant business and operational delays across our businesses. In particular, any breakdown in our information technology systems could result in disruptions of our research, development, manufacturing, accounting and billing processes as well as data losses. To the extent that any disruption or security breach were to result in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of our products could be delayed. In addition, we could be subject to fines or other penalties by governmental authorities or could suffer reputational damage as a result of such breach, loss or damage.

Any disruptions of our IT systems, including as a result of cyber-attacks and industrial espionage, may disrupt operations, or result in legal liability. The materialization of any of the above risks could have a material adverse effect on our business, financial condition and results of operations.

We may fail to identify all risks and liabilities associated with acquired businesses or we may encounter difficulties integrating acquired businesses with, or disposing of divested businesses from, our current operations; therefore, we may not realize the anticipated benefits of these acquisitions and divestitures.

In the past, we have acquired several businesses. For example, we completed the acquisition of the electro-ceramics business of Morgan Electro Ceramics in 2017 and the acquisition of Dentalpoint AG in 2021. In addition, as part of our growth strategy, we evaluate opportunities for acquiring complementary businesses that may supplement our internal growth. Our due diligence reviews of our acquisition targets may not identify all of the material issues necessary to accurately estimate the cost or potential loss contingencies with respect to a particular transaction, including potential exposure to regulatory sanctions resulting from an acquisition target’s previous activities. We may incur unanticipated costs or expenses, including post-closing asset impairment charges, expenses associated with eliminating duplicate facilities, litigation and other liabilities. We also may encounter difficulties in integrating acquisitions with our operations, applying our internal controls processes to these acquisitions or in managing strategic investments, and integrations of acquired entities could change our relations with employees, customers and suppliers. Additionally, we may not achieve the benefits we anticipate when we first enter into a transaction, including any expected synergies, in the amount or timeframe anticipated.

In the future, we may be unable to identify suitable acquisition targets, which may negatively impact our growth strategy. We also face the risk that our competitors may follow similar acquisition strategies and have greater financial resources available for investment or accept less favorable conditions that those which we are able to accept, preventing us from acquiring such targets, to the benefit of our competitors. Any acquisition or other strategic transaction that we may undertake in the future could result in the assumption of debt and contingent liabilities, as well as an increase in interest expense and amortization expense relating to goodwill or other intangible assets or a decrease in cash and cash equivalents.

Any of the foregoing could adversely affect our business and results of operations. In addition, accounting requirements relating to business combinations, including the requirement to expense certain acquisition costs as incurred, may cause us to experience greater earnings volatility and generally lower earnings during periods in which we acquire new businesses.

Furthermore, we may make strategic divestitures from time to time. These divestitures may result in continued financial involvement in the divested businesses, such as through guarantees or other financial arrangements, following the respective transactions. Under these arrangements, non-performance by those divested businesses could result in financial obligations imposed upon us and could affect our future financial results.

An economic downturn, a recession or market disruption in the capital and credit markets may adversely impact the value of our pension plan assets.

We have pension plan assets, among other things, located in Germany, the United Kingdom and in the United States. Our funding obligations could change significantly based on the investment performance of the pension plan assets and changes in actuarial assumptions for local statutory funding valuations. Any deterioration of the capital markets or returns available in such markets may negatively impact our pension plan assets and increase our funding obligations for one or more of these plans and negatively impact our liquidity. We cannot predict the impact of this or any further market disruption on our pension funding obligations.

If we are required to make unexpected payments to any pension plans applicable to our employees, or to cover plan funding shortfalls, our financial condition may be adversely affected.

Many of our current and former employees participate or participated in defined benefit pension plans. A few of these plans are unfunded and the liabilities in relation to these plans will need to be satisfied as they mature from our operating reserves. In jurisdictions where the defined benefit pension plans are intended to be funded with assets in a trust or other funding vehicle, we expect that the liabilities will exceed the corresponding assets in each of the plans. Various factors, such as changes in actuarial estimates and assumptions (including in relation to life expectancy, discount rates and rate of return on assets) as well as actual return on assets, can increase the expenses and liabilities of the defined benefit pension plans. The assets and liabilities of the plans must be valued from time to time under applicable funding rules and as a result we may be required to increase the cash payments we make in relation to these defined benefit pension plans.

We could also be required in some jurisdictions, as a result of the Transactions or at any time in the future, to make accelerated payments up to the full buy-out deficit in our defined benefit pension plans, which would likely be far higher than the normal ongoing funding cost of the plans. For example, we operate a defined benefit pension scheme in the United Kingdom, for the benefit of certain employees and former employees of the Group in the UK (the "UK Scheme"). According to preliminary results for the most recent actuarial valuation of the UK Scheme, as at April 1, 2020, the UK Scheme has assets of £6.9 million and technical provisions for £10.7 million, with a consequent funding shortfall of approximately £3.8 million (€4.4 million equivalent) on a technical provision basis. According to the current schedule of contributions and recovery plan, we undertook to contribute approximately £34,000 to the UK Scheme on a monthly basis, until March 31, 2027, in order to meet the shortfall and cover related administration expenses and statutory levy payments. Our cash flows may be negatively impacted to the extent that we are required to make any additional payments to any relevant defined benefit pension plans in excess of the amounts assumed in our current projections and assumptions or report higher pension plan expenses under relevant accounting rules.

Moreover, in certain jurisdictions pension regulators and authorities may be granted expensive powers that may be exercised in connection with the completion of M&A transactions, including the Transactions. For example, the UK Pensions Regulator has powers to impose contributions to a UK defined benefit pension scheme, or to put in place arrangements for the financial support of the pension scheme, including, but not limited to, requirements to provide additional security in support of such scheme. The new UK Pension Schemes Act 2021, which came into force in October 2021, may also significantly impact future corporate activity of entities with a UK defined benefit pension scheme. The new legislation provides for new criminal offences targeting "risking accrued scheme benefits" and the "avoidance of employer debt", which may be interpreted as to include ordinary corporate activity in certain circumstances. Moreover, the new legislation introduces wider powers for the UK Pensions Regulator to intervene in corporate activity (including acquisitions and internal restructurings), and new requirements to give advance notification of certain corporate activity and to provide statements to the UK Pensions Regulator, which may require the input of the pension scheme trustee, with regard to the expected impact of such activity on the pension scheme.

Furthermore, we could be subject to further payment obligations, if any of our former pension plans (for Germany and the United States) were not terminated properly in the past. In such case, employees could claim that further pension entitlements accrued under these plans. In addition, there could be unknown liabilities for prior periods under such plans, that we are not aware of and thus do not show in our financial statements. Any such additional obligations could have a material adverse effect on our business, financial condition and results of operations.

We may be exposed to tax risks in connection with our operating activities.

The Group is subject to complex tax laws. Changes in tax laws could adversely affect the Group's tax position, including our effective tax rate or tax payments. The Group often relies on generally available interpretations of applicable tax laws and regulations. There cannot be certainty that the relevant tax authorities are in agreement with the Group's interpretation of these laws. If the Group's tax positions are challenged by relevant tax authorities, the imposition of additional taxes could require the Group to pay taxes that the Group currently does not collect or pay or increase the costs of the Group's services to track and collect such taxes, which could increase the Group's costs of operations or the Group's effective tax rate and have a negative effect on the Group's business, financial condition and results of operations. The occurrence of any of the foregoing tax risks could have a material adverse effect on the Group's business, financial condition and results of operations.

Due to the global nature of our business, we are subject to income and other taxes in multiple jurisdictions. Significant judgement and estimation are required in determining our calculation and provision for income, sales, value-add and other taxes, including withholding taxes. In the ordinary course of our business, we take advantage of our international network and centralize our strategic functions. In particular, we transfer and provide goods and services among the companies of the Group by adopting a tax-transfer frame model for the billing of intercompany services. There is a risk that tax authorities in individual countries assess the relevant transfer prices differently from our tax-transfer pricing model and address retroactive tax claims against one of our companies. Possible non-recognition of transfer prices could have a material adverse effect on our financial condition and results of operations.

Moreover, we are regularly subject to tax audits by German tax authorities and tax authorities of certain other jurisdictions, which may raise claims against us for failure to comply with applicable tax laws. For example, our German subsidiaries have been subject to a general tax audit for the periods up to 2018. Final tax assessment notices were issued in 2021, and resulted in substantial changes to our tax declarations. While we appealed the assessment notices, we have recorded total provisions for tax-related disputes under other liabilities in an amount of €3.2 million as of December 31, 2020 to cover the estimated resulting risk. In addition, the tax authorities of certain foreign jurisdictions in which we operate might consider activities by an entity of the Group, which is not legally domiciled in such jurisdiction, as a "permanent establishment" in such jurisdiction. This determination could result in potential adverse tax consequences, such as additional tax obligations and liabilities, which could materially adversely affect our financial condition and cash flows. Although we believe our tax estimates are reasonable, the final determination of any such tax audits or reviews could differ from our tax provisions and accruals and any additional tax liabilities resulting from such final determination or any interest or any penalties or any regulatory, administrative or other sanctions relating thereto could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, certain members of the Target Group were in the past or are currently part of fiscal unities, tax groups and other tax consolidation schemes. We cannot ensure that these entities will not be held liable for unpaid taxes of the members of such tax consolidation schemes (including members outside of our Group) under statutory law or the contracts which formed or form the basis for the tax consolidation schemes. Furthermore, should such tax consolidation schemes not be accepted by the tax authorities and/or a tax court, taxes, interest and penalties may be imposed against entities of our group. Such liabilities may be substantial and could have a material adverse effect on our business, financial condition and results of operations.

If our suppliers or we encounter problems manufacturing products or cease to manufacture products, our business could suffer.

The manufacture of our products is highly exacting and complex due in part to strict regulatory requirements governing the manufacture of some of our products. We rely on complex machinery and information technology systems to support our manufacturing processes, as well as internal and external communications with respect to supplies, quality control and distribution. Problems may arise during manufacturing for a variety of reasons, including equipment malfunction, failure to follow specific protocols and procedures, problems with raw materials and environmental factors. If problems are severe, we may be forced to temporarily suspend all or part of our production until the problems are rectified. Any of this is likely to result in increased costs, lost sales, damage to customer relations, failure to perform existing contracts, time spent investigating the cause, remedial costs and, depending on the cause, similar losses with respect to other batches or products. In addition, where problems are not discovered before the product is released to the market, we may be forced to recall the product from the market. In certain cases, we may face product liability claims and incur respective costs. If any of these risks were to materialize, it may have a material adverse effect on our business, financial condition and results of operations.

We handle personal data in the ordinary course of our business, and any failure to maintain the confidentiality of that data could result in legal liability for us and reputational harm to our business.

We collect, process, transmit and store personal, sensitive and confidential information, including our proprietary business information and process sensitive personal consumer data (including, in certain instances, consumer names, addresses, and to a very limited extent, patient health data) as part of our business. The protection of customer, employee and company data is critical to us. Customers have a high expectation that we will adequately protect their personal information from cyberattack or other security breaches. A significant breach of customer, employee, or company data could damage our reputation and result in lost sales, fines, or lawsuits. We are also subject to and must comply with complex and evolving European, U.S. and other foreign laws and regulations including the General Data Protection Regulation (Regulation (EU) 2016/679) ("GDPR") regarding privacy, data protection and other related matters. Such laws govern our ability to collect, use and transfer personal data, including relating to consumers and business partners, as well as any such data relating to employees and others. These laws and rules also impose certain standards of protection and safeguarding on our ability to collect and use personal information relating to customers and potential customers, and could make us liable in the event of a loss of control of such data or as a result of unauthorized third-party access. We transmit and receive personal, confidential and proprietary information by electronic means and therefore rely on the secure processing, storage and transmission of such information in line with regulatory requirements. Unauthorized data disclosure could occur through cyber security breaches as a result of human error, external hacking, malware infection, malicious or accidental user activity, internal security breaches, and physical security breaches due to unauthorized personnel gaining physical access. We are exposed to the risk that data could be wrongfully appropriated, lost or disclosed, damaged or processed in breach of privacy or data protection laws which could lead to the imposition of fines or regulatory action, together with associated negative publicity. For example, breaches of the GDPR can result in significant fines based on percentages of our annual global turnover.

Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breaches due to employee error, malfeasance or other disruptions. Any such breach or attack, whether actual or perceived, could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. In the past, we have been required to report a data breach to the relevant competent authority. It cannot be ruled out that we will, in the future, be subject to additional assessments or specific requests. If this were the case and we were not able to adapt promptly to the requests by the authorities and/or fail to comply with the measures required by them, we could be subject to sanctions that may have a material adverse effect on our business, financial condition, results of operations and prospects.

Because the methods used to obtain unauthorized access change frequently and may not be immediately detected, we may be unable to anticipate these methods or promptly implement preventative measures. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, disrupt our operations and the services we provide to customers reduce our ability to attract and retain customers and damage our reputation, which could adversely affect our business, revenues and competitive position.

If a single material breach or series of less material breaches was to occur, we could face liability under data protection laws, could lose the goodwill of our customers and could have our reputation damaged, all of which could have a material adverse effect on our business, financial condition and results of operations.

We are exposed to default or counterparty risks in connection with our operating business or as a result of any contracting parties' failure to meet their contractual obligations.

We are exposed to default and counterparty risks in connection with deliveries of our products and services to customers or as a result of financing or hedging activities if contracting parties fail to meet their obligations. In addition, there is the risk that, in a difficult economic and financial environment, national healthcare systems may delay or fail to make payments to our customers, thus generating or increasing default or counterparty risks. Any of these risks could have a material adverse effect on our financial condition and results of operations.

Fluctuations in exchange rates may adversely affect our business and results of operations.

Our products are marketed in more than 65 countries and we operate 19 production sites in 11 countries. Accordingly, a significant portion of our sales, expenses, assets and liabilities are in currencies other than the euro, our reporting currency, and as such our results are subject to foreign exchange translation and transaction risks. Our primary foreign exchange rate risks relate to the U.S. dollar, the Chinese yuan, the British pound sterling, the Swiss Franc, the Polish zloty and the Czech koruna.

Transactional risk arises when we and our subsidiaries execute transactions in a currency other than our functional currency. To the extent that we incur expenses in one currency but generate sales in another, any change in the values of those non-euro currencies relative to euro could cause our profits to decrease or our products to be less competitive than those of our competitors. To the extent that cash and receivables that are denominated in currencies other than the euro are greater or less than our liabilities denominated in such non-euro currencies, we will be exposed to the risk of fluctuations and movements in the foreign exchange markets. Where we are unable to match sales and receivables denominated in foreign currencies with expenses and liabilities denominated in the same currency, our results of operations are affected by currency exchange rate fluctuations.

Additionally, currency risk arises in connection with the translation of the financial condition and results of operations of our international subsidiaries with non-euro reporting currencies. Any of these factors could have a material adverse effect on our business, financial condition and results of operations.

To the extent that any derivative financial instruments are not sufficient or not effective or due to a default risk of the relevant counterparty, fluctuations of local currencies could affect our financial condition and results of operations.

Climate change and related regulatory responses may adversely impact our business.

There is increasing concern that a gradual increase in global average temperatures due to increased concentration of carbon dioxide and other greenhouse gases in the atmosphere will cause significant changes in weather patterns around the globe and an increase in the frequency and severity of natural disasters. Changes in weather patterns and an increased frequency, intensity and duration of extreme weather conditions could, among other things, disrupt the operation of our supply chain, increase our product costs and impact the types of products that consumers purchase. As a result, the effects of climate change could have a long-term adverse impact on our business, financial condition, results of operations and prospects.

In many of the countries in which we operate, governmental bodies are increasingly enacting legislation and regulations in response to the potential impacts of climate change as well as specific levies related directly to the energy consumption (including the CO_2 tax, among others), which will increase in the future. These laws and regulations, which may be mandatory, have the potential to impact our operations directly or indirectly as a result of required compliance by us, as well as by our suppliers, wholesale partners and distributors. In addition, our manufacturing processes may be affected by new regulations in response to climate change. If we are perceived to be a contributor of greenhouse gas emissions or global warming, or if we are perceived as not taking appropriate steps to mitigate our effect on the environment, this could result in damage to our image and brand, which is particularly focused on socially conscious individuals. Any of these events could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, we have and may continue to take voluntary steps to mitigate our impact on climate change. As a result, we may experience increases in energy, production, transportation and raw material costs, capital expenditure or insurance premiums and deductibles.

Risks Related to the Transactions

The Acquisition is subject to certain conditions and risks and, if it is not consummated, the Issuer will redeem the Notes at 100% of the issue price, plus accrued and unpaid interest.

On August 16, 2021, Bidco entered into the Acquisition Agreement to acquire, directly or indirectly, the Target Group from the Seller. The Acquisition is subject to the satisfaction of certain closing conditions, including, customary antitrust and regulatory approvals. Pending the consummation of the Acquisition, the Initial Purchasers will deposit the gross proceeds from the Offering into the Escrow Account on the Issue Date. The release of the Escrowed Property is subject to the satisfaction of certain conditions, including that the funds required to pay the consideration for the Acquisition will be within five business days of release. As of the date of the offering memorandum, we do not yet know whether the Acquisition will complete.

If the conditions precedent to the Acquisition are not satisfied or waived, as applicable, by the Acquisition Longstop Date, then the Acquisition will not be consummated. If the conditions to the release of the Escrowed Property, as more fully described under “*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*” have not been satisfied on or prior to the Escrow Longstop Date or upon the occurrence of certain other events, the Notes will be subject to a Special Mandatory Redemption as described in “*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*” and you may not obtain the return you expect to receive on the Notes.

Furthermore, your decision to invest in the Notes is made at the time of purchase. Changes in the business or financial position of the Target Group, or the terms of the Acquisition, between the Issue Date and the Escrow Release Date, may have an impact on our creditworthiness, and you will not be able to rescind your decision to invest in the Notes as a result thereof.

If the conditions precedent to the release of the Escrowed Property are not satisfied, the Issuer will be required to redeem the Notes, but the Escrow Account may not have sufficient funds to cover such redemption without relying on funding from the Parent.

The Escrowed Property will be limited initially to the gross proceeds of the Offering and will not be sufficient to pay the Special Mandatory Redemption Price, which is equal to 100% of the aggregate issue price of the Notes, plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the Special Mandatory Redemption Date. See “*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*.” In the event that the Special Mandatory Redemption Price payable upon such Special Mandatory Redemption exceeds the amount of the Escrowed Property, the Parent will have committed to fund the Issuer with an amount sufficient to cover the difference between the Special Mandatory Redemption Price and the amount of the Escrowed Property, including accrued interest and additional amounts (if any) due with respect to the Notes from the Issue Date to the Special Mandatory Redemption Date and any negative interest which has accrued on the Escrow Account.

Holders of the Notes will not have any direct right to enforce directly against the Parent, and must rely on the Issuer’s right to enforcement. There can be no assurance that the Parent will have sufficient funds to make this payment, and the Issuer may not have access to the funds necessary to allow it to pay the full amount of the required redemption price in the event of a Special Mandatory Redemption.

The Issuer does not currently control the Target Group and will not control the Target Group until the Acquisition Closing Date.

As of the date of this offering memorandum, the Issuer does not, directly or indirectly, hold any issued and outstanding common shares of the Target Group. As a result, the Issuer’s ability to influence the management of the Target Group is limited. In particular:

- The Seller may not operate the business of the Target Group until the Acquisition Closing Date in the same way that the Issuer and the Sponsors would.

- The Acquisition has required, and will likely continue to require, substantial time and focus from the management of the Target Group, which could adversely affect their ability to operate the business of the Target Group. Likewise, employees may be uncomfortable with the Acquisition.

- In addition, the board of the entities in the Target Group is required to manage the business of the entities in the Target Group under its own responsibility and in a manner that is in the best interest of the entities in the Target Group.

- Prior to the Acquisition Closing Date, the Issuer cannot assure you that the Target Group will fully comply with the covenants described in "*Description of the Notes*" that will be included in the Indenture. As such, we cannot assure you that, prior to such date, the Target Group will not take any action that would otherwise have been prohibited by the Indenture had those covenants been applicable.

We cannot assure you that the Acquisition will be consummated given it is dependent on certain closing conditions, including receipt of antitrust and regulatory approvals. If we are not able to satisfy or waive these conditions, as applicable, the Acquisition Closing Date will not occur and the Acquisition will not be consummated.

Any of the risks associated with the Issuer's lack of control over the Target Group until the occurrence of the Acquisition Closing Date could have a material adverse effect on our business, financial position and results of operations.

The Sponsors' opportunity to conduct due diligence with respect to the Target Group was limited, and their due diligence may not have revealed all facts that may be relevant in connection with the Acquisition.

Before making investments, the Sponsors conduct due diligence that they each respectively deem reasonable and appropriate based on the facts and circumstances applicable to each investment. The objective of the due diligence process is to identify attractive investment opportunities based on the facts and circumstances of an investment, to identify possible risks associated with that investment and to prepare a framework that may be used from the date of an acquisition to drive operational achievement and value creation. When conducting due diligence, the Sponsors typically evaluate a number of important business, financial, tax, accounting, environmental and legal issues in determining whether or not to proceed with an investment. Outside consultants, legal advisors, accountants and investment banks are involved in the due diligence process in varying degrees depending on the type of investment. Nevertheless, when conducting due diligence and making an assessment regarding an investment, the Sponsors rely on resources available to them, including information provided by the Target of the investment and, in some circumstances, third-party investigations.

Instances of bribery, fraud, accounting irregularities, contingent liabilities and other improper, illegal or corrupt practices can be difficult to detect, and fraud and other deceptive practices can be widespread in certain jurisdictions.

There may be liabilities that the Sponsors failed, or were unable, to discover in the course of performing due diligence investigations into the Target Group in connection with the Acquisition. Following the Acquisition, we may learn of additional information about the Target Group that adversely affect us, such as unknown or contingent liabilities and issues relating to compliance with applicable laws. Any such liabilities, individually or in the aggregate, could have a material adverse effect on our business, financial position and results of operations.

There is no certainty that the Sponsors' due diligence investigation has revealed or highlighted all relevant facts (including fraud, bribery and other illegal activities and contingent liabilities) that may be necessary or helpful in evaluating the merits of investing in the Target Group or that the Sponsors' due diligence investigations will result in the investment in the Target Group being successful. Furthermore, there can be no assurance that the actual financial performance of such investment will not fall short of the financial projections the Sponsors used when evaluating that investment.

The Acquisition will entitle the Group's customers and certain other business partners of the Target Group to terminate their agreements as a result of change of control provisions and the transfer of certain agreements to other acquisition entities.

The Acquisition will constitute a change of control under certain agreements entered into by the entities in the Target Business. For example, the Issuer has identified change of control provisions in certain local facilities and guarantee agreements. As a result of the Acquisition, these counterparties will be entitled to terminate their agreements with us. Some of these counterparties may exercise their termination rights, which could have an adverse effect on our business, financial position and results of operations. Given the structure of the Acquisition, certain supplier and customer agreements as well as lease agreements must be transferred from the Seller to new legal entities of the Group. These counterparties must grant their consent to the transfer of any agreements. The counterparties may, in their sole discretion, withhold their consent in which case the respective agreement would remain with the respective Seller.

Risks Related to Our Capital Structure

Our substantial leverage and debt service obligations could materially adversely affect our business, financial position and results of operations and preclude us from satisfying our obligations under the Notes and the Note Guarantees.

Following the completion of the Transactions, we will be highly leveraged and have significant debt service obligations. As of September 30, 2021, after giving effect to the Transactions, we would have had total third-party indebtedness in the amount of €1,959 million, consisting of the Notes, drawings under the Senior Term Facility, lease liabilities and other third-party financial debt. See "*Capitalization*," "*Description of Certain Financing Arrangements*" and "*Description of the Notes*." We anticipate that our high leverage will continue to exist for the foreseeable future.

The degree to which we will be leveraged following completion of the Transactions could have important consequences for holders of the Notes, including, but not limited to:

- making it more difficult for the Issuer and its subsidiaries to satisfy their respective obligations with respect to the Notes, the Senior Secured Credit Facilities and other debt and liabilities we may incur;
- increasing our vulnerability to, and reducing our flexibility to respond to, general adverse economic and industry conditions;
- requiring the dedication of a substantial portion of our cash flow from operations to the payment of principal of, and interest on, our indebtedness, thereby reducing the availability of such cash flow to fund working capital, capital expenditures, acquisitions, joint ventures, product research and development, or other general corporate purposes;
- restricting us from pursuing acquisitions or exploiting business opportunities;
- limiting our flexibility in planning for, or reacting to, changes in our business, the competitive environment and the industry in which we operate;
- negatively impacting credit terms with our suppliers and other creditors;
- increasing our exposure to interest rate increases because some of our indebtedness bears a floating rate of interest;
- placing us at a competitive disadvantage compared to our competitors that are not as highly leveraged;
- limiting our ability to obtain additional financing to fund future operations, capital expenditures, business opportunities, acquisitions and other general corporate purposes and increasing the cost of any future borrowings; and
- limiting our ability to obtain additional capacity for issuance of bid, advance payment, performance and warranty guarantees for operative business purposes and increasing the cost of any future guarantee issuances.

Any of these or other consequences or events could have a material adverse effect on our ability to satisfy our obligations, including under the Notes and the Senior Secured Credit Facilities.

The Issuer is a holding company that has no revenue generating operations of its own and will depend on cash from the operating companies of the Group to be able to make payments on the Notes and the Note Guarantees.

The Issuer is a holding company with no business operations other than management of the equity interests it holds in its subsidiaries. Following consummation of the Acquisition, the Issuer will be dependent upon the cash flow from its operating subsidiaries in the form of dividends or other distributions or payments to meet its obligations, including its obligations under the Notes and the Note Guarantees. Given the Group's international operations, it has a large number of operating subsidiaries and business participations, which individually contribute to our Group's results. The amounts of dividends and distributions available to the Issuer will depend on the profitability and cash flows of its subsidiaries and the ability of each of those subsidiaries to declare dividends under applicable law or transfer profits under profit and loss transfer agreements, if applicable. The Issuer's subsidiaries, however, may not be able to, or may not be permitted under applicable law to, make distributions or advance upstream loans to the Issuer to make payments in respect of its indebtedness, including the Notes and the Note Guarantees.

Various agreements governing our debt may restrict and, in some cases may actually prohibit, the ability of these subsidiaries to move cash within the restricted group. In particular, the Senior Secured Credit Facilities Agreement will limit the ability to upstream cash to the Issuer subject to certain exceptions. Applicable tax laws may also subject such payments to further taxation. Applicable law as well as profit and loss transfer agreements between several entities of the Group may also limit the amounts that some of our subsidiaries will be permitted to pay as dividends or distributions on their equity interests, or even prevent such payments. In particular, the ability of the Issuer's subsidiaries to pay dividends to the Issuer will generally be limited to the amount of distributable reserves available to each of them and the ability to pay their respective debt when due. The subsidiaries of the Issuer that do not guarantee the Notes will have no direct obligation to make payments with respect to the Notes or the Note Guarantees.

While the Indenture will limit the ability of the Issuer's subsidiaries to incur consensual restrictions on their ability to pay dividends or make other intercompany payments, these limitations will be subject to significant qualifications and exceptions, including exceptions for restrictions imposed by agreements in existence on the Issue Date and applicable law.

We may incur substantially more debt in the future, which may make it difficult for us to service our debt, including the Notes, and impair our ability to operate our businesses.

Despite our substantial leverage, we may incur substantial additional debt in the future. We will have the ability to borrow up to approximately €250 million (equivalent) under our Revolving Credit Facility, which will be secured in part by the Shared Collateral, and the Senior Secured Credit Facilities Agreement and the Indenture will also permit the incurrence of additional debt thereunder. The Indenture and the Senior Secured Credit Facilities Agreement will also permit us to incur a substantial amount of indebtedness at subsidiaries that do not guarantee the Notes and to incur indebtedness that shares in the Collateral or that benefits from security interests over assets that do not secure the Notes. Any debt that our subsidiaries incur could be structurally or effectively senior to the Notes to the extent that such subsidiaries do not guarantee the Notes, such debt is secured by liens that do not secure the Notes, to the extent of the value of such property and assets securing such debt, and other debt could be secured or could mature prior to the Notes. Although the Senior Secured Credit Facilities Agreement and the Indenture will contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of significant qualifications and exceptions, and under certain circumstances the amount of indebtedness that could be incurred in compliance with these restrictions could be substantial. If new debt is added to the Issuer's and its subsidiaries' existing debt levels, the related risks that we now face would increase. In addition, the Senior Secured Credit Facilities Agreement and the Indenture will not prevent us from incurring obligations that do not constitute indebtedness under those agreements. Our inability to service our debt could have a material adverse effect on our business, financial position, results of operations and our ability to fulfil our obligations under the Notes and the Note Guarantees.

Following the consummation of the Transactions, we will be subject to restrictive covenants that will limit our operating and financial flexibility.

The Senior Secured Credit Facilities Agreement and the Indenture will contain covenants which impose significant operating and financial restrictions on us. These agreements will limit our ability to, among other things:

- incur or guarantee additional indebtedness or issue certain preferred stock;
- make certain restricted payments and investments;
- transfer or sell assets;
- enter into transactions with affiliates;
- create or incur certain liens;
- make certain loans, investments or acquisitions;
- issue or sell share capital of certain of our subsidiaries;
- create or incur restrictions on the ability of our subsidiaries to pay dividends or to make other payments to us;
- take certain actions that would impair the security interests in the Collateral granted for the benefit of the holders of the Notes;
- merge, consolidate or transfer all or substantially all of our assets; and
- pay or redeem subordinated debt or equity.

All of these limitations will be subject to significant exceptions and qualifications. See "*Description of the Notes—Certain Covenants*." The covenants to which we will be subject could limit our ability to finance our future operations and capital needs and our ability to pursue business opportunities and activities that may be in our interest.

In addition, the Senior Secured Credit Facilities Agreement will require us to comply with certain affirmative covenants while amounts under the Senior Secured Credit Facilities remain outstanding. The Revolving Credit Facility is expected to contain a springing financial covenant requiring, in certain circumstances, compliance with a certain senior secured leverage ratio (the "SSNL Ratio") while amounts exceeding a certain threshold remain outstanding under the Revolving Credit Facility. See "*Description of Certain Financing Arrangements—Senior Secured Credit Facilities Agreement*." Our ability to meet the SSNL Ratio (if tested) under the Senior Secured Credit Facilities Agreement may be affected by events beyond our control, and we cannot assure you that we will meet such financial ratio. A breach of any of the covenants or restrictions under the Senior Secured Credit Facilities Agreement, including our failure to comply with the financial covenant thereunder, could result in an event of default under the Senior Secured Credit Facilities Agreement. Upon the occurrence of an event of default that is continuing under the Senior Secured Credit Facilities Agreement, subject to applicable cure periods, the relevant creditors could cancel the availability of the Senior Secured Credit Facilities and elect to declare all amounts outstanding under the Senior Secured Credit Facilities, together with accrued interest, immediately due and payable. In addition, a default under the Senior Secured Credit Facilities, including our failure to comply with the financial covenant thereunder, could lead to an event of default and acceleration under other debt instruments that contain cross default or cross acceleration provisions, including the Indenture. If our creditors, including the creditors under the Senior Secured Credit Facilities, accelerate the payment of those amounts, we cannot assure you that our assets and the assets of our subsidiaries would be sufficient to repay in full those amounts, to satisfy all other liabilities of our subsidiaries that would be due and payable and to make payments to enable us to repay the Notes. In addition, if we are unable to repay those amounts, our creditors could proceed against any Collateral granted to them to secure repayment of those amounts.

We will require a significant amount of cash to service our debt and sustain our operations, which we may not be able to generate or raise.

Our ability to make principal or interest payments when due on our indebtedness, including the Senior Secured Credit Facilities and our obligations under the Notes, and to fund our ongoing operations and future capital expenditures, will depend on our future performance and ability to generate cash, which, to a certain extent, is subject to the success of our business strategy as well as general economic, financial, competitive, legislative, legal, regulatory and other factors, as well as other factors discussed in these "*Risk Factors*," many of which are beyond our control.

We cannot assure you that our business will generate sufficient cash flows from operations, that currently anticipated growth, cost savings or efficiencies will be realized or that future debt financing will be available to us in an amount sufficient to enable us to pay our debts when due, including the Notes, or to fund our other liquidity needs including the repayment at maturity of the then outstanding amount under the Senior Secured Credit Facilities. At the respective maturities of the Senior Secured Credit Facilities, the Notes or any other debt that we may incur, if we do not have sufficient cash flows from operations and other capital resources to pay our debt obligations, or to fund our other liquidity needs, we may be required to refinance or restructure our indebtedness.

If our future cash flows from operations and other capital resources are insufficient to pay our obligations as they mature or to fund our liquidity needs, we may be forced to:

- sell assets;
- obtain additional debt or equity capital; or
- restructure or refinance all or a portion of our debt, including the Notes, on or before maturity.

The type, timing and terms of any future financing, restructuring, asset sales or other capital raising transactions will depend on our cash needs and the prevailing conditions in the financial markets. We cannot assure you that we would be able to accomplish any of these alternatives on a timely basis or on satisfactory terms, if at all. In such an event, we may not have sufficient assets to repay any portion or all of our debt.

Any failure to make payments on the Notes on a timely basis would likely result in a reduction of our credit rating, which could also harm our ability to incur additional indebtedness. In addition, the terms of our debt, including the Notes and the Senior Secured Credit Facilities, will limit, and any future debt may limit, our ability to pursue any of these alternatives. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business, financial position and results of operations. There can be no assurances that any assets that we could be required to dispose of could be sold or that, if sold, the timing of such sale and the amount of proceeds realized from such sale would be acceptable. If we are unsuccessful in any of these efforts, we may not have sufficient cash to meet our obligations.

Due to restrictions on the deductibility of interest expenses or forfeiture of interest carry forwards under applicable law, we may be unable to fully deduct interest expenses on our financial liabilities.

A certain amount of our annual financing expenses (primarily including interest payments) is not deductible under existing interest limitation rules, especially the German interest barrier rules (*Zinsschranke*) as further described below.

Subject to certain requirements, the German interest barrier rules impose certain restrictions on the deductibility of interest expense for German tax purposes. The German interest barrier rules generally provide for a limitation on the deduction of net interest expenses in excess of 30% of tax adjusted EBITDA. For purposes of the interest barrier rules, all entities that are part of the same fiscal unity (*Organschaft*) for corporate income and trade tax purposes are treated as one single business. Any non-deductible amount exceeding the threshold of 30% is carried forward and may be, again subject to the interest barrier rules, deductible in future financial years. Any interest carryforward may be forfeited in part or in full in connection with certain measures, such as a change of the ownership structure. Upon closing of the Acquisition, certain Group companies, in particular in Germany, may forfeit their existing interest carryforwards on the Acquisition Closing Date. Furthermore, on June 20, 2016, the Council of the European Union adopted the Directive (EU) 2016/1164 (ATAD I) laying down rules against tax avoidance practices that directly affect the functioning of the internal market. The Anti-Tax Avoidance Directive contains five legally binding anti abuse measures, which member states are generally required to apply against common forms of aggressive tax planning since January 1, 2019. Part of the package of measures is the implementation of an interest limitation in line with German rules. The restriction of the deductibility of interest expenses for tax purposes may have adverse consequences for our financial position and results of operations. The Council of the European Union has also adopted Directive (EU) 2017/952 (ATAD II) targeting mismatches . End of June 2021, the German legislator passed the ATAD Implementation Act (*Gesetz zur Umsetzung der Anti-Steuervermeidungsrichtline*, "ATADUmsG"*)* in order to implement the respective changes into German tax law. Amongst others, the ATADUmsG has introduced provisions to counter tax shortfalls due to mismatches from the use of hybrid financial instruments or hybrid entities or due to dual tax residency and has amended the CFC rules. These new rules may result in higher taxable income and a higher tax burden for corporate income tax and trade tax purposes in the current and future tax periods. Further measures may follow as part of the Organization for Economic Co-operation and Development's Base Erosion and Profit Shifting Project.

In addition, certain of our German subsidiaries have considerable tax loss carryforwards which have partially been capitalized as deferred tax assets in our Financial Statements. The use of such existing tax loss carryforwards and ongoing losses for German corporate income and trade tax purposes may be forfeited in case of a direct or indirect transfer of shares, subject to certain limited exceptions. Such restriction, applying to both corporate income and trade tax, depends on the percentage of share capital or voting rights transferred within a five year period to one acquirer or person(s) closely related to the acquirer or a group of acquirers with a common interest. Under current rules, if more than 50% of the share capital or voting rights are transferred to such an acquirer, tax loss carryforwards and current losses will be forfeited to the extent no exception from the general forfeiture rules can be applied, such as the built-in gains exemption pursuant to which tax loss carryforwards survive to the extent taxable built-in gains are available at the level of the loss-carrying entity. To the extent that the utilization of tax losses is restricted, they cannot be set off against future tax profits which would result in higher future tax burdens compared to the situation in which tax loss carryforwards can be used to lower the actual tax burden on profits. Such restriction may require a write down of the deferred tax assets in our consolidated financial statements and would negatively affect our financial position and results of operations.

Furthermore, upon the creation of a fiscal unity for German corporate and trade tax purposes, any tax loss carryforwards and interest carry forwards for German corporate income and trade tax purposes of a subsidiary, which have been incurred before the creation of the fiscal unity, will be excluded from use for the duration of the fiscal unity.

Loans under the Senior Secured Credit Facilities will bear interest at floating rates that could rise significantly, increasing our costs and reducing our cash flow.

Debt under the Senior Secured Credit Facilities will bear interest at a variable rate based on the Euro Interbank Offered Rate ("EURIBOR") for loans denominated in Euro, the Sterling Overnight Index Average Rate ("SONIA") for loans denominated in sterling, or Secured Overnight Financing Rate ("SOFR") for loans denominated in US Dollars, in each case, subject to a zero floor if less than zero plus an applicable margin. These variable rates could rise significantly in the future, increasing our interest expense associated with these obligations, reducing cash flow available for capital expenditures and hindering our ability to make payments on the Notes. Neither the Senior Secured Credit Facilities Agreement nor the Indenture contain a covenant requiring us to hedge all or any portion of our floating rate debt.

Although we may enter into certain hedging arrangements designed to fix a portion of these rates, there can be no assurance that hedging will be available or continue to be available on commercially reasonable terms. Hedging itself carries certain risks, including that we may need to pay a significant amount (including costs) to terminate any hedging arrangements. To the extent that interest rates or any drawings were to increase significantly, our interest expense would correspondingly increase, reducing our cash flow.

EURIBOR or other benchmarks may be discontinued or change in the future.

Various interest rate benchmarks (including EURIBOR) are the subject of recent national and international regulatory guidance and proposals for reform. Some reforms are already effective, including the EU Benchmark Regulation (Regulation (EU) 2016/1011) and the cessation of the publication of Sterling LIBOR rates and certain tenors of US Dollar LIBOR rates after December 31, 2021, while others are still to be implemented.

These reforms and other pressures may cause EURIBOR, SONIA, SOFR or other such benchmarks to disappear entirely, to perform differently than in the past (as a result of a change in methodology or otherwise), create disincentives for market participants to continue to administer or participate in certain benchmarks or have other consequences which cannot be predicted. Based on the foregoing, investors should in particular be aware that (a) any of these reforms or pressures or any other changes to a relevant interest rate benchmark, as well as manipulative practices or the cessation thereof, could affect the level of the published rate, including to cause a sudden or prolonged increase and/or to make it more volatile than it would otherwise be, which could have an adverse impact on our ability to service debt that bears interest at floating rates of interest, and (b) if EURIBOR, SONIA or SOFR (or any of their successors or other benchmarks) is discontinued, that may require amendments to the Senior Secured Credit Facilities Agreement or other documentation that references such rate and, in relation to any of our obligations which have not transitioned to a successor rate by the relevant date, then the rate of interest applicable to such obligations may be determined for a period by applicable fallback provisions, specified in the relevant documentation for such obligations, although such provisions, if they are dependent in part upon the provision by reference banks of offered quotations, may not operate as intended (depending on market circumstances and the availability of rates information at the relevant time).

The interests of the Sponsors may conflict with your interests as a holder of the Notes.

The Sponsors indirectly control the Issuer. As a result, the Sponsors have and will continue to have, directly or indirectly, the power to affect our legal and capital structure as well as the ability to elect and change our management and to approve other changes to our operations and to influence the outcome of matters requiring action by our shareholder. Our Sponsors' interests in certain circumstances may conflict with your interests as noteholders, particularly if we encounter financial difficulties or are unable to pay our debts when due. For example, the Sponsor could vote to cause us to incur additional indebtedness. The Sponsors are in the business of making investments in companies and may acquire and hold interests in businesses that compete directly or indirectly with us. The Sponsors may also pursue acquisition opportunities that are complementary to our business and, as a result, those acquisition opportunities may not be available to us. In addition, the Sponsors may hold interests in our suppliers or our customers. The Sponsors and their respective affiliates could also have an interest in pursuing acquisitions, divestitures (including one or more divestitures of all or part of our business or sales of our shares which would result in changes to our shareholding structure), financings, dividend distributions or other transactions that, in their judgment, could enhance their equity investments, although such transactions might involve risks to you as a holder of Notes.

Risks Related to the Notes

Your right to receive payment under the Note Guarantees is contractually subordinated to senior ranking debt of the Guarantors.

The obligations of the Guarantors under their respective Note Guarantee are general senior obligations of such Guarantors and will be contractually subordinated in right of payment to the prior payment in full in cash of all existing and future obligations in respect of senior ranking debt of such Guarantor. Such debt includes their obligations under the Senior Secured Credit Facilities. Although the Indenture will contain restrictions on the ability of the Guarantors to incur additional debt, any additional debt incurred may be substantial and rank senior to the Note Guarantees.

Upon any payment or distribution to creditors of a Guarantor under the Indenture in respect of an insolvency event, the holders of senior ranking debt of such Guarantor will be entitled to be paid in full from the assets of such Guarantor before any payment may be made pursuant to such Note Guarantee. Until the senior ranking debt of such Guarantor is paid in full, any distribution to which holders of the Notes would be entitled but for the subordination provisions included in the Intercreditor Agreement shall instead be made to holders of senior ranking debt of such Guarantor as their interests may appear. As a result, in the event of insolvency of a Guarantor under the Indenture, holders of senior ranking debt of such Guarantor may recover more, ratably, than the holders of the Notes, in respect of the Guarantor's Note Guarantee.

In addition, the subordination provisions in the Intercreditor Agreement relating to the Note Guarantees will provide:

- customary turnover provisions by the Trustee and the holders of the Notes for the benefit of the holders of senior ranking debt of such Guarantor;

- that if any event of default occurs and is continuing on any designated senior ranking indebtedness and the Trustee receives a notice of such default, such Guarantor may not make any payment in respect of the Notes, or pursuant to its Note Guarantee, until (among others) the earlier of the waiver or cure of such default and 179 days after the date on which the applicable payment blockage notice is received; and

- that the holders of the Notes and the Trustee are prohibited, without the prior consent of the Majority Senior Secured Creditors or the Majority Super Senior Creditors, from taking any enforcement action in relation to such guarantee, except in certain circumstances.

The Indenture will also provide that, except under very limited circumstances, only the Trustee will have standing to bring an enforcement action in respect of the Notes and the Note Guarantees. Moreover, the Intercreditor Agreement and the

Indenture will restrict the rights of holders of the Notes to initiate insolvency proceedings or take legal actions against each of the Guarantors under the Indenture and by accepting any Note each such holder will be deemed to have agreed to these restrictions. As a result of these restrictions, holders of the Notes will have limited remedies and recourse under the Note Guarantees in the event of a default by the Issuer or a Guarantor under the Indenture.

The Notes will be structurally subordinated to the liabilities of non-guarantor subsidiaries, including the claims of trade creditors, and effectively subordinated to liabilities that are secured on assets that do not secure the Notes.

The Notes will be structurally subordinated to any existing or future indebtedness of the subsidiaries of the Issuer that do not guarantee the Notes, including its obligations to trade creditors, and effectively subordinated to all of the Issuer's existing and future indebtedness that is secured by liens that do not secure the Notes, including the Senior Secured Credit Facilities, to the extent of the value of such property and assets securing such indebtedness. In the event of our bankruptcy, liquidation, reorganization or other winding up, our assets that secure debt ranking senior or equal in right of payment to the Notes will be available to pay obligations on the Notes on a *pro rata* basis with debt ranking equal in right of payment to the Notes only after the senior secured debt has been repaid in full from these assets. There may not be sufficient assets remaining to pay amounts due on any or all of the Notes then outstanding. The Indenture will not prohibit us from incurring additional secured debt, nor will it prohibit any of our subsidiaries from incurring additional liabilities.

Generally, claims of creditors, including depositors, trade creditors and preferred stockholders (if any) of non-Guarantor subsidiaries of the Issuer, are entitled to payments of their claims from the assets of such subsidiaries before these assets are made available for distribution to their respective parent entity or the creditors of the Issuer and the Guarantors. Accordingly, in the event that any non-Guarantor subsidiary of the Issuer becomes insolvent, is liquidated, reorganized or dissolved or is otherwise wound up other than as part of a solvent transaction:

- the creditors of the Issuer and the Guarantors (including the holders of the Notes) will have no right to proceed against the assets of such non-Guarantor subsidiary; and

- creditors of such non-Guarantor subsidiary, including depositors, trade creditors and preferred stockholders (if any) will generally be entitled to payment in full from the sale or other disposal of the assets of such subsidiary before the Issuer or any Guarantor, as a direct or indirect shareholder (as applicable), will be entitled to receive any distributions from such subsidiary.

As such, the Notes and the Note Guarantees will be structurally subordinated to the creditors, including depositors, trade creditors and any preferred stockholders (if any) of the non-Guarantor subsidiaries of the Issuer. In addition, the Indenture will, subject to certain limitations, permit these non-Guarantor subsidiaries to incur substantial additional indebtedness without such incurrence constituting a default under the Indenture, and such indebtedness may also be secured. The Indenture will not contain any limitation on the amount of other liabilities, such as deposits and trade payables that may be incurred by these subsidiaries.

The Issuer and the Guarantors will have control over the Collateral, and the sale of particular assets could reduce the pool of assets securing the Notes.

The Transaction Security Documents will allow the Collateral providers to remain in possession of, retain exclusive control over, freely operate, and collect, invest and dispose of any income from the Collateral to the extent that it relates to their assets. So long as no acceleration event has occurred and subject to certain conditions, the Collateral providers may, among other things, without any release or consent by the Security Agent, conduct ordinary course activities with respect to the Collateral, such as selling, factoring, abandoning or otherwise disposing of the Collateral and making ordinary course cash payments, including repayments of indebtedness.

The Shared Collateral secures the Senior Secured Credit Facilities on a senior priority basis, and your rights to recover on such Shared Collateral will be limited.

A portion of the Collateral, the Shared Collateral, will be pledged to the Security Agent for the benefit of the lenders under the Senior Secured Credit Facilities, as well as to the Security Agent for the benefit of holders of the Notes. Under the Intercreditor Agreement and the Transaction Security Documents, the Senior Secured Credit Facilities are secured by prior ranking security interests in the Shared Collateral (with the Senior Term Facility having first priority) and the proceeds of any sale of the Shared Collateral on enforcement will be applied first to repay all debt of the lenders under the Senior Secured Credit Facilities. Consequently, you may not be able to recover on such Shared Collateral because the lenders under the Senior Secured Credit Facilities will have a prior claim on all proceeds realized from any enforcement of such Shared Collateral.

The Notes will be secured only to the extent of the value of the Collateral that will be granted as security for the Notes and future secured debt may be secured by certain assets that do not secure the Notes.

The Notes will be secured only to the extent of the value of the Collateral described in this offering memorandum. See "*Description of the Notes—Security*." In addition, a portion of the Collateral, the Shared Collateral, will also secure the Senior Secured Credit Facilities on a first-priority basis, and the Notes on a junior-priority basis, and may secure additional debt ranking senior to or *pari passu* with the Notes and the Note Guarantees. Although the pledge over the shares of the Issuer will secure the Notes and the Note Guarantees on a first-priority basis and will not secure the Senior Secured Credit Facilities, such pledge may secure additional debt ranking *pari passu* with the Notes, to the extent permitted by the terms of the Indenture and the Intercreditor Agreement. The rights of the holders may therefore be diluted by any increase in the debt secured by the Collateral or a reduction of the value of the Collateral securing the Notes. In addition, pursuant to the Intercreditor Agreement, the proceeds of an enforcement of the Collateral will be applied in repayment of any Super Senior Liabilities (to the extent the Designation Date has occurred), followed by (or unless the Designation Date has not occurred) any lenders under the Senior Secured Credit Facilities, among others, before repayment of the Notes and Note Guarantees. To the extent the claims of the holders of the Notes exceed the value of the Collateral securing the Notes and the Note Guarantees, those claims will generally rank equally with the claims of the holders of all other existing and future senior debt ranking *pari passu* with the Notes and the Note Guarantees. As a result, if the value of the assets pledged as Collateral is less than the value of the claims of the holders of the Notes, those claims may not be satisfied in full. In addition, not all of our assets will secure the Notes, and the Indenture will allow the Issuer and its restricted subsidiaries to secure certain types of debt permitted to be incurred under the Indenture (which may be structurally senior to the Notes and the Note Guarantees) with the property and assets of the restricted subsidiaries that do not secure the Notes. The value of such assets and property could be significant. If an event of default occurs and the obligations under the Notes are accelerated, the Notes and the Note Guarantees will not benefit from the assets securing such secured debt and will rank equally with the holders of unsecured debt of the Issuer and its restricted subsidiaries with respect to any property or assets that is excluded from the Collateral securing the Notes.

The value of the Collateral securing the Notes may not be sufficient to satisfy our obligations under the Notes and such Collateral may be reduced or diluted under certain circumstances.

If we default on the Notes, holders of the Notes will be secured only to the extent of the value of the Collateral granted in favor of holders of the Notes and, in respect of the Shared Collateral, only after lenders under the Senior Secured Credit Facilities have been paid in full. In the event of an enforcement of the pledges in respect of the Notes, the proceeds from the sale of the assets underlying the pledges may not be sufficient to satisfy the Issuer's obligations with respect to the Notes including due to the reasons described in the preceding sentence. No appraisal of the value of the Collateral has been made in connection with this Offering. The value of the assets underlying the pledges will also depend on many factors, including, among other things, whether or not the business is sold as a going concern, regulatory restrictions that could affect such sale, the ability to sell the assets in an orderly sale and the condition of the economies in which operations are located and the availability of buyers.

The Collateral that is pledged or assigned for the benefit of the holders of the Notes may provide for only limited repayment of the Notes, in part because most of such Collateral may not be liquid and its value to other parties may be less than their value to us. Likewise, we cannot assure you that the Collateral will be saleable or, if saleable, that there will not be substantial delays in the liquidation thereof. Industry regulations in certain jurisdictions in which we operate, such as Germany, include restrictions on persons who may hold certain of our licenses, authorizations and consents that are necessary to operate our business. In the event of foreclosure, the transfer of our business operations may be prohibited or only permitted to a limited group of investors eligible to hold such assets, thereby decreasing the pool of potential buyers. Furthermore, entry into the Transaction Security Documents, enforcement of the Collateral and any transfer of our operations may require, in certain jurisdictions, governmental or other regulatory consents, approvals or filings or might otherwise be challenged. Such consents, approvals or filings may take time to obtain or may not be obtained at all. As a result, enforcement may be delayed, a temporary shutdown of operations may occur and the value of the Collateral may be significantly decreased. Most of our assets will not secure the Notes and it is possible that the value of the Collateral will not be sufficient to cover the amount of indebtedness secured by the Collateral. With respect to any shares of our subsidiaries pledged to secure the Notes and the Note Guarantees thereof, such shares may also have limited value in the event of bankruptcy, insolvency or other similar proceedings in relation to the entity's shares that have been pledged because all of the obligations of the entity whose shares have been pledged must first be satisfied, which may leave little or no remaining assets in the pledged entity. As a result, the creditors secured by a pledge of the shares of these entities may not recover anything of value in the case of an enforcement sale. In addition, the value of the Collateral may decline over time. If the proceeds of the Collateral are not sufficient to repay all amounts due on the Notes, the holders of the Notes (to the extent not repaid from the proceeds of the sale of the Collateral) would have only a senior unsecured, unsubordinated claim against the Issuer's and the Guarantors' remaining assets.

The Indenture will also permit the granting of certain liens other than those in favor of the holders of the Notes on the Collateral. To the extent that holders of other indebtedness or third parties enjoy liens, including statutory liens, whether or not permitted by the Indenture or the Transaction Security Documents, such holders or third parties may have rights and remedies with respect to the Collateral which, if exercised, could reduce the proceeds available to satisfy our obligations under the Notes. Moreover, if we issue additional Notes under the Indenture, holders of such Notes would benefit from the same collateral as the holders of the Notes being offered hereby, thereby diluting your ability to benefit from the liens on the Collateral.

Not all of the Guarantors will initially guarantee the Notes.

On the Issue Date, the Notes will only be guaranteed by Bidco. Subject to and in accordance with the Agreed Security Principles and subject to certain material limitations pursuant to applicable laws, the Post-Closing Guarantors are expected to become guarantors of the Notes by executing and delivering to the Trustee supplemental indentures substantially in the forms attached to the Indenture within 120 days from the business day immediately after the Acquisition Closing Date. As of and for the year ended December 31, 2020, the Post-Closing Guarantors accounted for 79.8% of total assets of the Target Group (before giving effect to purchase price allocation adjustments and minor top level adjustments, but after giving effect to intercompany eliminations other than intercompany profit eliminations), 78.3% of the revenue (before giving effect to consolidation adjustments) and 88.7% of the EBITDA (before giving effect to consolidation adjustments) of the Target Group. There can be no assurance that we will be successful in procuring such additional Note Guarantees within the time period specified. The Issue Date Note Guarantee by Bidco and Post-Closing Note Guarantees by the Post-Closing Guarantors will be limited as set forth in "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and Security Interests*."

Holders of the Notes may not control certain decisions regarding the Collateral.

The Notes will be secured by the Shared Collateral which will also secure the obligations under the Senior Secured Credit Facilities. In addition, under the terms of the Indenture, we will be permitted to incur significant additional *pari passu* indebtedness and other obligations that may be secured by the same Collateral. The Intercreditor Agreement will provide that the Security Agent, who will serve as the security agent for the secured parties with respect to the Collateral, will act only as provided for in the Intercreditor Agreement. The Security Agent may refrain from enforcing the Collateral unless otherwise instructed by the Instructing Group. For the purposes of enforcement, "Instructing Group" means, in the context of our capital structure upon consummation of the Transactions, more than 50% by value of the total senior secured credit participations under the relevant Senior Secured Credit Facilities (as described further in "*Description of Certain Financing Arrangements—Intercreditor Agreement*"), certain hedge counter-parties at that time and any other additional *pari passu* indebtedness that may be secured on such collateral (the "Majority Senior Secured Creditors"). The Majority Senior Secured Creditors may have interests that are different from the interests of holders of the Notes and they may, subject to the terms of the Intercreditor Agreement, elect to pursue their remedies under the Transaction Security Documents at a time when it would be disadvantageous for the holders of the Notes to do so. See "*Description of Certain Financing Arrangements—Intercreditor Agreement" and "Description of the Notes—Security*."

The granting of the Note Guarantees and security interests in connection with the issuance of the Notes, or the incurrence of permitted debt in the future, may create or restart hardening or voidance periods for such security interests in accordance with the laws applicable in certain jurisdictions.

The granting of the Note Guarantees and security interests to secure the Notes may create hardening or voidance periods for such Note Guarantees and security interests in certain jurisdictions. The granting of shared security interests to secure future permitted debt may restart or reopen such hardening or voidance periods in particular, as the Indenture will permit the release and retaking of security granted in favor of the Notes in certain circumstances including in connection with the incurrence of future debt. The applicable hardening or voidance period for these new security interests can run from the moment each new security interest has been granted or perfected. At each time, if the security interest granted or recreated were to be enforced before the end of the respective hardening or voidance period applicable in such jurisdiction, it may be declared void or ineffective and/or it may not be possible to enforce it. See "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and Security Interests*."

The same rights also apply following the issuance of the Notes in connection with the accession of further subsidiaries as additional guarantors and the granting of security interest over their relevant assets and equity interests for the benefit of holders of the Notes, as applicable.

Enforcing your rights as a holder of the Notes or under the Note Guarantees thereof or the Collateral across multiple jurisdictions may prove difficult.

The Issuer is organized under the laws of Germany, the entities expected to provide Notes Guarantees are organized under the laws of Germany and the United States, and the Collateral includes the shares of the Issuer and Bidco, which are entities incorporated under the laws of Germany, and certain present and future intercompany loan receivables held by the Issuer and Bidco. In the event of bankruptcy, insolvency, administration or a similar event, proceedings could be initiated in any of these jurisdictions. Your rights under the Notes, the Note Guarantees and the Collateral are likely to be subject to insolvency and administrative laws of several jurisdictions and there can be no assurance that you will be able to effectively enforce your rights in such complex proceedings. In addition, the multi-jurisdictional nature of enforcement over the Collateral may limit the realizable value of the Collateral.

The insolvency, administration and other laws of the jurisdiction of organization of the Issuer and the Guarantors may be materially different from, or conflict with, each other and with the laws of the United States, including in the areas of rights of creditors, priority of governmental and other creditors, the ability to obtain post-petition interest, the duration of proceeding and preference periods. The application of these laws, and any conflict between them, could call into question whether, and to what extent, the laws of any particular jurisdiction should apply, adversely affect your ability to enforce your rights under the Note Guarantees and the Transaction Security Documents in these jurisdictions or limit any amounts that you may receive.

The Escrow Charge will be granted to the Trustee and the security interests in the remaining Collateral will be granted to the Security Agent, in each case, rather than directly to the holders of the Notes. The ability of the Trustee or the Security Agent, as applicable, to enforce the Collateral may be restricted by local law.

The security interests that will secure the obligations of the Issuer under the Notes and the obligations of the Guarantors under the Note Guarantees thereof (including the Escrow Charge) will not be granted directly to the holders of the Notes but to the respective Trustee or Security Agent, as applicable, and thus the holders of the Notes will not have any independent power to enforce, or have recourse to, any of the Transaction Security Documents or to exercise any rights or powers arising under the Transaction Security Documents except through the relevant Trustee or Security Agent, as applicable, including as may be provided in the Intercreditor Agreement. By accepting a Note, you will be deemed to have agreed to these restrictions. As a result of these restrictions, holders of the Notes will have limited remedies and recourse against us in the event of a default. See "*Description of Certain Financing Arrangements—Intercreditor Agreement*."

In addition, the ability of the Security Agent to enforce the security interests in the Collateral (excluding the Escrow Charge) will be subject to mandatory provisions of the laws of each jurisdiction in which security interests over such Collateral are taken. For example, the laws of certain jurisdictions may not allow for the appropriation of certain pledged assets, but require a sale through a public auction and certain waiting periods may apply. There is some uncertainty under the laws of certain jurisdictions as to whether obligations to beneficial owners of the Notes that are not identified as registered holders in a security document will be validly secured. In certain jurisdictions, including Germany, due to the laws and other jurisprudence governing the creation and perfection of security interests and the enforceability of such security interests, the Intercreditor Agreement will provide for the creation of "parallel debt" obligations in favor of the relevant Security Agent ("Parallel Debt") mirroring the obligations of the Issuer and the Guarantors owed to holders of the Notes under or in connection with the Indenture ("Principal Obligations"). All or part of the pledges and other security interests in such jurisdictions will be granted to the Security Agent as security interests for the Parallel Debt and will not directly secure the Principal Obligations. Under the provisions of the Intercreditor Agreement, the Parallel Debt will be at all times in the same amount and payable at the same time as the Principal Obligations and any payment in respect of the Principal Obligations shall discharge the corresponding Parallel Debt and any payment in respect of the Parallel Debt shall discharge the corresponding Principal Obligations. In respect of the security interests granted to secure the Parallel Debt, the holders of the Notes will not have direct security interests and will not be entitled to take enforcement actions in respect of such security interests except through the relevant Security Agent. Therefore, the holders of the Notes will bear the risk of insolvency or bankruptcy of the relevant Security Agent. In addition, the Parallel Debt construct has not been tested under law in certain of these jurisdictions, including in Germany, and to the extent that the security interests in the Collateral created under the Parallel Debt construct are not validly granted, are unenforceable or are successfully challenged by other parties, holders of the Notes will not receive any proceeds from an enforcement of such security interests in the Collateral. See "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and Security Interests*."

Rights in the Collateral may be adversely affected by the failure to perfect security interests in the Collateral.

Under applicable law, a security interest in certain tangible and intangible assets can only be properly perfected, and its priority retained, through certain actions undertaken by the secured party or the grantor of the security, as applicable. The liens on the Collateral securing the Notes may not be perfected with respect to the claims of the Notes if we fail or are unable to take the actions necessary to perfect any of these liens. Under German law, the creation of a valid security interest under a German law governed pledge agreement in relation to certain assets (such as bank accounts) may be subject to the delivery of a notice of pledge by the security agent or the security provider to a third party (for example, the notice of pledge to the account bank in case of a pledge over bank accounts). Any failure to perfect any security interest in the Collateral may result in the invalidity of the relevant security interest or adversely affect the priority of such security interest in favor of the Notes against third parties, including a trustee in bankruptcy and other creditors who claim a security interest in the same Collateral. Neither the Trustee nor the Security Agent will be under any obligation or responsibility to take any steps or action to perfect, or ensure the perfection of, any such liens.

There are circumstances other than the repayment or discharge of the Notes under which the Collateral securing the Notes and the Note Guarantees will be released automatically without your consent or the Trustee or the Security Agent obtaining your further consent.

Under a variety of circumstances, the Collateral securing the Notes will be released automatically, including a sale, transfer or other disposal of such Collateral in a transaction that does not violate the asset sale covenant of the Indenture and in connection with an enforcement sale permitted under the Intercreditor Agreement. The Indenture will also permit us to designate one or more restricted subsidiaries that are Guarantors as unrestricted subsidiaries. If we designate a Guarantor as an unrestricted subsidiary for purposes of the Indenture, all of the liens on the Collateral owned by such subsidiary and any Note Guarantees by such subsidiary will be released under the Indenture, subject to certain conditions. Designation of an unrestricted subsidiary as such will reduce the aggregate value of the Collateral securing the Notes to the extent of liens securing the shares of such unrestricted subsidiary or of its subsidiaries. See "*Description of the Notes—Note Guarantees—Note Guarantees Releases*" and "*Description of the Notes—Security—Release of Liens*."

The insolvency laws of Germany and other applicable jurisdictions may not be as favorable to you as the insolvency laws of the United States or those of another jurisdiction with which you are familiar; other limitations on the Note Guarantees and the Security Interests (as defined herein), including fraudulent conveyance statutes, may adversely affect their validity and enforceability.

On and after the Issue Date or within 120 days from the business day immediately after the Acquisition Closing Date, as applicable, the Issuer's obligations under the relevant Notes will be guaranteed by the relevant Guarantors and secured by security interests over the relevant Collateral (the "Security Interests"). The Issuer is organized under the laws of Germany and the entities expected to provide Notes Guarantees are organized under the laws of Germany and the United States. With respect to the Issuer and any Guarantor organized under the laws of a member state of the European Union, there is a rebuttable presumption that the "centre of main interest" as defined in the Council of the European Union Regulation No. 2015/848 on Insolvency Proceedings (recast) is the jurisdiction where the registered office is situated. In addition, the Collateral will include a pledge over the shares in the Issuer and Bidco, which are entities organized under the laws of Germany, and security interests in certain present and future intercompany loan receivables held by the Issuer.

The insolvency laws of other jurisdictions may not be as favorable to your interests as the laws of the United States or other jurisdictions with which you are familiar. In the event that any one or more of the Issuer, the Guarantors or any other of the Issuer's subsidiaries experiences financial difficulty, it is not possible to predict with certainty in which jurisdiction or jurisdictions insolvency or similar proceedings would be commenced, or the outcome of such proceedings.

Although laws differ among the jurisdictions, in general, applicable fraudulent transfer and conveyance and equitable principles, insolvency laws and limitations on the enforceability of judgments obtained in courts in such jurisdictions could limit the enforceability of the Notes against the Issuer, the enforceability of a Note Guarantee against a Guarantor and the enforceability of the Security Interests. In certain circumstances the court may also void the Security Interest or the Note Guarantee if the company is close to or near insolvency. The following discussion of fraudulent transfer, conveyance and insolvency law, although an overview, describes generally applicable terms and principles, which are defined under the relevant jurisdiction's fraudulent transfer and insolvency statutes.

In an insolvency proceeding, it is possible that creditors of the Guarantors or the appointed insolvency administrator may challenge the Note Guarantees and the Security Interests, and intercompany obligations generally, as preferences, transaction at an undervalue, invalid charges, fraudulent transfers or conveyances or on other grounds. If so, such laws may permit a court, if it makes certain findings, to:

- avoid or invalidate all or a portion of a Guarantor's obligations under its Note Guarantee or the Security Interests provided by such security provider;
- direct that the Issuer and the holders of the Notes return any amounts paid under a Note Guarantee or any Security Interest to the relevant Guarantor or security provider or to a fund for the benefit of the Guarantor's or security provider's creditors; and
- take other action that is detrimental to you.

If we cannot satisfy our obligations under the Notes and any Note Guarantee or Security Interest is found to be a preference, transaction at an undervalue, fraudulent transfer or conveyance or is otherwise set aside, we cannot assure you that we can ever repay in full any amounts outstanding under the Notes. In addition, the liability of each Guarantor or security provider under its Note Guarantee or the Security Interests will be limited to the amount that will result in such guarantee or Security Interests not constituting a fraudulent conveyance or improper corporate distribution or otherwise being set aside. The amount recoverable from the Guarantors and security providers under the Transaction Security Documents will also be limited. However, there can be no assurance as to what standard a court would apply in making a determination of the maximum liability of each. There is also the possibility that the entire Note Guarantee or Security Interest may be set aside, in which case the entire liability may be extinguished. See also "*—Corporate benefit, financial assistance laws, capital maintenance and other limitations on the Note Guarantees and the Collateral may adversely affect the validity and enforceability of the Note Guarantees and the Collateral*."

In order to initiate any of these actions under fraudulent transfer or other applicable principles, courts would, for example, need to find that, at the time the Note Guarantees were issued or the Security Interests created, the Guarantor or security provider:

- issued such Note Guarantee or created such Security Interest with the intent of hindering, delaying or defrauding current or future creditors or with a desire to prefer some creditors over others, or created such security after its insolvency;

- issued such Note Guarantee or created such Security Interest in a situation where a prudent business person as a shareholder of such Guarantor or security provider would have contributed equity to such Guarantor or security provider or where the relevant beneficiary of the Note Guarantee or Security Interest knew or should have known that the Guarantor or security provider was insolvent or a filing for insolvency had been made; or

- received less than reasonably equivalent value for incurring the debt represented by the Note Guarantee or Security Interest on the basis that the Note Guarantee or Security Interest were incurred for our benefit, and only indirectly the Guarantor's or security provider's benefit, or on some other basis and (i) was insolvent or rendered insolvent by reason of the issuance of the Note Guarantee or the creation of the Security Interest, or subsequently became insolvent for other reasons; (ii) was engaged, or was about to engage, in a business transaction for which the Guarantor's or security provider's assets were unreasonably small; or (iii) intended to incur, or believed it would incur, debts beyond its ability to make required payments as and when they would become due.

Different jurisdictions evaluate insolvency on various criteria, but a Guarantor or security provider generally may, in different jurisdictions, be considered insolvent at the time it issued a Note Guarantee or created any Security Interest if:

- its liabilities exceed the fair market value of its assets;

- it cannot pay its debts as and when they become due;

- the present saleable value of its assets is less than the amount required to pay its total existing debts and liabilities, including contingent and prospective liabilities, as they mature or become absolute; or

- its liabilities exceed the liquidation value of its assets, unless it has a positive going concern prognosis. Although we believe that both the Issuer and the Guarantors are solvent, and will be so after giving effect to the Transactions, there can be no assurance as to which standard a court would apply in determining whether a Guarantor or security provider was "insolvent" as of the date the Note Guarantees were issued or the Security Interests were created or that, regardless of the method of valuation, a court would not determine that a Guarantor or security provider was insolvent on that date, or that a court would not determine, regardless of whether or not a Guarantor or security provider was insolvent on the date its Note Guarantee was issued or the Security Interests were created, that payments to holders of the Notes constituted fraudulent transfers on other grounds.

For an overview of certain insolvency laws and enforceability issues as they relate to the Note Guarantees and Security Interests, see "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and Security Interests*."

Corporate benefit, financial assistance laws, capital maintenance and other limitations on the Note Guarantees and the Collateral may adversely affect the validity and enforceability of the Note Guarantees and the Collateral.

The Issuer and certain of the entities expected to provide a Note Guarantee are organized under the laws of Germany and the United States. Enforcement of the obligations under a Note Guarantee against, and/or any Collateral provided by, as applicable, any such Guarantor or providers of collateral will be subject to certain defenses available to the Issuer or the relevant Guarantor, as the case may be. These laws and defenses may include those that relate to fraudulent conveyance, financial assistance, corporate benefit, capital maintenance, liquidity maintenance or similar laws as well as regulations or defenses affecting the rights of creditors generally, particularly by limiting the amounts recoverable under the Note Guarantees and Collateral, as applicable, and the amounts recoverable thereunder will be limited to the maximum amount that can be guaranteed or secured by a particular Guarantor or security provider under the applicable laws of each jurisdiction, to the extent that the granting of such Note Guarantee or Collateral is not in the relevant Guarantor's or security provider's corporate interests, or the burden of such Note Guarantee or Collateral exceeds the benefit to the relevant Guarantor or security provider, or such Note Guarantee or Collateral would be in breach of capital maintenance, liquidity maintenance or thin capitalization rules or any other general statutory laws and/or would cause the directors or managers of such subsidiary Guarantor or security provider to contravene their fiduciary duties and incur civil or criminal liability.

The Note Guarantees and/or security interests granted by a German limited liability company (*Gesellschaft mit beschränkter Haftung*, "GmbH") or a partnership with a GmbH as liable partner (i.e., a "GmbH & Co. KG") for the purpose of guaranteeing or securing liabilities of its direct or indirect shareholders or a subsidiary of such shareholders (excluding direct or indirect subsidiaries of such GmbH) are considered to constitute a benefit for such shareholder and therefore are subject to certain capital maintenance and liquidity maintenance rules. Therefore, any Note Guarantees and/or security interests provided by a GmbH or GmbH & Co. KG will be subject to certain contractual limitations (so called "limitation language") contained in the Indenture (or any other document under which any Note Guarantee is granted) and that are or will be contained in the Transaction Security Documents, respectively, designed to ensure compliance with applicable capital maintenance, liquidity maintenance or any other general statutory laws. Certain of the Collateral granted by a Guarantor incorporated as a German GmbH or GmbH & Co. KG will be subject to "limitation language."

Any guarantee and/or security interest granted by a GmbH or any other entity incorporated/established under the laws of Germany (including Bidco) may be held invalid pursuant to Section 138 BGB and would therefore not be enforceable if, at the time of the creation or enforcement of any such guarantee and/or security interest, among others, the third party creditor and the affiliate have acted in fraudulent conveyance (*kollusives Zusammenwirken*) to the detriment of the GmbH or other third party creditors of the GmbH. These principles apply mutatis mutandis to a GmbH & Co. KG.

As a result, the Guarantor's or security provider's liability under its Note Guarantee or Collateral could be materially reduced or eliminated, depending upon the law and contractual enforcement restrictions applicable to it. This could lead to a situation in which such Note Guarantee or Collateral cannot be enforced at all. It is possible that a Guarantor or security provider, or any of their creditors, or the bankruptcy trustee or other insolvency office holder in the case of a bankruptcy/insolvency of a Guarantor or security provider, may contest the validity and enforceability of the Guarantor's Note Guarantee or the security provider's Collateral on any of the above grounds and that the applicable court may determine that the Note Guarantee or Collateral should be limited or voided. To the extent that any limitations on the relevant Note Guarantees or Collateral apply, the Notes would be to that extent effectively subordinated to all liabilities of the applicable Guarantor or security provider, including trade payables of such Guarantor or security provider. Future Note Guarantees and Collateral may be subject to similar limitations.

See "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and Security Interests*."

Transfer of the Notes will be restricted, which may adversely affect the value of the Notes.

Because the Notes and the Note Guarantees have not been, and will not be, and are not required to be, registered under the U.S. Securities Act or the securities laws of any other jurisdiction, they may not be offered or sold in the United States except to QIBs in accordance with Rule 144A, outside the United States in offshore transactions in accordance with Regulation S or pursuant to another exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act and all other applicable laws. These restrictions may limit the ability of investors to resell the Notes. It is the obligation of investors in the Notes to ensure that all offers and sales of the Notes in the United States and other countries comply with applicable securities laws. See "*Transfer Restrictions*."

The Notes will initially be held in book-entry form and therefore investors must rely on the procedures of the relevant clearing systems to exercise any rights and remedies.

The Notes will initially only be issued in global certificated form and held through Euroclear and Clearstream, as applicable.

Interests in the global Notes will trade in book-entry form only, and Notes in definitive registered form, or Definitive Registered Notes (as defined herein), will be issued in exchange for book-entry interests only in very limited circumstances. Owners of book-entry interests will not be considered owners or holders of Notes. The common depositary, or its nominee, for Euroclear and/or Clearstream, as applicable, will be the registered holders of the global notes representing the Notes. Payments of principal, interest and other amounts owing on or in respect of the global notes representing the Notes will be made to the Paying Agent, which will make payments to Euroclear and/or Clearstream, as applicable. Thereafter, these payments will be credited to participants' accounts that hold book-entry interests in the global Notes representing the Notes and credited by such participants to indirect participants. After payment to the common depositary for Euroclear and Clearstream, as applicable, the Issuer, the Trustee, the Paying Agent, the Transfer Agent and the Registrar will have no responsibility or liability for the payment of interest, principal or other amounts to the owners of book-entry interests. Accordingly, if investors own a book-entry interest, they must rely on the procedures of Euroclear and/or Clearstream, as applicable, and if investors are not participants in Euroclear and/or Clearstream, as applicable, they must rely on the procedures of the participant through which they own their interest, to exercise any rights and obligations of a holder of the Notes under the Indenture.

Unlike the holders of the Notes themselves, owners of book-entry interests will not have the direct right to act upon the Issuer's solicitations for consents, requests for waivers or other actions from holders of the Notes. Instead, if an investor owns a book-entry interest, it will be permitted to act only to the extent it has received appropriate proxies to do so from Euroclear and/or Clearstream, as applicable. The procedures implemented for the granting of such proxies may not be sufficient to enable such investor to vote on a timely basis.

Similarly, upon the occurrence of an event of default under the Indenture, unless and until Definitive Registered Notes are issued in respect of all book-entry interests, if investors own book-entry interests, they will be restricted to acting through Euroclear and/or Clearstream, as applicable. The procedures to be implemented through Euroclear and/or Clearstream may not be adequate to ensure the timely exercise of rights under the Notes. See "*Book-Entry, Delivery and Form*."

There may not be an active trading market for the Notes, in which case your ability to sell the Notes will be limited.

We cannot assure you as to:

- the liquidity of any market in the Notes;
- your ability to sell your Notes; or
- the prices at which you would be able to sell your Notes.

Future trading prices of the Notes will depend on many factors, including, among other things, prevailing interest rates, our operating results and the market for similar securities. The liquidity of a trading market for the Notes may be adversely affected by a general decline in the market for similar securities. Historically, the market for non-investment grade securities has been subject to disruptions that have caused substantial volatility in the prices of securities similar to the Notes. Any such disruption may have a negative effect on you, as a holder of Notes, regardless of our prospects and financial performance.

The Initial Purchasers have advised that they intend to make a market in the Notes after completing the Offering. However, they have no obligation to do so and may discontinue market making activities at any time without notice. In addition, such market making activity will be subject to limitations imposed by the U.S. Securities Act and other applicable laws and regulations. As a result, there may not be an active trading market for the Notes. If no active trading market develops, you may not be able to resell your Notes at a fair value, if at all.

Investors may not be able to recover in civil proceedings for U.S. securities law violations.

The Issuer and certain of the Guarantors (together, the "Non-U.S. Obligors") are organized or incorporated outside the United States, and their business is substantially conducted outside the United States. A majority of the directors, managers and executive officers of the Non-U.S. Obligors are non-residents of, and substantially all of their assets are located outside of, the United States. Although the Non-U.S. Obligors will submit to the jurisdiction of certain New York courts in connection with any action under U.S. securities laws, you may be unable to effect service of process within the United States on the directors, managers and executive officers of Non-U.S. Obligors. In addition, as a substantial portion of the assets of the Non-U.S. Obligors and their subsidiaries and those of their directors, managers and executive officers are located outside of the United States, you may be unable to enforce against them judgments obtained in U.S. courts. Moreover, in light of recent decisions of the U.S. Supreme Court, actions of the Non-U.S. Obligors may not be subject to the civil liability provisions of the federal securities laws of the United States.

Additionally, there is uncertainty as to whether the courts of foreign jurisdictions would enforce (i) judgments of United States courts obtained against the Non-U.S. Obligors and the directors, managers and executive officers who are not residents of the United States predicated upon the civil liability provisions of the United States federal and state securities laws or (ii) in original actions brought in such foreign jurisdictions against us or such persons predicated upon the United States federal and state securities laws.

The United States is not currently bound by a treaty providing for reciprocal recognition and enforcement of judgments, other than arbitral awards, rendered in civil and commercial matters, with Germany. For further information see "*Service of Process and Enforcement of Civil Liabilities*."

The Issuer may not be able to repurchase the Notes upon a change of control. In addition, under certain circumstances, the Issuer may have the right to purchase all outstanding Notes in connection with a tender offer, even if certain holders do not consent to the tender.

If a change of control (as defined in the Indenture) occurs, the Issuer will be required to make an offer to purchase all the outstanding Notes at a price equal to 101% of the principal amount thereof, plus any accrued and unpaid interest and additional amounts, if any, to, but excluding, the date of purchase. In such a situation, the Issuer may not have enough funds to pay for all of the Notes that are tendered under any such offer. If a significant principal amount of Notes is tendered, the

Issuer will likely have to obtain financing to pay for the tendered Notes. However, the Issuer may not be able to obtain such financing on acceptable terms, if at all. A change of control may also result in a mandatory prepayment under the Senior Secured Credit Facilities Agreement and any other agreements governing any future indebtedness and may result in the acceleration of such indebtedness. Any failure by the Issuer to offer to purchase the Notes upon a change of control would constitute a default under the Indenture, which would, in turn, constitute a default under the Senior Secured Credit Facilities Agreement.

The change of control provision contained in the Indenture may not necessarily afford you protection in the event of certain important corporate events, including reorganizations, restructurings, mergers, recapitalizations or other similar transactions involving us that may adversely affect you, because such corporate events may not involve a shift in voting power or beneficial ownership or, even if they do, may not constitute a change of control as defined in the Indenture.

In addition, in connection with certain tender offers for the Notes, if holders of not less than 90% in aggregate principal amount of the applicable outstanding Notes validly tender and do not withdraw such Notes in such tender offer and the Issuer, or any third party making such a tender offer in lieu of such Issuer, purchases, all of the Notes validly tendered and not withdrawn by such holders, the Issuer or such third party will have the right to redeem the Notes that remain outstanding in whole, but not in part, following such purchase at a price equal to the price offered to each other holder of Notes. See "*Description of the Notes—Optional Redemption*."

The term "all or substantially all" in the context of a change of control has no clearly established meaning under relevant law and is subject to judicial interpretation such that it may not be certain that a change of control has occurred or will occur.

Upon the occurrence of a transaction that constitutes a change of control under the Indenture, the Issuer will be required to make an offer to repurchase all outstanding Notes tendered. The definition of "change of control" in the Indenture will include (with certain exceptions) a disposition of all or substantially all of the assets of the Issuer and its restricted subsidiaries (taken as a whole), to any person. Although there is a limited body of case law interpreting the phrase "all or substantially all," it has no clearly established meaning under relevant law, varies according to the facts and circumstances of the subject transaction and is subject to judicial interpretation. Accordingly, in certain circumstances, there may be a degree of uncertainty in ascertaining whether a particular transaction would involve a disposition of "all or substantially all" of the assets of a person, and therefore it may be unclear whether a change of control has occurred and whether the Issuer is required to make an offer to repurchase the Notes.

We may dispose of certain assets or capital stock of entities in the Group.

We may have an interest in pursuing acquisitions, divestitures, financings, or other transactions that, in our judgment, would be beneficial to us, even if such transactions might involve risks to you as noteholders. For example, pursuant to the provisions of the Senior Secured Credit Facilities Agreement and the Indenture, we may, under certain circumstances, sell, convey, transfer or otherwise dispose of material assets of the Group and, if meeting certain leverage ratios on a *pro forma* basis, distribute some or all of the proceeds therefrom to our shareholders. Such a transaction would not constitute a change of control or a default under the terms of the Notes. See "*Description of the Notes—Certain Covenants—Limitation on Restricted Payments*." Additionally, we may issue, sell transfer or otherwise dispose of the capital stock of entities in the Group for purposes of taking a dividend or distribution that would benefit us but not benefit you as a noteholders.

Credit ratings may not reflect all risks, are not recommendations to buy or hold securities and may be subject to revision, suspension or withdrawal at any time.

One or more independent credit rating agencies may assign credit ratings to the Notes. The credit ratings address our ability to perform our obligations under the terms of the Notes and credit risks in determining the likelihood that payments will be made when due under the Notes. The ratings may not reflect the potential impact of all risks related to the structure, market, additional risk factors discussed above and other factors that may affect the value of the Notes. A credit rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal by the rating agency at any time. No assurances can be given that a credit rating will remain constant for any given period of time or that a credit rating will not be lowered or withdrawn entirely by the credit rating agency if, in its judgment, circumstances in the future so warrant. A suspension, reduction or withdrawal at any time of the credit rating assigned to the Notes by one or more of the credit rating agencies may adversely affect the cost and terms and conditions of our financings and could adversely affect the value and trading of the Notes.

Certain covenants and events of default will be suspended if we receive investment grade ratings.

The Indenture will provide that, if at any time following the date of the Indenture, the Notes issued under such Indenture receive any two of the following ratings: Baa3 or higher from Moody's, BBB- or higher from S&P or BBB- or higher from Fitch, and no default or event of default has occurred and is continuing, then beginning that day and continuing until such time as such Notes are no longer rated investment grade by either rating agency, certain covenants will cease to be applicable to such Notes. See "*Description of the Notes—Certain Covenants—Suspension of Covenants on Achievement of Investment Grade Status*." At any time when these covenants are suspended, we will be able to, among other things, incur additional indebtedness, pay cash dividends and redeem subordinated indebtedness without restriction, each of which may conflict with the interests of holders of the Notes. There can be no assurance that the Notes will ever achieve an investment grade rating or that any such rating if achieved will be maintained.

The Notes may not become or remain listed on the Official List of the Exchange.

Application will be made to the Authority for the listing of and permission to deal in the Notes on the Official List of the Exchange. However, there can be no assurance that the Notes will become or remain listed on the Official List of the Exchange. If the Issuer cannot maintain the listing on the Exchange and the admission to dealing on the Official List thereof, or if it becomes unduly burdensome to make or maintain such listing, the Issuer may cease to make or maintain such listing on the Official List of the Exchange. Listing of any of the Notes on the Official List of the Exchange does not imply that a public offering of any of the Notes in the Channel Islands or the Isle of Man has been authorized. Although no assurance is made as to the liquidity of the Notes as a result of listing on the Official List of the Exchange or another recognized listing exchange for comparable issuers, failure to be approved for listing of the Notes on the Official List of the Exchange or another recognized listing exchange or the delisting of the Notes from the Official List of the Exchange or another listing exchange may have an adverse effect on a holder's ability to resell Notes in the secondary market.

Interest paid on the Notes may be treated as U.S. source interest, in which case 30% U.S. withholding tax may apply unless a non-U.S. holder qualifies for an exemption from such withholding tax.

A portion of the net proceeds of this offering is expected to be on-lent by the Issuer to a U.S. subsidiary of the Issuer and used in the United States to repay existing debt of such subsidiary. As a result, the IRS could argue that the issuance of the Notes, together with the contemplated on-lending, is a tax avoidance plan and that interest on the Notes is U.S. source interest, which if paid to a non-U.S. holder is subject to withholding tax at 30% unless the non-U.S. holder qualifies for an applicable exemption. We will not be required to pay any additional amounts with respect to amounts so withheld. See *"Certain Tax Consequences—Certain U.S. Federal Income Tax Considerations—Possible Alternative Tax Treatment of the Notes"* for a discussion of these potential U.S. federal income tax consequences and of certain related acknowledgements, representations, and agreements that each holder and beneficial owner of the Notes will be deemed to have made by its purchase and acceptance of the Notes.

You may face foreign currency exchange risks as a result of investing in the Notes if you are a U.S. investor.

The Notes will be denominated and payable in euro. If you are a U.S. investor, an investment in the Notes will entail foreign exchange related risks due to, among other factors, possible significant changes in the value of the euro relative to the U.S. dollar because of economic, political and other factors over which we have no control. Depreciation of the euro against the U.S. dollar could cause a decrease in the effective yield of the Notes below their stated coupon rates and could result in a loss to you on a U.S. dollar basis. Investments in the Notes denominated in a currency other than U.S. dollars, by U.S. Holders (as defined in "*Certain Tax Consequences—Certain U.S. Federal Income Tax Considerations*") may also have important tax consequences as a result of foreign exchange gains or losses. See "*Certain Tax Consequences—Certain U.S. Federal Income Tax Considerations*" for more information.

The Indenture will not be qualified under the U.S. Trust Indenture Act of 1939, as amended.

The Indenture will not be required to, and will not be, qualified under the U.S. Trust Indenture Act of 1939, as amended (the "TIA") and will not incorporate or include and will not be subject to any of the provisions of the TIA. Consequently, the holders of the Notes will not be entitled to the protections provided under the TIA to holders of debt securities issued under a qualified indenture, including those respecting preferential collections by the trustee or conflicting interests of the trustee. See "*Description of the Notes*."

Holders of the Notes may have adverse tax consequences in the event of an IPO Debt Pushdown.

Under certain circumstances, we may undertake an IPO Debt Pushdown (as described under "*Description of the Notes—IPO Debt Pushdown*"), pursuant to which the Issuer is entitled to give notice that the terms of the Indenture and other Notes Documents (as defined herein) will automatically operate so that, among other things the Issuer (and all related provisions) will now refer to the IPO Pushdown Entity and its Restricted Subsidiaries. In such event, each holding company of the IPO Pushdown Entity would be released from its obligations under the Indenture. Such a modification to the terms of the Notes could be treated for U.S. federal income tax purposes as a deemed exchange of (i) the Notes as in place prior to such modifications for (ii) new Notes as in place after such modifications ("New Notes"). If such modifications resulted in a deemed exchange, such a deemed exchange could be treated as a taxable transaction for U.S. federal income tax purposes in which certain beneficial owners of the Notes could be required to recognize gain or loss. Furthermore, for U.S. federal income tax purposes the New Notes deemed issued in such a deemed exchange could be treated as issued with original issue discount.

In such event, U.S. Holders (as defined under "*Certain Tax Consequences—Certain U.S. Federal Income Tax Considerations*") would be required to include that original issue discount in their income as it accrues, in advance of the receipt of cash corresponding to such income. U.S. Holders should consult their own tax advisors as to the U.S. federal income tax considerations relating to modification of the Notes in connection with the IPO Debt Pushdown, including the U.S. federal income tax considerations of a deemed exchange and resulting original issue discount, if any.

THE TRANSACTIONS

The Transactions

The Acquisition

On August 16, 2021, CTEC III GmbH ("Bidco"), an entity beneficially owned by a consortium led by funds advised by BC Partners and CPP Investments (the "Sponsors"), entered into the Acquisition Agreement with CTEC Acquisition S.à r.l., (the "Seller") to acquire all the issued and outstanding capital stock of the Target (the "Acquisition"). In addition, the existing shareholder loan (the "Existing Shareholder Loan") granted by the Seller as lender to CeramTec Bondco GmbH will be transferred on or about the Acquisition Date, to Bidco as lender in connection with the Acquisition. We currently expect the Acquisition to complete by February 28, 2022, subject to the satisfaction of certain closing conditions, which include receipt of the approval by relevant merger and foreign investment control authorities. Under the terms of the Acquisition Agreement, Bidco has agreed to take all necessary steps to obtain the required clearances with regard to certain entities. If closing has not occurred by April 16, 2022 or by such other date as agreed by the parties to the Acquisition Agreement (the "Acquisition Longstop Date"), the Acquisition Agreement may be terminated, or if the actions to be undertaken at the scheduled date of consummation of the transaction are not conducted by one of the parties, the other party may withdraw from the Acquisition Agreement.

The Acquisition Agreement contains customary warranties given by the Seller as to capacity, title and certain business matters as well as customary covenants given by the Seller regarding, among other things, the conduct of the business and affairs of the Target Group pending consummation of the Acquisition. The Seller's liability for any breach of a warranty is subject to certain thresholds and limitations.

The Issuer will indirectly acquire the Target through its subsidiary, Bidco. See "*—Summary Corporate and Financing Structure*." Prior to the Acquisition Closing Date, the Issuer will not have control over the Target Group and the Target's board will be required to manage the Group under its own responsibility and in a manner that is in the best interests of the Target Group. See "*Risk Factors—Risks Related to the Transactions—The Issuer does not currently control the Target Group and will not control the Target Group until the Acquisition Closing Date*."

Sources and Uses for the Acquisition

The funding for the consideration payable for the Acquisition, the repayment of certain existing debt of the Target Group, including the outstanding indebtedness under the Existing Credit Facilities and the Existing Notes, and the payment of related fees and expenses and other costs related to the Transactions consist of proceeds from the following sources:

- equity contributions from the Sponsors and other co-investors to the Issuer in the form of subscription to ordinary equity shares of the Issuer equaling approximately €1,888 million and contributed to Bidco through intermediate holding companies (the "Equity Contribution");
- drawings under the Senior Term Facility in an aggregate amount of €1,430 million; and
- the proceeds from the Offering of the Notes offered hereby.

The notional sources and uses necessary to consummate the Transactions are shown in the table below. Actual amounts will vary from estimated amounts depending on several factors, including the actual Acquisition Closing Date, the actual purchase price for the Acquisition, the amount of cash available to the Target Group, the actual amount of existing indebtedness of the Target Group being repaid and actual amounts outstanding under the Existing Credit Facilities, Existing Notes and other existing indebtedness of the Target Group on the Acquisition Closing Date (including any accrued and unpaid interest thereon and any other prepayment premiums), any fluctuations in currency exchange rates for amounts not denominated in euro, the amount of the Equity Contribution or other available sources of cash and differences between estimated and actual fees and expenses related to the Transactions. In particular, the purchase price under the Acquisition Agreement is subject to certain notified cash leakage items and certain other adjustments required under the Acquisition Agreement. Any changes in these amounts may be funded through other sources available to the Group, including drawings under the Revolving Credit Facility or other cash sources. The table below should be read in conjunction with "*Capitalization*" and "*The Transactions*."

Sources of Funds	Amount	Uses of Funds	Amount
(in € million, unaudited)			
Senior Term Facility[1]	1,430	Total cash consideration for Acquisition and repayment of existing debt[4]	3,719
Notes offered hereby[2]	515	Transaction fees and expenses[5]	114
Equity Contribution[3]	1,888		
Total sources	3,833	**Total uses**	3,833

(1) Represents the euro-equivalent aggregate principal amount we expect to draw under the Senior Term Facility on or about the Acquisition Closing Date. In connection with the Transactions, Bidco is expected to enter into a Senior Secured Credit Facilities Agreement which will provide for up to €1,680.0 million (equivalent) of committed facilities, including (i) the Senior Term Facility in the amount of up to €1,430.0 million and (ii) a €250.0 million Revolving Credit Facility. See "*Description of Certain Financing Arrangements—Senior Secured Credit Facilities Agreement*." Any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Revolving Credit Facility.

(2) Represents the estimated gross proceeds of the Notes offered hereby.

(3) Represents the expected Equity Contributions from the Sponsors and other co-investors to the Issuer in the form of subscription to ordinary equity shares of the Issuer. The amount of the Equity Contribution may be reduced by the amount of cash available to the Target Group on the Acquisition Closing Date to prepay or redeem amounts outstanding under the Existing Credit Facilities and the Existing Notes.

(4) Represents the agreed consideration payable to the Seller pursuant to the Acquisition Agreement, as adjusted for our estimates of certain notified cash leakage items and certain other adjustments required under the Acquisition Agreement, and the estimated amount to prepay or redeem in full all outstanding net indebtedness under the Existing Credit Facilities and the Existing Notes. Actual consideration paid on the Acquisition Closing Date will vary due to factors, including, among others, the date of consummation of the Acquisition, the amount of cash available to the Target Group, the amount of Target Group cash that is used to repay existing indebtedness, the amount of accrued interest on the Existing Credit Facilities and the Existing Notes from September 30, 2021 to the Acquisition Closing Date and any adjustments to the cash consideration paid pursuant to the Acquisition Agreement on the Acquisition Closing Date.

(5) Represents estimated fees and expenses associated with the Transactions, including commitment, underwriting, financial advisory, legal, accounting, ratings advisory, other advisory fees, consortium fees, and other transaction costs and professional fees (but excluding net interest expense and other fees that will accrue on proceeds of the Notes while held in the Escrow Account). These fees and expenses have been estimated as of the date of this offering memorandum and are subject to change.

Escrow Account

Pending the consummation of the Acquisition, the Initial Purchasers will deposit the gross proceeds from the Offering into the Escrow Account in the name of the Issuer. The initial funds deposited in the Escrow Account, and all other funds, securities, interest, dividends, distributions and other property and payments credited to the Escrow Account (less any property and/or funds paid in accordance with the Escrow Agreement) is referred to as the "Escrowed Property." The Escrow Account will be controlled by the Escrow Agent and will be pledged on a first-priority basis in favor of the Trustee on behalf of the holders of the Notes pending release or special mandatory redemption as described below. See "*Summary—The Offering—Collateral*." The release of the Escrowed Property from the Escrow Account is subject to the satisfaction of certain conditions, including that the funds required to pay the consideration for the Acquisition will be applied within five business days. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*." If these conditions are not satisfied on or before the Escrow Longstop Date or upon the occurrence of certain other events, the Notes will be subject to a special mandatory redemption. The special mandatory redemption price for the Notes will be equal to 100% of the aggregate issue price of the Notes plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the date of such special mandatory redemption. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*" and "*Risk Factors—Risks Related to the Transactions—If the conditions precedent to the release of the Escrowed Property are not satisfied, the Issuer will be required to redeem the Notes, but the Escrow Account may not have sufficient funds to cover such redemption without relying on funding from the Parent*."

In the event of a special mandatory redemption, the Parent will have committed to fund the Issuer in such aggregate amounts as are required in order to enable the Issuer to pay any funding shortfall, including Escrow Account fees, negative interest on the Escrow Account's balances, costs and accrued and unpaid interest and additional amounts, if any, owing to the holders of the Notes on such special mandatory redemption date. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption" and "Risk Factors—Risks Related to the Transactions—If the conditions precedent to the release of the Escrowed Property are not satisfied, the Issuer will be required to redeem the Notes, but the Escrow Account may not have sufficient funds to cover such redemption without relying on funding from the Parent*."

USE OF PROCEEDS

We expect that the gross proceeds from the Offering will be €515 million. The gross proceeds from the Offering of the Notes, together with borrowings under the Senior Term Facility and the proceeds from the Equity Contribution will be used to (i) fund the consideration payable for the Acquisition and repay certain existing net indebtedness of the Target Group, including amounts outstanding under the Existing Credit Facilities and the Existing Notes, and (ii) pay the fees and expenses incurred in connection with the Transactions.

The notional sources and uses necessary to consummate the Transactions are shown in the table below. Actual amounts will vary from estimated amounts depending on several factors, including the actual Acquisition Closing Date, the actual purchase price for the Acquisition, the amount of cash available to the Target Group, the actual amount of existing indebtedness of the Target Group being repaid and actual amounts outstanding under the Existing Credit Facilities, Existing Notes and other existing indebtedness of the Target Group on the Acquisition Closing Date (including any accrued and unpaid interest thereon and any other prepayment premiums), any fluctuations in currency exchange rates for amounts not denominated in euro, the amount of the Equity Contribution or other available sources of cash and differences between estimated and actual fees and expenses related to the Transactions. In particular, the purchase price under the Acquisition Agreement is subject to certain notified cash leakage items and certain other adjustments required under the Acquisition Agreement. Any changes in these amounts may be funded through other sources available to the Group, including drawings under the Revolving Credit Facility or other cash sources. The table below should be read in conjunction with "*Capitalization*."

Sources of Funds	Amount	Uses of Funds	Amount
(in € million, unaudited)			
Senior Term Facility[1]	1,430	Total cash consideration for Acquisition and repayment of existing debt[4]	3,719
Notes offered hereby[2]	515		
Equity Contribution[3]	1,888	Transaction fees and expenses[5]	114
Total sources	**3,833**	**Total uses**	**3,833**

(1) Represents the euro-equivalent aggregate principal amount we expect to draw under the Senior Term Facility on or about the Acquisition Closing Date. In connection with the Transactions, Bidco is expected to enter into a Senior Secured Credit Facilities Agreement which will provide for up to €1,680 million (equivalent) of committed facilities, including (i) the Senior Term Facility in the amount of up to €1,430 million and (ii) a €250 million Revolving Credit Facility. See "*Description of Certain Financing Arrangements—Senior Secured Credit Facilities Agreement*." Any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Revolving Credit Facility.

(2) Represents the estimated gross proceeds of the Notes offered hereby.

(3) Represents the expected Equity Contributions from the Sponsors and other co-investors to the Issuer in the form of subscription to ordinary equity shares of the Issuer. The amount of the Equity Contribution may be reduced by the amount of cash available to the Target Group on the Acquisition Closing Date to prepay or redeem amounts outstanding under the Existing Credit Facilities and the Existing Notes.

(4) Represents the agreed consideration payable to the Seller pursuant to the Acquisition Agreement, as adjusted for our estimates of certain notified cash leakage items and certain other adjustments required under the Acquisition Agreement, and the estimated amount to prepay or redeem in full all outstanding net indebtedness under the Existing Credit Facilities and the Existing Notes. Actual consideration paid on the Acquisition Closing Date will vary due to factors, including, among others, the date of consummation of the Acquisition, the amount of cash available to the Target Group, the amount of Target Group cash that is used to repay certain existing indebtedness, the amount of accrued interest on the Existing Credit Facilities and the Existing Notes from September 30, 2021 to the Acquisition Closing Date and any adjustments to the cash consideration paid pursuant to the Acquisition Agreement on the Acquisition Closing Date.

(5) Represents estimated fees and expenses associated with the Transactions, including commitment, underwriting, financial advisory, legal, accounting, ratings advisory, other advisory fees, consortium fees, and other transaction costs and professional fees (but excluding net interest expense and other fees that will accrue on proceeds of the Notes while held in the Escrow Account). These fees and expenses have been estimated as of the date of this offering memorandum and are subject to change.

CAPITALIZATION

The following table sets forth the cash on hand and bank balance and the capitalization of (i) the Target as of September 30, 2021 on an actual basis and (ii) the Issuer as of September 30, 2021 as adjusted to give effect to the completion of the Acquisition and the other Transactions, including the application of the proceeds from the Offering as described in, and subject to the assumptions of, "*Use of Proceeds*," as if these events had occurred on September 30, 2021, unless otherwise described below, in each case, on the basis of IFRS. The adjustments are based on available information and contain assumptions made by our management. The actual amount of cash and cash equivalents as of the Issue Date may vary from this amount due to a number of factors, including as a result of the amount of consideration paid on the Acquisition Closing Date. Amounts of indebtedness shown in the following table represent principal amounts and exclude letters of credit and operational guarantees.

You should read this table in conjunction with "*Presentation of Financial and Other Information*," "*Use of Proceeds*," "M*anagement's Discussion and Analysis of Financial Condition and Results of Operations*," "*Description of Certain Financing Arrangements*," "*Description of the Notes*" and the Financial Statements included elsewhere in this offering memorandum.

	As of September 30, 2021	
	Target Group Actual	**Group As Adjusted**
(€ million)		
Cash and cash equivalents(1)	**276.0**	**—**
Senior Secured Credit Facilities(2)	—	1,430
Existing Credit Facilities(3)	1,198	—
Total senior secured indebtedness	**1,198**	**1,430**
Notes offered hereby(4)	—	515
Existing Notes(5)	406	—
Leases (IFRS 16)(6)	12	12
Other existing third-party indebtedness(7)	2	2
Total third-party indebtedness	**1,618**	**1,959**
Subordinated shareholder funding(8)	274	—
Shareholders' Equity(9)	241	1,888
Total capitalization	**2,133**	**3,847**

(1) The adjustment to cash and cash equivalents as of September 30, 2021 represents the netting of such cash against the existing indebtedness under the Existing Credit Facilities and the Existing Notes, which is expected to be used in connection with the Transactions. As adjusted cash and cash equivalents does not include any cash generated by the Target Group from September 30, 2021 to the Acquisition Closing Date. The consideration paid in connection on the Acquisition Closing Date and actual cash and cash equivalents following the Transactions will vary. See "*Use of Proceeds*."

(2) Represents the aggregate principal amount we expect to draw under the Senior Term Facility on or about the Acquisition Closing Date. We also expect to have up to €250 million (equivalent) available under the Revolving Credit Facility on or about the Acquisition Closing Date. See "*Description of Certain Financing Arrangements—Senior Secured Credit Facilities Agreement*." Any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Revolving Credit Facility. See "*Use of Proceeds*."

(3) Represents the aggregate principal amount outstanding under the Existing Credit Facilities Agreement, excluding accrued and unpaid interest of €2.7 million as of September 30, 2021 and accrued transaction costs.

(4) Represents the aggregate principal amount of the Notes offered hereby.

(5) Represents the aggregate principal amount outstanding under the Existing Notes, excluding accrued and unpaid interest of €2.7 million as of September 30, 2021 and accrued transaction costs.

(6) Represents the carrying amount of current and non-current lease liabilities as presented in the notes to the Unaudited Interim Financial Statements as of September 30, 2021. The as adjusted carrying amount represents the carrying amount as of September 30, 2021 as well and has not been revalued for this purpose.

(7) Represents the remaining part of the carrying amount of non-current and current liabilities to banks of the Target Group as of September 30, 2021. See notes 4.10 and 4.12 to the Unaudited Interim Financial Statements included elsewhere in this offering memorandum for further information. The as adjusted carrying amount represents the carrying amount as of September 30, 2021 as well and has not been revalued for this purpose.

(8) Represents the aggregate principal amount of the Existing Shareholder Loan, excluding accrued and unpaid interest of €15.1 million as of September 30, 2021. The Existing Shareholder Loan was granted by the Seller as lender to the Target as borrower, which on or about the Acquisition Closing Date, will be transferred to Bidco as lender in connection with the Transactions.

(9) As adjusted shareholders' equity represents the sum of the expected Equity Contributions from the Sponsors, other co-investors and management in connection with the Transactions, and the existing equity of the Issuer. The Equity Contribution will be contributed to the Issuer in the form of subscription to ordinary equity shares of the Issuer. The amount of the equity contributions from the Sponsors, and certain other co-investors, in each case, may be increased or decreased in the amount of cash available to the Target Group on the Acquisition Closing Date to prepay or redeem amounts outstanding under the Existing Credit Facilities and the Existing Notes, or if the amount of existing indebtedness of the Target Group, fees and expenses are greater or less than our current estimate. See "*Use of Proceeds*."

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is a discussion and analysis of our financial condition and results of operations that our management believes is relevant to an assessment and understanding of our historical consolidated financial position and results of operations and addresses periods prior to the consummation of the Transactions. All of the historical financial information presented in this offering memorandum are that of the Target and its consolidated subsidiaries. Accordingly, all references to "we," "us," "our" or similar terms in respect of historical financial information in this offering memorandum are to the Target and its consolidated subsidiaries collectively. You should read this discussion in conjunction with the Financial Statements included elsewhere in this offering memorandum and the sections in this offering memorandum titled "Presentation of Financial and Other Information" and "Selected Historical Financial Information." The Target's historical results are not necessarily indicative of the results that should be expected in the future, and its interim results are not necessarily indicative of the results that should be expected for the year ended December 31, 2021 or any other future period.

The statement of comprehensive income and consolidated statement of cash flows information of the Target for the year ended December 31, 2018 include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018."

The following discussion of our results of operations also makes reference to certain Non-IFRS Measures. Prospective investors should bear in mind that these Non-IFRS Measures are not financial measures defined in accordance with IFRS, may not be comparable to other similarly titled measures of other companies, have limitations as analytical tools and should not be considered in isolation or as a substitute for analysis of our operating results as reported under IFRS. See "Presentation of Financial and Other Information—Non-IFRS Financial Measures."

The discussion and analysis of historical periods do not reflect the significant impact that the Transactions will have on our financial position, results of operations and cash flows, including the impact of purchase accounting (including changes in depreciation and amortization). In addition, the statements in the discussion and analysis regarding industry outlook, our expectations regarding the performance of our business and other forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to, the risks and uncertainties described in "Risk Factors." and "Forward-Looking Statements." Our actual results may differ materially from those contained in or implied by any forward-looking statements. You should read the following discussion and analysis together with the sections entitled "Presentation of Financial Information," and "Risk Factors" and the Audited Financial Statements, including the accompanying notes, which appear elsewhere in this offering memorandum. No financial information of the Issuer has been included in this offering memorandum. See "Presentation of Financial Information".

Overview

We are a leading global med-tech platform with a focus on high performance ceramics ("HPC") solutions. Our HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological, mechanical, thermal, chemical, electric, magnetic or optical properties compared to competing products made from metal, alloys of cobalt and chrome or polymers (plastics). We have been engaged in the HPC industry for over 100 years, with operational expertise and experience in creating innovative system solutions for longstanding customers at an industrial scale. We offer hip joint prostheses components, dental implants and a growing range of other adjacent medical products to serve our Medical markets. We believe that our BIOLOX® brand has become the "gold-standard" for ceramic hip replacement implants. Based on the number of implants sold globally, on average a hip joint replacement with a BIOLOX® component is implanted every 30 seconds. We are focused on broadening our Medical portfolio and relationships, complemented by our Industrials product portfolio, which offers a wide range of HPC solutions to mobility markets, electronics markets and industrial applications markets, including actuators in engine valves for fuel injection systems, high-end substrates for power electronics, high speed cutting tools and sensoring solutions for different applications. Our end-market driven approach in our Industrials markets strives to actively focus on themes for development in the largest and most attractive industrial segments while our growth strategy in the Medical markets centers on organic growth and M&A, particularly in dental, orthopedics, complementary materials and digital solutions.

Our leading R&D infrastructure with over 600 patents and over 200 trademarks, as well as more than 150 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally enables us to stay at the forefront of innovation. Throughout our R&D activities, we closely collaborate with customers during the entire development and commercialization cycle of our products and become embedded within our customers' innovation processes by offering value-added solutions. Within the last five years, we have introduced many new products including key innovations in areas of new materials and processes as well as new medical solutions, such as BIOLOX CONTOURA®, a new generation of licensed ball heads cleared for marketing by certain of our customers by the U.S. Food and Drug

Administration ("FDA") for use in certain prosthetic hip replacements without bone cement, and a ceramic core for the Simplify®Disc spinal disc implant by Simplify Medical (now part of the NuVasive group). Simplify®Disc received FDA approval for use in certain 1-level implants in 2020, and approval for use in certain 2-level implants in 2021.

Although 63.6% of our revenue was generated from customers based in Europe for the twelve months ended September 30, 2021, 19.7% of which was generated with customers based in Germany, we have a global infrastructure with production facilities in 11 countries across Europe, North America, Asia and South America, and over 3,400 full-time equivalent ("FTE") employees as of September 30, 2021. Further, many of our customers have a strong export-focus which positions us as a company with a global sales footprint.

For the twelve months ended September 30, 2021, we generated revenue of €629.4 million. The Issuer's Pro Forma Adjusted EBITDA for the twelve months ended September 30, 2021 was €275.9 million. Our Cash Conversion Ratio consistently remained above 80% during the last two years.

Our operations focus on two markets: Medical markets and Industrials markets.

Medical Markets

We develop and manufacture advanced ceramics, which are designed to perform their functions in critical medical applications, including hip replacements, other orthopedic implants and dental implants to serve Medical markets. In these markets, we primarily focus on ceramic components for hip joint prostheses, such as ball heads and cup inserts used in hip replacement procedures.

We believe that practitioners recognize our HPC components for medical implants, namely in hips, as a superior solution with proven benefits versus other materials such as metal alloys of cobalt and chrome. As a result, ceramic materials are replacing traditional materials for hip joint prosthetic components such as metal which have documented safety concerns and can trigger physical reactions in patients including, for example, allergic reactions resulting from metal sensitivity. In particular, HPC components are not only highly biocompatible, but also extremely wear resistant and durable and thus, have the ability to improve patients' lives through appropriate immunological response, corrosion resistance, infection prevention, lowest wear of all bearings and best clinical outcomes. Consequently, ceramics penetration in global medical implant markets is steadily rising leading to increased growth for our ceramic components. More than 20 million of our BIOLOX® ceramic components have been implanted in patients globally as of the date of this offering memorandum. We estimate that nearly one in two hip joint implant systems sold worldwide includes at least one ceramic component. Our customers are orthopedic implant OEMs, including the top orthopedic implant OEMs who together have a strong presence in the global hip implant market. We believe that our BIOLOX® brand has come to symbolize high quality and innovation and is increasingly preferred by surgeons and other medical professionals. We believe that in the future, the superior characteristics of ceramic materials will drive the rapidly growing market for dental implants, in which we have been active for many years and are further ramping up our presence with our DENSILOX® and ZERAMEX® brands. The penetration of ceramics in the dental implants market is rapidly increasing from a low starting point (according to a leading international consultancy firm, the ceramic share in the dental implant market in the US and EU-5 was equal to 7% in 2019) as patients not only become more focused on aesthetics and biocompatible implants, but also as new product innovations have closed the gap with titanium implants in terms of product quality, primarily relating to wearability and longevity. Since 2020, our HPC solutions have been used for spine disc implants and, over the coming years, we expect to bring our BIOLOX® technology to more orthopedic applications, such as implants for knee and shoulder. We also have a strong presence in ceramic solutions for medical equipment markets, including medical glove formers. In particular, we focus on ultrasound equipment, flow sensors, disposable medical glove formers and other applications in the medical field such as hermetic products for medical, pharmaceutical or laboratory environments.

Industrials Markets

We develop, manufacture and supply a broad range of highly specialized, performance critical HPC solutions for customers catering primarily to mobility, electronics and industrial applications to serve our Industrials markets.

We are a leading HPC manufacturer with a portfolio comprised of many different solutions used across various end-markets. Our dedicated teams of scientists and engineers collaborate closely with customers to develop tailor-made solutions and production processes to fulfill distinct functionality and performance requirements. We believe that we are one of the few advanced ceramics manufacturers with a full-range of HPC materials and manufacturing processes with a global reach. Our HPC solutions are often used in performance-critical components. For example, our cutting tools have a longer life and faster cutting speeds compared to non-HPC cutting tools, allowing our customers to save costs and reduce downtime. In mobility engineering, HPC products, including our piezo ceramic components, play a vital role in increasing safety and are increasingly being used to meet the high performance requirements of electronics components in hybrid and full electric vehicles. They also improve cost-effectiveness and enhance comfort in vehicles. Our ceramic substrates are used for a variety of purposes in the electronics and telecommunications sector, including measurement and control technology and entertainment electronics. We believe that the specialized, mission-critical nature of our solutions, our long-standing customer relationships and our highly diversified portfolio of solutions and customer base, reduce the exposure of our business to the Industrials markets to any single industry or product.

Key Factors Affecting Our Results of Operations and Financial Condition

Impact of the COVID-19 Pandemic

The global COVID-19 pandemic has had a material impact on economic activity across our markets and on our business in 2020 and the beginning of 2021. We experienced decreased volumes as non-essential surgeries were postponed and customers had to cancel orders or shift delivery dates given the lower demand from clinics. Performance in the Industrials markets has been impacted by the global industrial down-cycle since 2019 that was further exacerbated by the COVID-19 pandemic. We also experienced COVID-19 related involuntary plant closures, which negatively impacted revenue and EBITDA during 2020. As a result, revenue decreased by 22.8% from the first quarter of 2020 to the second quarter of 2020. During 2020, however, revenues from medical equipment markets were supported by a spike in market growth for our ceramic formers used in manufacturing disposable medical gloves and by sales of components for COVID-19 test kits in the second half of 2020. Overall, we experienced a decrease in revenue of 10.9% in 2020 as compared to 2019. Despite the revenue decline, our cash flow from operating activities was €163.4 million in 2020 as compared to €190.1 million in 2019. Our EBITDA margins also remained resilient in 2020 as we continued to implement various cost optimization measures. We started numerous initiatives in February 2019 to streamline our organization and focus on an Industrials market-based approach, with the aim of reducing organizational complexity and overhead costs. In addition, following the outbreak of COVID-19, we deployed further cost reduction measures including multiple employee lay-offs, and the decrease or postponement of investing outflows and capital expenditures with regard to non-essential projects. We also used short-time work for certain periods in 2020 and to a lesser degree in 2021, which significantly reduced our costs per fulltime-equivalent employee in 2020. We expect that costs will increase in 2021, partially due to the reduction of short-time work benefits. We also deferred UK VAT due to the COVID-19 pandemic. We also received government support of €1.1 million mainly comprised of short-time work related social security contributions in 2020.

Since the third quarter of 2020, we have begun to experience pre-pandemic rates of growth. Our revenue in the first quarter of 2021 were approximately 2% higher than in the first quarter of 2019 and approximately 5% higher in the second quarter of 2021 as compared to the same period in 2019. The strong performance in the nine months ended September 30, 2021 reflects surgery volumes recovering to pre-pandemic levels in most regions, key customers re-stocking and increasing orders following postponements and cancellations, and further strong ceramic penetration momentum. Year-to-date trading is benefitting from post-COVID-19 tailwinds as the result of key customers restocking and increasing orders following postponements and cancellations in 2020. In 2021, our business has experienced a clear recovery, as revenue for the nine months ended September 30, 2021 has increased by approximately 4.3% as compared to the same period in 2019. Our continued post-COVID-19 normalization has been further supported by a strong order book in 2021. Order intake in the first nine months of 2021 was higher than the equivalent periods in 2019 and 2020 and the order book in September 2021 has substantially increased as compared to our order book as of September 30, 2019 and 2020.

As a result of the significant impact of the COVID-19 pandemic on our results of operations, the comparability of our results for the year ended December 31, 2020 and the nine months ended September 30, 2020 with the relevant corresponding periods in 2019 and the comparability with future periods may be limited. See "*Summary—Recent Developments—Our Response to COVID-19*" for additional information on the measures we implemented and our financial performance following the outbreak of COVID-19.

Hip Replacement Market Growth and Ceramic Hip Implant Components Penetration

Our total revenues and operating profit are significantly influenced by the development of the market for hip replacements in general and the penetration rate for ceramic hip implants. The ceramic components we manufacture include ball heads, cup inserts and option heads (used for revisions). As of the date of this offering memorandum, more than 20 million of our BIOLOX® ceramics components have been implanted in patients globally. In 2020, we sold 1.6 million BIOLOX® hip implant components.

The following table provides a breakdown of the growth in number of ball-heads and inserts units sold for the last five years (for more information on market trends in the Medical markets, see "*Business—Our Business—Medical Markets—Artificial Hip Joint Market*"):

	2016	2017	2018	2019	2020[(a)]	CAGR 2016-2020
			(in million)			(in %)
Total number of units sold[(1)]	1.4	1.5	1.7	1.9	1.6	4.7%

(a) Our financial and other operating information for the year ended December 31, 2020 includes the impact of procedure postponements during COVID-19-related lockdowns and is expected to recover to a pre-COVID-19 growth trajectory in the near- to mid-term.

(1) On average, more than 80% of our total ceramic hip implant components sold in the last five years were ball heads. This is principally due to the lower share of the total hip implant market of ceramic-on-ceramic components compared to ceramic-on-polyethylene components.

According to a leading international consultancy firm, the total market for hip implant components is estimated to be approximately €600 million, which includes an approximately €270 million addressable market for ceramic hip implants. The total addressable market is expected to grow based on continuously growing increase in the total number of hip replacement procedures, which represents a key driver of demand for ceramic ball heads and inserts. Further, ceramic as a material is increasingly used in revisions and partial hip replacement.

In developed markets such as Europe and the United States, growth in the artificial hip joint market is primarily driven by an aging population as well as by an increase in obesity rates. Both age and obesity are significant contributors to hip joint problems. Additionally, there are indications that the younger population, those who are less than 65 years old, are electing to have primary hip replacements earlier in life so that they can maintain and enjoy an active lifestyle. Such younger patients are taking advantage of improvements in technology leading to better wearability and increased life spans of hip implant prostheses.

Similarly, growth in artificial hip joints in emerging markets also stems from an aging population and, in some countries, increased obesity. However, in developing countries there are additional drivers of growth, such as the rise in cases of osteoarthritis and osteonecrosis (reduced blood flow to bones), improved availability of medical care and prosthetic procedures coupled with increased household incomes and broader access to funded healthcare.

Our Position as Supplier of Choice for Ceramic Hip Implant Components

We have long-lasting partnerships in place with major orthopedic implant manufacturers that regularly order our hip implant components. We continue to supplement our product offering with appropriate levels of services to enhance these relationships. We have a strong market position in ceramic components for hip replacements. BIOLOX® is our key brand and product line for our orthopedics business, and we believe hip implant systems containing our BIOLOX® components have become the product of choice for surgeons around the globe. The cost of our HPC components (both ball heads and cup inserts) included in a complete hip joint implant system represents a small part of the overall costs of the total system, but are critical to the performance of these products and therefore our customers are less sensitive to the cost of such components.

We have a longstanding relationship with key hip replacement implant OEMs, including the top orthopedic implant OEMs who together have a strong presence in the global hip implant market. Our ceramic components (both ball heads and cup inserts) are critical to the overall performance of their hip implant systems. We also collaborate with our OEM customers to assist them in reaching end-users and key decision makers, which we believe has contributed to our high level of brand loyalty, characterized by a high contract renewal rate, with very low customer churn. We believe that our strategic relationship with each of the top orthopedic implant OEMs as well as with many other customers is key to our strong position in the ceramic hip replacement components market and demand from each of these customers has historically been, and is expected to continue to be, a major driver of revenue from the Medical markets.

General Macroeconomic and Other Developments in our Key Geographical Target Markets

Our sales to our customers are mostly concentrated in Europe and specifically in Germany. However, although our customers are concentrated in Europe, many of them, especially medical and mobility customers, are export oriented, global companies. Consequently, we view our business as globally diversified. We believe that our business is more exposed to North America, Asia and other regions than indicated by the split of revenues by geography provided below, due to our largest OEMs customers ordering through purchasing hubs or their respective European purchasing organizations. Although we generated 62.5% of our revenue for the year ended December 31, 2020 from sales to our direct customers in Europe, of which 20.2% were generated in Germany, we have a global infrastructure with 19 production facilities in Europe, North America, Asia and South America, and over 3,400 FTE employees as of September 30, 2021. Further, many of our customers have a strong export-focus which positions us as a company with a global sales footprint.

The following table provides an overview of our revenue by geography in the last three years as a percentage of total revenue in the given period:

	Year Ended December 31,		
	2018	2019	2020
		(unaudited)	
Europe (excluding Germany)	43.4%	43.6%	42.3%
Germany	25.3%	22.9%	20.2%
North America	13.1%	14.8%	16.5%
Asia	15.1%	16.2%	19.1%
Rest of World	3.1%	2.5%	1.9%
Total revenue	**100.0%**	**100.0%**	**100.0%**

While Medical markets revenue is not particularly affected by macroeconomic developments in our geographic markets being largely non-cyclical in nature, Industrials markets revenue is influenced by economic growth in our target markets, particularly in Europe. According to the World Bank, Germany has registered a GDP growth of 1.3% in 2018, 0.6% in 2019 and a decline of 4.9% in 2020, while GDP in the European Union grew by 2.1% in 2018, 1.6% in 2019 and declined by 6.2% in 2020. As of May 2021, the OECD projects global growth of 5.8% in 2021 (from a decline of 3.6% in 2020 according to the World Bank) which is expected to decelerate to 4.4% in 2022. The United States' GDP is projected to grow by 6.9% in 2021 and 3.6% in 2022 (from a decline of 3.5% in 2020 according to the World Bank), while the Eurozone's GDP is projected to grow at around 4.3% in 2021 and 4.4% 2022.

In addition, due to the large number of niche markets in which we operate, the effect of economic downturns in our target geographic markets has in the past been partially offset by the various different developments in Industrials markets, as demonstrated by our ability to quickly rebound from two global economic crises. Medical end-markets are typically more profitable and less susceptible to the economic cycles. As a consequence, our profitability and cash generation is more resilient and less affected by negative developments in the economies of our target markets than our overall revenue. See also "*—Impact of the COVID-19 Pandemic*" above.

Demand Cycles in Various End-Markets in the Industrials Markets

In addition to the overall GDP growth rate influencing the Industrials markets revenue, each of our industrial markets is also influenced by separate and distinct factors and has a different economic cycle. In particular, the mobility, electronics, sensoring, construction and other industrial end-markets we serve are cyclical and subject to technological changes. Demand for our products is significantly affected by the business success of our OEM customers as well as end users that purchase products from those OEM customers. For example, overall economic conditions can affect new car sales, impacting our mobility customers and thereby also influencing demand for our ceramic components in automobiles and engines.

By revenue, the mobility market was the largest single end-market among the Industrials markets, followed by the electronics market, textile, construction and various other industrial niche markets. Particularly for the mobility end-market, but also various other industrial end-markets such as construction, the economic developments in Germany and Europe have a significant effect on our revenue with Asian markets, particularly China, gaining importance. For example, effects such as government regulations and subsidies for new car sales have materially affected the automobile sector in the past, specifically in Germany and other European countries. In addition, we have in the past been affected by political and fiscal decisions, for example by decisions of the Chinese government that had an impact on the textile industry in China.

Development of New Products, Materials and Processing Technologies and Regulatory Knowledge

As a manufacturer of HPC products we believe that our continued emphasis on research and development is key to our future profitability and our reputation as a technology leader in HPC. To ensure the sustainability of our business, we continuously research and develop materials as well as manufacturing and coating processes for new products in established and new markets. Our product development is mainly focused on delivering customer driven innovations and next generation solutions. We also invest in the development of new materials and processes, such as, among others, new solutions for the hip market, the spine market, the knee market, the shoulder market and different ceramic implants for dental applications. We deliver many new products every year to customers in the Industrials markets—recent examples being new generation substrates, sensors for various applications and piezo-based innovations for a number of end-markets. We believe that the abovementioned growth investments are crucial to continued success in our target markets.

We have a strong, centralized R&D infrastructure with more than 150 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally. Our innovations play a fundamental role in our ability to maintain and grow our global market share in the different markets in which we operate. Within the last five years, we have introduced many new products including key innovations in areas of new materials and processes as well as new medical solutions. For example, in 2019 we successfully launched BIOLOX CONTOURA®, a new generation of licensed ball heads, cleared for marketing by certain of our customers by the FDA for use in certain prosthetic hip replacements without bone cement. In addition, we are in the process of launching a ceramic resurfacing solution with two ongoing projects in clinical trials and anticipate CE marking in 2022. Over the same period, we also developed and launched on the market the ceramic core for the Simplify®Disc spinal disc implant by Simplify Medical (now part of the NuVasive group). Simplify®Disc received FDA approval for use in certain 1-level implants in 2020, and approval for use in certain 2-level implants in 2021. In 2020, our R&D expenses were €20.6 million, equal to 3.7% of revenue. We expect that modification, innovation and new product design will continue to be a key driver of our success in the future.

We also created a strong regulatory team with a deep understanding of all relevant regulatory requirements for medical implants in all key markets in which we operate. Our understanding of these requirements and the consequent ability to support our customers thereon is highly valued in all regions in which we operate.

Expansion through Acquisitions and Growth Investment

We have over the past years engaged in M&A activity to strategically grow our business. In April 2017, we acquired the UK electro-ceramics business from Morgan Advanced Materials plc, which produces integrated piezo components. Further, on January 4, 2021, we acquired Dentalpoint AG, a corporation based in Spreitenbach, Switzerland, supporting our investment in the fast-growing future market for ceramic dental implants and further expanding our offering within the Medical markets. In addition to growth through strategic acquisitions, we have in the past invested substantially in our infrastructure and machinery in order to maintain and expand our production capabilities and provide, particularly our Medical customers, the safety of a multi-step production strategy assisted by the ability to quickly respond to changing volume requirements. A further focus of our investment strategy are various digitalization initiatives.

Cost Effectiveness through Simplification of businesses and Business Excellence Initiatives

In order to improve our earnings and cash flows, we continue to implement measures to increase organizational cost effectiveness and drive productivity across all businesses. This includes a comprehensive reorganization started in 2016, where we streamlined our commercial units to focus on Industrials end-markets and consolidated our operations in Europe. We continuously invest into automation, streamlined processes in production as well as indirect areas and new product launches (including ceramic dental implants) targeted to the Medicals markets. We also implemented a number of measures aimed at increasing cost efficiency during the COVID-19 pandemic. See "—*Impact of the COVID-19 Pandemic*" above for further details.

We operate our company on a lean management, flat hierarchy philosophy and have not substantially increased the size of our administrative team for many years despite our growth in revenue. We have a centrally coordinated, structured program in place, that aims to continuously improve our product quality, productivity and the efficiency of our manufacturing processes, as well as to improve the cost effectiveness of research and development, sales, and administrative functions. In addition, we have implemented commercial excellence initiatives to improve customer focus, cross selling and commercial delivery, through implementation of a structured opportunity management process, including the implementation of customer relationship management and the education of our sales force.

Price Development

We maintain a pricing strategy that reflects our position as innovation leader with unrivalled clinical and quality track record in our core Medical markets. Our pricing also takes into account our close relationship with our customers, the significant loyalty of medical professionals to our proven product solutions and our strong regulatory understanding of all relevant processes.

We are also among the market leaders in many of the industrial niche markets that we target. Most of our main HPC competitors have either a different target market or geographical focus. Additionally, due to the large variety of our products, we are the sole supplier of certain specialized products in certain niche areas. However, specifically in the mobility and electronics markets, customers regularly stipulate annual cost improvements, which we aim to compensate with selected price increases in other markets as well as through the implementation of regular productivity improvements on an annual basis.

Seasonality

Our business is moderately affected by seasonal volatility in order volumes. We register a slight slowdown of new orders in the summer months and in December, related mainly to procurement and supply chain management of our customers, mainly medical OEMs. However, due to the diversification across a large number of products sold and our global geographic footprint, the fluctuations in revenue on a quarter-by-quarter basis we experience over the course of a year are similar from year to year and moderately low. Our revenue is usually strongest in the first quarter of a year and lowest in the fourth quarter. The slowdown in the summer and at the end of December is also driven by the impact of vacation at our production sites and year-end holidays.

Factors Affecting Comparability of Our Financial Statements

The Acquisition of Ceramtec Holding GmbH in 2018

On March 8, 2018, CeramTec Holding and its subsidiaries was acquired by CeramTec AcquiCo, a wholly owned, indirect subsidiary of the Target. The statement of comprehensive income and consolidated statement of cash flows information of the Target for the year ended December 31, 2018 include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income and consolidated statement of cash flows for the year ended December 31, 2018 are not directly comparable to the statement of comprehensive income or consolidated statement of cash flows for any subsequent period. See "*Presentation of Financial and Other Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

The Acquisition of Dentalpoint AG

On January 4, 2021, we acquired Dentalpoint AG, a corporation based in Spreitenbach, Switzerland, supporting our investment in the fast-growing future market for ceramic dental implants and further expanding our Medical product offering. The preliminary purchase price of €51.0 million was paid using cash and cash equivalents, while, following a reduction agreed in September 2021, the final purchase price equaled €49.9 million as a result of post-closing adjustments (or €49.0 million, net of cash and cash equivalents taken over). As a result, our consolidated financial information may not be comparable following the date of such acquisition. See note 1.3 to the Unaudited Interim Financial Statements for further information.

Adoption of IFRS 16

We adopted IFRS 16 (Leases) on January 1, 2019. The new standard resulted in the recognition of the majority of our leases on the statement of financial position and therefore our assets and liabilities have increased. The net carrying amount of the right-of-use assets amounted to €4.1 million whereas the corresponding lease liabilities to the right-of-use assets amounted to €4.2 million as of December 31, 2019. The expenses from the right-of-use assets and the lease liabilities in accordance with IFRS 16 were €2.5 million depreciation and €0.2 million interest expenses for the year ended December 31, 2019. In the year ended December 31, 2019, payments for capitalized leases were made in an amount of €2.7 million. Finance leases capitalized in prior years according to IAS 17 were included in the statement of financial position as of December 31, 2019 in an amount of €1.2 million net carrying value in property, plant and equipment and €1.2 million in the lease liabilities. See note 4.14 to the 2019 Audited Financial Statements for further information on the adoption of IFRS 16.

The Impact of the Transactions

On August 16, 2021, a subsidiary of the Issuer entered into the Acquisition Agreement to acquire the Target. See "*Summary—The Transactions*." Consequently, the consolidated financial information of the Group following the Transactions will not be fully comparable with our historical consolidated financial information due to, among other things, (i) the application of purchase accounting from the date of acquisition in connection with the Acquisition, (ii) changes to depreciation and amortization expenses, among other things, that may result from the purchase accounting of the Acquisition, (iii) additional interest expense associated with the financing of the Transactions (including the refinancing of certain of existing debt of the Target Group), and (iv) changes to the level of consolidation of our results in the future. See "*Presentation of Financial and Other Information—Historical Financial Information—Comparability of the Financial Statements—The Transactions*."

Key Components of our Historical Results of Operations

Revenue

Revenue results primarily from the sale of goods and merchandise. Consequently, revenue from the majority of contracts with customers is recognized when control is transferred to a customer (when the customer has legal title to the asset, has the significant risks and rewards related to the ownership of the asset, or has formally accepted the asset).

Cost of Sales

Cost of sales reflects all costs incurred by us for the delivery of goods to the customer. Cost of sales consist of material and packaging costs, amortization and depreciation, personnel expenses and other costs of sales. Material and packaging costs are variable costs and include raw materials and costs of contract workers. Amortization and depreciation is mainly driven by depreciation of our manufacturing sites and machinery. Our personnel expenses are mostly fixed costs (excluding costs for a small number of contract workers (*Leiharbeiter*)) and include wages, bonuses and social costs, post-retirement costs and severance payments. Other costs of sales mainly contain energy costs, freight costs and maintenance expenses.

Selling Costs

Selling costs are incurred in the marketing of finished products and certain services rendered to customers in connection with the sale of products. Selling costs primarily contain amortization and depreciation as well as personnel expenses and marketing expenses.

Research and development costs

Research and development costs mainly comprise personnel expenses attributable to our R&D employees. While we expensed R&D expenses in the past, under IFRS we may be allowed to capitalize these costs, amortizing them over the relevant contract period.

General Administrative Costs

The majority of our general administrative costs are personnel expenses, which are partially fixed, but as far as they relate to bonuses paid out to management and other key employees, are variable costs. Other main components within general administrative costs are IT-expenses, travel costs, pension cost, rentals as well as professional and contract services.

Other Income and Expenses, net

Other income and expenses, net, include various smaller income sources and expenses, such as foreign currency results, write-downs and impairment, sundry other income and expenses, restructuring costs and income from reversal of provisions.

Interest Income and Other Finance Income

Interest income and other finance income includes interest from shareholder loans, bank balances and certain other interest income.

Interest Expenses and Other Finance Costs

Interest expenses and other finance costs primarily reflects interest on borrowings under our Existing Credit Facilities Agreement and the Existing Shareholder Loan, and interest on the Existing Notes. Interest expenses and other finance costs also include the accumulation of interest on provisions and accrued liabilities and as well as certain other financing costs and financial expenses, such as exchange rate losses or gains resulting from loans that are not granted in the functional currency of the relevant entity.

Income tax benefit / (expense)

There is a consolidated tax group for income tax purposes between Ceramtec BondCo and its German subsidiaries. The Target is not included in the German consolidated tax group for income tax purposes. This means that German corporate income tax and trade tax is only levied at the level of Ceramtec BondCo. We also have indirect shareholdings in foreign corporations. Our current income taxes therefore include, in addition to German corporate income tax and trade tax, the tax expense of our foreign subsidiaries, which is calculated based on taxable income according to local tax law and the tax rate applicable, in each case, as well as changes to deferred tax positions.

Results of Operations

The following discussion should be read in conjunction with the information contained in our Audited Financial Statements and the notes thereto as well as in our Interim Financial Statements and the notes thereto included elsewhere in this offering memorandum. For a detailed reconciliation to the closest comparable IFRS measure. See "*Summary—Summary Consolidated Financial Information and Other Information—Other Financial and Operating Information*."

Nine months ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

The following table sets forth amounts from our unaudited condensed consolidated interim financial information along with the percentage change for the nine months ended September 30, 2021 compared to the nine months ended September 30, 2020:

	Nine Months Ended September 30,		
	2020	**2021**	**Change**
	(unaudited) (€ million)		**(unaudited) (%)**
Revenue	418.3	495.1	18.3%
Cost of sales	251.3	275.1	9.5%
Gross profit	**167.1**	**219.9**	**31.7%**
Selling costs	65.8	72.8	10.7%
Research and development costs	15.6	17.0	8.9%
General administrative costs	17.7	19.1	7.8%
Other income and (expenses), net	(136.5)	3.2	n.a.
Operating income	**(68.6)**	**114.2**	**n.a.**
Interest income and other financial income	2.4	26.1	984.3%
Interest expenses and other financial costs	85.5	65.3	(23.6)%
Financial result	**(83.1)**	**(39.2)**	**(52.8)%**
Profit/(loss) before income taxes	(151.7)	74.9	n.a.
Income tax benefit / (expense)	(1.9)	(24.2)	1,161.3%
Net profit/(loss) for the period	**(153.6)**	**50.7**	**n.a.**

Revenue

The following table provides a breakdown of our revenue for the nine months ended September 30, 2021, compared to the nine months ended September 30, 2020 on a market level:

	Nine Months Ended September 30,		
	2020	2021	Change
	(unaudited) (€ million)		(unaudited) (%)
Medical markets[1]	202.6	240.8	18.9%
Industrials markets[1]	215.9	254.6	17.9%
Consolidation adjustments	(0.2)	(0.1)	(50.0)%
	(unaudited)		(unaudited)
Total revenue	**418.3**	**495.1**	**18.3%**

(1) Medical markets revenue and Industrials markets revenue represent external revenue to third parties. Medical markets revenue consists of revenue from the Medical business as reported in the Financial Statements plus revenue from medical equipment markets. In our Financial Statements, revenue from medical equipment markets was included in our Industrials business revenue. We present revenue based on end-market in this offering memorandum as we believe it is more consistent with our market-based approach to our business.

Revenue was €495.1 million for the nine months ended September 30, 2021, an increase of €76.7 million, or 18.3%, as compared to €418.3 million for the nine months ended September 30, 2020. This increase was mainly due to higher revenue volumes in both our key end-markets. The Medical markets experienced a particularly strong recovery in 2021 from the impact of COVID-19 in 2020, driving this growth over-proportionally.

Medical markets revenue was €240.8 million for the nine months ended September 30, 2021, an increase of €38.2 million or 18.9%, including the contribution of Dentalpoint AG, whereas organic growth was approximately 16.3%. This increase was mainly due to recovery from lower revenues in the nine months ended September 30, 2020, which have been impacted by decreased order income, order cancellations and postponements from customers, in the context of a lower number of elective surgeries taking place due to the outbreak of COVID-19. We now benefit from growing demand in China and from our top Medical markets customers, with recovery in Europe being slower due to protracted impact of COVID-19.

Industrials markets revenue was €254.6 million for the nine months ended September 30, 2021, an increase of €38.7 million or 17.9%, as compared to €215.9 million for the nine months ended September 30, 2020. This increase was mainly due to strong recovery from lower revenues in the nine months ended September 30, 2020, which have been impacted by lower demand from customers and order cancellations as a consequence of the outbreak of COVID-19. We now benefit from a significant rebound in economic activity in all our key end-markets, as well as a strong order book as a result of our revamped customer-centric go-to-market strategy in the Industrials markets.

The following table provides a breakdown of our revenue for the nine months ended September 30, 2021, compared to the nine months ended September 30, 2020 by region:

	Nine Months Ended September 30,		
	2020	2021	Change
	(unaudited) (€ million)		(unaudited) (%)
Europe (excluding Germany)	174.2	216.6	24.3%
Germany	84.8	97.2	14.6%
North America[1]	73.4	87.6	19.3%
Asia	77.7	89.9	15.6%
Rest of World	8.2	3.8	(52.9)%
Total revenue	**418.3**	**495.1**	**18.3%**

(1) Revenue in North America consists of revenue in the United States, Canada and Mexico.

Cost of sales and gross profit

The following table shows a breakdown of our costs of sales for the nine months ended September 30, 2020 and 2021:

	Nine Months Ended September 30,			
	2020		2021	
	(unaudited)			
	(€ million)	(% of revenue)	(€ million)	(% of revenue)
Material and packing costs	74.3	17.8%	90.8	18.3%
Personnel expenses	93.0	22.2%	99.6	20.1%
Amortization and depreciation	42.0	10.0%	42.5	8.6%
Other costs of sales	42.0	10.0%	42.2	8.5%
Cost of sales	**251.3**	**60.1%**	**275.1**	**55.6%**

Cost of sales was €275.1 million (representing 55.6% of total revenue) for the nine months ended September 30, 2021, an increase of €23.9 million or 9.5%, compared to €251.3 million (representing 60.1% of total revenue) for the nine months ended September 30, 2020. Excluding amortization and depreciation and non-recurring items, our Adjusted cost of sales increased by €24.7 million, or 12.1%, from €205.0 million representing 49.0% of total revenue for the nine months ended September 30, 2020 to €229.7 million representing 46.4% of total revenue for the nine months ended September 30, 2021. This increase was mainly due to increased material, personnel and packing costs as a result of the increased sales volumes in both business. The improvement of our margin was driven by operating leverage as well as productivity improvements and product mix.

Gross profit was €219.9 million for the nine months ended September 30, 2021, an increase of €52.9 million or 31.7%, as compared to €167.1 million for the nine months ended September 30, 2020. Excluding amortization and depreciation and non-recurring items, our Adjusted gross profit margin increased by 2.6 percentage points to 53.6% for the nine months ended September 30, 2021, from 51.0% for the nine months ended September 30, 2020. This increase was mainly due to higher sales in both businesses as the impact of the COVID-19 pandemic began to reverse, more efficient utilization of our facilities, significant productivity improvements, an improved cost structure and positive customer and product mix. These positive effects were partially offset by the discontinuation of short-time work.

Selling costs

Selling costs were €72.8 million (representing 14.7% of total revenue) for the nine months ended September 30, 2021, an increase of €7.0 million or 10.7%, as compared to €65.8 million (representing 15.7% of total revenue) for the nine months ended September 30, 2020. Excluding amortization and depreciation and non-recurring items, our Adjusted selling costs increased by €4.2 million, or 15.5%, to €31.4 million representing 6.3% of total revenue for the nine months ended September 30, 2021, from €27.1 million representing 6.5% of total revenue for the nine months ended September 30, 2020. This increase, which was less than our the increase to sales growth during the period, was mainly due to economies of scale, continued stringent cost control activities and improved efficiency in certain key processes.

Research and development costs

Research and development costs were €17.0 million (representing 3.4% of total revenue) for the nine months ended September 30, 2021, an increase of €1.4 million or 8.9%, as compared to €15.6 million (representing 3.7% of revenue) for the nine months ended September 30, 2020. This increase was mainly due to amortization, depreciation and non-recurring items. Excluding amortization and depreciation and non-recurring items, our Adjusted research and development costs increased by €0.4 million, or 3.0%, to €13.6 million representing 2.7% of total revenue for the nine months ended September 30, 2021, from €13.2 million representing 3.2% of revenue for the nine months ended September 30, 2020. This decrease was mainly due to a more focused approach to our development activities (including through a streamlined organization) and the funding of selected special projects in 2020. Despite the abovementioned decrease, we maintain our commitment to invest in the development of new medical products, customer driven innovation in the Industrials markets, and to support selected strategic projects.

General administrative costs

General administrative costs were €19.1 million (representing 3.9% of revenue) for the nine months ended September 30, 2021, an increase of €1.4 million or 7.8%, as compared to €17.7 million (representing 4.2% of revenue) for the nine months ended September 30, 2020. This increase was mainly due to increased volumes, amortization, depreciation and non-recurring items. Excluding amortization and depreciation and non-recurring items, our Adjusted general administrative costs increased by €1.2 million, or 9.0%, to €14.5 million representing 2.9% of revenue for the nine months ended September 30, 2021 from €13.3 million representing 3.2% of revenue for the nine months ended September 30, 2020 and remained broadly unchanged as a percentage of revenue.

Other income and expenses, net

Other income was €3.2 million for the nine months ended September 30, 2021, an increase of €139.6 million, or 102.3%, as compared to other expenses of €136.5 million for the nine months ended September 30, 2020. This increase was mainly due to impairment effects on goodwill in 2020. Excluding non-recurring items, our Adjusted Other income and expenses, net, decreased by €2.7 million, or 71.1%, to €1.1 million representing 0.2% of total revenue for the nine months ended September 30, 2021, from €3.8 million representing 0.9% of revenues for the nine months ended September 30, 2020. This decrease was mainly due to higher other income derived from COVID-19-related adjustments, including additional costs for safety measures and shutdown costs for our facilities.

Interest income and other finance income

Interest income and other finance income was €26.1 million for the nine months ended September 30, 2021, an increase of €23.7 million, or 984.1%, as compared to €2.4 million for the nine months ended September 30, 2020. This increase was mainly due to €24.9 million gains from the fair value measurement of derivatives and to €1.1 million interest income from the effective interest method.

Interest expenses and other finance costs

Interest expenses and other finance costs were €65.3 million for the nine months ended September 30, 2021, a decrease of €20.2 million, or 23.6%, as compared to €85.5 million for the nine months ended September 30, 2020. This decrease was mainly due to €28.0 million of losses resulting from the fair value measurement of derivatives for the nine months ended September 30, 2020. Interest expenses and other finance costs for the nine months ended September 30, 2021, include €39.5 million of interest expense on the borrowings under the Existing Credit Facilities Agreement and the Existing Notes, €15.1 million of interest expenses from the Existing Shareholder Loan, €6.0 million expenses from unwinding the discount on financial liabilities, €3.0 million exchange rate losses and €1.6 million of other interest expenses.

Income tax benefit / (expense)

Income tax expense was €24.2 million for the nine months ended September 30, 2021, an increase of €22.3 million, or 1,161.3%, as compared to an income tax expense of €1.9 million for the nine months ended September 30, 2020. This increase was mainly due to lower deferred tax income resulting from the valuation of derivatives and higher current tax expenses mainly resulting from the consolidated tax group between Ceramtec BondCo and its German subsidiaries.

Net profit/(loss) for the period

As a result of the developments described above, net profit for the period was €50.7 million for the nine months ended September 30, 2021, an increase of €204.3 million compared to a net loss of €153.6 million for the nine months ended September 30, 2020.

Year Ended December 31, 2020 Compared to the Year Ended December 31, 2019

The following table sets forth amounts from our historical consolidated financial information along with the percentage change for the year ended December 31, 2020 compared to the year ended December 31, 2019:

	Year Ended December 31,		
	2019	2020	Change
	(audited) (€ million)		(unaudited) (%)
Revenue	620.4	552.7	(10.9)%
Cost of sales	356.2	334.9	(6.0)%
Gross profit	**264.1**	**217.8**	**(17.5)%**
Selling costs	95.2	87.3	(8.3)%
Research and development costs	23.3	20.6	(11.6)%
General administrative costs	27.1	24.5	(9.6)%
Other income and (expenses), net	(342.9)	(139.0)	(59.5)%
Operating income	**(224.5)**	**(53.6)**	**(76.1)%**
Interest income and other finance income	2.1	6.8	220.8%
Interest expenses and other finance costs	100.4	99.5	(0.9)%
Financial result	**(98.3)**	**(92.7)**	**(5.7)%**
Profit/(loss) before income tax	**(322.8)**	**(146.3)**	**(54.7)%**
Income tax benefit / (expense)	(16.5)	(2.8)	(82.7)%
Net loss for the year	**(339.3)**	**(149.2)**	**(56.0)%**

Revenue

The following table provides a breakdown of our revenue for the year ended December 31, 2020 compared to the year ended December 31, 2019 on a market level:

	Year Ended December 31,		
	2019	2020	Change
	(unaudited) (€ million)		(unaudited) (%)
Medical markets[1]	282.4	265.1	(6.1)%
Industrials markets[1]	338.3	287.9	(14.9)%
Consolidation adjustments	(0.3)	(0.3)	0.0%
	(audited)		(unaudited)
Total revenue	**620.4**	**552.7**	**(10.9)%**

(1) Medical markets revenue and Industrials markets revenue represent external revenue to third parties. Medical markets revenue consists of revenue from the Medical business as reported in the Financial Statements plus revenue from medical equipment markets. In our Financial Statements, revenue from medical equipment markets was included in our Industrials business revenue. We present revenue based on end-market in this offering memorandum as we believe it is more consistent with our market-based approach to our business.

Revenue was €552.7 million for the year ended December 31, 2020, a decrease of €67.7 million, or 10.9%, as compared to €620.4 million for the year ended December 31, 2019. This decrease was mainly due to the decrease in revenue in both our businesses.

Medical markets revenue was €265.1 million for the year ended December 31, 2020, a decrease of €17.3 million, or 6.1%, as compared to €282.4 million for the year ended December 31, 2019. This decrease was mainly due to lower order income and order cancellations as well as postponements from customers in the context of a decreased level of elective surgeries taking place due to the outbreak of COVID-19, partly offset by our performance in medical equipment markets.

Industrials markets revenue was €287.9 million for the year ended December 31, 2020, a decrease of €50.4 million, or 14.9%, as compared to €338.3 million for the year ended December 31, 2019. This decrease was mainly due to lower demand from customers and order cancellations as a consequence of the outbreak of COVID-19, as well as to generally slowing markets for mobility and electronic components even before the outbreak of COVID-19. The impact from the abovementioned factors was partly offset by a growth in volumes for piezo ceramics employed for sensors in different end-markets.

The following table provides a breakdown of our revenue for the year ended December 31, 2020 compared to the year ended December 31, 2019 by region:

	Year Ended December 31,		
	2019	2020	Change
	(audited) (€ million)		(unaudited) (%)
Europe (excluding Germany)	270.3	233.7	(13.5)%
Germany	141.9	111.7	(21.3)%
North America[1]	91.8	91.2	(0.6)%
Asia	100.4	105.4	5.0%
Rest of World	16.0	10.7	(33.5)%
Total revenue	**620.4**	**552.7**	**(10.9)%**

(1) Revenue in North America consists of revenue in the United States, Canada and Mexico.

Cost of sales and gross profit

The following table shows a break-down of our costs of sales for the years ended December 31, 2019 and 2020:

	Year Ended December 31,			
	2019		2020	
	(audited) (€ million)	(unaudited) (% of revenue)	(audited) (€ million)	(unaudited) (% of revenue)
Material and packing costs	116.3	18.7%	101.5	18.4%
Personnel expense	130.9	21.1%	124.4	22.5%
Amortization and depreciation	55.9	9.0%	55.8	10.1%
Other cost of sales	53.2	8.6%	53.2	9.6%
Cost of sales	**356.2**	**57.4%**	**334.9**	**60.6%**

Cost of sales was €334.9 million (representing 60.6% of total revenue) for the year ended December 31, 2020, a decrease of €21.3 million or 6.0%, as compared to €356.2 million (representing 57.4% of total revenue) for the year ended December 31, 2019. This decrease was mainly due to a decrease in sales as a result of postponed or cancelled orders related to the COVID-19 pandemic, a decrease in personnel expenses related to a reduction of the overall number of employed FTE, and the use of short-time work. Excluding amortization and depreciation and non-recurring items such as additional contribution to a pension fund, consulting costs and severance payments, our Adjusted cost of sales decreased by €20.5 million, or 7.0%, from €293.5 million representing 47.3% of total revenue for the year ended December 31, 2019, to €273.0 million representing 49.4% of total revenue for the year ended December 31, 2020. This decrease was mainly due to the reasons described above.

Gross profit was €217.8 million for the year ended December 31, 2020, a decrease of €46.3 million or 17.5%, as compared to €264.1 million for the year ended December 31, 2019. Excluding amortization and depreciation and non-recurring items, our Adjusted gross profit margin decreased by 2.1 percentage points to 50.6% for the year ended December 31, 2020, from 52.7% for the year ended December 31, 2019. This decrease was mainly due to decreases in sales as a result of the economic slowdown related to the COVID-19 pandemic and the resulting under-utilization rate of our facilities.

Selling costs

Selling costs were €87.3 million (representing 15.8% of total revenue) for the year ended December 31, 2020, a decrease of €8.0 million, or 8.3%, as compared to €95.2 million (representing 15.4% of total revenue) for the year ended December 31, 2019. Excluding amortization and depreciation and non-recurring items such as non-recurring litigation costs, additional contribution to a pension fund, consulting costs and severance payments, our Adjusted selling costs decreased by €7.8 million, or 18.1%, to €35.4 million representing 6.4% of total revenue for the year ended December 31, 2020, from €43.2 million representing 6.4% of total revenue for the year ended December 31, 2019. This decrease was mainly due to decreases in sales as a result of the economic slowdown related to the COVID-19 pandemic and cost-savings measures implemented as a result thereof.

Research and development costs

Research and development costs were €20.6 million (representing 3.7% of total revenue) for the year ended December 31, 2020, a decrease of €2.7 million, or 11.6%, as compared to €23.3 million (representing 3.8% of total revenue) for the year ended December 31, 2019. Excluding amortization and depreciation and non-recurring items such as additional contribution to a pension fund and severance payments, our Adjusted research and development costs decreased by €2.7 million, or 13.4%, to €17.4 million representing 3.1% of total revenue for the year ended December 31, 2020, from €22.4 million representing 4.5% of revenue for the year ended December 31, 2019. This decrease was mainly due to decreases in projects as a result of the slowdown in the industrial cycle related to the COVID-19 pandemic and more careful management of project costs.

General administrative costs

General administrative costs were €24.5 million (representing 4.4% of total revenue) for the year ended December 31, 2020, a decrease of €2.6 million or 9.6%, as compared to €27.1 million (representing 4.4% of total revenue) for the year ended December 31, 2019. Excluding amortization and depreciation and non-recurring items such as acquisition consulting and severance payments, our Adjusted general administrative costs decreased by €0.4 million, or 2.2%, to €18.1 million representing 3.3% of revenue for the year ended December 31, 2020, from €18.5 million representing 3.0% of revenue for the year ended December 31, 2019. This decrease was mainly due to decreases in sales as a result of the economic slowdown related to the COVID-19 pandemic and cost-savings measures implemented as a result thereof.

Other income and expenses, net

Other expenses were €139.0 million for the year ended December 31, 2020, a decrease of €203.9 million, or 59.5%, as compared to other expenses of €342.9 million for the year ended December 31, 2019. This decrease was mainly due to lower impairment in 2020 as compared to 2019. In 2019, we recognized impairment losses of €329.8 million with regard to goodwill. Excluding non-recurring items such as impairment expenses, transaction-related expenses and foreign exchange effects, our Adjusted Other income, net, increased by €4.8 million to €4.2 million representing 0.8% of revenue for the year ended December 31, 2020, from Adjusted Other expenses, net, of €0.6 million representing 0.1% of revenues for the year ended December 31, 2019. This increase was mainly due to COVID-19-related adjustments and discontinued operations items.

Interest income and other finance income

Interest income and other finance income was €6.8 million for the year ended December 31, 2020, an increase of €4.7 million, or 220.8%, as compared to €2.1 million for the year ended December 31, 2019. This increase was mainly due to a higher exchange rate gains.

Interest expenses and other finance costs

Interest expenses and other finance costs were €99.5 million for the year ended December 31, 2020, a decrease of €0.9 million or 0.9%, as compared to €100.4 million for the year ended December 31, 2019. This decrease was mainly due to higher interest expenses and losses on derivative valuations compensated by lower interest expenses from the Existing Shareholder Loan. Interest expenses and other finance costs for the year ended December 31, 2020, include €50.9 million in interest expense from the borrowings under the Existing Credit Facilities Agreement and the Existing Notes, €22.7 million losses on derivative valuations, €19.1 million in interest expenses from the Existing Shareholder Loan, €5.2 million in expenses from the effective interest rate method and €1.5 million in other interest expenses.

Income tax benefit / (expense)

Income tax benefit / (expense) was an expense €2.8 million for the year ended December 31, 2020, a decrease of €13.7 million or 82.7%, as compared to an income tax expense of €16.5 million for the year ended December 31, 2019. This decrease was mainly due to lower current tax expenses resulting from the consolidated tax group between CeramTec BondCo and its German subsidiaries combined with lower deferred tax income from purchase price allocation depreciation and higher tax expenses from the valuation of derivatives.

Net loss

As a result of the developments described above, net loss for the period was €149.2 million for the year ended December 31, 2020, a decrease of €190.1 million, or 56.0%, as compared to a net loss of €339.3 million for the year ended December 31, 2019.

Year Ended December 31, 2019 Compared to the Year Ended December 31, 2018

The following table sets forth amounts from our historical consolidated financial information along with the percentage change for the year ended December 31, 2019 compared to the year ended December 31, 2018:

	Year Ended December 31,		
	2018[(a)]	**2019**	**Change**
	(audited)		**(unaudited)**
	(€ million)		**(%)**
Revenue	496.9	620.4	24.8%
Cost of sales	336.6	356.2	5.8%
Gross profit	**160.3**	**264.1**	**64.8%**
Selling costs	81.1	95.2	17.4%
Research and development costs	18.6	23.3	25.7%
General administrative costs	28.3	27.1	(4.0)%
Other income and (expenses), net	(11.2)	(342.9)	2,964.5%
Operating income	**21.2**	**(224.5)**	**n.a.**
Interest income and other finance income	1.6	2.1	31.3%
Interest expenses and other finance costs	125.0	100.4	(19.7)%
Financial result	**(123.4)**	**(98.3)**	**(20.3)%**
Loss before income tax	**(102.2)**	(322.8)	215.7%
Income tax benefit / (expense)	15.1	(16.5)	n.a.
Net loss for the year	**(87.1)**	**(339.3)**	**289.4%**

(a) The statement of comprehensive income information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

Revenue

The following table provides a breakdown of our revenue for the year ended December 31, 2019 compared to the year ended December 31, 2018 on a market level:

	Year Ended December 31,		
	2018[1]	2019	Change
	(unaudited) (€ million)		(unaudited) (%)
Medical markets[2]	205.6	282.4	37.5%
Industrials markets[2]	291.8	338.3	16.0%
Consolidation adjustments	(0.5)	(0.3)	(40.0)%
	(audited)		(unaudited)
Total revenue	**496.9**	**620.4**	**24.8%**

(1) The statement of comprehensive income information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

(2) Medical markets revenue and Industrials markets revenue represent external revenue to third parties. Medical markets revenue consists of revenue from the Medical business as reported in the Financial Statements plus revenue from medical equipment markets. In our Financial Statements, revenue from medical equipment markets was included in our Industrials business revenue. We present revenue based on end-market in this offering memorandum as we believe it is more consistent with our market-based approach to our business.

Revenue was €620.4 million for the year ended December 31, 2019, an increase of €123.5 million or 24.8%, as compared to €496.9 million for the year ended December 31, 2018. This increase is primarily attributable to the statement of comprehensive income for the year ended December 31, 2018, only including the operations of the Target, CeramTec BondCo and CeramTec AcquiCo prior to the acquisition of CeramTec Holding by the Target on March 8, 2018. Revenue for the year ended December 31, 2019 increased from the year ended December 31, 2018 on a pro forma basis (including the results of CeramTec Holding and its consolidated subsidiaries for the entire period) mainly due to higher Medical markets revenue volumes, partly offset by a slight decrease of Industrials markets revenue volumes.

Medical markets revenue was €282.4 million for the year ended December 31, 2019, an increase of €76.8 million, or 37.5%, as compared to €205.6 million for the year ended December 31, 2018. Medical markets revenue for the year ended December 31, 2019 increased from the year ended December 31, 2018 on a pro forma basis (including the results of CeramTec Holding and its consolidated subsidiaries for the entire period) mainly due to a volume increase in ball-heads and inserts.

Industrials markets revenue was €338.3 million for the year ended December 31, 2019, an increase of €46.5 million or 16.0%, as compared to €291.8 million for the year ended December 31, 2018. This increase is primarily attributable to the statement of comprehensive income for the year ended December 31, 2018, only including the operations of the Target, CeramTec BondCo and CeramTec AcquiCo prior to the acquisition of CeramTec Holding by the Target on March 8, 2018. Industrials markets revenue for the year ended December 31, 2019 decreased from the year ended December 31, 2018 on a pro forma basis (including the results of CeramTec Holding and its consolidated subsidiaries for the entire period) mainly due to a general slowdown in the industrial cycle resulting in an overall softer demand in the electronics and mobility markets whereas revenue in 2018 benefitted from peak activity in the mobility industry. In addition, as part of a wider strategy to streamline our business, we discontinued certain product groups from our offering in 2018.

The following table provides a breakdown of our revenue for the year ended December 31, 2019 compared to the year ended December 31, 2018 by region:

	Year Ended December 31,		
	2018[1]	2019	Change
	(audited) (€ million)		(unaudited) (%)
Europe (excluding Germany)	215.8	270.3	25.2%
Germany	125.7	141.9	12.9%
North America[2]	65.0	91.8	41.2%
Asia	75.1	100.4	33.7%
Rest of World	15.2	16.0	5.3%
Total revenue	**496.9**	**620.4**	**24.8%**

(1) The statement of comprehensive income information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

(2) Revenue in North America consists of revenue in the United States, Canada and Mexico.

Cost of sales and gross profit

The following table shows a break-down of our cost of sales for the years ended December 31, 2018 and 2019:

	Year Ended December 31			
	2018		**2019**	
	(audited) (€ million)	**(unaudited)** (% of revenue)	**(audited)** (€ million)	**(unaudited)** (% of revenue)
Material and packing costs	100.0	20.1%	116.3	18.7%
Personnel expense	103.5	20.8%	130.9	21.1%
Amortization and depreciation	79.9	16.1%	55.9	9.0%
Other cost of sales	53.2	10.7%	53.2	8.6%
Cost of sales	**336.6**	**67.7%**	**356.2**	**57.4%**

Cost of sales was €356.2 million (representing 57.4% of total revenue) for the year ended December 31, 2019, an increase of €19.6 million, or 5.8%, as compared to €336.6 million (representing 67.7% of total revenue) for the year ended December 31, 2018. This increase is primarily attributable to the statement of comprehensive income for the year ended December 31, 2018 only including the operations of the Target, CeramTec BondCo and CeramTec AcquiCo prior to the acquisition of CeramTec Holding by the Target on March 8, 2018.

Cost of sales for the year ended December 31, 2019 decreased from the year ended December 31, 2018 on a pro forma basis, including the results of CeramTec Holding and its consolidated subsidiaries for the entire period. Excluding amortization and depreciation and non-recurring items such as additional contribution to pension fund, consulting costs and severance payments, our cost of sales increased due to higher sales volumes and a change in product mix.

Gross profit was €264.1 million for the year ended December 31, 2019, an increase of €103.8 million, or 64.8%, as compared to €160.3 million for the year ended December 31, 2018. This increase is primarily attributable to the statement of comprehensive income for the year ended December 31, 2018, only including the operations of the Target, CeramTec BondCo and CeramTec AcquiCo prior to the acquisition of CeramTec Holding by the Target on March 8, 2018.

Gross profit for the year ended December 31, 2019 increased from the year ended December 31, 2018 on a pro forma basis, including the results of CeramTec Holding and its consolidated subsidiaries for the entire period. Excluding amortization and depreciation and non-recurring items, our gross profit margin slightly increased mainly due to higher sales, productivity improvements and economics of scale, partly offset by certain tariff increases.

Selling costs

Selling costs were €95.2 million (representing 15.4% of total revenue) for the year ended December 31, 2019, an increase of €14.1 million or 17.4%, as compared to €81.1 million (representing 16.3% of total revenue) for the year ended December 31, 2018. This increase is primarily attributable to the statement of comprehensive income for the year ended December 31, 2018, only including the operations of the Target, CeramTec BondCo and CeramTec AcquiCo prior to the acquisition of CeramTec Holding by the Target on March 8, 2018.

Selling costs for the year ended December 31, 2019 increased from the year ended December 31, 2018 on a pro forma basis, including the results of CeramTec Holding and its consolidated subsidiaries for the entire period. Excluding amortization and depreciation and non-recurring items such as non-recurring litigation costs, additional contribution to pension fund, consulting costs and severance payments, our selling costs decreased due to more targeted marketing expenses and an overall improved cost structure.

Research and development costs

Research and development costs were €23.3 million (representing 3.8% of total revenue) for the year ended December 31, 2019, an increase of €4.8 million, or 25.7%, as compared to €18.6 million (representing 3.7% of total revenue) for the year ended December 31, 2018. This increase is primarily attributable to the statement of comprehensive income for the year ended December 31, 2018, only including the operations of the Target, CeramTec BondCo and CeramTec AcquiCo prior to the acquisition of CeramTec Holding by the Target on March 8, 2018.

Research and development costs for the year ended December 31, 2019 increased from the year ended December 31, 2018 on a pro forma basis, including the results of CeramTec Holding and its consolidated subsidiaries for the entire period. Excluding amortization and depreciation and non-recurring items such as additional contribution to pension fund and severance payments, our research and development costs decreased mainly due to more focused R&D approach and efficiency gains in our cost processes.

General administrative costs

General administrative costs were €27.1 million (representing 4.4% of total revenue) for the year ended December 31, 2019, a decrease of €1.1 million, or 4.0%, as compared to €28.3 million (representing 5.7% of total revenue) for the year ended December 31, 2018. General administrative costs for the year ended December 31, 2019 decreased from the year ended December 31, 2018 on a pro forma basis (including the results of CeramTec Holding and its consolidated subsidiaries for the entire period) mainly due to non-recurring transaction related expenses and tighter cost discipline measures. Excluding amortization and depreciation and non-recurring items such as acquisition consulting and severance payments, our general administrative costs decreased due to economies of scale, cost discipline measures such as lower spend on travel and external consulting and the implementation of a market and customer-centric realignment of our operations focused on Industrials markets with positive effects being recorded starting from the second half of 2019.

Other income and expenses, net

Other expenses were €342.9 million for the year ended December 31, 2019, an increase of €331.7 million, or 2,964.5%, as compared to other expenses of €11.2 million for the year ended December 31, 2018. This increase is primarily attributable to the statement of comprehensive income for the year ended December 31, 2018 only including the operations of the Target, CeramTec BondCo and CeramTec AcquiCo prior to the acquisition of CeramTec Holding by the Target on March 8, 2018. Other expenses for the year ended December 31, 2019 increased from the year ended December 31, 2018 on a pro forma basis including the results of CeramTec Holding and its consolidated subsidiaries for the entire period mainly due to higher impairment expenses in 2019, while other expenses in 2018 were primarily driven by transaction-related expenses.

Interest income and other finance income

Interest income and other finance income was €2.1 million for the year ended December 31, 2019, an increase of €0.5 million, or 31.3%, as compared to €1.6 million for the year ended December 31, 2018. This increase was mainly due to the sale of bonds with a nominal value of €5.0 million in December 2019, which resulted in a gain of €0.4 million.

Interest expenses and other finance costs

Interest expenses and other finance costs were €100.4 million for the year ended December 31, 2019, a decrease of €24.6 million, or 19.7%, as compared to €125.0 million for the year ended December 31, 2018. This decrease was mainly due to lower interest rate expenses and losses on derivative valuations. Interest expenses and other finance costs for the year ended December 31, 2019 include €53.4 million in interest expenses from the borrowings under the Existing Credit Facilities Agreement and the Existing Notes, €38.8 million in interest expenses from the Existing Shareholder Loan, €4.3 million in expenses from the effective interest rate method, €1.3 million in losses on derivative valuations and €2.8 million in other interest expenses.

Income tax benefit / (expense)

Income tax expense was €16.5 million for the year ended December 31, 2019, an increase of €31.6 million, as compared to an income tax benefit of €15.1 million for the year ended December 31, 2018. This increase was mainly due to higher current tax expenses resulting from the consolidated tax group between Ceramtec Holding and its German subsidiaries combined with lower deferred tax income from purchase price allocation depreciation and higher tax expenses from the valuation of derivatives.

Net loss

As a result of the developments described above, net loss was €339.3 million for the year ended December 31, 2019, an increase of €252.1 million, or 289.4%, as compared to a net loss of €87.1 million for the year ended December 31, 2018.

Non-IFRS Measures

The table below sets forth our EBITDA, Management Adjusted EBITDA and Management Adjusted EBITDA margin for the periods presented.

(in € million)	Year Ended December 31, 2019	Year Ended December 31, 2020	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2021
	(audited)	(audited)	(unaudited)	(unaudited)
Operating income	**(224.5)**	**(53.6)**	(68.6)	**114.2**
Amortization, depreciation and impairment charges on non-current assets	447.2	244.2	217.3	84.2
		(unaudited)		
EBITDA	**222.7**	**190.5**	**148.7**	**196.6**
Restructuring costs[(a)]	7.6	5.9	4.3	2.3
Other non-recurring costs[(a)]	7.3	10.4	8.6	7.5
Foreign exchange conversion effects[(a)]	0.7	0.9	(0.6)	(1.3)
Additional contributions related to pensions[(a)]	0.0	0.1	0.2	—
Acquisition costs[(a)]	0.3	1.4	0.2	0.5
Transaction-related costs[(a)]	0.4	0.4	0.3	0.3
PPA on inventories and fixed assets[(a)]	0.0	0.8	—	1.0
Start-up losses[(a)]	0.9	1.3	0.9	1.6
Discontinued operations[(a)]	4.5	1.4	0.8	(1.6)
Management Adjusted EBITDA	**244.3**	**213.1**	**163.5**	**206.9**
Management Adjusted EBITDA Margin	**39%**	**39%**	**39%**	**41.8%**

(a) For further details on these adjustments, please see "*Summary—Summary Financial and Other Data*.".

Our Management Adjusted EBITDA increased by €43.4 million, or 26.5%, from €163.5 million in the nine months ended September 30, 2020 to €206.9 million in the nine months ended September 30, 2021. This increase was mainly due to group-wide sales increases, in particular from growth from our high-margin medical products, supported by further productivity improvements and solid product mix and cost management.

Our Management Adjusted EBITDA increased by €31.2 million, or 12.8%, from €244.3 million the year ended December 31, 2019, to €213.1 million in the year ended December 31, 2020. This decrease was mainly due to the impact of the COVID-19 pandemic, partly offset by cost discipline measures and the customer-centric reorganization of our Industrials markets portfolio.

Liquidity and Capital Resources

Following the consummation of the Transactions, we expect that our primary cash needs will be related to debt service requirements on the Notes and the Senior Secured Credit Facilities, working capital requirements, capital expenditures, tax payments and restructuring costs, which we expect to be funded by cash flows from operations. Our ability to generate cash from our operations depends on our future operating performance, which is in turn dependent, to some extent, on general economic, financial, competitive, market, legislative, regulatory and other factors, many of which are beyond our control, as well as other factors including those discussed in this section and the section entitled "*Risk Factors*." Following the consummation of the Transactions, we expect that our primary source of liquidity will continue to be cash flows from operations. In addition, there will be funds available under our Revolving Credit Facility that we may utilize to meet our future cash needs up to an amount of €250.0 million. See "*Description of Certain Financing Arrangements*."

We introduced a number of early and comprehensive measures in response to the COVID-19 pandemic to safeguard our liquidity, including temporary cost controls related to travel and entertainment, curtailment of R&D spend and other measures. In particular, we received short-time working compensation (*Kurzarbeitergeld*) from the German federal employment agency and implemented measures aimed at reducing costs. We incurred certain costs related to the COVID-19 pandemic, including costs related to depreciation and other fixed costs related to the production facilities and costs related to illness rates and quarantines. In addition, we recorded an under-utilization of our factories and overhead functions. We also incurred other costs related to disinfecting production sites and offices and further measures, implemented to safeguard the health of our employees. We implemented a disciplined management of our working capital, and reduced our inventory levels through improved planning and monitoring while also temporarily reducing spend on capital expenditures for certain non-essential projects.

We anticipate that we will be highly leveraged for the foreseeable future and our ability to generate future financing cash flows will be limited by the Indenture and Senior Secured Credit Facilities, which may have important negative consequences for you. See "*Risk Factors*," "*Description of the Notes—Certain Covenants*" and "*Description of Certain Financing Arrangements*." Any additional indebtedness that we incur could reduce the amount of our cash flow available to make payments on our then existing indebtedness, including under the Notes offered hereby, and increase our leverage.

Cash Flows

The following table summarizes our cash flows for the years ended December 31, 2018, 2019 and 2020, and the nine months ended September 30, 2020 and 2021:

	Year Ended December 31,			Nine Months Ended September 30,	
	2018[a]	**2019**	**2020**	**2020**	**2021**
		(audited)		**(unaudited)**	
			(€ million)		
Cash flows from operating activities	110.8	190.1	163.4	101.9	151.6
Cash flows from investing activities	(2,493.4)	(41.1)	(37.6)	(26.9)	(75.8)
Cash flows from financing activities	2,403.6	(106.0)	54.8	(102.2)	(45.4)
Change in cash and cash equivalents	**21.0**	**43.1**	**180.6**	**(27.2)**	**30.4**
Net foreign exchange difference	—	0.3	(0.9)	(0.7)	1.5
Cash and cash equivalents at the beginning of the period	—	21.1	64.4	64.4	244.1
Cash and cash equivalents at the end of the period	**21.1**	**64.4**	**244.1**	**36.5**	**276.0**

(a) The consolidated statement of cash flows information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

Cash flows from operating activities

Cash flows from operating activities increased by €49.7 million, or 48.8%, from an inflow of €101.9 million for the nine months ended September 30, 2020 to an inflow of €151.6 million for the nine months ended September 30, 2021. This increase was mainly due to overall stronger business performance, partly offset by increasing trade receivables driven by consistent volume growth.

Cash flows from operating activities decreased by €26.7 million, or 14.0%, from an inflow of €190.1 million for the year ended December 31, 2019 to an inflow of €163.4 million for the year ended December 31, 2020. This decrease was mainly due to overall weaker business performance in the context of the outbreak of COVID-19, partly offset by strong operative working capital management.

Cash flows from operating activities increased by €79.3 million, or 71.6%, from an inflow of €110.8 million for the year ended December 31, 2018 to an inflow of €190.1 million for the year ended December 31, 2019. This increase is primarily attributable to the statement of cash flows for the year ended December 31, 2018 only including the operations of the Target, CeramTec BondCo and CeramTec AcquiCo prior to the acquisition of CeramTec Holding by the Target on March 8, 2018. Cash flow from operating activities for the year ended December 31, 2019 increased from the year ended December 31, 2018 on a pro forma basis including the results of CeramTec Holding and its consolidated subsidiaries for the entire period mainly due to higher EBITDA in 2019, stronger working capital management and non-recurring one-time transaction expenses recorded in 2018.

Cash flows from investing activities

Cash flows from investing activities increased by €48.9 million, or 182.3%, from an outflow of €26.9 million for the nine months ended September 30, 2020 to an outflow of €75.8 million for the nine months ended September 30, 2021. This increase was mainly due to the acquisition of Dentalpoint AG in January 2021 for a purchase price net of cash and cash equivalents taken over of €49.0 million in for the nine months ended September 30, 2021.

Cash flows from investing activities decreased by €3.5 million, or 8.4%, from an outflow of €41.1 million for the year ended December 31, 2019 to an outflow of €37.6 million for the year ended December 31, 2020. This decrease was mainly due to investing outflows being partly decreased or postponed with regard to non-essential projects as a consequence of the outbreak of COVID-19.

Cash flows from investing activities for property, plant and equipment and intangible assets decreased by €2,452.3 million, or 98.4%, from an outflow of €2,493.4 million for the year ended December 31, 2018 to an outflow of €41.1 million for the year ended December 31, 2019. This decrease was mainly due to the acquisition of the Group by BC Partners in 2018 for €2,479 million. Cash used in investing activities for the year ended December 31, 2019 increased from the year ended December 31, 2018 on a pro forma basis including the results of CeramTec Holding and its consolidated subsidiaries for the entire period mainly due to the acquisition of the Group by BC Partners in 2018 of €2,479 million.

Cash flows from financing activities

Cash flows from financing activities decreased by €56.9 million, or 55.6%, from an outflow of €102.2 million for the nine months ended September 30, 2020 to an outflow of €45.4 million for the nine months ended September 30, 2021. This decrease was mainly due to higher outflows in the nine months ended September 30, 2020 driven by the payment of the Existing Shareholder Loan in the amount of €19.6 million.

Cash flows from financing activities changed by €160.8 million, or 151.8%, from an outflow of €106.0 million for the year ended December 31, 2019 to an inflow of €54.8 million for the year ended December 31, 2020. This change was mainly due to the drawing of a syndicated loan during 2020 with a cash inflow effect of €168.2 million, while €53.9 million of syndicated loans were repaid in 2019.

Cash flows from financing activities changed by €2,509.5 million, or 104.4%, from an inflow of €2,403.6 million for the year ended December 31, 2018 to an outflow of €106.0 million for the year ended December 31, 2019. This change was mainly due to the financing of the acquisition of the Group by BC Partners in 2018. Cash flow from financing activities for the year ended December 31, 2019 decreased from the year ended December 31, 2018 on a pro forma basis including the results of CeramTec Holding and its consolidated subsidiaries for the entire period mainly due to financing of the acquisition of the Group by BC Partners in 2018.

Capital Expenditures

The following table provides an overview of our capital expenditures for the years ended December 31, 2019 and 2020, the nine months ended September 30, 2020 and 2021:

	Year Ended December 31,		**Nine Months Ended September 30,**	
	2019	**2020**	**2020**	**2021**
	(audited)		**(unaudited)**	
	(€ million)			
Additions to intangible assets	3.0	3.9	2.4	2.7
	(unaudited)			
Additions to property, plant & equipment (excluding right-of-use assets)	40.6	32.8	19.5	21.3
Capital expenditures	**43.6**	**36.7**	**21.9**	**24.0**
Additions from business acquisitions (including right-of-use assets)[(a)]	—	—	—	54.6

(a) Additions from business acquisitions are not included in the calculation for capital expenditures and are provided for information purposes only.

In general, our capital investment is split evenly, between maintenance and growth projects. The lower investment spending in the year ended December 31, 2020 was mainly due to the partial reduction or postponement of capital investments as a consequence of the outbreak of COVID-19. The increased investment spending in the year ended December 31, 2019 was mainly driven by phasing of growth projects, which reflected the market conditions in 2019.

Our annual capital expenditures have typically amounted to between 6% and 8%, of which approximately half has typically been related to maintenance and the half to growth. Given the lower level of capital expenditures in 2020, we would expect certain catch-up effects in 2021, which may be significant, and would bring the three-year average capital expenditures back in line with our typical level. Capital expenditures in 2021 were focused on growth projects aimed at ensuring our ability to manage a strong increase in order intake in addition to necessary maintenance (including, for example, capacity increase projects in our Medical markets and selected projects to enhance our digitalization and ESG capabilities).

As Adjusted Contractual Obligations

The following table presents information relating to our contractual obligations as of September 30, 2021 excluding discounts and bonuses, accrued and unpaid interest and capitalized transaction costs, as adjusted to illustrate the effect of the Transactions:

(in € million)	Payments due by period end			
	Less than 1 year	1-5 years	Over 5 years	Total
		(unaudited)		
Notes offered hereby[(1)]	—	—	515.0	515.0
Senior Secured Credit Facilities[(2)]	—	—	1,430.0	1,430.0
Other liabilities to banks	1.8	—	—	1.8
Trade payables	24.8	—	—	24.8
Lease liabilities (IFRS 16)	2.3	5.6	4.2	12.1
Other liabilities[(3)]	2.5	—	—	2.5
Total	**31.4**	**5.6**	**1,949.2**	**1,986.2**
Derivatives financial instrument	6.9	11.7	—	18.6

(1) Represents the aggregate principal amount of the Notes offered hereby excluding future interest payments.

(2) Represents the euro-equivalent aggregate principal amount of the Senior Term Facility excluding accrued interest therein. While we do not currently expect to draw amounts under the Revolving Credit Facility as of the Acquisition Closing Date, any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Revolving Credit Facility. See "*Description of Other Indebtedness—Senior Secured Credit Facilities Agreement*."

(3) Represents certain contractual liabilities under contracts with customers, wages and salaries (including taxes), real estate transfer tax and other current liabilities. See note 4.11 to the Unaudited Interim Financial Statements included elsewhere in this offering memorandum for further information.

Lease Commitments

In accordance with IFRS 16, right-of-use assets are initially measured at cost and subsequently measured at cost less accumulated depreciation and impairment losses, adjusted for any remeasurement of the lease liability.

The lease liability is initially measured at the present value of the lease payments not being paid at that date. Subsequently, the lease liability is adjusted for interest and lease payments, including for the impact of lease modifications.

The net carrying amount of right-of-use assets as of December 31, 2020, is broken down as follows:

Right-of-use assets	Year Ended December 31,		
	2019	2020	Change
	(audited) (€ million)		(unaudited) (%)
January 1	—	6.6	n.a.
First-time adoption of IFRS 16 as of January 1, 2019	4.9	—	(100.0)
Additions cost	1.8	2.8	56.7
Disposals cost	—	(2.1)	n.a.
Reclassifications and foreign exchange effects	0.0	(0.2)	n.a.
Cost	**6.6**	**7.0**	**6.1**
January 1	—	2.5	n.a.
Additions depreciation	2.5	2.6	1.9
Disposals depreciation	—	(2.1)	n.a.
Reclassifications and foreign exchange effects	0.0	(0.2)	n.a.
Depreciation	**2.5**	**2.8**	**11.5**
Net carrying amount	**4.1**	**4.2**	**2.8**

Provisions for Pension Commitments

We provide our employees with various defined benefit and defined contribution pension plans in relation to retirement, invalidity and death benefits. The promised benefits differ from country to country depending on the legal, tax and economic conditions. Furthermore, the existing plans are subject to the respective local requirements as well as the financing and the plan assets of pension plans.

The following table shows the amount of the pension obligations and the market value of the plan assets of the defined benefit plans at the beginning and at the end of the year ended December 31, 2020:

	Year Ended December 31, 2020		
		(audited)	
	German plans	Foreign plans	Total
		(€ million)	
Benefit obligations at the beginning of the year	**109.5**	**12.7**	**122.2**
Service costs	4.1	—	4.2
Interest expenses	1.0	0.2	1.2
Remeasurements	8.4	1.0	9.3
Foreign currency translation	—	(0.7)	(0.7)
Benefits paid	(2.4)	(0.4)	(2.8)
Benefit obligations at the end of the year	**120.6**	**12.8**	**133.4**
Market value of plan assets at the beginning of the year	**—**	**8.8**	**8.8**
Interest income from plan assets	—	0.2	0.2
Expense for managing the plans	—	(0.1)	(0.1)
Employer contributions	—	0.4	0.4
Remeasurements	—	0.7	0.7
Foreign currency translation	—	(0.5)	(0.5)
Benefits paid	—	(0.4)	(0.4)
Market value of the plan assets at the end of the year	—	**9.1**	**9.1**
Net obligation amount for pension benefits	**120.6**	**3.7**	**124.4**

The actuarial increase is primarily due to changes in financial assumptions. The contributions to the defined benefit plans by the employer for the year ended December 31, 2020 amounted to €0.4 million.

Off-Balance Sheet Arrangements

As of September 30, 2021, we have no off-balance sheet arrangements except for an uncommitted, non-recourse true sale and factoring program with PB Factoring GmbH as well as with Banco Santander in relation to certain accounts and receivables and certain leases entered into in the ordinary course of business in line with IFRS 16.

Critical Accounting Policies and Significant Accounting Estimates

Our principal accounting policies are described in note 2 of the 2020 Audited Financial Statements included elsewhere in this offering memorandum. The preparation of the Audited Financial Statements under IFRS requires assumptions and estimates to be made which can impact the measurement of the assets and liabilities recognized income and expenses, as well as the disclosure of contingent liabilities. Estimates and the assumptions underlying them are based on management's best estimate and facts, circumstances and information available to management. Actual amounts may deviate from estimated amounts. All estimates and assumptions are reviewed on a regular basis. Changes in estimates are adjusted in the current period in the event that the change only affects the current period. Otherwise the change is recorded in future periods.

Our management believes the accounting estimates discussed below represent those accounting estimates requiring the exercise of judgment where a different set of judgments could result in the greatest changes to our reported results.

Business Combinations

Business combinations are accounted for using the acquisition method. The acquired assets and liabilities are measured at their acquisition-date fair value.

Using the acquisition method requires certain estimates and judgments, particularly with regard to determining the fair value of the acquired intangible assets and property, plant and equipment as well as the fair value of liabilities assumed. In addition, the expected useful lives of acquired intangible assets and property, plant and equipment need to be determined.

This measurement is largely based on estimated future cash flows. Deviations between the actual cash flows and those determined when calculating the fair value can have a significant effect on the future net profit/loss for the period of the Target Group.

Impairment of Non-Financial Assets

Assumptions were made to calculate the recoverable amount to determine whether impairment losses had to be recognized on intangible assets and property, plant and equipment. In this regard, future cash flows were derived from the budget planning and medium-term forecast for each of the cash-generating units. Management assumes that the assumptions and estimates, on which the discounted cash flows are based, are accurate. Nevertheless, changes in the economic environment and growth assumptions can affect impairment testing resulting in the need to recognize impairment losses or to reverse impairment losses in the future.

Valuation Allowances on Receivables

Allowances for receivables are recognized based on assumptions about default risk and expected loss given default. The Target Group exercises judgment to make the assumptions and select inputs used in determining the allowances by reference to past default experience, prevailing market conditions, and forward-looking estimates as of the end of the reporting period.

Accordingly, receivables are reduced by appropriate specific allowances for amounts estimated to be irrecoverable (for example, receivables from customers on whose assets insolvency proceedings have been initiated are written off in full to the extent that any collateral provided is not recoverable).

Provisions for Pension Obligations

Defined benefit plans are measured using actuarial valuations. These contain assumptions of discount rates, future salary trends, mortality rates and future pension increases.

Provisions

Provisions for the expected expenses from warranty obligations in accordance with national sales contract law are recognized as of the date on which the relevant products are sold according to the management's best estimate regarding the expenses required to settle the Target Group's obligation.

A provision is set up for the obligation to eliminate environmental damage if it is likely to occur and the costs can be estimated reliably. With ongoing examination and over the course of performing renovation measures, the provisions are adjusted in line with the knowledge gained. The amount of the individual provisions is influenced by factors such as the extent of the contamination, the renovation measures called for and additional demands from authorities, companies or private persons.

Deferred Tax Assets

The calculation of deferred tax assets requires assumptions to be made relating to the future taxable income and historical use of deferred tax assets. These assumptions take into account the anticipated development and effect on earnings from the reversal of taxable temporary differences. As future business developments cannot be foreseen with certainty and are not entirely within the Target Group's sphere of influence, the measurement of deferred tax assets involves a level of uncertainty.

Qualitative and Quantitative Disclosure about Market Risk

Our business and financial results are affected by fluctuations in global financial markets, including interest rates, currency exchange rates and commodity prices.

Interest rate risk

Following the completion of the Transactions, our principal interest rate exposure will relate to outstanding amounts under Senior Secured Credit Facilities and the Notes. Additionally, following the completion of the Transactions, we will have our new Revolving Credit Facility available to us in a maximum amount of €250.0 million. We do not currently expect to draw amounts under the Revolving Credit Facility as of the Acquisition Closing Date. We intend to hedge our variable interest exposure through interest rate hedges on a majority of the borrowings under the Senior Secured Credit Facilities Agreement.

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. We are and following completion of the Transactions will remain exposed to foreign currency risks arising from changes in the USD/EUR exchange rate as well as from developments affecting other currencies.

The following table shows the effects on our net income for the year ended December 31, 2020 as well as our equity of a hypothetical change of +/- 10% to the closing rate and forward rate as of the reporting date for our main foreign currency items.

	Change in the spot rate	Change in the forward rate	As of and for the year ended December 31, 2020					
	%	%	USD	GBP	CZK	PLN	CNY	Total
Earnings effect before tax (thousand €)	+10%		7,046	79	26	(130)	(674)	**6,347**
	-10%		(8,612)	(97)	(32)	159	824	**(7,757)**
Effect on equity (thousand €)		+10%	9,878	(64)	59	(96)	(677)	**9,110**
		-10%	(12,073)	66	(72)	117	828	**(11,134)**

In connection with our borrowings in U.S. dollar, we are in particular exposed to foreign currency risks from changes in the U.S. dollar to euro exchange rate.

Commodity price risk

We are subject to changes in our cost of sales caused by movements in underlying commodity prices (primarily natural gas, petrol, electricity and water). For the year ended December 31, 2020, approximately 30% of our costs of sales is related to raw materials. Our price fluctuations generally follow industry indices. The raw materials we use are generally not traded on commodity exchanges with the exception of lead oxide which is connected to lead prices and our natural gas needs which are connected to the commodities market for natural gas. We historically have not entered into long-term purchase contracts related to the purchase of raw materials and energy, however, we have secured electricity and gas prices via short- to mid-term forward contracts, from time to time.

BUSINESS

Overview

We are a leading global med-tech platform with a focus on high performance ceramics ("HPC") solutions. Our HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological, mechanical, thermal, chemical, electric, magnetic or optical properties compared to competing products made from metal, alloys of cobalt and chrome or polymers (plastics). We have been engaged in the HPC industry for over 100 years, with operational expertise and experience in creating innovative system solutions for longstanding customers at an industrial scale. We offer hip joint prostheses components, dental implants and a growing range of other adjacent medical products to serve our Medical markets. We believe that our BIOLOX® brand has become the "gold-standard" for ceramic hip replacement implants. Based on the number of implants sold globally, on average a hip joint replacement with a BIOLOX® component is implanted every 30 seconds. We are focused on broadening our Medical portfolio and relationships, complemented by our Industrials product portfolio, which offers a wide range of HPC solutions to mobility markets, electronics markets and industrial applications markets, including actuators in engine valves for fuel injection systems, high-end substrates for power electronics, high speed cutting tools and sensoring solutions for different applications. Our end-market driven approach in our Industrials markets strives to actively focus on themes for development in the largest and most attractive industrial segments while our growth strategy in the Medical markets centers on organic growth and M&A, particularly in dental, orthopedics, complementary materials and digital solutions.

Our leading R&D infrastructure with over 600 patents and over 200 trademarks, as well as more than 150 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally enables us to stay at the forefront of innovation. Throughout our R&D activities, we closely collaborate with customers during the entire development and commercialization cycle of our products and become embedded within our customers' innovation processes by offering value-added solutions. Within the last five years, we have introduced many new products including key innovations in areas of new materials and processes as well as new medical solutions, such as BIOLOX CONTOURA®, a new generation of licensed ball heads cleared for marketing by certain of our customers by the U.S. Food and Drug Administration ("FDA") for use in certain prosthetic hip replacements without bone cement, and a ceramic core for the Simplify®Disc spinal disc implant by Simplify Medical (now part of the NuVasive group). Simplify®Disc received FDA approval for use in certain 1-level implants in 2020, and approval for use in certain 2-level implants in 2021.

Although 63.6% of our revenue was generated from customers based in Europe for the twelve months ended September 30, 2021, 19.7% of which was generated with customers based in Germany, we have a global infrastructure with production facilities in 11 countries across Europe, North America, Asia and South America, and over 3,400 full-time equivalent ("FTE") employees as of September 30, 2021. Further, many of our customers have a strong export-focus which positions us as a company with a global sales footprint.

For the twelve months ended September 30, 2021, we generated revenue of €629.4 million. The Issuer's Pro Forma Adjusted EBITDA for the twelve months ended September 30, 2021 was €275.9 million. Our Cash Conversion Ratio consistently remained above 80% during the last two years.

Our operations focus on two markets: Medical markets and Industrials markets.

Medical Markets

We develop and manufacture advanced ceramics, which are designed to perform their functions in critical medical applications, including hip replacements, other orthopedic implants and dental implants to serve Medical markets. In these markets, we primarily focus on ceramic components for hip joint prostheses, such as ball heads and cup inserts used in hip replacement procedures.

We believe that practitioners recognize our HPC components for medical implants, namely in hips, as a superior solution with proven benefits versus other materials such as metal alloys of cobalt and chrome. As a result, ceramic materials are replacing traditional materials for hip joint prosthetic components such as metal which have documented safety concerns and can trigger physical reactions in patients including, for example, allergic reactions resulting from metal sensitivity. In particular, HPC components are not only highly biocompatible, but also extremely wear resistant and durable and thus, have the ability to improve patients' lives through appropriate immunological response, corrosion resistance, infection prevention, lowest wear of all bearings and best clinical outcomes. Consequently, ceramics penetration in global medical implant markets is steadily rising leading to increased growth for our ceramic components. More than 20 million of our BIOLOX® ceramic components have been implanted in patients globally as of the date of this offering memorandum. We estimate that nearly one in two hip joint implant systems sold worldwide includes at least one ceramic component. Our customers are orthopedic implant OEMs, including the top orthopedic implant OEMs who together have a strong presence in the global hip implant market. We believe that our BIOLOX® brand has come to symbolize high quality and innovation and is increasingly preferred by surgeons and other medical professionals. We believe that in the future, the superior characteristics of ceramic materials will drive the rapidly growing market for dental implants, in which we have been active for many years and are further ramping up our presence with our DENSILOX® and ZERAMEX® brands. The penetration of ceramics in the dental implants market is rapidly increasing from a low starting point (according to a leading international consultancy firm, the ceramic share in the dental implant market in the US and EU-5 was equal to 7% in 2019) as patients not only become more focused on aesthetics and biocompatible implants, but also as new product innovations have closed the gap with titanium implants in terms of product quality, primarily relating to wearability and longevity. Since 2020, our HPC solutions have been used for spine disc implants and, over the coming years, we expect to bring our BIOLOX® technology to more orthopedic applications, such as implants for knee and shoulder. We also have a strong presence in ceramic solutions for medical equipment markets, including medical glove formers. In particular, we focus on ultrasound equipment, flow sensors, disposable medical glove formers and other applications in the medical field such as hermetic products for medical, pharmaceutical or laboratory environments.

Industrials Markets

We develop, manufacture and supply a broad range of highly specialized, performance critical HPC solutions for customers catering primarily to mobility, electronics and industrial applications to serve our Industrials markets.

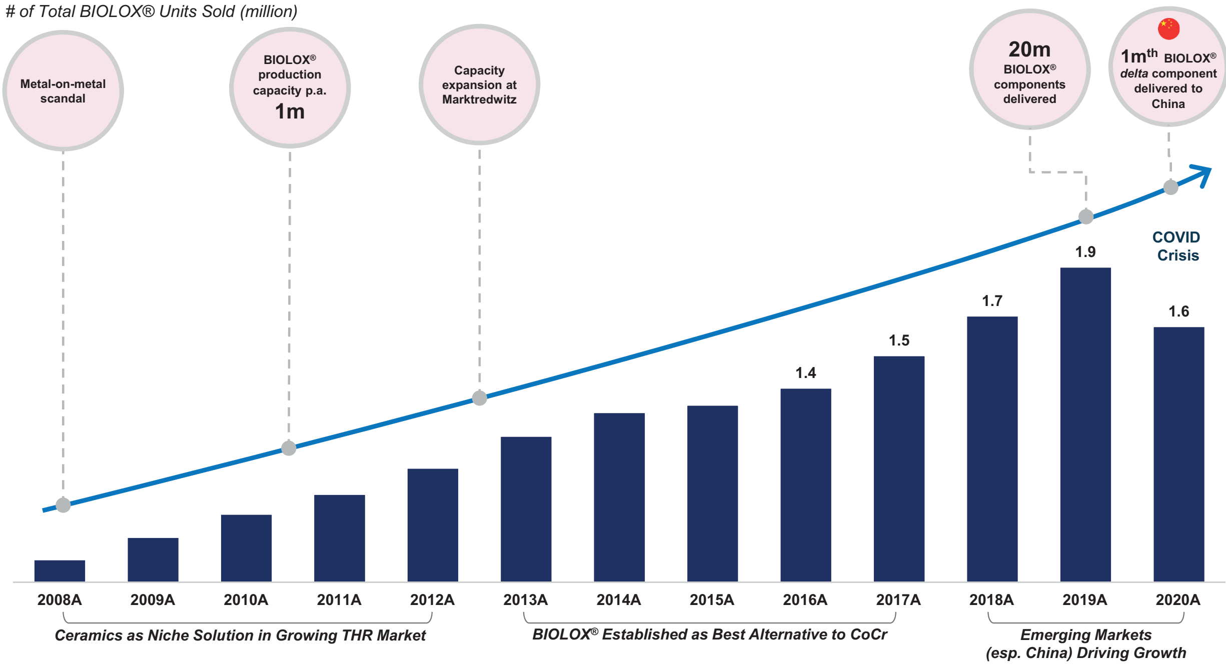
We are a leading HPC manufacturer with a portfolio comprised of many different solutions used across various end-markets. Our dedicated teams of scientists and engineers collaborate closely with customers to develop tailor-made solutions and production processes to fulfill distinct functionality and performance requirements. We believe that we are one of the few advanced ceramics manufacturers with a full-range of HPC materials and manufacturing processes with a global reach. Our HPC solutions are often used in performance-critical components. For example, our cutting tools have a longer life and faster cutting speeds compared to non-HPC cutting tools, allowing our customers to save costs and reduce downtime. In mobility engineering, HPC products, including our piezo ceramic components, play a vital role in increasing safety and are increasingly being used to meet the high performance requirements of electronics components in hybrid and full electric vehicles. They also improve cost-effectiveness and enhance comfort in vehicles. Our ceramic substrates are used for a variety of purposes in the electronics and telecommunications sector, including measurement and control technology and entertainment electronics. We believe that the specialized, mission-critical nature of our solutions, our long-standing customer relationships and our highly diversified portfolio of solutions and customer base, reduce the exposure of our business to the Industrials markets to any single industry or product.

Our Competitive Strengths

A high growth med-tech platform with defensible industry leading position

We are the innovation leader of ceramic components for medical implants, addressing a €8.1 billion market based on global sales in 2019, according to a leading international consultancy firm. The global addressable orthopedics implant market, consisting of hip, spine, knee and shoulder and veterinarian orthopedic implants, amounted to €3.5 billion in 2019, and its growth is driven by an aging population, increasing life expectancy, increasing prevalence of overweight and chronic diseases, increasing access to healthcare, favorable demographics factors and increasing number of pet owners (for veterinarian implants), among others. Further, global growth in the hip total addressable market by volume of hip implant surgeries is expected to grow at a CAGR of approximately 5% from 2022 to 2026. We believe practitioners recognize our high performance ceramic components for medical implants as a superior solution with proven benefits and a superior clinical record as compared to other materials such as metal alloys of cobalt and chrome. As a result, ceramics penetration in global medical implant markets is steadily rising, leading to increased growth for our ceramic components. For example, in hip implants, the ceramic volume share of hip ball heads is expected to increase from approximately 47% in 2019 to approximately 58% in 2026, with a longer-term penetration potential of 100% and increasing penetration by 18% from 2016 to 2026, according to a leading international consultancy firm. The global addressable dental implant market is estimated to amount to €4.6 billion in 2019 and to grow at a CAGR of approximately 6% between 2022 and 2026 driven by an aging population, higher disposable income and increased aesthetic consciousness, with ceramic dental implant EU-5 and US markets growing at a CAGR of approximately 10% for the same period, according to a leading international consultancy firm, driven by an aging population, higher disposable income, and increasing awareness of dental aesthetics. The volume share of ceramic dental implants for the EU-5 and US dental implant fixtures and abutments is expected to grow from a mere 4% in 2019 to 6% in 2026, with a mid-term ambitious penetration potential of 20% to 25% in the US and 20% to 30% in EU-5, according to a leading international consultancy firm.

BIOLOX® is our key brand and product line for our orthopedics business. Our BIOLOX® product line has been in the market since 1974, growing from approximately 0.6 million units sold per year in 2008 to approximately 1.6 million units sold for the year ended December 31, 2020 (which includes the impact of procedure postponements during COVID-19-related lockdowns), as shown by the graph below:



As of the date of this offering memorandum, well over 20 million BIOLOX® components have been delivered to medical OEMs worldwide. We believe that our BIOLOX® components are the "gold-standard" for hip implants with a unique market position, and hip implant systems containing our BIOLOX® components have become the product of choice for surgeons around the globe. OEMs, hospitals, surgeons, patients and regulators all expect consistent and flawless performance, which we believe we can demonstrate on the basis of significant in-body performance and our unmatched clinical record.

We also have a highly defensible position in dental implants. With the acquisition of Dentalpoint in 2021, we have added ZERAMEX®, a well-established, certified implant systems brand with a long-standing clinical history, to our high-quality, innovative ceramic implants brand, DENSILOX®. Both DENSILOX® and ZERAMEX® are 100% metal-free and cement-free solutions: ZERAMEX® has FDA and CE clearance and long-standing clinical history.

Defensible market position due to strong customer loyalty and stickiness, unmatched scale and quality track record as well as high regulatory hurdles

We have over 45 years of experience in the orthopedics market and have established strong and long-standing relationships with our customers, including all of the top orthopedic implant OEMs. We believe we are a key supplier of ceramic components to the top orthopedic implant OEMs. We are able to achieve significant economies of scale and regularly implement productivity improvements, which helps us to effectively compete given that players in this industry require scale in order to cover fixed costs. OEMs typically prefer suppliers with capacity to increase volumes, react flexibly to volume changes and sign longer-term contracts. We are also able to manage costs through our strong supplier base built up over a number of years. We believe our customers are highly loyal as we have a strong reputation with surgeons and care providers. In addition, our ceramic hip components represent only a small portion of the total price of an implant system for an OEM, typically comprising less than 10% of the overall cost, but are critical to the performance of these products. As a result, customers tend to be less sensitive to the cost of these components and primarily focused on quality. Ceramic hip components also have a high potential of being more cost-efficient over the course of their lifecycle than metal components due to their durability (regardless of the patient's age) and other safety concerns. In addition, responsibility to bring a new device to the market typically lies with the OEM, as the marketing authorization is granted not for the component but for an entire hip implant system. This process requires substantial financial efforts and time since obtaining marketing authorization from regulators can take 18 months or longer for ceramic-on-polyethylene products or up to six years for ceramic-on-ceramic products across geographies. Therefore, replacing one part in a hip implant system could require new or additional regulatory authorizations or delay the regulatory review process, which incentivizes customers to use an established and proven product like ours. We also maintain a regulatory and quality team of over 50 people as of September 30, 2021, in an effort to ensure a smooth process and efficient assistance both to our customers and to our internal organization. Given the associated liability risks for OEMs in relation to any quality issues, we believe that OEMs prefer our well-trusted BIOLOX® brand to others.

We actively engage in promoting our brand among key opinion leaders in the medical industry, including surgeons and hospitals by regularly organizing technical training sessions and attending medical seminars on clinical outcomes and material properties of ceramics. We believe BIOLOX® is a globally recognized brand in hip implant solutions among surgeons and considered the industry "gold-standard" for hip replacement procedures. As a result, our leading market position enhances continuing customer loyalty.

Strong R&D capabilities and track record of medical manufacturing excellence

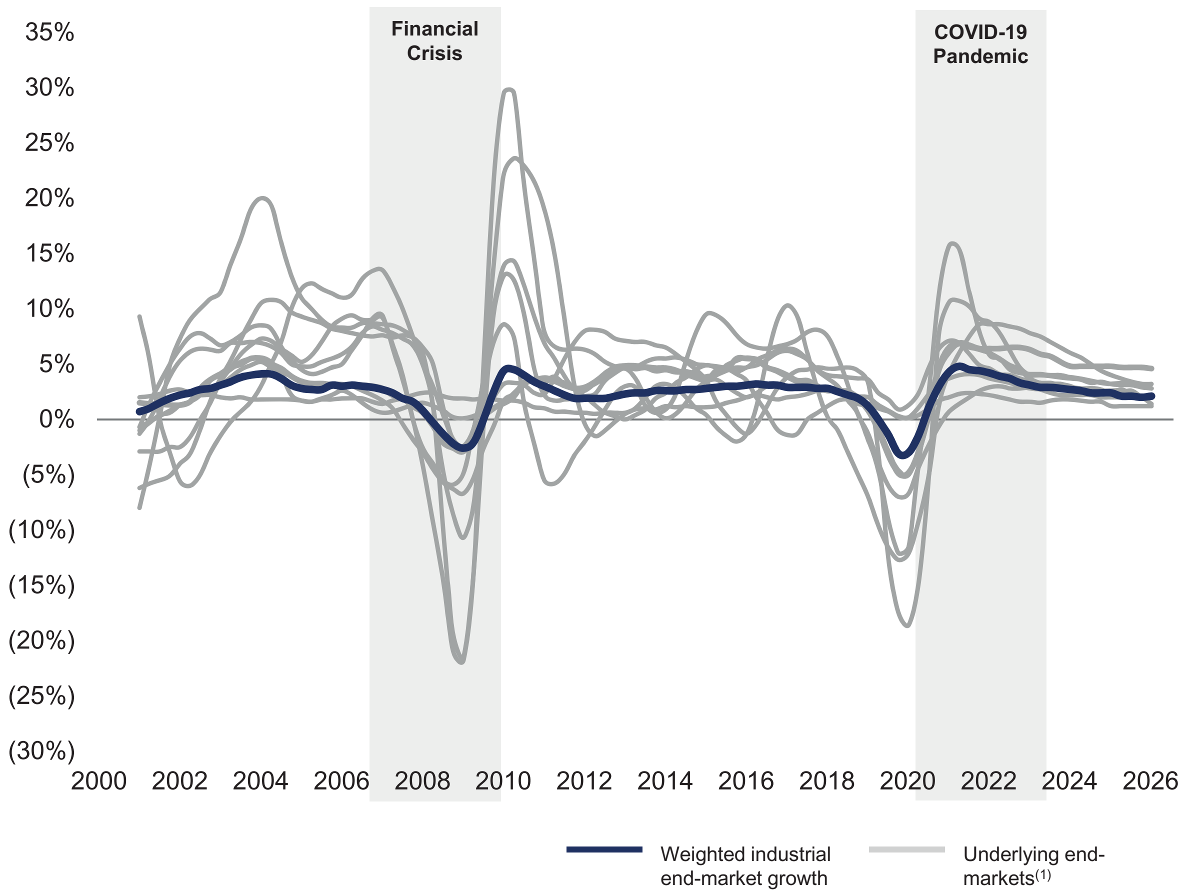
Our decades of experience as a leading manufacturer of high performance ceramic components with a broad coverage of different ceramic materials has provided us with an unmatched combination of R&D infrastructure, process excellence and regulatory expertise. Throughout our R&D activities, we closely collaborate with customers during the entire development and commercialization cycle and become embedded within our customers' innovation processes by offering value-added solutions. Our leading R&D infrastructure with over 600 patents and over 200 trademarks (registered across Germany, the European Union, the United Kingdom, the United States and China) as of the date of this offering memorandum, as well as more than 150 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally enables us to stay at the forefront of innovation. Within the last five years, we have introduced many new products including key innovations in areas of new materials and processes as well as new medical solutions, such as BIOLOX CONTOURA®, a new generation of licensed ball heads cleared by the FDA for marketing by certain of our customers for use in certain prosthetic hip replacements without bone cement, and a ceramic core for the Simplify®Disc spinal disc implant by Simplify Medical (now part of the NuVasive group). Simplify®Disc received FDA approval for use in certain 1-level implants in 2020, and approval for use in certain 2-level implants in 2021. Furthermore, our unique combination of know-how, experience and equipment has allowed us to optimize our high-volume production process with units undergoing quality tests at every stage. We have a robust ability to produce and deliver clinical grade ceramic solutions at scale, with the ability to produce more than two million BIOLOX® hip components per year, and we have delivered well over 20 million BIOLOX® components in total as of the date of this offering memorandum. With our nimble setup, we are able to react quickly to changing customer demands, meet peak increases in demand as well as rapidly progress from prototyping to large volume production. Our production facilities in Marktredwitz, Lauf and Plochingen (all in Germany), and our Spreitenbach facility in Switzerland (operated by our subsidiary, Dentalpoint AG) are equipped with highly automated machine park manufacturing equipment dedicated to developing prototypes and made-to-order batches or pilot series, which we believe makes us the only hip component player capable of providing ceramic hip components at scale. Our dual-site manufacturing footprint for hip components fulfills the critical sourcing requirements of our customers and manifests us as a preferred supplier. Our culture and track record of quality control has also contributed to our being awarded various quality and industry certifications.

Customer-centric, profitable and resilient Industrials markets

We complement our product offering and solutions for the Medical markets with those for the Industrials markets, offering highly specialized solutions to select industrial markets and applications, in particular mobility, electronics and industrial applications. Revenue from Industrials markets represented 51.9% of our revenue for the twelve months ended September 30 2021.

We believe ourselves to be the partner of choice for a diverse base of blue-chip customers across various end markets, which has resulted in growth of approximately 3% per annum since 2000, despite the financial crisis and the impact of the COVID-19 pandemic during this period, demonstrating the stability, resilience and solid profitability of our Industrials markets. In addition, as demonstrated in the graph below, the growth dynamics of our addressable Industrials end-markets for the periods presented are largely uncorrelated.

Global YoY Growth of Core End Markets(1) (%)



Source: a leading international consultancy firm

(1) Industries shown include aerospace, motor vehicles & parts, electrical equipment manufacturing, consumer electronics, machine tools, basic chemicals & fertilizers, textiles, oil & natural gas extraction, construction of buildings, public administration, defense & social security.

In recent years, we have positioned ourselves as a customer-centric solutions provider in the Industrials markets. Due to the specialized nature, manufacturing complexity and quality requirements of our products, we enjoy customer relationships spanning decades with many Industrials customers. The collaborative nature of our development processes often means that we are the sole supplier of a particular solution with high contract renewal rates, as co-developing specifications often requires years of validation. Further, while our solutions are typically mission-critical, these usually account for a small portion of the overall cost of our customers' end-products. Our diverse base of customers includes leading blue-chip customers such as Bosch, Brembo, Hella, Schaeffler, BASF, Rogers, Heraeus, Scientific Design, Cepheid, Federal Mogul, Oerlikon, Berliner Glas and Volkswagen.

Our business from the Industrials markets benefits from our focus on attractive, growing and broad range of end-markets. For example, in the mobility market, we expect the rise of electric vehicles and autonomous driving to facilitate the use of piezo-ceramic components, used in a wide range of sensors, as well as the increased use of substrates for various demanding power electronic solutions. In particular, hybrid electric vehicle ("HEV") drivetrains include ceramic components for both internal combustion engine ("ICE") and electric vehicle ("EV") drivetrains. The decline in demand for ICE should be more than compensated by HEV demand, which is expected to grow by approximately 30% between 2020 and 2026 and to represent a market value of approximately €0.7 billion to €1.0 billion by 2026 (compared to an expected total market value for drivetrain technology of between €1.2 billion and €1.4 billion in 2026) according to a leading international consultancy firm.

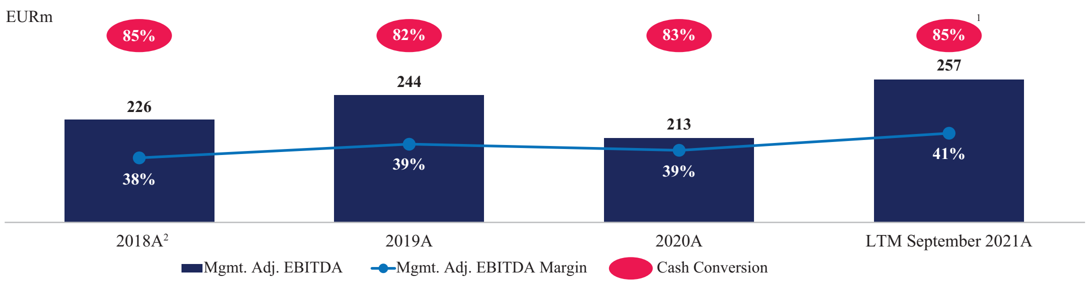
HEV production is expected to be 47 million vehicles per year by 2026 according to a leading international consultancy firm, with the ceramic value per hybrid vehicle representing approximately between €16 to €21 per vehicle in the same period, making it an attractive growing market. The transition to EV also increases ceramics intensity for this category of vehicles (power electronics, passive and active components, circuit protection, circuit boards) to approximately €15 to €19 per vehicle. The EV market is expected to reach a production level of 12 million vehicles by 2026 and to represent a market value of approximately €180 million to €220 million by 2026, according to a leading international consultancy firm. We also believe we are well-placed to capitalize on trends driving growth in other industrial end-markets besides mobility such as electronics and industrial applications.

Strong financial profile supported by sustained profitability and highly attractive cash generation

We have evolved into a leading high-growth medical company with a highly resilient financial profile. Between 2007 and 2019, we were able to grow revenues by approximately 5.4% per year, on average, which was driven by secular growth, steadily increasing ceramics penetration across our end-markets and targeted growth initiatives. Our Management Adjusted EBITDA margins were 37.7%, 39.4%, 38.6% and 40.7% in 2018, 2019, 2020 and the twelve months ended September 30, 2021, respectively, bolstered by a differentiated and highly specialized product offering, operational excellence and a standout ability to profitably scale up production in a highly regulated industry. Our prudent approach to cost management in sales and other supporting functions has contributed to strong operating leverage and has allowed us to increase profitability.

In addition, our well-invested manufacturing footprint allows us to operate with modest maintenance capital expenditure requirements, which typically comprise half of our total capital expenditures. While our total capital expenditures are subject to the viability of growth projects during the period, our flexible R&D approach and growth capital expenditure projects provide us with the flexibility to defer a significant part of planned expenditures to later periods.

Our business is also highly cash generative and has a track record of delivering strong financial results with a Cash Conversion Ratio of 85.3%, 82.1%, 82.8% and 84.9% in 2018, 2019, 2020 and the twelve months ended September 30, 2021, driven by growth and margin expansion as well as a well-invested asset base and capital expenditures focusing on attractive growth projects. We intend to maintain a disciplined approach in using such cash, while preserving attractive margins. We believe that the stability and resilience of our business has been demonstrated in particular during the economic slowdown resulting from the COVID-19 pandemic. For example, we recorded a resilient Cash Conversion Ratio of 82.8% in 2020 as a result of strict cost control measures, including effective cost reduction programs. This was driven in part by the strength of our team, our flexible cost base as well as the highly diversified portfolio of end-markets we serve and customer base of our business. The graph below shows our Management Adjusted EBITDA, Management Adjusted EBITDA Margin and Cash Conversion for the period between 2018 and the twelve months ended September 30, 2021:



(1) Excluding €50 million of purchase price payment related to the acquisition of Dentalpoint AG.
(2) Figures for 2018 are presented on a *pro forma* basis, giving effect to the acquisition of CeramTec Holding and its consolidated subsidiaries in 2018 as if it had occurred on January 1, 2018. See "*Presentation of Financial and Other Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of Ceramtec Holding GmbH in 2018*."

Highly experienced management team with track record of profitably growing the business

Our management team combines deep and long-standing industry knowledge and extensive experience working for other global organizations such as Biomet, Daimler, Johnson Controls, Eaton and Siemens. Our CEO Dr. Hadi Saleh is a surgeon by profession and thus, has an excellent and hands-on understanding of our customers' needs. The managerial excellence of our management ranges from regulatory compliance and process excellence to audit tests as well as an uncompromising attitude of quality and integrity. In particular during the COVID-19 pandemic in 2020, our management showcased its track record of operational excellence driving margin and cash conversion stability. The senior team is further supplemented by a highly capable, committed, and specialized second level management with proven track records of developing and commercializing innovative HPC solutions, especially accelerating our medical platform. We also benefit from a highly productive and loyal over 3,400-strong employee base as of September 30, 2021, with very low employee turnover as well as good relationships with all work councils and unions.

Our Business Strategy

Drive growth of leading hip implant offering

We will continue to drive the penetration of BIOLOX® in orthopedic hip replacement implants and continued education of end-users about the benefits of ceramic components. According to a leading international consultancy firm, the market for ceramic hip implants is expected to grow at approximately 8% per year between 2022 and 2026, driven by an overall increase in underlying hip replacement surgeries (5%) and increased ceramics penetration (3%). Growth is expected to be particularly pronounced in underpenetrated markets such as China and Rest of World markets (i.e., excluding China, EU-5 the US). China is one of the fastest growing markets for hip replacements with an expected CAGR of 13.4% for ceramic hip components from 2022 to 2026, according to a leading international consultancy firm. We intend to partner with local players in China to drive further penetration and achieve scale through domestic geographic expansion. As such, we are currently involved in multiple projects with leading Chinese OEMs. Our established footprint and customer suite in China provides a proven playbook for other high growth geographies such as India. In addition to regular upgrades of existing products, we also focus on introducing new products centered around hip implants leveraging our global leadership position. For example, we successfully launched a new generation of licensed ball heads cleared by the FDA for marketing by certain of our customers for use in certain prosthetic hip replacements without bone cement, BIOLOX CONTOURA®, in 2019 and are in the process of launching a ceramic resurfacing solution with two ongoing projects in clinical trials and anticipate CE marking in 2022. Beyond introducing new products, we are also able to monetize our unique position as an innovation leader by offering adjacent services to our customers such as the shipping of our components in sterilized packages, regulatory services on the back of our extensive experience with regulatory bodies globally (e.g., technical file preparation and submission) and engineering services (wide range of services to facilitate collaboration across component interfaces and process steps, e.g., 3D scanning, CAD Modelling).

Increase our presence in the dental market

We are a leading manufacturer of ceramic dental implants with our ZERAMEX® brand's long-standing clinical history, and together with our DENSILOX® brand, we offer 100% metal-free and cement-free components with high corrosion resistance, hardness and toughness. In addition, our highly-specialized portfolio includes FDA-cleared and CE-marked products. In doing so, we pursue a three-pronged go-to-market strategy offering a comprehensive one-stop shop solution consisting of white label and custom-designed products for OEMs, custom-made partnerships with OEMs and branded products via direct sales channels or distributors, respectively. Our offering is supplemented by key services across product development, digital solutions, quality control, manufacturing and regulatory affairs. We have strong conviction in the future growth trajectory of the ceramics dental implant market, as tooth replacement procedures with biologically sound implant materials which are free of metallic parts and superior aesthetic outcomes continue to grow in popularity as a premium solution. While ceramic dental implants are still a relatively niche product within the titanium-dominated dental implant market, with a 7% share of the €2.6 billion market (EU-5 and US markets) in 2019, according to a leading international consultancy firm, ceramic penetration is expected to significantly increase resulting in average growth of the ceramic dental implant EU-5 and US markets by approximately 10% per year between 2022 and 2026. We believe that our strong product portfolio and broad market access will allow us to grow over-proportionally, driven by the underlying growth in dental procedures as well as increasing penetration of ceramics in the dental market. We believe we can leverage our well-established market position, track record of operational excellence and production at unmatched scale in other ceramic applications, to take market share in the dental market. We have high volume and high-quality manufacturing capabilities with flexible production routes in place to ramp-up production as demand increases. Our regulatory expertise as well as clinical trial and documentation history will help us to scale-up our product offering. We are also planning to expand our product offering to other implant treatments such as full dentures or implant fixation and are rolling-out our digital workflow offering for full digital service provisions to end-customers.

Increasing Growth in Medical Equipment

We aim to grow our presence in medical equipment markets on the back of strong end-market demand. In particular, we intend to focus on ultrasound equipment, flow sensors and medical glove formers.

The ultrasound equipment market is expected to grow in terms of value by 4% per year between 2022 and 2026, according to a leading international consultancy firm, driven by increasing healthcare spend due to ageing population and focus on proactive diagnosis. We also expect a shift away from MRI/CT imaging and increasing adoption in clinical applications to drive long-term growth in ultrasound equipment. We intend to leverage our piezo-ceramic knowledge to grow our presence in ultrasound imaging equipment and high-powered ultrasonic transducers.

The market for medical delivery systems is expected to grow 6% per year between 2022 and 2026, according to a leading international consultancy firm, driven by a strong demand for insulin and infusion pumps. We believe that we can capitalize on this growth given our strong relationships with the leading OEMs, to expand our presence in this market.

The global disposable glove market is expected to grow between 7% to 9% per year between 2022 and 2026, according to a leading international consultancy firm, driven by increased health and safety awareness globally, particularly due to the COVID-19 pandemic, which is expected to continue to drive long-term growth. We have a dedicated facility in Seremban, Malaysia for manufacturing glove formers, capable of coping with growing demand and located in close proximity to the its key customer. We intend to further capitalize on our brand and visibility to strengthen our position in this market.

Notwithstanding the above areas, we will also continue to monitor attractive opportunities to enter other medical equipment markets that cater to our unique expertise and capabilities.

Leverage our BIOLOX® technology to expand into other adjacent orthopedic markets

We believe that superior characteristics of HPC materials will open up the market for other orthopedic implants, such as spine, knee and shoulder. For spines, we developed and launched on the market the ceramic core for the Simplify® Disc implant in cooperation with Simplify Medical in 2020, and have received FDA approvals for use in certain 1-level implants in 2020, and approval for use in certain 2-level implants in 2021. The global market for artificial spinal disc implants is projected to grow by approximately 9.5% per year between 2022 and 2026, according to a leading international consultancy firm. Ceramic components are expected to reach up to 10% market share by 2026, according to a leading international consultancy firm, driven by clinical benefits of the Simplify® Disc solution with our ceramic core over comparable cervical disc implants due to its slim design, MRI compatibility, use of biocompatible materials and unique articulation designed to restore natural motion, together with the strong marketing capability of NuVasive, a large spine-focused OEM that acquired Simplify Medical in 2021.

We also view ceramic knee implants as a logical next step for us, given the similar market dynamics and success factors when compared to hip implants. The market for knee implants was €1.6 billion in 2019 and expected to grow at approximately 4% per year between 2022 and 2026, according to a leading international consultancy firm. While virtually all current replacement implants are made of metal alloys, we expect that similar issues as with hips, such as wear, infections, allergic reactions and ultimately, removal surgeries, are likely to provide a significant market opportunity for ceramic implants. We believe the opportunity for a new generation BIOLOX® knee is particularly attractive due to the anticipated significant ceramic penetration in combination with our existing orthopedic expertise and brand awareness amongst OEMs and end-users. Our new BIOLOX® delta knee implants are currently in the design phase, and we expect clinical trials to commence in 2023 and go-to-market in the United States in 2027.

In addition, ceramic shoulder implants and other orthopedic solutions for extremities present further attractive adjacencies for growth that we will explore in the medium- to long-term. The global market for shoulder implants amounted to €212 million in 2019 and is projected to grow by approximately 7% between 2022 and 2026, according to a leading international consultancy firm. The market currently comprises almost 100% metal implants, with two challenger OEMs providing insignificant volumes of ceramic components. However, we expect that ceramic shoulder implants could comprise up to approximately 10% of the shoulder implant market in the medium term and up to 50% in the longer-term, primarily due to the superiority of ceramic shoulders compared to metal, further driven by surgeons, who would specifically recommend a ceramic shoulder implant for patients who are hypersensitive, young or undergoing total shoulder replacements. We have designed a new ceramic shoulder head to be used for both anatomic as well as reverse shoulders. We currently have an agreement with one OEM in place that will shortly start clinical trials to gain market approval and another OEM that has the design on hand.

Focused product strategy targeting selected high growth and profitable industrial end-markets

We continuously monitor additional value-add services for existing solutions in the Industrials markets (e.g., lazering, metallization) and new solutions in targeted high-growth markets (e.g., electronics and e-mobility) in order to consider how best to apply our materials expertise, manufacturing know-how and regulatory experience to develop relevant HPC solutions that can be successfully commercialized. For example, we are actively managing the auto transition by expanding our broad range of products tailored to ICE and HEV drivetrains to also include new thermal and electronic HPC applications for the growing electronic and autonomous vehicle markets. According to a leading international consultancy firm, the total ceramic value per hybrid or EV drivetrain is estimated to be above that of ICE drivetrains (currently at approximately €16 for hybrid and €15 for EV drivetrains, as opposed to €10 for ICE drivetrains, and expected to grow by 2026 to a range of approximately €16 to €21 for hybrid drivetrains and approximately €15 to €19 for EV drivetrains, while total ceramic value per vehicle is expected to remain stable at approximately €10 for ICE drivetrains). We expect to benefit from the ramp up in hybrid and EV adoption as the annual total market value for hybrid and EV drivetrain technology is expected to have outgrown the total market value of ICE drivetrain technology by 2026, according to a leading international consultancy firm. We further believe the growth in power electronics and renewable energy, more specifically wind energy and electrical output from larger turbines, pose attractive potential opportunities for our HPC substrates.

Driving excellence and digitalizing our business

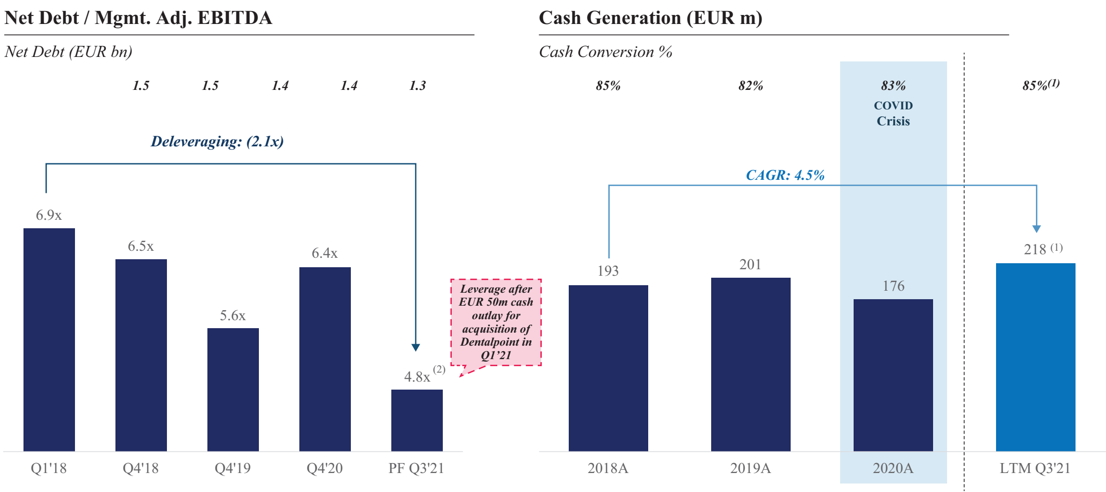
We intend to maintain our position as the partner of choice in our end-markets by continuing to focus on initiatives that drive excellence in all aspects of our business, in particular our commercial & operational excellence and continued digitalization efforts. Specifically, we apply value-driven pricing and provide new service functions as we continue to strive to be closely attuned to our customers' needs. The successful roll-out of our global CRM system and an aligned commercial process will allow us to continually enhance the customer experience and build meaningful partnerships. Furthermore, we continue to optimize our global operations and supply chain management, realizing productivity improvements based on a performance-enhancing lean manufacturing/lean enterprise methods to achieve annual productivity improvements and to reduce manufacturing inefficiencies including, among others, defects, extra-processing, over-production, and inventory costs ("Lean Principles") and focused employee engagement. Concurrently, we have implemented modern tools such as integrated planning, digital factory and visual shop-floor management systems to increase asset utilization and reliability of supply. A further focus of our growth strategy has been digitalization initiatives. In particular, we intend to build out the use of our digital sales channels to drive market and customer accessibility (e.g., self-configuration tool and digital marketing). Digitalization will also serve as a tool to further streamline our organization and automate various processes.

Pursue value accretive M&A

We have, in the past, engaged in M&A activity to strategically position our business for future growth. We have a successful track record of executing and integrating multiple bolt-on acquisitions, including our most recent acquisition of Dentalpoint AG, the electrochemical business from Morgan Advanced Materials plc and DAI Ceramics Inc. Going forward, for our business related to the Medical markets, we aim to leverage our brand strength, our strong regulatory know-how as well as customer relationships across the globe, and focus on potential targets in ceramics and adjacent non-metal advanced materials. As part of the targeted growth strategy for the Industrials markets, we may pursue selective bolt-on acquisition opportunities in industrial growth segments.

Maintain a disciplined approach to cash generation

Supported by our well-invested manufacturing footprint and overall growth, our business is highly cash generative, with Cash Conversion Ratios of 82.1% and 82.8% in 2019 and 2020, respectively. We intend to maintain a disciplined approach in using such cash while preserving attractive margins. Further, we have historically been successful at reducing our indebtedness as demonstrated by the constant decrease from a ratio of 7.3x adjusted net debt to Management Adjusted EBITDA in the third quarter of 2017 in connection with the financing for the acquisition in 2018, to a ratio of 4.8x adjusted net debt to Pro Forma Adjusted EBITDA as of September 30, 2021, prior to giving effect to the Transactions. This decrease is further illustrated by the graph below:



(1) Excluding €50 million of purchase price payment related to the acquisition of Dentalpoint AG.

(2) Based on the Issuer's €275.9 million Pro Forma Adjusted EBITDA for the twelve months ended September 30, 2021.

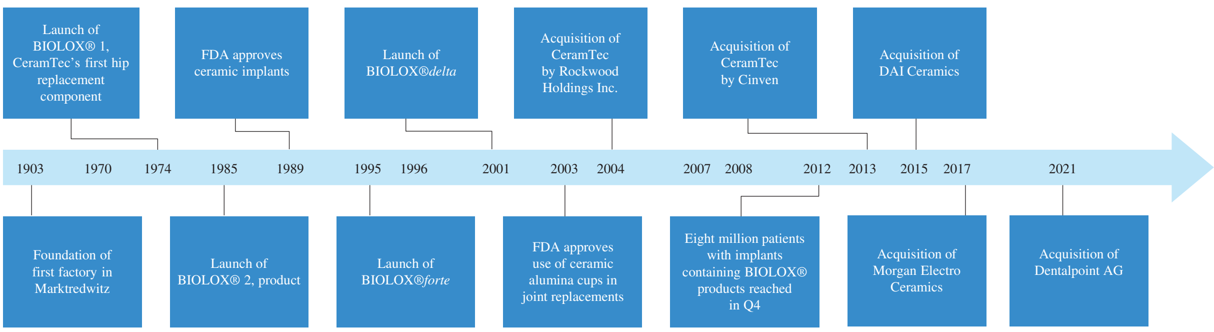
We reduced our leverage, despite COVID-19 due to continued Management Adjusted EBITDA growth across the period and strong cash generation. We anticipate that our future uses of cash include engaging in value accretive M&A and maintaining an optimal capital structure.

Our History

Our history dates back to 1903 when we opened our first factory in Marktredwitz, Germany, and started manufacturing advanced ceramics under the trade name "Thomas factories" (*Thomaswerke*). We were subsequently taken over by Philipp Rosenthal & Co. AG in 1908 and, in 1921, commenced the development of technical ceramics products & solutions. In 1951, we opened our first factory in Plochingen. Through a series of combinations, the Group in substantially its current form was established in 1996, following the merger of ceramic company Cerasiv GmbH with Hoechst CeramTec AG. The Rockwood Group acquired the Target Group in 2004 from Metallgesellschaft AG. Subsequently, the private equity firm, Cinven acquired the Target Group from the Rockwood Group in 2013. In 2015, we accelerated our growth by completing the acquisition of DAI Ceramics, Inc., a specialized producer of ceramic cores for precision casting applications, such as the production of advanced components for aircraft engines and stationary gas turbines, implants and other delicate high-tech applications in foundries. In 2017, we acquired the UK electro-ceramics business of Morgan Advanced Materials plc, which included two manufacturing sites in the United Kingdom, further strengthening our piezo-ceramics product portfolio. In 2018, a consortium of funds led by BC Partners, and participated by PSP Investments and the Ontario Teachers' Pension Plan acquired the Target Group. In early 2021, we strengthened our leadership in the ceramic med-tech market with the acquisition of Dentalpoint AG, a Swiss corporation specialized in ceramic dental implants. Most recently, on August 16, 2021, Bidco, an entity beneficially owned by a consortium led by funds advised by BC Partners and CPP Investments, entered into the Acquisition Agreement with CTEC Acquisition S.à r.l. for the acquisition of the Target Group. See "*Summary—The Transactions*" for more information.

Throughout our history, we believe we have been at the forefront of new technology, providing innovative solutions for our customers and introducing first-in-market products such as ceramic preforms (metal matrix composites) used in production of vehicle parts, specifically as part of lightweight construction, and ceramic-on-ceramic ball head and cup insert components for hip replacement systems. We launched our first ceramic hip joint component, BIOLOX® 1, in 1974. Since the development of BIOLOX® 1, we have continued to build on our expertise in ceramic components for hip replacement systems and have launched four generations of BIOLOX® materials to date, the latest being BIOLOX®*delta* in 2003. Our BIOLOX® materials and related product manufacturing processes represent our core know-how and are exclusive to us. Through each generation of BIOLOX® materials, we have continued to refine our BIOLOX® materials to target a wider range of applications. We believe that our BIOLOX® components now represent the "gold-standard" for hip implants with a unique market position, and hip implant systems containing our BIOLOX® components have become the product of choice for surgeons around the globe. To date, we have sold well over 20 million BIOLOX® products worldwide, which includes over 14 million BIOLOX®*delta* ball heads and inserts sold since 2003.

The following timeline provides an overview of our history and key product milestones:



Overview of HPC Products

The global ceramics market comprises products and components based on inorganic, non-metallic, microcrystalline materials that are manufactured at high temperatures. Ceramics can be divided into traditional ceramics, such as bricks, tiles and white ware and high performance ceramics, which are ceramic materials and products optimized for special purposes. High performance ceramics include ceramic powders, ceramic additives, structural ceramics and functional ceramics.

HPC products have superior characteristics compared to classic metal or polymer products in six key aspects: biocompatibility, mechanical, thermal, chemical, electric/magnetic and optical.

Dimension	Key Characteristics of HPC
Biocompatibility	Ceramic materials are biologically inert, making them durable and stable enough to withstand the corrosive effects of bodily fluids
Mechanical	**Strength/hardness**: flexural strength relates to ceramic's ability withstand mechanical loads without fracturing **Abrasion/wear resistance**: due to high hardness and material strength, ceramics have a high-abrasion-and-wear resistance **Weight**: ceramics are lighter than other high-strength metals with the same volume
Thermal	**Thermal conductivity**: some ceramics are able to transfer heat extremely well through the material **Thermal expansion**: ceramics have low thermal expansion—they keep their size and volume relatively constant when heated **Heat shock resistance**: ceramics have the ability to withstand high temperatures (high melting point)

Dimension	Key Characteristics of HPC
Chemical	**Corrosion/oxidation resistance**: due to high levels of chemical stability, ceramic materials are highly resistant to chemical corrosion, oxidation, and other chemical processes **Adsorption**: adhesion of atoms, ions, or molecules from a gas, liquid or dissolved solid to a ceramic surface possible
Electric/Magnetic	**Electric conductivity**: ceramics can exhibit various electrical characteristics: insulator (insulating effect), dielectric (insulator that accumulates electricity), conductor (conduct electricity—depending on voltage level) and magnetic (ferrite ceramics) **Piezoelectricity**: some ceramics possess a unique property allowing them to convert mechanical shock or vibration into electrical signals, and vice versa (direct and indirect piezoelectric effect)
Optical	**Transparency**: ceramics can be made translucent by minimizing pores and boundary elements after sintering, and by increasing crystal size in order to reduce boundary interfaces **Other electro-optical effects**: ceramics can exhibit changes in fluorescence, phosphorescence, color tone, and birefringence due to interactions with light and, electric/magnetic fields

HPC's unique characteristics enable their application in multiple end-user markets. Listed below are certain examples, among others, of the HPC characteristics that are sought after by various industries for use in different products:

- *Medical—implants*: The medical industry utilizes the high strength and low abrasion mechanical qualities of HPC to cope with weight pressure. In addition, as a result of the biocompatibility, superior wear profile on polyethylene inserts and lack of allergic reactions with the human body (with no risks of hypersensitivity or toxicity given the elimination of risks from potentially toxic metal ions, according to a leading international consultancy firm), HPC are regarded as the material of choice for implant prosthesis components, in particular for hip procedures;

- *Medical—equipment*: Ultrasound imaging equipment employing piezo ceramic components to send out and measure sound wave signals. Further applications include glove formers for the production of sanitary and surgery gloves, as well as in-line sensors for drug delivery systems;

- *Mobility—piezo systems*: The mobility industry utilizes the electric/magnetic characteristic of advanced ceramics by using the indirect piezo effect, converting electricity into motion, for fuel injection systems to provide accurate fuel supply without time delays. In addition, advanced ceramics can be used in e-mobility for electric motors, charging units and passenger cells, as well as in substrates for high- and low-voltage circuit carriers;

- *Mobility—cutting tools*: The mobility industry utilizes the mechanical, thermal and chemical characteristics of HPC products for cutting tools which are high strength and have thermal resistance for hot hardness during machining and reduced chemical reactions with material resulting in increased output/ throughput;

- *Electronics—packages*: The electronics industry utilizes the electric characteristic of advanced ceramics to embed transistor packages or integrated circuits in HPC products and provide insulation. Advanced ceramics can act as circuit carriers, heat sinks, sensors, actuators and as active or passive components in different areas (for example, ceramic heat-sinks can provide the right climate for high-power electronics);

- *Electronics—Semiconductors*: The electronics industry utilizes high-precision silicium carbide plates in machines used for the production of semiconductors with very tight tolerance levels;

- *Industrial Applications—increased performance in energy and environmental processes*: The energy industry utilizes ceramic materials to enable safe, low-wear process control, reducing emissions and ensuring an efficient use of resources in the energy supply process; and

- *Industrial Applications*: The textile industry uses ceramic components' surface qualities in thermodynamics, friction, wear and electrostatic interaction for the forming, texturing and modification of yarns, as well as thread guides and cutters.

Our Business

Our operations focus on two markets—Medical markets and Industrials markets. With regard to both, we believe that our customers view us as a thought leader and reliable partner with whom they can closely collaborate on the research and development of both material science and application design that meet complex commercial or regulatory requirements.

The following table provides an overview of our sales by region for each of the periods presented:

	Year Ended December 31,					
(in € million)	2018[(a)]	%	2019	%	2020	%
	(audited)	(unaudited)	(audited)	(unaudited)	(audited)	(unaudited)
Germany	125.7	25.3%	141.9	22.9%	111.7	20.2%
Rest of Europe	215.8	43.4%	270.3	43.6%	233.7	42.3%
North America	65.0	13.1%	91.8	14.8%	91.2	16.5%
Asia	75.1	15.1%	100.4	16.2%	105.4	19.1%
Other Regions	15.2	3.1%	16.0	2.5%	10.7	1.9%
Total	**496.9**	**100%**	**620.4**	**100%**	**552.7**	**100%**

(a) The statement of comprehensive income information for the year ended December 31, 2018 presented in the comparative column in the 2019 Audited Financial Statements of the Target include (i) approximately two months of operations of the Target, CeramTec BondCo and CeramTec AcquiCo only, without any results from the operational business activities of the Group, and (ii) approximately ten months of operations of the Target, including CeramTec Holding and its consolidated subsidiaries from time to time. As a result, given the impact of the acquisition of CeramTec Holding and its consolidated subsidiaries, the statement of comprehensive income for the year ended December 31, 2018 is not directly comparable to the statement of comprehensive income for any subsequent period. See "*Presentation of Financial Information—Historical Financial Information—Comparability of the Financial Statements—The Acquisition of CeramTec Holding GmbH in 2018*" for further information.

Although 62.5% of our revenue was generated from customers based in Europe for the year ended December 31, 2020, 20.2% of which was generated with German customers, we have a global infrastructure with production facilities in Europe, North America, South America and Asia, with over 3,400 FTE employees and 20 production sites as of September 30, 2021. In addition, many of our customers have a strong export-focus which positions us as a company with a global sales footprint.

Medical Markets

Our advanced ceramics are designed to perform their functions in critical medical applications, including hip replacements, dental implants and key medical devices and systems used in operating theaters, hospitals and laboratories. As a medical engineering partner, we offer a tailored materials portfolio for greater product efficiency, safety and durability, for precision and process efficiency from the initial concept to largescale production.

Our Medical markets portfolio covers four product groups: Orthopedic hip replacement implants, Dental implants, Other orthopedic implants and Medical equipment. Our revenue from medical equipment markets is presented as part of our Medical markets revenue in this offering memorandum as we believe it is more consistent with our market-based approach to our business. Historically, we have reported revenue from medical equipment markets as part of Industrials revenue in our Financial Statements.

Orthopedic Hip Implants

Overview

Our main orthopedics implant focus is on ceramic components for hip joint prostheses, such as ball heads and cup inserts, to be used in hip replacement procedures. Ceramic materials are replacing traditional materials such as metal contained in hip joint prosthetic components. In addition to their wear resistance and excellent friction behavior, high performance ceramics are biologically inert, therefore representing one of the few materials that are durable and stable enough to withstand the corrosive effects of bodily fluids. Research has also shown that ceramic hip joint components are less susceptible to fracture than certain other alternative materials. Practitioners recognize our high performance ceramic components for medical implants as the superior solution with proven benefits and with a superior clinical record as compared to other materials such as metal alloys of cobalt and chrome. As a result, ceramics penetration in global medical implant markets is steadily rising, leading to market-beating growth for our ceramic components. For example, in relation to hip implants, the ceramic volume share of ball heads is expected to increase from approximately 47% in 2019 to approximately 58% in 2026, with a longer-term penetration potential of 100% for ceramic ball heads according to a leading international consultancy firm. As a result, we believe that high performance ceramics will increasingly become more common for medical applications, such as for the repair and replacement of hips, knees and other human body parts.

We leverage over 25 years of best-in-class brand heritage and product expertise. In particular, BIOLOX® is our key brand and product line for our orthopedics business. Our BIOLOX® product line has been in the market since 1974 and, as of today, well over 20 million BIOLOX® components have been delivered to medical OEMs worldwide. We believe that our BIOLOX® components are the "gold-standard" for hip implants with a unique market position, and hip implant systems containing our BIOLOX® components have become the product of choice for surgeons around the globe.

Our end customers are well-established blue-chip entities such as DePuy, Smith & Nephew, Stryker and Zimmer Biomet. We also supply challengers including Medacta, Corin, Aesculap, Wego and AK Medical, with the aim of strengthening our customer base and maintaining our market leading position despite potential market share shifts between established blue-chip and challengers. We believe our customers are highly loyal as we have a strong reputation with surgeons and care providers. Many of our medical solutions have been developed in collaboration with our customers in order to be customized for their hip implant systems. We believe that our BIOLOX® brand has come to symbolize high quality and the industry standard for hip replacement procedures. Demand for our BIOLOX® products is also supported by our reputation and clinical history.

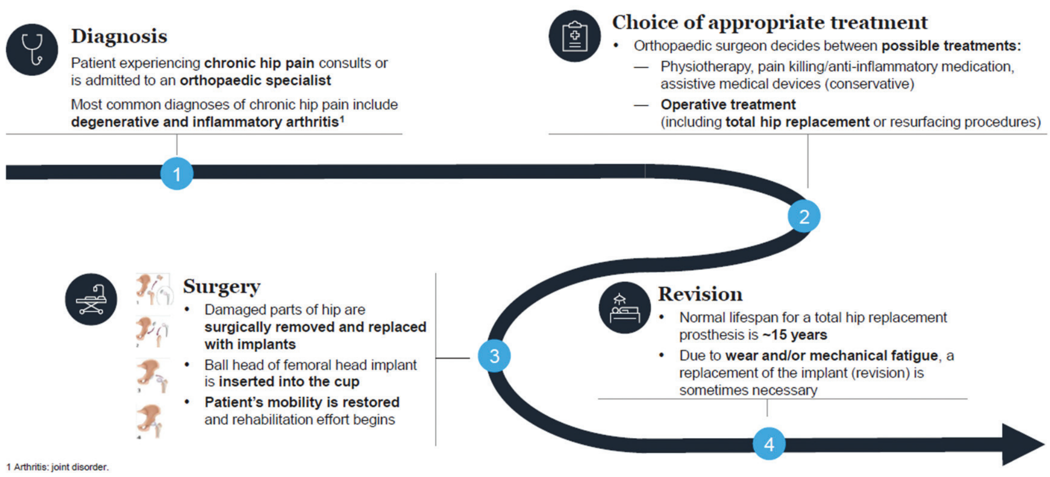
The ceramic components for hip joint prostheses are produced at our facilities in Marktredwitz and Plochingen in Germany, and are sold to OEM orthopedic implant manufacturers globally. After successfully expanding our medical production facilities in Marktredwitz in 2013 and 2014 and again in 2019 and 2020, our annual production capacity exceeded 2.1 million units (based on current product mix) on a year-to-date basis as of September 30, 2021 and we expect it to exceed 2.3 million units as of December 31, 2021 (based on current product mix). We believe that our production capacity allows us to further ensure security of supply for our customers and increase our ability to efficiently react to fluctuations in demands by leveraging our increased number of production lines.

Hip Replacement Therapy

The most common cause of chronic hip pain and disability is arthritis, including osteoarthritis, rheumatoid arthritis and traumatic arthritis.

Hip replacement therapy is used to treat hip pain when other more conservative alternatives such as medication or physical therapy are no longer a feasible option. It involves surgically replacing damaged parts of the hip with implants or prostheses. As a result of age or other factors, the protective cartilage tissue between the bones that meet at the hip joint, the acetabulum and femur, can be worn out, damaging the joint and causing pain and reduced mobility. Depending on the type and severity of damage to the joint, treatments of choice are partial or total joint replacement procedures, or a revision procedure after an initial implant. If only a portion of the femoral side of the joint is damaged, the affected parts can be replaced, with a partial joint replacement restoring function and reducing discomfort for patients. However, when the entire joint is damaged, a total joint replacement is necessary. A revision procedure may be required or desirable to replace, repair or enhance the initial prosthesis. While our current product portfolio mainly consists of components for total hip replacement systems, we also manufacture components for partial and revision procedures. In 2019, approximately 3.6 million hip replacement procedures (including partial procedures, revisions and resurfacing) were performed worldwide, according to a leading international consultancy firm.

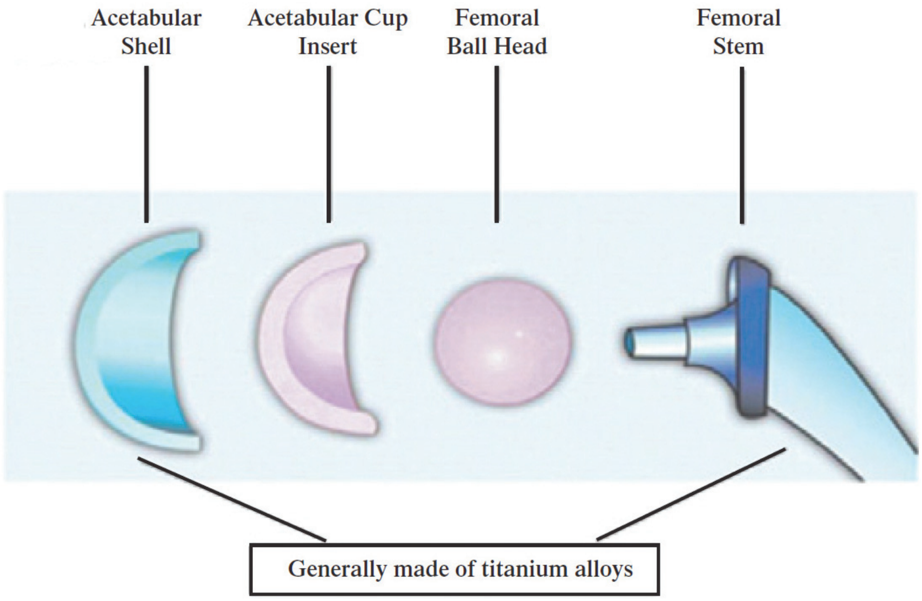
The diagram below illustrates the step-by-step procedure carried out for a total hip replacement.



Hip replacement therapy is one of the most successful surgical procedures in modern medicine, according to the American Academy of Orthopedic Surgeons. First performed in 1960, improvements in both surgical techniques and materials have greatly increased the effectiveness of total hip replacement. A successful hip replacement procedure will relieve pain, increase motion and allow the patient to live a fuller, more active life.

Materials for Hip Implant Components

To replicate the action of a human hip joint, an artificial hip replacement commonly has four parts: femoral stem, femoral ball head, acetabular insert and acetabular shell. The “acetabular cup” replaces the natural hip socket and consists of a shell and an insert. The femoral ball head allows the hip joint to rotate. The femoral stem is inserted into the femur and anchors the implant in place. The diagram below illustrates the hip joint replacement system.



The acetabular cup insert is made of ceramic, metal or polyethylene (plastic), while the femoral ball head is made of ceramic or metal. The insert and the ball head together form the “bearing”, which is a performance-critical part of the hip implant system. The bearing affects the durability, mobility, flexibility and range-of-motion of the artificial joint. All of our hip joint products are advanced ceramic bearing components. The following table shows the options for combinations of materials used in artificial hip joint bearings:

	Ceramic-on-Ceramic (CoC)	**Ceramic-on-Polyethylene (CoP)**	**Metal-on-Polyethylene (MoP)**	**Metal-on-metal[1] (MoM)**
Description	• Ceramic head on ceramic insert (with metal shell and stem)	• Ceramic head on polyethylene insert (w/ metal shell & stem)	• Metal head on polyethylene insert (w/ metal shell & stem)	• Metal head on metal insert (with metal shell and stem)

An important aspect of the bearings in total hip replacement systems is the amount of wear. Wear particles created by the articulating femoral ball head and acetabular cup insert are deposited in the surrounding tissues and have the potential to trigger inflammation and loosening of the implant, as well as other negative side effects. For example, metal-on-metal hip implants can cause cobalt and chromium wear particles to enter the patient’s bloodstream and result in metal toxicity.

We believe that due to the superior wear rate and biocompatibility of ceramic components, they will increase penetration in the hip joint market. Ceramic ball heads can also be used in combination with polyethylene or the more recently-developed highly cross-linked polyethylene cup insert with better results than metal ball heads. Additionally, clinical studies have demonstrated that ceramic-on-ceramic bearings have the lowest wear rates and generate wear particles with the lowest level of reactivity due to size, shape and chemical composition.

Products

For ceramic ball heads and cup inserts used for hip joint implant systems, we believe our BIOLOX® brand has come to symbolize high quality and innovative products. More than 20 million BIOLOX® products have been sold worldwide. We believe that we are a market leader in ceramic components for hip joints globally. According to a leading international consultancy firm, penetration of ceramics hip ball heads in hip implants was 47% for hip ball heads and 12% for hip inserts in 2019, with expected penetration of 58% and 13%, respectively, for 2026, and 100% and 40%, respectively, on the longer term. The rationale for the potential 100% longer-term penetration for ceramic hip ball heads is based on better patient outcomes from ceramic due to reduced wear and higher biocompatibility (given the elimination of risks from potentially toxic metal ions). The 40% longer-term penetration for ceramic hip inserts is based on the longer durability of ceramic-on-ceramic implants, with such lower penetration percentage being due to stronger availability of ceramic-on-polyethylene alternative products.

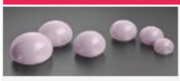
We currently offer two different ceramic materials under our BIOLOX® brand which are compatible with each other.

- BIOLOX®*forte*, introduced in 1995, represents of previous generation of ball head and insert products. BIOLOX®*forte* solutions offer properties that are designed to exceed the requirements outlined in ISO 6474-1, the relevant standard establishing the mechanical and other properties for the product, that is taken into account by the FDA in its regulatory review processes. BIOLOX®*forte* is made of high purity alumina with a small share of magnesium oxide to control grain growth and achieve maximum density. BIOLOX®*forte* is based on over 40 years of clinical experience, particularly our experience with hip joint replacement parts marketed and sold before the introduction of our BIOLOX®*forte* implants.

- BIOLOX®*delta*, introduced in 2003, consists of a newer generation of material, compared to BIOLOX®*forte*. It consists of a mixed oxide ceramic with increased fracture strength, improved wear properties and biocompatibility. The main difference between BIOLOX®*forte* and BIOLOX®*delta* is BIOLOX®*delta*'s greater strength, which makes it possible to produce thinner cup inserts and both revision ball heads and femoral ball heads. BIOLOX®*delta* was developed to open up a broader range of clinical uses for a wider range of customer-specific designs for ball heads and cup insert including customers who are not currently using BIOLOX®*forte*. In over 15 years of clinical experience, we have sold a total of over 14 million BIOLOX®*delta* branded ball heads and inserts since 2003.

Within the above brands, we sell the following key products to our OEM implant manufacturer customers for use in their hip joint replacement systems.

BIOLOX®*delta* Ball Heads and Inserts — 2003



- Leading ceramic ball head solution, with increased fracture strength, excellent wear properties and biocompatibility

BIOLOX®*forte* Ball Heads — 1995

- Previous generation ball head
- Multi-decade clinical track record

BIOLOX®*delta* Inserts — 2003

- Leading ceramic insert solution

BIOLOX®*forte* Inserts — 1995

- Previous generation insert
- Multi-decade clinical track record

BIOLOX® Option Ball Heads — 2003

- Leading ceramic option ball head solution focused on revision surgeries

- BIOLOX® *Ball Heads*: Given the size range of our BIOLOX® ball heads and compatibility with other BIOLOX® family products as well as conventional polyethylene and highly cross-linked polyethylene cup inserts, we are able to offer our customers a number of possibilities for their hip replacement systems. We produce ball heads with diameters of 22 mm, 28 mm, 30 mm, 32 mm, 34 mm, 36 mm, 38 mm, 40 mm and 44 mm (while diameters of 22 mm, 30 mm and 38 mm are available in BIOLOX®*delta* only) to accommodate the size of the patient's acetabular cup, and with neck lengths in up to four sizes: small, medium, large and x-large (while the x-large size is available in BIOLOX®*delta* only) to accommodate a patient's body structure, such as leg length and tension of ligaments, and lifestyle needs. BIOLOX® ball heads are available in both BIOLOX®*forte* and BIOLOX®*delta* materials.

- BIOLOX® *Cup Inserts*: We manufacture two types of ceramic cup insert—monoblock cup inserts which are assembled during the production process by our customers and modular cup inserts which are larger and assembled by surgeons during the hip replacement procedure. With our ceramic modular cup insert, long term secure fixation of the insert in the acetabular shell is achieved by means of a particular fixation concept which fixes the BIOLOX® cup insert directly into the metal acetabular shell. With our monoblock cup inserts, state-of-the-art materials make it possible to optimize the diameter ratio between the ceramic head and the acetabulum. This enables treating even patients with a small acetabulum with relatively large ceramic ball heads, thereby leading to an increased range of motion and improved stability. Previously, this was only possible with metal-on-metal bearings. A special process is used to press the ceramic monoblock cup insert into the metal acetabular shell. BIOLOX® cup inserts are available in both BIOLOX®*forte* and BIOLOX®*delta* materials.

- BIOLOX® *DUO*: BIOLOX® DUO, which is made from BIOLOX®*forte*, is an innovative ceramic-on-ceramic alternative in partial hip replacement. There are two parts to the BIOLOX® *DUO*: the ceramic ball head is attached to the femoral stem and articulates against the ceramic cavity of a ball-shaped bipolar shell which in turn articulates against the patient's natural acetabular cartilage. The bipolar system transfers joint movement mainly into the ceramic-on-ceramic bearing part, reducing the relative motion on the acetabular side to further protect the patient's natural cartilage. Additionally, the ceramic-on-ceramic bearing results in reduced wear debris compared to polyethylene and metal. Consequently, metal sensitivity and the risk of aseptic loosening due to polyethylene particles are also reduced. The implant is particularly suitable for younger, more active patients and for patients with metal sensitivity.

- BIOLOX® *OPTION*: The BIOLOX® *OPTION* product is used for revision procedures in total hip replacement. It is intended for use either for cup revision or ball head exchange in cases where ceramic heads must be replaced on in situ femoral stems. Furthermore, the neck system offers an increased range of neck lengths for primary hip replacements.

We also dedicate our VERILOX® product line to the offering of ceramic components for orthopedic implants to be used in animal medicine for the treatment of hip dysplasia and severe osteoarthritis. Total hip replacement can be performed on dogs ranging from five to 170 pounds (about 2 kg to 70 kg in size), and on cats. VERILOX® ceramics are designed to be hypoallergenic and to assist rapid bone ingrowth with less bacteria adhesion compared to other materials.

The following table provides a breakdown of the growth in number of ball-heads and inserts units sold for the last five years.

	2016	2017	2018	2019	2020[(a)]	CAGR 2016-2020
			(in million)			(in %)
Total number of units sold[(1)]	1.4	1.5	1.7	1.9	1.6	4.7%

(a) Our financial and other operating information for the year ended December 31, 2020 includes the impact of procedure postponements during COVID-19-related lockdowns and is expected to recover to a pre-COVID-19 growth trajectory in the near- to mid-term.

(1) On average, more than 80% of our total ceramic hip implant components sold in the last five years were ball heads. This is principally due to the lower share of the total hip implant market of ceramic-on-ceramic components compared to ceramic-on-polyethylene components.

Artificial Hip Joint Market

According to a leading international consultancy firm, an estimated 3.0 million hip implant surgeries have been performed worldwide in 2020. The number of hip implant surgeries globally is expected to increase by 3.2% per annum from 2019 to 2022, reflective of the impact of postponed surgeries during COVID-19-related lockdowns and is expected to grow by approximately 5.3% per annum thereafter between 2022 to 2026, in line with pre-COVID-19 growth trends:

	Estimated number of hip implant surgeries in 2020 (in thousands)	Expected CAGR for 2022 - 2026
Germany, France, Italy, Spain and the United Kingdom	635	2.9%
Rest of Europe	421	8.4%
United States	741	1.9%
China	397	8.9%
Rest of World	807	6.7%
Global	**3,001**	**5.3%**

Source: a leading international consultancy firm

Growth in the volume of performed hip implant surgeries is primarily driven by an aging population, as well as by an increase in obesity rates, growing access to major surgeries in BRICS countries (i.e., Brazil, Russia, India, China, South Africa) due to economic development and increasing life expectancy, according to a leading international consultancy firm.

There are currently four main combinations of ball head and cup insert materials for hip implants in the market: (i) ceramic ball head and ceramic cup insert ("ceramic-on-ceramic"), (ii) ceramic ball head and polyethylene cup insert ("ceramic-on-polyethylene"), (iii) metal ball head and polyethylene cup insert ("metal-on-polyethylene") and (iv) metal ball head and metal cup insert ("metal-on-metal"). We focus solely on ceramic components. Metal ball heads are increasingly subject to safety concerns, including corrosion and release of allergens causing hypersensitivity, but are still being used due to their lower price. Metal-on-metal combinations have been declining over the years as cobalt chrome, which are used in metal hip implants, was identified as a potentially carcinogenic substance by the U.S. National Institute of Health in November 2016. Ceramic is not known to have any of these drawbacks, which has led to increasing penetration rates as metal has been increasingly substituted with ceramic. In addition, we are experiencing increasing levels of trust among surgeons due to continued growth in our clinical track record as well as improved training of surgeons about the properties of ceramic implants. Ceramic also offers postoperative process benefits, because the capsule and the tissue around the ceramic implant undergo a better healing process, with reduced risk of infections.

We service the hip replacement market with ball heads, cup inserts and option heads (used for revisions).

According to a leading international consultancy firm, the total size of the global hip implant market addressed by us amounted to approximately €600 million in 2019 (i.e., including market shares covered by metal and polyethylene). The total addressable market is expected to grow with the number of hip replacement procedures, a key driver of demand for ceramic ball heads and inserts, according to the same source. Further, ceramic as a material is increasingly used in revisions and hip replacement procedures. The market for ceramic ball heads is significantly larger than for inserts and option heads as ball heads are used across all of hip replacement procedures.

As the hip replacement market grows, ceramic components are expected to increase their share of the market by replacing traditional materials for hip joint prosthetic components such as metal which can trigger negative patient reactions, for example due to allergic reactions resulting from metal sensitivity, and have experienced documented safety concerns.

Globally, penetration of ceramic ball heads (ceramic-on-ceramic and ceramic-on-polyethylene) as a percentage of applied hip implants as a result of performed hip implant procedures was estimated at 47% in 2019, according to a leading international consultancy firm. A further increase in ceramic penetration in ball heads is expected, reaching a 100% penetration on the longer term.

Competition in Medical Applications

We sold approximately 1.6 million units of BIOLOX® products in 2020 (which includes the impact of procedure postponements during COVID-19-related lockdowns). Our competitors are mainly active in niche markets or specific geographies as shown in the table below. Additionally, some of our competitors, such as Kyocera, manufacture hip replacement systems (rather than only the components) and therefore compete directly against our customers.

Kyocera	**CoorsTek**	**Nevz-Ceramics**	**Mathys**	**Metoxit**	**LCERAM**	**Ceraver**
• Kyocera manufactures medical products, including artificial joints and dental implants, primarily for the Japanese market • 510(k) clearance obtained for artificial hip joints in 2017, started selling in the U.S. the following year	• US ceramics manufacturer, offers ceramic hip implant components since in 2011 in South America,2012 in Europe and 2016 in the US	• Russian manufacturer of ceramic for industrial and medical use	• Swiss med-device OEM focused on artificial joint replacement products	• Swiss manufacturer of dental ceramics, chemistry components and orthopedic components	• French manufacturer of metal and ceramic components for joint reconstruction implants and spine	• French manufacturer of hip and knee implant component

Source: a leading international consultancy firm

Our ceramic ball heads and cup inserts have geometric specifications that accommodate our customers' hip implant systems, and are manufactured with highly specialized equipment. If our customers were to switch to a new supplier or produce ceramic components in-house then a new procedure or approval by the applicable regulatory authority is required. Time-consuming and expensive regulatory procedures for new products and costly clinical trials provide our customers with little incentive to switch to alternative suppliers. Moreover, as of September 30, 2021, we maintain a quality and regulatory team of over 50 people, specifically trained, among other things, to assist our customers in the complex regulatory procedures relating to our products.

Surgeons tend to be reluctant to adopt new hip implant prostheses where they lack experience or if there is limited clinical history. Our BIOLOX® product line has been in the market since 1974 and well over 20 million BIOLOX® products have been implanted in patients worldwide. As a result, we believe that BIOLOX® is considered the industry standard by surgeons for ceramic-based total hip replacement procedures. Further, we believe that our ability to produce ceramic components at an industrial scale, while still maintaining a strict quality control regime and a track record of continuous productivity improvement, provides us with a competitive advantage that we believe would require significant investment for any competitor to replicate. We also believe that OEMs prefer to contract with large suppliers that have the capacity and flexibility to react to volume changes and the ability to enter into long-term relationships.

Given the foregoing, we enjoy a stable leading position in Medical markets based on our significant competitive advantage in the form of, amongst others things, regulatory approval requirements, well- established relationships with key hip implant manufacturers including the top OEMs, and the high reputational and financial risk associated with the impact of an implant product failure and recall.

Customers

We have a longstanding relationship with all of the key hip replacement implant OEMs, including the top orthopedic implant OEMs who together have a strong presence in the global hip implant market. We believe that our strategic relationship with each of the top orthopedic implant OEMs is key to our strong position in the ceramic hip replacement components market.

We co-design our ceramic components (both ball heads and cup inserts) which are highly customized to the hip implant prosthesis of our end-customers and are critical to the overall performance of their hip implant systems. As a result, we believe that our customers are not incentivized to replace our components and switch suppliers. Our core know-how lies in the BIOLOX® materials, the manufacturing process, application know-how and the ability to produce at scale. In addition, we consider our global scale difficult to replicate for competitors, in light of the significant investments required to this end.

We also collaborate with our OEM customers to assist them in reaching end-users and key decision makers, which we believe has contributed to our high level of brand loyalty, characterized by a high contract renewal rate, with very low customer churn. Health care regulatory bodies in the applicable jurisdiction, insurance providers, health care systems and the reimbursement environment all influence the choice of hip implant systems. In general, surgeons are the final decision makers who choose the hip replacement materials based on patient needs and personal experience. In the United States, while surgeons are also important, patients are increasingly becoming more knowledgeable and aware of the benefits and risks of implant materials and in some cases exert influence on decision-making. To increase the safe and effective use of our products, we conduct surgeon training sessions and produce clinical articles, apps and educational literature on our medical products that we make widely available. We hold workshops with high class international faculty covering all aspects of bearings in total hip replacement procedures. We monitor all of these sales activities closely for compliance with applicable regulations on interactions with health care professionals.

In addition, certain of our OEM customers market their implant systems with the BIOLOX® logo on their packaging or include it their surgical technique brochures. We believe that all of these activities significantly increase our brand awareness.

Our key customers comprise the bulk of our Medical markets revenues. For the year ended December 31, 2020, our top four customers in Medical markets made up 44% of our Medical markets revenue, while the top ten customers accounted for 63%.

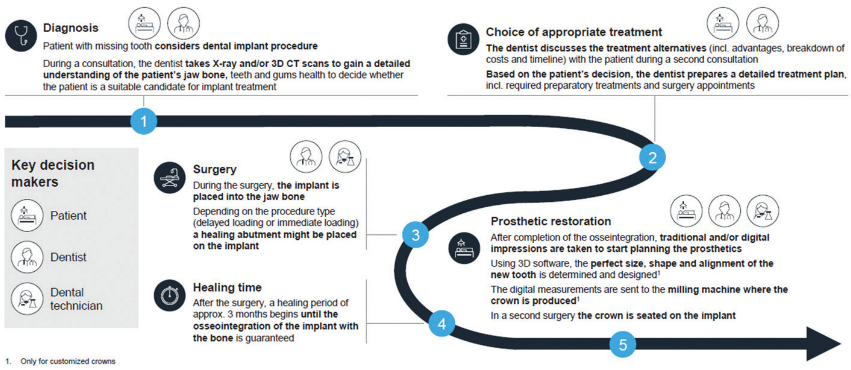
Dental Implants

Overview

Our dental sub-area focuses on a highly-specialized product portfolio that includes FDA-cleared and CE-marked products, centered around a full ceramic dental implant offering. Our aim is to provide OEMs with a "one-stop shop" solution, which includes the complete management of the development and production processes as well as key components such as thorough quality control and handling of the regulatory workstream. The broad range of services included in our offering therefore reflects the complete product life cycle workflow; from ideation, engineering, manufacturing, and regulatory to marketing and education. In addition to acting as provider of white-label solutions to certain customers, we also sell our products directly and indirectly through our DENSILOX® and ZERAMEX® brands. While each service and product can be tailored to the customer's needs in order to create maximum value, we also maintain a growing portfolio of digital solutions, in order to facilitate a completely digital workflow for customers.

Dental Implant Procedure

The dental implant procedure consists of a time-intensive 5-step process, the characteristics of which are ultimately dependent on the chosen treatment and the patient's prior oral health condition. The process is illustrated in the diagram below.



Dental Implant Design

The dental implant market is characterized by two key dental implant designs: a one-piece implant and a two-piece implant, the difference depending on whether the surgical implant and the prosthetic abutment are integrated into one single piece or rather into two separate components.

- One-piece implant designs predominantly use a restoration retention mechanism consisting of cement-retained solutions, based on which crowns are cemented to the abutment allowing for maximum aesthetics, due to the lack of a screw access hole and the compensation of improperly inclined implants.

- Two-piece implant designs offer a different restoration retention mechanism, namely screw-retained solutions. In the context of this implant, screws are placed into the crown post through the abutment, which in turn enables easy retrievability of restoration allowing for repair or examination of soft tissue and direct visualization of the implant.

Products

We provide a full ceramic dental implant range across implant fixtures, internal connection and prosthetics and operate a three-pronged go-to-market strategy via (i) direct sales, (ii) distributors and (iii) OEMs partnerships (white label and custom-designed). According to leading international consultancy firm, the dental product line provides access to a market of €2.6 billion (US and EU-5) in 2019, which is expected to grow overall by 4.8% per annum between 2022 and 2026 due to rising demand for tooth replacement, while ceramic penetration is also expected to significantly increase resulting in average growth of the ceramic dental implant EU-5 and US markets by approximately 10% per year between 2022 and 2026. This growth is also driven by rising awareness for clinical benefits of ceramic compared to titanium implants (which includes, for example, high biocompatibility and fast healing time due to less gum recession).

Our products in the dental implant offering employ highly innovative ceramic implant materials, which are 100% metal-free, with high corrosion resistance, hardness and toughness. The materials are also designed to have a high fracture strength and low thermal conductivity. We apply our robust ceramic manufacturing know-how to implement standardized production processes, which can be replicated both for small- and large-scale production and can accommodate a flexible range of manufacturing technologies (including, among others, ceramic injection molding).

A key component is our proprietary VICARBO® technology connecting the implant fixture with the abutment and crown, which is made of carbon-fiber-reinforced high-performance PEEK polymer, to allow for medically optimal elasticity in a completely metal-free implant system. In addition, certain studies mainly focusing on use of zirconia materials ("TZP") have shown that ceramic surfaces have low potential of bacterial colonization. The reduction of peri-implant plaque formation may therefore simplify hygiene for the patient and prevent gum inflammations. Our offering includes products that are regulated as Class IIb implants in the EU, and accordingly, such products are provided with clean-room packaging (which can be strengthened by optional sterile packaging). In addition, the cleanliness of our DENSILOX® products is audited by the Clean Implant Foundation ("CIF") GmbH.

Our dental product offering is comprised of the following solutions:

- Under the DENSILOX® brand, we offer high quality one- and two-piece implants and abutments exclusively as white-label solutions to OEMs, leveraging over 30 years of experience in dental applications. All DENSILOX® ceramic implants are made of 100% metal-free and biocompatible oxide-based materials, and are categorized as Class IIb implants in the EU. In 2021, we were awarded a Certified Production Quality seal for the DENSILOX® offering by the CIF GmbH.

- In January 2021, we acquired Dentalpoint AG, a Swiss leading producer of ceramic dental implants and abutments under the ZERAMEX® brand. ZERAMEX® implants are offered in all three of our dental go-to-market channels, and we are increasingly focusing on OEM partnerships. This portfolio consists of 100% metal-free and cement-free ceramic two-piece implants, with different prosthetic platforms and endosseous diameters, particularly suitable for anterior restorations enabling decisive implant osseointegration due to their micro-structured implant surface. The ZERAMEX® implants ensure high primary stability during placement due to the cylindrical-conical design of the implant thread. ZERAMEX® adds to our dental portfolio its patented VICARBO® Screw technology, which provides a 100% metal-free alternative with comparable flexibility to metal. This carbon fiber reinforced PEEK screw serves as the internal metal-free precision connection tool between implant and abutment, and ensures reliable protection against rotation (other ceramic implants use a metal screw or have a fixed (one-piece) connection of implant and abutment), a repeated correct positioning of the abutment and a tailored screw able to deform elastically in order to minimize bacteria accumulation. Through the ZERAMEX® Digital Solutions workflow, we can also offer individualized abutments and crowns suitable for highly aesthetic anterior restorations. Our ZERAMEX® implants are supported by long-standing clinical history, are CE marked and have received certain FDA 510(k) clearances.

Customers

We sell our dental implant products through three main channels: direct sales (i.e., by directly targeting dentists), indirect sales (i.e., through distributors) and white-label sales (i.e., to large white-label dental players). White label customers seek one-stop shops for ceramic implant development and production, while dentists seek innovative products and digital services for end-to-end solutions. White-label customers can benefit from our CE-marked and FDA-cleared, ready to use white-label offer (including, for example, our ZERAMEX® XT implant) in order to expand their dental implant portfolio.

Medical Equipment

As part of our portfolio for Medical markets, we also cater to medical equipment end-markets, by providing innovative ceramic offerings on the back of our material leadership and strong customer base.

In particular, we focus on ultrasound equipment, flow sensors, disposable medical glove formers and other applications in the medical field such as hermetic products for medical, pharmaceutical or laboratory environments. In addition our ceramic sensor components, actuators, valves, connectors and vacuum connections can be used in a wide range of medical engineering applications, including analysis and sensor technologies. Further, piezo-ceramics can be used for ultrasound equipment and for high-powered ultrasonic transducers to send out wave signals (which are needed in treatment applications or as dental/surgical tools). In addition, piezo-ceramics can also be employed in ultrasonic sensors for drug delivery devices. Piezo-ceramic components are electromechanical transducers, and as such are able to convert mechanical energy into electrical energy and vice-versa. Piezo-ceramic components help break up kidney and gall stones, give ultrasound diagnostics and treatment devices the necessary impulses and oscillate surgical knives and dental cleaning tools. Further application include their use as in lithotripter devices and surgical knives. Ceramic hand formers are also used in the manufacturing process for disposable medical gloves and particularly valued for their heat resistance.

Our advanced ceramics ensure that dialysis machines, endoscopic equipment and heart pumps function reliably. In aerosol therapies, piezo-ceramic components are used in nebulizers. These appliances are complemented by our Ceramaseal® hermetic feedthroughs, which are used in X-rays and MRI scans.

Additional Orthopedic Applications

In addition to our core business in the hip joint replacement market, we believe that the markets for spine replacement disc products, knee joint replacements and shoulder joint replacements could also contribute to the growth of the business generated by our products and solutions for Medical markets. We market and sell ceramic spine products, although our hip joint components sales still constitute the vast majority of our sales. We are in the process of the design and validation phases to develop our BIOLOX® knee implant. The total knee joint replacement market is larger than the total hip joint market, and, unlike hip systems where we supply ball heads and inserts in ceramics, the entire knee replacement implant system can be made of ceramics. However, ceramic components have not reached a significant market share of the total knee implant market to date. We also view the market for shoulder prostheses as another attractive area of application for ceramic components and have products for this market in our development pipeline, which are currently undergoing clinical trial.

Adjacent Medical Services

We aim to maintain our position as a trusted strategic innovation partner within the end-markets addressed by our offering of medical products and solutions. Our product portfolio is therefore complemented by a wide range of value-adding services. Our services are designed to reflect the complete product lifecycle workflow of our customers, end-users and partners, from ideation over engineering, manufacturing, regulatory through marketing and education. Each service can be tailored to our customers' needs, in order to achieve maximum value. In particular, services can be booked individually, or potentially being provided as a bundle, effectively outsourcing the entire product management workflow to us. Our service bundle can be divided into six categories: Ideation, Engineering, Manufacturing, Regulatory, Marketing and Education.

As part of the "Ideation" services, we offer a range of solutions to support business partners in their innovation process. Our "Engineering" solutions cover wide range of engineering services, from 3D scanning, CAD modeling and design evaluation through FE Analyses, risk assessment, and rationales for regulatory purposes, standard testing, product-specific setups, and statistics. If required, through our "Manufacturing" services bundle we can support customers with our ISO-audited manufacturing equipment and production capacity, specifically deployed to assist with prototype and contract manufacturing (free of internal production capacity limitations or quality management investments). "Regulatory" services include customized projects and regulatory pathway planning, device classification and evaluation of predicate devices, technical file preparation and submission, as well as negotiations and communication with the responsible national authorities. In addition, as part of the "Marketing" offering, we provide a complete range of marketing solutions aimed at facilitating and accelerate successful product launches, while reinforcing brand visibility (for example, through the use of premium brands, clinical benefit assessments, dedicated scientific affairs, and market access expertise). Lastly, as part of our "Education" offering, we provide first-hand tailored training sessions directed at medical professionals, as well as at our customers' marketing and sales teams.

Medical Regulation

United States

Medical devices, such as hip replacement systems and dental implants, are subject to extensive regulation in the United States by the FDA under the Federal Food, Drug, and Cosmetic Act (the "FDCA") and the regulations promulgated by the FDA and various other federal, state and local agencies. These regulations govern, among other things, product development, testing, manufacturing, labeling, safety, storage, market clearance or approval, advertising and promotion, import and export, sales and distribution and performance/effectiveness.

Failure to comply with the FDCA and applicable FDA regulations could result in, among other things, warning letters, civil penalties, delays in approving or refusal to clear or approve a product candidate, product recall, product seizure, interruption of production, operating restrictions, suspension or withdrawal of product approval, injunctions or criminal prosecution.

Certain of our dental-implant products, and most of our customers' products and our ceramic-on-polyethylene products (ceramic ball heads against "soft" cup insert made from polyethylene or variants of polyethylene, such as highly cross-linked polyethylene), require the submission of a premarket notification, commonly referred to as a 510(k), to the FDA prior to marketing the product. This process requires us or our customers to demonstrate that the device is "substantially equivalent" to a legally marketed device before the FDA will clear the new device for commercial distribution in the United States. We hold four 510(k)s for our ZERAMEX® dental implant systems, the most recent being cleared in November 2018.

Certain other devices our customers develop and market and our ceramic-on-ceramic products (hard-hard bearings, i.e. ceramic ball heads against ceramic cup insert) fall into a class of products for which the FDA has implemented stringent clinical investigation and premarket approval (PMA) requirements. The PMA process requires the submission of clinical and laboratory data that establishes that medical device products are safe and effective for their intended uses. The FDA will approve a medical device for commercial distribution if it determines that the data and information provided in the PMA relating to design, materials, bench and animal testing and human clinical data, including any data provided with respect to our ceramic components, constitute valid scientific evidence and that there is reasonable assurance that the device is safe and effective for its intended use.

As part of the PMA review, the FDA will typically inspect the manufacturer's facilities (which may extend to our facilities, because we supply key components to the overall hip replacement joints) for compliance with the Quality System Regulation (QSR) which governs testing, control, documentation and other aspects of quality assurance. The FDA will approve the new device for commercial distribution if it determines that the data and information in the PMA constitute valid scientific evidence and that there is reasonable assurance that the device is safe and effective for its intended use(s). Once FDA approval is granted, a medical device can be marketed to the end-customers.

One or more clinical trials are almost always required to support a PMA application and are sometimes required to support a 510(k) submission. Clinical studies of unapproved or uncleared medical devices or devices being studied for uses for which they are not approved or cleared (investigational devices) must be conducted in compliance with FDA requirements.

We maintain separate device master files with the FDA to support our customers through the regulatory process and protect our technology and know-how. The master files contain data and information on our products (relating to ceramic femoral heads and inserts) so that we can provide our customers with a reference to the file number that they can use during the approval or notification process with the FDA. This also means that we do not need to share our valuable know-how or studies with our customer. Changes in a medical device approved or cleared by the FDA, including changes or substitution of components, such as our ceramic components, may trigger a new FDA 510(k) clearance or FDA approval process, including the PMA process and potentially additional clinical trials.

After a device is cleared or approved for marketing, numerous and pervasive regulatory requirements continue to apply. These include the QSR regulation, which governs, among other things, how manufacturers design, test, manufacture, exercise quality control over and document manufacturing of their products, labeling and claims regulations, which prohibit the promotion of products for unapproved or "off-label" uses and impose other restrictions on labeling, and the Medical Device Reporting regulation, which requires reporting to the FDA certain adverse experiences associated with use of the product.

European Economic Area

The regulation of our customers' and our products in Europe falls primarily within the EEA, which currently consists of the twenty-seven Member States of the European Union plus Iceland, Liechtenstein and Norway, and has approximately 450 million inhabitants.

In the EEA, our customers' and our devices are required to comply with the essential requirements of the EU Medical Devices Regulation (Regulation (EU) 2017/745 of April 5, 2017 on medical devices, which came into force on May 26, 2021 (the "MDR"). We do not act as a legal manufacturer within the EEA according to the MDR (with the exception of Dentalpoint AG with regard to dental implants), for our BIOLOX® products and currently, these certifications under the MDR are solely handled by our customers. However, we do act as a legal manufacturer within the EEA according to the MDR for our ZERAMEX® products and therefore these products, must be registered and approved by a Notified Body (as defined below) before commencement of marketing and sale activities.

Effective May 26, 2021, the new Medical Devices Regulation has introduced a number of significant changes to the legal framework for medical devices in the EEA. These changes include the reclassification of certain medical devices, more stringent requirements to conduct clinical performance studies and to collect and retain post-market clinical data, the introduction of a unique device identification for all medical devices and a new scrutiny mechanism for certain high-risk medical devices undergoing conformity assessments by independent and neutral institutions designated by a Member State of the EEA ("Notified Bodies"), which may be required to consult with an expert panel before allowing the device to be placed in the market. We have established a dedicated team to evaluate the impact of these new requirements under MDR, conduct a gap analysis and adapted our internal processes and documents to both comply with and support our customers to comply with these new regulations. We have also implemented selected amendments to certain quality agreements. For our DENSILOX® and ZERAMEX® products, this includes re-certification of our quality management systems under MDR.

Compliance with the requirements under MDR entitles us and our customers to affix CE marks to the medical devices, verifying that the products meet MDR and national law requirements for medical devices, without which they cannot be commercialized in the EEA. Medical devices lawfully placed on the market pursuant to the EU Medical Devices Directive prior to May 26, 2021, may generally continue to be made available on the market or put into service until May 26, 2025, and any new products will need to be certified under MDR going forward. The European standards bodies, mainly the European Committee for Standardization (CEN), have adopted numerous harmonized standards covering a wide range of devices or specific devices or device categories. Compliance with the relevant harmonized standards applicable to a given medical device provides a presumption of conformity with the general safety and performance requirements. The European Commission has adopted various guidelines, consensus statements and interpretative documents aimed at ensuring the uniform application of the provisions of the MDR. In order to demonstrate compliance with the general safety and performance requirements and obtain the right to affix the CE conformity mark, products must undergo a conformity assessment procedure, which varies according to the type of medical device and its classification. Except for low-risk medical devices (Class I non-sterile, non-measuring devices, non-reusable surgical instruments), where the manufacturer can issue an EC Declaration of Conformity based on a self-assessment of the conformity of its products with the general safety and performance requirements of the MDR, a conformity assessment procedure requires the intervention of an independent and neutral institution designated by a Notified Body. Typically, the Notified Body, during the course of reviewing a product application (Technical Documentation), will confirm that Quality System certifications are being upheld through ongoing assessments which are conducted separately and must be evidenced to complete the conformity assessment. For our customers, we can draw up an EC Declaration of Conformity which allows our customers to affix the CE mark to their products. Among possible conformity procedures, the most common is the assurance of a "Full quality management System" pursuant to Annex XI of the MDR (based on the requirements of ISO13485), which will be combined with a review of the Technical Documentation.

Further, the advertising and promotion of our products is subject to EEA Member States' laws implementing the Medical Devices, Directive 2006/114/EC concerning misleading and comparative advertising, and Directive 2005/29/EC on unfair commercial practices, as well as other EEA Member State legislation and national laws governing the advertising and promotion of medical devices (for example, the German Drug Advertisement Law). These laws may limit or restrict the advertising and promotion of our customers' and our products to the general public and may impose limitations on our promotional activities with healthcare professionals.

United Kingdom

Following Brexit, the legal framework for the regulation of medical devices in the United Kingdom is provided by the Medical Devices Regulations 2002, which gives effect to the EU Medical Devices Regulation in the United Kingdom. In accordance with applicable UK legislation, our existing certificates of conformity bearing CE marking and issued by EU bodies will continue to be recognized in United Kingdom until June 30, 2023.

However, starting from July 1, 2023, medical devices which are placed on the market in in the United Kingdom will be required to bear a UKCA mark and must, in the case of Class IIb medical devices, successfully complete a conformity assessment by a UK "approved body". In addition, any medical device to be placed on the market in United Kingdom must be registered with the Medicines and Healthcare Products Regulatory Agency ("MHRA"), which is now a standalone regulatory body. The UK government has introduced a new Medicines and Medical Device Act which transfers the regulatory decision-making formerly carried out by the European Commission to the MHRA. The MHRA may choose to align with MDR going forward or retain regulatory flexibility through domestic legislation.

Under the terms of the Northern Ireland Protocol, the EU legal framework governing medical devices, including the Medical Devices Regulation, also applies in Northern Ireland. Therefore, medical device products placed on the market in Northern Ireland are required to bear the CE mark and must be registered with the MHRA.

Industrials Markets

We develop, manufacture and supply on a large scale a broad range of highly specialized, tailor-made performance critical HPC solutions for customers spanning a wide range of industries including mobility, electronics and industrial applications. For the twelve months ended September 30, 2021, our Industrials markets revenue represented 51.9% of our revenue. The business generated from the Industrials markets demonstrated our robust resilience through the recent economic downturns, largely due to our broad end-market focus and the diversification of our customer base.

We are a HPC player with a portfolio comprised of many different solutions used across various end-markets, which we believe reduces our exposure to a single industry or product. Our dedicated teams of scientists and engineers collaborate closely with customers to develop tailor-made solutions and production processes to fulfil distinct functionality and performance requirements, and to research a pipeline of next-generation products.

We streamlined our organizational framework by changing our commercial set-up to a customer-focused end-market driven sales organization, with three main areas based on customer industry verticals, while also deploying commercial excellence programs for our entire organization.

As a result of our revamped customer-centric go-to-market strategy in our Industrials markets and our materials and manufacturing process expertise, we are able to provide our customers with product solutions for which the superior properties of ceramic material can be considered. Due to the superior characteristics of advanced ceramics, such as better wear and heat resistance than alternative materials, our HPC solutions are often performance-critical components.

In addition, we harmonized and standardized site management activities, implementing a robust sales, inventory and operations (“SIOP”), which enabled us to reduce capacity constraints and lead times, improving our working capital management as well as delivery to promise. We also deployed improvement programs targeting employees, based on Lean Principles, with good engagement levels.

Industrials End-Markets

Industrials markets includes multiple end-markets, including mobility, electronics, industrial applications and International Affiliates. Each of our Industrials end-markets is also influenced by separate and distinct factors and has a different economic cycle. Across our end-markets, we maintain long relationships with our blue-chip customer base, and a streamlined set-up. This enables us to supply bespoke product solutions, enhanced by our distinct competencies, with the aim to deliver significant competitive advantages to our customers.

The table below sets out the split of revenue generated by our solutions for Industrials markets based on targeted end-market for the year ended December 31, 2020.

End-Market	**Approximate % of 2020 revenue from solutions for Industrials markets [(1)] (%)**
Electronics	11.8%
Mobility	29.0%
Industrial Applications[(2)]	28.8%
International Affiliates	30.4%
Total	**100.0%**

(1) Based on management estimates, unaudited. Based on 2020 revenue from solutions for Industrials markets, including international affiliates and segment consolidation.

(2) Industrial Applications revenue calculated as the sum of “Industrial Applications” and “Consolidation Industrial”.

Our targeted Industrials end-markets are summarized below.

Mobility

Ceramics offers significant contributions to mobility. For example, HPC components can be employed in vehicles as well as in production facilities for vehicle construction processes and as components and parts in a wide variety of applications (i.e., ceramic tapes for oxygen sensors and direct injection, or piezo-ceramic parts and assemblies for knock and parking sensors). We believe that our advanced ceramics play a key role in increasing safety, cost effectiveness and comfort in vehicle engineering. Our production of solutions for the mobility end-market is stable and reliable, ensuring quality. In addition, we maintain design and quality control measures which are based on mobility market quality control systems (such as ISO 16949), and strong collaboration ties with our customers' technical teams.

We maintain a resilient offering of solutions for internal combustion engine ("ICE") vehicle and products. Our range of ceramic products includes applications across drivetrain, electronics and process technologies. We believe that the current declining trend of ICE demand will be overcompensated by growing demand in the e-mobility area, through the increasing market penetration of solutions dedicated to hybrid and electric vehicles.

In the e-mobility sector, we provide high-performance components for electrical vehicles, which can be implemented both on fully electric or hybrid vehicles. New high power chip sets being developed in the e-mobility sector, as well as ongoing development of miniaturized power electronics, constantly require the research of newer and more efficient heat management solutions. Our ceramic solutions for e-mobility are specifically designed to contribute towards increasing battery power, comfort and safety of the e-vehicle. In particular, we developed solutions covering electric motors, charging units and passenger cells, as well as different substrates for high- and low-voltage circuit carriers (also through passive and active components installed on circuit protection appliances and circuit boards). Our products include piezo-ceramic components, which act as sensors for electronic controls and are therefore able to provide information on the vehicle's quiet engine operation, position and changes in direction (see "—*Ceramics Solutions in Industrials Markets*"). Electronic components based on ceramic substrates react to this information and activate their control of motor management functions and vehicle safety systems, such as ABS and ASR (being also able to release the airbag when necessary). With regard to engines, heat-resistant ceramic parts such as valve components, backings in the crankshaft housing and components for water and fuel pumps, ensure increased efficiency, reduced wear and lower noise emissions. Our high-performance technical ceramics products are suitable for vehicles with combustion, hybrid and electric engines. In electric vehicles, HPC are used in thermal management systems, power electronics, bearing and other electrical components. In addition, hybrid vehicles include HPC components from both ICE and EV drivetrains, offering a high potential for bridging the transition to electric vehicles.

Our ceramic-metal composites also include solutions for the light metal construction aspects of the mobility industry, while modern halogen or xenon light systems with ceramic components significantly improve visibility. The use of SPK® ceramic cutting materials and precision tools in mobility manufacturing also ensures the efficient production of vehicle components made of cast iron or hardened steels.

Within the mobility end-market, our key customers include well-established mobility suppliers with whom we maintained strong relationships, such as BOSCH, Federal Mogul, Brembo, Faurecia, Hella and Schaeffler. We maintain a lead supplier role for most of our mobility end-market customers.

Electronics

We are one of the leading manufacturers of HPC components in electronic applications, focusing on substrates and various other components are used throughout the field of power electronics, and particularly power modules. For example, ceramic heat sinks provide the right thermal environment for high power electronics, while ceramic substrates can be employed for metallized power electronic boards. In addition, components are used in the mobility industry, optoelectronics, measurement and control technology and in industry and entertainment electronics, while our dedicated teams operate in close integration with our customers' R&D teams to develop next generation solutions.

The Electronics end-market is currently driven by global trends and increasing technology requirements. For example, in the renewable energy area, newer generations of solar and wind plants require upgraded power electronics, able to increase efficient power transmission over long distances, and to support a more compact power conversion system. Moreover, increasing automation of manufacturing processes is driving demand for efficient power electronics solutions, while energy efficiency concerns and increased sector regulation are shaping the characteristics of electronic inverters and converters (for example, driving the development of variable speed control systems). We believe the above trends will result in increased demand for ceramics, to be primarily employed for high performance substrate materials meeting the needs for next-generation high power electronics, heaters and coolers, insulators and passive/active electrical components.

Our leadership position largely relies on our Rubalit® and Alunit® substrates (which are industry standards for electronic circuit carriers), as well as on our high dimensional accuracy on an industrial scale. We believe we have the necessary manufacturing infrastructure to provide the next generation of substrate components, and to deliver products with unique characteristics which cannot be easily replicated by competitors (such as substrate surfaces), enabling us to deliver higher return yields with lower costs. Further, we deliver high-quality and reliable solutions, with no recorded critical defects.

Our key customers include tier-2 and tier-3 suppliers placed at the beginning of the value-chain and global specialty electronic components providers, including among others Rogers, Heraeus, Littelfuse, IST, Vishay and TDK.

Industrials Applications

The Industrials Applications end-market is very diverse, and spans across industries and niches such as metalworks, energy infrastructure, textile machinery, mechanical engineering, sanitary goods, white goods and chemicals, pumps and sealings, among others. These industries require the material properties of our ceramics solutions to manufacture bespoke and mission critical components. In this end-market we develop highly customized solutions, based on unique technological capabilities. We believe we act as an innovation partner for our customers, and represent a high quality and reliable supplier for the delivery of high precision and tight tolerance critical parts. In addition, HPC solutions can also be successfully used in markets including chemical processing, sanitary applications and consumer goods. For example, our HPC products are employed as catalysts in the production of chemicals, as seals in certain domestic appliances and in water faucets cartridges.

Our advanced ceramics are capable of facilitating the secure control of industrial processes, enabling our customers to reduce production emissions and effectively manage scarce resources in a wide range of areas of chemicals and process engineering. For example, we provide silicon carbide (“SiC”) plates for semiconductor machinery, ongoing development efforts to expand our manufacturing scope. Specifically, advanced ceramics characteristics such as high wear resistance, temperature resistance and high corrosion resistance make our products an alternative to other materials in equipment, machine and plant engineering.

We believe that the demand for HPC solutions for diversified industrial applications will increase, as machine become more complex in both design and manufacturing process, therefore requiring more resilient and efficient components to reduce both maintenance costs and unit failure rates.

Our products contribute to the operating life and performance capabilities of machines and plants specifically in chemical, environmental or energy technology, in precision engineering or in metal forming. In addition, high-performance machining with SPK® cutting materials and tools offers a high degree also in the metalworking sector, significantly contributing to the shorter production times and decreased costs. Additional product applications include ceramic components for bearings, seals, valves, and texturing discs for the textile industry.

Similarly, we provide solutions for different areas in the defense market including ballistic protection and reliable piezo-ceramics sensor components for sonar equipment. Ceramic armor components designed for ballistic vehicle protection deliver the required safety for military and emergency vehicles.

Key customers in the Industrials Applications end-market include well-established blue-chip entities, such as, among others, Ideal Standard, Rheinmetall, Berliner Glas, BASF, Oerlikon and Hansgrohe.

International Affiliates

Our non-German operating subsidiaries (“International Affiliates”) deliver highly customized product solutions in all Industrials end-markets.

Our International Affiliates along with their main business activities, are set forth below.

- *CeramTec North America.* CeramTec North America has special ceramic-to-metal and glass-to-ceramic seal technology capabilities. Key product groups for ceramic-metal connections are various hermetically sealed (Ceramaseal®) components including feedthroughs, multipin accessories and coaxial isolators, high-voltage bushings and ultra-high vacuum applications. In addition, CeramTec North America produces ceramics specifically formulated for the mobility, defense, energy & electronics, laser & high energy physics, scanning & analytical equipment, and semiconductors sectors.

- *CeramTec Suzhou/China.* CeramTec Suzhou/China produces advanced ceramic components for the application of high-tech ceramic materials in the Chinese market, in particular, textile machine components, including thread guides, eyelets and extractor nozzles. It also provides hard machining of seal and regulator discs for sanitary and industrial fittings. CeramTec Suzhou/China acts as a laser house for processing ceramic substrates and we intend to actively expand our market share in the Chinese market by targeting the high-end segment.

Key customers of our International Affiliates include well-established blue-chip entities, such as, among others, Raytheon, Oerlikon and Ferrotech Group.

Ceramic Solutions in Industrials Markets

A selection of key products offered across our portfolio of solutions for Industrials markets is further described below.

- *Piezo-ceramics.* Piezo-ceramics are capable of converting mechanical energy such as pressure or acceleration into electrical energy or, conversely, of transforming electrical signals into mechanical movement or oscillation. Our piezo-ceramic components and tapes are used in sensors, actuators and in power transducers for high-power ultrasonic applications, non-destructive material testing and sonar applications. Piezo-ceramics are also used in the medical industry for high frequency medical imaging. We have developed special high-performance materials for implementation in piezo applications, as piezo-ceramic components are sometimes exposed to high stress environments, while fulfilling their functions with maximum reliability. Further, our customers use piezo-ceramic components for a variety of purposes in automobiles, acting as sensors for electronic controls such as safety airbags and anti-lock braking systems ("ABS") and providing information on a vehicle's engine performance.

- *Substrates for electronics.* We produce substrates as carriers for electronic circuits. Substrates are ceramic plates with electrical, thermal and mechanical properties that serve as heat conductors in electronic applications. Our substrates are mainly used for power electronic applications. We believe that we are among the top manufacturers of aluminum oxide substrates in terms of technological leadership.

- *Ceramic tapes for lambda sensors.* We produce ceramic tapes for lambda sensors, which can be used to measure the oxygen content of exhaust gases in a car. Benefitting from uniform material properties, such tapes are thermal-shock resistant and can be produced on a large scale.

- *Sealing discs and cartridges.* Our sealing discs and cartridges are used in the sanitary fittings and mobility supplier industries in areas where fluids are pumped, compressed or stirred, such as bushings, face seal rings, pump components, valve shims and sealing discs. Through different combinations of aluminum oxides and silicon carbides, we are able to fine-tune the sliding and sealing properties of seal rings and bearings to closely match the actual operating environments. For example, we supply sealing discs for single lever mixers in the sanitary fittings market comprised of Ceramdisc®-branded ceramic discs, for customers such as Ideal Standard. Mobility uses of sealing rings and discs have become an increasingly important part of our product mix, based on the multitude of uses from valves and sensor bodies to seal rings, seals and rollers for fuel and water pumps or roller bearings all the way to friction bearings and shafts. We also offer sanitary fitting cartridges which are designed to use in high-end faucet and mixing units.

- *Friction discs.* Our friction discs are used for three-axle spindle units in the friction texturing of yarns and other small components such as needle guides in machine parts used in textile manufacturing. We recently introduced our CeramTec Standard S friction disc, which has an improved surface structure. Our friction discs exhibit high wear resistance as well as corrosion resistance, resulting in a long service life.

- *Wear protective solutions.* Though our Alotec® product line, we provide solutions for wear, corrosion and temperature protection in industrial plants. Our wear solutions are mainly used in machines and systems in steel plants, in foundries, in the mining, processing and preparation of minerals. Customers of our wear solutions are mostly active within the paper, pulp, chemical and pharmaceutical industries, in power plants, in cement production, and in concrete production and transportation.

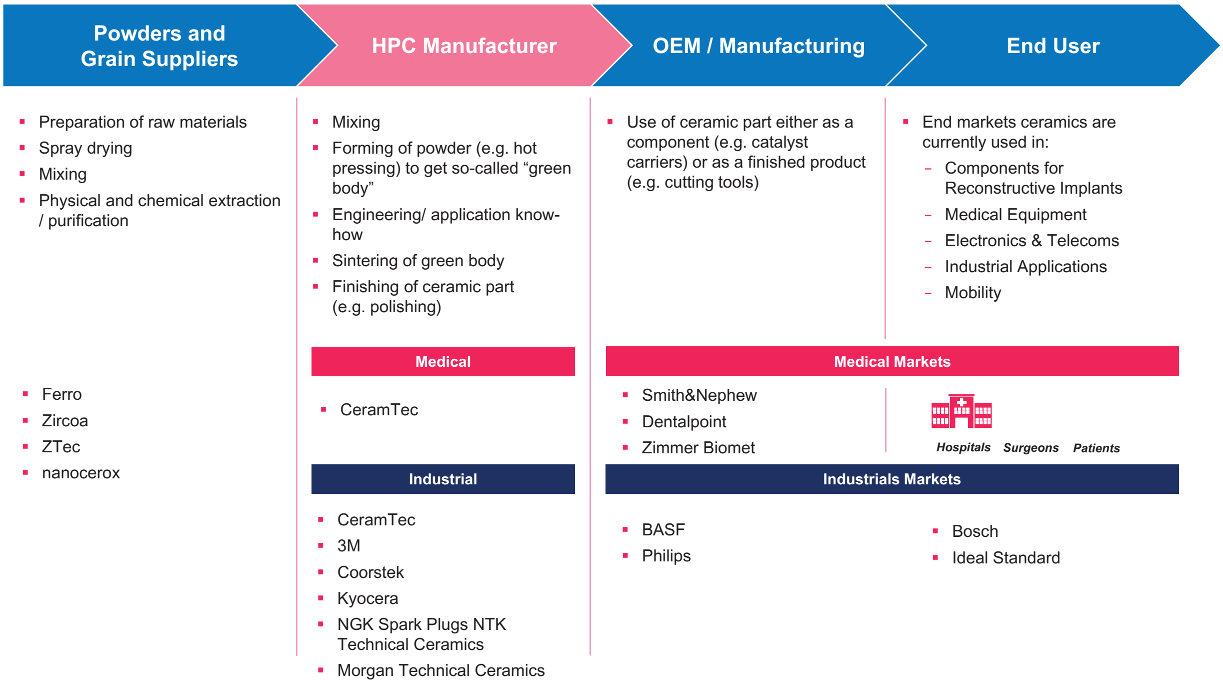
- *Cutting tools.* We are a leading supplier of ceramic cutting tools as well as other tools and tooling systems for high speed processing in the mobility, metalworking and mechanical engineering industries. Beneficial properties of ceramic materials such as high melting points, excellent hardness and superior wear resistance make ceramics a favored high-speed cutting tool material. In addition, the longer life and faster cutting speeds possible with ceramics allow customers to save costs by increasing their throughput and reducing the downtime for replacing their cutting tools. Under the SPK® brand name, we offer a wide range of cutting ceramics and precision tools for machining applications. Additionally, our polycrystalline cubic boron nitride ("pCBN") product range, made of the second hardest material on Earth and characterized by outstanding hardness especially under high temperatures has been a key growth driver for cutting tools product range. The primary customers of cutting tools products are mobility OEMs and their suppliers including Volkswagen, Daimler, Akebono and Brembo.

Competition in Industrials Markets

We believe that some of our key HPC competitors are Kyocera Corporation, Maruwa, PI, CoorsTek Inc., 3M Company, NGK Spark Plug Co. Ltd., Morgan Advanced Materials and Kennametal, Inc. However, each of these competitors has either a different geographic focus or product strategy. While competition varies based on the particular product group or niche market, we believe that we are among the market leaders in the application areas where we compete and that we are the leading HPC solution provider in Europe.

Our Production Process

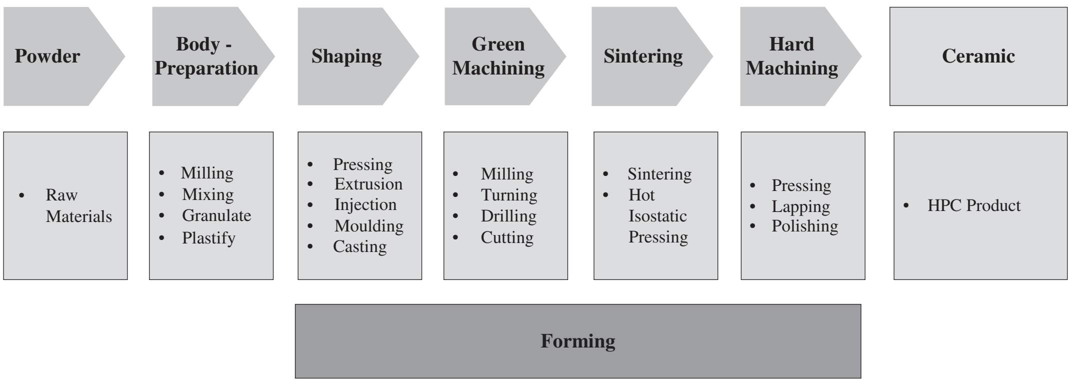
The graph below provides an overview of the HPC value-chain, and of our position as HPC manufacturer:



The manufacturing processes to produce high performance ceramics are complex and involve multiple steps. Each ceramic component requires, to a large extent, its own individual production technology. Though our objective is to automate production processes to the greatest degree possible, certain processes require manual labor to maintain the integrity of the process.

Our know-how and decades of experience reflect a large variety of molding processes (dry pressing, injection molding, extruding and tape casting) and green machining of blanks we conduct as well as thermal processes and surface treatment (grinding, lapping and polishing).

The following chart sets out our key production steps:



Ceramic Raw Material

The raw material for high performance ceramics (oxide and non-oxide ceramics) is generally based on ultra-pure, fine disperse oxides, nitrides, borides and carbides with specific chemical compound and particle morphologies. The required powder is primarily produced synthetically, as natural materials do not offer the necessary chemical purity, homogeneity and consistency.

Powder Processing

The second production step involves the preparation of the ceramic powder by mixing it with the necessary additives. The milling and mixing process is normally conducted in a watery suspension followed by granulation.

Forming Process

After the powder is prepared (either as dry granulate or in fluid form as slurry) it is formed into the required product form. The different procedures of forming are discussed below:

- *Dry-Pressing*: granulate pressed in form-giving cavity to achieve forms close to the end product
- *Extrusion*: used to achieve forms by forcing powder through a die (which is a specialized tool used to shape material using a press)
- *Tape Casting*: used to achieve thin sheet-like forms
- *Slip Casting*: used for medical glove formers
- *Isostatic Pressing*: used for medical implants and electrical parts
- *Injection Molding*: used for textile components

After the forming, the dry-pressed part can be further processed to an "as-near-as-possible" final shape by being drilled or machined prior to being sintered. At this stage (i.e., before being sintered) the form has not reached its final density.

Densification

The components are thereafter sintered in a multi-stage process, which can generally be described as densification of powder by various methods to its final shape. The sintering temperature depends on the material's consistency, but usually reaches between 1,050 degrees Celsius and 2,200 degrees Celsius. The densification process shrinks the sintered product by about 20% of the previous dimension in each direction. This step allows high performance ceramics to reach their required functionality. Taking into consideration the exact amount of unavoidable shrinkage is part of the complex skill set we possess as an expert manufacturer.

Component Finishing

In the next step, the sintered components are further refined in order to achieve higher specifications such as dimensional accuracy or surface structure. The processing steps include surface measures such as grinding, honing, lapping, lazering and ultrasonic treatment.

End Quality Control

Quality control is an important step of the production process to ensure the high quality standards required of high performance ceramics. We work to comply with the FDA's Good Manufacturing Practice ("GMP") guidelines in our development of medical products, choice of suppliers, inspection of incoming goods and in-process tests. We have received various customer awards for highest product quality.

Particularly for medical products, quality assurance plays a critical role. All production, final inspection and packaging processes meet the latest quality assurance standards and are DIN and ISO certified.

During this inspection, all important quality and product characteristics are documented in full. The quality of materials and products is constantly being assessed in the testing and analytical laboratory. Each year, the safety of our products is assessed and confirmed through regular audits conducted by our customers and by health authorities from around the world including the FDA. Between 2019 and 2020, we have completed seven regulatory audits.

3D-printed ceramic components

3D printing, known as additive manufacturing ("AM"), is growing rapidly in a wide range of industries, particularly in recent years. We implemented a 3D printing process for the production of construction elements: our ROCAR® 3D solution combines the special material properties of silicon carbide (SiSiC) with the advantages of the fast, cost-effective 3D printing process. It is primarily suitable for the innovative development and production of prototypes or components starting with batch size one, for example in the context of plant and mechanical engineering.

AM is faster than conventional subtractive production processes, and enables a high degree of product customization in terms of product geometry and individual shaping, which are costly to realize through traditional manufacturing processes. We believe that 3D printing production of ceramic elements results in a faster product launch at lower costs, while enabling component optimization. In addition, intricate functions can be combined in one component by combining assembly components. The AM process is managed by including data evaluation and production optimization services.

Research and Development

As a manufacturer of high-tech solutions we believe that our continued emphasis on research and development is key to our future profitability. Our R&D efforts consist mainly of applications development in response to customer requirements and we often partner with customers to develop innovative solutions and processes with high commercialization potential. We have a strong, centralized R&D infrastructure with over 150 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally. Our total R&D expenses for the year ended December 31, 2020 were €20.6 million (representing 3.7% of our total revenue for the period). Parts of the development costs are customer-related.

While we cooperate with many leading research institutions and universities, we aim to focus on commercial applications rather than being the first in innovations with unclear commercial potential. Our R&D efforts are also directed towards the innovation of new products and development of new materials to respond to anticipated customer needs. For example, to address needs of both surgeons and patients, we research and regularly develop upgrades to our existing medical product portfolio and, more recently, have developed BIOLOX CONTOURA® in cooperation with the Harris Orthopedics Laboratory at Massachusetts General Hospital in Boston, a novel licensed design ball head line, with an oval, more anatomical, geometry. BIOLOX CONTOURA® has received FDA clearance for use in certain prosthetic hip replacements without bone cement and was launched in the United States in 2019. In addition, over the same period we also developed and launched on the market the ceramic core for the Simplify®Disc spinal disc implant by Simplify Medical (now part of the NuVasive group). Simplify®Disc received FDA approval for use in certain 1-level implants in 2020, and approval for use in certain 2-level implants in 2021. While specific development topics for product groups are addressed in follow-up projects, the development of new technologies in materials preparation is facilitated and aided by laboratory equipment for the development of materials and formulations on a pilot scale. For example, we also launched two resurfacing projects now undergoing clinical trials.

In recent years, we succeeded in developing various R&D innovations including:

- a ceramic cooling solution for a power module to be placed in inverters in the drive trains of electric cars;
- a ceramic cooling solution for a power module for use in drive inverters in e-mobility;
- a cooling solution for the e-mobility sector, based on chip-on-heat sink technology ceramic power module for drive inverters ;
- Solid PcBN and ceramic indexable inserts solutions for machining of hardened components; and
- producing ceramic sample containers for a space experiment facility on the International Space Station.

Our R&D innovations have received various awards and most recently in 2021, we have been awarded the "Certified Production Quality" certificate by CleanImplant Foundation CIF GmbH in relation to our DENSILOX® dental implant sub-area and the "Weber Ultrasonics Supplier Excellence Award" in the category "Best Improving supplier" by our customer Weber Ultrasonics).

In addition, we recently reorganized our R&D framework for our solutions targeting Industrials markets, by reshaping stage gate processes and financial targets. We also streamlined our development pipeline, targeting key growth areas and customer growth.

Manufacturing, Sales Offices and Operations

We operate 19 production facilities in Europe, North America, Asia and South America and maintain numerous international sales and representative offices. Our German operations are headquartered at Plochingen, which also acts as a core manufacturing site for solutions serving both our Medical and Industrials markets. The manufacturing site at Marktredwitz is also designed to meet supply needs of our Medical markets and Industrial markets, while our German facilities are located in close proximity to customers in industrial clusters. Our manufacturing sites at Lauf and Marktredwitz are also designed to meet supply needs of our Medical markets and Industrials markets, in a business continuity perspective.

In addition, our Laurens plant serves as a hub for our North-American operations, while production in our UK plants focuses on high-growth piezo ceramics.

We maintain a highly automated, technologically advanced machine park and manufacturing equipment capable to efficiently manage orders entailing prototype development, made-to-order batches or pilot series. Our flexible manufacturing capacity enables us to scale up or scale down production to meet different customer volume demands, with the ability to meet demand for manufacturing components with ranges from micro sizes with the finest radius and tolerances to large, highly complex products with free-form surfaces. We have also been awarded various quality certifications at all of our sites. For example, all production sites are ISO 9001 certified, while sites producing components for the mobility industry have obtained the QS9000 certification.

In addition, we comply with several general certification standards, such as the ISO TS 16949 for the mobility industry and the ISO 13485 for medical products, and facilities dedicated to the production of our offering for Medical markets are subject to routine audits by customers and the competent health authorities (including the FDA).

The following table provides an overview of the locations of our manufacturing sites, the size in square meters and whether the sites are leased or owned, in each case, as of September 30, 2021.

Location	Markets served	Building Footprint (in thousand m^2)	Leased/ Owned
Germany			
Plochingen	Medical, Mobility, Industry	19.7	Owned
Ebersbach/Fils	Mobility, Industry	10.9	Owned
Lauf an der Pegnitz	Mobility, Electronics, Industry	21.2	Owned
Lohmar	Ballistic Protection	5.1	Owned
Marktredwitz	Electronics, Mobility, Medical	35.5	Owned
Wilhermsdorf	Mobility	2.7	Leased
Wittlich	General Industry	3.4	Leased
Rest of Europe			
Ruabon, UK	Mobility, Medical Equipment	7.0	Owned
Southampton, UK	Mobility, Medical Equipment	8.5	Leased
Ŝumperk, Czech Republic	General Industry	10.4	Owned
Gorzyce, Poland	Mobility	1.5	Leased
Spreitenbach, Switzerland	Medical	1.0	Leased
Americas			
Laurens, SC(1)	Mobility, Electronics, Industry	17.6	Owned
Willoughby, OH	General Industry	3.5	Owned
Heroica Puebla de Zaragoza, Mexico	Mobility	4.5	Owned
Nova Odessa, Brazil	Mobility	0.7	Leased
Asia			
Patiala, India	Mobility	1.0	Leased
Suzhou, China	General Industry	4.9	Leased
Seremban, Malaysia	Medical Equipment	10.0	Owned

(1) Includes extensive factory grounds.

Raw Materials

Our main raw materials are various aluminum oxide and zirconium oxide powders. The sourcing of our raw materials constitute approximately 30% of our cost of sales for the year ended December 31, 2020. In general, raw materials are sourced from a large number of different suppliers and are partially purchased on the commodities markets. In addition, we use a wide range of raw materials thus limiting dependence on any one supplier or raw material to a minimum. However, a number of our raw materials can only be sourced from a small number of suppliers given that the properties we require for such materials are highly specific. We keep additional safety stock for most single-sourced as well as for other mission critical raw materials, and our risk management function constantly monitors our suppliers for any possible supply chain disruptions, while identifying suitable alternative supply channels.

We usually do not enter into long-term agreement with suppliers for our raw materials as most are generally widely available and we prefer to purchase opportunistically on spot market which provides us with manufacturing flexibility.

Intellectual Property

Our technology innovation efforts and industry expertise have built a strong intellectual property portfolio of patents and trademarks. Most of our intellectual property is developed in-house through our internal R&D and is not licensed from third parties. From time to time, we may enter into cooperation agreements with certain third parties governing the joint research and development of a particular intellectual property right. In these instances, we generally maintain the ability (through joint patent applications) to use the intellectual property right developed as a result of such cooperation. We also deployed internal procedures ensuring that all required fees relating to our material patent portfolio are paid on time. As of

September 30, 2021, we had a total portfolio of over 200 trademarks, over 600 patents and over 100 domains registered across Germany, the European Union, the United Kingdom, the United States and China. In addition to protecting our technology with patents, we have an extensive portfolio of proprietary technical knowledge. Most of our intellectual property was directly developed in-house and is owned by us rather than licensed, although a small part of the technology and products we develop and manufacture are also based on intellectual property that we license from third parties

Sales, Marketing and Innovation

Customer relationships and industry know-how are key success factors in the high performance ceramics industry. As many of the high performance ceramics products are customized to customer-specific needs, sales and marketing activities need to be closely aligned to technological changes and corresponding customer requirements. We provide strong technical support to our customers—a critical competency of our business that allows us to introduce new materials and products and expand into new markets.

We ensure that our sales and marketing is closely aligned with our customers by having dedicated teams providing market and industry-specific coverage. Our sales and marketing team for our medical products and solutions, including specially trained staff that act as scientific consultants, cooperates with customers to assist them in their relationships with both surgeons and hospitals. Surgeons are key decision makers as it relates to the choice of implant materials to be used (ceramics, metal or polyethylene) for patients, based on circumstances, medical condition and personal preferences. We believe that surgeons may become a key driver of increasing demand for ceramic components. We aim to support the increasing shift to ceramics in the Medical markets by maintaining a select combination of awareness initiatives. We regularly cooperate with OEMs to educate both end-users and key decision makers (such as surgeons) on the properties of ceramics. In 2019, we attended over 70 conferences with an estimated over 20 thousand participants, organizing satellite symposia and workshops, including seminars and webinars for surgeons.

For example, we recently launched our BIOLOX® Inside App, an application featuring 3D video capabilities highlighting joints in action, live surgical videos describing the different steps of implanting ceramic components, 3D computer animations (showing product features) and online guides. In addition, in April 2021 we launched our newsletter "Medtech Pulse", which aims to cover the most important developments in the healthcare sector. We also regularly conduct surgeon training sessions and workshops with highly experienced international faculty, covering all aspects of bearing in hip replacement procedures. Moreover, we support the publication of clinical articles and educational literature.

We aim to become a complete solution provider for our customers in Medical markets, by adding additional services to our traditional product offering, such as sterilization services (which our customers would otherwise need to perform themselves before delivering the products to their respective end-customers) and regulatory support. Our sales and marketing strategy also provides for the strengthening of our adjacent services offering. We aim to leverage our ceramics expertise and know-how in order to provide an end-to-end solutions portfolio, specifically designed to offer a full spectrum of services covering the entire lifecycle of our products. For further information, see "*Our Business—Medical Markets—Adjacent Medical Services*."

Our sales and marketing team for Industrials markets is structured on a regional and end-market level, in order to focus on local customer coverage. We also are increasingly focusing on targeting sales and growth in high-growth markets, particularly relating to next generation substrates, e-mobility and sensors.

We are also enhancing the digitalization of our activities group-wide, by implementing a digital shop-floor, and the global rollout of salesforce and AI-based integrated planning systems. For example, we launched a digital sales initiative, complemented by CeramCreator, a complete self-configuration tool for ceramic products, and tailored marketing initiatives.

In total, we employed 303 FTE sales people worldwide as of September 30, 2021.

Customers

In 2020, we served approximately 4,150 different customers. Our largest, top-ten and top-20 customers generated 7.9%, 37.9% and 49.3%, respectively, of our total revenue, with the remaining generating 50.7%.

Our key customers for both Medical markets and Industrials markets include Aesculap, BASF, BOSCH, Curamik Electronics, DePuy, Epcos, Grohe, Rheinmetall, Smith & Nephew, Stryker, Volkswagen, Wuxi Hongyan and Zimmer Biomet.

Employees

As of September 30, 2021, we had over 3,400 FTE employees located throughout the world consisting of sales, technical, manufacturing operations, supply chain and customer service personnel.

In Germany, there is employee and union representation in local and group works councils. The Supervisory Board is subject to German Codetermination Act with employee and union representatives on all matters covered by the law. In general, we maintain a good relationship with the employee representatives and the unions and have not experienced any material strikes or industrial actions in the past five years.

We believe that we have a stable employee base with a low employee turnover rate, driven by a loyal workforce. In addition, we cooperate with high schools and colleges to offer opportunities for vocational education and training, and accepted over 50 apprentices throughout 2020.

In addition, we routinely launch talent upgrade initiatives and succession planning for leadership positions.

The following table shows a breakdown of our employees (FTE) by region and by function as at December 31, 2018, 2019 and 2020 and as of September 30, 2021.

	As of December 31,			As of September 30,
Full Time Equivalent	**2018**	**2019**	**2020**	**2021**
By Geography				
Europe (excluding Germany)	650	639	629	645
Germany	2,116	2,065	1,975	2,000
Americas	346	325	303	295
Asia	477	491	513	537
By Function				
Manufacturing	2,813	2,785	2,717	2,732
Sales	329	300	289	303
Research & Development	191	186	161	175
Administrative	256	254	253	267
Total Number of Active Employees	**3,589**	**3,525**	**3,420**	**3,477**

Health and Safety

We are subject to the health, safety and environmental legislation in the jurisdictions where our manufacturing sites are located. Most of our production is located within the European Union and specifically in Germany. As a result, we are principally subject to the health and safety standards as well as the environmental standards as adopted in the European Union and specifically locally in Germany. We have also adopted a corporate social responsibility policy aimed at achieving profitable global growth, conserving energy, protecting natural resources while acting in an ethical way with integrity. To this end, we will continue to focus on customer satisfaction, conserving scarce resources, energy management as well as working conditions for our employees.

For a discussion of the regulations relating to our medical products, see "*—Medical Markets—Regulation*."

Sustainability

We strive to operate our business sustainably, and commit to the pursuance of ethical values in the operation of our business. We implemented a corporate social responsibility policy (the "CSR Policy"), with the goal to achieve profitable global growth, while reducing energy consumption, protecting the environment and ensuring an ethical conduct of business. In addition, we recently appointed an ESG manager, and are in the process of setting long-term ESG targets and strategy. Our value system is constantly monitored and updated, and is being communicated to employees in order to ensure full alignment to our goals throughout our organization. As a customer-oriented manufacturer, we focus on application consulting and on the development of innovative, competitive and sustainable processes for realizing products consistent with specifications.

We have established a framework with reliable, risk-minimizing technical and organizational processes, while conducting our business according to a set of clearly defined management principles, which we review on an annual basis.

We are committed to significantly reduce our environmental footprint. Environmental sustainability is a key component of our CSR Policy, and we strive to minimize our impact by ensuring our operations are conducted in an environmentally-friendly way. For example, we implemented an energy management system (DIN ISO EN 50001 certified) which focuses on increasing energy efficiency and sustainably reducing energy consumption across our facilities and production processes. In addition, we implemented a DIN ISO 14001 certified environmental management system, which assists in the promotion of environmental protection, the prevention of pollution, and the application environmentally-sensitive approaches in our manufacturing and procurement processes. Capital expenditure and expenses related to health, safety and environmental protection in our Group in 2020 amounted to €1.2 million.

Insurance

We maintain insurance covering, among others, product liability, property, business interruption and casualty insurance. We believe that our insurance coverage is consistent with industry practice and is sufficient for the risks that would normally be associated with our operations, but we cannot guarantee that we could not be adversely affected by damage or accidents despite possessing said insurance coverage. See "*Risk Factors—Risks Related to our Business—The insurance we maintain may not fully cover all potential exposures and insurance premiums may increase*."

Legal Proceedings

We are from time to time party to legal proceedings that arise in the ordinary course of business. See "*Risk Factors—Risks Related to our Business—We are subject to the risk of litigation and other claims*," "*Risk Factors—Risks Related to our Business—We may have only limited protection for our intellectual property and know-how and if it were copied by competitors, or if they were to develop similar intellectual property independently, our results of operations could be negatively affected*" and "*Risk Factors—Risks Related to our Business—Due to the nature of our business and products, we may be liable for damages arising out of product liability claims*." These legal proceedings include a variety of product liability cases in Europe brought by individuals. Additionally, we have been subject to legal disputes relating to intellectual property. For example, since 2013 we have been involved in a series of legal proceedings against C5 in Germany, the United States and France in relation to our trademarks for the distinctive pink color of our ceramic hip implant component BIOLOX® delta, in respect of which we incurred significant expenses and which remain ongoing. In France, we plan to challenge a recent judgement granted in favor of C5. In addition, we are and have been subject to certain employment-related disputes.

There are no pending product liability cases in the United States as of the date of this offering memorandum. In Europe, there are 13 pending product liability cases involving fractured ceramic ball heads and cup inserts.

When we determine that a significant risk of a future claim against us exists, we record provisions in an amount equal to our estimated liability. As of December 31, 2020, we set aside total provisions for legal disputes in an amount of €0.5 million and total provisions for tax-related disputes in an amount of €3.2 million. Further, as of December 31, 2020, we have set aside provisions in an amount of €3.4 million to cover for claims related to breach of warranties and product liability.

We are not currently involved in any legal proceedings which, either individually or in the aggregate, are expected to have a material adverse impact effect on our business or financial position and have allocated provisions which we believe to be sufficient to cover our perceived risk in connection with pending product liability claims. However, the outcome of legal proceedings can be extremely difficult to predict, and we offer no assurances in this regard.

MANAGEMENT

The Issuer

The Issuer is a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany. As of the date of this offering memorandum, the Issuer has no material assets or liabilities and has not engaged in any activities other than those related to its formation and the Transactions. The Issuer is indirectly controlled by the Sponsors. The Issuer is registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267748. The Issuer's registered office is at Schwanthalerstraße 73, c/o SCUR24 Holding GmbH, 80336 Munich, Germany. The Issuer's managing directors can be contacted at the Issuer's business address.

The details of the Issuer's managing directors are as follows:

Name	Age	Position
Jusco Frommeyer	52	Director
Ewald Walgenbach	62	Director

Set forth below is a short biography of the Issuer's managing directors.

Jesko Frommeyer was appointed as a director of the Issuer in July 2021. Mr. Frommeyer is also serving as a Managing Director in the Portfolio Value Creation—Real Assets team at CPP Investments since 2021, and prior to that, as a Senior Principal since 2018. Prior to that, between 2015 and 2018 Mr. Frommeyer was Senior Managing Director—Operations at CVC Capital Partners. Mr. Frommeyer holds a bachelor degree from the Johann Wolfgang Goethe University in Frankfurt, and an MBA from the University of Iowa, United States.

Ewald Walgenbach was appointed as a director of the Issuer in July 2021. Mr. Walgenbach is also serving as Chairman of the Supervisory Board at Aenova Holding since 2019 and as member of the Supervisory Board at Springer Nature Group since 2018. Prior to that, Mr. Walgenbach was Partner at BC Partners between 2008 and 2019. Mr. Walgenbach holds a Ph.D. in Biology from the Max Plank Institute, Germany.

The Target Group's Executive Board

The following table sets forth certain information regarding the executive officers of the Target Group, including their ages as of the date of this offering memorandum.

Name	Age	Position
Dr. Hadi Saleh	49	Chief Executive Officer
Eric Oellerer	51	Chief Financial Officer
Horst Garbrecht	56	President Industrial

Set forth below is a short biography of each of the members of the Target Group's Executive Board:

Dr. Hadi Saleh was appointed Chief Executive Officer of the Target Group on March 8, 2018. Prior to that, Dr. Saleh was Chief Operating Officer of the Target Group's Executive Board since 2015, responsible for Medical markets (excluding medical equipment markets). He worked in the medical technology sector, as Senior Vice President of Biomet Inc. and President of Biomet International. In addition, Dr. Saleh was previously responsible for all Biomet product lines worldwide outside of the United States and Europe and played a leading role in the Zimmer Holdings acquisition of Biomet Inc. From 2001 to 2015, Dr. Saleh held a number of positions at Biomet, first at Biomet Germany, then Biomet Europe and finally at the parent company, Biomet Inc. in Warsaw, Indiana in the United States. Prior to that, he studied and earned his doctorate at the universities in Frankfurt am Main and Mainz, worked as an orthopedic surgeon at St. Josef's Hospital in Wiesbaden and at the University Clinic in Heidelberg and was a Senior Consultant at GAIA in Hamburg. Dr. Saleh holds a doctorate in Medicine from the University of Frankfurt, Germany.

Eric Oellerer was appointed Chief Financial Officer of the Target Group on September 15, 2018. Prior to that, he held positions as chief financial officer and chief operating officer of Metabowerke GmbH, where he worked since 2011. Previously, Mr. Oellerer served as portfolio manager at HgCapital for three years, after being at Daimler/ -Mercedes-Benz, where after working for several years in M&A, he was responsible for various companies in the role as chief financial officer. Mr. Oellerer has a master's degree in Business Administration from the Rotterdam School of Management, Erasmus University, Netherlands, and a Magister Juris from the University of Vienna, Austria.

Horst Garbrecht was appointed President Industrial of the Target Group on January 1, 2022. Prior to that, he held positions as chief executive officer of Metabowerke GmbH since 2009 and chief operating officer Europe (COOE) of Koki

Holdings Ltd. since 2019. Mr. Garbrecht also serves as member of the supervisory board of Basler AG since 2015. Mr. Garbrecht holds an undergraduate degree in mechanical engineering and energy technology from the Esslingen University of Applied Sciences, Germany.

Managing Directors' Compensation

The members of management in key positions of the Target received total remuneration (fixed and variable amounts) in the form of short-term employee benefits amounting to €2.3 million in 2020 and €2.4 million in 2019. The payments for post-employment benefits amounted to €0.6 million in 2020 and €0.4 million in 2019. This amount comprises the service cost for pension obligations and contributions to defined contribution plans. Former general managers were not granted any benefits in 2019 or 2020 in the event of premature termination of management activities. Additionally, as of December 31, 2020, there were pension obligations to general managers in the amount of €1.6 million in 2020 and €1.4 million and to former general managers and their surviving dependents in the amount of €4.4 million in 2020 and €4.1 million in 2019. See note 6.3 to the 2020 Audited Financial Statements for further information.

Management Practices

We are committed to fulfilling corporate governance requirements. We maintain a compliance management system, an internal control system, internal risk management guidelines (such as procurement policies) and a code of conduct which is to be adhered to by our employees. In addition, internal audits are regularly carried out on these different topics.

Management of the Target Following the Completion of the Acquisition

The Target Group's executive board will continue to be responsible for the daily operations of the Target Group.

Supervisory Board

The Target Group currently has and, following the consummation of the Acquisition will continue to have, a co-determined supervisory board in accordance with the German Co-Determination Act (*Mitbestimmungsgesetz*) (the "Supervisory Board"). As of the date of this offering memorandum, the Supervisory Board consists of 12 members and is established at the level of CeramTec GmbH. The upcoming election cycle for the renewal of the Supervisory Board is scheduled for early 2022, in which we expect that several of the current supervisory board members will not stand for re-election. In accordance with the German Stock Corporation Act, the Supervisory Board is responsible for supervision and control of the management of CeramTec GmbH in accordance with resolutions of CeramTec GmbH's shareholder meetings, but the Supervisory Board has no direct managerial powers. The executive address of the members of the Supervisory Board is CeramTec-Platz 1-9, 73207 Plochingen, Germany.

Management Participation Program

It is expected that, on consummation of the Acquisition, certain employees and members of management will invest in a new management participation program, established by the Sponsors, on customary terms and conditions. We expect that simultaneously with the consummation of the Acquisition, the management investors will enter into one or more participation agreements with affiliates of the Sponsors, including provisions with respect to the election of directors, participation rights in equity offerings, rights and restrictions relating to the issuance or transfer of shares, including tag-along rights and drag-along rights, information rights and other corporate governance provisions.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

In the course of its ordinary business activities, the Target Group enters into related party transactions with our shareholders, companies within the Target Group, key management personnel and associates. Such transactions with such parties are generally negotiated and executed on an arm's-length basis and that the terms of these transactions are comparable to those currently contracted with unrelated third-parties.

In addition, the Target Group will engage in various financing transactions with its new shareholders and enter into new related party transactions in connection with the Transactions. See "*The Transactions*." From time to time, the Target Group may also enter into other employment or compensation arrangements with senior management or other key employees. See "*Management—Managing Directors' Compensation*."

Transactions with Related Companies

Our subsidiary CT GmbH leases a car park facility in Plochingen, Germany from Dalag Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs KG ("Dalag"), a limited partnership in which we hold approximately 90% of the participation and 10% of the voting rights. The lease provides for a fixed term of 25 years comprising an initial term of 20 years and an additional term of five years. CT GmbH is obliged to pay pre-rents for covering the costs of financing the property until the lease's commencement, as well as an annual rent, administrative costs contributions and tenant loans to Dalag in an aggregate amount of €4.2 million.

For an overview of the material transactions between the Target Group and its related parties that affected the Target Group's financial position or net income as of and for each of the years ended December 31, 2018, 2019 and 2020 and the nine months ended September 30, 2019 and 2020, see the Financial Statements included elsewhere in this offering memorandum.

PRINCIPAL SHAREHOLDERS

Bidco is a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany. Following the completion of the Acquisition, Bidco will own the Target. Prior to the Acquisition Closing Date, 13184374 Canada Inc. will acquire a participation in Bidco, so that approximately 99.996% of the issued share capital in Bidco will be held by the Issuer and 0.004% of the issued share capital will be held by 13184374 Canada Inc. The Issuer is an indirect subsidiary of Lux Topco. Funds affiliated with, or subsidiaries of, the Sponsors and 13184374 Canada Inc. directly or indirectly own the equity interests in Lux Topco. The capitalization at an indirect holding company of the Issuer includes preferred equity. On or about the Acquisition Closing Date, the Sponsors intend to establish the structure for a management equity participation program pursuant to which the subscribing managers will directly or indirectly hold 9.3% of the issued ordinary shares in Lux Topco, and 1.7% of preferred instruments. See "*Management—Management of the Target Following the Completion of the Acquisition—Management Participation Program*."

On or about the Acquisition Closing Date, we expect that the Sponsors, any co-investors and 13184374 Canada Inc. will directly or indirectly hold approximately 90.7% of the ordinary shares and 97.7% of the voting rights in Lux Topco, and management will directly or indirectly hold up to 9.3% of the ordinary shares and 2.3% of the voting rights in Lux Topco. 13184374 Canada Inc. will directly hold beneficiary certificates conveying voting rights on the appointment and removal of directors as well as on transfers of shares and beneficiary certificates (but no ordinary shares) in Lux Topco. The foregoing shareholding percentages are indicative and may be subject to variations. See "*Summary—Summary Corporate and Financing Structure*."

The Sponsors

BC Partners

BC Partners is a leading alternative global investment firm focused on private equity, credit, and real estate, that is currently investing its eleventh flagship private equity fund. BC Partners is one of the most experienced private equity firms in Europe and has continually operated for over three decades as a pan-European partnership with a strong presence in North America. BC Partners currently advises 11 successive funds, and since inception has completed 124 private equity investments representing €161 billion of enterprise value across 18 countries. BC Partners is highly committed to the healthcare sector, with 18 investments globally and a proven track record of supporting its portfolio companies to deliver profitable growth. BC Partners operates across four core sectors including Industrial & Business Services, consumer & retail, healthcare and TMT and employs an investment team of 67 professionals with over 540 years of combined private equity experience operating from four offices: New York, London, Paris and Hamburg.

CPP Investments

CPP Investments is a professional investment management organization that manages the Fund in the best interest of the more than 20 million contributors and beneficiaries of the Canada Pension Plan. In order to build diversified portfolios of assets, investments are made around the world in public equities, private equities, real estate, infrastructure and fixed income. Headquartered in Toronto, with offices in Hong Kong, London, Luxembourg, Mumbai, New York City, San Francisco, São Paulo and Sydney, CPP Investments is governed and managed independently of the Canada Pension Plan and at arm's length from governments. At June 30, 2021, the Fund totaled C$519.6 billion.

CPP Investments' Direct Private Equity team is a committed long-term investor with permanent capital, a focus on sizeable investments alongside aligned partners, the ability to invest across the full spectrum of ownership from minority positions up to full control platforms, and the ability to shape the duration and underwriting approach of investments to support longer-date return on investment initiatives. With 59 investment professionals globally, it has deployed more than C$43 billion across 139 investments since inception, of which 11 in the healthcare sector. At March 31, 2021, its portfolio consisted of 88 investments valued at C$53.3 billion.

DESCRIPTION OF CERTAIN FINANCING ARRANGEMENTS

Senior Secured Credit Facilities Agreement

Overview and structure

In connection with the financing of the Acquisition, CTEC III GmbH ("Bidco") will enter into a senior facilities agreement with, among others, Bank of America Europe Designated Activity Company, Banque Nomura France, Morgan Stanley Bank AG, MUFG Bank (Europe) N.V. Germany Branch, Deutsche Bank Aktiengesellschaft, and UBS Europe SE as mandated lead arrangers, and Deutsche Bank AG, London Branch as agent and security agent (the "Senior Secured Credit Facilities Agreement").

The Senior Secured Credit Facilities Agreement provides for (i) a senior term loan facility in a principal amount of €1,430 million ("Facility B") and (ii) a revolving credit facility in a principal amount of €250 million (the "Revolving Credit Facility" and, together with Facility B, the "Senior Secured Credit Facilities").

Incremental facilities may also be established under the Senior Secured Credit Facilities Agreement from time to time (including by way of an increase to any existing facilities or the establishment of new facilities) (the "Incremental Senior Secured Credit Facilities" and, together with the Senior Secured Credit Facilities, the "Senior Secured Facilities").

Borrowers, currencies and utilizations

Facility B may be utilized by Bidco and its restricted subsidiaries which enter into the Senior Secured Credit Facilities Agreement as borrowers of such facility or otherwise accede to the Senior Secured Credit Facilities Agreement as additional borrowers of that facility (the "Facility B Borrowers").

The Revolving Credit Facility may be utilized by Bidco and certain of its restricted subsidiaries which enter into the Senior Secured Credit Facilities Agreement as borrowers of such facility or otherwise accede to the Senior Secured Credit Facilities Agreement as additional borrowers (the "Revolving Credit Facility Borrowers" and, together with the Facility B Borrowers, the "Senior Secured Credit Facilities Borrowers") in EUR, GBP and USD and certain other currencies readily available in the relevant market and freely convertible into EUR (subject to obtaining the consent of all the relevant lenders under the Revolving Credit Facility) by the drawing of cash advances, the issue of letters of credit and ancillary facilities (on a bilateral and/or fronted basis).

Purpose

All amounts borrowed under Facility B shall be applied directly or indirectly, in or towards (including by way of on-lending to, or investment in, any other member of the Senior Secured Group (as defined below) or the Target Group) (directly or indirectly): (i) financing or refinancing consideration paid or payable in connection with the Acquisition (including any purchase price adjustments); (ii) the payment of acquisition costs and all other fees, costs, expenses and other amounts incurred in connection with the Transaction (as defined in the Senior Secured Credit Facilities Agreement); (iii) refinancing or otherwise discharging existing indebtedness of the Target Group (including back-stopping or providing cash cover in respect of any letters of credit, guarantees or ancillary, revolving, working capital or local facilities or other arrangements) and paying any breakage costs, redemption premium, make-whole costs and other fees, costs and expenses payable in connection with such refinancing and/or acquisition; (iv) financing any other payments identified in or for any other purpose contemplated by the funds flow statement or the tax structure memorandum or otherwise arising in connection with the Transaction; (v) financing other related amounts, including fees, costs and expenses; and/or (vi) to the extent not applied for a purpose set out in sub-paragraphs (i) to (v) above, financing or refinancing the general corporate purposes and/or working capital requirements of Bidco and its restricted subsidiaries (the "Senior Secured Group") (including, for the avoidance of doubt, as cash over-funding).

The Revolving Credit Facility may be used for: (i) financing or refinancing the general corporate purposes and/or working capital requirements of the Senior Secured Group; (ii) to backstop or provide cash cover in respect of any existing ancillary facilities, guarantees, indemnities, letters of credit, revolving, working capital or local facilities or other arrangements of the Target Group (if applicable) and financing or refinancing any other transactions contemplated by the Transaction; and/or (iii) financing any other payments identified in, or for any other purpose contemplated by, the tax structure memorandum or the funds flow statement or otherwise arising in connection with the Transaction, in each case, together with related fees, costs and expenses (and including, for the avoidance of doubt, as cash over-funding).

Availability

Facility B will be available to be utilized from (and including) the date of the Senior Secured Credit Facilities Agreement to (and including) the earliest to occur of (i) the date falling twenty Business Days after the longstop date under the Acquisition Agreement; (ii) 4 June 2022; (iii) the date falling five Business Days after (x) the first utilisation of Facility B to complete the Acquisition; and (y) the Acquisition Closing Date has occurred (together, the "Closing Date"); and (iv) the date on which Bidco (or any of its Affiliates) determines and notifies the agent under the Senior Secured Credit Facilities Agreement that the Acquisition Agreement has been validly and conclusively terminated prior to the longstop date under the Acquisition Agreement, or such later date as agreed by the arrangers (each acting reasonably and in good faith).

The Revolving Credit Facility may be utilized from (and including) the Closing Date to (and including) the date falling one month prior to the maturity date of the Revolving Credit Facility.

Utilizations of the Senior Secured Credit Facilities are subject to customary conditions precedent.

Interest and Fees

Loans under the Senior Secured Credit Facilities will bear interest at rates per annum equal to EURIBOR (for loans denominated in euro), Sterling Overnight Index Average ("SONIA") (for loans denominated in British pound sterling ("Sterling"), Secured Overnight Financing Rate ("SOFR") (for loans denominated in U.S. dollars) or the applicable IBOR (for loans denominated other than in euro, Sterling or U.S. dollars), plus an applicable margin, which in each case will be subject to a decreasing margin ratchet based on the ratio of consolidated senior secured net debt to consolidated pro forma EBITDA (each as defined in the Senior Secured Credit Facilities Agreement) (the "Senior Secured Net Leverage Ratio").

If EURIBOR is less than zero, EURIBOR shall be deemed to be zero in respect of loans made under Facility B or the Revolving Credit Facility (as applicable). If another IBOR, including LIBOR, is less than zero, LIBOR shall be deemed to be zero in respect of loans made under the Revolving Credit Facility (as applicable). If SONIA is less than zero, SONIA shall be deemed to be zero in respect of loans made under the Revolving Credit Facility. If SOFR is less than zero, SOFR shall be deemed to be zero in respect of loans made under the Revolving Credit Facility.

A commitment fee will be payable on the aggregate undrawn and uncancelled amount of the Revolving Credit Facility from the Closing Date to the end of the availability period applicable to the Revolving Credit Facility at a rate of 30% of the applicable margin for the Revolving Credit Facility. Such commitment fees will be payable quarterly in arrears (provided that Bidco may elect that accrued commitment fee shall instead be paid on each Quarter Date or the last date of each Interest Period applicable to a Facility B), on the last day of the availability period applicable to the Revolving Credit Facility and on the date the Revolving Credit Facility is cancelled in full or on the date on which the relevant lender cancels its commitment.

Any letter of credit issued under the Revolving Credit Facility shall be subject to such issuing bank and fronting fees as may be agreed between Bidco and the applicable issuing bank and a letter of credit fee equal to the margin that would have been applicable to a cash drawn under the Revolving Credit Facility in the applicable currency.

Default interest will be calculated as an additional 1% per annum on the defaulted amount.

Repayments

The loans made under Facility B will be repaid in full on the date that is seven years from the Closing Date.

In respect of the Revolving Credit Facility, each advance will be repaid on the last day of the interest period relating thereto, subject to an ability to roll over cash drawings. All outstanding amounts under the Revolving Credit Facility will be repaid on the termination date of the Revolving Credit Facility, being the date falling six and a half years from the Closing Date. Amounts repaid by the borrowers on loans made under the Revolving Credit Facility may be reborrowed, subject to certain conditions.

In respect of the letters of credit, each will be repaid on the termination date of the relevant Revolving Credit Facility, being the date falling six and a half years from the Closing Date (or such earlier date in accordance with the Senior Secured Credit Facilities Agreement), provided that if any letter of credit has an expiry date ending on or after the termination date applicable to the applicable Revolving Credit Facility, on such termination date each letter of credit shall be repaid unless the relevant issuing bank agrees that such letter of credit shall continue as between that issuing bank and the relevant member of the Senior Secured Group on a bilateral basis and not as part of or under the documentation for the Senior Secured Facilities.

Voluntary and Mandatory Prepayment

The Senior Secured Credit Facilities Agreement will permit voluntary prepayments to be made (subject to de minimis amounts) and will require mandatory prepayment in full or in part in certain circumstances, including:

- from certain net cash proceeds received by the Senior Secured Group from certain asset disposals, to the extent not otherwise applied for a permitted purpose and required to be applied in prepayment of the Senior Secured Facilities and subject to a de minimis amount and other customary carve outs substantially similar to the Notes as described in the section entitled "*Description of the Notes*"; and

- unless otherwise agreed by the majority lenders under the Senior Secured Credit Facilities Agreement, for each financial year (commencing with the first full financial year following the Closing Date), a percentage of excess cash flow in the event that excess cash flow exceeds a minimum threshold amount (subject to certain adjustments based on anticipated debt service, distributions to be paid to minority shareholders and certain other expenses), which percentage decreases as the Senior Secured Net Leverage Ratio decreases (an "Excess Cash Flow Prepayment").

Upon the occurrence of a Change of Control (as defined in the Senior Secured Credit Facilities Agreement which follows terms substantially similar to the Notes as described in the section entitled "*Description of the Notes*"), each lender and issuing bank shall be entitled to require prepayment of outstanding amounts and cancellation of its commitments within a prescribed time period. A Change of Control shall include:

- any person or group (other than one or more permitted holders) becoming the beneficial owner of more than 50% of the voting power of Bidco other than in connection with a transaction or series of transactions in which Bidco shall become the wholly owned subsidiary of a Parent Entity (as defined in the Senior Secured Credit Facilities Agreement) subject to certain conditions;

- the Issuer and the Relevant Third Party (as defined in the Senior Secured Credit Facilities Agreement) ceasing to directly own (in aggregate) 100% of the total issued share capital of Bidco (or any successor entity as a result of certain mergers permitted under the Senior Secured Credit Facilities Agreement); or

- on a disposal of all or substantially all the assets of the Senior Secured Group taken as a whole to a person other than a restricted subsidiary or one or more permitted holders.

Bidco may prepay any other indebtedness of the Senior Secured Group which is permitted (including, junior or junior secured indebtedness) in priority if such prepayment would comply with the restricted payments covenant.

If a lender waives its right (such right shall be at Bidco's request only) to receive its share of any prepayment of the Senior Secured Facilities ("Waived Amounts"), such Waived Amounts may be retained by the Senior Secured Group for any purposes not prohibited by the Senior Secured Credit Facilities Agreement (including restricted payments), may be offered to any lender(s) selected by Bidco which did not decline such prepayment or applied in prepayment of any other permitted indebtedness.

Guarantees and Security

Guarantor Coverage Test and Material Subsidiaries

The Senior Secured Facilities will be guaranteed by each borrower of the Senior Secured Facilities and the Guarantors (together, the "Senior Secured Obligors").

Subject to agreed security principles in the Senior Secured Credit Facilities Agreement, the following security shall be granted as a condition precedent to the availability of the Senior Secured Credit Facilities: (a) the Issuer shall grant limited recourse security over (i) its shares in the capital of Bidco and (ii) any structural intercompany receivables owed to the Issuer (as lender) by Bidco (as borrower) and (b) Bidco shall grant a bank account pledge agreement pledging its material bank accounts in Germany (without control over use and freely operational prior to acceleration).

On or prior to the Acquisition Closing Date, the Relevant Third Party (as defined in the Senior Secured Credit Facilities Agreement) will grant security over (a) its shares in the capital of Bidco and (b) any structural intercompany receivables owed to it by Bidco (together, the "Relevant Third Party Security").

Within ten Business Days from (and excluding) the Acquisition Closing Date, Bidco will grant security over (a) the shares in the Target directly owned by it; and (b) structural intercompany receivables owed to it directly (the "Target CS Security").

Subject to certain adjustments and agreed security principles in the Senior Secured Credit Facilities Agreement, Bidco is required to ensure that members of the Senior Secured Group incorporated in certain agreed jurisdictions ("Guarantor Jurisdictions"), namely, Germany, Luxembourg, the UK and the US (including any state thereof and the District of Columbia) and the jurisdiction of incorporation of any borrower that (i) taken together, generate at least 80% of Consolidated EBITDA (as defined in the section entitled "*Description of the Notes*") of the members of the Senior Secured Group incorporated in Guarantor Jurisdictions (the "Guarantor Coverage Test") and (ii) (A) are Obligors; or (B) that individually generate more than 5% of Consolidated EBITDA of the Group (a "Material Subsidiary"), in each case, are guarantors under the Senior Secured Credit Facilities Agreement within 120 days after (and excluding) the Acquisition Closing Date, and thereafter on an ongoing basis within 120 days of the date on which the annual financial statements of Bidco (or other applicable financial reporting entity) are required to be delivered to the agent under the Senior Secured Credit Facilities Agreement.

As part of the guarantor accession process, security shall be granted (subject to the agreed security principles): (a) by each wholly-owned Material Subsidiary which is incorporated in a Guarantor Jurisdiction over any shares it holds in any other wholly-owned Material Subsidiary which is incorporated in a Guarantor Jurisdiction; and (b) if the relevant acceding guarantor is incorporated in England and Wales or the United States shall grant floating security over substantially all assets located in its jurisdiction of incorporation (subject to customary exclusions, "excluded assets" including, in respect of a guarantor incorporated in England & Wales, real estate) and in each case only to the extent to do so would not have a material adverse effect on the ability of the relevant company to conduct their business and operations (as determined by such company in its sole and absolute discretion).

Release of Guarantees and Security

In addition to the circumstances described below under the sections entitled "—*Intercreditor Agreement—Distressed Disposals*" and "—*Intercreditor Agreement—Non-distressed Disposals*," Bidco may, subject to certain conditions, request the release of a guarantor from its guarantee under the Senior Secured Credit Facilities Agreement if (i) such guarantor is the subject of a third-party disposal or other permitted activity under the Senior Secured Credit Facilities Agreement pursuant to which such guarantor will cease to be a member of the Senior Secured Group, (ii) on a pro forma basis taking into account such release, the Guarantor Coverage Test will continue to be satisfied or (iii) the lenders whose commitments under the Senior Secured Credit Facilities Agreement aggregate greater than 50% of the total commitments under such facilities consent to such release. Upon the effectiveness of a release pursuant to the foregoing sentence, the applicable guarantor would have no further obligations under the Senior Secured Credit Facilities Agreement, including any obligations to grant security in any Senior Collateral owned by such guarantor.

The provision and the terms of the security and guarantees set forth above will in all cases be subject to certain limitations and are at all times and in all cases subject to the requirements of applicable law and the other matters set forth in the Intercreditor Agreement and the Senior Secured Credit Facilities Agreement.

Representations and Warranties

The Senior Secured Credit Facilities Agreement contains certain representations and warranties (subject to certain agreed qualifications and with certain representations being repeated), including: (i) status, (ii) binding obligations, (iii) non-conflict with other obligations, (iv) power and authority, (v) validity and admissibility in evidence, (vi) governing law and enforcement, (vii) filing and stamp taxes, (viii) information memorandum, management case and reports, (ix) financial statements, (x) no litigation, (xi) taxation, (xii) intellectual property, (xiii) group structure, (xiv) ownership and (xv) pari passu ranking.

Certain representations and warranties will be made on the Closing Date and will be repeated on the date of each utilization, on the first day of each interest period and at certain other times.

Springing Financial Covenant

The Senior Secured Credit Facilities Agreement contains a springing senior secured net leverage financial covenant ("Financial Covenant") solely for the benefit of the lenders participating in the Revolving Credit Facility and any applicable Incremental Senior Secured Facilities (together the "Financial Covenant Facilities"), set at a flat ratio whereby the Senior Secured Net Leverage Ratio as set out in the relevant compliance certificate delivered to the agent under Senior Secured Credit Facilities Agreement shall not exceed 9.52:1

The Financial Covenant will be on an LTM basis on each financial quarter date on or after the first testing date (a "Test Date"), provided that the Senior Secured Group will only be required to test the Financial Covenant if as of 5.00 p.m. (in London) on a Test Date, the amount of: (a) all loans under the Financial Covenant Facilities (excluding: (i) loans to fund any original issue discount or flex-related payments with respect to Facility B and any Incremental Senior Secured Facility which is a term facility; (ii) loans made on or prior to the Closing Date (and, in each case, any rollover loan in respect thereof); (iii) loans used to fund any acquisitions, joint ventures, capital expenditure or other investments, provided that utilisations of the Revolving Credit Facility excluded pursuant to this paragraph (iii) shall not exceed €50 million) and (iv) (for the avoidance of doubt) any amounts drawn under the Revolving Credit Facility by way of ancillary facilities and letters of credit (or bank guarantees)); minus (b) any cash and cash equivalent investments of the Senior Secured Group, exceeds 40% of the aggregate of: (i) the total commitments of the Revolving Credit Facility as at the date of the Senior Secured Credit Facilities Agreement; and (ii) the aggregate of all commitments under any Incremental Senior Secured Facility which is a revolving facility and a Financial Covenant Facility established after the date of the Senior Secured Credit Facilities Agreement, (disregarding, in each case, any reduction in such commitments following the establishment thereof) (the "Test Condition").

The Senior Secured Net Leverage Ratio is based on the definitions and adjustments in the Senior Secured Credit Facilities Agreement, which may differ from similar definitions in the Indenture and the equivalent definitions described in this offering memorandum.

The Senior Secured Credit Facilities Agreement contains an equity cure provision enabling Bidco to cure or prevent breaches of the Financial Covenant (an "Equity Cure") by the contribution from its shareholders or any other person of additional equity, assets and/or subordinated loans ("Cure Amount") to (i) increase the consolidated EBITDA under the

Senior Secured Credit Facilities Agreement, ("EBITDA Cure") (ii) decrease senior secured indebtedness as defined in the Senior Secured Credit Facilities Agreement, or (iii) prepay the Revolving Credit Facility ("Prepayment Cure") so that the Test Condition is no longer satisfied. The EBITDA Cure equity cure right may not be exercised on more than five occasions during the term of the Senior Secured Credit Facilities Agreement and no more than two EBITDA Cures may be made in any four consecutive relevant periods. Such Equity Cure must be exercised prior to the date falling 20 Business Days after the date on which the compliance certificate is required to be delivered.

There shall be no obligation to use any Cure Amount (other than with respect to a Prepayment Cure) in prepayment of the Senior Secured Facilities.

If the Financial Covenant has been breached, but is complied with when tested on any subsequent Test Date or is otherwise not required to be tested due to the Test Condition not being met on any subsequent date, then, the prior breach of such Financial Covenant or any event of default arising therefrom shall be deemed cured unless the requisite super-majority lenders under the Revolving Credit Facility have exercised their acceleration rights to declare all or part of the loans under the Revolving Credit Facility to be immediately due and payable.

General Undertakings

The Senior Secured Credit Facilities Agreement contains certain of the incurrence covenants, information undertakings and related definitions (with, in each case, certain adjustments), including (i) limitations on indebtedness; (ii) limitations on restricted payments; (iii) limitations on liens (which includes a restriction on designating certain credit facilities and/or hedging obligations secured on the Collateral as Super Senior Liabilities (as defined in the section entitled "*—Intercreditor Agreement—Ranking and Priority*") unless, prior to such designation, Facility B has been refinanced in full (ignoring any participation (x) of a lender which has been rolled over in a refinancing (or otherwise) of Senior Secured Credit Facilities and/or (y) in respect of which a lender has declined prepayment)); (iv) limitations on sale of assets and subsidiary stock; (v) limitations on affiliate transactions; (vi) designation of restricted and unrestricted subsidiaries (vii) merger and consolidation undertakings with respect to (a) Bidco and (b) the guarantors of the Senior Secured Facilities; and (viii) additional intercreditor agreements.

In addition, the Senior Secured Credit Facilities Agreement also requires Bidco and certain of its restricted subsidiaries to observe certain other customary positive and negative covenants, subject to certain exceptions and grace periods, including covenants relating to: (i) authorizations and consents; (ii) compliance with laws; (iii) pari passu ranking; (iv) taxes; (v) centre of main interests; (vi) guarantees and security; (vii) further assurance; (viii) intercreditor agreement (ix) anti-corruption law and sanctions; (x) insurance; (xi) pension schemes; (xii) ratings; and (xiii) conditions subsequent for: (A) Bidco to enter into the Target CS Security within ten Business Days from (and excluding) the Acquisition Closing Date and (B) the Relevant Third Party (as defined in the Senior Secured Credit Facilities Agreement) to enter into the Relevant Third Party Security on or prior to the Acquisition Closing Date.

The Senior Secured Credit Facilities Agreement also requires the Senior Secured Credit Facilities Borrowers to comply with certain customary information undertakings, including delivery of quarterly and annual financial statements and accompanying compliance certificates, provided that the obligation to deliver financial information may differ from similar requirements in the Indenture and as described in this offering memorandum.

It is intended that certain agreed covenants and other provisions of the Senior Secured Credit Facilities Agreement will fall-away during the period (if any) that certain release conditions are satisfied, being (i) the occurrence of a listing in respect of which the Senior Secured Group's Total Net Leverage Ratio does not exceed 3.75:1; and (ii) Bidco having a long-term corporate credit rating of BBB- or Baa3 (as applicable) or better from any 2 of Fitch, Moody's Investor Services Limited or Standard & Poor's Rating Services.

Events of Default

The Senior Secured Credit Facilities Agreement provides for substantially the same events of default as under the Notes. In addition, the Senior Secured Credit Facilities Agreement provides for additional events of default, subject to customary materiality qualifications and grace periods, including (i) breach of the financial covenant, provided that (A) in the event of such breach, only the requisite super-majority of the lenders under the Financial Covenant Facilities (the "Super Majority Revolving Facility Lenders") may exercise acceleration rights as a result of such breach and (B) if the Super Majority Revolving Facility Lenders have exercised such acceleration rights as a result of such breach, the remaining lenders shall have a right of cross-acceleration; (ii) misrepresentation; (ii) invalidity and unlawfulness of the Senior Secured Facilities financing documents; and (iii) material failure to comply with the Intercreditor Agreement.

Governing Law

The Senior Secured Credit Facilities Agreement and any non-contractual obligations arising out of or in connection with it, are governed by, construed in accordance with and will be enforced in accordance with English law although the restrictive covenants, events of default and related definitions scheduled to the Senior Secured Credit Facilities Agreement will be interpreted in accordance with New York law (without prejudice to the fact that the Senior Secured Credit Facilities Agreement is governed by English law).

Intercreditor Agreement

General

To establish the relative rights of certain of our creditors under our financing arrangements, Bidco, the Issuer, the Trustee and certain Guarantors are party to and certain other Guarantors will accede to the Intercreditor Agreement between, among others, the agent, the security agent, arrangers and lenders under the Senior Secured Credit Facilities Agreement.

By accepting a Note, holders of the Notes will be deemed to have agreed to, and accepted the terms and conditions of, the Intercreditor Agreement.

The Intercreditor Agreement is governed by English law and sets out various matters governing the relationship of the creditors to our group including the relative ranking of certain debt of Bidco, the Issuer, the Guarantors and any other person that becomes party to the Intercreditor Agreement as a Debtor or Third Party Security Provider (as defined below), when payments can be made in respect of debt of the Debtors or Third Party Security Providers, when enforcement action can be taken in respect of that debt, the terms pursuant to which certain of that debt will be subordinated upon the occurrence of certain insolvency events and turnover provisions and provisions related to the enforcement of shared security.

The following description is a summary of certain provisions contained in the Intercreditor Agreement. It does not restate the Intercreditor Agreement in its entirety and we urge you to read that document because it, and not the description that follows, defines certain rights of the holders of the Notes and of the Trustee. Capitalized terms used but not defined herein have the meanings given to them in the Intercreditor Agreement.

For the purposes of this description:

"Senior Secured Group" shall mean Bidco and any of its Restricted Subsidiaries.

References to the "Senior Secured Notes" shall include any notes, securities or other debt instruments issued or to be issued by or in relation to which a New Debt Financing (as defined below) has been made available to or by a member of the Senior Secured Group which are designated by Bidco as Senior Secured Notes under the Intercreditor Agreement and references to the "Topco Notes" shall include the Notes and any other notes, securities or other debt instruments issued or to be issued by or in relation to which a New Debt Financing has been made available to or by a Topco Borrower (as defined below) which are designated by Bidco as Topco Notes under the Intercreditor Agreement.

The Intercreditor Agreement uses the term the "Company" to refer to Bidco, the direct subsidiary of the Issuer, "Topco" to refer to the Issuer and the "Topco Notes Liabilities" to refer to the Notes and certain other indebtedness of the Issuer.

The Relevant Third Party (as defined in the Senior Secured Credit Facilities Agreement) shall be a Third Party Security Provider and a Subordinated Creditor each for the purposes of the Intercreditor Agreement.

Ranking and Priority

Priority of Debts

The Intercreditor Agreement provides that the liabilities owed by the Issuer and each other debtor (under the Intercreditor Agreement (together, the "Debtors") (other than the Issuer and any member of the Topco Group which is designated as a Topco Borrower under the Intercreditor Agreement) (a "Topco Borrower")) to the Secured Parties (as defined below) shall rank in right of priority and payment in the following order and are postponed and subordinated to any prior ranking liabilities as follows:

- first, liabilities owed to (i) the lenders, issuing banks and ancillary lenders in relation to the Senior Secured Credit Facilities Agreement or any future senior secured facilities agreements (a "Permitted Senior Secured Facilities Agreement") (the "Senior Lender Liabilities"), (ii) the lenders, issuing banks, and ancillary lenders in relation to any future super senior facilities agreement (a "Permitted Super Senior Secured Facilities Agreement") and any hedge counterparty under a hedging agreement that on or after the Designation Date (as defined below) is designated by Bidco as super senior (together the "Super Senior Liabilities" and creditors thereof being the "Super Senior Creditors"), (iii) the Trustee and any trustee in relation to future senior secured notes (each a "Senior Secured Notes Trustee") (other than certain amounts paid to it in its capacity as trustee), the holders of future senior secured notes (the "Senior Secured Notes") and the security agent in relation to the Senior Secured Notes (the "Senior Secured Notes Liabilities"), (iv) the lender under any future loan made by the issuer of any Senior Secured Notes (if so designated by Bidco in its discretion and not including, for the avoidance of doubt, Bidco) to a member of the Group for the purposes of on lending the proceeds of any Senior Secured Notes together with any additional or replacement loan made on substantially the same terms (the "Senior Secured Notes Proceeds Loan Liabilities"), (v) the arrangers, agents, issuing banks and lenders under any cash management facility (a "Cash Management Facility" and the liabilities under a Cash Management Facility being the "Cash Management Facility Liabilities"), (vi) the hedge counterparties in relation to any hedging agreements that are not Super Senior Liabilities (the "Pari Passu Hedging Liabilities") (together with the hedging designated by Bidco as being Super Senior Liabilities, the "Hedging Liabilities"), (vii) the lenders in relation to any future second lien facility agreement (a "Second Lien Facility Agreement" and the liabilities to the lenders under a Second Lien Facility Agreement being the "Second Lien Lender Liabilities"), (viii) any second lien notes trustee (other than certain amounts paid to it in its capacity as trustee), the holders of any future second lien notes and the Security Agent in relation to any second lien notes (such second lien notes being "Second Lien Notes" and the liabilities in respect of such Second Lien Notes being the "Second Lien Notes Liabilities" and together with the Second Lien Lender Liabilities, the "Second Lien Liabilities" and creditors thereof being the "Second Lien Creditors"), (ix) any agent or trustee under any finance documents relating to any of the aforementioned liabilities, any agent or trustee under the Topco Liabilities (as defined below) and to any agent or trustee in relation to certain other liabilities of such agent or trustee (together the "Agent Liabilities"), (x) any arranger in connection with the aforementioned liabilities, and (xi) the Security Agent, pari passu and without any preference between them; and

- second, all liabilities owed (i) to the trustee (other than certain amounts paid to it in its capacity as trustee), and the holders of the Topco Notes and any future notes issued by or in relation to which a New Debt Financing has been made available to or by a Topco Borrower and designated by Bidco as Topco Notes and the Security Agent in relation to such Topco Notes (the "Topco Notes Liabilities"), (ii) under any future loan facility made available to any Topco Borrower (the "Topco Facility Liabilities" and together with the Topco Notes Liabilities, the "Topco Liabilities"), (iii) any arranger in connection with the aforementioned liabilities, and (iv) the liabilities owed under any future loan (a "Topco Proceeds Loan") made by any Topco Borrower for the purpose of on lending the proceeds of any Topco Notes or Topco Loans (the "Topco Proceeds Loan Liabilities"), pari passu and without any preference between them.

The Intercreditor Agreement provides that the liabilities owed by any Topco Borrower to the Secured Parties (as defined below) shall rank pari passu in right and priority of payment and without any preference between them in respect of (i) the Senior Lender Liabilities, (ii) the Super Senior Liabilities, (iii) the Senior Secured Notes Liabilities, (iv) the Cash Management Facility Liabilities, (v) the Hedging Liabilities, (vi) the Second Lien Lender Liabilities, (vii) the Second Lien Notes Liabilities, (viii) the Topco Liabilities, (ix) the Topco Proceeds Loan Liabilities, (x) the Agent Liabilities, and (xi) any arranger in connection with the aforementioned liabilities.

The Intercreditor Agreement provides that the intra-group liabilities owed by one member of the Senior Secured Group to another member of the Senior Secured Group (other than any Senior Secured Notes Proceeds Loan Liabilities or Topco Proceeds Loan Liabilities) (the "Intra-Group Liabilities") will be subordinated to the liabilities owed by the Debtors and Third Party Security Providers to the creditors under the Senior Lender Liabilities, Super Senior Liabilities, Senior Secured Notes Liabilities, Cash Management Facility Liabilities, Hedging Liabilities, Second Lien Lender Liabilities and Second Lien Notes Liabilities, Agent Liabilities and Notes Liabilities and to any arranger in connection with the aforementioned liabilities (such creditors, together with the Security Agent, any receiver or delegate, any creditor of the Agent Liabilities and any arranger with respect to the Secured Liabilities, the "Secured Parties").

The Intercreditor Agreement also provides that the liabilities owed by any member of the Senior Secured Group (other than any Topco Proceeds Loan Liabilities) to a holding company of Bidco or to any other person who becomes a subordinated creditor (a "Subordinated Creditor") under the Intercreditor Agreement (the "Subordinated Liabilities") will be subordinated to the liabilities owed by the Debtors and Third Party Security Providers to the Secured Parties, and to the Intra-Group Lenders.

Priority of Security

The Intercreditor Agreement provides that the Transaction Security (as defined below) shall, subject to the terms of the Intercreditor Agreement, rank and secure the applicable Secured Obligations (but only to the extent that such Transaction Security is expressed to secure those liabilities) in the following order of priority:

(a) first, the Senior Secured Creditor Liabilities (as defined below) pari passu and without any preference between them;

(b) second, the Second Lien Liabilities pari passu and without any preference between them; and

(c) third (to the extent of the Topco Shared Security), the Topco Liabilities pari passu and without any preference between them.

For the purposes of this description only:

"Debt Documents" means the Intercreditor Agreement and the documents creating or evidencing the Cash Management Facility Liabilities, the Hedging Liabilities, the Second Lien Liabilities, the Senior Secured Liabilities, any Senior Secured Notes Proceeds Loan Liabilities (a "Senior Secured Notes Proceeds Loan Agreement"), the Topco Liabilities, the Topco Proceeds Loan Liabilities, the unsecured liabilities of any unsecured creditors who are party to the Intercreditor Agreement, the Subordinated Liabilities and the Intra- Group Liabilities (each as defined in this description) and any other document designated as such by the Security Agent and Bidco.

"Designation Date" means the first date that Bidco designates any liabilities as Super Senior Liabilities in accordance with the Intercreditor Agreement.

"Finance Documents" means the Senior Secured Credit Facilities Agreement, any Permitted Senior Secured Facilities Agreement, any Permitted Super Senior Secured Facilities Agreement, the indenture in respect of any Senior Secured Notes, Second Lien Facility Agreement, the indenture in respect of any Second Lien Notes, the facility documenting any Topco Facility, the indenture in respect of any Topco Notes and any document designated by Bidco as an unsecured finance document under and in accordance with the Intercreditor Agreement.

"Secured Creditors" means the Senior Secured Creditors, Second Lien Creditors and the Topco Creditors (each as defined below).

"Secured Debt Documents" means the documents relating to the Senior Secured Liabilities, Second Lien Liabilities, Topco Liabilities and Hedging Liabilities.

"Secured Obligations" means (i) in the case of Transaction Security other than Topco Shared Security, all liabilities and all other present and future obligations at any time due, owing or incurred by any member of the Senior Secured Group and by each Debtor and any Third Party Security Provider to any Secured Party (other than a Topco Creditor) under the Secured Debt Documents (other than the Topco Finance Documents) (including to the Security Agent under the Parallel Debt), both actual and contingent and whether incurred solely or jointly and as principal or surety or in any other capacity (the "Transaction Security Secured Obligations") and (ii) in the case of Topco Shared Security, the Topco Shared Security Secured Obligations.

"Secured Parties" means the Security Agent, each of the agents, any receiver or delegate, the arrangers and the Secured Creditors from time to time but, in the case of each agent, arranger or any Secured Creditor, only if, it (or in the case of any noteholders, the relevant notes trustee) is a party to the Intercreditor Agreement or has acceded to the Intercreditor Agreement, in the appropriate capacity.

"Third Party Security Provider" means any person that has provided Transaction Security (including Topco Shared Security) but is not a Debtor in respect of any direct borrowing or guarantee liabilities of the applicable Secured Obligations to which that Transaction Security relates and which is designated by Bidco (in its discretion).

"Topco Independent Transaction Security" refers to security (other than Transaction Security) which in relation to a Topco Borrower or any member of the Senior Secured Group that directly holds shares in a Topco Borrower or any such person that is not a member of the Senior Secured Group which is designated as such by Bidco (in its discretion) (together, the "Topco Independent Obligors") (i) is created, or expressed to be created, in favor of the Security Agent as agent or trustee for the other Topco Secured Parties (or a class of Topco Secured Parties); (ii) in the case of any jurisdiction in which effective security cannot be granted in favor of the Security Agent as agent or trustee for the other Topco Secured Parties (or a class of Topco Secured Parties), is created, or expressed to be created, in favor of (x) all the Topco Secured Parties (or a class of Topco Secured Parties); or (y) the Security Agent under a parallel debt and/or joint and several creditorship or similar structure for the benefit of all the Secured Parties (or a class of Secured Parties). In the case of a Topco Independent Obligor which is a member of the Senior Secured Group and a direct shareholder of a Topco Borrower, such security shall be limited to shares in and receivables owed to it by the relevant Topco Borrower which are not required to be subject to the Transaction Security pursuant to the Finance Documents. Topco Independent Transaction Security shall secure all liabilities and present and future obligations of each Topco Independent Obligor to the Topco Secured Parties under the Topco Finance Documents.

"Topco Shared Security" refers to security at any time which is created, or expressed to be created, over any of the following (i) the shares in Bidco held by any direct shareholder of Bidco, (ii) all receivables owed by Bidco to a Topco Investor (as defined below), Subordinated Creditor or other holding company or shareholder of Bidco (including any Topco Proceeds Loan and the Topco Proceeds Loan Liabilities, as applicable), (iii) the shares in any Topco Borrower which is a member of the Senior Secured Group, (iv) all receivables owed by a member of the Senior Secured Group under any Topco Proceeds Loan (or, in the case of a Topco Borrower which is a member of the Senior Secured Group, any Senior Secured

Notes Proceeds Loan), (v) any escrow account relating to the proceeds of any Topco Liabilities, and (vi), any other assets not falling within limbs (i), (ii), (iii), (iv) and (v) of this paragraph of a Topco Borrower and (to the extent that Bidco has confirmed to the Security Agent that the granting of such security in favor of the Topco Shared Security Secured Obligations is not prohibited by the terms of any applicable prior ranking financing agreements) any other member of the Senior Secured Group, in each case designated as Topco Shared Security by Bidco (in its discretion) in favor of the Security Agent as agent or trustee for the other Secured Parties (or if such trustee arrangements are not legally possible, in favor of all the Secured Parties or in favor of the Security Agent under a parallel debt or similar structure). Topco Shared Security shall secure all liabilities and present and future obligations of the Senior Secured Group and at any time after the incurrence of any Topco Liabilities by a Topco Borrower that is not a member of the Senior Secured Group, such Topco Borrower and each of its Subsidiaries other than Unrestricted Subsidiaries (as defined in the documents governing the relevant Topco Notes or Topco Facility (as the case may be)) (together, the "Topco Group"), each Debtor and any Third Party Security Provider to the Secured Parties under the Secured Debt Documents.

"Transaction Security" refers to security (from the Senior Secured Group, any Third Party Security Provider and Topco Shared Security (but excluding, for the avoidance of doubt, Topco Independent Transaction Security), as defined above) in each case which, to the extent legally possible and subject to any Agreed Security Principles (as defined in the Senior Secured Credit Facilities Agreement) and the provisions of the Intercreditor Agreement (i) is created, or expressed to be created, in favor of the Security Agent as agent or trustee for the other Secured Parties (or a class of Secured Parties) in respect of the applicable Secured Obligations; or (ii) in the case of any jurisdiction in which effective security cannot be granted in favor of the Security Agent as agent or trustee for the Secured Parties (or a class of Secured Parties), is created, or expressed to be created, in favor of (x) all the Secured Parties (or a class of Secured Parties) in respect of the applicable Secured Obligations or (y) the Security Agent under a parallel debt and/or joint and several creditorship or similar structure for the benefit of all the Secured Parties (or a class of Secured Parties) in respect of the applicable Secured Obligations. Transaction Security which is not Topco Shared Security shall secure all liabilities and present and future obligations of the Debtors and Third Party Security Providers to the Secured Parties (other than the creditors under the Topco Liabilities (the "Topco Secured Parties")) under the Secured Debt Documents (other than the finance documents relating to the Topco Liabilities (the "Topco Finance Documents")). Transaction Security which is Topco Shared Security shall secure all liabilities and present and future obligations of any member of the Topco Group, the Debtors and Third Party Security Providers to the Secured Parties under the Secured Debt Documents (including to the Security Agent under the Parallel Debt) both actual and contingent and whether incurred solely or jointly and as principal or surety or in any other capacity (the "Topco Shared Security Secured Obligations").

The Topco Notes and Note Guarantees thereunder will be Topco Notes Liabilities for the purposes of the Intercreditor Agreement and the Designation Date has not occurred. On the Issue Date, no Senior Secured Notes Liabilities, Second Lien Lender Liabilities or Second Lien Notes Liabilities will be outstanding. Such liabilities and liabilities in respect of other new debt financings may only be incurred and/or designated if not prohibited under the terms of the Debt Documents, including, without limitation, the covenants applicable to the Notes described under "*Description of the Notes—Certain Covenants*".

Guarantees and Security: Topco Creditors

The creditors in respect of the Topco Liabilities (the "Topco Creditors") have the right to take, accept or receive the benefit of:

(a) any Topco Shared Security from any member of the Senior Secured Group or from a Third Party Security Provider in respect of the Topco Liabilities if and to the extent legally possible and subject to any agreed security principles, at the same time it is also offered either:

to the Security Agent as agent or trustee for the other Secured Parties (or applicable class thereof) in respect of their Liabilities; or

in the case of any jurisdiction in which effective security cannot be (or is not) granted in favor of the Security Agent as agent or trustee for the Secured Parties (or applicable class thereof):

1. to the other Secured Parties (or applicable class thereof) in respect of their Liabilities; or

2. to the Security Agent under a parallel debt structure, joint and several creditor structure or agency structure for the benefit of the other Secured Parties (or applicable class thereof),

and ranks in the same order of priority as described under "*Priority of Security*" above, provided that all amounts received or recovered by any Topco Creditor with respect to such Topco Shared Security are immediately paid to the Security Agent for application as set out under "*Application of Proceeds*" below;

(b) any guarantee, indemnity or other assurance from any member of the Senior Secured Group in respect of the Topco Liabilities in addition to any guarantee, indemnity or assurance in the original form of any

Topco Finance Documents or the Intercreditor Agreement, or given to all the Secured Parties as security for the liabilities of the Topco Group, each Debtor and any Third Party Security Provider to the Secured Parties under the Debt Documents if, subject to any agreed security principles:

(except for any guarantee, indemnity or other assurance permitted by the Finance Documents), the Secured Parties other than the Topco Creditors (the "Priority Secured Parties") already benefit from such a guarantee, indemnity or other assurance or at the same time it is also offered to the Priority Secured Parties and ranks in the same order of priority as described under "*Priority of Debts*" above, as applicable; and

all amounts received by any Topco Creditor with respect to such guarantee, indemnity or assurance are immediately paid to the Security Agent for application as set out under "*Application of Proceeds*" below; and

(c) any security, guarantee indemnity or other assurance:

from any person that is not a member of the Senior Secured Group;

and from any member of the Senior Secured Group:

1. in connection with any escrow or similar arrangements relating to amounts held by a person which is not a member of the Topco Group prior to release of those amounts to a member of the Topco Group;

2. in connection with any actual or proposed defeasance, redemption, prepayment, repayment, purchase or other discharge of any Secured Liabilities not prohibited by the Intercreditor Agreement; or

3. as otherwise permitted by the Intercreditor Agreement.

No security (other than pursuant to the secured documents relating to Topco Independent Transaction Security or Topco Shared Security or as described above) shall be granted by a member of the Senior Secured Group in respect of any Topco Liabilities.

New Debt Financing

The Intercreditor Agreement provides, subject to certain conditions, for the implementation of existing, additional, supplemental or new financing arrangements or the assumption or incurrence of any Liabilities that will constitute, for the purposes of the Intercreditor Agreement, Senior Lender Liabilities, Senior Secured Notes Liabilities, Cash Management Facility Liabilities, Hedging Liabilities, Second Lien Liabilities, Topco Liabilities, Super Senior Liabilities or Pari Passu Hedging Liabilities (each a "New Debt Financing"). The conditions include certification by Bidco that such New Debt Financing is not prohibited under the terms of the Finance Documents.

Such financing arrangements may be implemented by way of refinancing, replacement, exchange, set-off, discharge or increase of any such new, existing, additional, supplemental or new financing arrangement under the relevant finance documents. In connection with and in order to facilitate any New Debt Financing, each agent in respect of any Priority Secured Liabilities and the Security Agent (and each other person party to a Transaction Security document or a Topco Independent Transaction Security document) is authorized and instructed to enter promptly into any new security document, amend or waive any term of an existing security document and/or release any asset from the Transaction Security or Topco Independent Transaction Security (as the case may be) and/or to effect the ranking, priority guarantees and Security of the New Debt Financing, subject to certain conditions, including as regards the terms of such security (which shall be, unless otherwise required by Bidco, substantially the same (if applicable) as the terms applicable to the existing Transaction Security or Topco Independent Transaction Security over equivalent assets).

Where any indebtedness ("Permitted Acquired Indebtedness") which is not prohibited under the Finance Documents is incurred by or in connection with the acquisition of (i) a person or any of its subsidiaries who, after the Closing Date, becomes a Restricted Subsidiary or merges, consolidates or is otherwise combined with a Restricted Subsidiary, or (ii) in relation to an asset of or shares (or other ownership interests) in any such person or which is otherwise acquired after the Closing Date (together an "Acquired Person or Asset"), any security, guarantee, indemnity or other assurance against loss in respect of such New Debt Financing which is subsisting at the date when the conditions to the incurrence of such New Debt Financing set out in the Intercreditor Agreement have been satisfied (or is to be granted thereafter, including subject to any condition or periodic testing) shall be permitted to subsist and there is no requirement to offer that security, guarantee, indemnity or other assurance in respect of any other liabilities under any Debt Document. No security, guarantee, indemnity or other assurance against loss is required to be given by any member of the Topco Group in respect of any liabilities (including under any Debt Document) (i) over any Acquired Person or Asset if this would breach a contractual undertaking applicable to the Topco Group or is excluded or exempt from being given under the Agreed Security Principles (as defined in the Senior Secured Credit Facilities Agreement), (ii) over any asset required (including subject to any condition) to provide credit support in relation to any Permitted Acquired Indebtedness (other than as a result of any obligation to extend any Transaction Security ratably for the benefit of such Permitted Acquired Indebtedness), or (iii) where the grant of such security, guarantee, indemnity or other assurance against loss is prevented by the documentation relation to such Permitted Acquired Indebtedness or would give rise to an obligation (including any payment obligation but not including any obligation to extend any Transaction Security ratably for the benefit of such Permitted Acquired Indebtedness) under or in relation thereto.

Permitted Payments

Permitted Payments in respect of Senior and Super Senior Liabilities

The Debtors and Third Party Security Providers may make payment in respect of the Senior Lender Liabilities, Senior Secured Notes Liabilities, Super Senior Liabilities and Cash Management Facility Liabilities (together with the Hedging Liabilities, the "Senior Secured Creditor Liabilities," the creditors in respect thereof being the "Senior Secured Creditors") at any time, provided that following certain acceleration events under the Senior Secured Credit Facilities Agreement, any Permitted Senior Secured Facilities Agreement or future senior secured notes indenture (a "Senior Secured Notes Indenture") or Permitted Super Senior Secured Facilities Agreement or following certain insolvency events in relation to a member of the Senior Secured Group, payments may only be made by Debtors or Third Party Security Providers and received by creditors in accordance with the provisions described below under "*Application of Proceeds*" provided that after the Designation Date there shall be no obligation to turnover any such payments received, other than those related to an enforcement of Transaction Security or a Distressed Disposal (as defined below) of assets subject to the Transaction Security.

Any failure to make a payment in accordance with the Senior Secured Finance Documents following an acceleration event as required by the Intercreditor Agreement shall not prevent the occurrence of an event of default under such applicable Senior Secured Finance Documents.

Permitted Payments in respect of Second Lien Liabilities

Prior to the first date on which all of the Senior Liabilities, the Super Senior Liabilities and the Senior Secured Notes Liabilities (together, the "Senior Secured Liabilities" and together with the Second Lien Liabilities and Topco Liabilities being the "Secured Liabilities") have been discharged (the "Senior Secured Discharge Date"), Bidco, the members of the Senior Secured Group and Third Party Security Providers may only make specified scheduled payments in respect of the Second Lien Liabilities, in accordance with the finance documents governing such Second Lien Liabilities, subject to compliance with certain conditions in the Intercreditor Agreement.

The principal conditions are that the relevant payment (if it is a payment of principal or capitalized interest) is not prohibited by any prior ranking financing agreement, including any Permitted Super Senior Secured Facilities Agreement, Permitted Senior Secured Facilities Agreement and any Senior Secured Notes Indenture (or if it is so prohibited, that all necessary consents have been obtained to permit it), no payment stop notice has been issued to the agent or trustee for the relevant Second Lien Liabilities and no payment default (subject to a de minimis threshold in the case of amounts other than principal, interest or certain fees) is continuing under any Permitted Senior Secured Facilities Agreement, Permitted Super Senior Secured Facilities Agreement, Cash Management Facility document or Senior Secured Notes document.

Certain specified payments in respect of Second Lien Liabilities are also permitted at all times, notwithstanding that a payment stop notice is outstanding or such a payment default is continuing. These payments and basket amounts are substantially similar to those referenced for Topco Liabilities in (b) of the next paragraph.

Permitted Payments in respect of Topco Liabilities

Prior to the date which is the later of the Senior Secured Discharge Date and the first date (the "Second Lien Discharge Date") on which all Second Lien Liabilities have been discharged (the "Priority Discharge Date"), Bidco, Topco Borrowers, Third Party Security Providers and other members of the Senior Secured Group may only make specified scheduled payments (including any other direct or indirect step, matter, action or dealing in relation to any Topco Liabilities otherwise prohibited under the Intercreditor Agreement) under the Topco Liabilities or under any Topco Proceeds Loan (together the "Topco Group Liabilities") to the Topco Creditors or any Topco Borrower or any holding company of Bidco or other lender in respect of a Topco Proceeds Loan (in respect of the Topco Proceeds Loan Liabilities only) (such payments, collectively, "Permitted Topco Payments"):

(a) if:

- no Topco Payment Stop Notice (as defined below) is outstanding;

- no payment default (subject to a de minimis threshold in the case of amounts other than principal, interest or certain fees) has occurred and is continuing under any Permitted Senior Secured Facilities Agreement, Permitted Super Senior Secured Facilities Agreement, Cash Management Facility document or Senior Secured Notes document (a "Senior Secured Payment Default"), or under the Second Lien Facilities or Second Lien Notes (a "Second Lien Payment Default"); and

- the payment is of (1) any amount of principal or capitalized interest in respect of the Topco Liabilities which is (x) not prohibited by any prior ranking financing agreements (in respect of the Senior Secured Liabilities and the Second Lien Liabilities), or any required consents to permit such payment have been obtained or (y) permitted as a Non-Distressed Disposal (as defined below) or the result of any claim which is subject to Transaction Security, (2) any other amount which is not an amount of principal or capitalized interest (such other amounts including all scheduled interest payments (including, if applicable, special interest (or liquidated damages))), the accrual of cash interest otherwise payable during a period when a Topco Payment Stop Notice (as defined below) is outstanding and default interest on the Topco Liabilities accrued and payable in accordance with the terms of the relevant Topco Finance Document (as at the date of the issue of the same or as amended in accordance with the terms of the Intercreditor Agreement and the other Debt Documents), additional amounts payable as a result of the tax gross-up provisions relating to the Topco Liabilities and amounts in respect of currency indemnities in any Topco Finance Document, (3) made in pursuance of a debt buy-back program approved by the Majority Senior Secured Creditors, Majority Super Senior Creditors and Majority Second Lien Creditors (each as defined below), or (4) amounts due under any syndication strategy letter relating to the Topco Finance Documents;

(b) if, notwithstanding that a Topco Payment Stop Notice (as defined below) is outstanding and/or (other than in respect of paragraph (N) below) a Senior Secured Payment Default and/or a Second Lien Payment Default has occurred and is continuing and (if the Topco Borrower is a guarantor or borrower under any prior ranking debt facilities at such time, other than in respect of paragraph (L) below) irrespective of whether any creditors under prior ranking debt facilities have accelerated their debt, the payment is not prohibited to be made at such time by any prior ranking financing agreements (in respect of the Senior Secured Liabilities and the Second Lien Liabilities), or the payment is (without double counting any equivalent applicable basket in any Debt Document, but whether or not permitted by the Debt Documents): (A) of ongoing fees under any original fee letter relating to the Topco Finance Documents, (B) of commercially reasonable advisory and professional fees for restructuring advice and valuations (including legal advice and the advice of other appropriate financial and/or restructuring advisors) and a Topco Agent's fees, costs and expenses not exceeding €1,500,000, but excluding the costs of any litigation against a Senior Secured Creditor or Second Lien Creditor (or their affiliates), (C) of any amounts owed to a Topco Agent (as defined below), (D) of costs necessary to protect, preserve or enforce security, (E) of any costs, commissions, taxes, premiums, amendment fees (including any original issue discount and other consent and/or waiver fees) and any expenses incurred in respect of (or reasonably incidental to) the Topco Finance Documents (including in relation to any reporting or listing requirements under the Topco Finance Documents), (F) of any other amount not exceeding €5,000,000 in any financial year of Bidco (provided that any such amount not so applied may be carried forward and utilized in the subsequent financial year (where it shall be deemed to have been used first)), (G) of any amount of the Topco Liabilities which would have been payable but for the issue of a Topco Payment Stop Notice (which has since expired and no new Topco Payment Stop Notice is outstanding) which has been capitalized and added to the principal amount of the Topco Liabilities or where that amount is outstanding as a result of the accrual of cash interest payable in respect of the Topco Liabilities during such period or any such amount described at (a)(iii) above, provided that no such payment may be made if certain events of default have occurred under the Senior Secured Liabilities or Second Lien Liabilities or would occur as a result of making such payment, (H) for as long as an event of default under the Senior Secured Liabilities, Second Lien Liabilities or Topco Group Liabilities which is continuing, all or part of the Topco Liabilities being released or otherwise discharged solely in consideration for the issues of shares in any holding company of Bidco ("Debt for Equity Swap") provided that no cash or cash equivalent payment is made in respect of the Topco Liabilities, that it does not result in a Change of Control as defined in any prior ranking finance agreement or Topco Finance Document and that any Liabilities owed by a member of the Senior Secured Group to another member of the Senior Secured Group, to the Subordinated Creditors or to any other holding company of Bidco that arise as a result of any such Debt for Equity Swap are subordinated to the Senior Secured Liabilities and Second Lien Liabilities pursuant to the Intercreditor Agreement and the Senior Secured Creditors and Second Lien Creditors are granted Transaction Security in respect of any of those Intra-Group Liabilities or Subordinated Liabilities owed by any member of the Senior Secured Group, (I) of non-cash interest made by way of capitalizing interest or issuing a non cash-pay instrument which is subordinated on the same terms as the Topco Liabilities, (J) of audit fees, directors' fees, taxes and other proper and incidental expenses required to maintain existence or any other reasonable and administrative and maintenance costs and expenses of a Topco Borrower or its affiliates, (K) funded directly or indirectly with the proceeds of Topco Liabilities incurred under or pursuant to any Topco Finance Documents, (L) by the Topco Borrower in respect of its obligations under the Topco Finance Documents; and such payment is not directly or indirectly sourced from a member of the Senior Secured Group or such payment is funded from proceeds received by the Topco Borrower from the Senior Secured Group without breaching the terms of the Debt Documents, (M) if the payment is of a principal amount of the Topco Liabilities and made in accordance with a provision in a Topco Finance Document relating to prepayment upon illegality or any other provision that permits the repayment in full of any Topco Creditor (without a related requirement to repay all other Topco Creditors), or (N) if no Senior Secured Payment Default or Second Lien Payment Default has occurred and is continuing and the payment is a payment of principal, interest or any other amounts made on or after the final maturity date of the relevant Topco Liabilities (provided that such maturity date is no earlier than that contained in the original form of the relevant Topco Finance Document as of the date of first issuance or borrowing (as the case may be) of the applicable Topco Liabilities); or

(c) if the requisite Senior Secured Creditors, Super Senior Creditors and Second Lien Creditors give prior consent to that payment being made.

On or after the Priority Discharge Date, the Debtors, the Topco Borrowers and the Third Party Security Providers may make payments in respect of the Topco Group Liabilities in accordance with the Topco Finance Documents and the Topco Proceeds Loan Agreement (as applicable).

Topco Liabilities Payment Block Provisions

A Topco Payment Stop Notice (as defined below) is outstanding from the date falling one (1) Business Day after the date on which, following the occurrence of an event of default under any Senior Secured Liabilities (a "Senior Secured Event of Default") or an event of default under the Second Lien Liabilities (a "Second Lien Event of Default"), the Security Agent (acting on the instructions of the requisite Super Senior Creditors, Senior Secured Creditors or Second Lien Creditors gave the instructions for the relevant stop notice to be delivered) (a "Topco Payment Stop Notice") to the agent under any Topco Facility (the "Topco Agent") and the trustee under any Topco Notes (the "Topco Notes Trustee") advising that the Senior Secured Event of Default or Second Lien Event of Default is continuing and suspending payments by the Senior Secured Group of the Topco Liabilities, until the first to occur of:

(a) the date falling one hundred and seventy nine (179) days after delivery of that Topco Payment Stop Notice;

(b) the date on which a default occurs for failure to pay principal at the original scheduled maturity of the relevant Topco Liabilities;

(c) if a Topco Standstill Period (as defined below) commences after delivery of that Topco Payment Stop Notice, the date on which such standstill period expires;

(d) the date on which the relevant Senior Secured Event of Default or Second Lien Event of Default has been remedied or waived;

(e) the date on which the Security Agent (acting on the instructions of whichever of the Super Senior Creditors, Senior Secured Creditors or Second Lien Creditors gave the instructions for the relevant stop notice to be delivered) delivers a notice to the Topco Borrower, the Topco Agent and the Topco Notes Trustee cancelling the payment stop notice;

(f) the Priority Discharge Date; and

(g) the date on which the Topco Creditors take any enforcement action that is permitted under the Intercreditor Agreement (see "*Permitted Topco Enforcement*" below).

No Topco Payment Stop Notice may be delivered by the Security Agent in reliance on a Senior Secured Event of Default or a Second Lien Event of Default more than forty five (45) days after the occurrence of the relevant event of default. No more than one Topco Payment Stop Notice may be served (i) with respect to the same event or set of circumstances, or (ii) in any period of three hundred and sixty (360) days.

Any failure to make a payment due in respect of the Topco Group Liabilities as a result of the issue of a Topco Payment Stop Notice or the occurrence of a Senior Secured Payment Default or Second Lien Payment Default shall not prevent (i) the occurrence of an event of default as a consequence of that failure to make a payment in relation to the relevant Topco Group Liabilities, or (ii) the issue of an enforcement notice in respect of an event of default under the finance documents documenting any Topco Group Liabilities (a "Topco Enforcement Notice") on behalf of the Topco Creditors.

Payment Obligations and Capitalization of Interest Continue

Nothing in the Second Lien or Topco payment block provisions will release any Debtor from the liability to make any payment (including of default interest, which shall continue to accrue) under the applicable Debt Documents even if its obligation to make such payment is restricted at any time. The accrual and capitalization of interest (if any) in accordance with the applicable Debt Documents shall continue notwithstanding the issue of a payment stop notice.

Cure of Payment Stop

If:

(a) at any time following the issue of a Topco Payment Stop Notice or the occurrence of a Senior Secured Payment Default or Second Lien Payment Default, that Topco Payment Stop Notice ceases to be outstanding and/or (as the case may be) the Senior Secured Payment Default or Second Lien Payment Default ceases to be continuing; and

(b) the relevant Debtor or Topco Borrower then promptly pays to the Topco Creditors or any party that has acceded to the Intercreditor Agreement as a creditor under a Topco Proceeds Loan (the "Topco Investors") (in respect of the Topco Proceeds Loan Liabilities only) an amount equal to any payments which had accrued under the Topco Finance Documents or the Topco Proceeds Loan Agreement (as applicable) and which would have been Permitted Topco Payments but for that Topco Payment Stop Notice or Senior Secured Payment Default or Second Lien Payment Default (as the case may be),

then any event of default which may have occurred under a Topco Finance Document or Topco Proceeds Loan Agreement and any Topco Enforcement Notice which may have been issued as a result of that suspension of payments shall be deemed automatically waived without any further action being required.

Turnover by the Creditors

Subject to certain exceptions, the Intercreditor Agreement will provide that if, at any time prior to the latest to occur of the Super Senior Discharge Date, the Senior Secured Discharge Date, the Second Lien Discharge Date and the first date on which all of the Topco Liabilities have been fully discharged (the "Topco Discharge Date") (the "Final Discharge Date") any creditor (other than a Senior Secured Creditor on or after the Designation Date) receives or recovers from any Debtor, member of the Senior Secured Group or Third Party Security Provider:

(a) any payment or distribution of, or on account of or in relation to, any of the liabilities owed to the creditors under the Debt Documents other than any payment or distribution which is either (x) not prohibited under the Intercreditor Agreement or (y) made in accordance with the provisions set out below under "*Application of Proceeds*";

(b) any amount by way of set-off which does not give effect to a payment permitted under the Intercreditor Agreement;

(c) any amount:

   (i) on account of, or in relation to, any of the liabilities owed to the creditors under the Debt Documents (I) after the occurrence of an acceleration event or the enforcement of any Transaction Security as a result of such an acceleration event, or (II) as a result of any other litigation or a Debtor, member of the Senior Secured Group or any Third Party Security Provider (other than after the occurrence of an Insolvency Event); or

   (ii) by way of set-off in respect of any of the liabilities owed to it after the occurrence of an acceleration event or the enforcement of any Transaction Security as a result of such an acceleration event, other than, in each case, any amount received or recovered in accordance with the provisions set out below under "*Application of Proceeds*";

(d) the proceeds of any enforcement of any of the Transaction Security except in accordance with the provisions set out below under "*Application of Proceeds*"; or

(e) any distribution in cash or in kind or payment of, or on account of or in relation to, any of the liabilities owed by any Debtor, any member of the Senior Secured Group or Third Party Security Provider which is not in accordance with the provisions set out below under "*Application of Proceeds*" and which is made as a result of, or after, the occurrence of an Insolvency Event in respect of that Debtor, member of the Senior Secured Group or Third Party Security Provider, that creditor will:

1. in relation to receipts and recoveries not received or recovered by way of set-off (x) hold an amount of that receipt or recovery equal to the relevant liabilities (or if less, the amount received or recovered) on trust for (or otherwise on behalf and for the account of) the Security Agent and promptly pay or distribute that amount to the Security Agent for application in accordance with the terms of the Intercreditor Agreement, and (y) promptly pay or distribute an amount equal to the amount (if any) by which the receipt or recovery exceeds the relevant liabilities to the Security Agent for application in accordance with the terms of the Intercreditor Agreement; and

2. in relation to receipts and recoveries received or recovered by way of set-off, promptly pay an amount equal to that recovery to the Security Agent for application in accordance with the terms of the Intercreditor Agreement.

A turnover mechanism on substantially the same terms applies in the event that, at any time on or after the Designation Date but prior to the Final Discharge Date, any Senior Secured Creditor receives or recovers from any Debtor, any member of the Senior Secured Group or Third Party Security Provider (x) any proceeds from the enforcement of security or from a Distressed Disposal (as defined below) or following an acceleration event or the enforcement of security, any proceeds arising from any of the charged property or (y) any other amounts which should otherwise be received or recovered by the Security Agent except in accordance with the provisions set out below under "—*Application of Proceeds*".

Effect of Insolvency Event

"Insolvency Event" is defined as, in relation to any Debtor, Material Subsidiary (each as defined in the Senior Secured Credit Facilities Agreement) or Third Party Security Provider, (a) the passing of any resolution or making of an order for insolvency, bankruptcy, winding up, dissolution, administration or reorganization (excluding solvent reorganizations), (b) a moratorium is declared in relation to any of its indebtedness, (c) the appointment of a liquidator, receiver, administrative receiver, administrator, compulsory manager or other similar officer in respect of it or any of its assets, or (d) any analogous procedure or step is taken in any jurisdiction, other than (in each case), frivolous or vexatious proceedings, proceedings or appointments which the Security Agent is satisfied will be withdrawn or unsuccessful or as permitted under the Senior Secured Credit Facilities Agreement or in any Permitted Senior Secured Facilities Agreement, Permitted Super Senior Secured Facilities Agreement or a Second Lien Facility Agreement, or otherwise not constituting a default.

The Intercreditor Agreement provides that, after the occurrence of an Insolvency Event, any party entitled to receive a distribution out of the assets of a Debtor, Material Subsidiary or Third Party Security Provider (in the case of a Senior Secured Creditor on or after the Designation Date, only to the extent such amounts constitute proceeds of enforcement) shall direct the person responsible for the distribution to pay that distribution to the Security Agent until the liabilities owing to the Secured Parties have been paid in full. The Security Agent shall apply all such distributions paid to it in accordance with the provisions set out under "—*Application of Proceeds*" below.

To the extent that any member of the Senior Secured Group or Third Party Security Provider's liabilities to creditors are, with certain exceptions, discharged by way of set-off (mandatory or otherwise and in the case of a Senior Secured Creditor on or after the Designation Date, only to the extent such amounts constitute proceeds of enforcement) after the occurrence of an Insolvency Event, any creditor benefiting from such set-off shall pay an amount equal to the amount of the liabilities owed to it which are discharged by that set-off to the Security Agent for application in accordance with the provisions set out under "—*Application of Proceeds*" below.

If the Security Agent or any other Secured Party receives a distribution in a form other than in cash in respect of any liabilities, the liabilities will not be reduced by that distribution until and except to the extent that the realization proceeds are actually applied towards such liabilities.

Subject to certain netting and set-off rights under ancillary or cash management facilities, each creditor irrevocably authorizes the Security Agent to take Enforcement Action (as defined below), make demands, collect and receive distributions, file claims and take other actions necessary to make recovery after the occurrence of an Insolvency Event in relation to a Debtor, member of the Senior Secured Group or Third Party Security Provider. The creditors agree to do all things the Security Agent reasonably requests in order to give effect to these provisions.

Security Enforcement Regime

Enforcement of Security

The Intercreditor Agreement provides that the Security Agent may not take any action to enforce the Transaction Security or the Topco Independent Transaction Security without the prior written consent of an Instructing Group, Majority Second Lien Creditors or Majority Topco Creditors (as applicable) otherwise as specified in the provisions described below.

An "Instructing Group" means:

(a) if the Designation Date has not occurred:

(i) prior to the Senior Secured Discharge Date, the Majority Senior Secured Creditors;

(ii) on or after the Senior Secured Discharge Date but before the Priority Discharge Date, the Majority Second Lien Creditors; and

(iii) on or after the Priority Discharge Date but before the Topco Discharge Date, the Majority Topco Creditors;

(b) at any time on or after the occurrence of the Designation Date and:

(i) prior to the later of the Senior Secured Discharge Date and the first date on which the Super Senior Liabilities have been fully and finally discharged (the "Super Senior Discharge Date"), Senior Secured Creditors (other than the Super Senior Creditors) representing more than 50% of the Senior Secured Liabilities (other than the Super Senior Liabilities) (the "Senior Secured Creditors"), and Super Senior Creditors representing more than 50% of the Super Senior Secured Liabilities (the "Majority Super Senior Creditors") save that for instructions relating to enforcement, it shall mean the group of Secured Creditors entitled to give instructions in accordance with the enforcement regime described under "*Enforcement of Transaction Security prior to the Designation Date*" and "*Enforcement of Transaction Security on or after the Designation Date*" below;

(ii) on or after the later of the Senior Secured Discharge Date and the Super Senior Discharge Date but before the Priority Discharge Date, Second Lien Creditors representing more than 50% of the Topco Liabilities (the "Majority Second Lien Creditors"); and

(iii) on or after the Priority Discharge Date but before the Topco Discharge Date, Topco Creditors representing more than 50% of the Topco Liabilities (the "Majority Topco Creditors").

Enforcement of Transaction Security prior to the Designation Date

Prior to the Designation Date, the Security Agent may refrain from enforcing the Transaction Security unless instructed otherwise by (i) the Instructing Group, (ii) if, prior to the Senior Secured Discharge Date, the Instructing Group has (A) given no instructions as to the manner of enforcement or has instructed the Security Agent neither to enforce or cease enforcing and (B) not required any Debtor or Third Party Security Provider to make a Distressed Disposal (as defined below), an agent or trustee under the Second Lien Liabilities (acting on the instructions of the Majority Second Lien Creditors) where the rights of the Second Lien Creditors to enforce have arisen under the Intercreditor Agreement, or (iii) if, prior to the Priority Discharge Date, the Instructing Group (or Majority Second Lien Creditors as applicable) have (A) given no instructions as to the manner of enforcement or have instructed the Security Agent neither to enforce or cease enforcing and (B) not required any Debtor or Third Party Security Provider to make a Distressed Disposal, a Topco Agent or the Topco Notes Trustee (acting on the instructions of the Majority Topco Creditors).

Subject to the Transaction Security having become enforceable in accordance with its terms, the Instructing Group or any other persons entitled to give instructions in accordance with the preceding paragraph may give or refrain from giving instructions to the Security Agent to enforce, or refrain from enforcing, the Transaction Security as they see fit.

Notwithstanding the above paragraphs, if at any time the agents or representatives of the Second Lien Creditors or Topco Creditors then entitled to give the Security Agent instructions to enforce the Transaction Security give such instruction or indicate any intention to give such instruction (or, as the case may be, do not give any such instruction or indication), then the Instructing Group may give instructions or indication to the Security Agent to enforce the Transaction Security as the Instructing Group sees fit in lieu of any instructions or indication to enforce given (or not given, as applicable) by the agents or representatives of the Second Lien Creditors or Topco Creditors (as applicable) and the Security Agent shall act on such instructions received from the Instructing Group.

Unless (i) the Transaction Security has become enforceable as a result of an Insolvency Event or (ii) the Instructing Group or any agent of the creditors represented in the Instructing Group determines in good faith that to do so could reasonably be expected to have a material adverse effect on the Security Agent's ability to enforce the Transaction Security or the realization proceeds of any such enforcement, before giving any such instructions to enforce the Transaction Security or take any other enforcement action the creditors represented by an Instructing Group will be required to consult with each other agent (provided that any agent in respect of Topco Liabilities need only be consulted if such enforcement relates to Topco Shared Security) for a period of up to ten Business Days or take any Enforcement Action (the "Consultation Period") and the Instructing Group will only be entitled to give the enforcement instructions described above or take any Enforcement Action after the expiry of such Consultation Period.

Enforcement of Transaction Security on or after the Designation Date

On or after the Designation Date, the Security Agent may refrain from enforcing the Transaction Security unless instructed otherwise in accordance with the provisions described in this paragraph. If the Transaction Security has become enforceable, if either the Majority Super Senior Creditors or the Majority Senior Secured Creditors wish to issue enforcement instructions they shall deliver a copy of those instructions (an "Initial Enforcement Notice") to the Security Agent and to the other agents, trustees and hedge counterparties.

The Security Agent will act in accordance with any instructions (provided they are consistent with the Enforcement Principles (as defined below)) received from (i) the Majority Senior Secured Creditors, (ii) if the Majority Senior Secured Creditors have not made a determination as to the method of enforcement they wish to instruct the Security Agent to pursue within three months of the Initial Enforcement Notice or the Super Senior Discharge has not occurred within six months of the Initial Enforcement Notice, the Majority Super Senior Creditors, until the Super Senior Discharge Date has occurred, (iii) if an Insolvency Event (other than an Insolvency Event directly caused by enforcement action taken at the request of a Super Senior Creditor) is continuing, the Super Senior Creditors, until the Super Senior Discharge Date has occurred, (iv) if the Majority Senior Secured Creditors have not made a determination as to the method of enforcement they wish to instruct the Security Agent to pursue and the Majority Super Senior Creditors determine in good faith that a delay could reasonably be expected to have a material adverse effect on the Security Agent's ability to enforce the Transaction Security or on the realization of proceeds and the Majority Super Senior Creditors deliver instructions before the Security Agent has received any instructions from the Majority Senior Secured Creditors, the Majority Super Senior Creditors, until the Super Senior Discharge Date has occurred, (v) if, prior to the later of the Senior Secured Discharge Date and the Super Senior Discharge Date, the Majority Senior Secured Creditors or the Majority Super Senior Creditors (as applicable) have not given instructions or they have instructed the Security Agent (A) not to enforce or cease enforcing or (B) required any Debtor or Third Party Security Provider to make a Distressed Disposal, any agent or trustee in relation to the Second Lien Liabilities (the "Second Lien Agent") (acting on the instructions of the Majority Second Lien Creditors) where the rights of the Second Lien Creditors to enforce have arisen under the Intercreditor Agreement, or (vi) if, prior to the Priority Discharge Date, the Majority Senior Secured Creditors or the Majority Super Senior Creditors or the Majority Second Lien Creditors (as applicable) have not given instructions or they have instructed the Security Agent (A) not to enforce or cease enforcing or (B) required any Debtor or Third Party Security Provider to make a Distressed Disposal an agent or trustee under the Topco Finance Documents (acting on the instructions of the Majority Topco Creditors).

Notwithstanding the preceding paragraph, if at any time the agents or representatives of the Second Lien Creditors or Topco Creditors then entitled to give the Security Agent instructions give such instruction or indicate any intention to give such instruction (or, as the case may be, do not give such instruction or indication), then the Majority Senior Secured Creditors or Majority Super Senior Creditors to the extent that such group is entitled to give enforcement instructions as described in the paragraph above may give instructions to the Security Agent to enforce the Transaction Security as they see fit in lieu of any instructions to enforce given (or not given, as applicable) by the agents or representatives of the Second Lien Creditors or Topco Creditors (as applicable) and the Security Agent shall act on such instructions (i) "Enforcement Principles" means certain requirements as to the manner of enforcement, including that to the extent consistent with a prompt and expeditious realization of value, the method of enforcement chosen should maximize the value realized from such enforcement, (ii) certain proceeds must be received in cash, and (iii) enforcement in relation to assets over €5,000,000 or shares if not carried out by way of a public auction or other competitive sales process, shall (if the Security Agent is so requested by the Majority Super Senior Creditors or Majority Senior Secured Creditors) benefit from a fairness opinion from an investment bank, firm of accountants or third party financial adviser.

Enforcement—Topco Independent Transaction Security

Subject to the Topco Independent Transaction Security having become enforceable in accordance with its terms, an agent or trustee under the Topco Finance Documents (acting on the instructions of the Majority Topco Creditors) may give or refrain giving, instructions to the Security Agent to enforce or refrain from enforcing the Topco Independent Transaction Security as they see fit.

Manner of Enforcement

If the Transaction Security or Topco Independent Transaction Security is being enforced in accordance with any of the above paragraphs, the Security Agent shall enforce the relevant Transaction Security or Topco Independent Transaction Security in such manner (including the selection of any administrator of any Debtor or Third Party Security Provider to be appointed by the Security Agent) as any persons entitled at any time under the above provisions shall instruct it or, in the absence of any such instructions, as the Security Agent sees fit (which may include taking no action).

No Secured Party shall have any independent power to enforce, or to have recourse to, any of the Transaction Security or to exercise any right, power, authority or discretion arising under the Security Documents except through the Security Agent.

Security Held by Other Creditors

If any Transaction Security or Topco Independent Transaction Security is held by a creditor other than the Security Agent, then creditors may only enforce that Transaction Security or Topco Independent Transaction Security in accordance with instructions given by instructing creditors in accordance with the paragraphs above.

Enforcement Regime

Restrictions on Enforcement by Second Lien Creditors

Certain of the features set out below with respect to Topco Creditors may apply to the Second Lien Creditors, with appropriate modifications for the relative position in the capital structure.

Restrictions on Enforcement by Topco Creditors

Until the Priority Discharge Date, except with the prior consent of or as required by an Instructing Group, (i) no Topco Creditor or Topco Investor shall direct the Security Agent to enforce, or otherwise (to the extent applicable) require the enforcement of any Transaction Security (including the crystallization of any floating charge forming part of the Transaction Security), (ii) no Topco Creditor nor Topco Investor shall take or require the taking of any Enforcement Action (as defined below) against any member of the Senior Secured Group or Third Party Security Provider (other than in each case (and to the extent not restricted by (i) above and (iii) below) against a Topco Borrower in relation to the Topco Group Liabilities), and (iii) no Topco Creditor nor Topco Investor nor Topco Borrower shall take or require the taking of any Enforcement Action (as defined below) in relation to Topco Proceeds Loan Liabilities, except in the case of each of (i) through (iii) as set out under "*Permitted Topco Enforcement*" below and provided that no such action required by an Instructing Group need be taken except to the extent that such Instructing Group otherwise is entitled under the Intercreditor Agreement to direct such action.

Other than as restricted by (i) and (iii) in the paragraph above, any Topco Creditor may at any time take any Enforcement Action (as defined below) available against any person that is not a member of the Senior Secured Group, in each case in accordance with the terms of the Topco Finance Documents.

"Enforcement Action" is defined as:

(a) (i) in relation to any liabilities (other than unsecured liabilities) the acceleration, putting on demand, making of a demand, requiring a member of the Topco Group or Third Party Security Provider to acquire such liabilities (subject to certain exceptions), exercising of rights of set-off (other than certain netting under hedging agreements or as otherwise permitted under the Secured Debt Documents), or (ii) suing or commencing proceedings against any member of the Topco Group or a Third Party Security Provider in relation to such liabilities;

(b) premature termination or close-out of a hedging agreement, save to the extent permitted by the Intercreditor Agreement;

(c) the taking of steps to enforce or require the enforcement of the Transaction Security or, as the case may be, Topco Independent Transaction Security (including the crystallization of any floating charge) as a result of an acceleration event which was continuing at the time the request for enforcement was made;

(d) entering into any composition, compromise, assignment or similar arrangement with any Third Party Security Provider or a member of the Topco Group which owes any liabilities or has given any security, guarantee or indemnity or other assurance against loss in respect of liabilities owed to a creditor under the Intercreditor Agreement (other than any action permitted under the Intercreditor Agreement or any debt buy-backs pursuant to open market debt repurchases, tender offers or exchange offers entered into in accordance with the Secured Debt Documents, and not undertaken as part of an announced restructuring or turnaround plan or while a default was outstanding under the relevant Secured Debt Document); or

(e) petitioning, applying, voting for or taking steps (including the appointment of any liquidator, receiver, administrator or similar officer) in relation to the winding up, dissolution, administration or reorganization of any Third Party Security Provider or a member of the Topco Group which owes any liabilities or has given any security, guarantees, indemnity or other assurance against loss in respect of liabilities owed to a creditor under the Intercreditor Agreement or any of such Third Party Security Provider or member of the Topco Group's assets or any suspension of payments or moratorium of any indebtedness of any such Third Party Security Provider or member of the Topco Group, or any analogous procedure or step in any jurisdiction, except that the following shall not constitute Enforcement Action, (1) suing, commencing proceedings or taking any action referred to in paragraph (a)(ii) or (e) where necessary to preserve a claim, (2) discussions between or proposals made by any of the Secured Parties with respect to enforcement of the Transaction Security in accordance with the Intercreditor Agreement, (3) bringing proceedings in connection with a securities violation, securities or listing regulations or common law fraud or to restrain any breach of the Debt Documents or for specific performance with no claims for damages, (4) proceedings brought by a Secured Party to obtain injunctive relief to restrain any actual or putative breach of any Debt Document, specific performance with no claim for damages or to request judicial interpretation in relation to a Debt Document to which it is party with no claim for damages, (5) demands made by Intra-Group Creditors or Subordinated Creditors to the extent they relate to (x) payments permitted under the Intercreditor Agreement, or (y) the release of the liabilities owed to such creditors in return for the issue of shares in the relevant member of the Senior Secured Group provided that the ownership interest of the member of the Senior Secured Group prior to such issue is not diluted as a result and provided further that (in any such case) in the event that the shares of such member of the Senior Secured Group are subject to Transaction Security prior to such issue, then the percentage of shares in such member of the Senior Secured Group subject to Transaction Security is not diluted, (6) proceedings brought by an ancillary lender, a lender of Cash Management Facility Liabilities (a "Cash Management Facility Lender"), hedge counterparty, issuing bank, or agent or trustee in respect of the Second Lien Liabilities or Topco Liabilities to obtain injunctive relief to restrain any actual or putative breach of any Debt Document, specific performance (other than specific performance of an obligation to make a payment) with no claim for damages or to request judicial interpretation in relation to a Debt Document to which it is party with no claim for damages or to bring legal proceedings in connection with any securities violation, securities or listing regulations or common law fraud or to restrain any actual or putative breach of the Secured Debt Documents or for specific performance with no claims for damages, and (7) the taking of any action by a member of the Topco Group not prohibited by the Finance Documents.

Permitted Topco Enforcement

The restrictions set out above under "*Restrictions on Enforcement by Topco Creditors*" will not apply in respect of the Topco Group Liabilities, Topco Proceeds Loan Liabilities, or any Transaction Security securing the Topco Group Liabilities, if:

(a) an event of default under a Topco Finance Document or a Topco Proceeds Loan Agreement (the "Relevant Topco Default") is continuing;

(b) all agents or trustees in respect of the Senior Lender Liabilities, Senior Secured Notes Liabilities, and Second Lien Liabilities have received a notice of the Relevant Topco Default specifying the event or circumstance in relation to the Relevant Topco Default from the Topco Agent, the Topco Notes Trustee or the Topco Borrower;

(c) a Topco Standstill Period (as defined below) has elapsed; and

(d) the Relevant Topco Default is continuing at the end of that Topco Standstill Period.

Promptly upon becoming aware of an event of default under a Topco Finance Document, a Topco Notes Trustee, Topco Agent or Topco Investor (as the case may be) may give a Topco Enforcement Notice notifying any agent under a Permitted Senior Secured Facilities Agreement (the "Senior Agent"), Senior Secured Notes Trustee, the Second Lien Agent and any second lien notes trustee of the existence of such event of default.

"Topco Standstill Period" means the period beginning on the date (the "Topco Standstill Start Date") a Topco Enforcement Notice is served in respect of such a Relevant Topco Default and ending on the earliest to occur of:

(e) the date falling one hundred and seventy nine (179) days after the Topco Standstill Start Date (the "Topco Standstill Period");

(f) the date the Priority Secured Parties take any Enforcement Action in relation to a particular Debtor or Third Party Security Provider, provided that:

  (i) if a Topco Standstill Period ends pursuant to this paragraph (b), the Topco Creditors or a Topco Investor (in respect of the Topco Proceeds Loan Liabilities only) may only take the same Enforcement Action in relation to a Topco Guarantor as the Enforcement Action taken by the Priority Secured Parties against such Topco Guarantor and not against any other member of the Senior Secured Group or Third Party Security Provider; and

  (ii) Enforcement Action for the purpose of this paragraph shall not include action taken to preserve or protect any security as opposed to realize it;

(g) the date of an Insolvency Event (as defined above) in relation to a particular Topco Guarantor against whom Enforcement Action is to be taken;

(h) the expiry of any other Topco Standstill Period outstanding at the date such first mentioned Topco Standstill Period commenced (unless that expiry occurs as a result of a cure, waiver or other permitted remedy); and

(i) the first date on which the Majority Super Senior Creditors, the Majority Senior Secured Creditors and the Majority Second Lien Creditors (as applicable) have given their consent to the relevant Enforcement Action.

The Topco Creditors or Topco Investor (in respect of the Topco Proceeds Loan Liabilities only) may take Enforcement Action under the provisions described in this section (Permitted Topco Enforcement) in relation to a Relevant Topco Default even if, at the end of any relevant Topco Standstill Period or at any later time, a further Topco Standstill Period has begun as a result of any other event of default in respect of the Topco Liabilities.

Option to Purchase: Topco Creditors

Following acceleration or the enforcement of Transaction Security upon acceleration under any Senior Secured Creditor Liabilities, Second Lien Liabilities or Topco Liabilities, Topco Creditors may, by giving not less than 10 days' prior written notice to the Security Agent, elect to purchase all, but not part of, the Senior Lender Liabilities, Super Senior Lender Liabilities, Senior Secured Notes Liabilities, Cash Management Facility Liabilities, Second Lien Lender Liabilities and Second Lien Notes Liabilities for the amount that would have been required to prepay or redeem such liabilities on such date plus certain costs and expenses. Topco Creditors must also elect for the counterparties to hedging obligations to transfer their hedging obligations to holders in exchange (subject to specified conditions) for the amount that would have been payable under such hedging obligations had they been terminated on such date plus certain costs and expenses in connection with any such purchase.

Non-Distressed Disposals

The Security Agent (on behalf of itself and the other Secured Parties) and each other person party to a Transaction Security document or a Topco Independent Transaction Security document agrees that it shall (and is irrevocably authorized, instructed and obliged to do so without further consent, agreement, instruction, direction, confirmation, payment, certification or other document, request or information from any creditor, other Secured Party or Debtor) promptly following receipt of a written request from Bidco to the Security Agent:

(a) release (or procure the release) from the Transaction Security or Topco Independent Transaction Security and the Secured Debt Documents:

(i) any security (and/or other claim relating to a Debt Document) over any asset which Bidco has confirmed is the subject of:

1. a disposal not prohibited under the Finance Documents or where any applicable release and/or consent has been obtained under the applicable Finance Document including a disposal to a member of the Senior Secured Group but without prejudice to any obligation of any member of the Senior Secured Group in a Finance Document to provide replacement security; or

2. any other transaction not prohibited by the Finance Documents or where any applicable release and/or consent has been obtained under the applicable Finance Document pursuant to which that asset will cease to be held or owned by a member of the Senior Secured Group; and

in each case where such disposal is not a Distressed Disposal (as defined below) (in each case, a "Non-Distressed Disposal");

(ii) any security (and/or other claim relating to a Debt Document) over any document or other agreement requested in order for any member of the Senior Secured Group to the extent that Bidco has confirmed that such action is not prohibited by any Finance Document to effect any amendment or waiver or otherwise exercise any rights, comply with any obligations or take any action in relation to such document or agreement;

(iii) any security (and/or other claim relating to a Debt Document) over any asset of any member of the Senior Secured Group which has ceased or will cease to be a Debtor or guarantor simultaneously with such release to the extent that Bidco has confirmed that such ceasing to be a Debtor or guarantor in accordance with the terms of each Finance Document or the Agreed Security Principles (as defined in the Senior Secured Credit Facilities Agreement); and

(iv) any security (and/or other claim relating to a Debt Document) over any other asset to the extent that Bidco has confirmed that such security is not required to be given or such release is otherwise, in accordance with the terms of any Finance Document or the Agreed Security Principles (as defined in the Senior Secured Credit Facilities Agreement);

(b) in the case of a disposal of share or ownership interests in a Debtor, other member of the Senior Secured Group or any holding company of any Debtor or any other transaction pursuant to which a Debtor, other member of the Senior Secured Group or any holding company of any Debtor will cease to be a member of the Topco Group or a Debtor, release or procure the release of that Debtor or other member of the Senior Secured Group and its subsidiaries from all present and future liabilities under the Secured Debt Documents and the respective assets of such Debtor and its subsidiaries from the Transaction Security or Topco Independent Transaction Security and the Secured Debt Documents (including any claim relating to a Debt Document); and

(c) effect a Debt Transfer (as defined below).

When making any request for a release pursuant to paragraphs (a)(i), (a)(ii) and (b) above, Bidco shall confirm in writing to the Security Agent, that the relevant disposal or other action is not prohibited as at the date of completion of such release or, at the option of Bidco, on the date that the definitive agreement for such disposal or similar transaction is entered into.

When making any request for a release pursuant to paragraph (a)(iii) or (a)(iv) above, Bidco shall confirm in writing to the Security Agent, that such security is not required to be given or the relevant release or cessation is otherwise in accordance with the terms of the Finance Documents or the Agreed Security Principles (as defined in the Senior Secured Credit Facilities Agreement).

In the case of a disposal of shares or other ownership interests in a Debtor, member of the Senior Secured Group or holding company of any Debtor or any other transaction pursuant to which a Debtor, member of the Senior Secured Group or holding company of any Debtor will cease to be a member of Topco Group or a Debtor, to the extent Bidco has confirmed to the Security Agent that such disposal or other transaction or designation is not prohibited by the Finance Documents, if such member of the Topco Group or a Debtor is a borrower, issuer or primary debtor under any Debt Document, such person shall have the right to voluntarily prepay all liabilities outstanding under any Debt Document to the applicable creditors concurrently with ceasing to be a member of the Topco Group or Debtor; and any right to decline, delay or prevent any prepayment in any Debt Document shall be disapplied to the extent that if exercised such right would prevent the repayment of all such liabilities in full by such person (but without prejudice to any prepayment fees, make-whole payment, break costs or other payment required by the relevant Finance Documents).

Bidco may at any time require that all of the rights and obligations of any borrower of Super Senior Liabilities, Senior Lender Liabilities, Cash Management Facility Liabilities or Second Lien Lender Liabilities (each, a "Borrower") under the applicable Secured Debt Documents be novated or otherwise transferred by that Borrower (a "Debt Transfer") provided that (i) either (A) such Debt Transfer is to another member of the Senior Secured Group; (B) such Debt Transfer is by a Borrower where (I) that Borrower or any holding company of that Borrower is being disposed of in accordance with the Finance Documents, and (II) the proceeds of such disposal are not otherwise required to be applied unconditionally in prepayment of that Borrower's liabilities under the applicable Finance Documents; or (C) such Debt Transfer is undertaken in connection with an IPO, and (ii) the transferee in respect of such Debt Transfer is another borrower under the Super Senior Liabilities, Senior Lender Liabilities, Cash Management Facility Liabilities or Second Lien lender Liabilities (as applicable). Any Debt Transfer may (and shall upon the request of Bidco) be effected on a cashless basis, by way of book entries and not as physical cash movement to repay and reborrow any applicable liabilities.

Distressed Disposals

"Distressed Disposal" means a disposal of an asset or shares of, or other financial securities issued by a member of the Senior Secured Group or, in the case of a Third Party Security Provider, any assets or shares or financial securities which are subject to the Transaction Security which is being effected (a) at the request of an Instructing Group in circumstances where the Transaction Security has become enforceable as a result of an acceleration event which was continuing at the time the request for enforcement was made, (b) by enforcement of the Transaction Security as a result of an acceleration event which was continuing at the time the request for enforcement was made, or (c) after the occurrence of an acceleration event which has occurred and is continuing or the enforcement of any Transaction Security as a result of an acceleration event which has occurred and is continuing, by a Debtor or Third Party Security Provider to a person or persons which is not a member of the Senior Secured Group.

If a Distressed Disposal of any asset is being effected, the Security Agent is irrevocably authorized (subject to acting in accordance with certain conditions set out below) at the cost of the relevant Debtor, Third Party Security Provider and Bidco and without any consent, sanction, authority or further confirmation from any creditor under the Intercreditor Agreement, Third Party Security Provider or Debtor:

(a) to release the Transaction Security or any other claim over that asset and execute and deliver or enter into any release of that Transaction Security or claim and issue any letters of non-crystallization of any floating charge or any consent to dealing that may, in the discretion of the Security Agent, be considered necessary or desirable;

(b) if the asset which is disposed of consists of shares in the capital of a Debtor to release (A) that Debtor and any subsidiary of that Debtor from all or any part of its borrowing, guarantee or other liabilities; (B) any Transaction Security granted by that Debtor or any subsidiary of that Debtor over any of its assets, and (C) any other claim of an intra-group lender, a Topco Investor, Subordinated Creditor or another Debtor over that Debtor's assets or over the assets of any subsidiary of that Debtor, on behalf of the relevant creditors, Third Party Security Providers and Debtors;

(c) if the asset which is disposed of consists of shares in the capital of any holding company of a Debtor to release (A) that holding company and any subsidiary of that holding company from all or any part of its borrowing, guarantee or other liabilities; (B) any Transaction Security granted by that holding company or any subsidiary of that holding company over any of its assets, and (C) any other claim of an intra- group lender, a Topco Investor, Subordinated Creditor or a Debtor over that holding company's assets or over the assets of any subsidiary of that Debtor, on behalf of the relevant creditors and Debtors;

(d) if the asset which is disposed of consists of shares in the capital of a Debtor or the holding company of a Debtor and the Security Agent (acting in accordance with the Intercreditor Agreement) decides to dispose of all or any part of the liabilities owed by such Debtor or holding company or any of their subsidiaries to creditors or other Debtors:

    (i) (if the Security Agent (acting in accordance with the Intercreditor Agreement) does not intend that any transferee of those liabilities (the "Transferee") will be treated as a Secured Creditor or a Secured Party for the purposes of the Intercreditor Agreement) to execute and deliver or enter into any agreement to dispose of all or part of those liabilities, provided that, notwithstanding any other provision of any Debt Document, the Transferee shall not be treated as a Secured Creditor or Secured Party for the purposes of the Intercreditor Agreement; and

    (ii) (if the Security Agent (acting in accordance with the Intercreditor Agreement) does intend that any Transferee will be treated as a Secured Creditor or a Secured Party for the purposes of the Intercreditor Agreement) to execute and deliver or enter into any agreement to dispose of all (and not part only) of the liabilities owed to the Secured Creditors and all or part of any other liabilities,

on behalf of, in each case, the relevant creditors, Third Party Security Providers and Debtors;

(e) if the asset which is disposed of consists of shares in the capital of a Debtor or the holding company of a Debtor (the "Disposed Entity") and the Security Agent (acting in accordance with the Intercreditor Agreement) decides to transfer to another Debtor (the "Receiving Entity") all or any part of the Disposed Entity's obligations or any obligations of a subsidiary of that Disposed Entity in respect of the intra-group liabilities or liabilities owed to any Debtor, to execute and deliver or enter into any agreement to:

    (i) transfer all or part of the obligations in respect of those intra-group liabilities or liabilities to any Debtor on behalf of the relevant intra-group lenders and Debtors to which those obligations are owed and on behalf of the Debtors which owe those obligations; and

    (ii) (provided that the Receiving Entity is a holding company of the Disposed Entity which is also a Guarantor of the Senior Secured Liabilities) to accept the transfer of all or part of the obligations in respect of those intra-group liabilities, liabilities owed to Debtors on behalf of the Receiving Entity or Receiving Entities to which the obligations in respect of those intra-group liabilities or liabilities owed to Debtors are to be transferred.

The net proceeds of each Distressed Disposal (and the net proceeds of any disposal of liabilities as described above) shall be paid to the Security Agent for application in accordance with the provisions set out under "—*Application of Proceeds*" below as if those proceeds were the proceeds of an enforcement of the Transaction Security and, to the extent that any disposal of liabilities has occurred, as if that disposal of liabilities had not occurred.

In the case of a Distressed Disposal (or a disposal of liabilities) effected by, or at the request of, the Security Agent, the Security Agent shall take reasonable care to obtain a fair market price in the prevailing market conditions (although the Security Agent shall not have any obligation to postpone any such Distressed Disposal or disposal of liabilities in order to achieve a higher price).

If a Distressed Disposal is being effected at a time when the Majority Second Lien Creditors are entitled to give and have given instructions in accordance with the Intercreditor Agreement, the Security Agent is not authorized to release any Debtor, subsidiary or holding company from any borrowing liabilities, guarantee liabilities or any other liabilities owed to any Senior Secured Creditor unless those borrowing liabilities, guarantee liabilities or any other liabilities and any other Senior Secured Liabilities will be paid (or repaid) in full (or, in the case of any contingent liability relating to a letter of credit, cash management facility or an ancillary facility, made the subject of cash collateral arrangements acceptable to the relevant senior creditor) immediately following that release.

If a Distressed Disposal is being effected at a time when the Majority Topco Creditors are entitled to give, and have given instructions in accordance with the Intercreditor Agreement, the Security Agent is not authorized to release any Debtor, subsidiary or holding company from any borrowing liabilities, guarantee liabilities or any other liabilities owed to any Senior Secured Creditor or any Second Lien Creditor unless those borrowing liabilities, guarantee liabilities or any other liabilities and any other Senior Secured Liabilities or Second Lien Liabilities will be paid (or repaid) in full (or, in the case of any contingent liability relating to a letter of credit, cash management facility or an ancillary facility, made the subject of cash collateral arrangements acceptable to the relevant senior creditor) immediately following that release.

Where borrowing, guarantee or other liabilities would otherwise be released pursuant to the provisions described above, the creditor concerned may elect to have those borrowing, guarantee or other liabilities transferred to a holding company of Bidco specified by such creditor, in which case the Security Agent is irrevocably authorized (at the cost of the relevant Debtor or Bidco and without any consent, sanction, authority or further confirmation from any creditor or Debtor) to execute such documents as are required to so transfer those borrowing, guarantee or other liabilities.

Subject to the provisions described below, if a Distressed Disposal (or a disposal of liabilities pursuant to paragraphs (d) and (e) above) is being effected by or at the request of the Security Agent, unless the consent of each Senior Agent and each Senior Secured Notes Trustee (as applicable) has been obtained, it is a further condition to any release, transfer or disposal that:

(f) the consideration for such sale or disposal is in cash (or substantially all in cash); and

(g) such sale or disposal (including any sale or disposal of any claim) is made:

    (i) pursuant to a public auction or other competitive sale process conducted with the advice of a reputable, independent and internationally recognized investment bank or firm of accountants or (if all such banks or firms are conflicted), a reputable, independent and internationally recognized third party professional firm which is regularly engaged in providing valuations of businesses or assets similar or comparable to those subject to the relevant Transaction Security and, in each case, not being an auditor or administrator or other relevant officer of the applicable company (a "Financial Advisor") as selected by the Security Agent (it being acknowledged that the Security Agent has no obligation to select or engage any Financial Advisor until it has been indemnified and/or secured and/or prefunded to its satisfaction), in respect of which the Secured Creditors are entitled to participate (a "Competitive Sales Process"); or

    (ii) where a Financial Adviser selected by the Security Agent has delivered an opinion (including an enterprise valuation of the Senior Secured Group which can be relied upon by the Security Agent and disclosed to the Senior Secured Creditors, the Second Lien Creditors and the Topco Creditors on a non-reliance basis) that the proceeds received or recovered in connection with such sale or disposal are fair from a financial point of view taking into account all relevant circumstances including the method of enforcement (it being acknowledged that the Security Agent has no obligation to select or engage any Financial Adviser unless it has been indemnified and/or secured and/or prefunded to its satisfaction).

If before the Second Lien Discharge Date, a Distressed Disposal (or a disposal of liabilities pursuant to paragraphs (d) and (e) above) is being effected such that any Second Lien Liabilities and/or Transaction Security securing Second Lien Liabilities will be released, transferred or disposed of pursuant to the Intercreditor Agreement, it is a further condition to any release, transfer or disposal that either:

(h) each agent and trustee in respect of any Second Lien Liabilities has approved the release, transfer or disposal; or

(i) where shares or assets of a borrower, issuer or guarantor in respect of Second Lien Liabilities are sold:

(j) the consideration for such sale or disposal is in cash (or substantially all in cash); and

(k) at the time of completion of the sale or disposal the borrowing, guarantee and (to the extent permitted by the Intercreditor Agreement) other liabilities owing to each of the Secured Creditors and Unsecured Creditors by the Debtors and their respective subsidiaries being sold or disposed of (a "Relevant Claim") are (to the same extent) unconditionally released and discharged or sold or disposed of concurrently with such sale (and not assumed by the purchaser or its affiliates), and all security under documents creating security in respect of the Secured Obligations in respect of the assets of such members of the Senior Secured Group is simultaneously and unconditionally released and discharged concurrently with such sale, provided that, if each Senior Agent and Senior Secured Notes Trustee (acting reasonably and in good faith) determines that the Senior Secured Creditors will recover a greater cash amount if such Relevant Claim is sold or otherwise transferred to the purchaser or its affiliates and not released or discharged and provided such amount is nevertheless less than the aggregate amount of outstanding Senior Secured Liabilities, which shall be deemed to be the case if there are no bidders or if each Senior Agent and Senior Secured Notes Trustee (acting reasonably and in good faith) determines that there are no bona fide and fully committed bids in cash or substantially all in cash in excess of the outstanding amount of Senior Secured Liabilities and serves a written notice on the Security Agent confirming the same, then the Security Agent shall be entitled immediately to sell and transfer such Relevant Claim to the purchaser or its affiliate; and

(l) such sale or disposal (including any sale or disposal of any claim) is made pursuant to a Competitive Sales Process or where a Financial Adviser selected by the Security Agent has delivered an opinion (including an enterprise valuation of the Senior Secured Group which can be relied upon by the Security Agent and disclosed to the Senior Secured Creditors, the Second Lien Creditors and the Topco Creditors on a non-reliance basis) that the proceeds received or recovered in connection with such sale or disposal are fair from a financial point of view taking into account all relevant circumstances including the method of enforcement (it being acknowledged that the Security Agent has no obligation to select or engage any Financial Adviser unless it has been indemnified and/or secured and/or prefunded to its satisfaction).

If before the Topco Discharge Date, a Distressed Disposal (or a disposal of liabilities pursuant to paragraphs (d) and (e) above) is being effected such that any Topco Liabilities or Transaction Security securing Topco Liabilities will be released, transferred or disposed of pursuant to the provisions described above, it is a further condition to any release, transfer or disposal that either:

(m) each agent and trustee in respect of any Topco Liabilities has approved the release, transfer or disposal; or

(n) where shares or assets of a borrower, issuer or guarantor in respect of Topco Liabilities are sold:

  (i) the consideration for such sale or disposal is in cash (or substantially all in cash); and

  (ii) at the time of completion of the sale or disposal the borrowing, guarantee and (to the extent permitted by the Intercreditor Agreement) other liabilities owing to each of the Secured Creditors and Unsecured Creditors by the Debtors and their respective subsidiaries being sold or disposed of (a "Relevant Claim") are (to the same extent) unconditionally released and discharged or sold or disposed of concurrently with such sale (and not assumed by the purchaser or its affiliates), and all security under documents creating security in respect of the Secured Obligations in respect of the assets of such members of the Senior Secured Group is simultaneously and unconditionally released and discharged concurrently with such sale, provided that, if each Senior Agent, Senior Secured Notes Trustee and each agent and trustee in respect of any Second Lien Liabilities (acting reasonably and in good faith) determines that the Priority Secured Parties will recover a greater cash amount if such Relevant Claim is sold or otherwise transferred to the purchaser or its affiliates and not released or discharged and provided such amount is nevertheless less than the aggregate amount of outstanding Priority Secured Liabilities, which shall be deemed to be the case if there are no bidders or if each Senior Agent, Senior Secured Notes Trustee and each agent and trustee in respect of any Second Lien Liabilities (acting reasonably and in good faith) determines that there are no bona fide and fully committed bids in cash or substantially all in cash in excess of the outstanding amount of the Priority Secured Liabilities and serves a written notice on the Security Agent confirming the same, then the Security Agent shall be entitled immediately to sell and transfer such Relevant Claim to the purchaser or its affiliate; and

(o) such sale or disposal (including any sale or disposal of any claim) is made pursuant to a Competitive Sales Process or where a Financial Adviser selected by the Security Agent has delivered an opinion (including an enterprise valuation of the Senior Secured Group which can be relied upon by the Security Agent and disclosed to the Senior Secured Creditors, the Second Lien Creditors and the Topco Creditors on a non-reliance basis) that the proceeds received or recovered in connection with such sale or disposal are fair from a financial point of view taking into account all relevant circumstances including the method of enforcement (it being acknowledged that the Security Agent has no obligation to select or engage any Financial Adviser unless it has been indemnified and/or secured and/or prefunded to its satisfaction).

When acting for the purposes of the above paragraphs, the Security Agent shall always act (i) if the relevant Distressed Disposal is being effected by way of enforcement of the Transaction Security in accordance with the provisions set out under "—*Manner of Enforcement*" above, and (ii) in any other case on the instructions of the Instructing Group or, in the absence of such instructions, as the Security Agent sees fit (which may include taking no action).

Application of Proceeds

Order of Application—Transaction Security

Subject to certain provisions set out in the Intercreditor Agreement and to the proviso described below, all amounts from time to time received or recovered by the Security Agent pursuant to the terms of any Debt Document (other than amounts in respect of Topco Independent Transaction Security or in connection with the realization or enforcement of any other security which is not Transaction Security or any guarantees provided by any holding company of Topco or any subsidiary of any holding company of Bidco (other than a member of the Senior Secured Group) in respect of any Topco Liabilities or Topco Proceeds Loan Liabilities) or in connection with the realization or enforcement of all or any part of the Transaction Security (the "Recoveries") shall be applied at any time as the Security Agent (in its discretion) sees fit to the extent permitted by applicable law, in the following order of priority:

(a) in discharging any Agent Liabilities relating to the Senior Secured Liabilities, the Second Lien Liabilities or the Topco Liabilities and any sums owed to the Security Agent and any receiver or delegate on a pari passu basis;

(b) in payment of all costs and expenses incurred by any agent or Secured Creditor in connection with any realization or enforcement of the Transaction Security taken in accordance with the terms of the Intercreditor Agreement or any action taken at the request of the Security Agent under the Intercreditor Agreement;

(c) if the Designation Date has occurred, for application towards the discharge of:

  (i) the Super Senior Lender Liabilities and liabilities to arrangers and agents thereof; and

  (ii) Hedging Liabilities that have been designated by Bidco as ranking alongside the Super Senior Lender Liabilities (the "Super Senior Hedging Liabilities") (on a pro rata basis between the Super Senior Hedging Liabilities of each hedge counterparty),

  on a pro rata basis and ranking pari passu between paragraphs (i) and (ii) above;

(d) if or after the Super Senior Discharge Date has occurred, for application towards the discharge of:

  (i) the Senior Lender Liabilities and liabilities to arrangers thereof;

  (ii) the Senior Secured Notes Liabilities;

  (iii) the Cash Management Facility Liabilities; and

  (iv) the Hedging Liabilities which are not Super Senior Hedging Liabilities,

  on a pro rata basis between paragraphs (i) to (iv) above;

(e) if the Designation Date has not occurred, for application towards the discharge of:

  (i) the Senior Lender Liabilities and liabilities to arrangers thereof;

  (ii) the Senior Secured Notes Liabilities;

  (iii) the Cash Management Facility Liabilities; and

  (iv) the Hedging Liabilities,

on a pro rata basis and ranking pari passu between paragraphs (i) to (iv) above;

(f) for application towards the discharge of:

(i) the Second Lien Lender Liabilities and liabilities to arrangers thereof; and

(ii) the Second Lien Notes Liabilities,

on a pro rata basis and ranking pari passu between paragraphs (i) and (ii) above;

(g) solely to the extent such proceeds are from the realization or enforcement the Topco Shared Security and any guarantees provided by a Topco Guarantor that is a member of the Senior Secured Group or Third Party Security Provider in respect of the Topco Liabilities, for application towards the discharge of:

(i) the Topco Facility Liabilities and liabilities to arrangers thereof; and

(ii) the Topco Notes Liabilities,

on a pro rata basis and ranking pari passu between paragraphs (i) and (ii) above

(h) if none of the Debtors or Third Party Security Providers are under any further actual or contingent liability under any Secured Debt Document in payment to any other person to whom the Security Agent is obliged to pay in priority to any Debtor or Third Party Security Provider; and

(i) the balance, if any, in payment to the relevant Debtor,

provided that, all amounts from time to time received or recovered by the Security Agent from or in respect of a Topco Borrower pursuant to the terms of any Debt Document (other than in connection with the realization or enforcement of all or any part of the Transaction Security or Topco Independent Transaction Security) shall be held by the Security Agent on trust to apply at any time as the Security Agent (in its discretion) sees fit to the extent permitted by applicable law (and subject to the provisions of the Intercreditor Agreement), in the following order of priority:

1. in accordance with paragraph (a) above;

2. in accordance with paragraph (b) above;

3. in accordance with paragraphs (c) to (g) above (in each case only to the extent there are liabilities due from the relevant Topco Borrower to such creditors) provided that payments will be made on a pro rata basis and pari passu basis across all Liabilities subject to such paragraphs;

4. if none of the Debtors are under any further actual or contingent liability under any Secured Debt Document, in payment to any person to whom the Security Agent is obliged to pay in priority to any Debtor or Third Party Security Provider; and

5. the balance, if any, in payment to the relevant Debtor.

Order of Application—Topco Independent Transaction Security

Subject to certain provisions set out in the Intercreditor Agreement, all amounts from time to time received or recovered by the Security Agent pursuant to the terms of any Topco Document in connection with the realization or enforcement of Topco Independent Transaction Security or any guarantees provided by a Topco Guarantor (other than a member of the Senior Secured Group) (the "Topco Recoveries") shall be held by the Security Agent on trust and be applied at any time as the Security Agent (in its discretion) sees fit, to the extent permitted by applicable law and subject to the provisions in the Intercreditor Agreement, in the following order of priority:

(a) in discharging any Agent Liabilities in respect of the Topco Liabilities (to the extent related to such Topco Recoveries), the Security Agent and any receiver or delegate, on a pari passu basis;

(b) in payment of all costs and expenses incurred by any agent or Topco Creditor in connection with any realization or enforcement of the Topco Independent Transaction Security taken in accordance with the terms of the Intercreditor Agreement or any action taken at the request of the Security Agent under the Intercreditor Agreement; and

(c) for application towards the discharge of:

   (i) the Topco Facility Liabilities; and

   (ii) the Topco Notes Liabilities,

on a pro rata basis and ranking pari passu between paragraphs (i) and (ii) above;

(d) if none of the Debtors or Third Party Security Providers or Topco Independent Obligors is under any further actual or contingent liability in respect of the Secured Liabilities, in payment to any other person whom the Security Agent is obliged to pay in priority to any Debtor or Third Party Security Provider or Topco Independent Obligor; and

(e) the balance, if any, in payment to the relevant Debtor.

Equalization

The Intercreditor Agreement will provide that if, for any reason, any liabilities relating to Super Senior Liabilities, Senior Secured Liabilities, Second Lien Liabilities or Topco Liabilities remain unpaid after the first date on which certain types of Enforcement Action are taken (the "Enforcement Date") and the resulting losses are not borne by the creditors in any given specified class in the proportions which their respective exposures at the Enforcement Date bore to the aggregate exposures of all the creditors in that specified class at the Enforcement Date, the relevant class of creditors will make such payments amongst themselves as the Security Agent shall require to put the relevant creditors in such a position that (after taking into account such payments) those losses are borne in those proportions.

Required Consents

The Intercreditor Agreement will provide that, subject to certain exceptions, its terms may be amended or waived only with the consent of Bidco, the agents and trustees for the Secured Parties, and the Security Agent, provided that, to the extent that an amendment, waiver or consent only affects one class of creditors, and such amendment, waiver or consent could not reasonably be expected materially or adversely to affect the interests of the other classes of creditors, only written agreement from the relevant agent or trustee acting on behalf of the affected class (or in the case of hedging counterparties, each affected hedge counterparty) shall be required.

An amendment or waiver of the Intercreditor Agreement that has the effect of changing or which relates to, among other matters, the provisions set out under "*Application of Proceeds*" above and the order of priority or subordination under the Intercreditor Agreement shall not be made without the consent of:

(a) each of the agents or trustees (acting in accordance with the relevant finance documents) under the Senior Liabilities, the Super Senior Liabilities, the Second Lien Liabilities and the Topco Liabilities,

(b) each Cash Management Facility Lender (only to the extent that the proposed amendment or waiver would materially adversely affect the rights and obligations of such Cash Management Facility Lender under the Intercreditor Agreement and would not materially adversely affect the rights and obligations of any other creditor or class of creditors other than the Cash Management Facility Lenders (solely in their capacity as such)),

(c) each hedge counterparty (only to the extent that the proposed amendment or waiver would materially adversely affect the rights and obligations of such hedge counterparty under the Intercreditor Agreement and would not materially adversely affect the rights and obligations of any other creditor or class of creditors other than the hedge counterparties (solely in their capacity as such)), and

(d) Bidco.

Each agent or trustee shall, to the extent instructed to consent by the requisite percentage of creditors it represents or as otherwise authorized by the Debt Documents to which it is party, act on such instructions or authorizations in accordance therewith (save to the extent any amendments so consented or authorized to relate to any provision affecting the personal rights and obligations of that agent or trustee in its capacity as such).

Amendments and Waivers: Transaction Security Documents

Subject to certain exceptions under the Intercreditor Agreement (as described below), the Security Agent (a) may, if Bidco consents, amend the terms of, release or waive any of the requirements of or grant consents under, any document creating Transaction Security or Topco Independent Transaction Security which shall be binding on each party, and (b) may if

Bidco consents, and shall promptly upon request of Bidco, amend, release and/or retake any document creating Transaction Security where such amendment, release and/or retake is required in order to ensure the validity, perfection or priority of the relevant Transaction Security, together with any related or consequential waiver (including by reason of a failure to register any relevant document with Companies House within the prescribed time limit set out in section 859 of the Companies Act 2006, in which case the Security Agent shall also irrevocably waive any payment or other obligation or default arising out of such failure to register) and any such amendment, release, waiver and retake shall be binding on each Party.

Where any such amendment, release or waiver of, or consent under, any document creating Transaction Security or Topco Independent Transaction Security would adversely affect the nature or scope of the assets subject to Transaction Security or Topco Independent Transaction Security (as the case may be) or the manner in which the proceeds of enforcement of the Transaction Security or Topco Independent Transaction Security are distributed, such amendment may not be made without the prior consent of:

(a) each of the agents or trustees other than an agent under any Cash Management Facility, if appointed (acting in accordance with the relevant finance documents) under the Senior Liabilities, the Super Senior Liabilities, the Second Lien Liabilities and the Topco Liabilities,

(b) each Cash Management Facility Lender or the agent for the relevant Cash Management Facility on its behalf but only to the extent that the proposed amendment or waiver would materially adversely affect the rights and obligations of such Cash Management Facility Lender under the Intercreditor Agreement in their capacity as such and would not materially adversely affect the rights and obligations of any other creditor or class of creditors,

(c) each hedge counterparty (only to the extent that the proposed amendment or waiver would materially adversely affect the rights and obligations of such hedge counterparty under the under the Intercreditor Agreement and would not materially adversely affect the rights and obligations of any other creditor or class of creditors other than the hedge counterparties (solely in their capacity as such)), and

(d) Bidco.

Exceptions

Subject to the paragraph below, an amendment, waiver or consent which relates to the rights or obligations which are personal to an agent, an arranger or the Security Agent in its capacity as such (including any ability of that Security Agent to act in its discretion under the Intercreditor Agreement) may not be effected without the consent of that agent, arranger or, as the case may be, Security Agent.

The preceding paragraph and the first paragraph above under "*Amendments and Waivers: Transaction Security Documents*" are subject to certain exceptions under the Intercreditor Agreement, relating in particular to (i) any release of Transaction Security or Topco Independent Transaction Security, claims or liabilities, or (ii) to any amendment waiver or consent, which, in each case, the Security Agent gives in accordance with the provisions of the Intercreditor Agreement relating to the incurrence of additional or refinancing debt or the provisions set out under "*New Debt Financings*," "*Non-Distressed Disposals*" and "*Distressed Disposals*" above. Any release, amendment, waiver or consent effected in accordance with the relevant provisions of the Debt Documents relating to such matters can be effected solely by Bidco and the Security Agent.

Snooze / Lose

If in relation to:

(a) a request for a consent in relation to any of the terms of the Intercreditor Agreement (or any other Debt Document other than a notes indenture which does not contain a similar snooze / lose provision or which applies a longer period than that specified in the Intercreditor Agreement);

(b) a request to participate in any vote of a class of creditors under the terms of the Intercreditor Agreement (or any other Debt Document other than a notes indenture which does not contain a similar snooze / lose provision or which applies a longer period than that specified in the Intercreditor Agreement);

(c) a request to approve any other action under the terms of the Intercreditor Agreement (or any other Debt Document other than a notes indenture which does not contain a similar snooze / lose provision or which applies a longer period than that specified in the Intercreditor Agreement); or

(d) a request to provide any confirmation or notification under the Intercreditor Agreement (or any other Debt Document other than a notes indenture which does not contain a similar snooze / lose provision or which applies a longer period than that specified in the Intercreditor Agreement), then, in each case, any creditor:

(i) fails to respond to that request within ten (10) Business Days (or any other period of time notified by Bidco, with the prior agreement of the Agents if the period for this provision to operate is less than ten (10) Business Days) of that request being made; or

(ii) fails to provide details of its participation within the timescale specified by the Security Agent:

(iii) in the case of paragraphs (a) to (c) above, that the creditor's participation (as the case may be) shall be deemed to be zero for the purpose of calculating their participation in respect of the matter when ascertaining whether any relevant percentage (including, for the avoidance of doubt, unanimity) of their participation or has been obtained to give that consent, carry that vote or approve that action;

(iv) in the case of paragraphs (a) to (c) above, that the creditor's status shall be disregarded for the purposes of ascertaining whether the agreement of any specified group of creditors has been obtained to give that consent, carry that vote or approve that action; and

(v) in the case of paragraph (d) above, that confirmation or notification shall be deemed to have been given,

provided that, notwithstanding the foregoing, this Snooze/Loose clause shall not apply to any Noteholder in respect of any request where such Noteholder is not given the option to respond to such request in the negative but shall otherwise apply to all Noteholders.

Provisions Following an IPO

On or following an initial public offering of a member of the Senior Secured Group (or a holding company thereof) (an "IPO Event"), Bidco is entitled to give notice to each agent and each hedge counterparty (a "Pushdown Notice") that the terms of the Debt Documents will automatically operate (with effect from the date specified in the relevant Pushdown Notice (the "IPO Pushdown Date")) so that, amongst other things, (i) the Senior Secured Group (and all related provisions) will now refer to the member of the Senior Secured Group or holding company of Bidco who will issue shares or whose shares are to be sold pursuant to such IPO (the "IPO Pushdown Entity," and if any Topco Notes are not refinanced in full on or before the IPO Pushdown Date, the IPO Pushdown Entity shall be any holding company of Bidco which is the issuer or borrower of any Topco Liabilities) and its Restricted Subsidiaries, (ii) all financial ratio calculations shall be made excluding any holding company of the IPO Pushdown Entity and all reporting obligations shall be assumed at the level of the IPO Pushdown Entity, (iii) each reference in the Debt Documents to Bidco or any holding company of the IPO Pushdown Entity shall be deemed to be a reference to the IPO Pushdown Entity (to the extent applicable and unless the context requires otherwise) (iv) certain provisions of the Debt Documents (including representations, undertakings and events of default), will cease to apply to any holding company of the IPO Pushdown Entity, (v) no event, matter or circumstance relating to any holding company of the IPO Pushdown Entity shall directly or indirectly result in a breach of any representation, warranty, undertaking of event of default, (vi) each holding company of the IPO Pushdown Entity shall be irrevocably and unconditionally released from all obligations and restrictions under the Debt Documents (including any Transaction Security or Topco Independent Transaction Security) and (vii) unless otherwise notified by Bidco, each Subordinated Creditor, Third Party Security Provider, Investor (as defined in the Senior Secured Credit Facilities Agreement) or Topco Independent Obligor will be irrevocably and unconditionally released from its obligations and restrictions under the Intercreditor Agreement in the appropriate capacity.

Subject to the consent of the majority lenders under and as defined in the Senior Lender Liabilities, noteholders representing more than 50% of any Senior Secured Notes Liabilities, the majority lenders under and as defined in any Second Lien Facility Agreement, noteholders representing more than 50% of any Second Lien Notes Liabilities, the majority lenders under and as defined in any Topco Facility and noteholders representing more than 50% of any Topco Notes Liabilities (following the relevant IPO), each subsidiary of the IPO Pushdown Entity shall also be released from all obligations as Debtor and guarantor under the Debt Documents and from the Transaction Security (other than, in each case, borrowing liabilities). Each party to the Intercreditor Agreement shall be required to enter into any amendment, release or replacement of any Debt Document required to facilitate such matters.

Agreement to Override

Unless expressly stated otherwise therein, the Intercreditor Agreement overrides anything in any other Debt Document (other than any Transaction Security Documents which are governed by German law).

DESCRIPTION OF THE NOTES

The following is a description of the €515.0 million in aggregate principal amount of   % Senior Notes due 2030 (the "Notes"). The Notes will be issued by CTEC II GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany, having its registered office at Schwanthalerstraße 73, 80336 Munich, Germany, and registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267748 (the "Issuer"). For purposes of this "*Description of the Notes*," (i) the "Issuer" refers only to CTEC II GmbH, and none of its subsidiaries, (ii) the "Target Group" refers to CeramTec TopCo GmbH (the "Target"), together with its Subsidiaries, and (iii) the "Group" refers to the Issuer and the Restricted Subsidiaries, collectively.

The Issuer will issue the Notes under an indenture (the "Indenture"), to be dated as of the Issue Date, among, *inter alios*, the Issuer, Bidco, Deutsche Trustee Company Limited, as trustee (the "Trustee"), and Deutsche Bank AG, London Branch, as security agent (the "Security Agent"). The Notes will be issued in a private transaction that is not subject to the registration requirements of the Securities Act, and will be subject to certain terms restricting their transfer. See "*Notice to Investors*." The Notes are subject to all such terms pursuant to the provisions of the Indenture, and Holders are referred to the Indenture for a statement thereof.

The Indenture will be subject to the terms of the Intercreditor Agreement and any Additional Intercreditor Agreements (as defined below), and in the case of a conflict between the Indenture, the Notes or the Transaction Security Documents and the Intercreditor Agreement, the terms of the Intercreditor Agreement will prevail. The terms of the Intercreditor Agreement are important to understanding the relative ranking of indebtedness and security, the ability to make payments in respect of the indebtedness, the procedures for undertaking enforcement action, the subordination of certain indebtedness, enforcement standstill, payment blockages, turnover obligations, release of security and guarantees, and the payment waterfall for amounts received by the Security Agent. See "*Description of Certain Financing Arrangements—Intercreditor Agreement*" for a description of certain terms of the Intercreditor Agreement.

The Issuer will not be required to, nor does the Issuer currently intend to, offer to exchange the Notes for notes registered under the Securities Act or otherwise register or qualify by prospectus the Notes for resale under the Securities Act. The Indenture will not be qualified under, or incorporate by reference or include, or be subject to, any provisions of the Trust Indenture Act, including Section 316(b) thereof. Accordingly, the terms of the Notes include only those stated in the Indenture, and the Holders will not be entitled to the protections provided under the Trust Indenture Act to holders of debt securities issued under a qualified indenture, including among other things, those requiring the Trustee to resign in the event of certain conflicts of interest and to inform Holders of certain relationships between it and us.

The Issuer will, concurrently with the closing of the Offering of Notes on the Issue Date, deposit, or cause to be deposited on its behalf, an amount in cash equal to the gross proceeds of the Notes sold on the Issue Date into the Escrow Account (as defined below) pending consummation of the Acquisition and the satisfaction of certain other conditions as described below. Following release from the Escrow Account in connection with the consummation of the Acquisition, as further described below, the proceeds from the offering of the Notes issued on the Issue Date, together with proceeds from the Senior Term Facilities and the Equity Contribution, will be used to (i) fund the consideration payable for the Acquisition and repay certain net Existing Target Debt, including amounts outstanding Existing Credit Facilities and Existing Notes, and (ii) to pay certain fees and expenses in connection with the Transactions, as set forth in this offering memorandum under "*Use of Proceeds*." In the event that (i) the Escrow Longstop Date (as defined below) occurs and the Escrow Agent and the Trustee (each, as defined below) shall not have received the Escrow Release Officer's Certificate (as defined below) on or prior to such date or (ii) the Issuer informs the Escrow Agent and the Trustee in writing that, in the good faith judgment of the Issuer, the Acquisition will not be consummated on or prior to the Escrow Longstop Date, the Issuer will redeem the entire outstanding aggregate principal amount of Notes at a price equal to 100% of the issue price of the Notes as stated on the cover page of this offering memorandum, plus accrued and unpaid interest on the Notes and Additional Amounts, if any, from, and including, the Issue Date to, but excluding, the Special Mandatory Redemption Date (as defined below). See "*—Escrow of Proceeds; Special Mandatory Redemption*."

Upon the initial issuance of the Notes on the Issue Date, the Notes will only be obligations of the Issuer and Bidco and will not be guaranteed by any member of the Target Group. Within 120 days from the Business Day immediately after the Acquisition Closing Date, and subject to and in accordance with the Agreed Security Principles and to certain material limitations pursuant to applicable laws, the Post-Closing Guarantors (as defined below) are expected to accede to the Indenture (as defined below) and the Intercreditor Agreement and guarantee the Notes on a senior subordinated basis.

Prior to the Acquisition Closing Date, neither the Issuer nor Bidco will control the Target Group, and no member of the Target Group will be subject to the covenants described in this "*Description of the Notes*." As such, we cannot assure you that, prior to the Acquisition Closing Date, the Target Group will not engage in activities that would otherwise have been prohibited by the Indenture had those covenants been applicable to such entities as of the Issue Date, and any such non-compliance will not constitute a Default or Event of Default under the Indenture if occurring prior to the Acquisition Closing Date.

The following is a summary of the material provisions of the Indenture and refers to the Notes, the Intercreditor Agreement, the Transaction Security Documents and the Escrow Agreement. Because this is a summary, it may not contain all the information that is important to you. You should read each of the Indenture, the Notes, the Intercreditor Agreement, the Transaction Security Documents and the Escrow Agreement in their entirety. Copies of such documents are available as described under "*Where You Can Find Other Information*." The capitalized terms defined in "*—Certain Definitions*" below are used in this "*Description of the Notes*" as so defined.

Brief Description of the Notes and the Note Guarantees

The Notes will:

- be general senior obligations of the Issuer, secured as set forth under "*—Security*";
- rank *pari passu* in right of payment with any existing and future indebtedness of the Issuer that is not subordinated in right of payment to the Notes;
- rank senior in right of payment to any existing and future indebtedness of the Issuer that is expressly subordinated in right of payment to the Notes;
- be effectively subordinated to any existing or future Indebtedness or other liabilities of the Issuer and its subsidiaries that is secured by property or assets that do not secure the Notes (including the obligations under the Senior Secured Credit Facilities), to the extent of the property and value of the assets securing such Indebtedness or liabilities;
- be structurally subordinated to any existing and future Indebtedness and other liabilities, including preferred stock and obligations to trade creditors, of Subsidiaries of the Issuer that are not Guarantors;
- be guaranteed on a senior subordinated basis (i) on the Issue Date, by Bidco and (ii) within 120 days from the Business Day immediately after the Acquisition Closing Date, subject to and in accordance with the Agreed Security Principles and subject to certain material limitations pursuant to applicable laws, and substantially concurrently with the Guarantees granted in favor of obligations under the Senior Term Facilities Agreement, by the Post-Closing Guarantors; and
- be represented by one or more registered Notes in global form, but in certain circumstances may be represented by certificated Notes. See "*Book-Entry, Delivery and Form*."

Each Note Guarantee (as defined below), when granted, will:

- be a general senior subordinated obligation of the Guarantor, secured as set forth under "*—Security*";
- be subordinated in right of payment to any existing and future senior indebtedness of that Guarantor, including its obligations under the Senior Secured Credit Facilities;
- rank *pari passu* in right of payment with any existing and future indebtedness of such Guarantor that is not subordinated in right of payment to the Note Guarantee of such Guarantor;
- rank senior in right of payment to any existing and future indebtedness of such Guarantor that is expressly subordinated in right of payment to the Note Guarantee of such Guarantor;
- be effectively subordinated to any existing and future Indebtedness or other liabilities of such Guarantor and its subsidiaries that is secured by property or assets that do not secure the Notes or the Note Guarantees, including obligations under the Senior Secured Credit Facilities, or that is secured on a senior-priority basis over property or assets that secure the Notes or the Note Guarantees on a junior-priority basis, including the obligations under the Senior Secured Credit Facilities, to the extent of the value of the assets securing such Indebtedness or liabilities; and
- be structurally subordinated to any existing and future Indebtedness and other liabilities, including preferred stock and obligations to trade creditors, of Subsidiaries of such Guarantor that are not Guarantors.

Each Note Guarantee will be limited to the maximum amount that would not render the Guarantor's obligations subject to avoidance under applicable fraudulent conveyance provisions of the U.S. Bankruptcy Code or any comparable provision of foreign or state law to comply with corporate benefit, financial assistance and other laws and be further limited as required under the Agreed Security Principles.

Prior to the consummation of the Acquisition, the Notes will be obligations of the Issuer, guaranteed solely by Bidco, will be secured by the Collateral (as defined below) and the Escrow Charge (as defined below) and will not have the benefit of any Note Guarantees or any other credit support from the Target Group. See "*—Escrow of Proceeds; Special*

Mandatory Redemption." Prior to the Acquisition Closing Date, neither the Issuer nor Bidco will control the Target Group, and no member of the Target Group will be subject to the covenants described in this "*Description of the Notes*." As such, we cannot assure you that, prior to the Acquisition Closing Date, the Target Group will not engage in activities that would otherwise have been prohibited by the Indenture had those covenants been applicable to such entities as of the Issue Date, and any such non-compliance will not constitute a Default or Event of Default under the Indenture if occurring prior to the Acquisition Closing Date.

As of September 30, 2021, as adjusted to give effect to the Transaction, the Issuer and its consolidated Subsidiaries would have had total as adjusted third-party Indebtedness in an aggregate principal amount of €1,959 million, including the Notes offering hereby and €1,430 million of term loan drawings under the Senior Secured Credit Facilities Agreement. Any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Original Revolving Facility.

Principal and Maturity

On the Issue Date, the Issuer will issue €515.0 million in aggregate principal amount of Notes. The Notes will mature on , 2030. Each series of Notes will be issued in minimum denominations of €100,000 and in integral multiples of €1,000 in excess thereof. For the avoidance of doubt, Euroclear and Clearstream (as applicable, the "Relevant Clearing Systems" and each, a "Relevant Clearing System") are not required to monitor or enforce the minimum amount. The rights of Holders of beneficial interests in the Notes to receive the payments on such Notes are subject to applicable procedures of the Relevant Clearing System, as applicable. If the due date for any payment in respect of any Notes is not a Business Day at the place at which such payment is due to be paid, the Holder thereof will not be entitled to payment of the amount due until the next succeeding Business Day at such place, and will not be entitled to any further interest or other payment as a result of any such delay.

Interest

Interest on the Notes will accrue at the rate of % per annum and will be payable, in cash, semi-annually in arrears on and of each year, commencing on , 2022, which shall be no earlier than the Escrow Longstop Date (as defined below). The Issuer will make each interest payment for so long as the Notes are global notes to the Holders of record at the close of business (in Euroclear or Clearstream, as applicable) on the Clearing System Business Day immediately before the due date for such payment, where "Clearing System Business Day" means a day on which the Relevant Clearing System for which the global note representing the Notes is being held is open for business, or to the extent Definitive Registered Notes have been issued, Holders of record at the close of business on the and preceding the applicable interest payment date. Interest on the Notes will accrue from the most recent date to which interest has been paid or, if no interest has been paid, from the date of original issuance. Interest on overdue principal and interest on the Notes will accrue at a rate that is 1% higher than the interest rate on the overdue principal or interest. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months. Each interest period will end on (but not include) the relevant interest payment date. If the Issuer delivers global notes to the Trustee for cancellation on a date that is on or after the record date and on or before the corresponding interest payment date, the accrued and unpaid interest up to, but excluding, the redemption date will be paid on the redemption date to the Holder in whose name the Note is registered at the close of business on such record date in accordance with the applicable procedures of Relevant Clearing System, and no additional interest will be payable to Holders whose Notes will be subject to redemption by the Issuer.

Any Notes represented by global notes held by a nominee of the Relevant Clearing System will be subject to the then applicable procedures of the Relevant Clearing System, as applicable. Euroclear's and Clearstream's current practice is to make payments in respect of global notes to participants of record that hold an interest in the relevant global notes on the business day immediately preceding the applicable interest payment date.

Additional Notes

The Indenture will be unlimited in aggregate principal amount, of which €515.0 million in aggregate principal amount of Notes will be issued on the Issue Date. The Issuer may issue additional Notes (the "Additional Notes") from time to time under the Indenture, subject to compliance with the covenants contained in the Indenture. Any series of Additional Notes shall have terms substantially identical to the Notes, as applicable, originally issued, except in respect of any of the following terms which shall be set forth in an Officer's Certificate (defined below) or, at the election of the Issuer, a supplemental indenture, delivered to the Trustee:

(1) whether such Additional Notes shall be issued as part of a new or existing series of Notes or the title of such Additional Notes (which shall distinguish the Additional Notes of the series from Notes of any other series);

(2) the aggregate principal amount of such Additional Notes;

(3) the date or dates on which such Additional Notes will be issued and will mature;

(4) the rate or rates (which may be fixed or floating) at which such Additional Notes shall bear interest and, if applicable, the interest rate basis, formula or other method of determining such interest rate or rates, the date or dates from which such interest shall accrue, the interest payment dates on which such interest shall be payable or the method by which such dates will be determined, the record dates for the determination of holders thereof to whom such interest is payable and the basis upon which such interest will be calculated;

(5) the currency or currencies in which such Additional Notes shall be denominated and the currency in which cash or government obligations in connection with such series of Additional Notes may be payable;

(6) the date or dates and price or prices at which, the period or periods within which, and the terms and conditions upon which, such Additional Notes may be redeemed, in whole or in part;

(7) if other than in minimum denominations of €100,000 and integral multiples of €1,000 in excess thereof, the denominations in which such Additional Notes shall be issued and redeemed;

(8) the ISIN, Common Code or other securities identification numbers with respect to such Additional Notes;

(9) to reflect a change in tax law since the date of the Indenture in a Relevant Taxing Jurisdiction; and

(10) any relevant limitation language with respect to Note Guarantees and Transaction Security Documents.

Such Additional Notes will be treated, along with all other Notes, as a single class for the purposes of the Indenture with respect to waivers, amendments and all other matters which are not specifically distinguished for such series in such Officer's Certificate or supplemental indenture (as applicable); *provided* that any Additional Notes that are not fungible with the applicable series of Notes offered hereunder for U.S. federal income tax purposes shall have a separate ISIN, Common Code or other securities identification number from such Notes. Unless the context otherwise requires, for all purposes of the Indenture and this "*Description of the Notes*," references to "Notes" shall be deemed to include references to the Notes initially issued on the Issue Date as well as any Additional Notes.

Payments

Principal, premium, if any, interest and Additional Amounts, if any, with respect to the Notes represented by one or more global notes held by a common depositary of Euroclear and Clearstream and registered in the name of its nominee will be made through the Principal Paying Agent (as defined below) by wire transfer of immediately available funds to the accounts specified by the registered Holder or Holders thereof (initially being the common depositary or its nominee for Euroclear and Clearstream).

Principal, premium, if any, interest and Additional Amounts, if any, with respect to certificated Notes will be payable at the office or agency of the paying agent maintained for such purpose (the "Principal Paying Agent") or, may, at the option of the Issuer, be made through the Principal Paying Agent by check mailed to the Holders of the Notes at their respective addresses set forth in the register of Holders; *provided* that all payments of principal, premium, if any, interest and Additional Amounts, if any, with respect to certificated Notes may, at the option of the Issuer, be made by wire transfer to a euro account maintained by the payee with a bank in the United States, the United Kingdom or Europe if the applicable Holder elects payment by wire transfer by giving written notice to the Trustee and the Principal Paying Agent to such effect designating such account no later than 30 days immediately preceding the relevant due date for payment (or such other date as the Principal Paying Agent may accept in its discretion).

The rights of Holders to receive the payments of interest on such Notes are subject to applicable procedures of the Relevant Clearing System. If the due date for any payment in respect of any Notes is not a Business Day at the place at which such payment is due to be paid, the Holder thereof will not be entitled to payment of the amount due until the next succeeding Business Day at such place, and will not be entitled to any further interest or other payment as a result of any such delay.

Paying Agent, Registrar and Transfer Agent for the Notes

The Issuer will maintain a Paying Agent for the Notes and the initial Principal Paying Agent will be Deutsche Bank AG, London Branch. The Issuer will also maintain a registrar (the "Registrar") and a transfer agent (the "Transfer Agent") for the Notes. The initial Registrar will be Deutsche Bank Luxembourg S.A. and the initial Transfer Agent will be Deutsche Bank AG, London Branch. The Registrar will maintain a register reflecting ownership of the Notes outstanding from time to time, if any, and together with the Transfer Agent will facilitate transfers of the Notes on behalf of the Issuer.

Upon written notice to the Trustee, the Issuer may change any Paying Agent, Registrar or Transfer Agent for the Notes without prior notice to the Holders of such Notes. For so long as Notes are listed on the Official List of The International Stock Exchange (the "Exchange") and if and to the extent that the rules of The International Stock Exchange

Authority Limited (the "Authority") so require, the Issuer will notify the Authority of any change of Paying Agent, Registrar or Transfer Agent. The Issuer or any of its Subsidiaries may act as Paying Agent or Registrar in respect of the Notes, *provided* that it segregates and holds in a separate trust fund for the benefit of the Holders all money held by it as paying agent.

Transfer and Exchange

A Holder may transfer or exchange Notes in accordance with the Indenture. The Registrar and the Trustee may require a Holder to furnish appropriate endorsements and transfer documents in connection with a transfer of Notes. Holders will be required to pay all taxes due on such transfer or exchange. Any such transfer or exchange will be made without charge to Holders, other than any taxes payable in connection with such transfer or exchange. The Issuer and the Transfer Agent will not be required to transfer or exchange any Note selected for redemption or tendered (and not withdrawn) for repurchase in connection with a Change of Control Offer or an Asset Disposition Offer (each as defined herein). None of the Issuer, the Transfer Agent or the Registrar will be required to transfer or exchange any Note for a period of 15 days before the delivery of a notice of redemption of Notes to be redeemed or between record date and payment date. The registered Holder of a Note will be treated as the absolute owner of the Note for all purposes. See "*Book Entry, Delivery and Form*."

Restricted Subsidiaries and Unrestricted Subsidiaries

As of the Issue Date, each Subsidiary of the Issuer will be a "Restricted Subsidiary" for the purposes of the Indenture. Immediately after the completion of the Acquisition on the Acquisition Closing Date, each member of the Target Group as of such time will become Restricted Subsidiaries. However, in the circumstances described below under "*—Certain Covenants—Designation of Restricted and Unrestricted Subsidiaries*," the Issuer will be permitted to designate Restricted Subsidiaries as Unrestricted Subsidiaries. Unrestricted Subsidiaries will not be subject to any of the restrictive covenants in the Indenture and will not guarantee, provide security with respect to, or have their shares pledged in favour of, the Notes.

Escrow of Proceeds; Special Mandatory Redemption

Concurrently with the closing of this offering of Notes on the Issue Date, the Issuer will enter into an escrow agreement (as amended, supplemented or modified from time to time, the "Escrow Agreement") among the Issuer, the Trustee and Deutsche Bank AG, London Branch, as escrow agent (in such capacity, together with its successors, the "Escrow Agent"), pursuant to which the Issuer will deposit, or cause to be deposited on its behalf, an amount in cash equal to the gross proceeds of the Notes sold on the Issue Date into the escrow account in the name of the Issuer (the "Escrow Account"). Such Escrow Account will be controlled by the Escrow Agent subject to the terms of the Escrow Agreement, on behalf of the Trustee and the Holders of the Notes. The initial funds deposited in the Escrow Account, and all other funds, securities, interest, dividends, distributions and other property and payments credited to the Escrow Account in connection with the Notes (less any property or funds paid in accordance with the Escrow Agreement such as ordinary course charges and fees paid to the bank holding the Escrow Account) are referred to, collectively, as the "Escrowed Property."

The Escrow Agent will be entitled pursuant to the Escrow Agreement to deduct amounts from the Escrowed Property in respect of negative interest having accrued on the Escrowed Property.

The Issuer will be entitled to cause the Escrow Agent to release any Escrowed Property (in which case the Escrowed Property will be paid to, or as directed by, the Issuer) (the "Escrow Release") (the date of the Escrow Release being referred to as the "Escrow Release Date") upon delivery to the Escrow Agent, on or prior to August 31, 2022 (the "Escrow Longstop Date"), of an Officer's Certificate (the "Escrow Release Officer's Certificate"), upon which the Escrow Agent shall be entitled to rely absolutely without further investigation, certifying that the following conditions (collectively, the "Escrow Conditions") will be met substantially concurrently with or promptly following the Release on the Escrow Release Date:

- the Escrowed Property will be applied in substantially the same manner as described in this offering memorandum;
- the Acquisition will be consummated no more than five Business Days following the release of the Escrowed Property substantially on the terms set forth under "*Summary—The Transactions*" except for any changes or other modifications that will not, when taken as a whole, have a material adverse effect on the Holders of the Notes; and
- as of the Acquisition Closing Date, there is no Default or Event of Default in respect of the Issuer under clauses (a), (b) or (e) of the first paragraph under the section titled "*—Events of Default*".

Upon the Escrow Release, the Escrowed Property will be paid out of the Escrow Accounts in accordance with the Escrow Agreement for the purposes described under "*Use of Proceeds*" and the Escrow Accounts will be reduced to zero.

In the event that (i) the Escrow Longstop Date occurs and the Escrow Agent shall not have received the Escrow Release Officer's Certificate on or prior to such date or (ii) the Issuer informs the Escrow Agent and the Trustee in writing that, in the good faith judgment of the Issuer, the Acquisition will not be consummated on or prior to the Escrow Longstop Date (the date of any such event being the "Special Termination Date"), the Issuer will redeem the entire outstanding aggregate principal amount of the Notes (the "Special Mandatory Redemption") at a price (the "Special Mandatory Redemption Price") equal to 100% of the issue price of the Notes as stated on the cover page of this offering memorandum, plus accrued and unpaid interest on the Notes and Additional Amounts, if any, from, and including, the Issue Date to, but excluding, the Special Mandatory Redemption Date (as defined below), subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date.

Notice of the Special Mandatory Redemption will be delivered by the Issuer no later than one Business Day following the Special Termination Date, to the Trustee and the Escrow Agent (copied to the Paying Agent), and will provide that the Notes shall be redeemed on a date that is no later than the tenth Business Day after such notice is given by the Issuer in accordance with the terms of the Escrow Agreement (the "Special Mandatory Redemption Date"). On the Special Mandatory Redemption Date, the Escrow Agent shall pay to the Paying Agent for payment to each Holder of Notes, the Special Mandatory Redemption Price for such Holder's Notes, shall be entitled to use the Escrowed Property to make such payments and, concurrently with the payment to such Holders, deliver any excess Escrowed Property to the Issuer.

The Escrow Accounts will not include cash to fund any accrued and unpaid interest owing to Holders of the Notes that is included in the Special Mandatory Redemption Price. In the event that the Special Mandatory Redemption Price payable upon such Special Mandatory Redemption of the Notes exceeds the amount of the applicable Escrowed Property, the Parent will have committed to make an equity contribution to the Issuer to fund the difference between the applicable Special Mandatory Redemption Price and the amount of the Escrowed Property.

In order to secure the payment of the Special Mandatory Redemption Price (as defined below) of the Notes, if applicable, the Issuer will grant the Trustee, for its benefit and the benefit of the Holders of the Notes, subject to certain liens of the Escrow Agent, a first-priority security interest in the Escrow Account and the Issuer's rights under the Escrow Agreement, pursuant to one or more escrow account charges dated on or about the Issue Date between the Issuer, the Trustee and the Escrow Agent (the "Escrow Charge"); *provided* that such liens and security interest shall automatically be released and terminate upon receipt by the Trustee of either an Escrow Release Officer's Certificate (as defined below) or a notice of Special Mandatory Redemption (as defined below). The Escrow Charge will provide that the funds will be segregated and held for the purposes specified herein. By its acceptance of the Notes, each Holder shall be deemed to authorize and direct the Trustee to execute, deliver and perform its obligations under the Escrow Agreement. The Escrow Agent will invest the Escrowed Property as directed by the Issuer in such short-term liquid investments (including bank deposit products) as permitted under the Escrow Agreement, and liquidate such investments, as the Issuers will from time to time direct in writing. Receipt by the Trustee of either an Officer's Certificate for the release or a notice of Special Mandatory Redemption shall constitute deemed consent by the Trustee for the release of the Escrowed Property from the Escrow Charge.

The Issuer from time to time, but not more than twice in aggregate, may open one or more replacement or additional accounts at an alternative bank or banks, which, in each case, must be the Trustee, Escrow Agent, an Initial Purchaser or one or more of their respective banking affiliates, and may transfer any portion of the Escrowed Property to any such replacement or additional accounts (a "Transfer") without such Transfer being deemed a Release; *provided* that the Issuer provides a substantially equivalent security interest to the Trustee for the benefit of the Holders over such replacement or additional account or accounts if such security interest was initially granted in connection with the original Escrow Account; *provided, further*, that use of the funds from any such account shall be subject to the same conditions as applied to the original Escrow Account. In such an event, any replacement or alternative accounts into which Escrowed Property is transferred shall be deemed to be an Escrow Account. Receipt by the Trustee from the Issuer of an Officer's Certificate in connection with a Transfer shall constitute deemed consent by the Trustee for the transfer of the Escrowed Property from the original Escrow Account to a new Escrow Account.

If at the time of such Special Mandatory Redemption, the Notes are listed on the Official List of the Exchange and the rules of the Authority so require, the Issuer will notify the Authority that the Special Mandatory Redemption has occurred and any relevant details relating to such Special Mandatory Redemption to the extent so required.

Any of the provisions in this section, including, for the avoidance of doubt, the Escrow Conditions and the conditions applicable to a Special Mandatory Redemption (other than the Special Mandatory Redemption Price) may be waived or modified by Holders representing a majority in aggregate principal amount of the Notes then outstanding.

Note Guarantees

General

On the Issue Date, the obligations of the Issuer under the Notes and the Indenture will be, jointly and severally and unconditionally guaranteed on a senior subordinated basis (the "Note Guarantees") by CTEC III GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany, registered in the commercial register of the local court (*Amtsgericht*) of Munich under HRB 267814, with business address at Schwanthalerstraße 73, 80336 Munich, Germany ("Bidco"). Subject to and in accordance with the Agreed Security Principles and to certain material limitations pursuant to applicable laws, within 120 days from the Business Day immediately after the Acquisition Closing Date, and substantially concurrently with the Guarantees granted in favor of obligations under the Senior Term Facilities Agreement, the Notes are expected to be guaranteed on a senior subordinated basis by certain members of the Target Group that will guarantee the Senior Secured Credit Facilities Agreement (the "*Post-Closing Guarantors*"). Such members of the Target Group granting such Note Guarantees are currently expected to be CeramTec GmbH and CeramTec North America LLC. The Senior Secured Credit Facilities will be guaranteed on a senior secured basis by each Post-Closing Guarantor. In addition, if required by the covenant described under "*—Certain Covenants—Limitation on Guarantees of Indebtedness by Restricted Subsidiaries*" and subject to the Intercreditor Agreement, the Agreed Security Principles and certain material limitations pursuant to applicable laws, certain other Restricted Subsidiaries may provide a Note Guarantee in the future and accede to the Intercreditor Agreement. As of and for the year ended December 31, 2020, the Post-Closing Guarantors accounted for 79.8% of total assets of the Target Group (before giving effect to purchase price allocation adjustments and minor top level adjustments, but after giving effect to intercompany eliminations other than intercompany profit eliminations), 78.3% of the revenue (before giving effect to consolidation adjustments) and 88.7% of the EBITDA (before giving effect to consolidation adjustments) of the Target Group.

By its terms, the obligations of each Guarantor under its Note Guarantee will be limited to the maximum amount that would not render the Guarantor's obligations subject to avoidance under applicable fraudulent conveyance provisions of the U.S. Bankruptcy Code or any comparable provision of foreign or state law to comply with corporate benefit, financial assistance and other laws and the Note Guarantees of, or the relevant Note Documents to be entered into by, certain Guarantors organized in certain jurisdictions, including, without limitation, Germany and the United States, will contain language limiting the amount of indebtedness guaranteed or qualifying the Note Guarantee in order to address applicable local law considerations (including preservation of share capital and statutory reserves, capitalization, prohibited financial assistance, corporate benefit principles and other legal restrictions applicable to the Guarantors and their respective shareholders and directors or managers). In addition, the Note Guarantees will be further limited as required under the Agreed Security Principles as described below under "*—Security—General*." The Agreed Security Principles apply to the granting of guarantees and security in favor of obligations under the Senior Secured Credit Facilities Agreement and the Notes. The Agreed Security Principles include restrictions on the granting of guarantees where, among other things, such grant would be restricted by general statutory or other legal limitations or requirements, financial assistance rules, corporate benefit rules, fraudulent preference rules, "thin capitalization" rules, capital maintenance rules, liquidity impairment rules, retention of title claims and similar matters, or where the time and cost of granting the guarantee would be disproportionate to the benefit accruing to the Holders. By virtue of these limitations, a Guarantor's obligation under its Note Guarantee could be significantly less than amounts payable with respect to the Notes, or a Guarantor may have effectively no obligation under its Note Guarantee. However, such limitations may not be effective under local law. See "*Risk Factors—Risks Related to the Notes—Corporate benefit, financial assistance laws, capital maintenance and other limitations on the Note Guarantees and the Collateral may adversely affect the validity and enforceability of the Note Guarantees and the Collateral*" and "*Risk Factors—Risks Related to the Notes—The insolvency laws of Germany and other applicable jurisdictions may not be as favorable to you as the insolvency laws of the United States or those of another jurisdiction with which you are familiar; other limitations on the Note Guarantees and the Security Interests (as defined herein), including fraudulent conveyance statutes, may adversely affect their validity and enforceability*." The validity and enforceability of the Note Guarantees and the liability of each Guarantor will be subject to the limitations described in "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and the Security Interests*."

The Issuer is a holding company and its only material assets are its interests in the capital stock of its Subsidiaries. As such, the Issuer will be dependent upon the Restricted Subsidiaries to make payments to it to service interest, principal and other payments on the Notes.

A significant portion of the operations of the Issuer will be conducted through Subsidiaries that are not expected to become Guarantors, including Subsidiaries exempt from becoming Guarantors or having security granted over their shares or assets under the Agreed Security Principles or other limitations. Claims of creditors of non-Guarantors, including trade creditors, secured creditors and creditors holding debt and guarantees issued by those Subsidiaries, and claims of preferred and minority stockholders (if any) of those Subsidiaries and claims against joint ventures generally will have priority with respect to the assets and earnings of those Subsidiaries and joint ventures over the claims of creditors of the Issuer and the Guarantors, including Holders. The Notes and each Note Guarantee therefore will be structurally subordinated to creditors (including trade creditors) and preferred and minority stockholders (if any) of Subsidiaries of the Issuer (other than the Guarantors) and joint ventures. Although the Indenture limits the incurrence of Indebtedness by the Issuer and the Restricted Subsidiaries (including Disqualified Stock, and Preferred Stock of Restricted Subsidiaries), the limitation is subject to a number of significant exceptions. Moreover, the Indenture does not impose any limitation on the incurrence by Restricted Subsidiaries of liabilities that are not considered Indebtedness under the Indenture. See "*—Certain Covenants—Limitation on Indebtedness*."

Subordination of the Note Guarantees

The Note Guarantees will be senior subordinated indebtedness, which means that, pursuant to the terms of the Intercreditor Agreement and the Indenture, the Note Guarantees will rank behind, and will be expressly subordinated to, all the existing and future Senior Indebtedness of the Guarantors, including any obligations under the Senior Secured Credit

Facilities and any future Indebtedness that ranks pari passu with the Senior Secured Credit Facilities. As a result of this subordination, holders of Senior Indebtedness of any Guarantor will be entitled to receive full payment on all obligations owed to them before any payment can be made to Holders of the Notes in respect of such Guarantor's Note Guarantee. The ability to take enforcement action against the Guarantors is subject to significant restrictions imposed by the Intercreditor Agreement, and potentially any Additional Intercreditor Agreements entered into after the Issue Date. For example, the ability of the Trustee or the Holders to take enforcement action with respect to the Note Guarantees will be subject to certain standstill provisions and payment blockage and other limitations on enforcement. The Trustee and the Holders will not be able to enforce the Note Guarantees until the expiration of the applicable standstill period (generally 179 days) for so long as amounts under Senior Indebtedness remain outstanding. For a description of the restrictions imposed by the Intercreditor Agreement, see "*Description of Certain Financing Arrangements—Intercreditor Agreement*."

In addition, the Note Guarantees and the Collateral securing the Notes and the Note Guarantees will be subject to release under certain circumstances, including, but not limited to, the sale of Bidco pursuant to an enforcement of security over shares of Bidco taken by the Security Agent acting at the direction of an instructing group of senior secured creditors. Because of the foregoing subordination provisions, it is likely that holders of Senior Indebtedness and other creditors (including trade creditors) of the Guarantors would recover disproportionately more than the holders of the Notes recover in any insolvency or similar proceeding relating to such entity. In any such case, there may be insufficient assets, or no assets, remaining to pay the principal of or interest on the Notes after the repayment in full of all Senior Indebtedness. See "*Risk Factors—Risks Related to the Notes—Your right to receive payment under the Note Guarantees is contractually subordinated to senior ranking debt of the Guarantors*."

Note Guarantee Releases

The Note Guarantee of a Guarantor will be automatically and unconditionally released and discharged upon:

(1) a direct or indirect sale, exchange, transfer or other disposition (including by way of merger, amalgamation, consolidation, dividend distribution or otherwise) of (i) the Capital Stock of such Guarantor (as a result of which such Guarantor would no longer be a Restricted Subsidiary), or (ii) all or substantially all the assets of the Guarantor, to a Person other than the Issuer or a Restricted Subsidiary and otherwise in compliance with the Indenture, the Intercreditor Agreement and any Additional Intercreditor Agreement;

(2) the designation in accordance with the Indenture of the Guarantor as an Unrestricted Subsidiary or upon the occurrence of any event after which such Guarantor is no longer a Restricted Subsidiary;

(3) payment in full of principal, interest and all other obligations on the Notes or legal defeasance, covenant defeasance or satisfaction and discharge of the Notes and the Indenture, as provided in "*—Defeasance*" and "*—Satisfaction and Discharge*";

(4) in accordance with the provisions of the Intercreditor Agreement or any Additional Intercreditor Agreement, including in respect of the provisions relating to an IPO Debt Pushdown;

(5) so long as no Event of Default has occurred and is continuing, upon the release or discharge of the Guarantee and any other obligations of such Guarantor under the Senior Secured Credit Facilities Agreement; *provided* that such Guarantor is not providing a Guarantee in respect of any other Credit Facility in aggregate principal amount in excess of €50.0 million or any Public Debt at such time that will not also be released substantially simultaneously with the release of the Note Guarantee and/or a Guarantee under the Senior Secured Credit Facilities Agreement;

(6) as described in the fifth paragraph of the covenant described below under "*—Certain Covenants—Limitation on Guarantees of Indebtedness by Restricted Subsidiaries*";

(7) upon the merger, amalgamation or consolidation of any Guarantor with and into the Issuer or another Guarantor or upon the liquidation of such Guarantor, in each case, in compliance with the covenant under "*—Merger and Consolidation*";

(8) in connection with a Permitted Transaction;

(9) upon the occurrence of a Covenant Suspension Event or by written notice from the Issuer to the Trustee upon the Notes achieving an Investment Grade Status; *provided* that such Guarantor is not providing a Guarantee in respect of any other Credit Facility in aggregate principal amount in excess of €50.0 million or any Public Debt at such time that will not also be released substantially simultaneously with the release of the Note Guarantee; *provided*, *further*, that if a Reversion Date occurs, subject to and in accordance with the Agreed Security Principles, certain material limitations under applicable law and the Guarantee

Limitations, the Issuer will use its commercially reasonable efforts to procure that any such Note Guarantee that was released in reliance on this clause to be re-granted; and

(10) as described under "—*Amendments and Waivers*."

The Trustee and the Security Agent, as applicable, shall, subject to the terms of the Intercreditor Agreement and subject to receipt of certain documentation requested pursuant to the Indenture, take all necessary actions at the reasonable request and cost of the Issuer, including the granting of releases or waivers under the Intercreditor Agreement or any Additional Intercreditor Agreement, to effectuate any release of a Note Guarantee in accordance with these provisions, subject to customary protections and indemnifications. Each of the releases set forth above shall be effected by the Trustee and the Security Agent, as applicable, without the consent of the Holders and will not require any other action or consent on the part of the Trustee. None of the Issuer, the Trustee or any Guarantor will be required to make a notation on the Notes to reflect any such release, termination or discharge. The Issuer may in its sole discretion, and without prejudice to any future election in relation thereto, elect to have any Note Guarantee remain in place, as opposed to being released.

Security

General

On the Issue Date, the Notes and the Note Guarantees thereof will be secured on a first-priority basis by the Escrow Charge. Upon receipt by the Trustee of either an Escrow Release Officer's Certificate or a notice of Special Mandatory Redemption, the Escrowed Property will be released and the first-priority security interests over the Escrowed Property will automatically be released and terminate and no other Officer's Certificate, Opinion of Counsel, or other document will be required to effect such release and termination.

In addition, on the Issue Date, subject to and in accordance with the Agreed Security Principles, the Notes and the Note Guarantees in respect thereof will be secured by:

- on a first-priority basis, a share pledge in respect of the shares in the Issuer and any structural intercompany receivables owed to the Parent by the Issuer (the "SUN Collateral")

- on a second-priority basis, pledges of the shares in Bidco and any structural intercompany receivables owed to the Issuer by Bidco (collectively, the "Shared Collateral" and, together with the SUN Collateral and the Escrow Charge, the "Collateral").

The Collateral and any other assets subject to Security Interests that may in the future be granted to secure obligations under the Notes, any Note Guarantees and the Indenture in accordance with the provisions of the Intercreditor Agreement constitute "Charged Property."

The Shared Collateral will secure the Senior Secured Credit Facilities on a senior basis to the Notes and Note Guarantees, and may also secure certain Hedging Obligations and certain future Indebtedness on a senior basis. The Collateral may also secure any Additional Notes and certain other future Indebtedness on a pari passu or junior basis.

Subject to certain conditions, including compliance with the covenants described under "—*Certain Covenants—Impairment of Security Interest*" and "—*Certain Covenants—Limitation on Liens*," the Issuer and the Restricted Subsidiaries will be permitted to grant security over the Charged Property in connection with future issuances of Indebtedness or Indebtedness of the Restricted Subsidiaries, including, subject to certain requirements described herein, Additional Notes, as permitted under the Indenture and the Intercreditor Agreement.

The Collateral will be granted to the Security Agent on behalf of the Holders and (other than in respect of the Escrow Charge) holders of the other secured obligations that are secured by the Collateral pursuant to the Transaction Security Documents. All Collateral will be subject to the limitations that are applicable to Note Guarantees granted by the same entity, the operation of the Agreed Security Principles and any Permitted Collateral Liens.

The proceeds from the enforcement of the Collateral may not be sufficient to satisfy the obligations owed to the Holders. No appraisals of the Collateral have been made in connection with the offering of the Notes. By its nature, some or all of the Charged Property will be illiquid and may have no readily ascertainable market value. Accordingly, the Charged Property may not be able to be sold in a short period of time, or at all. See "*Risk Factors—Risks Related to the Notes—The Notes will be secured only to the extent of the value of the Collateral that will be granted as security for the Notes and future secured debt may be secured by certain assets that do not secure the Notes*" and "*Risk Factors—Risks Related to the Notes—The value of the Collateral securing the Notes may not be sufficient to satisfy our obligations under the Notes and such Collateral may be reduced or diluted under certain circumstances*."

The Liens on the Charged Property will be limited as necessary to recognize certain limitations arising under or imposed by local law and defenses generally available to providers of Collateral (including those that relate to fraudulent conveyance or transfer, voidable preference, financial assistance, corporate purpose or benefit, capital maintenance, liquidity impairment or similar laws, regulations or defenses affecting the rights of creditors generally) or other considerations under applicable law. For a brief description of such limitations, see "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and the Security Interests*."

Notwithstanding the foregoing and the provisions of the covenants described below under "*—Certain Covenants—Limitation on Liens*" and "*—Certain Covenants—Limitation on Guarantees of Indebtedness by Restricted Subsidiaries*," certain property, rights and assets may not be pledged or assigned, and any pledge or assignment over property, rights and assets may be limited (or the Liens not perfected), and certain Note Guarantees may not be granted in accordance with the Agreed Security Principles or may be limited. The following is a non-exhaustive summary of certain terms of the Agreed Security Principles, which include, among others:

- general legal and statutory limitations, regulatory restrictions, financial assistance, anti-trust and other competition authority restrictions, corporate benefit, fraudulent preference, equitable subordination, "*transfer pricing*", "*thin capitalization*", "*earnings stripping*", "*controlled foreign corporation*" and other tax restrictions, "*exchange control restrictions*", "*capital maintenance*" rules and "*liquidity impairment*" rules, tax restrictions, retention of title claims, employee consultation or approval requirements and similar principles may limit the ability of a member of the Group to provide a guarantee or security or may require that the guarantee or security be limited as to amount or otherwise and, if so, the guarantee or security will be limited accordingly; *provided* that, to the extent requested by the Security Agent before signing any applicable security or accession document, the relevant member of the Group shall use reasonable endeavors (but without incurring material cost and without adverse impact on relationships with third parties) to overcome any such obstacle or otherwise such guarantee or security document shall be subject to such limit;

- a key factor in determining whether or not (and the terms on which) a guarantee or security will be taken (and in respect of the security, the extent of its perfection and/or registration) is the applicable time and cost (including adverse effects on taxes, interest deductibility, stamp duty, registration costs and taxes, notarial costs, translation costs and all applicable legal and notarial fees and adverse effects on the ability of the Group to obtain or maintain local facilities or other financing arrangements, including any factoring or similar arrangement in each case permitted under the Indenture) which will not be disproportionate to the benefit accruing to the secured parties of obtaining such guarantee or security;

- members of the Group will not be required to give guarantees or enter into security documents if they are not wholly owned by another member of the Group or if it is not within the legal capacity of the relevant members of the Group or if it would conflict with the fiduciary or statutory duties of their officers or contravene any applicable legal, regulatory or contractual prohibition or restriction or have the potential to result in a material risk of personal or criminal liability for any officer of or for any member of the Group; *provided* that, to the extent requested by the Security Agent before signing any applicable security document or accession document, the relevant member of the Group shall use reasonable endeavors (but without incurring material cost and without adverse impact on relationships with third parties) to overcome any such obstacle or otherwise such guarantee or security document shall be subject to such limit;

- guarantees and security will be limited so that the aggregate of notarial costs and all registration and like taxes and duties relating to the provision of security will not exceed an amount to be agreed between the Issuer and the Security Agent;

- where a class of assets to be secured includes material and immaterial assets, if the cost of granting security over the immaterial assets is disproportionate to the benefit of such security, security will be granted over the material assets only;

- it is expressly acknowledged that it may be either impossible or impractical to create security over certain categories of assets in which event security will not be taken over such assets;

- any asset subject to a legal requirement, contract, lease, license, instrument, regulatory constraint (including any agreement with any government or regulatory body) or other third party arrangement (other than restrictions contained in the constitutional documents of a member of the Group or in any intra-Group loan agreement), which may prevent or condition the asset from being charged, secured or being subject to the applicable security document (including requiring a consent of any third party, supervisory board or works council (or equivalent)) and any asset which, if subject to the applicable security document, would give a third party the right to terminate or otherwise amend any rights, benefits and/or obligations with respect to any member of the Group in respect of the asset or require the relevant chargor to take any action materially adverse to the interests of the Group or any member thereof, in each case will be excluded from a guarantee or security document;

- the giving of a guarantee, the granting of security and the registration and/or the perfection of the security granted will not be required if it would have a material adverse effect on the ability of the relevant member of the Group to conduct its operations and business in the ordinary course as otherwise permitted by the Finance Documents (as defined in the section entitled "*Description of Certain Financing Arrangements—Intercreditor Agreement*" above) (including dealing with the secured assets and all contractual counterparties or amending, waiving or terminating (or allowing to lapse) any rights, benefits or obligations, in each case prior to an Acceleration Event (as defined in the Intercreditor Agreement) which is continuing), and any requirement under the Agreed Security Principles to seek consent of any person or take or not take any other action shall be subject to the Agreed Security Principles;

- any security document will only be required to be notarized if required by law in order for the relevant security to become effective or admissible in evidence;

- no guarantee or security will be required to be given by or over any acquired person or asset (and no consent shall be required to be sought with respect thereto) which are required to support Acquired Indebtedness to the extent such Acquired Indebtedness is permitted by the Indenture to remain outstanding after an acquisition. No member of a target group or other entity acquired pursuant to an acquisition permitted by the Indenture shall be required to become a Guarantor or grant security with respect to the Notes if prevented by the terms of the documentation governing that acquired indebtedness (including Acquired Indebtedness or any Refinancing Indebtedness in respect of such Acquired Indebtedness) or if becoming a Guarantor or the granting of any security would give rise to an obligation (including any payment obligation) under or in relation thereto; no security will be granted over any asset secured for the benefit of any debt permitted by the Indenture and/or to the extent constituting a Permitted Lien unless specifically required by a Finance Document to the contrary;

- to the extent possible and unless required by applicable law, there should be no action required to be taken in relation to the guarantees or security when any Holder assigns or transfers any of its Notes to a new holder (and, unless explicitly agreed to the contrary in the Indenture, no member of the Group shall bear or otherwise be liable for any taxes, any notarial, registration or perfection fees or any other costs, fees or expenses that result from any assignment or transfer by a Holder);

- no title investigations or other diligence on assets will be required and no title insurance will be required;

- security will not be required over any assets subject to security in favor of a third party (other than in relation to security under general business conditions of account banks which do not prohibit or prevent the creation of Transaction Security over such accounts) or any cash constituting regulatory capital or customer cash (and such assets or cash shall be excluded from any relevant security document);

- to the extent legally effective, all security will be given in favor of the Security Agent and not the secured creditors individually (with the Security Agent to hold one set of security documents for all secured parties); "*parallel debt*" provisions will be used where necessary (and included in the Intercreditor Agreement and not the individual security documents); no member of the Group will be required to take any action in relation to any guarantees or security as a result of any assignment or transfer by a secured party;

- guarantees and security will not be required from or over the assets of, any joint venture or similar arrangement, any minority interest or any member of the Group that is not wholly owned by another member of the Group;

- each security document shall be deemed not to restrict or condition any transaction permitted under the Indenture or the Intercreditor Agreement and the security granted under each security document shall be deemed to be subject to these Agreed Security Principles, before and after the execution of the relevant security document and creation of the relevant security;

- no security may be provided on terms which are inconsistent with the turnover or sharing provisions in the Intercreditor Agreement;

- the secured parties (or any agent or similar representative appointed by them at the relevant time) will not be able to exercise any power of attorney or set-off granted to them under the terms of the Finance Documents prior to the occurrence of a declared default which is continuing;

- no guarantee or security shall guarantee or secure any "Excluded Swap Obligations" defined in accordance with the LSTA Market Advisory Update dated February 15, 2013 entitled "Swap Regulations' Implications for Loan Documentation", and any update thereto by the LSTA;

- the agreement that the guarantees and security to be provided in respect of the Notes in accordance with the Agreed Security Principles are only to be given by wholly owned Material Subsidiaries (as defined in the Senior Secured Credit Facilities Agreement) incorporated in Germany, Luxembourg, the United Kingdom and the United States of America only (including any state thereof and the District of Columbia) (each, a "Guarantor Jurisdiction") and any other jurisdiction in which a borrower under the Senior Secured Credit Facilities Agreement is incorporated;

- other than a general filing relating to a floating charge or blanket lien, no perfection, filing or other action will be required with respect to assets of a type not owned by members of the Group or not in a Guarantor Jurisdiction or otherwise over the shares of a member of the Group not located in a Guarantor Jurisdiction; and

- no translation of any document relating to any security or any asset subject to any security will be required to be prepared or provided to the secured parties, unless (i) required for such documents to become effective or admissible in evidence and (ii) an Acceleration Event is continuing.

The Agreed Security Principles with respect to the Notes will be interpreted and applied in good faith by the Issuer.

Priority

The relative contractual priority with regard to the security interests in the Collateral that are created by the Transaction Security Documents (the "Security Interests" and each, a "Security Interest") as between (a) the lenders under the Senior Secured Credit Facilities Agreement, (b) the counterparties under certain Hedging Obligations, (c) the Trustee, the Security Agent and the Holders under the Indenture and (d) the creditors of certain other Indebtedness (including Indebtedness that may be Incurred in the future) permitted to be secured by such Collateral, respectively, will be established by the terms of the Intercreditor Agreement, which will provide, among other things, that (i) the obligations under the Senior Secured Credit Facilities Agreement and certain Hedging Obligations and the guarantees thereof are secured equally and ratably by, among other things, first-priority Security Interests in the Shared Collateral, (ii) the Notes and the Note Guarantees are secured equally and ratably by first-priority Security Interests in the SUN Collateral, and (iii) the Notes and the Note Guarantees are secured equally and ratably by junior-priority Security Interests in the Shared Collateral. Pursuant to the terms of the Intercreditor Agreement, the Holders will receive proceeds from the enforcement of, or certain distressed disposals of, the SUN Collateral on a pari passu basis with all indebtedness of the Issuer that is not subordinated in right of payment to the Notes. In addition, the Holders will receive proceeds from the enforcement of, or certain distressed disposals of, the Shared Collateral only after any existing or future Indebtedness with a prior-ranking Lien on such Shared Collateral is repaid in full, including the Senior Secured Credit Facilities. See "*Description of Certain Financing Arrangements—Intercreditor Agreement*."

In addition, the Intercreditor Agreement will restrict the ability of the Trustee or the holders of the Notes to instruct the Security Agent to take enforcement action. The circumstances in which the holders of the Notes may instruct the Security Agent to take enforcement action in respect of the Security Interests over the Shared Collateral are significantly limited. Generally, the Intercreditor Agreement will provide that the holders of prior- ranking security interests in the Shared Collateral will be entitled to control virtually all decisions relating to the exercise of remedies with respect to these Security Interests, will be able to block enforcement of such Security Interests, will be able to release the Security Interests constituting Shared Collateral in certain circumstances and will receive any proceeds from the enforcement of those Security Interests before amounts will be available to the holders of the Notes.

In general, the rights of the Security Agent (acting on its own behalf or on behalf of the holders of the Notes) to take enforcement action under the Transaction Security Documents with respect to the Shared Collateral will be subject to certain standstill provisions and payment blockage and other limitations on enforcement. The Trustee and the holders of the Notes may only act through the Security Agent and will not be able to independently pursue the remedies of a secured creditor under the Transaction Security Documents or until the expiration of the applicable standstill period (being a period of up to 179 days subject to certain exceptions) and for so long as any amounts under the Senior Secured Credit Facilities Agreement, certain Hedging Obligations and any such other Senior Indebtedness or obligations remain outstanding, force a sale of such Shared Collateral. See "*Description of Certain Financing Arrangements—Intercreditor Agreement*."

Transaction Security Documents

Under the Transaction Security Documents, the Issuer and the Parent will grant security over the Charged Property to secure the payment when due of the Issuer's and the Guarantors' payment obligations under the Notes, the Note Guarantees and the Indenture. The Transaction Security Documents will be entered into by the relevant security provider and the Security Agent for itself and as agent for the secured parties. When entering into such Transaction Security Documents, the Security Agent will act in its own name, but for the benefit of the secured parties (including itself, the Trustee and the Holders from time to time). Under the Intercreditor Agreement, the Security Agent also acts as an agent of the lenders under the Senior Secured Credit Facilities Agreement and the counterparties under certain Hedging Obligations in relation to the Security Interests created in favor of such parties.

In certain jurisdictions, due to the laws governing the creation and perfection of Security Interests and local court decisions, the relevant Transaction Security Documents will secure "parallel debt" obligations created under the Intercreditor Agreement in favor of the Security Agent (and not the obligations under the Notes and the Note Guarantees). The parallel debt construct has not been fully tested under the law in certain of these jurisdictions. See "*Risk Factors—Risks Related to the Notes—The Escrow Charge will be granted to the Trustee and the security interests in the remaining Collateral will be granted to the Security Agent, in each case, rather than directly to the holders of the Notes. The ability of the Trustee or the Security Agent, as applicable, to enforce the Collateral may be restricted by local law*."

The Escrow Charge (pending release or Special Mandatory Redemption as described under "*—Escrow of Proceeds; Special Mandatory Redemption*" above) will be granted solely for the benefit of the Trustee on behalf of the Holders of the Notes, and no other persons (including for the avoidance of doubt any lender under the Senior Secured Credit Facilities Agreement, counterparties under any Hedging Obligations or any other creditors) will be entitled to benefit from the Escrow Charge.

The Indenture and the Intercreditor Agreement will provide that, to the extent permitted by applicable law, only the Security Agent will have the right to enforce the Transaction Security Documents on behalf of the Trustee and the Holders. As a consequence of such contractual provisions, Holders will not be entitled to take enforcement action in respect of the Collateral securing the Notes, except through the Trustee under the Indenture, who will (subject to the provisions of the Indenture) provide instructions to the Security Agent. In addition, prior to the discharge of obligations under the Senior Secured Credit Facilities, certain Hedging Obligations and other obligations constituting priority indebtedness under the Intercreditor Agreement, the representatives of the Holders will be subject to a 179-day standstill on the taking of any enforcement action over the Shared Collateral. See "*Description of Certain Financing Arrangements—Intercreditor Agreement*."

The Indenture will provide that, subject to the terms thereof and of the Transaction Security Documents and the Intercreditor Agreement, the Notes and the Indenture, as applicable, will be secured by Security Interests in the Charged Property until all obligations under the Notes and the Indenture have been discharged. However, the Security Interests with respect to the Notes and the Indenture may be released under certain circumstances as provided under "*—Security—Release of Liens*."

In the event that the Issuer or its Subsidiaries enter into insolvency, bankruptcy or similar proceedings, the Security Interests created under the Transaction Security Documents or the rights and obligations enumerated in the Intercreditor Agreement could be subject to potential challenges. If any challenge to the validity of the Security Interests or the terms of the Intercreditor Agreement was successful, the Holders may not be able to recover any amounts under the Transaction Security Documents. See "*Risk Factors—Risks Related to the Notes—The granting of the Note Guarantees and security interests in connection with the issuance of the Notes, or the incurrence of permitted debt in the future, may create or restart hardening or voidance periods for such security interests in accordance with the laws applicable in certain jurisdictions*."

Enforcement of Security Interest

The Indenture and the Intercreditor Agreement will restrict the ability of the Holders or the Trustee to enforce the Security Interests and provide for the release of the Security Interests created by the Transaction Security Documents in certain circumstances upon enforcement by the Security Agent in accordance with the terms of the Intercreditor Agreement. These limitations are described under "*Description of Certain Financing Arrangements—Intercreditor Agreement*" and "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and the Security Interests*." The ability to enforce may also be restricted by similar arrangements in relation to future Indebtedness that is secured on the Collateral in compliance with the Indenture and the Intercreditor Agreement.

The creditors under the Senior Secured Credit Facilities Agreement, the counterparties to Hedging Obligations secured by the Collateral and the Trustee will have or have and, by accepting a Note as described below, each Holder will be deemed to have appointed the Security Agent to act as its agent under the Intercreditor Agreement and the security documents securing such Indebtedness.

Intercreditor Agreement; Additional Intercreditor Agreements; Agreement to be Bound

The Indenture will also provide that each Holder, by accepting a Note, will be deemed (without any further consent of the Holders) to have:

(1) appointed and authorized the Security Agent and the Trustee to enter into and give effect to the provisions in the Intercreditor Agreement, any Additional Intercreditor Agreements and the Transaction Security Documents and perform the duties and exercise the rights, powers and discretions that are specifically given to it under the Intercreditor Agreement and the Transaction Security Documents securing such Indebtedness, together with any other incidental rights, power and discretions;

(2) agreed to be bound by the provisions of the Intercreditor Agreement, any Additional Intercreditor Agreements and the Transaction Security Documents; and

(3) irrevocably appointed the Security Agent and the Trustee to act in its name and on its behalf to enter into and comply with the provisions of the Intercreditor Agreement, any Additional Intercreditor Agreements and the Transaction Security Documents (including the execution of, and compliance with, any waiver, modification, amendment, renewal or replacement expressed to be executed by the Trustee or the Security Agent on its behalf) and to be bound thereby and to perform their respective obligations and exercise their respective rights thereunder in accordance therewith.

See the section entitled "*Risk Factors—Risks Related to the Notes—The Escrow Charge will be granted to the Trustee and the security interests in the remaining Collateral will be granted to the Security Agent, in each case, rather than directly to the holders of the Notes. The ability of the Trustee or the Security Agent, as applicable, to enforce the Collateral may be restricted by local law*."

Similar provisions to those described above may be included in any Additional Intercreditor Agreement (as defined below) entered into in compliance with the covenant described under "*—Certain Covenants—Additional Intercreditor Agreements*."

Release of Liens

Subject to the terms of the Intercreditor Agreement or any Additional Intercreditor Agreement, release of the Security Interests in respect of the Charged Property will be permitted under any one or more of the following circumstances:

(1) other than the Liens over the Capital Stock of the Issuer, in connection with any transfer, sale or other disposition of Charged Property to (a) a Person that is not the Issuer or a Restricted Subsidiary (but excluding any transaction subject to "*—Merger and Consolidation*"), if such sale or other disposition does not violate the covenant described under "*—Certain Covenants—Limitation on Sales of Assets and Subsidiary Stock*" and is otherwise not prohibited by the Indenture or (b) any Restricted Subsidiary; provided that this sub-clause (b) shall not be relied upon in the case of a transfer of Capital Stock or of accounts receivable (including intercompany loan receivables and hedging receivables) to a Restricted Subsidiary (except to a Securitization Subsidiary) unless the relevant property and assets (to the extent already secured in favor of the Notes) remain subject to, or otherwise become subject to, a Lien, or substantially equivalent Liens are granted, in favor of the Notes following such transfer, sale or disposal;

(2) in the case of a Guarantor that is released from its Note Guarantee pursuant to the terms of the Indenture, the release of the property and assets of, and Capital Stock in, such Guarantor;

(3) as described under "*—Amendments and Waivers*" and "*—Certain Covenants—Limitation on Liens*";

(4) upon payment in full of principal, interest and all other obligations on the Notes or legal defeasance, covenant defeasance or satisfaction and discharge of the Notes, as provided in "*—Defeasance*" and "*—Satisfaction and Discharge*";

(5) if the Issuer designates any Restricted Subsidiary to be an Unrestricted Subsidiary in accordance with the applicable provisions of the Indenture, the release of the property and assets, and Capital Stock, of such Unrestricted Subsidiary, and the release of any assets designated by the Issuer as Receivables Assets in connection with a Receivables Facility;

(6) in connection with a Permitted Transaction;

(7) upon the occurrence of a Covenant Suspension Event or by written notice from the Issuer to the Trustee upon the Notes achieving an Investment Grade Status; *provided* that if a Reversion Date occurs, subject to the Agreed Security Principles and the limitations described in this Offering Memorandum, the Issuer will use its commercially reasonable efforts for a Lien of substantially equivalent value to such Lien that was released in reliance on this clause to be re-taken to the extent that the Group continues to own such assets that had constituted Charged Property on such date; or

(8) as otherwise permitted in accordance with the Indenture.

In addition, the Security Interests created by the Transaction Security Documents will be released (a) in accordance with the Intercreditor Agreement or any Additional Intercreditor Agreement, including in respect of the provisions relating to an IPO Debt Pushdown and (b) as may be permitted by the covenant described under "*—Certain Covenants—Impairment of Security Interest*."

The Security Interests over the assets subject to the Escrow Charge will be released upon the occurrence of the Escrow Release or in connection with the Special Mandatory Redemption.

The Security Agent and the Trustee (if necessary or required) will take all necessary action reasonably requested by the Issuer to effectuate any release of Charged Property securing the Notes and the Note Guarantees, including executing and delivering any appropriate document or instrument evidencing such release (in the form provided by the Issuer), in accordance with the provisions of the Indenture, the Intercreditor Agreement or any Additional Intercreditor Agreement and the relevant Transaction Security Document. Each of the releases set forth above shall occur automatically or, if required to effect the release, be effected by the Security Agent without the consent of the Holders or any action on the part of the Trustee (unless action is required by it to effect such release). The Security Agent and, only to the extent any action is necessary or required by it to effect the release, the Trustee shall be entitled to request and rely solely upon an Officer's Certificate and Opinion of Counsel, each certifying which circumstance, as described above, giving rise to a release of the Security Interests has occurred, and that such release complies with the Indenture; *provided* that with respect to the release of the Security Interests over the assets subject to the Escrow Charge, the Trustee shall only be entitled to receive (i) in connection with the Escrow Release, the Escrow Release Officer's Certificate or (ii) in connection with the Special Mandatory Redemption, a notice of the Special Mandatory Redemption, in each case, as described under "*—Escrow of Proceeds; Special Mandatory Redemption*" and no other Officer's Certificate or Opinion of Counsel shall be required in connection therewith.

IPO Debt Pushdown

On or following certain public equity offerings (an "IPO Event") (or in contemplation of an IPO Event with respect to the release of Security Interests if required to implement such IPO Event), the terms of the Intercreditor Agreement provide (and the Indenture and the Notes shall be subject to such provisions) that the Issuer shall be entitled to require (by written notice to the Trustee and the Security Agent) that the terms of the Indenture, the Intercreditor Agreement (and any Additional Intercreditor Agreement) and the Transaction Security Documents shall operate (with effect from the date specified in such notice) as described under "*Description of Certain Financing Arrangements—Intercreditor Agreement—Required Consents—Provisions Following an IPO*" (an "IPO Debt Pushdown"). Following such notice, among other things, the Group would comprise of the member of the Group or holding company of the Issuer who will issue shares or whose shares are to be sold pursuant to such IPO Event, subject to certain limitations while the Notes are outstanding or in certain other circumstances (the "IPO Pushdown Entity") and its restricted subsidiaries and the Indenture will include provisions to provide for substitution of the IPO Pushdown Entity as issuer in accordance with the provisions of the Intercreditor Agreement. Any Parent Holding Company of the IPO Pushdown Entity would not be subject to the provisions of the Indenture and the other Note Documents and any security over its assets may be released or if a Guarantor, its Note Guarantee may be released, in each case, in accordance with the provisions of the Indenture. The Trustee and the Security Agent shall be required to enter into any amendment to the Indenture, the Intercreditor Agreement (and any Additional Intercreditor Agreement) or the Transaction Security Documents (in the case of the Security Agent) required by the Issuer, enter into any document or instrument in connection therewith and/or take such other action as is required by the Issuer in order to facilitate or reflect any of the matters contemplated by the Intercreditor Agreement; *provided* that such amendment, replacement or other document or instrument does not impose personal obligations on the Trustee or the Security Agent or, affect the rights, duties, liabilities, indemnification or immunity of the Trustee or the Security Agent under such amendment, release, replacement or other document or instrument.

Optional Redemption

Except as set forth below and except as described under "*—Redemption for Taxation Reasons*," the Notes are not redeemable at the option of the Issuer.

At any time and from time to time prior to , 2025, the Issuer may, at its option, redeem the Notes, in whole or in part, upon notice as described under "*—Selection and Notice*," at a redemption price equal to 100% of the principal amount of such Notes plus the Applicable Premium with respect to the Notes as of, and accrued and unpaid interest and Additional Amounts, if any, to, but excluding, the redemption date.

At any time and from time to time prior to , 2025, the Issuer may, at its option, redeem an aggregate principal amount of Notes upon notice as described under "*—Selection and Notice*," not to exceed the Net Cash Proceeds received by the Issuer from one or more Equity Offerings or a contribution to the Issuer's common share capital made with the Net Cash Proceeds of one or more Equity Offerings, at a redemption price equal to % of the principal amount of such Notes plus accrued and unpaid interest and Additional Amounts, if any, to, but excluding, the redemption date; *provided* that:

(1) the aggregate principal amount redeemed shall not exceed 40% of the aggregate principal amount of the Notes issued under the Indenture (including any Additional Notes of the same series);

(2) at least 50% of the original aggregate principal amount of the Notes originally issued under the Indenture on the Issue Date (excluding Additional Notes of the same series) remains outstanding immediately after the occurrence of each such redemption (unless all Notes are redeemed substantially concurrently); and

(3) each such redemption occurs not later than 180 days after the closing of the related Equity Offering.

At any time and from time to time on or after , 2025, the Issuer may, at its option, redeem the Notes in whole or in part, upon notice as described under "—*Selection and Notice*," at a redemption price equal to the percentage of principal amount set forth below plus accrued and unpaid interest and Additional Amounts, if any, on the Notes redeemed, to, but excluding, the applicable redemption date, if redeemed during the twelve-month period beginning on of the year indicated below:

Year	Percentage
2025	%
2026	%
2027, and thereafter	100.000%

Other Redemption Terms

Notwithstanding the foregoing, in connection with any tender offer for any series of Notes, including a Change of Control Offer or Asset Disposition Offer, if Holders of not less than 90% in aggregate principal amount of the outstanding Notes of such series validly tender and do not withdraw such Notes in such tender offer and the Issuer, or any third party making such a tender offer in lieu of the Issuer, purchases all of the Notes validly tendered and not withdrawn by such Holders, the Issuer or such third party will have the right upon not less than 10 nor more than 60 days' prior notice, given not more than 30 days following such purchase date, to redeem all Notes of such series, in whole or in part, that remain outstanding following such purchase at a price equal to the price offered to each other Holder (excluding any early tender or incentive fee) in such tender offer plus, to the extent not included in the tender offer payment, accrued and unpaid interest and Additional Amounts, if any, thereon, to, but excluding, the date of such redemption. Without prejudice to any provision of the Indenture regarding Notes deemed to not be outstanding for voting purposes if held by the Issuer or its Affiliates, in determining whether the Holders of at least 90% of the aggregate principal amount of the then outstanding Notes of a series have validly tendered and not validly withdrawn Notes in a tender offer, including a Change of Control Offer or Asset Disposition Offer, Notes owned by an Affiliate of the Issuer or by funds controlled or managed by any Affiliate of the Issuer, or any successor thereof, shall be deemed to be outstanding for the purposes of such tender offer and such determination.

Notice of redemption will be provided as set forth under "—*Selection and Notice*" below.

Notice of any redemption of the Notes (other than a Special Mandatory Redemption) may, at the Issuer's discretion, be given prior to the completion of a transaction (including an Equity Offering, an incurrence of Indebtedness, a Change of Control, an Asset Disposition or other transaction) and any redemption may, at the Issuer's discretion, be subject to one or more conditions precedent, including, but not limited to, completion of a related transaction. If such redemption or purchase is so subject to satisfaction of one or more conditions precedent, such notice shall describe each such condition, and if applicable, shall state that, in the Issuer's discretion, the redemption or repurchase date may be delayed until such time (including more than 60 days after the date the notice of redemption or offer to purchase was sent) as any or all such conditions shall be satisfied (or waived by the Issuer in its sole discretion), or such redemption or purchase may not occur and such notice may be rescinded in the event that any or all such conditions shall not have been satisfied (or waived by the Issuer in its sole discretion) by the redemption or purchase date, or by the redemption or purchase date as so delayed, or that such notice may be rescinded at any time in the Issuer's sole discretion if the Issuer determines that any or all of such conditions will not be satisfied or waived. In addition, the Issuer may provide in such notice that payment of the redemption or purchase price and performance of the Issuer's obligations with respect to such redemption may be performed by another Person.

The Issuer may redeem Notes pursuant to one or more of the relevant provisions in the Indenture, and, subject to the requirements of the Relevant Clearing System, a single notice of redemption may be delivered with respect to redemptions made pursuant to different provisions. Any such notice may provide that redemptions made pursuant to different provisions will have the same or different redemption dates.

If requested in writing by the Issuer (which request may be included in an Officer's Certificate) to the Trustee and the Paying Agent, the Paying Agent will distribute any amounts deposited to the Holders prior the redemption date, as the case may be; *provided, however,* that the Holders shall have received at least five Business Days' notice from the Issuer of such earlier repayment date (which may be included in the notice of redemption). For the avoidance of doubt, the distribution and payment to Holders prior to the redemption date as set forth above will not include any negative interest, present value adjustment, break costs or any other premium on such amounts.

If the optional redemption date is on or after a record date and on or before the corresponding interest payment date, the accrued and unpaid interest up to, but excluding, the redemption date will be paid on the redemption date to the Holder in whose name the Note is registered at the close of business on such record date in accordance with the applicable procedures of the Relevant Clearing System, and no additional interest will be payable to Holders whose Notes will be subject to redemption by the Issuer.

Unless the Issuer defaults in the payment of the redemption price, interest will cease to accrue on the Notes or portions thereof called for redemption on the applicable redemption date.

Mandatory Redemption or Sinking Fund; Transactions in the Notes

Except as described under the caption "*—Escrow of Proceeds; Special Mandatory Redemption*," the Issuer is not required to make mandatory redemption payments or sinking fund payments with respect to the Notes. However, under certain circumstances, the Issuer may be required to offer to purchase Notes as described under "*—Change of Control*" and "*—Certain Covenants—Limitations on Sales of Assets and Subsidiary Stock*." As market conditions warrant, we and our equity holders, including the Permitted Holders, their respective Affiliates and members of our management, may from time to time seek to purchase our outstanding debt securities or loans, including the Notes or derivative instruments related thereto, in privately negotiated or open market transactions, by tender offer or otherwise. Subject to any applicable limitations contained in the agreements governing our indebtedness, including the Indenture, the Intercreditor Agreement and any Additional Intercreditor Agreement, any purchases made by us may be funded by the use of cash on our balance sheet or the incurrence of new secured or unsecured debt, including borrowings under our credit facilities. The amounts involved in any such purchase transactions, individually or in the aggregate, may be material. Any such purchases may be with respect to a substantial amount of a particular class or series of debt, with the attendant reduction in the trading liquidity of such class or series.

Selection and Notice

In the event that any global Note (or any portion thereof) is redeemed, the Relevant Clearing System, as applicable, will redeem an equal amount of the Book-Entry Interests in such global Note from the amount received by them in respect of the redemption of such global Note. The redemption price payable in connection with the redemption of such Book Entry Interests will be equal to the amount received by the Relevant Clearing System, as applicable, in connection with the redemption of such global Note (or any portion thereof).

Under the existing practices of Euroclear and Clearstream, if fewer than all of the Notes are to be redeemed at any time, Euroclear and Clearstream will credit their respective participants' accounts on a pro rata basis (such as by way of a pool factor), by lot or on such other basis as they deem fair and appropriate and in accordance with their applicable procedures (unless otherwise required by law or applicable stock exchange rules); *provided* that no Book-Entry Interest of less than €100,000 principal amount may be redeemed in part. If the Notes are not held through Euroclear or Clearstream, the Notes will be selected on a pro rata basis, subject to adjustments so that no Note in an unauthorized denomination remains outstanding after such redemption; *provided, however*, that no such partial redemption shall reduce the outstanding principal amount of any Notes below €100,000. The Trustee, the Paying Agent and the Registrar shall not be liable for selections made under this paragraph.

Notices of redemption will be delivered electronically or mailed by first-class mail, postage prepaid, at least 10 days but not more than 60 days before the redemption date to each Holder of Notes to be redeemed at the address of such Holder appearing in the security register or otherwise in accordance with the applicable procedures of the Relevant Clearing System, except that redemption notices may be delivered electronically or mailed more than 60 days prior to a redemption date if the notice is issued in connection with a legal or covenant defeasance of the Notes or a satisfaction and discharge of the Indenture.

If and for so long as any Notes are listed on the Official List of the Exchange and if and to the extent the rules of the Authority so require, the Issuer will notify the Authority of any such notice to the Holders of the Notes and, in connection with any redemption, the Issuer will notify the Authority of any change in the principal amount of Notes outstanding.

If any Note is to be redeemed in part only, the notice of redemption that relates to that Note shall state the portion of the principal amount thereof to be redeemed. When the Notes are held in certificated form, a new Note in principal amount equal to the unredeemed portion of the original Note will be issued in the name of the Holder thereof upon cancellation of the original Note. When the Notes are held in the form of global notes, an appropriate notation will be made on such Note (or otherwise in accordance with the applicable procedures of the Relevant Clearing Systems) to decrease the principal amount thereof to an amount equal to the unredeemed portion thereof. Subject to the terms of the applicable redemption notice (including any conditions contained therein), Notes called for redemption become due on the date fixed for redemption. On and after the redemption date, unless the Issuer defaults in the payment of the redemption price, interest ceases to accrue on Notes or portions of them called for redemption.

Except as otherwise required under the Indenture, the Issuer may elect to redeem or repurchase one or more series of Notes or a portion of a series of Notes without redeeming any other series of Notes.

Redemption for Taxation Reasons

The Issuer may redeem the Notes in whole, but not in part, at any time at its discretion upon giving not less than 10 nor more than 60 days' prior notice to the Holders (which notice will be irrevocable) at a redemption price equal to 100% of the principal amount thereof, together with accrued and unpaid interest, if any, to but excluding the date fixed for redemption (a "Tax Redemption Date") (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date) and all Additional Amounts, as defined below under "*—Withholding Taxes*," if any, then due and which will become due on the Tax Redemption Date as a result of the redemption or otherwise, if the Issuer determines in good faith that, as a result of:

(1) any change in, or amendment to, the law or treaties (or any regulations, official guidance or rulings promulgated thereunder) of a Relevant Taxing Jurisdiction (as defined below under "—*Withholding Taxes*") affecting taxation; or

(2) any amendment to, introduction of or change in an official application, administration or interpretation of such laws, treaties, regulations, official guidance or rulings (including by reason of a holding, judgment or order by a court of competent jurisdiction or a change in published practice or revenue guidance) (each of the foregoing in clauses (1) and (2), a "Change in Tax Law"),

a Payor (as defined below under "—*Withholding Taxes*") is, or on the next interest payment date in respect of the Notes would be, required to pay Additional Amounts (or increased Additional Amounts) with respect to the Notes (but, in the case of a Guarantor, only if the payment giving rise to such requirement cannot be made by the Issuer or another Guarantor who can make such payment without the obligation to pay Additional Amounts), and such obligation cannot be avoided by taking reasonable measures available to the Payor (including, for the avoidance of doubt, the appointment of a new Paying Agent where this would be reasonable). Such Change in Tax Law must be formally announced and become effective on or after the Issue Date (or if the applicable Relevant Taxing Jurisdiction became a Relevant Taxing Jurisdiction on a date after the Issue Date, such later date). The foregoing provisions the laws and official positions of any jurisdiction in which any successor to a Payor is organized or otherwise considered to be a resident for tax purposes or any political subdivision or taxing authority or agency thereof or therein. The foregoing provisions will survive any termination, defeasance or discharge of the Indenture.

Notice of redemption for taxation reasons will be published in accordance with the procedures described under "—*Selection and Notice*." Notwithstanding the foregoing, no such notice of redemption will be given earlier than 60 days prior to the earliest date on which the Payor would be obligated to make such payment of Additional Amounts. Prior to the publication or mailing of any notice of redemption of Notes pursuant to the foregoing, the Issuer will deliver to the Trustee (a) an Officer's Certificate stating that it is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to its right to so redeem have been satisfied and that the obligation to pay Additional Amounts cannot be avoided by the relevant Payor taking reasonable measures available to it and (b) a written opinion of an independent tax counsel of recognized standing qualified under the laws of the Relevant Taxing Jurisdiction and satisfactory to the Trustee (such approval not to be unreasonably withheld) to the effect that the Payor has been or will become obligated to pay Additional Amounts as a result of a Change in Tax Law. The Trustee will accept and shall be entitled to rely conclusively on such Officer's Certificate and opinion as sufficient evidence of the satisfaction of the conditions precedent described above, without liability or further inquiry, in which event it will be conclusive and binding on the Holders.

Withholding Taxes

All payments made by or on behalf of the Issuer or any Guarantor (including any successor entity) (each, a "Payor") in respect of the Notes or with respect to any Note Guarantee, as applicable, will be made free and clear of and without withholding or deduction for, or on account of, any Taxes unless the withholding or deduction of such Taxes is then required by law. If any deduction or withholding for, or on account of, any Taxes imposed or levied by or on behalf of:

(1) any jurisdiction from or through which payment on any such Note is made by any Payor or by the Paying Agent on behalf of any Payor, or any political subdivision or governmental authority thereof or therein having the power to tax (including the jurisdiction of the Paying Agent); or

(2) any other jurisdiction in which a Payor is incorporated or organized, engaged in business for tax purposes, or otherwise considered to be a resident for tax purposes, or any political subdivision or governmental authority thereof or therein having the power to tax (each of clause (1) and (2), a "Relevant Taxing Jurisdiction"),

will at any time be required by law to be made from any payments made by any Payor or the Paying Agent on behalf of any Payor, with respect to any Note, including payments of principal, redemption price, interest or premium, if any, such Payor will pay (together with such payments) such additional amounts (the "Additional Amounts") as may be necessary in order that the net amounts received by each Holder in respect of such payments, after such withholding or deduction (including any such withholding or deduction from such Additional Amounts), will not be less than the amounts which would have been received by each Holder in respect of such payments on any such Note or Note Guarantee in the absence of such withholding or deduction; *provided, however*, that no such Additional Amounts will be payable for or on account of:

(1) any Taxes, to the extent such Taxes would not have been so imposed but for the existence of any actual or deemed present or former connection between the relevant Holder (or between a fiduciary, settlor, beneficiary, member, partner or shareholder of, or possessor of power over the relevant Holder, if the relevant Holder is an estate, nominee, trust, partnership, limited liability company or corporation) and the

Relevant Taxing Jurisdiction (including, without limitation, being resident for tax purposes, or being a citizen or resident or national of, or carrying on a business or maintaining a permanent establishment in or place of management present in, or being physically present in, the Relevant Taxing Jurisdiction) but excluding, in each case, any connection arising solely from the acquisition, ownership or holding of such Note or the receipt of any payment or the exercise or enforcement of rights under such Note, the Indenture or a Note Guarantee;

(2) any Taxes, to the extent such Taxes are imposed or withheld by reason of the failure by the Holder or the beneficial owner of the Note to comply with a written request of the Payor addressed to the Holder or beneficial owner, after reasonable notice (at least 30 days before payment from which any such withholding or deduction is required would be payable), to provide certification, information, documents or other evidence concerning the nationality, residence or identity of the Holder or such beneficial owner or to make any declaration or similar claim or satisfy any other reporting requirement relating to such matters, which is required by a law, statute, treaty, regulation or administrative practice of the Relevant Taxing Jurisdiction as a precondition to exemption from, or reduction in the rate of, all or part of such Tax, but, in each case, only to the extent the Holder or beneficial owner is legally entitled to do so;

(3) any Taxes, to the extent such Taxes are imposed as a result of the presentation of the Note for payment (where Notes are in the form of Definitive Registered Notes and presentation is required) more than 30 days after the relevant payment is first made available for payment to the Holder (except to the extent that the Holder would have been entitled to Additional Amounts had the Note been presented on the last day of such 30 day period);

(4) any Taxes that are payable otherwise than by deduction or withholding from a payment with respect to the Notes or with respect to any Note Guarantee;

(5) any estate, inheritance, gift, sales, transfer, capital gains, excise, personal property or similar Taxes imposed on any Note or the transfer thereof;

(6) any Taxes imposed, deducted or withheld pursuant to section 1471(b) of the Code, or otherwise imposed pursuant to sections 1471 through 1474 of the Code, in each case, as of the Issue Date (and any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or agreements thereunder, official interpretations thereof or similar law or regulation implementing an intergovernmental agreement relating thereto;

(7) any Taxes directly attributable to the failure of the representation in paragraph (12) under "*Transfer Restrictions*" in this Offering Memorandum to be true with respect to the relevant holder or beneficial owner; or

(8) any combination of the items (1) through (7) above.

In addition, no Additional Amounts shall be paid with respect to a Holder who is a fiduciary or a partnership or any person other than the beneficial owner of the Notes, to the extent that the beneficiary or settler with respect to such fiduciary, the member of such partnership or the beneficial owner would not have been entitled to Additional Amounts had such beneficiary, settler, member or beneficial owner held such Notes directly.

The Payor will (i) make any required withholding or deduction and (ii) remit the full amount deducted or withheld to the relevant tax authority in accordance with applicable law. The Payor will use reasonable efforts to provide certified copies of tax receipts evidencing the payment of any Taxes so deducted or withheld from each Relevant Taxing Jurisdiction imposing such Taxes, or if such tax receipts are not available, certified copies of such other reasonable evidence as is available of such payments as soon as reasonably practicable to the Trustee (with a copy to the Paying Agent). Such copies shall be made available to the Holders upon reasonable request and will be made available at the offices of the Paying Agent.

If any Payor is obligated to pay Additional Amounts with respect to any payment made on any Note or any Note Guarantee, at least 30 days prior to the date of such payment, the Payor will deliver to the Trustee and the Paying Agent an Officer's Certificate stating the fact that Additional Amounts will be payable and the amount estimated to be so payable and such other information necessary to enable the Paying Agent to pay Additional Amounts to Holders on the relevant payment date (unless such obligation to pay Additional Amounts arises less than 45 days prior to the relevant payment date, in which case the Payor may deliver such Officer's Certificate as promptly as practicable after the date that is 30 days prior to the payment date). The Trustee and the Paying Agent shall be entitled to conclusively rely on such Officer's Certificate as conclusive proof that such payments are necessary.

Wherever in the Indenture, the Notes or this "*Description of the Notes*" there is mentioned, in any context:

(1) the payment of principal;

(2) purchase prices in connection with a purchase of the Notes;

(3) interest; or

(4) any other amount payable on or with respect to any of the Notes or any Note Guarantee, such reference shall be deemed to include payment of Additional Amounts to the extent that, in such context, Additional Amounts are, were or would be payable in respect thereof.

The Payor will pay each applicable Holder for any present or future stamp, issue, registration, court or documentary taxes, or similar charges or levies (including any related interest or penalties with respect thereto) or any other excise, property or similar taxes or similar charges or levies (including any related interest or penalties with respect thereto) that arise in a Relevant Taxing Jurisdiction from the execution, issuance, delivery, registration, enforcement of, or receipt of payments with respect to any Notes, any Note Guarantee, the Indenture, or any other document or instrument in relation thereto (in each case, other than in connection with a transfer after this offering) and limited, solely to the extent of such taxes or similar charges or levies that arise from the receipt of any payments of principal or interest on the Notes, to any such taxes or similar charges or levies that are not excluded under clauses (1) through (3) and (5) through (8).

The foregoing obligations will survive any termination, defeasance or discharge of the Indenture, any transfer by a Holder or beneficial owner, and will apply mutatis mutandis to any jurisdiction in which any successor to a Payor is incorporated or organized, engaged in business for tax purposes or otherwise resident for tax purposes, or any jurisdiction from or through which any payment under, or with respect to the Notes (or any Note Guarantee) is made by or on behalf of such successor Payor, or any political subdivision or taxing authority or agency thereof or therein.

Change of Control

The Indenture will provide that if a Change of Control Triggering Event occurs, unless (i) a third party makes a Change of Control Offer or (ii) the Issuer has previously or substantially concurrently therewith delivered a redemption notice with respect to all the outstanding Notes as described in the seventh paragraph under this heading "—*Change of Control*," the Issuer will make an offer to purchase all of the Notes (*provided* that Notes of €100,000 or less in principal amount may only be redeemed in whole and not in part) pursuant to the offer described below (the "Change of Control Offer") at a price in cash equal to 101% of the aggregate principal amount thereof plus accrued and unpaid interest and Additional Amounts, if any, to but excluding the date of repurchase; *provided* that if the repurchase date is on or after the record date and on or before the corresponding interest payment date, then Holders in whose name the Notes are registered at the close of business on such record date will receive interest on the repurchase date. Within 60 days following any Change of Control Triggering Event, the Issuer will deliver or cause to be delivered a notice of such Change of Control Offer electronically in accordance with the applicable procedures of the Relevant Clearing Systems or by first-class mail, with a copy to the Trustee, to each Holder of Notes at the address of such Holder appearing in the security register or otherwise in accordance with the applicable procedures of the Relevant Clearing Systems, describing the transaction or transactions that constitute the Change of Control Triggering Event and offering to repurchase the Notes for the specified purchase price on the date specified in the notice, which date will be no earlier than 10 days and no later than 60 days from the date such notice is delivered, pursuant to the procedures required by the Indenture and described in such notice, except in the case of a conditional Change of Control Offer made in advance of a Change of Control Triggering Event as described below.

To the extent that the provisions of any securities laws, rules or regulations, including Rule 14e-1 under the Exchange Act, conflict with the provisions of the Indenture, the Issuer will comply with the applicable securities laws and regulations and shall not be deemed to have breached its obligations described in the Indenture by virtue thereof. The Issuer may rely on any no-action letters issued by the SEC indicating that the staff of the SEC will not recommend enforcement action in the event a tender offer satisfies certain conditions.

Except as described above with respect to a Change of Control Triggering Event, the Indenture does not contain provisions that permit the Holders to require that the Issuer repurchase or redeem the Notes in the event of a takeover, recapitalization or similar transaction. Holders' right to require the Issuer to repurchase Notes upon the occurrence of a Change of Control Triggering Event may deter a third party from seeking to acquire the Issuer or its Subsidiaries in a transaction that would constitute a Change of Control Triggering Event.

The occurrence of events which would constitute a Change of Control would entitle each lender under the Senior Secured Credit Facilities Agreement (individually) to cancel its commitments and require prepayment of amounts outstanding to it under the Senior Secured Credit Facilities Agreement and could trigger a change of control under other financing arrangements of the Group. Future Indebtedness of the Issuer's Subsidiaries may contain prohibitions on certain events which would constitute a change of control or require such Indebtedness to be repurchased upon a change of control. Moreover, the exercise by the Holders of their right to require the Issuer to repurchase the Notes could cause a default under such Indebtedness, even if the Change of Control Triggering Event itself does not, due to the financial effect of such repurchase on the Issuer. There can be no assurance that sufficient funds will be available when necessary to make any required repurchases.

The Issuer's ability to pay cash to the Holders of Notes following the occurrence of a Change of Control Triggering Event may be limited by its then-existing financial resources. Therefore, sufficient funds may not be available when necessary to make any required repurchases. The Change of Control Triggering Event purchase feature of the Notes may in certain circumstances make more difficult or discourage a sale or takeover of us and, thus, the removal of incumbent management.

Subject to the limitations discussed below, the Issuer could, in the future, enter into certain transactions, including acquisitions, refinancings or other recapitalizations, that would not constitute a Change of Control Triggering Event under the Indenture, but that could increase the amount of Indebtedness outstanding at such time or otherwise affect our capital structure or credit ratings. Restrictions on our ability to incur additional Indebtedness are contained in the covenants described under "*—Certain Covenants—Limitation on Indebtedness*" and "*—Certain Covenants—Limitation on Liens*." Such restrictions in the Indenture can be waived only with the consent of the Holders of a majority in principal amount of the Notes then outstanding. Except for the limitations contained in such covenants, however, the Indenture will not contain any covenants or provisions that may afford Holders protection in the event of a highly leveraged transaction.

The Issuer will not be required to make a Change of Control Offer following a Change of Control Triggering Event if (i) a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in the Indenture applicable to a Change of Control Offer made by the Issuer and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer or (ii) a notice of redemption of all outstanding Notes has been given pursuant to the Indenture as described under "*—Optional Redemption*," unless and until there is a default in the payment of the redemption price on the applicable redemption date or the redemption is not consummated due to the failure of a condition precedent contained in the applicable redemption notice to be satisfied. Notwithstanding anything to the contrary herein, a Change of Control Offer may be made in advance of a Change of Control Triggering Event, conditional upon such Change of Control Triggering Event.

The definition of "Change of Control" includes a disposition of all or substantially all of the assets of the Issuer and its Restricted Subsidiaries, taken as a whole, to certain Persons. Although there is a limited body of case law interpreting the phrase "substantially all," there is no precise established definition of the phrase under applicable law. Accordingly, in certain circumstances there may be a degree of uncertainty as to whether a particular transaction would involve a disposition of "all or substantially all" of the assets of the Issuer and its Subsidiaries, taken as a whole. As a result, it may be unclear as to whether a Change of Control Triggering Event has occurred and whether a Holder of Notes may require the Issuer to make an offer to repurchase the Notes as described above.

The provisions under the Indenture relating to the Issuer's obligation to make an offer to repurchase the Notes as a result of a Change of Control Triggering Event may be waived or modified with the written consent of the Holders of a majority in principal amount of the Notes then outstanding.

If and for so long as the Notes are listed on the Official List of the Exchange and if and to the extent that the rules of the Authority so require, the Issuer will notify the Authority of any Change of Control Offer.

Certain Covenants

Set forth below are summaries of certain covenants that will be contained in the Indenture. For the avoidance of doubt, the consummation of the Transaction shall not be prohibited by the covenants below under "*—Certain Covenants*."

Suspension of Covenants on Achievement of Investment Grade Status

Following the first day:

(a) a series of Notes has achieved Investment Grade Status; and

(b) no Default or Event of Default has occurred and is continuing under the Indenture,

(the occurrence of such events, a "Covenant Suspension Event" and the date thereof being referred to as the "Suspension Date"), then, beginning on the Suspension Date until the occurrence of the Reversion Date (as defined below), (i) the amount of each basket set by reference to a monetary amount for which a specific amount is set out in the Indenture and any definitions used therein (including all "annual," "life of facilities", "fiscal year", "financial year", "calendar year", "at any time" and "aggregate" baskets) shall be increased by 50% and (ii) the covenants specifically listed under the following captions in this offering memorandum will no longer be applicable to the Notes (collectively, the "Suspended Covenants"):

- "*—Limitation on Indebtedness*";
- "*—Limitation on Restricted Payments*";
- "*—Limitation on Sales of Assets and Subsidiary Stock*";
- "*—Limitation on Affiliate Transactions*";
- the provisions of clauses (ii) and (iv) under "*—Merger and Consolidation—The Issuer*";
- "*—Limitation on Restrictions on Distributions from Restricted Subsidiaries*";
- "*—Limitation on Guarantees of Indebtedness by Restricted Subsidiaries*"; and
- "*—Impairment of Security Interest*."

During any period that the foregoing covenants have been suspended, the Issuer may not designate any of its Subsidiaries as Unrestricted Subsidiaries. If and while the Issuer and its Restricted Subsidiaries are not subject to the Suspended Covenants, the Notes will be entitled to substantially less covenant protection. In the event that the Issuer and its Restricted Subsidiaries are not subject to the Suspended Covenants under the Indenture for any period of time as a result of the foregoing, and on any subsequent date (the "Reversion Date") the Notes no longer have an Investment Grade Rating or a Rating Agency withdraws its Investment Grade Rating or downgrades the rating assigned to the relevant series of Notes below an Investment Grade Rating (in each case, to the extent given an Investment Grade Rating by such Rating Agency), then the Issuer and its Restricted Subsidiaries will thereafter again be subject to the Suspended Covenants under the Indenture with respect to future events. The period of time between the Suspension Date and the Reversion Date is referred to in this description as the "Suspension Period." The Note Guarantees will be suspended during the Suspension Period. Additionally, upon the occurrence of a Covenant Suspension Event, the amount of Excess Proceeds from any Asset Dispositions shall be reset to zero.

During the Suspension Period, the Issuer and its Restricted Subsidiaries will be entitled to incur Liens to the extent provided for under "*—Limitation on Liens*" (including, without limitation, Permitted Liens) and any Permitted Liens which may refer to one or more Suspended Covenants shall be interpreted as though such applicable Suspended Covenant(s) continued to be applicable during the Suspension Period (but solely for purposes of the "*—Limitation on Liens*" covenant and the definitions of "Permitted Liens" and "Permitted Collateral Liens" and for no other covenant).

Notwithstanding the foregoing, in the event of any such reinstatement, no action taken or omitted to be taken by the Issuer or any of its Restricted Subsidiaries prior to such reinstatement will give rise to a Default or Event of Default under the Indenture, and no Default or Event of Default will be deemed to exist or have occurred as a result of any failure by the Issuer or any Restricted Subsidiary to comply with any of the Suspended Covenants during the Suspension Period; provided, that (1) with respect to Restricted Payments (as defined herein) made after such reinstatement, the amount available to be made as Restricted Payments will be calculated as though the covenant described under the caption "*—Limitation on Restricted Payments*" had been in effect prior to, but not during, the Suspension Period (including with respect to an Applicable Transaction entered into during the Suspension Period); (2) all Indebtedness incurred, committed or issued during the Suspension Period (or deemed incurred or issued in connection with an Applicable Transaction entered into during the Suspension Period) will be classified to have been incurred or issued pursuant to clause (iv)(A) of the second paragraph of "*—Limitation on Indebtedness*"; (3) any Affiliate Transaction (as defined herein) entered into after such reinstatement pursuant to an agreement entered into during any Suspension Period shall be deemed to be permitted pursuant to clause (vi) of the second paragraph of the covenant described under "*—Limitation on Affiliate Transactions*"; (4) any encumbrance or restriction on the ability of any Restricted Subsidiary to take any action described in clauses (i) through (iii) of the first paragraph of the covenant described under "*—Limitation on Restrictions on Distributions from Restricted Subsidiaries*" that becomes effective during any Suspension Period shall be deemed to be permitted pursuant to clause (i) of the second paragraph of the covenant described under "*—Limitation on Restrictions on Distributions from Restricted Subsidiaries*"; (5) no Subsidiary of the Issuer shall be required to comply with the covenant described under "*—Limitation on Guarantees of Indebtedness by Restricted Subsidiaries*" after such reinstatement with respect to any guarantee or obligation entered into by such Subsidiary during any Suspension Period; and (6) all Investments made during the Suspension Period (or deemed made in connection with an Applicable Transaction entered into during the Suspension Period) will be classified to have been made under clause (i) of the definition of "Permitted Investments."

Notwithstanding that the Suspended Covenants may be reinstated after the Reversion Date, (1) no Default, Event of Default or breach of any kind will be deemed to exist under the Indenture, the Notes or the Note Guarantees with respect to the Suspended Covenants, and none of the Issuer or any of its Subsidiaries shall bear any liability for any actions taken or events occurring during the Suspension Period, or any actions taken at any time pursuant to any contractual obligation arising during any Suspension Period, in each case as a result of a failure to comply with the Suspended Covenants during the Suspension Period (or, upon termination of the Suspension Period or after that time based solely on any action taken or event that occurred during the Suspension Period) and (2) following a Reversion Date, the Issuer and each Restricted Subsidiary will be permitted, without causing a Default or Event of Default, to honor, comply with or otherwise perform any contractual commitments or obligations arising during any Suspension Period and to consummate the transactions contemplated thereby.

There can be no assurance that any series of Notes will ever achieve or maintain an Investment Grade Rating. The Trustee shall be notified of a Covenant Suspension Event and a Reversion Date; provided that no such notification shall be a condition for the Covenant Suspension Event to be effective. The Trustee shall have no duty to (i) monitor the ratings of the Notes, (ii) ascertain whether a Covenant Suspension Event or Reversion Date have occurred or (iii) notify the Holders of any of the foregoing.

Limitation on Indebtedness

The Issuer will not, and will not permit any of the Restricted Subsidiaries to, Incur any Indebtedness (including Acquired Indebtedness); provided that the Issuer and any of the Restricted Subsidiaries may Incur Indebtedness (including Acquired Indebtedness), if on the Applicable Test Date and after giving pro forma effect thereto (including pro forma application of the proceeds thereof), either: (i) the Fixed Charge Coverage Ratio is at least 2.00:1.00 or (ii) the Total Net Leverage Ratio does not exceed 7.60:1.00.

The first paragraph of this covenant will not prohibit the Incurrence of the following Indebtedness (collectively, "Permitted Debt"):

(i) the Incurrence by the Issuer or any of the Restricted Subsidiaries of Indebtedness under any Credit Facility (and the issuance and creation of letters of credit, guarantees and bankers' acceptances thereunder) in an aggregate principal amount at any time outstanding not to exceed the sum of:

(A) the aggregate of:

(1) €1,430 million or, if higher, the principal amount of Facility B as at the Acquisition Closing Date; plus

(2) the greater of (x) €250.0 million, or if higher, the principal amount of the Original Revolving Facility as at the Acquisition Closing Date and (y) an amount equal to 100% of LTM EBITDA; plus

(B) the greater of (x) €275.9 million and (y) an amount equal to 100% of LTM EBITDA; plus

(C) the maximum amount of Senior Secured Indebtedness such that, on the Applicable Test Date after giving pro forma effect to such Incurrence, the Senior Secured Net Leverage Ratio does not exceed 5.20:1.00; plus

(D) the maximum amount of Indebtedness that constitutes Total Secured Debt that is not Senior Secured Indebtedness such that, on the Applicable Test Date after giving pro forma effect to such Incurrence, either:

(1) the Total Secured Net Leverage Ratio does not exceed 5.70:1.00; or

(2) the Fixed Charge Coverage Ratio is at least 2.00:1.00; plus

(E) the maximum amount of Indebtedness that is not Senior Secured Indebtedness or Total Secured Debt, or is unsecured such that on the Applicable Test Date, after giving pro forma effect to such Incurrence, either:

(1) the Total Net Leverage Ratio does not exceed 7.60:1.00; or

(2) the Fixed Charge Coverage Ratio is at least 2.00:1.00,

provided that any Indebtedness or unutilized commitments in respect of Indebtedness Incurred or deemed to be Incurred pursuant to this clause (i) may be refinanced at any time if such refinancing does not exceed the greater of (x) the aggregate principal amount of Indebtedness permitted to be Incurred pursuant to this clause (i) on the Applicable Test Date for such refinancing and (y) the aggregate principal amount of the Indebtedness or unutilized commitments in respect of Indebtedness being refinanced at such time (together with an amount necessary to pay accrued and unpaid interest and any fees and expenses (including original issue discount, upfront fees or similar fees), including any premium and defeasance costs, indemnity fees, discounts, premiums (including tender premiums), penalties, taxes, break costs and other costs and expenses Incurred or payable in connection with such refinancing) and, in the case of a refinancing of Indebtedness under Facility B and the Original Revolving Facility, such Indebtedness shall be treated for all purposes as Incurred pursuant to clauses (A)(1) and (A)(2) above, respectively;

(ii) any (A) Guarantees by the Issuer or any Restricted Subsidiary of Indebtedness or other obligations of the Target or any Restricted Subsidiary and (B) without limiting the covenant set out under "*—Limitation on Liens*," Indebtedness arising by reason of any Lien granted by or applicable to such person securing Indebtedness of the Issuer or any Restricted Subsidiary, in each case, so long as the Incurrence of such Indebtedness or other obligations is permitted by the terms of the Indenture;

(iii) Indebtedness of the Issuer owing to and held by any Restricted Subsidiary or Indebtedness of a Restricted Subsidiary owing to and held by the Issuer or any Restricted Subsidiary;

(iv) Indebtedness represented by:

(A) Indebtedness of the Issuer and its Subsidiaries outstanding as of the Acquisition Closing Date or Incurred (or available for Incurrence) under a facility committed or as in effect as of the Acquisition Closing Date;

(B) the Notes (other than any Additional Notes) and any Note Guarantees;

(C) Refinancing Indebtedness Incurred in respect of any Indebtedness described in:

(1) this clause (iv);

(2) clause (v)(B) below; or

(3) the first paragraph of this covenant; and

(D) other Indebtedness Incurred to finance Management Advances;

(v) Indebtedness (x) of the Issuer, any Restricted Subsidiary or any person that will be a Restricted Subsidiary or that will be merged, consolidated or otherwise combined with or into the Issuer or any Restricted Subsidiary Incurred or issued to finance an acquisition (including an acquisition of any assets), merger, amalgamation or consolidation or similar transaction ("Acquisition Debt") or any capital expenditure or (y) of persons that are, or secured by any assets that are, acquired by the Issuer or any Restricted Subsidiary or merged into, amalgamated or consolidated with the Issuer or a Restricted Subsidiary in accordance with the terms of the Indenture; in an aggregate amount not to exceed:

(A) an amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this sub-clause (v)(A) and then outstanding, does not exceed the greater of (x) €69.0 million and (y) an amount equal to 25% of LTM EBITDA as of the Applicable Test Date; plus

(B) unlimited additional Indebtedness to the extent that:

(1) after giving effect to such acquisition (including an acquisition of any assets), merger, amalgamation or consolidation or similar transaction or capital expenditure:

(i) if such Indebtedness is Senior Secured Indebtedness, either (x) the Issuer would be permitted to Incur at least €1.00 of additional Indebtedness pursuant to clause (i)(C) above or (y) the Senior Secured Net Leverage Ratio would not increase as a result;

(ii) if such Indebtedness constitutes Indebtedness that is Total Secured Debt but is not Senior Secured Indebtedness, either (x) the Issuer would be permitted to Incur at least €1.00 of additional Indebtedness pursuant to clause (i)(D) above; (y) the Total Secured Net Leverage Ratio would not increase as a result or (z) the Fixed Charge Coverage Ratio would not decrease as a result;

(iii) if such Indebtedness is not Senior Secured Indebtedness or Total Secured Debt, or is unsecured, either (x) the Issuer would be permitted to Incur at least €1.00 of additional Indebtedness pursuant to the first paragraph of this covenant or clause (i)(E) above; (y) the Total Net Leverage Ratio would not increase as a result or (z) the Fixed Charge Coverage Ratio would not decrease as a result; or

(2) in the case of Acquired Indebtedness, such Indebtedness is discharged within six months of such Incurrence or would otherwise constitute Permitted Debt or Indebtedness Incurred pursuant to the first paragraph of this covenant.

(vi) Hedging Obligations (excluding Hedging Obligations entered into for speculative purposes as determined in good faith by the Issuer);

(vii) Indebtedness:

(A) represented by Capitalized Lease Obligations, mortgage financings, Purchase Money Obligations or other financings, Incurred for the purpose of financing all or any part of the purchase price or cost of construction or improvement of property, plant or equipment used in a Similar Business or Indebtedness otherwise Incurred to finance the purchase, lease, rental or cost of design, construction, installation or improvement of property (real or personal) or equipment that is used or useful in a Similar Business, whether through the direct purchase of assets or the Capital Stock of any person owning such assets, and any Indebtedness which refinances, replaces or refunds such Indebtedness either:

(1) Incurred in the ordinary course of business or consistent with past practice; or otherwise

(2) in an aggregate outstanding principal amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this sub-clause (vii)(A)(2) and then outstanding, does not exceed the greater of (x) €103.5 million and (y) an amount equal to 37.5% of LTM EBITDA as of the Applicable Test Date,

provided that, in each case, the Indebtedness exists on the date of such purchase, lease, rental, construction, design, installation or improvement or is created within 270 days thereafter; or

(B) arising out of Sale and Leaseback Transactions;

(viii) Indebtedness in respect of:

(A) workers' compensation claims, old-age-part-time arrangements, self-insurance obligations, unemployment insurance (including premiums related thereto), other types of social security, pension obligations or partial retirement obligations, vacation pay, health, disability or other employee benefits, customer guarantees performance, indemnity, surety, judgment, appeal, advance payment (including progress premiums), customs, value added or other tax or other guarantees or other similar bonds, instruments or obligations and completion guarantees and warranties provided by the Issuer or a Restricted Subsidiary or relating to liabilities, obligations or guarantees Incurred either:

(1) Incurred in the ordinary course of business or consistent with past practice; or otherwise

(2) in an aggregate principal amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this sub-clause (viii)(A)(2) and then outstanding, does not exceed the greater of (x) €13.8 million and (y) an amount equal to 5% of LTM EBITDA, as of the Applicable Test Date;

(B) the honoring by a bank or other financial institution of a check, draft or similar instrument drawn against insufficient funds in the ordinary course of business or consistent with past practice; *provided* that such Indebtedness is extinguished within 45 days of Incurrence;

(C) customer deposits and advance payments (including progress premiums) received in the ordinary course of business or consistent with past practice from customers for goods or services purchased in the ordinary course of business or consistent with past practice;

(D) letters of credit, bankers' acceptances, warehouse receipts, guarantees, discounted bills of exchange or the discounting or factoring of receivables for credit management of bad debt purposes, reverse factoring arrangements or other similar instruments or obligations issued or relating to liabilities or obligations either:

(1) Incurred in the ordinary course of business or consistent with past practice; or otherwise

(2) in an aggregate principal amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this sub-clause (viii)(D)(2) and then outstanding, does not exceed the greater of (x) €13.8 million and (y) an amount equal to 5% of LTM EBITDA, as of the Applicable Test Date;

(E) the financing of insurance premiums, take-or-pay obligations contained in supply arrangements, any customary treasury, depositary, cash management, credit card processing, automatic clearinghouse arrangements, overdraft protections, credit or debit card, purchase card, electronic funds transfer, the collection of checks and direct debits, cash pooling or netting or setting off arrangements, operating facilities or similar arrangements either:

(1) Incurred in the ordinary course of business (and in the case of operating facilities, consistent with past practice in scope and nature); or otherwise

(2) Indebtedness Incurred in an aggregate principal amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this sub-clause (viii)(E)(2) and then outstanding, does not exceed the greater of (x) €69.0 million and (y) an amount equal to 25% of LTM EBITDA, as of the Applicable Test Date;

(F) Indebtedness representing:

(1) deferred consideration or compensation to current or former directors, officers, employees, members of management, managers and consultants of any Parent Entity, the Issuer or any of its Subsidiaries in the ordinary course of business; or

(2) deferred consideration or compensation or other similar arrangements in connection with any Investment or acquisition permitted hereby;

(G) Indebtedness owed on a short-term basis of no longer than 30 Business Days owed to banks and other financial institutions Incurred in the ordinary course of business or consistent with past practice of the Issuer or any Restricted Subsidiary with such banks or financial institutions that arises in connection with ordinary banking arrangements to manage cash balances of the Issuer or any Restricted Subsidiary;

(H) Settlement Indebtedness;

(I) Guarantees Incurred in the ordinary course of business in respect of obligations to suppliers, customers, franchisees, lessors, licensees, sub-licensees and distribution partners and/or in connection with government subsidies received by the Issuer or any of its Restricted Subsidiaries; and

(J) Indebtedness Incurred by the Issuer or a Restricted Subsidiary as a result of leases entered into by the Issuer or such Restricted Subsidiary in the ordinary course of business on behalf of customers for property or equipment to be used by the Issuer or such Restricted Subsidiary, such customers or a subcontractor in providing services to a customer and for which the Issuer or such Restricted Subsidiary will be reimbursed by such customer;

(ix) Indebtedness arising from agreements providing for Guarantees, indemnification, obligations in respect of earn-outs or other adjustments of purchase price or, in each case, similar obligations, in each case, Incurred or assumed in connection with the acquisition or disposition of any business or assets or person or any Capital Stock of a Subsidiary (other than Guarantees of Indebtedness Incurred by any person acquiring or disposing of such business or assets or such Subsidiary for the purpose of financing such acquisition or disposition); *provided* that the maximum liability of the Issuer and the Restricted Subsidiaries in respect of all such Indebtedness in connection with a disposition shall at no time exceed the gross proceeds, including the fair market value of non-cash proceeds (measured at the time received and without giving effect to any subsequent changes in value), actually received by the Issuer and the Restricted Subsidiaries in connection with such disposition;

(x) Indebtedness in an aggregate outstanding principal amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this clause (x) and then outstanding, will not exceed 100% of the Net Cash Proceeds received by the Issuer from the issuance or sale (other than to a Restricted Subsidiary) of its Subordinated Shareholder Funding or Capital Stock or otherwise contributed to the equity (in each case, other than through the issuance of Disqualified Stock, Designated Preferred Stock, an Excluded Contribution or a Parent Debt Contribution) of the Issuer, in each case, subsequent to the Acquisition Closing Date, and any Refinancing Indebtedness in respect thereof, *provided* that:

(A) any such Net Cash Proceeds that are so received or contributed shall not increase the amount available for making Restricted Payments to the extent the Issuer and the Restricted Subsidiaries Incur Indebtedness pursuant to this clause (x) in reliance thereon; and

(B) any Net Cash Proceeds that are so received or contributed shall be excluded for purposes of Incurring Indebtedness pursuant to this clause (x) to the extent such Net Cash Proceeds or cash have been applied to make a Restricted Payment;

(xi) Indebtedness of Restricted Subsidiaries that are not Guarantors and Guarantees by the Issuer or any Restricted Subsidiary of Indebtedness of joint ventures in an aggregate amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness incurred pursuant to this clause (xi) and then outstanding, does not exceed the greater of (x) €69.0 million and (y) an amount equal to 25% of LTM EBITDA as of the Applicable Test Date;

(xii) Indebtedness consisting of promissory notes issued by the Issuer or any of the Restricted Subsidiaries to any future, present or former employee, director, manager, contractor or consultant of the Issuer, any of its Subsidiaries or any Parent Entity (or permitted transferees, assigns, estates, or heirs of such employee, director, manager, contractor or consultant), to finance the purchase or redemption of Capital Stock of the Issuer or any Parent Entity or payment of a transaction bonus that is permitted by the covenant described under "*—Limitation on Restricted Payments*";

(xiii) Indebtedness in an aggregate outstanding principal amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this clause (xiii) and then outstanding, will not exceed the greater of (x) €138.0 million and (y) an amount equal to 50% of LTM EBITDA as of the Applicable Test Date;

(xiv) Indebtedness Incurred pursuant to factoring financings, securitizations, receivables financings or similar arrangements, in each case, that are:

(A) not recourse to the Issuer and the Restricted Subsidiaries other than a Securitization Subsidiary (except to the extent customary in the good faith determination of the Issuer for such type of arrangement and except for Standard Securitization Undertakings);

(B) outstanding or available for Incurrence as at the Acquisition Closing Date; or

(C) in an aggregate outstanding principal amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this sub-clause (xiv)(C) and then outstanding, does not exceed the greater of (x) €82.8 million and (y) an amount equal to 30% of LTM EBITDA as of the Applicable Test Date;

(xv) any obligation, or guaranty of any obligation, of the Issuer or any Restricted Subsidiary to reimburse or indemnify a person extending credit to customers of the Issuer or a Restricted Subsidiary Incurred in the ordinary course of business for all or any portion of the amounts payable by such customers to the person extending such credit;

(xvi) Indebtedness to a customer to finance the acquisition of any equipment necessary to perform services for such customer; *provided* that (A) the repayment of such Indebtedness is conditional upon such customer ordering a specific volume of goods and (B) such Indebtedness does not bear interest or provide for scheduled amortization or maturity;

(xvii) obligations in respect of Disqualified Stock of the Issuer in an amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness incurred pursuant to this clause (xvii) and then outstanding, does not exceed the greater of (x) €55.2 million and (y) an amount equal to 20% of LTM EBITDA as of the Applicable Test Date;

(xviii) Indebtedness of the Issuer or any of the Restricted Subsidiaries arising pursuant to any Permitted Tax Restructuring;

(xix) Indebtedness consisting of local lines of credit, bilateral facilities, overdraft facilities or local working capital facilities in an aggregate outstanding principal amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this clause (xix) and then outstanding, will not exceed the greater of (x) €69.0 million and (y) an amount equal to 25% of LTM EBITDA;

(xx) Indebtedness of the Issuer or any Restricted Subsidiary in an aggregate principal amount which, when taken together with any Refinancing Indebtedness in respect thereof and the principal amount of all other Indebtedness Incurred pursuant to this clause (xx) and then outstanding, will not exceed an amount equal to 100% of the Available RP Capacity Amount; provided that to the extent Available RP Capacity

Amount is used to Incur Indebtedness pursuant to this sub-clause (xx), the Incurrence of such Indebtedness shall reduce the capacity to make Restricted Payments pursuant to the relevant Restricted Payment provisions under the first paragraph of the covenant described under the caption "—*Limitation on Restricted Payments*" or pursuant to the relevant Permitted Payment provisions under the second paragraph of that covenant in an amount equal to the Available RP Capacity Amount so utilized (it being understood that the capacity to make any Restricted Payments under the first paragraph of the covenant described under the caption "—*Limitation on Restricted Payments*" or any Permitted Payments provision under the second paragraph of that covenant may not be reduced below zero under this proviso) until prepaid in accordance with paragraph (c) of the definition thereof; and

(xxi) any joint and several liability between Restricted Subsidiaries as a result of a fiscal unity for tax purposes.

For purposes of determining compliance with, and without prejudice to the section "—*Financial and Other Calculations*," and the outstanding principal amount of any particular Indebtedness Incurred pursuant to, and in compliance with, this covenant:

(i) subject to clause (ii) below, in the event that all or any portion of any item of Indebtedness (or any portion thereof) meets the criteria of more than one of the categories of Permitted Debt or is entitled to be Incurred pursuant to the first paragraph of this covenant, the Issuer, in its sole discretion, will classify, and may from time to time reclassify, such item of Indebtedness and will only be required to include, in any manner that complies with this covenant, the amount and type of such Indebtedness (or any portion thereof) in the first paragraph of this covenant or one of the clauses of the second paragraph of this covenant, and Indebtedness permitted by this covenant need not be permitted solely by reference to one provision permitting such Indebtedness but may be permitted in part by one such provision and in part by one or more other provisions of this covenant permitting such Indebtedness;

(ii) all Indebtedness under Facility B and the Original Revolving Facility, in each case, outstanding as of the Acquisition Closing Date (and any Refinancing Indebtedness in respect thereof), shall be deemed to have been Incurred pursuant to:

(A) clause (i)(A)(1) of the second paragraph of this covenant, in the case of Indebtedness under Facility B; and

(B) clause (i)(A)(2) of the second paragraph of this covenant, in the case of Indebtedness under the Original Revolving Facility;

and the Issuer shall not be permitted to reclassify all or a portion of such Indebtedness;

(iii) for purposes of determining compliance with this covenant, with respect to Indebtedness Incurred under a Credit Facility, re-borrowings of amounts previously repaid pursuant to a "cash sweep" or "clean down" provisions or any similar provisions under a Credit Facility that provide that Indebtedness is deemed to have been repaid periodically shall only be deemed for the purposes of this covenant to have been Incurred on the date such Indebtedness was first Incurred and not on the date of any subsequent re-borrowing thereof;

(iv) in the case of any Refinancing Indebtedness, when measuring the outstanding amount of such Indebtedness, such amount shall not include any amounts necessary to pay the aggregate amount of accrued and unpaid interest and any fees and expenses (including original issue discount, upfront fees or similar fees), including any premium (including any tender premiums) and defeasance costs, penalties, taxes, indemnity fees, discounts, premiums and other costs and expenses Incurred or payable in connection with such refinancing;

(v) Guarantees of, or obligations in respect of letters of credit, bankers' acceptances or other similar instruments relating to, or Liens securing, Indebtedness that is otherwise included in the determination of a particular amount of Indebtedness shall not be included;

(vi) if obligations in respect of letters of credit, bankers' acceptances or other similar instruments are Incurred pursuant to any Credit Facility and are being treated as Incurred pursuant to the first or the second paragraph of this covenant and the letters of credit, bankers' acceptances or other similar instruments relate to other Indebtedness, then such other Indebtedness shall not be included;

(vii) the principal amount of any Disqualified Stock of the Issuer or a Restricted Subsidiary, or Preferred Stock of a Restricted Subsidiary, will be equal to the greater of the maximum mandatory redemption or repurchase price (not including, in either case, any redemption or repurchase premium) or the liquidation preference thereof;

(viii) in the event that the Issuer or a Restricted Subsidiary enters into or increases commitments under a revolving credit facility, enters into any commitment to Incur or issue Indebtedness or commits to Incur any Lien pursuant to clause (cc) of the definition of "Permitted Liens," the Incurrence or issuance thereof for all purposes under the Indenture, including for the purposes of calculating any Applicable Metric for borrowings and reborrowings thereunder (and including issuance and creation of letters of credit and bankers' acceptances thereunder) may be determined, at the Issuer's option (A) on the date of such revolving credit facility or such entry into or increase in commitments or (B) on the date on which such facility or commitments become available or, if applicable, any other Applicable Test Date (assuming, in the case of (A) and (B) of this clause (viii) that the full amount thereof (or, at the option of the Issuer, a portion thereof) has been borrowed as of such date) and, in either case, if any such Applicable Metric is satisfied with respect thereto at such time, any borrowing or reborrowing thereunder (and the issuance and creation of letters of credit and bankers' acceptances thereunder) will be permitted under this covenant irrespective of the Applicable Metric at the time of any borrowing or reborrowing (or issuance or creation of letters of credit or bankers' acceptances thereunder) (the committed amount permitted to be borrowed or reborrowed (and the issuance and creation of letters of credit and bankers' acceptances) on a date pursuant to the operation of this clause (viii) but not actually borrowed on such date shall be the "Reserved Indebtedness Amount" as of such date for purposes of the Fixed Charge Coverage Ratio, the Senior Secured Net Leverage Ratio, the Total Secured Net Leverage Ratio or the Total Net Leverage Ratio, as applicable, and, to the extent of any clause of the second paragraph of this covenant (if any), shall be deemed to be Incurred and outstanding under such clauses);

(ix) notwithstanding anything in this covenant to the contrary, in the case of any Indebtedness Incurred to refinance Indebtedness initially Incurred in reliance on the first paragraph of this covenant or any clause of the second paragraph of this covenant measured by reference to a percentage of LTM EBITDA as of the Applicable Test Date, if such refinancing would cause the percentage of LTM EBITDA restriction to be exceeded if calculated based on the percentage of LTM EBITDA on the Applicable Test Date of such refinancing, such percentage of LTM EBITDA restriction shall not be deemed to be exceeded so long as the principal amount of such Refinancing Indebtedness does not exceed the principal amount of such Indebtedness being refinanced, plus the aggregate amount of accrued and unpaid interest and any fees and expenses (including original issue discount, upfront fees or similar fees), including any premium and defeasance costs, indemnity fees, discounts, premiums and other costs and expenses Incurred or payable in connection with such refinancing; and

(x) except as otherwise specified herein, the amount of Indebtedness issued at a price that is less than the principal amount thereof will be equal to the amount of the liability in respect thereof determined on the basis of IFRS.

Accrual and/or capitalization of interest, accrual of dividends, the accretion of accreted value, the accretion or amortization of original issue discount, the payment of interest in the form of additional Indebtedness, the payment of dividends in the form of additional shares or Preferred Stock or Disqualified Stock or the reclassification of commitments or obligations not previously treated as Indebtedness due to a change in IFRS, will not be deemed to be an Incurrence of Indebtedness for purposes of the covenant described under this covenant; *provided* that the amount of any Refinancing Indebtedness in respect of any outstanding Indebtedness may (in the Issuer's sole discretion) be increased by the amount of all such accrued and/or capitalized interest, accreted value, original issue discount and/or additional Indebtedness in respect of such Indebtedness and such Increased Amount will not be deemed to be Indebtedness for the purpose of calculating any basket, permission or threshold under which such Refinancing Indebtedness is permitted to be Incurred.

If at any time an Unrestricted Subsidiary becomes a Restricted Subsidiary, any Indebtedness of such Subsidiary shall be deemed to be Incurred by a Restricted Subsidiary as of such date (and, if such Indebtedness is not permitted to be Incurred as of such date under this covenant, the Issuer shall be in default of this covenant).

For the purposes of determining compliance with any restriction on the incurrence of Indebtedness denominated in a given currency, the Currency Equivalent of the aggregate principal amount of Indebtedness (or liquidation preference in the case of Disqualified Stock or Preferred Stock) denominated in another currency shall be calculated as described under "*—Financial and Other Calculations*"; *provided* that if such determination is made with respect to Indebtedness Incurred to refinance other Indebtedness denominated in another currency, and such refinancing would cause the applicable currency-denominated restriction to be exceeded if calculated at the relevant currency exchange rate in effect on the date of such refinancing, such currency denominated restriction, as applicable, shall be deemed not to have been exceeded so long as the principal amount (or liquidation preference in the case of Disqualified Stock or Preferred Stock) of such Refinancing Indebtedness does not exceed (x) the principal amount of such Indebtedness (or liquidation preference in the case of Disqualified Stock or Preferred Stock) being refinanced plus (y) the aggregate amount of accrued and unpaid interest and any fees and expenses (including original issue discount, upfront fees or similar fees), including any premium and defeasance costs, indemnity fees, discounts, premiums and other costs and expenses Incurred or payable in connection with such refinancing.

Notwithstanding any other provision of this covenant, the maximum amount of Indebtedness that the Issuer or a Restricted Subsidiary may Incur pursuant to this covenant shall not be deemed to be exceeded solely as a result of fluctuations in the exchange rate of currencies. The principal amount of any Indebtedness Incurred to refinance other Indebtedness, if Incurred in a different currency from the Indebtedness being refinanced, shall be calculated based on the currency exchange rate applicable to the currencies in which such Refinancing Indebtedness is denominated that is in effect on the date of such refinancing.

The Issuer shall not permit any Guarantor to, and no Guarantor shall Incur any Indebtedness that is or purports to be contractually subordinated (either by its terms or the terms of the agreement governing such Indebtedness) in right of payment to any Senior Indebtedness of such Guarantor unless such Indebtedness ranks *pari passu* with such Guarantor's Note Guarantee or is also contractually subordinated (either by its terms or the terms of the agreement governing such Indebtedness) in right of payment to such Guarantor's Note Guarantee; *provided* that no Indebtedness will be deemed to be contractually subordinated in right of payment to any other Indebtedness of the Issuer or any Guarantor solely by virtue of being unsecured or by virtue of being secured with different collateral or by virtue of the application of waterfall or other payment ordering provisions affecting different tranches of the Notes or where such ranking or subordination arises as a matter of law; *provided*, *further*, that this limitation shall not apply to distinctions between categories of Senior Indebtedness that exist by reason of any Liens or Guarantees or the ordering of payment for any Liens or by virtue of being secured on a junior-priority basis (including, for the avoidance of doubt, any Indebtedness incurred under any asset-backed loan facility or other facility secured on the Collateral on a junior-ranking basis to such Senior Indebtedness); *provided* , *further*, that and that Indebtedness under a Credit Facility that is Senior Indebtedness of a Guarantor may provide for an ordering of payments among the tranches of such Credit Facility.

Limitation on Restricted Payments

The Issuer will not, and will not permit any of the Restricted Subsidiaries, directly or indirectly, to:

(i) declare or pay any dividend or make any distribution on or in respect of the Issuer's or any Restricted Subsidiary's Capital Stock (including any such payment in connection with any merger or consolidation involving the Issuer or any of the Restricted Subsidiaries) except:

(A) dividends or distributions payable in Capital Stock of the Issuer (other than Disqualified Stock) or in options, warrants or other rights to purchase such Capital Stock of the Issuer or in Subordinated Shareholder Funding;

(B) dividends or distributions payable to the Issuer or a Restricted Subsidiary (and, in the case of the Issuer or any such Restricted Subsidiary making such dividend or distribution, to holders of its Capital Stock other than the Issuer or another Restricted Subsidiary on no more than a pro rata basis); and

(C) dividends or distributions payable to any Parent Entity to fund payments of interest, premia or break costs in respect of Indebtedness of such Parent Entity (or Refinancing Indebtedness thereof) which is Guaranteed by the Issuer or any Restricted Subsidiary or is otherwise considered Indebtedness of the Issuer or any Restricted Subsidiary; *provided* that:

(1) any net proceeds from such Indebtedness are, directly or indirectly, contributed to the equity of the Issuer or any Restricted Subsidiary in any form or otherwise received (including by way of Indebtedness) by the Issuer or any Restricted Subsidiary (a "Parent Debt Contribution");

(2) any net proceeds described in sub-clause (1) above shall be excluded for purposes of increasing the amount available for distribution pursuant to clause (C) of this paragraph below and shall not be Excluded Contributions; and

(3) in the case that any net proceeds described in sub-clause (1) above are contributed to or received by the Issuer or the Restricted Subsidiaries in the form of Indebtedness, there shall be no double-counting of interest paid on such Indebtedness, any proceeds loan relating to such Indebtedness and any dividends or distributions payable to the relevant Parent Entity to fund interest payments in respect of Indebtedness of such Parent Entity;

(ii) purchase, repurchase, redeem, retire or otherwise acquire or retire for value any Capital Stock of the Issuer or any Parent Entity held by persons other than the Issuer or a Restricted Subsidiary other than in exchange for Capital Stock of the Issuer (other than Disqualified Stock) or in exchange for options, warrants or other rights to purchase such Capital Stock of the Issuer;

(iii) purchase, repurchase, redeem, defease or otherwise acquire or retire for value, prior to scheduled maturity, scheduled repayment or scheduled sinking fund payment, any Subordinated Indebtedness (other than (A) any such purchase, repurchase, redemption, defeasance or other acquisition or retirement in anticipation of satisfying a sinking fund obligation, principal instalment or final maturity, in each case, due within one year of the date of purchase, repurchase, redemption, defeasance or other acquisition or retirement and (B) any Indebtedness Incurred pursuant to clause (iii) of the second paragraph of the covenant described under "—*Limitation on Indebtedness*");

(iv) make any payment (whether of principal, interest or other amounts) on or with respect to, or purchase, redeem, defease or otherwise acquire or retire for value, any Subordinated Shareholder Funding (other than any payment of interest thereon in the form of additional Subordinated Shareholder Funding); or

(v) make any Restricted Investment,

(any such dividend, distribution, purchase, redemption, repurchase, defeasance, other acquisition, retirement or Restricted Investment referred to in clauses (i) through (v) above are referred to herein as a "Restricted Payment"), if at the time the Issuer or such Restricted Subsidiary makes such Restricted Payment:

(A) an Event of Default shall have occurred and be continuing or would occur as a consequence thereof;

(B) the Issuer is not able to Incur an additional €1.00 of Indebtedness pursuant to sub-clause (i) of the first paragraph of the covenant described under "—*Limitation on Indebtedness*" immediately after giving effect, on a pro forma basis, to such Restricted Payment; or

(C) the aggregate amount of such Restricted Payment and all other Restricted Payments made subsequent to the Issue Date (and not returned or rescinded) (including Permitted Payments made pursuant to clauses (i) and (xiii)(C) of the next succeeding paragraph, but excluding all other Restricted Payments permitted by the next paragraph below) would exceed the sum of (without duplication):

(1) 50% of Consolidated Net Income of the Issuer for the period (treated as one accounting period) from the first day of the Financial Quarter in which the Acquisition Closing Date occurs to the end of the most recent Financial Quarter ending prior to the date of such Restricted Payment for which internal consolidated financial statements of the Issuer are available, provided that the amount taken into account pursuant to this sub-clause (1) shall not be less than zero; plus

(2) 100% of the aggregate amount of cash, and the fair market value of property or assets or marketable securities, received by the Issuer from the issue or sale of its Subordinated Shareholder Funding or Capital Stock or as the result of a merger or consolidation with another person or otherwise contributed to the equity (in each case other than through the issuance of Disqualified Stock or Designated Preferred Stock) of the Issuer subsequent to the Acquisition Closing Date (other than (I) Subordinated Shareholder Funding or Capital Stock sold to a Subsidiary of the Issuer, (II) Net Cash Proceeds or property or assets or marketable securities received from an issuance or sale of such Capital Stock to a Restricted Subsidiary or an employee stock ownership plan or trust established by the Issuer or any Subsidiary of the Issuer for the benefit of their employees to the extent funded by the Issuer or any Restricted Subsidiary, (III) cash or property or assets or marketable securities to the extent that any Restricted Payment has been made from such proceeds in reliance on clause (vi) of the next paragraph, (IV) the Transaction Equity Contribution and (V) Excluded Contributions); plus

(3) 100% of the aggregate amount of cash, and the fair market value of property or assets or marketable securities, received subsequent to the Acquisition Closing Date by the Issuer or any Restricted Subsidiary from the issuance or sale (other than (I) Subordinated Shareholder Funding, (II) the Transaction Equity Contribution or (III) Capital Stock sold to the Issuer or a Restricted Subsidiary or an employee stock ownership plan or trust established by the Issuer or any Subsidiary of the Issuer for the benefit of their employees to the extent funded by the Issuer or any Restricted Subsidiary) by the Issuer or any Restricted Subsidiary subsequent to the Acquisition Closing Date of any Indebtedness, Disqualified Stock or Designated Preferred Stock that has been converted into or exchanged for Capital Stock of the Issuer (other than Disqualified Stock or Designated Preferred Stock) plus, without duplication, the

amount of any cash, and the fair market value of property or assets or marketable securities, received by the Issuer or any Restricted Subsidiary upon such conversion or exchange; plus

(4) 100% of the aggregate amount received in cash and the fair market value, as determined in good faith by the Issuer, of marketable securities or other property received subsequent to the Acquisition Closing Date by the Issuer or any Restricted Subsidiary by means of: (I) the sale or other disposition (other than to the Issuer or a Restricted Subsidiary) of Restricted Investments made by the Issuer or the Restricted Subsidiaries and repurchases and redemptions of such Restricted Investments from the Issuer or the Restricted Subsidiaries and repayments of loans or advances, and releases of guarantees, which constitute Restricted Investments by the Issuer or the Restricted Subsidiaries, in each case after the Acquisition Closing Date; or (II) the sale (other than to the Issuer or a Restricted Subsidiary) of the stock of an Unrestricted Subsidiary or a distribution from an Unrestricted Subsidiary or a dividend from a person that is not a Restricted Subsidiary after the Acquisition Closing Date (in each case, other than to the extent of the amount of the Investment that constituted a Permitted Investment or was made under clause (xvii) of the next paragraph and will increase the amount available under the applicable clause of the definition of "Permitted Investment" or clause (xvii) of the next paragraph, as the case may be); plus

(5) in the case of the redesignation of an Unrestricted Subsidiary as a Restricted Subsidiary or the merger, amalgamation or consolidation of an Unrestricted Subsidiary into the Issuer or a Restricted Subsidiary or the transfer of all or substantially all of the assets of an Unrestricted Subsidiary to the Issuer or a Restricted Subsidiary subsequent to the Acquisition Closing Date, the fair market value of the Investment in such Unrestricted Subsidiary (or the assets transferred), as determined in good faith by the Issuer at the time of the redesignation of such Unrestricted Subsidiary as a Restricted Subsidiary or at the time of such merger, amalgamation or consolidation or transfer of assets (after taking into consideration any Indebtedness associated with the Unrestricted Subsidiary so designated or merged, amalgamated or consolidated or Indebtedness associated with the assets so transferred), other than to the extent of the amount of the Investment that constituted a Permitted Investment or was made under clause (xvii) of the next paragraph and will increase the amount available under the applicable clause of the definition of "Permitted Investment" or clause (xvii) of the next paragraph below, as the case may be; plus

(6) the greater of (x) €110.4 million and (y) an amount equal to 40% of LTM EBITDA,

provided that notwithstanding the foregoing, any amounts (such amounts, the "Excluded Amounts") that would otherwise be included in the calculation of the amount available for Restricted Payments pursuant to sub-clauses (2) or (3) hereof will be excluded to the extent (A) such amounts result from the receipt of cash, property or assets or marketable securities received in connection with an event that would otherwise constitute a Change of Control Triggering Event pursuant to the definition thereof, (B) the purpose of the receipt of such cash, property or assets or marketable securities was to reduce the Total Net Leverage Ratio of the Issuer so that there would be an occurrence of a Permitted Change of Control that would not otherwise have been achieved without the receipt of such cash, property or assets or marketable securities; and (C) no Change of Control Offer is made in connection with such event, or such requirement is not otherwise waived by Holders, in accordance with the requirements of the Indenture.

The foregoing provisions will not prohibit any of the following (collectively, "Permitted Payments"):

(i) the payment of any dividend or distribution or any purchase, redemption, defeasance, repurchase, other acquisition or retirement for value, completed within 60 days after the date of declaration or notice thereof, if at the date of declaration or notice such payment would have complied with the provisions of this covenant or the redemption, repurchase or retirement of Indebtedness if, at the date of any redemption or repayment notice, such payment would have complied with the provisions of this covenant as if it were and is deemed at such time to be a Restricted Payment at the time of such notice;

(ii) any:

(A) prepayment, purchase, repurchase, redemption, defeasance or other acquisition, discharge or retirement of Capital Stock of the Issuer (including any accrued and unpaid dividends thereon)

("Treasury Capital Stock") or Subordinated Indebtedness made by exchange (including any such exchange pursuant to the exercise of a conversion right or privilege in connection with which cash is paid in lieu of the issuance of fractional shares) for, or out of the proceeds of the substantially concurrent sale of, Subordinated Shareholder Funding or Capital Stock of the Issuer (other than Disqualified Stock or Designated Preferred Stock) ("Refunding Capital Stock") or a substantially concurrent contribution to the equity (other than through the issuance of Disqualified Stock or Designated Preferred Stock, the Transaction Equity Contribution or through an Excluded Contribution or a Parent Debt Contribution) of the Issuer; *provided* that to the extent so applied, the Net Cash Proceeds, or fair market value of property or assets or of marketable securities, from such sale of Subordinated Shareholder Funding or Capital Stock or such contribution will be excluded from clause (C)(2) of the first paragraph of this covenant; and

(B) if immediately prior to the retirement of Treasury Capital Stock the declaration and payment of dividends thereon was permitted under sub-clause (xiii) below, the declaration and payment of dividends on the Refunding Capital Stock (other than Refunding Capital Stock the proceeds of which were used to redeem, repurchase, retire or otherwise acquire any Capital Stock of a Parent Entity) in an aggregate amount per year no greater than the aggregate amount of dividends per annum that were declarable and payable on such Treasury Capital Stock immediately prior to such retirement;

(iii) any prepayment, purchase, repurchase, exchange, redemption, defeasance, discharge or other acquisition or retirement of Subordinated Indebtedness made by exchange for, or out of the proceeds of the substantially concurrent sale of, Refinancing Indebtedness permitted to be Incurred pursuant to the covenant described under "*—Limitation on Indebtedness*";

(iv) any prepayment, purchase, repurchase, redemption, defeasance, discharge or other acquisition or retirement of Preferred Stock of the Issuer or a Restricted Subsidiary made by exchange for or out of the proceeds of the substantially concurrent sale of Preferred Stock of the Issuer or a Restricted Subsidiary, as the case may be, that, in each case, is permitted to be Incurred pursuant to the covenant described under "*—Limitation on Indebtedness*";

(v) any purchase, repurchase, redemption, defeasance or other acquisition or retirement of Subordinated Indebtedness (other than Subordinated Shareholder Funding) or Disqualified Stock or Preferred Stock of a Restricted Subsidiary:

(A) to the extent required by the agreement governing such Subordinated Indebtedness, Disqualified Stock or Preferred Stock, following the occurrence of:

(1) a Change of Control (or other similar event described therein as a "change of control"); or

(2) an Asset Disposition (or other similar event described therein as an "asset disposition" or "asset sale"),

but only if (and to the extent required) the Issuer shall have first complied with the provisions of the Indenture that require (I) a Change of Control Offer or (II) an Asset Disposition Offer (other than as provided in clause (iii)(A)(2) or, solely as it relates to this clause (v), clause (iii)(C) of the first paragraph of the covenant described under "*—Limitation on Sales of Assets and Subsidiary Stock*") and, in each case all Notes validly tendered by Holders of such Notes in connection with such Change of Control Offer or Asset Disposition Offer, as applicable, have been repurchased, redeemed, acquired or retired for value; or

(B) consisting of Acquired Indebtedness, other than Indebtedness Incurred:

(1) to provide all or any portion of the funds utilized to consummate the transaction or series of related transactions pursuant to which such person became a Restricted Subsidiary or was otherwise acquired by the Issuer or a Restricted Subsidiary; or

(2) otherwise in connection with or contemplation of such acquisition;

(vi) a Restricted Payment to pay for the repurchase, redemption, prepayment, purchase, defeasance, cancellation, retirement or other acquisition or retirement for value of Capital Stock (including any options, warrants or other rights in respect thereof) (other than Disqualified Stock) or Subordinated

Shareholder Funding of the Issuer or any Parent Entity held by any future, present or former employee, director, manager, or consultant of the Issuer, any of its Subsidiaries or any Parent Entity (or permitted transferees, assigns, estates, trusts or heirs of such employee, director, manager, contractor or consultant); *provided* that the aggregate Restricted Payments made under this clause (vi) do not exceed (x) the greater of (I) €41.4 million and (II) an amount equal to 15% of LTM EBITDA in any calendar year (with unused amounts in any calendar year being carried forward to succeeding calendar years) or (y) subsequent to the consummation of an Initial Public Offering of common stock of any IPO Entity, the greater of (I) €55.2 million and (II) an amount equal to 20% of LTM EBITDA in any calendar year (with unused amounts in any calendar year being carried forward to succeeding calendar years); *provided, further*, that such amount in any calendar year may be increased by an amount not to exceed

(A) the cash proceeds from the issuance or sale of Subordinated Shareholder Funding or Capital Stock (other than Disqualified Stock or Designated Preferred Stock, any Transaction Equity Contribution or Excluded Contributions) of the Issuer and, to the extent contributed to the capital of the Issuer or any Parent Entity (other than through the issuance of Disqualified Stock or Designated Preferred Stock, the Transaction Equity Contribution or an Excluded Contribution), Subordinated Shareholder Funding or Capital Stock of any Parent Entity, in each case to members of management, directors, managers or consultants of the Issuer, any of its Subsidiaries or any Parent Entity that occurred after the Issue Date, to the extent the cash proceeds from the sale of such Capital Stock or Subordinated Shareholder Funding have not otherwise been applied to the payment of Restricted Payments by virtue of clause (C) of the first paragraph of this covenant; *plus*

(B) the cash proceeds of key man life insurance policies received by the Issuer, the Restricted Subsidiaries or any Parent Entity (to the extent contributed to the Issuer or any Restricted Subsidiary) after the Issue Date,

provided, further, that the Issuer may elect to apply all or any portion of the aggregate increase contemplated by sub-clauses (A) and (B) of this clause (vi) in any calendar year. In addition, (x) cancellation of Indebtedness owing to the Issuer or any Restricted Subsidiary from any future, present or former members of management, directors, managers, employees, contractors or consultants of the Issuer or Restricted Subsidiaries or any Parent Entity and (y) the repurchase of Capital Stock deemed to occur upon the exercise of options, warrants or similar instruments if such Capital Stock represents all or a portion of the exercise price thereof or payments in lieu of the issuance of fractional Capital Stock or withholding to pay other taxes payable in connection therewith, in each case, in connection with a repurchase of Capital Stock of the Issuer or any Parent Entity will not be deemed to constitute a Restricted Payment for purposes of this covenant or any other provision of the Indenture;

(vii) the declaration and payment of dividends on Disqualified Stock or Preferred Stock of a Restricted Subsidiary, Incurred in accordance with the terms of the covenant described under "*—Limitation on Indebtedness*";

(viii) purchases, repurchases, redemptions, defeasances or other acquisitions or retirements of Capital Stock deemed to occur upon the exercise, conversion or exchange of stock options, warrants or other rights in respect thereof if such Capital Stock represents a portion of the exercise price thereof or withholding or similar taxes in respect thereof and payments in respect of withholding or similar taxes payable upon exercise or vesting thereof;

(ix) dividends, loans, advances or distributions to any Parent Entity or other payments by the Issuer or any Restricted Subsidiary in amounts equal to (without duplication):

(A) the amounts required for any Parent Entity to pay any Parent Entity Expenses or any Related Taxes;

(B) any Permitted Tax Distribution;

(C) amounts constituting or to be used for purposes of making payments to the extent specified in clauses (ii), (iii), (iv)(B), (v), (xi), (xii) and (xvii) (but only in respect of the parenthetical in (xvii)(A)) and (xviii) of the second paragraph of the covenant described under "*—Limitation on Affiliate Transactions*", *provided* that any such dividends, loans, advances or distributions to make payments in respect of annual management fees specified in clause (xi)(A) of the second paragraph under "*—Limitation on Affiliate Transactions*" and made pursuant to this sub-clause (C) shall not exceed in aggregate, the greater of (x) €13.8 million and (y) an amount equal to 5% of LTM EBITDA in any Financial Year; and

(D) up to the greater of (x) €13.8 million and (y) an amount equal to 5% of LTM EBITDA in any Financial Year;

(x) the declaration and payment of dividends on, or the purchase, redemption, defeasance or other acquisition or retirement for value of, the Capital Stock, common stock or common equity interests of the Issuer, any Parent Entity or any IPO Entity following a Public Offering of such Capital Stock, common stock or common equity interests; *provided* that the aggregate amount of all such dividends or distributions shall not exceed the greater of:

(A) up to 6% per annum of the amount of Net Cash Proceeds received by or contributed to the Issuer's common equity by any Parent Entity or any IPO Entity from any such public offering, other than public offerings with respect to the Issuer's, any Parent Entity's or any IPO Entity's common equity registered on Form S-8, other than issuances to any Subsidiary of the Issuer and other than any public sale constituting Indebtedness or an Excluded Contribution; and

(B) following an Initial Public Offering, an aggregate amount per annum not to exceed:

(1) 7% of the greater of Market Capitalization or IPO Market Capitalization where, after giving pro forma effect to such dividends, distributions, cash payments, loans or expense reimbursements, the Total Net Leverage Ratio shall be equal to or less than 6.85 to 1.00; and

(2) 5% of the greater of Market Capitalization or IPO Market Capitalization where, after giving pro forma effect to such dividends, distributions, cash payments, loans or expense reimbursements, the Total Net Leverage Ratio shall be greater than 6.85 to 1.00 but equal to or less than 7.10 to 1.00;

(xi) payments by the Issuer, or loans, advances, dividends or distributions to any Parent Entity to make payments, to holders of Capital Stock of the Issuer or any Parent Entity in lieu of the issuance of fractional shares of such Capital Stock; *provided* that any such payment, loan, advance, dividend or distribution shall not be for the purpose of evading any limitation of this covenant or otherwise to facilitate any dividend or other return of capital to the holders of such Capital Stock (as determined in good faith by the Issuer);

(xii) Restricted Payments that are made (A) in an amount that does not exceed the aggregate amount of Excluded Contributions, or consisting of non-cash Excluded Contributions, in each case, received following the Acquisition Closing Date or (B) without duplication with the immediately preceding sub-clause (A) and without double counting any such cash proceeds that otherwise increase amounts available under clause (C) of the first paragraph of this covenant, in an amount not to exceed the cash proceeds from a sale, conveyance, transfer or other disposition in respect of property or assets acquired after the Acquisition Closing Date, if the acquisition of such property or assets was financed with Excluded Contributions;

(xiii) the declaration and payment of dividends:

(A) on Designated Preferred Stock of the Issuer issued after the Issue Date;

(B) to a Parent Entity in an amount sufficient to allow the Parent Entity to pay dividends to holders of its Designated Preferred Stock issued after the Issue Date; and

(C) on Refunding Capital Stock that is Preferred Stock issued after the Issue Date in excess of the dividends declarable and payable thereon pursuant to clause (ii) of the second paragraph of this covenant; *provided* that:

(1) in the case of sub-clauses (A) and (B) above, the amount of all dividends declared or paid to a person pursuant to such clauses shall not exceed the cash proceeds received by the Issuer or the aggregate amount contributed as Subordinated Shareholder Funding or in cash to the equity of the Issuer (other than through the issuance of Disqualified Stock or an Excluded Contribution or a Parent Debt Contribution of the Issuer), from the issuance or sale of such Designated Preferred Stock; and

(2) in the case of sub-clauses (A), (B) and (C) above, as at the Applicable Test Date, after giving effect to such payment on a pro forma basis the Issuer would be permitted to Incur at least €1.00 of additional Indebtedness pursuant to the test set forth in the first paragraph of the covenant described under "—*Limitation on Indebtedness*";

(xiv) distributions, by dividend or otherwise, or other transfer or disposition of shares of Capital Stock, of equity interests in and participation interests in, or other securities of, or Indebtedness (including convertible debt) owed to the Issuer or a Restricted Subsidiary by, Unrestricted Subsidiaries (other than Unrestricted Subsidiaries, substantially all the assets of which are cash and Cash Equivalent Investments), or proceeds thereof;

(xv) distributions or payments of Securitization Fees, sales contributions and other transfers of Securitization Assets or Receivables Assets and purchases of Securitization Assets or Receivables Assets pursuant to a Securitization Repurchase Obligation, in each case in connection with a Qualified Securitization Financing or Receivables Facility;

(xvi) any Restricted Payment made in connection with the Transaction (including those Restricted Payments contemplated by the final tax structure memorandum prepared in connection with the Transaction (other than any exit steps described therein)) and any costs and expenses (including all legal, accounting and other professional fees and expenses) related thereto or used to fund amounts owed to Affiliates in connection with the Transaction (including dividends to any Parent Entity to permit payment by such Parent Entity of such amounts);

(xvii) so long as no Material Event of Default is continuing:

(A) Restricted Payments (including loans or advances):

(1) up to the greater of (x) €151.8 million and (y) an amount equal to 55% of LTM EBITDA; plus

(2) in an amount equal to any Declined Proceeds; plus

(B) any Restricted Payments (including loans or advances), so long as immediately after giving pro forma effect to the payment of any such Restricted Payment and the Incurrence of any Indebtedness the net proceeds of which are used to make such Restricted Payment, either:

(1) the Total Net Leverage Ratio shall be no greater than 6.10:1.00;

(2) in the case that the Total Net Leverage Ratio exceeds 6.10:1.00, the Total Net Leverage Ratio shall be no greater than 6.60:1.00 and 50% of such Restricted Payment shall be funded from the Available Amount (without double counting) at the time of such Restricted Payment; or

(3) in the case that the Total Net Leverage Ratio exceeds 6.60:1.00 and 100% of such Restricted Payment shall be funded from the Available Amount (without double counting) at the time of such Restricted Payment;

(xviii) mandatory redemptions of Disqualified Stock issued as a Restricted Payment or as consideration for a Permitted Investment;

(xix) the redemption, defeasance, repurchase, exchange or other acquisition or retirement of Subordinated Indebtedness of the Issuer or any Restricted Subsidiary:

(A) in an aggregate amount at the time redeemed, defeased, repurchased, exchanged or otherwise acquired or retired not to exceed the greater of (x) €151.8 million and (y) an amount equal to 55% of LTM EBITDA; plus

(B) so long as no Material Event of Default is continuing, such that immediately after giving pro forma effect to the payment of any such Restricted Payment and the redemption, defeasance, repurchase, exchange or other acquisition or retirement of any such Subordinated Indebtedness, either;

(1) the Total Net Leverage Ratio shall be no greater than 6.85:1.00;

(2) in the case that the Total Net Leverage Ratio exceeds 6.85:1.00, the Total Net Leverage Ratio shall be no greater than 7.35:1:00, and 50% of such Restricted Payment shall be funded from the Available Amount (without double counting) at the time of such Restricted Payment; or

(3) in the case that the Total Net Leverage Ratio exceeds 7.35:1.00 and 100% of such Restricted Payment shall be funded from the Available Amount (without double counting) at the time of such Restricted Payment;

(xx) payments or distributions to dissenting stockholders pursuant to applicable law (including in connection with, or as a result of, exercise of appraisal rights and the settlement of any claims or action (whether actual, contingent or potential)), pursuant to or in connection with a consolidation, merger or transfer of all or substantially all of the assets of the Issuer and the Restricted Subsidiaries, taken as a whole, that complies with the covenants described under "—*Merger and Consolidation*";

(xxi) Restricted Payments to a Parent Entity to finance Investments that would otherwise be permitted to be made pursuant to this covenant if made by the Issuer, provided that:

(A) such Restricted Payment shall be made substantially concurrently with the closing of such Investment;

(B) such Parent Entity shall, promptly following the closing thereof, cause:

(1) all property acquired (whether assets or Capital Stock) to be contributed to the capital of the Issuer or one of the Restricted Subsidiaries; or

(2) the merger or amalgamation of the person formed or acquired into the Issuer or one of the Restricted Subsidiaries (to the extent not prohibited by the covenant described under "—*Merger and Consolidation*") to consummate such Investment;

(C) such Parent Entity and its Affiliates (other than the Issuer or a Restricted Subsidiary) receives no consideration or other payment in connection with such transaction except to the extent the Issuer or a Restricted Subsidiary could have given such consideration or made such payment in compliance with the Indenture;

(D) any property received by the Issuer shall not increase amounts available for Restricted Payments pursuant to clause (C)(2) of the first paragraph or clauses (ii) or (vi) of this paragraph or be deemed to be an Excluded Contribution or a Parent Debt Contribution; and

(E) such Investment shall be deemed to be made by the Issuer or such Restricted Subsidiary pursuant to another provision of this covenant (other than pursuant to clause (xxi) hereof) or pursuant to the definition of "Permitted Investments" (other than pursuant to clause (l) thereof);

(xxii) any dividends, repayments of equity, reductions of capital, loans or any other distribution (a "tax distribution") by the Issuer or any Restricted Subsidiary to any other company or Parent Entity that is a member of the same fiscal unity for corporate income tax, trade tax or value added tax or similar purposes, profit and lost pooling, cash pooling, Tax Sharing Agreement or other similar arrangements (including any payments a fiscal unity or any other arrangement required to be made by any Parent Entity) to cover Taxes on a consolidated basis on behalf of the Group;

(xxiii) any Restricted Payment to repay any equity injected into the Group on or around the Acquisition Closing Date in an amount equal to any post-closing purchase price adjustment payment received by the Group;

(xxiv) so long as no Material Event of Default is continuing, Restricted Payments of amounts deemed to not constitute Excess Proceeds pursuant to the second paragraph of the covenant described under "—*Limitation on Sales of Assets and Subsidiary Stock*";

(xxv) Restricted Payments in an amount not to exceed the aggregate amount of the Closing Overfunding; and

(xxvi) any dividends, repayments of a tax distribution by the Issuer or any Restricted Subsidiary to any Parent Entity that is a member of the same fiscal unity (*steuerliche Organschaft*) for German corporate income tax, trade tax or value-added tax purposes; *provided* that:

(A) where payments under a German fiscal unity are required to be made by any Parent Entity to cover Taxes on a consolidated basis on behalf of the Group, a tax distribution shall be made in cash to such Parent Entity in accordance with the definition of Permitted Tax Distribution; and

(B) the remainder of such tax distribution in excess of the amount permitted pursuant to clause (A) above shall not be paid to such Parent Entity in cash but instead be converted into an intercompany loan made by such Parent Entity to the Issuer which constitutes Subordinated Liabilities, save to the extent otherwise agreed by the Agent.

For purposes of determining compliance with this covenant and without prejudice to the section "*—Financial and Other Calculations*," in the event that a Restricted Payment (or portion thereof) (i) meets the criteria of more than one of the categories of Permitted Payments described in the second paragraph of this covenant, and/or (ii) is permitted pursuant to the first paragraph of this covenant and/or (iii) constitutes a Permitted Investment, the Issuer will be entitled to classify such Restricted Payment or Investment (or portion thereof) on the date of its payment or later reclassify (based on circumstances existing on the date of such reclassification) such Restricted Payment or Investment (or portion thereof) in any manner that complies with this covenant, including as a Permitted Investment.

The amount of all Restricted Payments (other than cash) shall be the fair market value on the Applicable Test Date of the asset(s) or securities proposed to be paid, transferred or issued by the Issuer or such Restricted Subsidiary, as the case may be, pursuant to such Restricted Payment. The fair market value of any cash Restricted Payment shall be its face amount, and the fair market value of any non-cash Restricted Payment, property or assets other than cash shall be determined conclusively by the Issuer acting in good faith.

Unrestricted Subsidiaries may use value transferred from the Issuer and the Restricted Subsidiaries in a Permitted Investment or a Restricted Investment not prohibited under this covenant to purchase or otherwise acquire Indebtedness or Capital Stock of the Issuer, any Parent Entity or any of the Issuer's Restricted Subsidiaries, and to transfer value to the holders of the Capital Stock or any Parent Entity and to Affiliates thereof, and such purchase, acquisition, or transfer will not be deemed to be a "direct or indirect" action by the Issuer or the Restricted Subsidiaries.

Limitation on Liens

The Issuer will not, and the Issuer will not permit any Restricted Subsidiary to, directly or indirectly, create, Incur or suffer to exist any Lien upon any of its property or assets (including Capital Stock of a Restricted Subsidiary of the Issuer), whether owned on the Issue Date or acquired after that date, or any interest therein or any income or profits therefrom, which Lien is securing any Indebtedness (such Lien, the "Initial Lien"), except:

(i) in the case of any property or asset that does not constitute Charged Property:

(A) Permitted Liens; or

(B) Liens on property or assets that are not Permitted Liens if obligations under the Notes and the Indenture are directly secured equally and rateably with, prior to in the case of Subordinated Indebtedness, or, in the case of Liens with respect to Senior Indebtedness (at the Issuer's option), junior to, the Indebtedness secured by such Initial Lien for so long as such Indebtedness is so secured; and

(ii) in the case of any property or asset that constitutes Charged Property, Permitted Collateral Liens.

Any Lien created in favor of the Notes pursuant to sub-clause (i)(B) of the first paragraph of this covenant will be automatically and unconditionally released and discharged upon (i) the release and discharge of the Initial Lien to which it relates and (ii) otherwise as set forth in the Indenture, the Intercreditor Agreement and/or under the relevant Transaction Security Document.

With respect to any Lien securing Indebtedness that was permitted to secure such Indebtedness at the time of the Incurrence of such Indebtedness, such Lien shall also be permitted to secure any Increased Amount of such Indebtedness. The "Increased Amount" of any Indebtedness shall mean any increase in the amount of such Indebtedness in connection with any accrual of interest, the accretion of accreted value, the amortization of original issue discount, the payment of interest in the form of additional Indebtedness with the same terms, accretion of original issue discount or liquidation preference and increases in the amount of Indebtedness outstanding solely as a result of fluctuations in the exchange rate of currencies or increases in the value of property securing Indebtedness.

Limitation on Sales of Assets and Subsidiary Stock

The Issuer will not, and will not permit any of the Restricted Subsidiaries to, make any Asset Disposition unless:

(i) the Issuer or such Restricted Subsidiary, as the case may be, receives consideration (including by way of relief from, or by any other person assuming responsibility for, any liabilities, contingent or otherwise) at least equal to the fair market value (such fair market value to be determined on the date of contractually agreeing to such Asset Disposition), as determined in good faith by the Issuer, of the shares and assets subject to such Asset Disposition (including, for the avoidance of doubt, if such Asset Disposition is a Permitted Asset Swap);

(ii) in any such Asset Disposition, or series of related Asset Dispositions, with a purchase price in excess of the greater of (x) €46.9 million and (y) an amount equal to 17% of LTM EBITDA, except in the case of a

Permitted Asset Swap, at least 75% of the consideration for such Asset Disposition, together with all other Asset Dispositions since the Acquisition Closing Date (on a cumulative basis), received by the Issuer or such Restricted Subsidiary, as the case may be, is in the form of Cash Equivalent Investments; and provided further that the amount of:

(A) the greater of the principal amount and the carrying value of any liabilities (as reflected on the Issuer's or such Restricted Subsidiary's most recent consolidated balance sheet or in the footnotes thereto or, if Incurred or increased subsequent to the date of such balance sheet, such liabilities that would have been reflected on the Issuer's or such Restricted Subsidiary's consolidated balance sheet or in the footnotes thereto if such incurrence or increase had taken place on or prior to the date of such balance sheet, as determined by the Issuer) of the Issuer or such Restricted Subsidiary, other than liabilities that are by their terms subordinated to the Notes, that are (1) assumed by the transferee of any such assets (or a third party in connection with such transfer) pursuant to a written agreement which releases or indemnifies the Issuer or such Restricted Subsidiary from such liabilities or (2) otherwise cancelled or terminated in connection with the transaction;

(B) any securities, notes or other obligations or assets received by the Issuer or such Restricted Subsidiary from such transferee that are converted or reasonably expected by the Issuer acting in good faith to be converted by the Issuer or such Restricted Subsidiary into Cash Equivalent Investments (to the extent of the Cash Equivalent Investments received or expected to be received) or by their terms are required to be satisfied for Cash Equivalent Investments within 180 days following the closing of such Asset Disposition; and

(C) any Designated Non-Cash Consideration received by the Issuer or such Restricted Subsidiary in such Asset Disposition having an aggregate fair market value, taken together with all other Designated Non-Cash Consideration received pursuant to this clause (C) that is at that time outstanding, not to exceed the greater of (x) €55.2 million and (y) an amount equal to 20% of LTM EBITDA at the time of the receipt of such Designated Non-Cash Consideration (or, at the Issuer's option, at the time of contractually agreeing to such Asset Disposition), with the fair market value of each item of Designated Non-Cash Consideration being measured at the time received and without giving effect to subsequent changes in value, shall each be deemed to be Cash Equivalent Investments for purposes of this provision and for no other purpose; and

(iii) an amount equal to 100% of the Net Available Cash from such Asset Disposition is applied, to the extent the Issuer or any Restricted Subsidiary, as the case may be, elects (at its sole discretion):

(A) to prepay, repay or purchase:

(1) any Senior Indebtedness; and/or

(2) any other Permitted Debt (provided that such application would comply with the covenant described under "—*Limitation on Restricted Payments*"),

(in each case, other than Indebtedness owed to the Issuer or any Restricted Subsidiary);

(B) to invest in or commit to invest in Additional Assets (including by means of an investment in Additional Assets by a Restricted Subsidiary equal to the amount of Net Available Cash received by the Issuer or another Restricted Subsidiary); and/or

(C) to make any Permitted Investment,

in each case, within 455 days from the later of (1) the date of such Asset Disposition and (2) the receipt of such Net Available Cash; *provided* that:

(1) in connection with any prepayment, repayment or purchase of Indebtedness pursuant to sub-clause (iii)(A) above, the Issuer or such Restricted Subsidiary will retire such Indebtedness and will cause the related commitment (if any) (other than in the case of any asset-based credit facility or any revolving credit facility (including a Revolving Facility)) to be reduced in an amount equal to the principal amount so prepaid, repaid or purchased;

(2) a binding commitment or letter of intent entered into not later than such 455th day shall be treated as a permitted application of the Net Available Cash from the date of such commitment

or letter of intent so long as the Issuer, or such Restricted Subsidiary, enters into such commitment or letter of intent with the good faith expectation that such Net Available Cash will be applied to satisfy such commitment or letter of intent within the later of such 455th day and 180 days of such commitment or letter of intent (an "Acceptable Commitment") or, in the event any Acceptable Commitment is later cancelled or terminated for any reason before the Net Available Cash is applied in connection therewith, the Issuer or such Restricted Subsidiary enters into another Acceptable Commitment (a "Second Commitment") within 180 days of such cancellation or termination; *provided* that if any Second Commitment is later cancelled or terminated for any reason before such Net Available Cash is applied, then such Net Available Cash shall constitute Excess Proceeds; and

(3) pending the final application of the amount of any such Net Available Cash in accordance with sub-clauses (iii)(A) to (iii)(C) above or otherwise in accordance with this covenant, the Issuer and the Restricted Subsidiaries may temporarily reduce Indebtedness or otherwise use such Net Available Cash in any manner not prohibited by the Indenture.

The following amount of Net Available Cash from Asset Dispositions that is not applied or invested or committed to be applied or invested as provided in the first paragraph of this covenant will be deemed to constitute "Excess Proceeds" under the Indenture:

(i) if the Senior Secured Net Leverage Ratio as at the Applicable Test Date in respect of the relevant Asset Disposition exceeds 4.95:1.00 on a pro forma basis, 100% of the Net Available Cash from such Asset Disposition; or

(ii) if the Senior Secured Net Leverage Ratio as at the Applicable Test Date in respect of the relevant Asset Disposition exceeds 4.70:1.00 but does not exceed 4.95:1.00 on a pro forma basis, 50% of the Net Available Cash from such Asset Disposition; or

(iii) if the Senior Secured Net Leverage Ratio as at the Applicable Test Date in respect of the relevant Asset Disposition does not exceed 4.70:1.00 on a pro forma basis, 0% of the Net Available Cash from such Asset Disposition; *provided* that:

(A) to the extent the Issuer or any Restricted Subsidiary has elected to prepay, repay or purchase any amount of Notes or other Pari Passu Indebtedness at a price of no less than 100% of the principal amount thereof, to the extent the creditors in respect of such Pari Passu Indebtedness (including the Holders) elect not to tender their Pari Passu Indebtedness for such prepayment, repayment or purchase, the Issuer will be deemed to have applied an amount of Net Available Cash equal to such amount not tendered under this clause (A), and such amount shall not increase the amount of Excess Proceeds (such amount, together with the aggregate amount described under the fourth paragraph of this covenant, the "Declined Proceeds"); and

(B) for the avoidance of doubt, Net Available Cash that will not constitute Excess Proceeds pursuant to clause (ii) or (iii) of this paragraph above shall be immediately available to the Group for any purposes permitted by the Indenture, including to make Restricted Payments in accordance with clause (xxiv) of the second paragraph of the covenant described under "—*Limitation on Restricted Payments*," without regard to the periods specified in clause (iii) of the first paragraph of this covenant.

On the 456th day (or such longer period permitted by the first paragraph of this covenant) after the later of an Asset Disposition or the receipt of such Net Available Cash, if the aggregate amount of Excess Proceeds under this covenant exceeds the greater of (x) €55.2 million and (y) an amount equal to 20% of LTM EBITDA in a single transaction, the Issuer will within 10 Business Days make an offer (an "Asset Disposition Offer") to all Holders of the Notes and, if required or permitted by the terms of any other Pari Passu Indebtedness, to the holders or lenders of such Pari Passu Indebtedness, to purchase the maximum aggregate principal amount (or accreted value, as applicable) of the Notes and such Pari Passu Indebtedness that may be purchased out of the Excess Proceeds at an offer price in cash in an amount equal to (i) in the case of the Notes, 100% of the principal amount thereof (or accreted value, if less), plus accrued and unpaid interest, if any, to the date fixed for the closing of such offer, in accordance with the procedures set forth in the Indenture, and (ii) in the case of such other Pari Passu Indebtedness, the offer price required by the terms thereof, in accordance with the procedures set forth in the agreement(s) governing such Pari Passu Indebtedness.

The Issuer may satisfy the foregoing obligations with respect to any Net Available Cash from an Asset Disposition by making an Asset Disposition Offer with respect to such Net Available Cash prior to the expiration of the relevant 455 days (or such longer period provided above) (the "Asset Disposition Offer Period") with respect to all or part of the Net Available Cash (the "Advance Portion") in advance of being required to do so by the Indenture (an "Advance Offer").

If the aggregate principal amount (or accreted value, if applicable) of Notes tendered and other Pari Passu Indebtedness, as the case may be, surrendered by such holders or lenders thereof exceeds the amount offered in the Asset Disposition Offer (or in the case of an Advance Offer, the Advance Portion), the Issuer shall prepay, repay or purchase the Notes and such Pari Passu Indebtedness, as the case may be, on a pro rata basis (or otherwise in accordance with the Relevant Clearing System) based on the aggregate principal amount (or accreted value, if applicable) of the Notes or such Pari Passu Indebtedness, as the case may be, tendered with adjustments as necessary so that no Notes or Pari Passu Indebtedness, as the case may be, will be repurchased in part in an unauthorized denomination. Upon completion of any such Asset Disposition Offer (or Advance Offer), the amount of Excess Proceeds that resulted in the requirement to make an Asset Disposition Offer shall be reset to zero (regardless of whether there are any remaining Excess Proceeds upon such completion). Upon consummation or expiration of any Asset Disposition Offer, any remaining Net Available Cash shall not be deemed Excess Proceeds and the Issuer may use such Net Available Cash for any purpose not prohibited by the Indenture.

To the extent that the aggregate amount (or accreted value, if applicable) of Notes and Pari Passu Indebtedness, as the case may be, tendered pursuant to an Asset Disposition Offer is less than the amount offered in the Asset Disposition Offer (or, in the case of an Advance Offer, the Advance Portion), the Issuer may use any remaining Excess Proceeds (or in the case of an Advance Offer, the Advance Portion) for any purposes not otherwise prohibited under the Indenture.

Notwithstanding the foregoing provisions of this covenant, to the extent that (x) a distribution of any or all of the Net Available Cash of any Asset Disposition by a Subsidiary to the Issuer or another Restricted Subsidiary (to the extent necessary to comply with this covenant) is prohibited or delayed by applicable local law (including financial assistance and corporate benefit restrictions and fiduciary and statutory duties of the relevant directors or managers), (y) a distribution of any or all of the Net Available Cash of any Asset Disposition by a Subsidiary to the Issuer or another Restricted Subsidiary (to the extent necessary to comply with this covenant) could result in material adverse Tax consequences, as determined by the Issuer in its sole discretion, or (z) a contribution or distribution of any or all of the Net Available Cash of any Asset Disposition by a Subsidiary to the Issuer or to a Restricted Subsidiary (to the extent necessary to comply with this covenant) is subject to a contractual encumbrance or restriction affecting the distribution and such encumbrance or restriction is not prohibited by the covenant described under "*—Limitation on Restrictions on Distributions from Restricted Subsidiaries*", the portion of such Net Available Cash so affected will not be required to be applied in compliance with this covenant.

An Asset Disposition Offer or Advance Offer may be made at the same time as consents are solicited with respect to an amendment, supplement or waiver of the Indenture, the Notes and/or the Note Guarantees (but the Asset Disposition Offer or Advance Offer may not condition tenders on the delivery of such consents).

The Issuer will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent such laws or regulations are applicable in connection with the repurchase of the Notes pursuant to an Asset Disposition Offer or an Advance Offer. To the extent that the provisions of any securities laws or regulations conflict with the provisions of the Indenture, the Issuer will comply with the applicable securities laws and regulations and shall not be deemed to have breached its obligations described in the Indenture by virtue thereof. The Issuer may rely on any no-action letters issued by the SEC indicating that the staff of the SEC will not recommend enforcement action in the event a tender offer satisfies certain conditions.

The provisions under the Indenture related to the Issuer's obligation to make an offer to repurchase the Notes as a result of an Asset Disposition may be waived or modified with the written consent of the Holders of a majority in principal amount of all the then outstanding Notes.

For the purposes of calculating the principal amount of any such indebtedness not denominated in euro, such Indebtedness shall be calculated by converting any such principal amount into its Euro Equivalent amount determined as of a date selected by the Issuer that is within the Asset Disposition Offer Period.

The Senior Secured Credit Facilities Agreement may prohibit or limit, and future credit agreements or other agreements to which the Issuer or another member of the Group becomes a party may prohibit or limit, the Issuer from purchasing any Notes pursuant to this covenant. In the event the Issuer is prohibited from purchasing the Notes, the Issuer could seek the consent of the lenders under such agreements to the purchase of the Notes or could attempt to refinance the borrowings that contain such prohibition. If the Issuer does not obtain such consent or repay such borrowings, it will remain prohibited from purchasing the Notes. In such case, the Issuer's failure to purchase tendered Notes could constitute an Event of Default (subject to the relevant grace periods and other provisions described under "*—Events of Default*" below) under the Indenture.

Limitation on Affiliate Transactions

The Issuer will not, and will not permit any Restricted Subsidiary to, enter into or conduct any transaction or series of related transactions (including the purchase, sale, lease or exchange of any property or the rendering of any service) with any Affiliate of the Issuer (any such transaction or series of related transactions being an "Affiliate Transaction") involving aggregate value in excess of the greater of (x) €27.6 million and (y) an amount equal to 10% of LTM EBITDA unless:

(i) the terms of such Affiliate Transaction taken as a whole are not materially less favorable to the Issuer or such Restricted Subsidiary, as the case may be, than those that could be obtained in a comparable transaction at the time of such transaction or the execution of the agreement providing for such transaction in arm's length dealings with a person who is not such an Affiliate; and

(ii) in the event such Affiliate Transaction involves an aggregate value in excess of the greater of (x) €55.2 million and (y) an amount equal to 20% of LTM EBITDA, the terms of such Affiliate Transaction have been approved by a majority of the members of the Board of Directors of the Issuer; *provided* that any Affiliate Transaction shall also be deemed to have satisfied the requirements set forth in this clause (ii) if such Affiliate Transaction is approved by a majority of the Disinterested Directors of the Issuer, if any.

The provisions of the preceding paragraph will not apply to:

(i) any Restricted Payment permitted to be made pursuant to the covenant described under "*—Limitation on Restricted Payments*" or any Permitted Investment;

(ii) any issuance or sale of Capital Stock, options, other equity-related interests or other securities, or other payments, awards or grants in cash, securities or otherwise pursuant to, or the funding of, or entering into, or maintenance of, any employment, consulting, collective bargaining or benefit plan, program, agreement or arrangement, related trust or other similar agreement and other compensation arrangements, options, warrants or other rights to purchase Capital Stock of the Issuer, any Restricted Subsidiary or any Parent Entity, restricted stock plans, long-term incentive plans, stock appreciation rights plans, participation plans, transaction bonuses or transaction-related securities repurchase plans or similar employee benefits or consultants' plans (including valuation, health, insurance, deferred compensation, severance, retirement, savings or similar plans, programs or arrangements) or indemnities provided on behalf of officers, employees, directors, managers or consultants approved by the Board of Directors of the Issuer, in each case in the ordinary course of business;

(iii) any Management Advances and any waiver or transaction with respect thereto;

(iv) any:

(A) transaction between or among the Issuer and any Restricted Subsidiary (or entity that becomes a Restricted Subsidiary as a result of such transaction), or between or among Restricted Subsidiaries; and

(B) merger, amalgamation or consolidation with any Parent Entity; *provided* that such Parent Entity shall have no material liabilities and no material assets other than cash, Cash Equivalent Investments and the Capital Stock of the Issuer and such merger, amalgamation or consolidation is otherwise not prohibited under the Indenture;

(v) the payment of compensation, fees and reimbursement of expenses to, and customary indemnities (including under customary insurance policies) and employee benefit and pension expenses provided on behalf of, directors, managers, officers, contractors, consultants, distributors or employees of the Issuer, any Parent Entity or any Restricted Subsidiary (whether directly or indirectly and including through any Controlled Investment Affiliate of such directors, managers, officers, contractors, consultants, distributors or employees);

(vi) the entry into and performance of obligations of the Issuer or any of the Restricted Subsidiaries under the terms of any transaction arising out of, and any payments pursuant to or for purposes of funding, any agreement or instrument in effect as of or on the Acquisition Closing Date, as these agreements and instruments may be amended, modified, supplemented, extended, renewed or refinanced from time to time in accordance with the other terms of this covenant or to the extent not more disadvantageous to the Holders (taken as a whole) in any material respect;

(vii) any transaction effected as part of a Qualified Securitization Financing or Receivables Facility, any disposition or repurchase of Securitization Assets, Receivables Assets or related assets in connection with any Qualified Securitization Financing or Receivables Facility;

(viii) transactions with customers, clients, joint venture partners, suppliers, contractors, distributors or purchasers or sellers of goods or services, in each case in the ordinary course of business, which are fair to the Issuer or the relevant Restricted Subsidiary in the reasonable determination of the Board of Directors of the Issuer or the senior management of the Issuer or the relevant Restricted Subsidiary, or are on terms no less favorable than those that could reasonably have been obtained at such time from an unaffiliated party;

(ix) any transaction in the ordinary course of business between or among the Issuer or any Restricted Subsidiary and any Affiliate of the Issuer or an Associate or similar entity which would constitute an Affiliate Transaction solely:

(A) because the Issuer or a Restricted Subsidiary or any Affiliate of the Issuer or a Restricted Subsidiary or any Affiliate of any Permitted Holder owns an equity interest in, or otherwise controls such Affiliate, Associate or similar entity; or

(B) due to the fact that a director or manager of such person is also a director or manager of the Issuer or any direct or indirect Parent Entity of the Issuer (*provided* that such director abstains from voting as a director of the Issuer or such direct or indirect Parent Entity of the Issuer, as the case may be, on any matter involving such other person);

(x) any:

(A) issuances or sales of Capital Stock (other than Disqualified Stock or Designated Preferred Stock) of the Issuer or options, warrants or other rights to acquire such Capital Stock or Subordinated Shareholder Funding and the granting of registration and other customary rights (and the performance of the related obligations) in connection therewith or any contribution to capital of the Issuer or any Restricted Subsidiary; and

(B) amendment, waiver or other transaction with respect to any Subordinated Shareholder Funding in compliance with the other provisions of the Indenture, the Intercreditor Agreement or any Additional Intercreditor Agreement, as applicable; *provided* that such Subordinated Shareholder Funding, as amended or otherwise modified, will continue to satisfy the requirements described in the definition of Subordinated Shareholder Funding;

(xi) any:

(A) payments by the Issuer or any Restricted Subsidiary to any Permitted Holder (whether directly or indirectly), including to its affiliates or its designees, of annual management, consulting, monitoring, refinancing, transaction, subsequent transaction exit fees, advisory fees and related costs and reasonable expenses and indemnitees in connection therewith and any termination fees (including any such cash lump sum or present value fee upon the consummation of a corporate event, including an Initial Public Offering); and

(B) customary payments by the Issuer or any Restricted Subsidiary to any Permitted Holder (whether directly or indirectly, including through any Parent Entity) for financial advisory, financing, underwriting or placement services or in respect of other investment banking activities, including in connection with loans, capital markets transactions, acquisitions or divestitures; and

(C) payments by the Issuer or any Restricted Subsidiary to any Permitted Holder (whether directly or indirectly), including to its affiliates or its designees, of fees, costs and expenses reflected in the funds flow memorandum in connection with the Transaction or as described in the offering memorandum,

which are, in the case of each of sub-clauses (A) and (B) only, approved by a majority of the Board of Directors of the Issuer in good faith;

(xii) payment to any Permitted Holder of all out-of-pocket expenses incurred by such Permitted Holder in connection with its direct or indirect investment in the Issuer and its Subsidiaries;

(xiii) the Transaction and the payment of all costs and expenses (including all legal, accounting and other professional fees and expenses) related to the Transaction;

(xiv) transactions in which the Issuer or any Restricted Subsidiary, as the case may be, delivers to the Trustee a letter from an Independent Financial Advisor stating that either (x) such transaction is fair to the Issuer or such Restricted Subsidiary from a financial point of view or (y) that such transaction meets the requirements of clause (i) of the first paragraph of this covenant;

(xv) the existence of, or the performance by the Issuer or any Restricted Subsidiary of its obligations under the terms of, any equity holders agreement (including any registration rights agreement or purchase agreements related thereto) to which it is party as of the Acquisition Closing Date and any similar agreement that it may enter into thereafter; *provided* that the existence of, or the performance by the Issuer or any Restricted Subsidiary of its obligations under any future amendment to the equity holders' agreement or under any similar agreement entered into after the Acquisition Closing Date will only be permitted under this clause to the extent that the terms of any such amendment or new agreement are not otherwise disadvantageous to the Holders (taken as a whole) in any material respect as determined in good faith by the Issuer;

(xvi) any purchases by the Issuer's Affiliates of Indebtedness or Disqualified Stock of the Issuer or any of the Restricted Subsidiaries the majority of which Indebtedness or Disqualified Stock is purchased by persons who are not the Issuer's Affiliates; *provided* that such purchases by the Issuer's Affiliates are on the same terms as such purchases by such persons who are not the Issuer's Affiliates;

(xvii) any:

(A) Investments by Affiliates in securities of the Issuer or any of the Restricted Subsidiaries (and payment of reasonable out-of-pocket expenses Incurred by such Affiliates in connection therewith) so long as the Investment is being offered by the Issuer or such Restricted Subsidiary generally to other non-affiliated third party investors on the same or more favorable terms; and

(B) payments to Affiliates in respect of securities of the Issuer or any of the Restricted Subsidiaries contemplated in sub-clause (A) above or that were acquired from persons other than the Issuer and the Restricted Subsidiaries, in each case, in accordance with the terms of such securities;

(xviii) the execution, delivery and performance of and payments by any Parent Entity, the Issuer and/or the Restricted Subsidiaries pursuant to any Tax Sharing Agreements or other equity agreements in respect of Related Taxes among any such Parent Entity, the Issuer and/or the Restricted Subsidiaries on customary terms to the extent attributable to the ownership or operation of the Issuer and its Subsidiaries;

(xix) payments, Indebtedness and Disqualified Stock (and cancellation of any thereof) of the Issuer and the Restricted Subsidiaries and Preferred Stock (and cancellation of any thereof) of any Restricted Subsidiary to any future, current or former employee, director, manager, officer, contractor or consultant (or their respective Controlled Investment Affiliates or Immediate Family Members) of the Issuer, any of its Subsidiaries or any of its Parent Entities pursuant to any management equity plan or stock option plan or any other management or employee benefit plan or agreement or any stock subscription or shareholder agreement; and any employment agreements, stock option plans and other compensatory arrangements (and any successor plans thereto) and any supplemental executive retirement benefit plans or arrangements with any such employees, directors, managers, officers, contractors or consultants (or their respective Controlled Investment Affiliates or Immediate Family Members) that are, in each case, approved by the Issuer in good faith;

(xx) employment and severance arrangements between the Issuer or the Restricted Subsidiaries and their respective officers, directors, managers, contractors, consultants, distributors and employees in the ordinary course of business, or entered into in connection with or as a result of the Transaction;

(xxi) any transition services arrangement, supply arrangement or similar arrangement entered into in connection with or in contemplation of the disposition of assets or Capital Stock in any Restricted Subsidiary permitted under the covenant described under "*—Limitation on Sales of Assets and Subsidiary Stock*" or entered into with any Business Successor, in each case, that the Issuer determines in good faith is either fair to the Issuer or otherwise on customary terms for such type of arrangements in connection with similar transactions;

(xxii) transactions entered into by an Unrestricted Subsidiary with an Affiliate prior to the day such Unrestricted Subsidiary is redesignated as a Restricted Subsidiary as described under "*—Designation of Restricted and Unrestricted Subsidiaries*" and pledges of Capital Stock of Unrestricted Subsidiaries;

(xxiii) any lease entered into between the Issuer or any Restricted Subsidiary, as lessee, and any Affiliate of the Issuer that is not a Restricted Subsidiary, as lessor, which is approved by a majority of the members of the Board of Directors of the Issuer;

(xxiv) intellectual property licenses in the ordinary course of business;

(xxv) payments to or from, and transactions with, any joint venture, including for the avoidance of doubt, the entry into, and performance of obligations and related services under, any management services agreement or any licensing agreement with regards to any existing or future joint venture, in the ordinary course of business (including any cash management activities related thereto);

(xxvi) any participation in a public tender or exchange offer for securities or debt instruments issued by the Issuer or any of its Restricted Subsidiaries that provides for the same price or exchange ratio, as the case may be, to all holders accepting such tender or exchange offer;

(xxvii) the entry into, and performance of obligations and related services under, any registration rights or other listing agreement;

(xxviii) the payment of costs and expenses related to registration rights and customary indemnities provided to shareholders under any shareholder agreement;

(xxix) any Permitted Tax Restructuring; and

(xxx) the execution, delivery and, without duplication, performance of any Tax Sharing Agreement or any arrangement pursuant to which the Issuer or any of the Restricted Subsidiaries is required or permitted to file a consolidated tax return, or the formation and maintenance of any consolidated group for tax, accounting or cash pooling or management purposes in the ordinary course of business.

Limitation on Restrictions on Distributions from Restricted Subsidiaries

The Issuer will not, and will not permit any Restricted Subsidiary to, create or otherwise cause or permit to exist or become effective any consensual encumbrance or consensual restriction on the ability of any Restricted Subsidiary to:

(i) pay dividends or make any other distributions in cash or otherwise on its Capital Stock or pay any Indebtedness or other obligations owed to the Issuer or any Restricted Subsidiary;

(ii) make any loans or advances to the Issuer or any Restricted Subsidiary; or

(iii) sell, lease or transfer any of its property or assets to the Issuer or any Restricted Subsidiary, provided that (x) the priority of any Preferred Stock in receiving dividends or liquidating distributions prior to dividends or liquidating distributions being paid on common stock and (y) the subordination of (including the application of any standstill requirements to) loans or advances made to the Issuer or any Restricted Subsidiary to other Indebtedness Incurred by the Issuer or any Restricted Subsidiary shall not be deemed to constitute such an encumbrance or restriction.

The provisions of the preceding paragraph will not prohibit:

(i) any encumbrance or restriction pursuant to (a) any Credit Facility (including the Senior Secured Credit Facilities) and any security documents related thereto, (b) the Intercreditor Agreement and any Additional Intercreditor Agreement and (c) any other agreement or instrument, in each case, in effect at or entered into on or prior to the Acquisition Closing Date;

(ii) any encumbrance or restriction pursuant to the Indenture and any other Note Documents;

(iii) any encumbrance or restriction pursuant to applicable law, rule, regulation or order;

(iv) any encumbrance or restriction pursuant to an agreement or instrument of a Person or relating to any Capital Stock or Indebtedness of a Person, entered into on or before the date on which such Person was acquired by or merged, consolidated or otherwise combined with or into the Issuer or any Restricted Subsidiary, or was designated as a Restricted Subsidiary or on which such agreement or instrument is assumed by the Issuer or any Restricted Subsidiary in connection with an acquisition of assets (other than Capital Stock or Indebtedness Incurred as consideration in, or to provide all or any portion of the funds utilized to consummate, the transaction or series of related transactions pursuant to which such Person became a Restricted Subsidiary or was acquired by the Issuer or was merged, consolidated or otherwise combined with or into the Issuer or any Restricted Subsidiary or entered into in contemplation of or in connection with such transaction) and outstanding on such date; *provided* that, for the purposes of this clause, if another Person is the Successor Company (as defined below), any Subsidiary thereof or agreement or instrument of such Person or any such Subsidiary shall be deemed acquired or assumed by the Issuer or any Restricted Subsidiary when such Person becomes the Successor Company;

(v) any encumbrance, restriction or condition: (A) that restricts in a customary manner the subletting, assignment or transfer of any property or asset that is subject to a lease, license or similar contract or agreement, or the assignment or transfer of any lease, license or other contract or agreement; (B) contained in mortgages, pledges, charges or other security agreements permitted under the Indenture or securing Indebtedness of the Issuer or a Restricted Subsidiary permitted under the Indenture to the extent such encumbrances or restrictions restrict the transfer or encumbrance of the property or assets subject to such mortgages, pledges, charges or other security agreements; (C) contained in any trading, netting, operating, construction, service, supply, purchase, sale or other agreement to which the Issuer or any of the Restricted Subsidiaries is a party entered into in the ordinary course of business; *provided* that such agreement prohibits the encumbrance of solely the property or assets of the Issuer or such Restricted Subsidiary that are the subject to such agreement, the payment rights arising thereunder or the proceeds thereof and does not extend to any other asset or property of the Issuer or such Restricted Subsidiary or the assets or property of another Restricted Subsidiary; or (D) pursuant to customary provisions restricting dispositions of real property interests set forth in any reciprocal easement agreements of the Issuer or any Restricted Subsidiary;

(vi) any encumbrance or restriction pursuant to Purchase Money Obligations and Capitalized Lease Obligations permitted under the Indenture, in each case, that impose encumbrances or restrictions on the property so acquired;

(vii) any encumbrance or restriction imposed pursuant to an agreement entered into for the direct or indirect sale or disposition to a Person of all or substantially all the Capital Stock or assets of the Issuer or any Restricted Subsidiary (or the property or assets that are subject to such restriction) pending the closing of such sale or disposition;

(viii) customary provisions in leases, licenses, shareholder agreements, joint venture agreements and other similar agreements, organizational documents and instruments;

(ix) encumbrances or restrictions arising or existing by reason of or pursuant to applicable law or any applicable rule, regulation, licensing requirement or order, or required by any regulatory authority or any governmental license, concessions, franchises or permits, including restrictions on encumbrances on cash or deposits (including assets in escrow accounts) paid on property;

(x) any encumbrance or restriction on cash or other deposits or net worth imposed by customers or suppliers, or as required by insurance, surety or bonding companies or indemnities, in each case, under agreements entered into in the ordinary course of business;

(xi) any encumbrance or restriction pursuant to Hedging Obligations;

(xii) restrictions created in connection with any Qualified Securitization Financing or Receivables Facility that, in the good faith determination of the Issuer, are necessary or advisable to effect such Securitization Facility or Receivables Facility;

(xiii) any encumbrance or restriction arising pursuant to an agreement or instrument (a) relating to any Indebtedness permitted to be Incurred subsequent to the Issue Date pursuant to the covenant described under "*—Limitation on Indebtedness*" if the encumbrances and restrictions contained in any such agreement or instrument taken as a whole are not materially less favorable to the Holders (taken as a whole) than (i) the encumbrances and restrictions contained in (A) the Senior Secured Credit Facilities Agreement or the Indenture, together with any security documents associated therewith, and (B) the Intercreditor Agreement, in each case, as in effect on the Issue Date (or the closing date of the Senior Secured Credit Facilities Agreement) or (ii) as is customary in comparable financings (as determined in good faith by the Issuer), or (b) constituting an Additional Intercreditor Agreement;

(xiv) any encumbrance or restriction existing by reason of any lien permitted under the covenant described under "*—Limitation on Liens*"; or

(xv) any encumbrance or restriction pursuant to an agreement or instrument effecting a refinancing of Indebtedness Incurred pursuant to, or that otherwise refinances, an agreement or instrument referred to in clauses (i) to (xiv) of this paragraph or this clause (xv) (an "Initial Agreement") or contained in any amendment, supplement or other modification to an agreement referred to in clauses (i) to (xiv) of this paragraph or this clause (xv); *provided, however*, that the encumbrances and restrictions with respect to such Restricted Subsidiary contained in any such agreement or instrument are no less favorable in any material respect to the Holders taken as a whole than the encumbrances and restrictions contained in the Initial Agreement or Initial Agreements to which such refinancing or amendment, supplement or other modification relates (as determined in good faith by the Issuer).

Designation of Restricted and Unrestricted Subsidiaries

The Issuer may designate any Restricted Subsidiary to be an Unrestricted Subsidiary if that designation would not cause a Default. If a Restricted Subsidiary is designated as an Unrestricted Subsidiary, the aggregate fair market value of all outstanding Investments owned by the Issuer and the Restricted Subsidiaries in the Subsidiary designated as an Unrestricted Subsidiary will be deemed to be an Investment made as of the time of the designation and will reduce the amount available for Restricted Payments pursuant to the covenant described under "—*Limitation on Restricted Payments*" or under one or more clauses of the definition of "*Permitted Payments*" or "*Permitted Investments*," as determined by the Issuer. That designation will only be permitted if the Investment would be permitted at that time and if the Restricted Subsidiary otherwise meets the definition of an Unrestricted Subsidiary. The Issuer may redesignate any Unrestricted Subsidiary to be a Restricted Subsidiary if that redesignation would not cause a Default.

Any designation of a Subsidiary of the Issuer as an Unrestricted Subsidiary will be evidenced to the Trustee on the date of such designation by delivering to the Trustee an Officer's Certificate certifying that such designation complies with the preceding conditions and was permitted by the covenant described under "—*Limitation on Restricted Payments*."

If the designation of any Restricted Subsidiary as an Unrestricted Subsidiary fails to meet the requirements set out in the preceding paragraph, such Subsidiary shall not be an Unrestricted Subsidiary for the purposes of the Indenture and any Indebtedness of such Subsidiary will be deemed to be Incurred by it as a Restricted Subsidiary as of such date and, if such Indebtedness is prohibited from being Incurred as of such date under the covenant described under "—*Limitation on Indebtedness*," the Issuer will be in default of such covenant.

The Issuer may at any time designate any Unrestricted Subsidiary to be a Restricted Subsidiary; provided that such designation will be deemed to be an Incurrence of Indebtedness by a Restricted Subsidiary of any outstanding Indebtedness of such Unrestricted Subsidiary, and such designation will only be permitted if (1) such Indebtedness is not prohibited under the covenant described under "—*Limitation on Indebtedness*" (including pursuant to clause (v) of the second paragraph thereof treating such redesignation as an acquisition for the purpose of such clause), calculated on a pro forma basis as at the Applicable Test Date; and (2) no Event of Default would be in existence immediately following such designation. Any designation of an Unrestricted Subsidiary as a Restricted Subsidiary by the Issuer shall be evidenced to the Trustee by delivering to the Trustee an Officer's Certificate certifying that such designation complies with the preceding conditions.

Reports

So long as any Notes are outstanding, the Issuer will furnish to the Trustee the following reports following the Issue Date:

(1) within 120 days (or if such day is not a Business Day, on the next succeeding Business Day) after the end of each fiscal year of the Issuer (or, in the case of the first fiscal year ending after the Issue Date, 150 days), annual reports containing: (i) the audited consolidated balance sheet of the Issuer as at the end of the most recent two fiscal years and audited consolidated income statements and statements of cash flow of the Issuer for the most recent two fiscal years, including appropriate footnotes to such financial statements, for and as at the end of such fiscal years and the report of the independent auditors on the financial statements; (ii) an operating and financial review of the audited financial statements, including a discussion of the consolidated financial condition, results of operations, EBITDA and material changes in liquidity and capital resources of the Issuer; (iii) unaudited pro forma income statement and balance sheet information of the Issuer, together with explanatory footnotes, for any material acquisitions, dispositions or recapitalizations (other than the Acquisition) that have occurred since the beginning of the most recently completed fiscal year as to which such annual report relates (unless such pro forma information has been provided in a previous report pursuant to clauses (2) or (3) of the first paragraph of this covenant); *provided* that such pro forma financial information will be provided only to the extent reasonably available and without unreasonable expense; (iv) a brief description of the business, management and shareholders of the Issuer, all material affiliate transactions and a description of all material debt instruments and (v) a summary description of any changes to risk factors that would be material and material recent developments; provided that the information described in clauses (iv) and (v) may be *provided* in the footnotes to the audited financial statements;

(2) within 60 days (or if such day is not a Business Day, on the next succeeding Business Day) after the end of each of the first three fiscal quarters in each fiscal year of the Issuer (or, in the case of the first two such fiscal quarters ending after the Issue Date, 90 days), commencing with the quarter ending after the Issue Date, quarterly financial statements containing the following information: (i) the Issuer's unaudited condensed consolidated balance sheet as at the end of such quarter and unaudited condensed consolidated statements of income and cash flow for the most recent quarter year to date period ending on the unaudited condensed balance sheet date and the comparable prior period, together with condensed footnote disclosure; (ii) unaudited pro forma income statement and balance sheet information of the Issuer, together with explanatory footnotes, for any material acquisitions, dispositions or recapitalizations (other than the Acquisition) that have occurred since the beginning of the most recently completed fiscal year as to which such quarterly report relates (unless such pro forma information has been provided in a previous report pursuant to this clause (2) or clause (3) of the first paragraph of this covenant); *provided* that such pro forma financial information will be provided only to the extent reasonably available and

without unreasonable expense; (iii) an operating and financial review of the unaudited financial statements, including a discussion of the consolidated financial condition, results of operations, EBITDA and material changes in liquidity and capital resources of the Issuer; and (iv) material recent developments; *provided* that the information described in clause (iv) may be provided in the footnotes to the unaudited financial statements; and

(3) promptly after the occurrence of a material event that the Issuer announces publicly or any acquisition, disposition or restructuring, merger or similar transaction that is material to the Issuer and the Restricted Subsidiaries, taken as a whole, or a change in a senior executive officer of the Issuer or a change in auditors of the Issuer, a report containing a description of such event.

In addition, the Issuer shall furnish to the Holders and to prospective investors, upon the request of such parties, any information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act for so long as the Notes are not freely transferable under the Exchange Act by persons who are not "affiliates" under the Securities Act.

All financial statement information (excluding, for the avoidance of doubt, the calculations made under any incurrence covenant, which shall be prepared in accordance with the terms of the Indenture) shall be on a basis consistent with IFRS as in effect on the date of such report or financial statement (or otherwise on the basis of IFRS as then in effect) and on a consistent basis for the periods presented, except as may otherwise be described in such information; *provided, however*, that the reports set forth in clauses (1), (2) and (3) above may, in the event of a change in IFRS, present earlier periods on a basis that applied to such periods. No report need include separate financial statements for any Subsidiaries of the Issuer or any disclosure with respect to the results of operations or any other financial or statistical disclosure. In addition, the reports set forth above will not be required to contain any reconciliation to U.S. GAAP.

For purposes of this covenant, an acquisition or disposition shall be deemed to be material if the entity or business acquired or disposed of represents greater than 20% of the Issuer's pro forma consolidated revenue or LTM EBITDA for the most recent four quarters for which annual or quarterly financial reports have been delivered to the Trustee.

At any time that any of the Issuer's Subsidiaries are Unrestricted Subsidiaries and any such Unrestricted Subsidiary or group of Unrestricted Subsidiaries, taken as a whole, constitutes a Significant Subsidiary of the Issuer, then the quarterly and annual financial information required by the first paragraph of this covenant will include a reasonably detailed presentation, either on the face of the financial statements or in the footnotes thereto, of the financial condition and results of operations of the Issuer and the Restricted Subsidiaries separate from the financial condition and results of operations of the Unrestricted Subsidiaries of the Issuer.

In the event that (i) the Issuer becomes subject to the reporting requirements of Section 13(a) or 15(d) of the Exchange Act, or elects to comply with such provisions, for so long as it continues to file the reports required by Section 13(a) with the SEC or (ii) the Issuer elects to provide to the Trustee reports which, if filed with the SEC, would satisfy (in the good faith judgment of the Issuer) the reporting requirements of Section 13(a) or 15(d) of the Exchange Act (other than the provision of U.S. GAAP information, certifications, exhibits or information as to internal controls and procedures), for so long as it elects, the Issuer will make available to the Trustee such annual reports, information, documents and other reports that the Issuer is, or would be, required to file with the SEC pursuant to such Section 13(a) or 15(d).

All reports provided pursuant to this covenant shall be in English, or with a certified English translation.

Subject to compliance with the next subsequent paragraph, in the event that, and for so long as, the equity securities of the Issuer or any Parent Entity or IPO Entity are listed on the Main Market of the London Stock Exchange (or one or more of the equivalent regulated markets of the Frankfurt Stock Exchange, the Irish Stock Exchange, the Luxembourg Stock Exchange or the New York Stock Exchange) and the Issuer or such Parent Entity or IPO Entity is subject to the admission and disclosure standards applicable to issuers of equity securities admitted to trading on the Main Market of the London Stock Exchange (or the equivalent standards applicable to issuers of equity securities admitted to trading on one or more of the equivalent regulated markets of the Frankfurt Stock Exchange, the Irish Stock Exchange, the Luxembourg Stock Exchange or the New York Stock Exchange), for so long as it elects, the Issuer will make available to the Trustee such annual reports, information, documents and other reports that the Issuer is, or would be, required to file with the London Stock Exchange (or one or more of the equivalent regulated markets of the Frankfurt Stock Exchange, the Irish Stock Exchange, the Luxembourg Stock Exchange or the New York Stock Exchange) pursuant to such admission and disclosure standards (or the applicable standards of one or more of the equivalent regulated markets of the Frankfurt Stock Exchange, the Irish Stock Exchange, the Luxembourg Stock Exchange or the New York Stock Exchange, as applicable). Upon complying with the foregoing requirements, and *provided* that such requirements require the Issuer or any Parent Entity or IPO Entity to prepare and file annual reports, information, documents and other reports with the Main Market of the London Stock Exchange, or one or more of the equivalent regulated markets of the Frankfurt Stock Exchange, the Irish Stock Exchange, the Luxembourg Stock Exchange or the New York Stock Exchange, as applicable, the Issuer will be deemed to have complied with the provisions contained in this covenant.

Notwithstanding the foregoing, the Issuer may comply with any requirement to provide reports or financial statements under this covenant by providing (x) any report or financial statements of (i) any IPO Entity or (ii) any direct or indirect Parent Entity of the Issuer so long as such reports (if an annual or quarterly report) meet the requirements (including as to content and time of delivery) of this covenant as if references to the Issuer therein were references to the IPO Entity or such Parent Entity; (y) any report or financial statements of (i) Bidco, (ii) the Target or (iii) a direct or indirect Subsidiary of the Issuer that represents substantially all the assets of the Issuer and its Restricted Subsidiaries (any entity under sub-clause (y), a "Reporting Subsidiary") or (z) Person in respect of which financial statements or reports are provided to the agent under the Senior Secured Credit Facilities Agreement in compliance with the information undertakings thereunder (any such entity, the "SFA Reporting Entity" and together with the Issuer, a Reporting Subsidiary or any entity under sub-clauses (x), a "Financial Reporting Entity" (as determined at the sole discretion of the Issuer)) so long as such reports (if an annual or quarterly report) meet the requirements (including as to content and time of delivery) of this covenant as if references to the Issuer therein were references to the Reporting Subsidiary. Upon complying with the requirements set forth in the preceding sentence, the Issuer will be deemed to have complied with the provisions contained in this covenant.

For purposes of this covenant and any determination or calculation to be made under the Indenture, the Issuer may use financial statements of any Financing Reporting Entity (or a predecessor thereof) for reporting or making calculations under the Indenture.

Impairment of Security Interest

The Issuer shall not, and shall not permit any Restricted Subsidiary to, take or knowingly or negligently omit to take any action that would have the result of materially impairing the Security Interest with respect to the Charged Property (it being understood that (i) the Incurrence of Permitted Collateral Liens or the confirmation or affirmation of security interests in respect of the Charged Property, (ii) the occurrence of or implementation or any step in the Transaction or any Permitted Transaction and (iii) the implementation of an IPO Pushdown shall under no circumstances be deemed to materially impair the Security Interest with respect to the Charged Property) for the benefit of the Trustee and the Holders, and the Parent and the Issuer shall not, and the Issuer shall not permit any Restricted Subsidiary to, grant to any Person other than the Security Agent, for the benefit of the Trustee and the Holders and the other beneficiaries described in the Transaction Security Documents and the Intercreditor Agreement or any Additional Intercreditor Agreement, any interest in any of the Charged Property that is prohibited by the covenants described under "—*Limitation on Indebtedness*" or "—*Limitation on Liens*"; provided, that the Parent, the Issuer and its Restricted Subsidiaries may Incur any Lien over any of the Charged Property that is not prohibited by the covenants described under "—*Limitation on Indebtedness*" or "—*Limitation on Liens*", including Permitted Collateral Liens, and the Charged Property may be discharged, transferred or released in any circumstances not prohibited by the Indenture, the Intercreditor Agreement or the Transaction Security Documents.

Notwithstanding the first paragraph of this covenant, nothing in this covenant shall restrict the discharge, transfer or release of any Charged Property or Lien in any circumstance in accordance with the Indenture, the Intercreditor Agreement, any Additional Intercreditor Agreement and/or the Transaction Security Documents. Subject to the foregoing, the Transaction Security Documents may be amended, extended, renewed, restated, supplemented, replaced or otherwise modified or released (1) to cure any ambiguity, omission, defect or inconsistency therein; (2) for the purposes of Incurring Permitted Collateral Liens; (3) to add to the Charged Property; (4) for the purposes of undertaking any Permitted Transaction, a Permitted Tax Restructuring, an IPO Pushdown, the Transaction and/or a transaction not prohibited by the covenants described under "—*Merger and Consolidation*," (5) to make any other change thereto that does not adversely affect the Holders in any material respect; or (6) to amend, extend, renew, restate, supplement, replace or otherwise modify or release any Transaction Security Documents followed by an immediate retaking of a Lien of at least equivalent ranking over the same assets; *provided, however*, that in the case of clauses (5) and (6) above, no Transaction Security Document may be amended, extended, renewed, restated, supplemented, replaced or otherwise modified or released unless contemporaneously with such amendment, extension, renewal, restatement supplement, replacement or modification or release (followed by an immediate retaking of a Lien of at least equivalent ranking over the same assets), the Issuer delivers to the Security Agent and the Trustee, either (i) a solvency opinion, in form and substance reasonably satisfactory to the Security Agent and the Trustee, from an Independent Financial Advisor or appraiser or investment bank of international standing which confirms the solvency of the Issuer and its Subsidiaries, taken as a whole, after giving effect to any transactions related to such amendment, extension, renewal, restatement, supplement, replacement, modification or release (followed by an immediate retaking of a Lien of at least equivalent ranking over the same assets), (ii) a certificate from the chief financial officer or the Board of Directors of the relevant Person which confirms the solvency of the person granting any such Lien after giving effect to any transactions related to such amendment, extension, renewal, restatement, supplement, replacement, modification or release (followed by an immediate retaking of a Lien of at least equivalent ranking over the same assets) or (iii) an Opinion of Counsel (subject to any qualifications customary for this type of Opinion of Counsel), in form and substance reasonably satisfactory to the Trustee, confirming that, after giving effect to any transactions related to such amendment, extension, renewal, restatement, supplement, replacement, modification or release (followed by an immediate retaking of a Lien of at least equivalent ranking over the same assets), the Lien or Liens created under the Transaction Security Document, so amended, extended, renewed, restated, supplemented, replaced, modified or released (followed by an immediate retaking of a Lien of at least equivalent ranking over the same assets) are valid and perfected Liens not otherwise subject to any limitation, imperfection or new hardening period, in equity or at law, that such Lien or Liens were not otherwise subject to immediately prior to such amendment, extension, renewal, restatement, supplement, replacement, modification or release and to which the new Indebtedness secured by the Permitted Collateral Lien is not subject.

In the event that the Issuer and its Restricted Subsidiaries comply with the requirements of this covenant, the Trustee and the Security Agent shall (subject to the provisions of the Intercreditor Agreement and customary protections and indemnifications) consent to such actions without the need for instructions from the Holders.

Limitation on Guarantees of Indebtedness by Restricted Subsidiaries

Subject to and in accordance with the Agreed Security Principles, certain material limitations under applicable law and the Guarantee Limitations, the Issuer shall not permit any Restricted Subsidiary, other than a Guarantor or a Securitization Subsidiary, to Guarantee the payment of (i) any syndicated Credit Facility or (ii) Public Debt of the Issuer or any Guarantor in an aggregate principal amount in excess of the greater of (x) €69.0 million and (y) 25% of LTM EBITDA at such time, unless:

(i) such Restricted Subsidiary is or becomes a Guarantor within 60 days after the guarantee of such Indebtedness; and

(ii) if applicable, executes and delivers a supplemental indenture to the Indenture providing for a Note Guarantee by such Restricted Subsidiary, which will be senior to, or pari passu with, as applicable, such Restricted Subsidiary's Guarantee of such other Indebtedness, except that (i) with respect to a guarantee of Senior Indebtedness of the Issuer or a Guarantor, such Note Guarantee may be expressly subordinated and rank junior in right of payment to such Restricted Subsidiary's Guarantee of such other Indebtedness to the same extent as the Note Guarantees are subordinated to the Senior Indebtedness being guaranteed and (ii) with respect to a guarantee of Indebtedness of the Issuer or any Guarantor, if such Indebtedness is by its express terms subordinated in right of payment to the Notes or such Guarantor's Note Guarantee, any such Guarantee by such Restricted Subsidiary with respect to such Indebtedness shall be subordinated in right of payment to such Note Guarantee substantially to the same extent as such Indebtedness is subordinated to the Notes.

Notwithstanding the first paragraph of this covenant, no Restricted Subsidiary shall be obligated to become a Guarantor to the extent and for so long as the Incurrence of such Note Guarantee is contrary to the Agreed Security Principles or the Guarantee Limitations or could give rise to or result in:

(i) any breach or violation of statutory limitations, corporate benefit, financial assistance, fraudulent preference, thin capitalization rules, capital maintenance rules, liquidity impairment rules, guidance and coordination rules, retention of title claims or the laws, rules or regulations (or analogous restriction) of any applicable jurisdiction;

(ii) any risk or liability for the officers, directors, managers or (except in the case of a Restricted Subsidiary that is a partnership) shareholders of such Restricted Subsidiary (or, in the case of a Restricted Subsidiary that is a partnership, directors, managers or shareholders of the partners of such partnership); or

(iii) any cost, expense, liability or obligation (including with respect to any Taxes) other than reasonable out of pocket expenses.

At the option of the Issuer, any Note Guarantee may contain limitations on Guarantor liability to the extent reasonably necessary to recognize certain defenses generally available to guarantors (including the Guarantee Limitations and those that relate to fraudulent conveyance or transfer, voidable preference, financial assistance, corporate purpose, capital maintenance, liquidity impairment or similar laws, regulations or defenses affecting the rights of creditors generally) or other considerations under applicable law (including any usury laws).

The Issuer may elect, in its sole discretion, to cause any Subsidiary that is not otherwise required to be a Guarantor to become a Guarantor, in which case such Subsidiary shall not be required to comply with the 60-day period described in this covenant. The Indenture will provide that this covenant shall not be applicable to any guarantee of any Restricted Subsidiary that existed at the time such Person became a Restricted Subsidiary and was not incurred in connection with, or in contemplation of, such Person becoming a Restricted Subsidiary.

Future Note Guarantees granted pursuant to this provision shall be released as set forth under "*—Note Guarantees—Note Guarantee Releases*." A Note Guarantee of a future Guarantor may also be released at the option of the Issuer if, at the date of such release, there is no Indebtedness of such Guarantor outstanding which was Incurred after the Issue Date and which could not have been Incurred in compliance with the Indenture as at the date of such release if such Guarantor were not designated as a Guarantor as at that date. The validity and enforceability of the Note Guarantees and the Security Interests and the liability of each Guarantor will be subject to the limitations as described and set out in "*Risk Factors—Risks Related to the Notes—Corporate benefit, financial assistance laws, capital maintenance and other limitations on the Note Guarantees and the Collateral may adversely affect the validity and enforceability of the Note Guarantees and the Collateral*" and "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Note Guarantees and the Security Interests*."

Additional Intercreditor Agreements

The Indenture will provide that, at the request of the Issuer, in connection with the Incurrence by the Issuer or any of its Restricted Subsidiaries of: (i) any Indebtedness secured on Charged Property or as otherwise required or not prohibited herein; and (ii) any Refinancing Indebtedness in respect of Indebtedness referred to in sub-clause (i) above, the Issuer, the relevant Restricted Subsidiaries, the Trustee and the Security Agent shall enter into with the holders of such Indebtedness (or their duly authorized representatives) an intercreditor agreement (an "Additional Intercreditor Agreement") or a restatement, amendment or other modification of the existing Intercreditor Agreement on substantially the same terms as the Intercreditor Agreement (or terms not materially less favorable to the Holders (taken as a whole)), including substantially the same terms with respect to release of Note Guarantees and priority and release of the Security Interests, *provided* that: (A) such Additional Intercreditor Agreement will not impose any personal obligations on the Trustee or the Security Agent or, in the reasonable opinion of the Trustee or the Security Agent, as applicable, adversely affect the rights, duties, liabilities, indemnities or immunities of the Trustee or the Security Agent under the Indenture, any Additional Intercreditor Agreement or the Intercreditor Agreement; (B) if more than one such intercreditor agreement is outstanding at any time, the correlative terms of such intercreditor agreements must not conflict; and (C) regardless of the number of Intercreditor Agreements or Additional Intercreditor agreements, only one payment blockage notice may be served in any period of 360 consecutive days or in respect of the same event or circumstance and any such payment blockages may not be in effect for more than 179 days in the aggregate during any consecutive 360-day period..

The Indenture will also provide that, at the direction of the Issuer and without the consent of Holders, the Trustee and the Security Agent shall from time to time enter into one or more amendments to the Intercreditor Agreement or any Additional Intercreditor Agreement to: (i) cure any ambiguity, omission, defect, manifest error or inconsistency of any such agreement; (ii) increase the amount or types of Indebtedness covered by any such agreement that may be Incurred by the Issuer or any Restricted Subsidiary that is subject to any such agreement (including with respect to any Intercreditor Agreement or Additional Intercreditor Agreement, the addition of provisions relating to new Indebtedness ranking junior in right of payment to the Notes and the Note Guarantees); (iii) add Restricted Subsidiaries to the Intercreditor Agreement or an Additional Intercreditor Agreement; (iv) further secure the Notes (including Additional Notes); (v) make provision for equal and ratable pledges of the Charged Property to secure Additional Notes; (vi) to facilitate a Permitted Tax Restructuring, a Permitted Reorganization or the Transaction; (vii) implement any Permitted Collateral Liens; (viii) amend the Intercreditor Agreement or any Additional Intercreditor Agreement in accordance with the terms thereof; or (ix) make any other change to any such agreement that does not adversely affect the Holders (taken as a whole) in any material respect making all necessary provisions to ensure that the Notes and the Note Guarantees are secured by Liens of equivalent priority over the Charged Property.

The Indenture will also provide that the Issuer shall not otherwise direct the Trustee or the Security Agent to enter into any amendment to any Intercreditor Agreement or Additional Intercreditor Agreement, other than: (i) in accordance with the second paragraph of this covenant; (ii) with the consent of the requisite majority of Holders except as otherwise permitted below under "*—Amendments and Waivers*" or (iii) as otherwise permitted by such Intercreditor Agreement or Additional Intercreditor Agreement, and the Issuer may only direct the Trustee and the Security Agent to enter into any amendment to the extent such amendment does not impose any personal obligations on the Trustee or the Security Agent or, in the reasonable opinion of the Trustee or the Security Agent, adversely affect their respective rights, duties, liabilities, indemnities or immunities under the Indenture or the Intercreditor Agreement or any Additional Intercreditor Agreement.

The Indenture will also provide that, in relation to any Intercreditor Agreement or Additional Intercreditor Agreement, the Trustee (and Security Agent, if applicable) shall consent on behalf of the requisite majority of Holders to the payment, repayment, purchase, repurchase, defeasance, acquisition, retirement or redemption of any obligations subordinated to the Notes thereby, *provided* that such transaction would comply with the covenant described under "*—Limitation on Restricted Payments*."

The Indenture will also provide that each Holder, by accepting a Note, shall be deemed to have agreed to and accepted the terms and conditions of the Intercreditor Agreement or any Additional Intercreditor Agreement (whether then entered into or entered into in the future pursuant to the provisions described herein), and to have directed the Trustee and the Security Agent to enter into any such Additional Intercreditor Agreement.

Financial and Other Calculations

For the purpose of calculating any Applicable Metric (including the financial definitions or components thereof but excluding for the avoidance of doubt Excess Cash Flow) in the Note Documents, including when determining (or, as applicable, forecasting) Consolidated EBITDA for any Relevant Period (including the portion thereof occurring prior to any relevant Purchase (as defined below)), the Issuer may: (a) if during such period any member of the Group (by merger or otherwise) has made or committed (unilaterally, conditionally or otherwise) to make an Investment in any person that thereby becomes (or that the Issuer expects in good faith, based upon such commitment, will become) a Restricted Subsidiary or otherwise has acquired or committed (unilaterally, conditionally or otherwise) to acquire any entity, business, property or material fixed asset (including the acquisition, opening and/or development of any new site or operation) (any such Investment, acquisition or commitment (including under a letter of intent) therefor, a "Purchase"), including any such

Purchase occurring in connection with a transaction causing a calculation to be made under the Indenture or the other Finance Documents, calculate Consolidated EBITDA for such period on the basis that the earnings before interest, tax, depreciation and amortization (calculated on the same basis as Consolidated EBITDA, mutatis mutandis) attributable to the assets which are the subject of such Purchase during such Relevant Period shall be included as if the Purchase occurred on the first day of such Relevant Period; and/or (b) include an adjustment in respect of any Purchase and/or any steps taken or committed or expected to be taken (in each case, unilaterally, conditionally or otherwise) in respect of such Purchase up to the amount of the pro forma increase in Consolidated EBITDA projected by the Issuer (in good faith) after taking into account the full "run rate" effect of: (i) all Synergies which the Issuer (in good faith) determines have been or will be achieved (in full or in part) at any time during such Relevant Period directly or indirectly as a consequence of the Purchase or any related steps, without prejudice to the Synergies actually realized during the Relevant Period and already included in Consolidated EBITDA, *provided* that so long as such Synergies have been or will be realized at any time during such Relevant Period, it may be assumed they were realized during the entirety of such Relevant Period; and/or (ii) all Synergies which the Issuer (in good faith) believes can be achieved following the end of such period directly or indirectly as a consequence of the Purchase or any related steps (the "Forward-Looking Purchase Synergies"), *provided* that so long as such Forward-Looking Purchase Synergies will be realizable at any time in the future, it may be assumed they will be realizable during the entire such period; in each case, without prejudice to the Synergies actually realized during the Relevant Period and already included in Consolidated EBITDA; and/or (c) exclude any non-recurring fees, costs and expenses directly or indirectly related to the Purchase.

For the purpose of calculating any Applicable Metric (including the financial definitions or components thereof but excluding for the avoidance of doubt Excess Cash Flow) in the Note Documents, including when determining (or, as applicable, forecasting) Consolidated EBITDA for any Relevant Period (including the portion thereof occurring prior to any relevant Sale (as defined below)), the Issuer may: (a) if during such period any member of the Group has disposed or committed (unilaterally, conditionally or otherwise) to make a disposal of any person, property, business or material fixed asset or any group of assets constituting an operating unit of a business sold, transferred or otherwise disposed of by the Group (any such sale, transfer, disposition or commitment therefor, a "Sale") or if the transaction giving rise to the need to calculate Consolidated EBITDA relates to such a Sale, calculate Consolidated EBITDA for such period on the basis that Consolidated EBITDA will be reduced by an amount equal to the earnings before interest, tax, depreciation, amortization and impairment (calculated on the same basis as Consolidated EBITDA, mutatis mutandis) (if positive) attributable to the assets which are the subject of such Sale for such period or increased by an amount equal to the earnings before interest, tax, depreciation, amortization and impairment (calculated on the same basis as Consolidated EBITDA, mutatis mutandis) (if negative) attributable thereto for such period as if the Sale occurred on the first day of such Relevant Period; and/or (b) include an adjustment in respect of any Sale and/or any steps taken or committed or expected to be taken (in each case, unilaterally, conditionally or otherwise) in respect of such Sale up to the amount of the pro forma increase in Consolidated EBITDA projected by the Issuer (in good faith) after taking into account the full "run rate" effect of: (i) all Synergies which the Issuer (in good faith) determines have been or will be achieved (in full or in part) at any time during such Relevant Period directly or indirectly as a consequence of the Sale or any related steps, without prejudice to the Synergies actually realized during the Relevant Period and already included in Consolidated EBITDA, *provided* that so long as such Synergies have been realized at any time during such Relevant Period, it may be assumed they were realized during the entirety of such Relevant Period; and/or (ii) all Synergies which the Issuer (in good faith) believes can be achieved following the end of such period directly or indirectly as a consequence of the Sale or any related steps (the "Forward-Looking Sale Synergies"), *provided* that so long as such Forward-Looking Sale Synergies will be realizable at any time in the future, it may be assumed they will be realizable during the entire such period; in each case, without prejudice to the Synergies actually realized during the Relevant Period and already included in Consolidated EBITDA; and/or (c) exclude any non-recurring fees, costs and expenses directly or indirectly related to the Sale.

For the purpose of calculating any Applicable Metric (including the financial definitions or components thereof but excluding for the avoidance of doubt Excess Cash Flow) in the Note Documents, including when determining (or, as applicable, forecasting) Consolidated EBITDA for any Relevant Period (including the portion thereof occurring prior to implementing or committing to implement such Group Initiative), the Issuer may: (a) include an adjustment in respect of each Group Initiative and/or any steps taken or committed or expected to be taken (in each case, unilaterally, conditionally or otherwise) in respect of such Group Initiative up to the amount of the pro forma increase in Consolidated EBITDA projected by the Issuer (in good faith) after taking into account the full "run rate" effect of: (i) all Synergies which the Issuer (in good faith) determines have been or will be achieved (in full or in part) at any time during such Relevant Period directly or indirectly as a consequence of implementing or committing to implement such Group Initiative or any related steps, without prejudice to the Synergies actually realized during the Relevant Period and already included in Consolidated EBITDA, *provided* that so long as such Synergies have been realized at any time during such Relevant Period, it may be assumed they were realized during the entirety of such Relevant Period; and/or (ii) all Synergies which the Issuer (in good faith) believes can be achieved following the end of such period directly or indirectly as a consequence of implementing or committing to implement such Group Initiative or any related steps (the "Forward-Looking Group Initiative Synergies"), *provided* that so long as such Forward- Looking Group Initiative Synergies will be realizable at any time in the future, it may be assumed they will be realizable during the entire such period; in each case, without prejudice to the Synergies actually realized during the Relevant Period and already included in Consolidated EBITDA; and/or (b) exclude any non-recurring fees, costs and expenses directly or indirectly related to the implementation of, or commitment to, implement such Group Initiative.

In relation to the definitions set out in the Indenture and all other related provisions of the Note Documents (including any Applicable Metric): (i) all calculations will be as determined in good faith by an Officer of the Issuer (including in respect of Synergies); and (ii) all calculations in respect of Synergies (in each case actual or anticipated) may be made as though the full run-rate effect of such Synergies were realized on the first day of the Relevant Period.

Consolidated EBITDA or Consolidated Net Income for any part of a Relevant Period falling prior to the Issue Date shall be calculated on an actual basis over the Relevant Period (whereby for any part of the applicable Relevant Period falling prior to the date on which the Target Group became part of the Group, such amount shall be calculated based on actual historic data for the corresponding period available and by reference to the Target Group as adjusted in accordance with the provisions of this paragraph and the other provisions of the Indenture) or, at the Issuer's option, on the basis of the final management case financial model.

Unless a contrary indication appears, a reference in the Note Documents to Consolidated Net Income, Consolidated EBITDA, LTM EBITDA, the Senior Secured Net Leverage Ratio, the Total Secured Net Leverage Ratio, the Total Net Leverage Ratio or the Fixed Charge Coverage Ratio is to be construed as a reference to Consolidated Net Income, Consolidated EBITDA, LTM EBITDA, the Senior Secured Net Leverage Ratio, the Total Secured Net Leverage Ratio, the Total Net Leverage Ratio or the Fixed Charge Coverage Ratio of the Group on a consolidated basis.

Notwithstanding anything to the contrary (including anything in the financial definitions set out in the Indenture), when calculating any Applicable Metric, the financial definitions or component thereof but excluding Excess Cash Flow, the Issuer shall be permitted to: (a) exclude all or any part of any expenditure or other negative item (and/or the impact thereof) directly or indirectly relating to or resulting from: (i) the Transaction; (ii) any other acquisition, Investment or other joint venture permitted by the terms of the Indenture or the impact from purchase price accounting; (iii) start-up costs for new businesses and branding or re-branding of existing businesses; (iv) Restructuring Costs; (v) research and development expenditure (and the capitalization thereof); and/or (vi) the implementation of IFRS 15 (Revenue from Contracts with Customers) and/or IFRS 16 (Leases) and, in each case, any successor standard thereto (or any equivalent measure under the accounting principles) or any other changes in the applicable accounting principles; and/or (b) include any addbacks (without further verification or diligence) for adjustments (including anticipated Synergies) or costs or expenses of a type included in "Pro Forma Adjusted EBITDA" in this offering memorandum or otherwise related to the Transaction and/or any base case model or quality of earnings report relating to a Permitted Acquisition prepared by an independent third party and/or taken into account in determining "Pro Forma Adjusted EBITDA" or any financing EBITDA to be used in connection with financing for a Permitted Acquisition and/or any research and development expenditure (which is not otherwise capitalized).

When calculating the satisfaction of or availability under any Applicable Metric in the Indenture in connection with any Applicable Transaction, the date of determination of such Applicable Metric shall, at the option of the Issuer, be any Applicable Test Date. If the Issuer elects to determine any Applicable Metric as of any Applicable Test Date, it shall give pro forma effect to any other Applicable Transactions that have occurred up to (and including) such Applicable Test Date.

If compliance with an Applicable Metric is established in accordance with the preceding paragraph, such Applicable Metric shall be deemed to have been complied with (or satisfied) for all purposes; *provided* that (a) the Issuer may elect, in its sole discretion, to recalculate any Applicable Metric on the basis of a more recent Applicable Test Date, in which case, such date of redetermination shall thereafter be deemed to be the relevant Applicable Test Date for purposes of such Applicable Metrics; and (b) save as contemplated in clause (a) above, compliance with any Applicable Metric shall not be determined or tested at any time after the relevant Applicable Test Date for such transaction and any actions or transactions related thereto.

If any Applicable Metric for which compliance was determined or tested as of an Applicable Test Date would at any time after the Applicable Test Date have been exceeded or otherwise failed to have been complied with as a result of fluctuations in such Applicable Metric (or any other Applicable Metric), such Applicable Metric will not be deemed to have been exceeded or failed to have been complied with as a result of such fluctuations.

If any related requirements and conditions (including as to the absence of any continuing Default or Event of Default) for which compliance or satisfaction was determined or tested as of the Applicable Test Date would at any time after the Applicable Test Date not have been complied with or satisfied (including due to the occurrence or continuation of a Default or an Event of Default), such requirements and conditions will not be deemed to have been failed to be complied with or satisfied (and such Default or Event of Default shall be deemed not to have occurred or be continuing).

Subject to clause (viii) of the third paragraph of the covenant described under "*—Limitation on Indebtedness*," in calculating the availability under any Applicable Metric in connection with any action or transaction unrelated to the Applicable Transaction following the relevant Applicable Test Date and prior to the earlier of the date on which such Applicable Transaction is consummated or the Issuer determines (in its sole discretion) that such Applicable Transaction will not be consummated, any such Applicable Metric shall be determined or tested giving pro forma effect to such Applicable Transaction.

If an item of Indebtedness, Disqualified Stock or Preferred Stock (or any portion thereof) is committed, Incurred or issued, any Lien is committed or incurred or any other transaction is undertaken or any Applicable Metric is tested in reliance on a ratio-based basket based on the Fixed Charge Coverage Ratio, the Senior Secured Net Leverage Ratio, the Total Secured Net Leverage Ratio or the Total Net Leverage Ratio or any other ratio-based Applicable Metric, such ratio(s) shall be calculated without regard to the Incurrence or drawing of any Indebtedness under any revolving facility, letter of credit facility or bank guarantee facility and/or other debt which is available to be re-drawn (including under any Revolving Facility or any ancillary facility under the Senior Secured Credit Facilities Agreement), in each case, to the extent drawn for working capital purposes and, for the avoidance of doubt, subject to clause (viii) of the third paragraph of the covenant described under "—*Limitation on Indebtedness*", any undrawn commitments for Indebtedness (including under a Revolving Facility) shall be disregarded for the purposes of testing the Applicable Metric.

If, in connection with the same Applicable Transaction or otherwise substantially simultaneously: (a)(i) any Applicable Metrics required to be determined by reference to a fixed currency amount or a percentage of LTM EBITDA (a "fixed permission") are intended to be utilized; and/or (ii) revolving Indebtedness (other than Indebtedness under the Reserved Indebtedness Amount) is intended to be Incurred; and (b) any Applicable Metric required to be determined by reference to the Senior Secured Net Leverage Ratio, the Total Secured Net Leverage Ratio, the Total Net Leverage Ratio, the Fixed Charge Coverage Ratio or any other ratio-based Applicable Metric (a "ratio-based permission") are intended to be utilized (including, for the avoidance of doubt, any determination of any increase or decrease in any such Applicable Metric, including in accordance with the clauses (v)(B)(1)(I), (v)(B)(1)(II) or (v)(B)(1)(III) of the second paragraph of the covenant described under "—*Limitation on Indebtedness*"), then (x) amounts available to be incurred under the applicable ratio-based permissions shall first be calculated without giving effect to amounts to be incurred under the applicable fixed permissions or the applicable Incurrence of revolving Indebtedness, or amounts previously incurred under such fixed permissions and not reclassified that are being repaid in connection with such Applicable Transaction, unless otherwise elected by the Issuer; and (y) thereafter, compliance with any relevant fixed permissions shall be calculated, and in each case, full pro forma effect shall be given to all increases to LTM EBITDA and repayments or discharges of Indebtedness in connection with such Applicable Transaction in accordance with the Indenture.

If any Applicable Metric is determined by reference to the greater of a fixed amount (the "numerical permission") and a percentage of LTM EBITDA (the "grower permission") and the grower permission of the Applicable Metric exceeds the applicable numerical permission at any time as a result of a Permitted Acquisition or Permitted Investment, the numerical permission shall be deemed to be increased to the highest amount of the grower permission reached from time to time as a result of any such Permitted Acquisitions and/or Permitted Investments and shall not subsequently be reduced as a result of any decrease in the grower permission.

In the event that any amount or transaction meets the criteria of more than one Applicable Metric, the Issuer may (in its sole discretion), subject to the limitations imposed under clause (ii) of the third paragraph of the covenant described under "—*Limitation on Indebtedness*," classify and reclassify that amount or transaction to a particular Applicable Metric and will only be required to include that amount or transaction in one of those Applicable Metrics (and, for the avoidance of doubt, an amount may at the option of the Issuer be split between different Applicable Metrics).

Subject to the limitations imposed under clause (ii) of the third paragraph of the covenant described under "—*Limitation on Indebtedness*," if a proposed action, matter, transaction or amount (or a portion thereof) is incurred or entered into pursuant to a fixed permission and at a later time would subsequently be permitted under a ratio-based permission, unless otherwise elected by the Issuer, such action, matter, transaction or amount (or a portion thereof) shall automatically be reclassified to such ratio-based permission.

The Indenture will provide that references to (i) any matter being "permitted" under the Indenture or any other Note Document shall include references to such matters not being prohibited or otherwise being approved under the Indenture or such other Note Document and (ii) any transaction being in the "ordinary course of business" of a member of the Group shall be construed to include any transaction that is consistent with industry practice in the industries in which the Group operates or consistent with past practice of any member of the Group or the Target Group.

For purposes of determining compliance with: (i) any euro-denominated Applicable Metric (other than in respect of any calculation of any financial covenant or ratio under the Note Documents or related usage, ratchet or permission), the euro equivalent of amounts denominated in a foreign currency shall be calculated using a rate of exchange selected by the Issuer (acting reasonably and in good faith) on the Applicable Test Date (including, for the avoidance of doubt, the rate of any foreign exchange hedging entered into by the Group in relation to the Applicable Transaction); or (ii) any other Applicable Metric (including in respect of any calculation of any financial covenant or ratio under the Note Documents), the euro equivalent of amounts denominated in a foreign currency shall be calculated, at the Issuer's option, using any of: (A) any applicable weighted average spot conversion rates over the relevant testing period; (B) any applicable conversion rates used in any relevant financial statements or management accounts; (C) any applicable conversion rate selected by the Issuer (acting reasonably and in good faith) on the relevant date of determination (including the Applicable Test Date, if applicable); or (D) any applicable conversion rate under any foreign exchange hedging arrangement entered into by any member of the Group, and, in each case, no Default, Event of Default or any breach of representation or warranty or undertaking shall arise merely as a result of a subsequent change in the euro equivalent amount of any relevant amount due to fluctuations in exchange rates.

For any relevant Applicable Metric set by reference to a fiscal year, a calendar year, a Relevant Period, a four-quarter period, a twelve-month period or any other similar annual period (each an "Annual Period"):

(i) at the option of the Issuer, the maximum amount so permitted under such Applicable Metric during such Annual Period may be increased by: (A) an amount equal to 100% of the difference (if positive) between the permitted amount in the immediately preceding Annual Period and the amount thereof actually used or applied by the Group during such preceding Annual Period (the "Carry Forward Amount"); and/or (B) an amount equal to 100% of the permitted amount in the immediately following Annual Period and the permitted amount in such immediately following Annual Period shall be reduced by such corresponding amount (the "Carry Back Amount"); and

(ii) to the extent that the maximum amount so permitted under such Applicable Metric during such Annual Period is increased in accordance with clause (i) above, any usage of such Applicable Metric during such Annual Period shall be deemed to be applied in the following order: (A) first, against the Carry Forward Amount; (B) second, against the maximum amount so permitted during such Annual Period prior to any increase in accordance with clause (i) above; and (C) third, against the Carry Back Amount.

For the purpose of this section and to the extent any Applicable Metric is used as the basis (in whole or in part) for permitting any transaction or making any determination under the Indenture (including on a pro forma basis) no item shall be included or excluded more than once where to do so would result in double counting.

Merger and Consolidation

The Issuer

Subject to the first paragraph under "—*General*" below, the Issuer will not consolidate with or merge with or into, or assign, convey, transfer, lease or otherwise dispose of all or substantially all its assets, in one transaction or a series of related transactions, to any person, unless:

(i) the resulting, surviving or transferee person (the "Successor Company") will be a person organized and existing under the laws of the United Kingdom, Luxembourg, Germany, the United States (including, for the avoidance of doubt, any state thereof, the District of Columbia or any territory thereof) or a Member State of the European Union, the Cayman Islands, the Channel Islands, Japan, Norway or Switzerland, and the Successor Company (if not the Issuer) will expressly assume, by way of supplemental indenture or other documents or instruments, executed and delivered to the Trustee, all the obligations of the Issuer under the Indenture, the Notes, the Intercreditor Agreement, any Additional Intercreditor Agreement, the Transaction Security Documents and any other Note Documents, as applicable;

(ii) immediately after giving effect to such transaction (and treating any Indebtedness that becomes an obligation of the applicable Successor Company or any Subsidiary of the applicable Successor Company as a result of such transaction as having been Incurred by the applicable Successor Company or such Subsidiary at the time of such transaction), no Event of Default shall have occurred and be continuing and immediately after giving effect to such transaction:

    (A) the Issuer or the Successor Company would be able to Incur at least an additional €1.00 of Indebtedness pursuant to the first paragraph of the covenant described under "—*Limitation on Indebtedness*"; or

    (B) the Fixed Charge Coverage Ratio would not be lower, or the Total Net Leverage Ratio would not be higher, than it was immediately prior to giving effect to such transaction;

(iii) the Issuer or the Successor Company, as the case may be, shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel to the effect that such consolidation, merger or transfer and such supplemental indenture comply with the Indenture; *provided* that in giving an Opinion of Counsel, counsel may rely on an Officer's Certificate as to any matters of fact; and

(iv) the Holders (or the Security Agent on their behalf) will continue to have the same or substantially equivalent (ignoring for the purposes of assessing such equivalency any limitations required in accordance with the Agreed Security Principles or hardening periods (or any similar or equivalent concept)) guarantees and security over the same or substantially equivalent assets and over the shares (or other interests) in the Issuer or the Successor Company, save to the extent such assets or shares (or other interests) cease to exist (*provided* that if the shares (or other interests) in the Issuer cease to exist, security will be granted (subject to the Agreed Security Principles) over the shares (or other interests) in the Successor Company).

The Successor Company will succeed to, and be substituted for, and may exercise every right and power of, the Issuer under the Notes and the Indenture.

Guarantors

No Guarantor (other than a Guarantor whose Guarantee is to be released in accordance with the terms of the Indenture, the Intercreditor Agreement or any Additional Intercreditor Agreement) may:

(i) consolidate (for the avoidance of doubt, not including any fiscal unity for corporate income tax or value added tax purposes) with or merge with or into any person;

(ii) sell, assign, convey, transfer, lease or dispose of, all or substantially all its assets, in one transaction or a series of related transactions, to any person; or

(iii) permit any person to merge with or into such Guarantor,

unless:

(A) the other person is the Issuer or any Restricted Subsidiary that is a Guarantor (or becomes a Guarantor substantially concurrently with the transaction); or

(B) either (x) the Issuer or a Guarantor is the continuing person or (y) the resulting, surviving or transferee person expressly assumes all of the obligations of the Guarantor under the Indenture and all obligations of the Issuer under the Intercreditor Agreement, any Additional Intercreditor Agreement and the Transaction Security Documents, as applicable, and immediately after giving effect to the transaction, no Event of Default is continuing; or

(C) the transaction constitutes a sale or other disposition (including by way of consolidation or merger) of the Guarantor or the sale or disposition of all or substantially all the assets of the Guarantor (in each case other than to the Issuer or a Restricted Subsidiary) otherwise permitted by the Indenture.

General

The provisions set forth in this covenant shall not restrict (and shall not apply to):

(i) any Restricted Subsidiary that is not the Issuer or a Guarantor from consolidating with, merging or liquidating into or transferring all or substantially all of its properties and assets to the Issuer, a Guarantor or any other Restricted Subsidiary that is not the Issuer or a Guarantor;

(ii) any Guarantor from merging or liquidating into or transferring all or part of its properties and assets to the Issuer or another Guarantor;

(iii) any consolidation or merger of the Issuer into any Guarantor; *provided* that, if the Issuer is not the surviving entity of such merger or consolidation:

(A) the relevant Guarantor will assume the obligations of the Issuer (as applicable) under the Notes, the Indenture, the Note Guarantees, the Intercreditor Agreement, any Additional Intercreditor Agreement and the Transaction Security Documents and with respect to the Issuer, clauses (i), (iii) and (iv) of the covenant described under "*—The Issuer*" above shall apply to such transaction; and

(B) to the extent that any Transaction Security previously granted over the shares in the capital of the relevant Guarantor would not, in accordance with applicable law, constitute a Lien over the shares in the capital of the surviving entity, the direct Parent Holding Company of the surviving entity shall, subject to the Agreed Security Principles, grant Transaction Security over the shares in the capital of the surviving entity on substantially equivalent terms to any Transaction Security granted over the shares in the capital of such predecessor Guarantor immediately prior to such merger or consolidation;

(iv) the Issuer or any Guarantor consolidating into or merging or combining with an Affiliate incorporated or organized for the purpose of changing the legal domicile of such entity, reincorporating such entity in another jurisdiction, or changing the legal form of such entity; *provided* that, in the case of a consolidation, merger or combination of:

(A) the Issuer into or with an Affiliate that is not a Guarantor, clauses (i), (ii), (iii) and (iv) of the covenant described under "—*The Issuer*" shall apply to such transaction; and

(B) any Guarantor into or with an Affiliate, sub-clause (iii) above shall apply to such transaction; or

(v) the Transaction or any Permitted Transaction.

There is no precise established definition of the phrase "substantially all" under applicable law. Accordingly, in certain circumstances there may be a degree of uncertainty as to whether a particular transaction would involve "all or substantially all" of the property or assets of a Person.

This covenant shall not apply to the creation of a new Subsidiary as a Restricted Subsidiary.

Notwithstanding any other provision of this covenant, this covenant will not prohibit or restrict the Transaction or any Permitted Transaction, in each case, which shall be expressly permitted under this covenant.

Events of Default

Subject to the two succeeding paragraphs, each of the following is an Event of Default under the Indenture:

(a) default in any payment of interest on any Note when due and payable, continued for 30 days;

(b) default in the payment of the principal amount of or premium, if any, on any Note when due at its Stated Maturity, upon optional redemption, upon required repurchase, upon declaration or otherwise;

(c) failure by the Issuer or any Guarantor to comply for 60 days after written notice by the Trustee on behalf of the Holders or by the Holders of at least 30% in aggregate principal amount of the outstanding Notes with any agreement or obligation contained in the Indenture;

(d) the occurrence of any default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Indebtedness for money borrowed by the Issuer or any Significant Subsidiary or the payment of which is Guaranteed by the Issuer or any Significant Subsidiary, in each case, other than Indebtedness owed to the Issuer or a Restricted Subsidiary, whether such Indebtedness or Guarantee now exists, or is created after the date hereof, which default:

(i) is caused by a failure to pay principal of such Indebtedness, at its stated final maturity (after giving effect to any applicable grace periods) provided in such Indebtedness (a "payment default"); or

(ii) results in the acceleration of such Indebtedness prior to its stated final maturity (the "cross- acceleration provision"),

and, in each case, the aggregate principal amount of all Indebtedness subject to such payment defaults or accelerations (after giving effect to any applicable grace periods), is in excess of the greater of (x) €55.2 million and (y) an amount equal to 20% of LTM EBITDA;

(e) certain events of bankruptcy, insolvency or court protection of the Parent, the Issuer or a Significant Subsidiary (the "bankruptcy provisions") which, in each case, are sanctioned by a court and become unconditional and are not with a Finance Party (as defined in the Intercreditor Agreement) (in its capacity as such), the Trustee or the Security Agent;

(f) failure by the Issuer or a Significant Subsidiary to pay final judgments aggregating in excess of the greater of (x) €55.2 million and (y) an amount equal to 20% of LTM EBITDA, other than any judgments covered by indemnities provided by, or insurance policies issued by, reputable and creditworthy companies, which final judgments remain unpaid, undischarged and unstayed for a period of more than 60 days (after receipt of notice from the Trustee) after such judgment becomes final, and in the event such judgment is covered by insurance, an enforcement proceeding has been commenced by any creditor upon such judgment or decree which is not promptly stayed (the "judgment default provision");

(g) any Security Interest under the Transaction Security Documents having a fair market value in excess of the greater of (x) €41.4 million and (y) an amount equal to 15% of LTM EBITDA shall, at any time, cease to be in full force and effect (other than in accordance with the terms of the relevant Transaction Security Document, the Intercreditor Agreement, any Additional Intercreditor Agreement and the Indenture) for any reason other than the satisfaction in full of all obligations under the Indenture or the release of any such Security Interest in accordance with the terms of the Indenture, the Intercreditor Agreement, any Additional Intercreditor Agreement or the Transaction Security Documents or any such Security Interest created thereunder shall be declared invalid or unenforceable or the Issuer or any Restricted Subsidiary shall assert in writing that any such Security Interest is invalid or unenforceable and any such Default continues for 30 days (the "security default provisions");

(h) except as permitted under the Indenture, the Intercreditor Agreement or any Additional Intercreditor Agreement (including with respect to any limitations), any Note Guarantee of any one or more Guarantors that is a Significant Subsidiary is held in any judicial proceeding to be unenforceable or invalid or ceases for any reason to be in full force and effect, or any one or more Guarantors that is a Significant Subsidiary denies or disaffirms its obligations under its Note Guarantee (the "guarantee default provisions"); and

(i) the failure by the Issuer to consummate the Special Mandatory Redemption to the extent required, as described under "*—Escrow of Proceeds; Special Mandatory Redemption*".

However, a Default under clauses (c), (d) or (f) of the first paragraph above will not constitute an Event of Default unless (i) the Trustee or the Holders of at least 30% in aggregate principal amount of the outstanding Notes have notified the Issuer of the Default and (ii) the Issuer has not cured such Default within 60 days after receipt of such notice; *provided* that notice of Default may not be given with respect to any action taken or reported to the Trustee more than 2 years prior to such notice of Default. Any time period providing for the cure of any actual or alleged Default or Event of Default described under the first paragraph of this section may be extended or stayed by a court of competent jurisdiction to the extent such actual or alleged Default or Event of Default is the subject of litigation.

If an Event of Default (other than an Event of Default described in clause (e) of the first paragraph of this section) occurs and is continuing, the Trustee by written notice to the Issuer, or the Holders of at least 30% in principal amount of the outstanding Notes by written notice to the Issuer and the Trustee, may, and the Trustee (subject to certain conditions) at the request of such Holders shall, subject to the provisions of the next paragraph, declare the principal of and accrued and unpaid interest, if any, on all the Notes to be due and payable. Upon such a declaration, such principal and accrued and unpaid interest, if any, will be due and payable immediately. In the event of a declaration of acceleration of the Notes because an Event of Default described in clause (d) has occurred and is continuing, the declaration of acceleration of the Notes shall be automatically annulled if the event of default or payment default triggering such Event of Default pursuant to such clause (d) shall be remedied or cured, or waived by the holders of the Indebtedness, or the Indebtedness that gave rise to such Event of Default shall have been discharged in full, in each case, within 30 days after the declaration of acceleration with respect thereto and the annulment of the acceleration of the Notes would not conflict with any judgment or decree of a court of competent jurisdiction.

Any notice of Default under the first paragraph of this section (other than an Event of Default described in clause (e) of the first paragraph of this covenant), notice of acceleration with respect to an Event of Default under the first paragraph of this section (other than an Event of Default described in clause (e) of the first paragraph of this covenant) or instruction to the Trustee to provide a notice of Default under the first paragraph of this section (other than an Event of Default described in clause (e) of the first paragraph of this covenant), notice of acceleration with respect to an Event of Default under the first paragraph of this section (other than an Event of Default described in clause (e) of the first paragraph of this covenant) or take any other action with respect to an alleged Default or Event of Default the first paragraph of this section (other than an Event of Default described in clause (e) of the first paragraph of this covenant) (a "Noteholder Direction") provided by any one or more Holders (each, a "Directing Holder") must be accompanied by a written representation from each such Holder to the Issuer and the Trustee that such Holder is not, or, in the case such Holder is a Relevant Clearing System or the Relevant Clearing System's nominee, that such Holder is being instructed solely by beneficial owners that are not, Net Short (a "Position Representation"), which representation, in the case of a Noteholder Direction relating to a notice of Default shall be deemed repeated at all times until the resulting Event of Default is cured or otherwise ceases to exist or the Notes are accelerated. In addition, each Directing Holder must, at the time of providing a Noteholder Direction, covenant to provide the Issuer with such other information as the Issuer may reasonably request from time to time in order to verify the accuracy of such Directing Holder's Position Representation within five Business Days of request thereof (a "Verification Covenant"). In any case in which the Holder is the Relevant Clearing System or the Relevant Clearing System's nominee, any Position Representation or Verification Covenant required hereunder shall be provided by the beneficial owner of the Notes in lieu of the Relevant Clearing System or the Relevant Clearing System's nominee.

If, following the delivery of a Noteholder Direction, but prior to acceleration of the Notes, the Issuer determines in good faith that there is a reasonable basis to believe a Directing Holder was, at any relevant time, in breach of its Position Representation and the Issuer provides to the Trustee an Officer's Certificate (which shall be provided to the Holders) certifying that the Issuer (i) believes in good faith that there is a reasonable basis to believe a Directing Holder was at any relevant time in breach of its Position Representation or its Verification Covenant and (ii) has filed papers with a court of competent jurisdiction seeking a determination that such Directing Holder was, at such time, in breach of its Position Representation, and seeking to invalidate any Event of Default that resulted from the applicable Noteholder Direction, the cure period with respect to such Event of Default shall be automatically stayed pending a final and non-appealable determination of a court of competent jurisdiction on such matter. If such Officer's Certificate has been delivered to the

Trustee, the Trustee shall refrain from acting in accordance with such Noteholder Direction until such time as the Issuer provides to the Trustee an Officer's Certificate stating that (i) a Directing Holder has satisfied its Verification Covenant, (ii) a Directing Holder has failed to satisfy its Verification Covenant or (iii) a court of competent jurisdiction rules that such Directing Holder was, at such time, not in breach of its Position Representation or its Verification Covenant, and during such time the cure period with respect to any Event of Default that resulted from the applicable Noteholder Direction shall be automatically stayed pending satisfaction of such Verification Covenant. If there is any breach of the Position Representation or failure to satisfy its Verification Covenant in accordance with a final and non-appealable court determination or order, then for purposes of determining the requisite level of consent for such Noteholder Direction, that breaching Holder's position shall be treated as "not outstanding" for purposes of determining the denominator in the calculation of the requisite level of consent (and their position may not also be included in the numerator); and, if, without the participation of such Directing Holder, the percentage of Notes held by the remaining Holders that provided such Noteholder Direction would have been insufficient to validly provide such Noteholder Direction, such Noteholder Direction shall be void ab initio, with the effect that such Event of Default shall be deemed never to have occurred, and any related acceleration rescinded, and the Trustee shall be deemed not to have received such Noteholder Direction or any notice of such alleged Default or Event of Default, shall not be permitted to act thereon and shall be restricted from accepting and acting on any future Noteholder Direction in relation to such Event of Default. If the Directing Holder has satisfied its Verification Covenant, then the Trustee shall be permitted to act in accordance with such Noteholder Direction. Notwithstanding the above, if such Directing Holder's participation is not required to achieve the requisite level of consent of Holders required under the Indenture to give such Noteholder Direction, the Trustee shall be permitted to act in accordance with such Noteholder Direction notwithstanding any action taken or to be taken by the Issuer (as described above). The Trustee shall be entitled to conclusively rely on any Noteholder Direction (provided that the relevant Position Representations are provided in accordance with the provisions of the preceding paragraph) or Officer's Certificate delivered to it in accordance with the Indenture without verification, investigation or otherwise as to the statements made therein.

Each Holder by accepting a Note acknowledges and agrees that the Trustee (and any Agent) shall not be liable to any party howsoever arising for acting or refraining to act in accordance with (i) the foregoing provisions, (ii) any Noteholder Direction, (iii) any Officer's Certificate or (iv) its duties under the Indenture, as the Trustee may determine in good faith (provided that the Trustee's conduct does not constitute gross negligence, willful misconduct or fraud). The Trustee shall have no obligation (i) to monitor, investigate, verify or otherwise determine if a Holder has a Net Short position, (ii) investigate the merits, validity, accuracy or authenticity of any position representation or Officer's Certificate, as the case may be, (iii) inquire if the Issuer will seek action to determine if a Directing Holder has breached its position representation, (iv) enforce any Verification Covenant, (v) monitor any court proceedings undertaken in connection therewith, (vi) monitor or investigate whether any Default or Event of Default has been publicly reported or (vii) otherwise make any calculations, investigations or determinations with respect to any derivative instruments, Net Short position, long derivative instrument, short derivative instrument or otherwise.

If an Event of Default described in clause (e) of the first paragraph of this section occurs and is continuing, the principal of and accrued and unpaid interest, if any, on all the Notes will become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holders.

Holders may not enforce the Indenture or the Notes except as provided in the Indenture and may not enforce the Transaction Security Documents except as provided in such Transaction Security Documents and the Intercreditor Agreement or any Additional Intercreditor Agreement. The Holders of at least a majority in principal amount of the outstanding Notes under the Indenture may waive all past or existing Defaults or Events of Default (except with respect to non-payment of principal, premium, interest or Additional Amounts, if any, on any Note held by a non-consenting Holder, which may only be waived with the consent of Holders of not less than 90% of the aggregate principal amount of the outstanding Notes) and rescind any such acceleration with respect to such Notes and its consequences (including the payment default that resulted from such acceleration) if rescission would not conflict with any judgment or decree of a court of competent jurisdiction.

The Indenture will provide that (i) if a Default for a failure to report or failure to deliver a required certificate in connection with another default (the "Initial Default") occurs, then at the time such Initial Default is cured, such Default for a failure to report or failure to deliver a required certificate in connection with another default that resulted solely because of that Initial Default will also be cured without any further action and (ii) any Default or Event of Default for the failure to comply with the time periods prescribed in the covenant titled "*—Certain Covenants—Reports*" or otherwise to deliver any notice or certificate pursuant to any other provision of the Indenture shall be deemed to be cured upon the delivery of any such report required by such covenant or such notice or certificate, as applicable, even though such delivery is not within the prescribed period specified in the Indenture.

The Trustee will be under no obligation to exercise any of the rights or powers under the Indenture at the request or direction of any of the Holders unless such Holders have offered to the Trustee indemnity and/or security satisfactory to the Trustee in its sole discretion against any loss, liability or expense. Except to enforce the right to receive payment of principal or interest when due, no Holder may pursue any remedy with respect to the Indenture or the Notes unless:

(1) such Holder has previously given the Trustee written notice that an Event of Default is continuing and, if such Event of Default is in respect of clauses (c), (d) or (f) of the first paragraph of this section, such Holder is not in breach of a Position Representation or Verification Covenant;

(2) Holders, or in the case of clauses (c), (d) or (f) of the first paragraph of this section, Directing Holders that are not in breach of a Position Representation or Verification Covenant, of at least 30% in principal amount of the outstanding Notes have requested in writing the Trustee to pursue the remedy;

(3) such Holders, or Directing Holders that are not in breach of a Position Representation (as applicable) have offered in writing and, if requested, provided to the Trustee security and/or indemnity satisfactory to the Trustee in its sole discretion against any loss, liability or expense;

(4) the Trustee has not complied with such request within 60 days after the receipt of the written request and the offer of security and/or indemnity; and

(5) the Holders of a majority in principal amount of the outstanding Notes have not given the Trustee a written direction that, in the opinion of the Trustee, is inconsistent with such request within such 60-day period.

Subject to certain restrictions, the Holders of a majority in principal amount of the outstanding Notes are given the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or of exercising any trust or power conferred on the Trustee.

The Indenture will provide that, in the event an Event of Default has occurred and is continuing, of which a responsible officer of the Trustee has received written notice, the Trustee will be required in the exercise of its powers to use the degree of care that a prudent person would use in the conduct of its own affairs. The Trustee, however, may refuse to follow any direction that conflicts with law or the Indenture or that the Trustee determines (after consultation with counsel) is unduly prejudicial to the rights of any other Holder or that would involve the Trustee in personal liability. Prior to taking any action under the Indenture, the Trustee will be entitled to indemnification and/or security satisfactory to the Trustee in its sole discretion against all fees, losses, liabilities and expenses caused by taking or not taking such action.

The Indenture will provide that if a Default occurs and is continuing and a responsible officer of the Trustee is informed in writing of such occurrence by the Issuer, the Trustee must give notice of the Default to the Holders within 60 days after being notified by the Issuer. Except in the case of a Default in the payment of principal of, or premium, if any, or interest on any Note, the Trustee may withhold notice if and so long as the Trustee in good faith determines that withholding notice is in the interests of the Holders.

The Issuer is required to deliver to the Trustee, within 120 days (or if such day is not a Business Day, on the next succeeding Business Day) after the end of each fiscal year (or in the case of the first fiscal year ending after the Issue Date, 150 days), an Officer's Certificate indicating whether the signers thereof know of any Default that has occurred during the previous year, and is continuing. The Issuer is required to deliver to the Trustee, within 30 days after the occurrence thereof, written notice of any events that are continuing of which it is aware the occurrence of which would constitute certain Defaults, their status and what action the Issuer is taking or proposes to take in respect thereof.

Amendments and Waivers

Except as provided in the next two succeeding paragraphs, the Indenture and the other Note Documents may be amended, supplemented or otherwise modified with the consent of the Holders of at least a majority in principal amount of the Notes then outstanding (including consents obtained in connection with a purchase of, or tender offer or exchange offer for, such Notes) and, subject to certain exceptions, any existing Default or Event of Default (other than a Default or Event of Default in the payment of principal or premium, Additional Amounts, if any, or interest on any Note (including in connection with an offer to purchase), except a payment default resulting from an acceleration that has been rescinded) or compliance with any provision of the Indenture and the other Note Documents may be waived with the consent of the Holders of at least a majority in aggregate principal amount of the Notes then outstanding (including consents obtained in connection with a purchase of, or tender offer or exchange offer for, such Notes). If any amendment, supplement or waiver will only affect one or more series of Notes (but not all series of Notes), only the Holders of at least a majority in aggregate principal amount of the then outstanding Notes of the series so affected (and not the consent of the Holders of at least a majority in aggregate principal amount of all Notes then outstanding), shall be required.

However, without the consent of Holders holding not less than 90% (or, in the case of clauses (7) and (9) of this paragraph, 80%) of the then outstanding principal amount of the Notes (*provided, however*, that if any amendment, supplement, waiver or other modification or consent will only affect one or more series of Notes (but not all series of Notes), only the consent of the holders of at least 90% (or, in the case of clauses (7) and (9) below, 80%) of the aggregate principal amount of the then outstanding Notes of the series so affected will be required), an amendment or waiver may not, with respect to any Notes held by a non-consenting Holder:

(1) reduce the stated rate of or extend the stated time for payment of interest on any such Note (other than provisions relating to a Change of Control and Asset Dispositions);

(2) reduce the principal of or extend the Stated Maturity of any such Note (other than provisions relating to a Change of Control and Asset Dispositions);

(3) reduce the premium payable upon the redemption of any such Note or change the time at which any such Note may be redeemed, in each case as described under "—*Optional Redemption*" and "—*Redemption for Taxation Reasons*";

(4) make any such Note payable in currency other than that stated in such Note;

(5) impair the contractual right of any Holder of any outstanding Note to institute suit for the enforcement of any payment of principal of, or interest or Additional Amounts, if any, on such Holder's Notes on or after the due dates therefor;

(6) make any change in the provisions of the Indenture described under "—*Withholding Taxes*" that adversely affects the right of any Holder of such Notes in any material respect or amends the terms of such Notes in a way that would result in a loss of an exemption from any of the Taxes described thereunder or an exemption from any obligation to withhold or deduct Taxes so described thereunder unless the applicable Payor agrees to pay Additional Amounts, if any, in respect thereof;

(7) release all or substantially all Security Interests granted for the benefit of the Holders in the Charged Property (taken as a whole) other than in accordance with the terms of the Transaction Security Documents, the Intercreditor Agreement, any applicable Additional Intercreditor Agreement and the Indenture; *provided* that, for the avoidance of doubt and without prejudice to the provisions governing a Change of Control, the release of less than all or substantially all Security Interests granted for the benefit of the Holders in the Charged Property (taken as a whole) shall only require the consent of Holders of at least a majority in principal amount of the Notes then outstanding (including consents obtained in connection with a purchase of, or tender offer or exchange offer for, Notes) and any default or compliance with any provisions thereof may be waived with the consent of the Holders of at least a majority in principal amount of the Notes then outstanding (including consents obtained in connection with a purchase of, or tender offer or exchange offer for, Notes);

(8) waive a Default or Event of Default with respect to the non-payment of principal, premium or interest or Additional Amounts, if any (except pursuant to a rescission of acceleration of the Notes by the Holders of at least a majority in principal amount of such Notes and a waiver of the payment default that resulted from such acceleration);

(9) release any Guarantor from its obligations under its Note Guarantee or the Indenture, except in accordance with the terms of the Indenture and the Intercreditor Agreement; or

(10) reduce the principal amount of Notes whose holders must consent to any amendment, waiver or modification or make any other change in the amendment or waiver provisions which require the Holders' consent described in this sentence.

Notwithstanding the foregoing, without the consent of any Holder, the Issuer, the Trustee and the other parties thereto, as applicable, may amend or supplement any Note Documents to:

(1) cure any ambiguity, omission, mistake, defect, error or inconsistency or reduce the minimum denomination of the Notes;

(2) provide for the assumption by a successor Person or a co-issuer of the obligations of the Issuer or a Guarantor under any Note Document, including, without limitation, in connection with a Permitted Transaction;

(3) add to the covenants, add an obligor or provide for a Note Guarantee for the benefit of the Holders or surrender any right or power conferred upon the Issuer or any Restricted Subsidiary;

(4) make any change that would provide any additional rights or benefits to the Trustee or the Holders or make any change (including changing the ISIN, common code or other identifying number on any Notes) that does not adversely affect the rights of the Trustee or any Holder in any material respect;

(5) make such provisions as necessary (as determined in good faith by the Board of Directors or a member of senior management of the Issuer) for the issuance of Additional Notes that may be issued in compliance with the Indenture;

(6) provide for uncertificated Notes in addition to or in place of certificated Notes;

(7) provide for any Restricted Subsidiary to provide a Guarantee in accordance with the covenants described under "—*Certain Covenants—Limitation on Indebtedness*" or "—*Certain Covenants— Limitation on Guarantees of Indebtedness by Restricted Subsidiaries*," to add Note Guarantees with respect to the Notes, to add security to or for the benefit of the Notes, or to confirm and evidence the release, termination, discharge or retaking of any Note Guarantee or Lien with respect to or securing the Notes when such release, termination, discharge or retaking is provided for under the Indenture, the Transaction Security Documents, the Intercreditor Agreement or any Additional Intercreditor Agreement;

(8) evidence and provide for the acceptance and appointment under any Note Document of a successor Trustee or successor security agent pursuant to the requirements thereof or to provide for the accession by the Trustee or Security Agent to any Note Document;

(9) in the case of the Transaction Security Documents, to mortgage, pledge, hypothecate or grant a Security Interest in favor of the Security Agent for the benefit of the Holders or parties to the Senior Secured Credit Facilities Agreement, in any property which is required by the Transaction Security Documents to be mortgaged, pledged or hypothecated, or in which a Security Interest is required to be granted to the Security Agent, or to the extent necessary to grant a Security Interest in the Charged Property for the benefit of any Person; *provided* that the granting of such Security Interest is not prohibited by the Indenture, the Intercreditor Agreement or any Additional Intercreditor Agreement and the covenant described under "*—Certain Covenants—Impairment of Security Interest*" is complied with;

(10) release any Guarantor from its Note Guarantee pursuant to the Indenture when permitted or required by the Indenture;

(11) conform the text of the Indenture, the Intercreditor Agreement, the Transaction Security Documents or the Notes to any provision of this "*Description of the Notes*" to the extent that such provision in this "*Description of the Notes*" was intended to be a recitation of a provision of the Indenture, the Transaction Security Documents or the Notes;

(12) release and discharge any Lien securing the Notes when permitted or required by the Indenture (including pursuant to the second paragraph of the covenant described under "*—Certain Covenants—Liens*") or the Transaction Security Documents;

(13) make any amendment to the provisions of the Indenture relating to the transfer and legending of Notes as permitted by the Indenture, including to facilitate the issuance and administration of Notes; *provided, however*, that (i) compliance with the Indenture as so amended would not result in Notes being transferred in violation of the Securities Act or any other applicable securities law and (ii) such amendment does not adversely affect the rights of Holders to transfer Notes in any material respect;

(14) comply with the rules of any applicable securities depositary;

(15) facilitate any transaction that complies with the covenants described under "*—Certain Covenants—Limitation on Sales of Assets and Subsidiary Stock*" and "*—Merger and Consolidation", relating to mergers, consolidations and sales of assets;*

(16) amend, supplement or otherwise modify the Escrow Agreement or the Escrow Charge to the extent that such amendment, supplement or modification does not adversely affect the rights of the holders of the Notes in any material respect;

(17) comply with the covenant described under *"—Certain Covenants—Additional Intercreditor Agreements*"; and

(18) make any amendment of an administrative or ministerial nature to the provisions of the Indenture or any Note Document to facilitate the Acquisition, a Permitted Reorganization or a transaction described under "*—IPO Debt Pushdown*."

For the avoidance of doubt, no amendment to, or deletion of, or actions taken in compliance with, the covenants described under "*—Certain Covenants*" or this section shall be deemed to impair or affect any rights of Holders to receive payment of principal of, or interest or premium, if any, on the Notes.

In formulating its decisions on such matters, the Trustee and the Security Agent, as applicable, shall be entitled to require and rely absolutely on such evidence as it deems appropriate, including Officer's Certificates and Opinions of Counsel.

The consent of the Holders is not necessary under the Indenture to approve the particular form of any proposed amendment, supplement or waiver of any Note Document. It is sufficient if such consent approves the substance thereof. A consent to any amendment, supplement or waiver under the Indenture by any Holder given in connection with a sale or tender of such Holder's Notes will not be rendered invalid by such sale or tender.

Notwithstanding anything to the contrary in the paragraphs above, in order to effect an amendment authorized by clauses (3) and (6) of the third paragraph of this section to add a Guarantor under the Indenture, it shall only be necessary for the supplemental indenture providing for the accession of such additional Guarantor to be duly authorized and executed by (i) the Issuer, (ii) such additional Guarantor and (iii) the Trustee. Any other amendments permitted by the Indenture need only be duly authorized and executed by the Issuer, the Trustee and the Security Agent (to the extent applicable).

The Indenture will not contain a covenant regulating the offer and/or payment of a consent fee to Holders.

A Note does not cease to be outstanding because the Issuer, an Affiliate of the Issuer, or any fund or other entity controlled, managed or advised by any direct or indirect shareholder of the Issuer (or, in each case, any successor thereof) holds the Note; *provided* that, in determining whether the holders of the requisite majority of outstanding Notes have given any request, demand, authorization, direction, notice, consent or waiver hereunder, Notes owned by the Issuer, an Affiliate of the Issuer, or any fund or other entity controlled, managed by or advised by any direct or indirect shareholder of the Issuer (or, in each case, any successor thereof) shall be disregarded and deemed not to be outstanding if a responsible Officer of the Trustee has received written notice of such ownership at least two Business Days prior to the date of such determination. Prior to the receipt of such notice, the Trustee shall be entitled to assume that none of the Notes are owned by the Issuer, an Affiliate of the Issuer, or any fund or other entity controlled, managed by or advised by any direct or indirect shareholder of the Issuer (or, in each case, any successor thereof). For the avoidance of doubt, provision of such notice shall not be an obligation of the Issuer.

Defeasance

The Issuer at any time may terminate all obligations of the Parent, the Issuer and the Guarantors under the Note Documents ("legal defeasance") and cure all then existing Defaults and Events of Default, except for certain obligations, including those respecting the defeasance trust, the rights, powers, trusts, duties, immunities and indemnities of the Trustee and the obligations of the Issuer in connection therewith and obligations concerning issuing temporary Notes, registrations of Notes, mutilated, destroyed, lost or stolen Notes and the maintenance of an office or agency for payment and money for security payments held in trust. Subject to the foregoing, if the Issuer exercises its legal defeasance option, the Transaction Security Documents and the rights of the Trustee and the Holders under the Intercreditor Agreement or any Additional Intercreditor Agreement in effect at such time will terminate (other than with respect to the defeasance trust).

The Issuer at any time may terminate the obligations of the Issuer and its Restricted Subsidiaries under the covenants described under "*—Certain Covenants*" and "*—Merger and Consolidation*" (other than clauses (i), (iii) and (iv) of "*—Merger and Consolidation—The Issuer*") and "*—Change of Control*" and the default provisions relating to such covenants described under "*—Events of Default*" above, the operation of the cross- default upon a payment default, the cross acceleration provisions, the bankruptcy provisions (other than with respect to the Issuer), the judgment default provision, the guarantee provision, and the security default provision described under "*—Events of Default*" above ("covenant defeasance").

The Issuer at its option at any time may exercise its legal defeasance option notwithstanding its prior exercise of its covenant defeasance option. If the Issuer exercises its legal defeasance option, payment of the Notes may not be accelerated because of an Event of Default with respect to the Notes. If the Issuer exercises its covenant defeasance option with respect to the Notes, payment of the Notes may not be accelerated because of an Event of Default specified in clause (c), (d), (e) (other than with respect only to the Issuer), (f) or (g) under "*—Events of Default*" above.

In order to exercise either defeasance option, the Issuer (i) must irrevocably deposit in trust (the "defeasance trust") with the Trustee (or another entity designated or appointed (as agent) by the Trustee for this purpose) cash in euro or European Government Obligations or a combination thereof for the payment of principal, premium, if any, and interest on the Notes to redemption or maturity, as the case may be; provided, that upon any redemption that requires the payment of the Applicable Premium, the amount deposited shall be sufficient for purposes of the Indenture to the extent that an amount is deposited with the Trustee equal to the Applicable Premium calculated as of the date of the notice of redemption, with any deficit as of the date of redemption (any such amount, the "Applicable Premium Deficit") only required to be deposited with the Trustee on or prior to the date of redemption. Any Applicable Premium Deficit shall be set forth in an Officer's Certificate delivered to the Trustee simultaneously with the deposit of such Applicable Premium Deficit that confirms that such Applicable Premium Deficit shall be applied toward such redemption, and (ii) must comply with certain other conditions, including delivery to the Trustee of:

(1) an Opinion of Counsel, subject to customary assumptions and exclusions, to the effect that Holders and beneficial owners will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit and defeasance and will be subject to U.S. federal income tax on the same amounts and in the same manner and at the same times as would have been the case if such deposit and defeasance had not occurred (and in the case of legal defeasance only, such Opinion of Counsel must be based on a ruling of the U.S. Internal Revenue Service or change in applicable U.S. federal income tax law since the issuance of the Notes);

(2) an Officer's Certificate stating that the deposit was not made by the Issuer with the intent of defeating, hindering, delaying, defrauding or preferring any creditors of the Issuer; and

(3) an Officer's Certificate and an Opinion of Counsel (which opinion of counsel may be subject to customary assumptions and exclusions), each stating that all conditions precedent provided for or relating to legal defeasance or covenant defeasance, as the case may be, have been complied with.

Satisfaction and Discharge

The Indenture, and the rights of the Trustee and the Holders under the Intercreditor Agreement, any Additional Intercreditor Agreement and the Transaction Security Documents, will be discharged and cease to be of further effect (except as to surviving rights of transfer or exchange of the Notes and certain surviving rights of the Trustee, as expressly provided for in the Indenture) as to all Notes when (1) either (a) all the Notes previously authenticated and delivered (other than certain lost, stolen or destroyed Notes and certain Notes for which provision for payment was previously made and thereafter the funds have been released to the Issuer) have been delivered to the Trustee for cancellation; or (b) all Notes not previously delivered to the Trustee for cancellation (i) have become due and payable, (ii) will become due and payable at their Stated Maturity within one year or (iii) are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee or the Paying Agent in the name, and at the expense, of the Issuer; (2) the Issuer has deposited or caused to be deposited with the Trustee (or another entity designated or appointed (as agent) by the Trustee for this purpose) money in euro or European Government Obligations, or a combination thereof in an amount sufficient to pay and discharge the entire indebtedness on the Notes not previously delivered to the Trustee for cancellation, for principal, premium, if any, and interest and Additional Amounts, if any, to the date of deposit (in the case of Notes that have become due and payable), or to the Stated Maturity or redemption date, as the case may be; provided that upon any redemption that requires the payment of the Applicable Premium, the amount deposited shall be sufficient for purposes of satisfying and discharging the Indenture to the extent that an amount is deposited with the Trustee equal to the Applicable Premium calculated as of the date of the notice of redemption, with any Applicable Premium Deficit only required to be deposited with the Trustee on or prior to the date of redemption, and any Applicable Premium Deficit shall be set forth in an Officer's Certificate delivered to the Trustee simultaneously with the deposit of such Applicable Premium Deficit that confirms that such Applicable Premium Deficit shall be applied toward such redemption; (3) the Issuer has paid or caused to be paid all other sums payable under the Indenture; (4) the Issuer has delivered irrevocable instructions to the Trustee under the Indenture to apply the deposited money toward the payment of the Notes at maturity or on the redemption date, as the case may be; and (5) the Issuer has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel each stating that all conditions precedent under the section of the Indenture relating to the satisfaction and discharge of the Indenture have been complied with; provided that any such counsel may rely on any Officer's Certificate as to matters of fact (including as to compliance with the foregoing clauses (1), (2), (3) and (4)).

If requested in writing by the Issuer (which request may be included in the above-mentioned Officer's Certificate) to the Trustee and the Paying Agent, the Trustee will distribute any amounts deposited to the Holders prior to Stated Maturity or the redemption date, as the case may be; *provided, however*, that the Holders shall have received at least five Business Days' notice from the Issuer of such earlier repayment date (which may be included in the notice of redemption). For the avoidance of doubt, the distribution and payment to Holders prior to the maturity or redemption date as set forth above will not include any negative interest, present value adjustment, break costs or any other premium on such amounts.

No Personal Liability of Directors, Managers, Officers, Employees and Stockholders

No director, manager, officer, employee, incorporator or stockholder of the Issuer or any of its Subsidiaries or Affiliates, as such, shall have any liability for any obligations of the Issuer under the Note Documents or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes. Such waiver may not be effective to waive liabilities under the U.S. federal securities laws and it is the view of the SEC that such a waiver is against public policy.

Concerning the Trustee

Deutsche Trustee Company Limited is to be appointed as Trustee under the Indenture. The Indenture will provide that, except during the continuance of an Event of Default of which a responsible officer of the Trustee has written notice, the Trustee will perform only such duties as are set forth specifically in such Indenture. During the existence of an Event of Default, of which a responsible officer of the Trustee has received written notice, the Trustee will exercise such of the rights and powers vested in it under the Indenture and use the same degree of care that a prudent person would use in conducting its own affairs. The permissive rights of the Trustee to take or refrain from taking any action enumerated in the Indenture will not be construed as an obligation or duty. Furthermore, the Trustee will be under no obligation to exercise any of its rights or powers under the Indenture at the request of any Holder, unless such Holder has offered to the Trustee indemnity and/or security satisfactory to the Trustee in its sole discretion against any loss, liability or expense.

The Indenture will impose certain limitations on the rights of the Trustee, should it become a creditor of the Issuer, to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim as security or otherwise. The Trustee or any Agent will be permitted to engage in other transactions with the Issuer and its Affiliates and Subsidiaries.

The Indenture will set out the terms under which the Trustee may retire or be removed, and replaced. Such terms will include, among others, (1) that the Trustee may be removed at any time by the Holders of a majority in principal amount of the outstanding Notes, or may resign at any time by giving written notice to the Issuer and (2) that if the Trustee at any time (a) has actual knowledge that it has or has acquired a conflict of interest that is not eliminated or (b) becomes incapable of acting as Trustee or becomes insolvent or bankrupt, then the Issuer may remove the Trustee, or any Holder who has been a bona fide Holder for not less than six months may petition any court for removal of the Trustee and appointment of a successor Trustee.

Any removal or resignation of the Trustee shall not become effective until the acceptance of appointment by the successor Trustee.

The Indenture will contain provisions for the indemnification of the Trustee for any loss, liability, taxes and expenses incurred without gross negligence, willful misconduct or fraud on its part, arising out of or in connection with the acceptance or administration of the Indenture. In formulating its decisions, the Trustee and the Security Agent, as applicable, shall be entitled to require and rely absolutely on such evidence as it deems appropriate, including Officer's Certificates and Opinions of Counsel.

Notices

If and for so long as Notes are listed on the Official List of the Exchange and if and to the extent that the rules of the Authority so require, notices of the Issuer with respect to the Notes will be sent to the Authority.

All notices to Holders of Notes will be validly given if electronically delivered or mailed to them at their respective addresses in the register of the Holders, if any, maintained by the registrar. For so long as any Notes are represented by global notes, all notices to Holders will be delivered to the Relevant Clearing Systems in accordance with the applicable procedures of the Relevant Clearing Systems, delivery of which shall be deemed to satisfy the requirements of this paragraph, which will give such notices to the Holders of book-entry interests. To the extent the mandatory rules and procedures of the Relevant Clearing Systems conflict with any such requirements, a notice will be deemed to satisfy the requirements of the Indenture if it complies with the mandatory rules and procedures of the Relevant Clearing Systems.

Each such notice shall be deemed to have been given on the date of such publication or, if published more than once on different dates, on the first date on which publication is made; *provided* that, if notices are mailed, such notice shall be deemed to have been given on the later of such publication and the seventh day after being so mailed. Any notice or communication mailed to a Holder shall be mailed to such Person by first-class mail or other equivalent means and shall be sufficiently given to such Holder if so mailed within the time prescribed. Failure to electronically deliver or mail a notice or communication to a Holder or any defect in it shall not affect its sufficiency with respect to other Holders. If a notice or communication is electronically delivered or mailed in the manner provided above, it is duly given, whether or not the addressee receives it. If a notice or communication is given through a Relevant Clearing System, it is duly given on the day the notice is given to such Relevant Clearing System.

Prescription

Claims against the Issuer or any Guarantor for the payment of principal, premium, if any, or Additional Amounts, if any, on the Notes will be prescribed ten years after the applicable due date for payment thereof. Claims against the Issuer or any Guarantor for the payment of interest on the Notes will be prescribed six years after the applicable due date for payment of interest.

Currency Indemnity and Calculation of Euro-Denominated Restrictions

Euro is the required currency (the "Required Currency") of account and payment for all sums payable by the Issuer and the Guarantors, if any, under or in connection with the Notes and the Note Guarantees thereof, if any, including damages. Any amount received or recovered in a currency other than the applicable Required Currency, whether as a result of, or the enforcement of, a judgment or order of a court of any jurisdiction, in the winding-up or dissolution of the Issuer, any Guarantor or otherwise by any Holder, any Paying Agent or by the Trustee, in respect of any sum expressed to be due to it from the Issuer or a Guarantor will only constitute a discharge to the Issuer or such Guarantor, as applicable, to the extent of the amount of the applicable Required Currency which the recipient is able to purchase with the amount so received or recovered in that other currency on the date of that receipt or recovery (or, if it is not practicable to make that purchase on that date, on the first date on which it is practicable to do so). If the amount of the applicable Required Currency is less than the amount of the Required Currency expressed to be due to the recipient, any Paying Agent or the Trustee under any Note, the Issuer and the Guarantors will indemnify them against any loss sustained by such recipient or the Trustee as a result. In any event, the Issuer and the Guarantors will indemnify the recipient, any Paying Agent or the Trustee on a joint and several basis against the cost of making any such purchase. For the purposes of this currency indemnity provision, it will be prima facie evidence of the matter stated therein for the Holder of a Note or any Paying Agent or the Trustee to certify in a manner reasonably satisfactory to the Issuer (indicating the sources of information used) the loss it Incurred in making any such purchase. These indemnities constitute a separate and independent obligation from the Issuer's and the Guarantors' other obligations, will give rise to a separate and independent cause of action, will apply irrespective of any waiver granted by any Holder of a Note, any Paying Agent or the Trustee (other than a waiver of the indemnities set out herein) and will continue in full force and effect despite any other judgment, order, claim or proof for a liquidated amount in respect of any sum due under any Note or any Note Guarantee, or to the Trustee. Except as otherwise specifically set forth herein, for purposes of determining compliance with any euro-denominated restriction herein, the Euro Equivalent amount for purposes hereof that is denominated in a non-euro currency shall be calculated based on the relevant currency exchange rate in effect on the date such non-euro amount is Incurred or made, as the case may be.

Listing

Application will be made to list the Notes on the Official List of the Exchange and for permission to be granted to deal in the Notes on the Official List of the Exchange. There can be no assurance that the application to list the Notes on the Official List of the Exchange will be approved or that permission to deal in the Notes thereon will be granted, and settlement of the Notes is not conditioned on obtaining this listing or permission.

Enforceability of Judgments

Since a material portion of the assets of the Issuer and its subsidiaries are located outside the United States, any judgment obtained in the United States against the Issuer or the Guarantors, including judgments with respect to the payment of principal, premium, interest, Additional Amounts, if any, and any redemption price and any purchase price with respect to the Notes, may not be collectable within the United States.

Consent to Jurisdiction and Service

In relation to any legal action or proceedings arising out of or in connection with the Indenture and the Notes, the Issuer and the Guarantors will in the Indenture irrevocably submit to the jurisdiction of the federal and state courts in the Borough of Manhattan in the City, County and State of New York, in the United States of America. The Indenture will provide that each of the Issuer and the Guarantors will appoint an agent for service of process in any suit, action or proceeding with respect to the Indenture, the Notes and the Note Guarantees brought in any U.S. federal or New York state court located in the City of New York.

Governing Law

The Indenture and the Notes, including any Note Guarantees, and the rights and duties of the parties thereunder shall be governed by and construed in accordance with the laws of the State of New York. For the avoidance of doubt, the governing law of the Indenture and the Notes may be amended with the consent of Holders of at least a majority in principal amount of the Notes then outstanding (including consents obtained in connection with a purchase of, or tender offer or exchange offer for, Notes). The Intercreditor Agreement, the Escrow Agreement and the Escrow Charge, and the rights and duties of the parties thereunder shall be governed by and construed in accordance with the laws of England and Wales. The Transaction Security Documents will be governed by the law of the location of the relevant asset that is part of the Charged Property.

Certain Definitions

"*Acceptable Nation*" means Australia, Canada, any member state of the EU, Japan, Switzerland, the UK, the US, or any other state, country or sub-division of a country which has a rating for its short-term unsecured and noncredit-enhanced debt obligations of A-1 or higher by S&P or F1 or higher by Fitch or P-1 or higher by Moody's or by an instrumentality or agency of any such government having an equivalent credit rating.

"*Accounting Principles*" means, in respect of any member of any Financial Reporting Group, at its election, IFRS, International Financial Reporting Standards (formerly International Accounting Standards) endorsed from time to time by the EU or the International Accounting Standards Board (or any variation thereof), or generally accepted accounting principles in its jurisdiction of incorporation (including generally accepted accounting principles in Germany (*grundsatz ordnungsgemäßer buchführung*) under the German Commercial Code (*HGB*) (if applicable)), in each case to the extent applicable to the relevant financial statements and as applied by such Financial Reporting Entity or that member of the Financial Reporting Group from time to time.

"*Acquired Indebtedness*" means Indebtedness:

(a) of a person or any of its Subsidiaries existing at the time such person becomes a Restricted Subsidiary;

(b) assumed in connection with the acquisition of assets from such person, in each case whether or not Incurred by such person in connection with such person becoming a Restricted Subsidiary or such acquisition; or

(c) of a person at the time such person merges with or into or consolidates or otherwise combines with the Issuer or any Restricted Subsidiary, *provided* that Acquired Indebtedness shall be deemed to have been Incurred, with respect to:

  (i) clause (a) above, on the date such person becomes a Restricted Subsidiary;

  (ii) clause (b) above, on the date of consummation of such acquisition of assets; and

  (iii) clause (c) above, on the date of the relevant merger, consolidation or other combination.

"*Acquisition*" means the direct or indirect acquisition by Bidco of shares in the Target in accordance with the terms of the Acquisition Documents.

"*Acquisition Agreement*" means the sale and purchase agreement dated August 16, 2021 between Bidco and the Vendor.

"*Acquisition Closing Date*" means the date on which the Acquisition is completed in accordance with the terms of the Acquisition Agreement.

"*Acquisition Documents*" means the Acquisition Agreement, any other document ancillary to or entered into in connection with the Acquisition Agreement and each other document or agreement designated in writing as an Acquisition Document by the Issuer.

"*Additional Assets*" means:

(a) any property or assets (other than Capital Stock) used or to be used by the Issuer, a Restricted Subsidiary or otherwise useful (including Investments in property or assets for potential future use) in a Similar Business (it being understood that capital expenditures on property or assets already used, or to be used, in a Similar Business or to replace any property or assets that are the subject of such Asset Disposition shall be deemed an investment in Additional Assets);

(b) the Capital Stock of a person that is engaged in a Similar Business and becomes a Restricted Subsidiary as a result of the acquisition of such Capital Stock by the Issuer or a Restricted Subsidiary; or

(c) Capital Stock constituting a minority interest in any person that at such time is a Restricted Subsidiary.

"*Affiliate*" of any specified Person means any other Person, directly or indirectly, controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, "control," when used with respect to any Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

"*Agent*" means any Registrar, co-Registrar, Transfer Agent, Paying Agent or additional paying agent.

"*Agreed Security Principles*" means the agreed security principles appended to the Indenture.

"*Applicable Metric*" means any financial covenant or financial ratio or Incurrence-based permission, test, basket or threshold in the Indenture (including any financial definition or component thereof and any financial ratio, test, basket or threshold or permission based on the calculation of Consolidated EBITDA, LTM EBITDA, the Senior Secured Net Leverage Ratio, the Total Secured Net Leverage Ratio, the Total Net Leverage Ratio or the Fixed Charge Coverage Ratio), any Default, Event of Default or other relevant breach of the Indenture.

"*Applicable Premium*" means the greater of:

(a) 1% of the principal amount of such Note; and

(b) on any redemption date, the excess (to the extent positive) of:

(i) the present value at such redemption date of (A) the redemption price of such Note at , 2025 (such redemption price (expressed in percentage of principal amount) being set forth in the table under "—*Optional Redemption*" with respect to the Notes (excluding accrued and unpaid interest)), plus (B) all required interest payments due on such Note to and excluding , 2025 (excluding accrued but unpaid interest), computed upon the redemption date using a discount rate equal to the Bund Rate at such redemption date plus 50 basis points; over

(ii) the outstanding principal amount of such Note;

as calculated by the Issuer or on behalf of the Issuer by such Person as the Issuer shall designate. For the avoidance of doubt, calculation of the Applicable Premium shall not be an obligation or duty of the Trustee or the Agents.

"*Applicable Reporting Date*" means, as at any date of determination, at the Issuer's election (which election the Issuer may revoke and re-make at any time and from time to time):

(a) if no report or financial statements have yet been delivered pursuant to clause (1), (2) or (3) of the first paragraph of the covenant described under "—*Certain Covenants—Reports*" since the Acquisition Closing Date, the Acquisition Closing Date;

(b) the last day of the most recent fiscal quarter in respect of which a report or financial statements have been delivered pursuant to clause (1), (2) or (3) of the first paragraph of the covenant described under "—*Certain Covenants—Reports*," with such Applicable Metric determined by reference to such report or financial statements; or

(c) the last day of the most recently completed Relevant Period for which the Group has sufficient available information to be able to determine such Applicable Metric, with such Applicable Metric determined by reference to such available information.

"*Applicable Test Date*" means the Applicable Transaction Date or, at the Issuer's election (which election the Issuer may revoke and re-make at any time and from time to time), the Applicable Reporting Date prior to any Applicable Transaction Date.

"*Applicable Transaction*" means any Investment, acquisition, disposition, sale, merger, joint venture, consolidation or other business combination transaction, Incurrence, Change of Control Triggering Event, assumption, commitment, issuance, repayment, repurchase or refinancing of Indebtedness (including for the avoidance of doubt an additional facility under the Senior Secured Credit Facilities Agreement), Disqualified Stock or Preferred Stock and the use of proceeds thereof, any creation of a Lien, any Restricted Payment, any Affiliate Transaction, any designation of a Restricted Subsidiary or Unrestricted Subsidiary, any Asset Disposition or any other transaction for which an Applicable Metric falls to be determined; *provided* that, if any such transaction (the "first transaction") is being effected in connection with another such transaction (the "second transaction"), the second transaction shall also be an Applicable Transaction with respect to the first transaction.

"*Applicable Transaction Date*" means, in relation to any Applicable Transaction, at the Issuer's election (which election the Issuer may revoke and re-make at any time and from time to time):

(a) the date of any letter, definitive agreement, instrument, put option, scheme of arrangement or similar arrangement in relation to such Applicable Transaction (unilateral, conditional or otherwise);

(b) the date that any commitment, offer, announcement, communication or declaration (unilateral, conditional, or otherwise) with respect to such Applicable Transaction is made or received;

(c) the date that any notice, which may be revocable or conditional, of any repayment, repurchase or refinancing of any relevant Indebtedness is given to the holders of such Indebtedness;

(d) the date of consummation, Incurrence, payment or receipt of payment in respect of the Applicable Transaction; or

(e) any other date determined in accordance with the Indenture.

"*Asset Disposition*" means:

(a) the voluntary sale, conveyance, transfer or other disposition, whether in a single transaction or a series of related transactions, of property or assets (including by way of a Sale and Leaseback Transaction) of the Issuer or any of the Restricted Subsidiaries (in each case other than Capital Stock of the Issuer) (each referred to in this definition as a "disposition"); or

(b) the issuance, sale, transfer or other disposition of Capital Stock of any Restricted Subsidiary (other than Preferred Stock or Disqualified Stock of Restricted Subsidiaries issued in compliance with the covenant described under "—*Certain Covenants—Limitation on Indebtedness*" or directors' qualifying shares and shares issued to foreign nationals as required under applicable law), whether in a single transaction or a series of related transactions,

in each case, other than:

(i) a disposition by the Issuer or a Restricted Subsidiary to the Issuer or a Restricted Subsidiary;

(ii) a disposition of cash or Cash Equivalent Investments;

(iii) a disposition of inventory, receivables, trading stock, equipment or other assets (including Settlement Assets) in the ordinary course of business or held for sale or no longer used in the ordinary course of business, including any disposition of disposed, abandoned or discontinued operations;

(iv) a disposition of obsolete, worn-out, uneconomic, damaged, retired or surplus property, equipment, facilities or other assets or property, equipment or other assets that are no longer economically practical or commercially desirable to maintain or used or useful in the business of the Issuer and the Restricted Subsidiaries whether now or hereafter owned or leased or acquired in connection with an acquisition or used or useful in the conduct of the business of the Issuer and the Restricted Subsidiaries (including by ceasing to enforce, allowing the lapse, abandonment or invalidation of or discontinuing the use or maintenance of or putting into the public domain any intellectual property that is, in the reasonable judgment of the Issuer or the Restricted Subsidiaries, no longer used or useful, or economically practicable to maintain, or in respect of which the Issuer or any Restricted Subsidiary determines in its reasonable judgment that such action or inaction is desirable);

(v) transactions permitted pursuant to the covenants described under "*—Merger and Consolidation—The Issuer*" and "*—Merger and Consolidation—Guarantors*" or a transaction that constitutes a Change of Control;

(vi) a disposition, issuance, sale or transfer of Capital Stock (A) by a Restricted Subsidiary to the Issuer or to another Restricted Subsidiary or as part of or pursuant to an equity-based, equity-linked, profit sharing or performance based, incentive or compensation plan approved by the Board of Directors of the Issuer or (B) relating to directors' qualifying shares and shares issued to individuals as required by applicable law;

(vii) any dispositions of Capital Stock, properties or assets in a single transaction or series of related transactions with a fair market value (as determined in good faith by the Issuer) not exceeding the greater of (x) €41.4 million and (y) an amount equal to 15% of LTM EBITDA;

(viii) any Restricted Payment that is permitted to be made, and is made, under the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*" and the making of any Restricted Payment that is permitted to be made under the covenant described under"*—Certain Covenants—Limitation on Restricted Payments*", Permitted Payment or Permitted Investment;

(ix) dispositions in connection with Liens not prohibited by the covenant described under "*—Certain Covenants—Limitation on Liens*";

(x) dispositions of receivables in connection with the compromise, settlement or collection thereof in the ordinary course of business or in bankruptcy or similar proceedings and exclusive of factoring or similar arrangements or any sale of assets received by the Issuer or a Restricted Subsidiary upon the foreclosure of a Lien granted in favor of the Issuer or any Restricted Subsidiary;

(xi) conveyances, sales, transfers, licenses or sublicenses, lease or assignment or other dispositions of intellectual property rights, software or other general intangibles and licenses, sub-licenses, leases or subleases of other property, in each case, in the ordinary course of business pursuant to a research or development agreement in which the counterparty to such agreement receives a license in the intellectual property or software that result from such agreement;

(xii) the lease, assignment, license, sublease or sublicense of any real or personal property in the ordinary course of business;

(xiii) foreclosure, condemnation, forced dispositions, taking by eminent domain or any similar action with respect to any property or other assets;

(xiv) the sale or discount (with or without recourse, and on customary or commercially reasonable terms and for credit management purposes including pursuant to any factoring arrangements) of accounts receivable or notes receivable arising in the ordinary course of business, or the conversion or exchange of accounts receivable for notes receivable;

(xv) any issuance or sale of Capital Stock in, or Indebtedness or other securities of, an Unrestricted Subsidiary or any other disposition of Capital Stock, Indebtedness or other securities of an Unrestricted Subsidiary or a Subsidiary that is not a Material Subsidiary (as defined in the Senior Secured Credit Facilities Agreement as in effect on the Acquisition Closing Date);

(xvi) any disposition of Capital Stock of a Restricted Subsidiary pursuant to an agreement or other obligation with or to a person (other than the Issuer or a Restricted Subsidiary) from whom such Restricted Subsidiary was acquired, or from whom such Restricted Subsidiary acquired its business and assets (having been newly formed in connection with such acquisition), made as part of such acquisition and in each case comprising all or a portion of the consideration in respect of such sale or acquisition;

(xvii) dispositions of property to the extent:

(1) that such property is exchanged for credit against the purchase price of similar replacement property that is promptly purchased;

(2) that the proceeds of such disposition are promptly applied to the purchase price of such replacement property (which replacement property is actually promptly purchased); or

(3) allowable under Section 1031 of the Code (or any similar provision under applicable tax law) and constituting any exchange of like property (excluding any boot thereon) for use in a Similar Business;

(xviii) any disposition of Securitization Assets or Receivables Assets, or participations therein, in connection with any Qualified Securitization Financing or Receivables Facility, or the disposition of an account receivable in connection with the collection or compromise thereof in the ordinary course of business;

(xix) any disposition pursuant to a Sale and Leaseback Transaction or any other financing transaction with respect to property constructed, acquired, replaced, repaired or improved (including any reconstruction, refurbishment, renovation and/or development of real property) by the Issuer or any Restricted Subsidiary after the Issue Date, including asset securitizations, permitted by the Indenture;

(xx) dispositions of Investments in joint ventures or similar entities to the extent required by, or made pursuant to customary buy/sell arrangements between, the parties to such joint venture set forth in joint venture arrangements and similar binding arrangements;

(xxi) any surrender or waiver of contractual rights or the settlement, release, surrender or waiver of contractual, tort, litigation or other claims of any kind;

(xxii) the unwinding or termination of any Cash Management Services or Hedging Obligations (or any other disposition of interests in derivative transactions);

(xxiii) the disposition of any assets made in connection with the approval of any applicable antitrust authority or otherwise necessary or advisable in the good faith determination of the Issuer to consummate any acquisition; and

(xxiv) a disposition of property or assets if the acquisition of such property or assets was financed with Excluded Contributions and the Net Available Cash from such disposition is used to make a Restricted Payment,

in each case, *provided* that in the event that a transaction (or any portion thereof) meets the criteria of a permitted Asset Disposition and would also be a Permitted Investment or an Investment permitted under the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*" the Issuer, in its sole discretion, will be entitled to divide and classify such transaction (or a portion thereof) as an Asset Disposition and/or one or more of the types of Permitted Investments or Investments permitted under the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*."

"*Associate*" means (i) any person engaged in a Similar Business of which the Issuer or the Restricted Subsidiaries are the legal and beneficial owners of between 20% and 50% of all outstanding Voting Stock and (ii) any joint venture entered into by the Issuer or any Restricted Subsidiary.

"*Available Amount*" means at any time, an amount equal to, without duplication or double counting (including without double counting amounts which would increase the capacity to make Restricted Payments, Permitted Payments or Permitted Investments pursuant to the first paragraph of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*"), the sum of:

(a) Retained Cash (as defined in the Senior Secured Credit Facilities Agreement as in effect on the Acquisition Closing Date); plus

(b) the amount of any Equity Contribution made after the Acquisition Closing Date (excluding the Transaction Equity Contribution); plus

(c) Closing Overfunding; plus

(d) IPO Proceeds; plus

(e) (other than for the purpose of determining the Available RP Capacity Amount (pursuant to clauses (xvii)(B)(2) and (xix)(B)(3) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*")) Permitted Debt (excluding (i) any intra-Group Indebtedness and (ii) any Indebtedness of a member of the Group outstanding or committed on the Acquisition Closing Date under Facility B and/or the Notes that are applied by the Issuer on or about the

Acquisition Closing Date towards (x) the payment of the cash consideration to the Vendor under the Acquisition Agreement, (y) the refinancing of existing Indebtedness of the Target Group or (z) the payment of costs, fees or expenses in connection with the Transaction); plus

(f) cash and Cash Equivalent Investments held by members of the Group, *provided* that such cash and Cash Equivalent Investments would otherwise have been able to be used at that time to make a Permitted Payment (excluding the Available Amount permission); plus

(g) the aggregate principal amount of any Indebtedness of the Issuer or any Restricted Subsidiary issued after the Acquisition Closing Date (other than Indebtedness issued to the Issuer or a Restricted Subsidiary), which has been converted into or exchanged for equity and/or shareholder loans, together with the fair market value of any Cash Equivalent Investments and the fair market value (as reasonably determined by the Issuer) of any property or assets received by the Issuer or such Restricted Subsidiary upon such exchange or conversion, in each case, during the period from and including the day immediately following the Acquisition Closing Date through and including such time; plus

(h) the aggregate amount of net cash proceeds received by the Issuer or any Restricted Subsidiary during the period from and including the day immediately following the Acquisition Closing Date through and including such time in connection with the disposal to a person (other than the Issuer or any Restricted Subsidiary) of any investment funded made using the Available Amount (in whole or in part); plus

(i) to the extent not already reflected as a return of capital with respect to such investment for purposes of determining the amount of such investment, the aggregate amount of proceeds received by the Issuer or any Restricted Subsidiary during the period from and including the day immediately following the Acquisition Closing Date through and including such time in connection with cash returns, cash profits, cash distributions and similar cash amounts, (including cash interest and/or principal repayments of loans) in each case received in respect of any investment made after the Acquisition Closing Date using the Available Amount (in whole or in part) (in an amount not to exceed the original amount of such investment); plus

(j) an amount equal to the sum of:

(i) the amount of any investment made by the Issuer or any Restricted Subsidiary using the Available Amount in any Unrestricted Subsidiary (in an amount not to exceed the original amount of such investment) that has been re-designated as a Restricted Subsidiary or has been merged, consolidated or amalgamated with or into, or is liquidated, wound up or dissolved into, the Issuer or any Restricted Subsidiary; and

(ii) the fair market value (as reasonably determined by the Issuer) of the property or assets of any Unrestricted Subsidiary that have been transferred, conveyed or otherwise distributed (in an amount not to exceed the original amount of the investment in such Unrestricted Subsidiary) to the Issuer or any Restricted Subsidiary,

in each case, during the period from and including the day immediately following the Acquisition Closing Date through and including such time.

"*Available RP Capacity Amount*" means, at the time of determination:

(a) an amount equal to the capacity to make Restricted Payments calculated in accordance with clause (C) of the first paragraph of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*"; plus

(b) the aggregate amount of Permitted Payments that could be made as of that date of determination pursuant to clauses (vi), (x), (xii), (xvii)(A)(1) and (xvii)(B) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*"; minus

(c) an amount equal to the aggregate amount of:

(i) Restricted Payments made (and not returned or rescinded) by the Issuer or any Restricted Subsidiary in reliance on clause (C) of the first paragraph of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*";

(ii) Permitted Payments made (and not returned or rescinded) by the Issuer or any Restricted Subsidiary pursuant to clauses (vi), (x), (xii), (xvii)(A)(1) and (xvii)(B) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*"; and

(iii) Indebtedness Incurred and outstanding pursuant to clause (xx) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*";

in each case, subsequent to the Issue Date; plus

(d) the aggregate principal amount of Indebtedness prepaid prior to or substantially concurrently at such time, solely to the extent such Indebtedness was Incurred pursuant to clause (xx) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*."

"*Bidco*" means CTEC III GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany, having its registered office at Schwanthalerstraße 73, c/o SCUR24 Holding GmbH, 80336 Munich, Germany and registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267814.

"*Board of Directors*" means:

(e) with respect to the Issuer or any company or corporation, the board of directors or managers, as applicable, of that company or corporation, or any duly authorized committee thereof;

(f) with respect to any limited liability company, the sole member, sole manager, board of managers or other governing body, as applicable, of that limited liability company, or any duly authorized committee thereof;

(g) with respect to any partnership, the board of directors or other governing body of the general partner of that partnership or any duly authorized committee thereof, except if a manager or a board of managers have been appointed in accordance with the constitutional documents of such partnership, in which case clause (a) above shall apply; and

(h) with respect to any other person, the board or any duly authorized committee of that person serving a similar function.

Whenever any provision of the Indenture requires any action or determination to be made by, or any approval of, a Board of Directors, such action, determination or approval shall be deemed to have been taken or made if approved by a majority of the directors or equivalent (excluding employee representatives, if any) on any such Board of Directors (whether or not such action or approval is taken as part of a formal board meeting (or equivalent) or as a formal board approval (or equivalent)). The obligations of the "Board of Directors" under the Indenture may be exercised by the Board of Directors of the Issuer, the Parent, Bidco or any Financial Reporting Entity, including, in each case, its successors and assigns.

"*Bund Rate*" as selected by the Issuer, means the yield to maturity at the time of computation of direct obligations of the Federal Republic of Germany (*Bunds* or *Bundesanleihen*) with a constant maturity as officially compiled and published in the most recent financial statistics that have become publicly available at least two Business Days (but not more than five Business Days) prior to the redemption date (or, if such financial statistics are not so published or available, any publicly available source of similar market data selected in good faith by the Issuer) most nearly equal to the period from the redemption date to , 2025; *provided, however*, that if the period from the redemption date to , 2025 is not equal to the constant maturity of a direct obligation of the Federal Republic of Germany for which a weekly average yield is given, the Bund Rate shall be obtained by linear interpolation (calculated to the nearest one-twelfth of a year) from the weekly average yields of direct obligations of the Federal Republic of Germany for which such yields are given, except that if the period from such redemption date to , 2025 is less than one year, the weekly average yield on actually traded direct obligations of the Federal Republic of Germany adjusted to a constant maturity of one year shall be used; and *provided, further*, that in no case shall the Bund Rate be less than zero.

"*Business Day*" means each day that is not a Saturday, Sunday or other day on which banking institutions in (i) Frankfurt am Main, Germany, (ii) London, United Kingdom or (iii) New York, New York, United States are authorized or required by law to close.

"*Business Successor*" means (i) any former Subsidiary of the Issuer and (ii) any person that, after the Issue Date, has acquired, merged or consolidated with a Subsidiary of the Issuer (that results in such Subsidiary ceasing to be a Subsidiary of the Issuer), or acquired (in one transaction or a series of transactions) all or substantially all of the property and assets or business of a Subsidiary or assets constituting a business unit, line of business or division of a Subsidiary of the Issuer.

"*Capital Stock*" of any person means any and all shares of, rights to purchase or acquire, warrants, options or depositary receipts for, or other equivalents of, or partnership or other interests in (however designated), equity of such person, including any Preferred Stock, but excluding any debt securities convertible into, or exchangeable for, such equity.

"*Capitalized Lease Obligations*" means an obligation that is required to be classified and accounted for as a capitalized lease for financial reporting purposes on the basis of IFRS. The amount of Indebtedness represented by such obligation will be the capitalized amount of such obligation at the time any determination thereof is to be made as determined on the basis of IFRS, and the Stated Maturity thereof will be the date of the last payment of rent or any other amount due under such lease prior to the first date such lease may be terminated without penalty.

"*Cash Equivalent Investments*" means, at any time when held by a member of the Group or the Target Group (as applicable), any Cash Equivalents, Temporary Cash Investments or Investment Grade Securities and (without double counting):

(a) debt securities or other investments in marketable debt obligations issued or guaranteed by an Acceptable Nation or any agency thereof and having not more than one year to final maturity;

(b) certificates of deposit maturing within one year after the relevant date of calculation and issued by any lender party to a Credit Facility or by any bank or trust company:

(i) whose commercial paper is rated at least "A-1" or the equivalent thereof by S&P or at least "F1" or the equivalent thereof by Fitch or at least "P-1" or the equivalent thereof by Moody's (or if at the time neither is issuing comparable ratings, then a comparable rating of another Nationally Recognized Statistical Rating Organization); or

(ii) (in the event that the bank or trust company does not have commercial paper which is rated) having combined capital and surplus in excess of €250 million;

(c) any investment in marketable debt obligations issued or guaranteed by any government of any Acceptable Nation, maturing within one year after the relevant date of calculation and not convertible or exchangeable to any other security;

(d) commercial paper not convertible or exchangeable to any other security:

(i) for which a recognized trading market exists;

(ii) which matures within one year after the relevant date of calculation; and

(iii) which has a credit rating of either A-1 or higher by S&P or F1 or higher by Fitch or P-1 or higher by Moody's, or, if no rating is available in respect of the commercial paper, the issuer of which has, in respect of its short term unsecured and non-credit enhanced debt obligations, an equivalent rating;

(e) bills of exchange issued in any Acceptable Nation or, in each case, any agency thereof and eligible for rediscount at the relevant central bank and accepted by a bank (or their dematerialized equivalent);

(f) any investment which:

(i) is an investment in money market funds:

(A) with a credit rating of either A-1 or higher by S&P or F1 or higher by Fitch or P-1 or higher by Moody's; or

(B) which invests substantially all their assets in securities of the types described in clauses (a) to (e) above;

(ii) is any other money market investment (including repurchase agreements) and substantially all of the assets or collateral in respect of that investment have a credit rating of either A-1 or higher by S&P or F1 or higher by Fitch or P-1 or higher by Moody's; or (iii) can be turned into cash on not more than 30 days' notice,

in each case, to which any member of the Group or member of the Target Group (as applicable) is alone (or together with other members of the Group or Target Group (as applicable)) beneficially entitled at that time and which is not issued or guaranteed by any member of the Group or Target Group (as applicable) or subject to any Security Interest (other than a Permitted Lien).

"*Cash Equivalents*" means

(a) Australian dollars, Canadian dollars, euros, Japanese yen, Swiss francs, UK pounds sterling, U.S. dollars or any national currency of any member state of the EU or any other foreign currency held by the Issuer and the Restricted Subsidiaries in the ordinary course of business;

(b) securities or other direct obligations issued or directly and fully Guaranteed or insured by the government of Australia, Canada, Japan, Norway, Switzerland, the UK or the US, the EU or any member state of the EU on the Issue Date or, in each case, any agency or instrumentality thereof (*provided* that the full faith and credit of such country or such member state is pledged in support thereof), with maturities of 24 months or less from the date of acquisition;

(c) certificates of deposit, time deposits, eurodollar time deposits, overnight bank deposits or bankers' acceptances having maturities of not more than one year from the date of acquisition thereof issued by any lender or by any bank or trust company:

    (i) whose commercial paper is rated at least "A-1" or the equivalent thereof by S&P or at least "F1" or the equivalent thereof by Fitch or at least "P-1" or the equivalent thereof by Moody's (or if at the time neither is issuing comparable ratings, then a comparable rating of another Nationally Recognized Statistical Rating Organization); or

    (ii) (in the event that the bank or trust company does not have commercial paper which is rated) having combined capital and surplus in excess of €250 million;

(d) repurchase obligations for underlying securities of the types described in clauses (b), (c) and (g) of this definition entered into with any bank meeting the qualifications specified in clause (c) above;

(e) securities with maturities of one year or less from the date of acquisition backed by standby letters of credit issued by any person referenced in clause (c) above;

(f) readily marketable direct obligations issued by a member state of the European Union, the United Kingdom, Japan, Australia, Switzerland, Norway, Canada, the United States of America, any State of the United States or the District of Columbia or any political subdivision thereof, in each case, having one of the two highest rating categories obtainable from Moody's, S&P or Fitch;

(g) Indebtedness or preferred stock issued by persons with a rating of "BBB-" or higher from S&P or "Baa3" or higher from Moody's (or, if at the time, neither is issuing comparable ratings, then a comparable rating of another Nationally Recognized Statistical Rating Organization) with maturities of 12 months or less from the date of acquisition;

(h) bills of exchange issued in a member state of the European Union, the United Kingdom, Norway, Japan, Australia, Switzerland, Canada, the United States of America, any State of the United States or the District of Columbia, eligible for rediscount at the relevant central bank and accepted by a bank (or any dematerialized equivalent);

(i) with respect to a jurisdiction in which the Issuer or a Restricted Subsidiary conducts business or is organized, certificates of deposit, time deposits, recognized time deposits, overnight bank deposits or bankers' acceptances with any bank, trust company or similar entity, which would rank, in terms of combined capital and surplus and undivided profits or the ratings of its long-term debt, among the top five banks in such jurisdiction, in an amount not to exceed cash generated in or reasonably required for operations in such jurisdiction

(j) commercial paper and variable or fixed rate notes issued by a bank meeting the qualifications specified in clause (c) above (or by the Parent Entity thereof) maturing within one year after the date of creation thereof or any commercial paper and variable or fixed rate note issued by, or guaranteed by a corporation rated at least "A-1" or higher by S&P or at least "F1" or the equivalent thereof by Fitch or "P-1" or higher by Moody's (or, if at the time, neither is issuing comparable ratings, then a comparable rating of another Nationally Recognized Statistical Rating Organization selected by the Issuer) maturing within one year after the date of creation thereof;

(k) interests in any investment company, money market, enhanced high yield fund or other investment fund which invests 90% or more of its assets in instruments of the types specified in clauses (a) through (f) above; and

(l) for purposes of clause (ii) of the definition of "Asset Disposition", the marketable securities portfolio owned by the Issuer and its Subsidiaries on the Acquisition Closing Date.

"*Cash Management Services*" means any of the following: automated clearing house transactions, treasury, depository, credit or debit card, purchasing card, stored value card, electronic fund transfer services, daylight or overnight draft facilities and/or cash management services, including controlled disbursement services, overdraft facilities, foreign exchange facilities, deposit and other accounts and merchant services or other cash management arrangements in the ordinary course of business.

"*Change of Control*" means:

(1) the Issuer becomes aware of (by way of a report or any other filing pursuant to Section 13(d) of the Exchange Act, proxy, vote, written notice or otherwise) any "person" or "group" of related persons (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act as in effect on the Issue Date), other than one or more Permitted Holders, being or becoming the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act as in effect on the Issue Date) of more than 50% of the total voting power of the Voting Stock of the Issuer other than in connection with any transaction or series of transactions in which the Issuer shall become the Wholly Owned Subsidiary of a Parent Entity so long as no Person or group, as noted above, other than a Permitted Holder, holds more than 50% of the total voting power of the Voting Stock of such Parent Entity; or

(2) the sale, lease, transfer, conveyance or other disposition (other than by way of merger, amalgamation, consolidation or other business combination transaction), in one or a series of related transactions, of all or substantially all of the assets of the Issuer and the Restricted Subsidiaries taken as a whole to a Person, other than the Issuer or any of the Restricted Subsidiaries or one or more Permitted Holders.

Notwithstanding the foregoing, (a) a transaction will not be deemed to involve a Change of Control solely as a result of the Issuer becoming a direct or indirect Wholly Owned Subsidiary of a Parent Holding Company if (A) the direct or indirect holders of the Voting Stock of such Parent Holding Company immediately following that transaction are substantially the same as the holders of the Issuer's Voting Stock immediately prior to that transaction or (B) immediately following that transaction no Person (other than a holding company satisfying the requirements of this sentence) is the beneficial owner, directly or indirectly, of more than 50% of the Voting Stock of such holding company, (b) the right to acquire Voting Stock (so long as such Person does not have the right to direct the voting of the Voting Stock subject to such right) or any veto power in connection with the acquisition or disposition of Voting Stock will not be deemed to cause a party to be a beneficial owner and (c) a Permitted Transaction under clauses (a), (d) or (l) thereof shall not constitute a Change of Control.

"*Change of Control Triggering Event*" means the occurrence of a Change of Control, unless pro forma for the Change of Control, the Total Net Leverage Ratio is equal to or less than 6.75 to 1.00; provided that, notwithstanding anything herein to the contrary, when calculating the Total Net Leverage Ratio for purposes of this definition, the Issuer shall be entitled, at its option, to have such determinations occur (a) at the time of entry into such definitive agreement, put option or similar arrangement, or (b) at the time of the closing of the acquisition resulting in a Change of Control.

"*Clearstream*" means Clearstream Banking S.A., or any successor thereof.

"*Closing Overfunding*" means the aggregate amount invested in Bidco by way of Equity Contribution on or around the Acquisition Closing Date and identified as "Closing Overfunding" or similar in the funds flow statement, plus (without double-counting) the amount of cash on the balance sheet of the Group (including the Target Group) as at the Acquisition Closing Date (other than, for the avoidance of doubt, any cash attributable (as determined by Bidco (acting reasonably)) to amounts invested in Bidco (as applicable) by way of Equity Contribution or the proceeds from any Notes or any other Indebtedness that are applied by Bidco (as applicable) on the Acquisition Closing Date towards (i) the payment of cash consideration to the Vendor under the Acquisition Agreement, (ii) the refinancing of existing Indebtedness of the Target Group or (iii) the payment of costs, fees or expenses in connection with the Transaction).

"*Consolidated Depreciation and Amortization Expense*" means with respect to any person for any period, the total amount of depreciation and amortization expense, including amortization or write-off of:

(a) intangibles and non-cash organization costs;

(b) deferred financing fees or costs; and

(c) capitalized expenditures, lease obligations, customer acquisition costs and incentive payments, conversion costs and contract acquisition costs, the amortization of original issue discount resulting from the issuance of Indebtedness at less than par and amortization of favorable or unfavorable lease assets or liabilities,

of such person and the Restricted Subsidiaries for such period on a consolidated basis and otherwise determined in accordance with IFRS and any write down of assets or asset value carried on the balance sheet.

"*Consolidated EBITDA*" means, with respect to any person for any period, the Consolidated Net Income of such person for such period:

(a) increased (without duplication) by:

(i) provision for taxes based on income or profits, revenue or capital, including federal, state, provincial, territorial, local, foreign, unitary, excise, property, franchise and similar taxes and foreign withholding and similar taxes of such person paid or accrued during such period, including any penalties and interest relating to any tax examinations (including any additions to such taxes, and any penalties and interest with respect thereto), deducted (and not added back) in computing Consolidated Net Income; plus

(ii) Fixed Charges of such person for such period, including:

(A) net losses on any Hedging Obligations or other derivative instruments entered into for the purpose of hedging interest rate, currency or commodities risk;

(B) bank fees and other financing fees; and

(C) costs of surety bonds in connection with financing activities, plus amounts excluded from the definition of "*Consolidated Interest Expense*" pursuant to clauses (a)(A) through (a)(I) thereof,

in each case, to the extent the same were deducted (and not added back) in calculating such Consolidated Net Income; plus

(iii) Consolidated Depreciation and Amortization Expense of such person for such period to the extent the same were deducted (and not added back) in computing Consolidated Net Income; plus

(iv) any:

(A) Transaction Expenses; and

(B) any fees, costs, expenses or charges (other than Consolidated Depreciation and Amortization Expense) related to any actual, proposed or contemplated Equity Offering (including any expense relating to enhanced accounting functions or other transactions costs associated with becoming a public company), Permitted Investment, acquisition, disposition, recapitalization or the Incurrence of Indebtedness permitted to be Incurred by the Indenture (including a refinancing thereof) (whether or not successful),

in each case including such fees, expenses or charges (including rating agency fees and related expenses) related to the Senior Secured Credit Facilities, any Notes, any other Credit Facility, any Receivables Facility, any Securitization Facility, any other Indebtedness not prohibited by the Indenture or any Equity Offering and any amendment, waiver or other modification of any of the foregoing, in each case, whether or not consummated, to the extent the same were deducted (and not added back) in computing Consolidated Net Income; plus

(v) the amount of any:

(A) loss, restructuring charge, accrual or reserve (and adjustments to existing reserves), transaction or integration cost or other business optimization expense or cost (including charges directly related to the implementation of cost-savings initiatives) that is deducted (and not added back) in such period in computing Consolidated Net Income, including any one-time costs incurred in connection with acquisitions or divestitures after the Issue Date, including those related to any severance, retention, signing bonuses, relocation, recruiting and other employee related costs, internal costs in respect of strategic initiatives and curtailments or modifications to pension and post-retirement employment benefit plans (including any settlement of pension liabilities), operational and technology systems development and establishment costs, future lease commitments and costs related to the opening, pre-opening, abandonment, disposal, discontinuation and closure and/or consolidation of facilities and to exiting lines of business and consulting fees incurred with any of the foregoing; and

(B) fees, costs and expenses associated with acquisition related litigation and settlements thereof; plus

(vi) any other non-cash charges, write-downs, expenses, losses or items reducing Consolidated Net Income for such period including any impairment charges or the impact of purchase accounting; *provided* that if any such non-cash charge, write-down or item to the extent it represents an accrual or reserve for a cash expenditure for a future period then the cash payment in such future period shall be subtracted from Consolidated EBITDA when paid or other items classified by the Issuer as special items less other non-cash items of income increasing Consolidated Net Income (excluding any such non-cash item of income to the extent it represents a receipt of cash in any future period); plus

(vii) the amount of board of director fees, management, monitoring, advisory, consulting, refinancing, subsequent transaction, advisory and exit fees (including termination fees) and related indemnities and expenses paid or accrued in such period to any member of the Board of Directors of the Issuer, any Permitted Holder or any Affiliate of a Permitted Holder to the extent permitted under the covenant described under "*—Certain Covenants—Limitation on Affiliate Transactions*"; plus

(viii) the "run rate" adjustment required to give effect to synergies, cost savings, operating expense reductions, restructuring charges, operating cost improvements, operating improvements, revenue increases, revenue enhancements or other adjustments, similar initiatives or effects of synergies (together, being "Synergies") that have been realized (in full or in part) for some, but not all, of such period and that are related to any acquisition (including under a letter of intent), disposition, divestiture, restructuring, new or revised contract, information and technology systems establishment, modernization or modification or the implementation of any operating improvements, efficiency or cost savings initiative or any other adjustments or similar initiatives, as applicable, as if such Synergies had been realized from the first day of such period and during the entirety of such period (which adjustments, without double-counting may be incremental to pro forma adjustments made pursuant to the section entitled "*—Financial and Other Calculations*"); net of the amount of actual benefits realized during such period from such actions; plus

(ix) the pro forma adjustment (whether on a "run rate" basis or otherwise) for Synergies that are expected (in good faith) to be realized as a result of actions taken or committed or expected to be taken in relation to any acquisition (including under a letter of intent), disposition, divestiture, restructuring, new or revised contract, information and technology systems establishment, modernization or modification or the implementation of an operating improvements, efficiency or cost savings initiative or any other adjustments or similar initiative (for the avoidance of doubt, whether or not any action has been taken in relation to the same), calculated on a pro forma basis as if such Synergies had been realized from the first day of such period and during the entirety of such period (which adjustments, without double-counting, may be incremental to pro forma adjustments made pursuant to the section entitled "*—Financial and Other Calculations*"); plus

(x) the amount of loss or discount on sale of Securitization Assets, Receivables Assets and related assets to the Securitization Subsidiary in connection with a Qualified Securitization Financing or Receivables Facility; plus

(xi) any costs or expense incurred by the Issuer or a Restricted Subsidiary pursuant to any management equity plan or stock option plan or any other management or employee benefit plan or agreement, any severance agreement or any stock subscription or shareholder agreement, to the extent that such cost or expenses are funded with cash proceeds contributed to the capital of the Issuer or Net Cash Proceeds of an issuance of Capital Stock (other than Disqualified Stock) of the Issuer; plus

(xii) cash receipts (or any netting arrangements resulting in reduced cash expenditures) not representing Consolidated EBITDA or Consolidated Net Income in any period to the extent non-cash gains relating to such income were deducted in the calculation of Consolidated EBITDA pursuant to clause (b) below for any previous period and not added back; plus

(xiii) any net loss included in the Consolidated Net Income attributable to non-controlling interests; plus

(xiv) realized foreign exchange losses resulting from the impact of foreign currency changes on the valuation of assets or liabilities on the balance sheet of the Issuer and its Restricted Subsidiaries; plus

(xv) net realized losses from Hedging Obligations or embedded derivatives; plus

(xvi) the amount of any minority interest expense consisting of Subsidiary income attributable to minority equity interests of third parties in any non-wholly owned Subsidiary and any costs and expenses (including all legal, accounting and other professional fees and expenses) related thereto; plus

(xvii) with respect to any joint venture, an amount equal to the proportion of those items described in sub-clauses (i) and (iii) above relating to such joint venture corresponding to the Issuer's and the Restricted Subsidiaries' proportionate share of such joint venture's Consolidated Net Income (determined as if such joint venture were a Restricted Subsidiary) to the extent the same was deducted (and not added back) in calculating Consolidated Net Income; plus

(xviii) earn-out and contingent consideration obligations (including to the extent accounted for as bonuses or otherwise) and adjustments thereof and purchase price adjustments; plus

(xix) any net pension or other post-employment benefit costs representing amortization of unrecognized prior service costs, actuarial losses, including amortization of such amounts arising in prior periods, amortization of the unrecognized net obligation (and loss or cost), and any other items of a similar nature; plus

(xx) the amount of expenses relating to payments made to option holders of the Issuer or any Parent Entity in connection with, or as a result of, any distribution being made to equity holders of such person or its Parent Entities, which payments are being made to compensate such option holders as though they were equity holders at the time of, and entitled to share in, such distribution, in each case to the extent permitted under the Indenture; plus

(xxi) to the extent not already otherwise included herein, adjustments and add-backs (including anticipated synergies) or costs or expenses (or, in each case, similar items) made in calculating "Pro Forma Adjusted EBITDA" (or any similar or equivalent term) included in this offering memorandum and other adjustments of a similar nature to the foregoing and/or any base case model or quality of earnings report related to a Permitted Acquisition (including any annexures to such report) prepared by an independent third party; plus

(xxii) earn out obligations Incurred in connection with any Permitted Acquisition or other Investment permitted under the Indenture and paid or accrued during such period; plus

(xxiii) losses, charges and expenses related to the pre-opening and opening of new facilities, and start-up period prior to opening, that are operated, or to be operated, by the Issuer or any Restricted Subsidiary; plus

(xxiv) any other items classified by the Issuer as extraordinary, one-off, one-time, exceptional, unusual or nonrecurring items decreasing Consolidated Net Income of such person for such period; and

(b) decreased (without duplication) by non-cash gains increasing Consolidated Net Income of such person for such period, excluding any non-cash gains to the extent they represent the reversal of an accrual or reserve for a potential cash item that reduced Consolidated EBITDA in any prior period.

"*Consolidated Interest Expense*" means, with respect to any person for any period, without duplication, the sum of:

(a) consolidated interest expense of such person and its Restricted Subsidiaries for such period (in each case, determined on the basis of IFRS), to the extent such expense was deducted (and not added back) in computing Consolidated Net Income, including:

(i) amortization of original issue discount or premium resulting from the issuance of Indebtedness at less than par;

(ii) all commissions, discounts and other fees and charges owed with respect to letters of credit or bankers acceptances;

(iii) non-cash interest payments (but excluding any non-cash interest expense attributable to the movement in the mark to market valuation of any Hedging Obligations or other derivative instruments pursuant to IFRS);

(iv) the interest component of Capitalized Lease Obligations;

(v) net payments, if any, pursuant to interest rate Hedging Obligations with respect to Indebtedness; and

(vi) interest actually paid by the Issuer or any Restricted Subsidiary under any guarantee of Indebtedness or other obligation of any other person, and excluding:

(A) Securitization Fees;

(B) interest and other fees in respect of Receivables Facilities;

(C) penalties and interest relating to taxes;

(D) any additional cash interest owing pursuant to any registration rights agreement;

(E) accretion or accrual of discounted liabilities other than Indebtedness;

(F) any expense resulting from the discounting of any Indebtedness in connection with the application of recapitalization accounting or purchase accounting in connection with the Transaction or any acquisition;

(G) amortization or write-off of deferred financing fees, debt issuance costs, debt discount or premium, terminated Hedging Obligations and other commissions, financing fees and expenses and original issue discount with respect to any Indebtedness the Incurrence of which is permitted by the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" and, adjusted to the extent included, to exclude any refunds or similar credits received in connection with the purchasing or procurement of goods or services under any purchasing card or similar program;

(H) any expensing of bridge, commitment and other financing fees; and

(I) interest with respect to Indebtedness of any parent of such person appearing upon the balance sheet of such person solely by reason of push-down accounting under IFRS; plus

(b) consolidated interest expense of any Parent Entity to the extent such interest expense was funded with the proceeds of dividends, distributions or other payments to any Parent Entity pursuant to sub-clause (i)(C) of the first paragraph of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*"; plus

(c) consolidated capitalized interest of such person and its Restricted Subsidiaries for such period, whether paid or accrued (but excluding any interest capitalized, accrued, accreted or paid in respect of Subordinated Shareholder Funding); less

(d) interest income for such period, *provided* that, for purposes of this definition interest on a Capitalized Lease Obligation shall be deemed to accrue at an interest rate reasonably determined by such person to be the rate of interest implicit in such Capitalized Lease Obligation in accordance with IFRS.

"*Consolidated Net Income*" means, with respect to any person for any period, the net income (loss) of such person and its Subsidiaries that are Restricted Subsidiaries for such period determined on a consolidated basis on the basis of IFRS; *provided* that there will not be included in such Consolidated Net Income:

(a) any net income (loss) of any person if such person is not a Restricted Subsidiary (including any net income (loss) from Investments recorded in such person under the equity method of accounting), except that the Issuer's equity in the net income of any such person for such period will be included in such Consolidated Net Income up to the aggregate amount of cash or Cash Equivalent Investments actually distributed or that (as reasonably determined by an Officer of the Issuer) could have been distributed by such person during such period to the Issuer or a Restricted Subsidiary as a dividend or other distribution or return on investment; provided that, for the purposes of clause (C) of the first paragraph of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*" such dividend, other distribution or return on investment does not reduce the amount of Investments outstanding under the definition of Permitted Investments;

(b) any gain (or loss), together with any related provisions for taxes on any such gain (or the tax effect of any such loss), realized upon the sale or other disposition of any asset (including pursuant to any Sale and Leaseback Transaction) or disposed or discontinued operations of the Issuer or any Restricted Subsidiaries which is not sold or otherwise disposed of in the ordinary course of business (as determined in good faith by the Issuer);

(c) any extraordinary, exceptional, one-off, one-time, unusual or nonrecurring gain, loss, charge or expense, including Transaction Expenses or any charges, expenses or reserves in respect of any restructuring, redundancy or severance expense or relocation costs, one-time compensation charges, integration and facilities' opening costs and other business optimization expenses and operating improvements (including related to new product introductions and the build-out, renovation and expansion of facilities), systems development and establishment costs, accruals or reserves (including restructuring and integration costs related to acquisitions after the Issue Date and adjustments to existing reserves), whether or not classified as restructuring expense on the consolidated financial statements, signing costs, retention or completion bonuses, transition costs, losses related to closure/ consolidation or disruption of facilities, losses associated with temporary decreases in work volume and expenses related to maintaining underutilized personnel and facilities (to the extent such disruption of facilities, temporary decreases in work volume and/or underutilized personnel and facilities are the result of an extraordinary, exceptional, one-off, one-time, unusual or nonrecurring event or circumstance), internal costs in respect of strategic initiatives and curtailments or modifications to pension and post-retirement employee benefit plans (including any settlement of pension liabilities), litigation or any asset impairment charges or the financial impacts of natural disasters (including fire, flood and storm and related events), contract terminations and professional and consulting fees incurred with any of the foregoing;

(d) the cumulative effect of a change in law, regulation or accounting principles, including as permitted under clause (c) of the definition of "IFRS";

(e) any:

(i) non-cash compensation charge or expense arising from any grant of stock, stock options or other equity-based awards and any non-cash deemed finance charges in respect of any pension liabilities or other provisions or on the re-valuation of any benefit plan obligation; and

(ii) income (loss) attributable to deferred compensation plans or trusts;

(f) all deferred financing costs written off and premiums paid or other expenses incurred directly in connection with any early extinguishment of Indebtedness (including Hedging Obligations) and any net gain (loss) from any write-off or forgiveness of Indebtedness;

(g) any unrealized gains or losses in respect of any Hedging Obligations or other financial instruments or any ineffectiveness recognized in earnings related to qualifying hedge transactions or the fair value of changes therein recognized in earnings for derivatives that do not qualify as hedge transactions, in each case, in respect of any Hedging Obligations;

(h) any fees, charges and expenses (including any transaction or retention bonus or similar payment) incurred during such period, or any amortization thereof for such period, in connection with any acquisition, Investment, reorganization, restructuring, disposition of assets or securities, issuance or repayment or redemption of Indebtedness, issuance of Capital Stock, refinancing transaction or amendment or modification of any debt instrument (in each case, including any such transaction consummated prior to the Issue Date and any such transaction undertaken but not completed) and any charges or non-recurring merger costs incurred during such period as a result of any such transaction, in each case whether or not successful;

(i) any unrealized or realized foreign currency translation increases or decreases or transaction gains or losses in respect of Indebtedness of any person denominated in a currency other than the functional currency of such person, and any unrealized foreign currency transaction gains or losses in respect of Indebtedness or other obligations of the Issuer or any Restricted Subsidiary owing to the Issuer or any Restricted Subsidiary and any unrealized or realized foreign exchange gains or losses relating to translation of assets and liabilities denominated in foreign currencies;

(j) any unrealized or realized gain or loss due solely to fluctuations in currency values and the related tax effects, determined in accordance with IFRS;

(k) any recapitalization accounting or purchase accounting effects, including, adjustments to inventory, property and equipment, software and other intangible assets and deferred revenue in component amounts required or permitted by IFRS and related authoritative pronouncements (including the effects of such adjustments pushed down to the Issuer and the Restricted Subsidiaries), as a result of any consummated acquisition (including the Transaction), or the amortization or write-off of any amounts thereof (including any write-off of in process research and development);

(l) any impairment charge, write-off or write-down, including impairment charges, write-offs or write-downs related to intangible assets, long-lived assets, goodwill, investments in debt or equity securities (including any losses with respect to the foregoing in bankruptcy, insolvency or similar proceedings) and the amortization of intangibles arising pursuant to IFRS;

(m) any effect of income (loss) from the early extinguishment or cancellation of Indebtedness or any Hedging Obligations or other derivative instruments;

(n) accruals and reserves that are established or adjusted (including any adjustment of estimated pay-outs on existing earn-outs) that are so required to be established as a result of the Transaction in accordance with IFRS, or changes as a result of adoption or modification of accounting policies;

(o) any costs associated with the Transaction;

(p) any non-cash expenses, accruals or reserves related to adjustments to historical tax exposures and any deferred tax expense associated with tax deductions or net operating losses arising as a result of the Transaction, or the release of any valuation allowances related to such item;

(q) any:

(i) payments to third parties in respect of research and development, including amounts paid upon signing, success, completion and other milestones and other progress payments, to the extent expensed; and

(ii) effects of adjustments to accruals and reserves during a period relating to any change in the methodology of calculating reserves for returns, rebates and other chargebacks (including government program rebates);

(r) any net gain (or loss) from disposed, abandoned or discontinued operations and any net gain (or loss) on disposal of disposed, discontinued or abandoned operations; and

(s) the impact of capitalized, accrued or accreting or pay-in-kind interest or principal on Subordinated Shareholder Funding, *provided* that, in addition, to the extent not already included in the Consolidated Net Income of such person and its Subsidiaries that are Restricted Subsidiaries, notwithstanding anything to the contrary in the foregoing, Consolidated Net Income shall include:

(A) any expenses and charges that are reimbursed by indemnification or other reimbursement provisions in connection with any investment or any sale, conveyance, transfer or other disposition of assets permitted hereunder, or, so long as the Issuer has made a determination that there exists reasonable evidence that such amount will in fact be reimbursed and only to the extent that such amount is:

(1) not denied by the applicable payor in writing within 180 days; and

(2) in fact reimbursed within 365 days of the date of such evidence (with a deduction for any amount so added back to the extent not so reimbursed within 365 days); and

(B) to the extent covered by insurance (including business interruption insurance) and actually reimbursed, or, so long as the Issuer has made a determination that there exists reasonable evidence that such amount will in fact be reimbursed by the insurer and only to the extent that such amount is:

(1) not denied by the applicable carrier in writing within 180 days; and

(2) in fact reimbursed within 365 days of the date of such evidence (with a deduction for any amount so added back to the extent not so reimbursed within 365 days), expenses with respect to liability or casualty events or business interruption.

"*Contingent Obligations*" means, with respect to any person, any obligation of such person guaranteeing in any manner, whether directly or indirectly, any operating lease, dividend or other obligation that does not constitute Indebtedness ("primary obligations") of any other person (the "primary obligor"), including any obligation of such person, whether or not contingent:

(a) to purchase any such primary obligation or any property constituting direct or indirect security therefor;

(b) to advance or supply funds:

(i) for the purchase or payment of any such primary obligation; or

(ii) to maintain the working capital or equity capital of the primary obligor or otherwise to maintain the net worth or solvency of the primary obligor; or

(c) to purchase property, securities or services primarily for the purpose of assuring the owner of any such primary obligation of the ability of the primary obligor to make payment of such primary obligation against loss in respect thereof.

"*Controlled Investment Affiliate*" means, as to any person, any other person, which directly or indirectly is in control of, is controlled by, or is under common control with such person and is organized by such person (or any person controlling such person) primarily for making direct or indirect equity or debt investments in the Issuer and/or other companies.

"*Credit Facility*" means, with respect to the Issuer or any of its Subsidiaries, one or more debt facilities, indentures, instruments or other arrangements (including the Senior Secured Credit Facilities or commercial paper facilities and overdraft facilities) with banks, other financial institutions, funds, governmental or quasi-governmental agencies or investors providing for revolving credit loans, term loans, notes, receivables financing (including through the sale of receivables to such institutions or to special purpose entities formed to borrow from such institutions against such receivables), letters of credit or other Indebtedness, in each case, as amended, restated, modified, renewed, refunded, replaced, restructured, refinanced, repaid, increased or extended in whole or in part from time to time (and whether in whole or in part and whether or not with the original administrative agent and lenders or another administrative agent or agents or other banks or institutions and whether provided under the original Senior Secured Credit Facilities or one or more other credit or other agreements, indentures, financing agreements or otherwise) and in each case including all agreements, instruments and documents executed and delivered pursuant to or in connection with the foregoing (including any notes and letters of credit issued pursuant thereto and any Guarantee and collateral agreement, patent and trademark security agreement, mortgages or letter of credit applications and other Guarantees, pledges, agreements, security agreements and collateral documents). Without limiting the generality of the foregoing, the term "Credit Facility" shall include any agreement or instrument (i) changing the maturity of any Indebtedness Incurred thereunder or contemplated thereby, (ii) adding Subsidiaries of the Issuer as additional borrowers or guarantors thereunder, (iii) increasing the amount of Indebtedness Incurred thereunder or available to be borrowed thereunder or (iv) otherwise altering the terms and conditions thereof.

"*Currency Equivalent*" means, with respect to any monetary amount in a currency (the "second currency") other than a specified currency (the "first currency"), at any time for determination thereof, the amount of the first currency obtained by converting the amount of the second currency into the first currency at the spot rate for the purchase of the first currency with the second currency as published in The Wall Street Journal in the "Exchange Rates" column under the heading "Currency Trading" on the date two Business Days prior to such determination.

"*Debt Documents*" has the meaning assigned to such term in the Intercreditor Agreement.

"*Debt Pushdown*" means the novation, transfer or push down of all or part of the rights and obligations of a borrower of Facility B to another member of the Group in accordance with the provisions of the Senior Secured Credit Facilities Agreement.

"*Default*" means any event that is, or with the passage of time or the giving of notice or both would be, an Event of Default; *provided* that any Default that results solely from the taking of an action that would have been permitted but for the continuation of a previous Default will be deemed to be cured if such previous Default is cured prior to becoming an Event of Default.

"*Designated Non-Cash Consideration*" means the fair market value of non-cash consideration received by the Issuer or a Restricted Subsidiary in connection with an Asset Disposition that is so designated as Designated Non-Cash Consideration pursuant to an Officer's Certificate, setting forth the basis of such valuation, less the amount of Cash Equivalent Investments received in connection with a subsequent sale, redemption or repurchase of or collection or payment on such Designated Non-Cash Consideration. A particular item of Designated Non-Cash Consideration will no longer be considered to be outstanding when and to the extent it has been paid, redeemed or otherwise retired or sold or otherwise disposed of in exchange for consideration in the form of Cash Equivalent Investments in compliance with the covenant described under "*—Certain Covenants—Limitation on Sales of Assets and Subsidiary Stock*."

"*Designated Preferred Stock*" means Preferred Stock of the Issuer or a Parent Entity (other than Disqualified Stock) that is issued for cash (other than to the Issuer or a Subsidiary of the Issuer or an employee stock ownership plan or trust established by the Issuer or any such Subsidiary for the benefit of their employees to the extent funded by the Issuer or such Subsidiary) and that is designated as "*Designated Preferred Stock*" pursuant to an Officer's Certificate of the Issuer at or prior to the issuance thereof.

"*Disinterested Director*" means, with respect to any Affiliate Transaction, a member of the Board of Directors having no material direct or indirect financial interest in or with respect to such Affiliate Transaction. A member of the Board of Directors shall be deemed not to have such a financial interest by reason of such member's holding Capital Stock of the Issuer or any options, warrants or other rights in respect of such Capital Stock.

"*Disqualified Stock*" means, with respect to any person, any Capital Stock of such person which by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable) or upon the happening of any event:

(a) matures or is mandatorily redeemable for cash or in exchange for Indebtedness pursuant to a sinking fund obligation or otherwise; or

(b) is or may become (in accordance with its terms) upon the occurrence of certain events or otherwise redeemable or repurchasable for cash or in exchange for Indebtedness at the option of the holder of the Capital Stock in whole or in part,

in each case on or prior to the earlier of:

(i) the Stated Maturity of the Notes; or

(ii) the date on which there are no Notes outstanding;

provided that:

(A) only the portion of Capital Stock which so matures or is mandatorily redeemable, is so convertible or exchangeable or is so redeemable at the option of the holder thereof prior to such date will be deemed to be Disqualified Stock; and

(B) any Capital Stock that would constitute Disqualified Stock solely because the holders thereof have the right to require the Issuer to repurchase such Capital Stock upon the occurrence of a change of control or asset sale (howsoever defined or referred to) shall not constitute Disqualified Stock if any such redemption or repurchase obligation is subject to compliance by the relevant person with the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*,"

provided, further, that if such Capital Stock is issued to any future, current or former employee, director, officer, contractor or consultant (or their respective Controlled Investment Affiliates (excluding the Permitted Holders (but not excluding any future, current or former employee, director, officer, contractor or consultant) or Immediate Family Members), of the Issuer, any of its Subsidiaries, any Parent Entity or any other entity in which the Issuer or a Restricted Subsidiary has an Investment and is designated in good faith as an "affiliate" by the Board of Directors (or the compensation committee thereof) or any other plan for the benefit of current, former or future employees (or their respective Controlled Investment Affiliates or Immediate Family Members)) of the Issuer or its Subsidiaries or by any such plan to such employees (or their respective Controlled Investment Affiliates or Immediate Family Members), such Capital Stock shall not constitute Disqualified Stock solely because it may be required to be repurchased by the Issuer or its Subsidiaries in order to satisfy applicable statutory, contractual or regulatory obligations.

"*dollar*" or "*$*" means the lawful currency of the United States of America.

"*Equity Contribution*" means:

(a) any subscription for shares issued by, and any capital contributions (including by way of premium and/ or contribution to the capital reserves and on a cash or cashless basis) to, the Issuer via the Parent and/or the Relevant Third Party; and/ or

(b) any loans, notes, bonds or like instruments issued by or made to the Issuer via the Parent and/or the Relevant Third Party which are subordinated to the Notes as Subordinated Liabilities pursuant to the Intercreditor Agreement or otherwise (including, for the avoidance of doubt, any Subordinated Shareholder Funding).

"*Equity Documents*" means the constitutional documents of the Issuer and any document evidencing an Equity Contribution as described in paragraph (b) of the definition of "Equity Contribution."

"*Equity Offering*" means:

(a) a sale of Capital Stock of the Issuer (other than Disqualified Stock and other than offerings registered on Form S-8 (or any successor form) under the Securities Act or any similar offering in other jurisdictions); or

(b) the sale of Capital Stock or other securities by any person, the proceeds of which are contributed to the equity of the Issuer or any of the Restricted Subsidiaries by any Parent Entity in any form other than Indebtedness, Excluded Contributions or a Parent Debt Contribution.

"*Escrow Account*" means the escrow account in the name of the Issuer into which the Initial Purchasers will deposit the gross proceeds of the Notes sold on the Issue Date, which will be controlled by the Escrow Agent and charged in favor of the Trustee on behalf of the Holders pursuant to the Escrow Charge.

"*Escrow Agent*" means Deutsche Bank AG, London Branch.

"*Escrow Charge*" means the escrow account charges dated on or about the Issue Date, between the Issuer, the Trustee and the Escrow Agent, pursuant to which the Issuer will grant first-priority security interests in the Escrow Account and the Issuer's rights under the Escrow Agreement, to the Trustee for its own benefit and the benefit of the Holders.

"*Escrowed Proceeds*" means the proceeds from the offering or Incurrence of any debt securities or other Indebtedness paid into an escrow account with an independent escrow agent on the date of the applicable offering or Incurrence pursuant to escrow arrangements that permit the release of amounts on deposit in such escrow account upon satisfaction of certain conditions or the occurrence of certain events, provided that the term "Escrowed Proceeds" shall include any interest earned on the amounts held in escrow.

"*euro*" or "€" means the single currency of participating member states of the economic and monetary union as contemplated in the Treaty on European Union.

"*Euroclear*" means Euroclear Bank SA/NV, as currently in effect, or any successor securities clearing agency.

"*Euro Equivalent*" means, with respect to any monetary amount in a currency other than euro, at any time of determination thereof by the Issuer or the Trustee, the amount of euro obtained by converting such currency other than euro involved in such computation into euro at the spot rate for the purchase of euro with the applicable currency other than euro as published in The Financial Times in the "Currency Rates" section (or, if The Financial Times is no longer published, or if such information is no longer available in The Financial Times, such source as may be selected in good faith by the Issuer) on the date of such determination.

"*European Government Obligations*" means any security denominated in euro that is (1) a direct obligation of any country that is a member of the European Monetary Union and whose long-term debt is rated "*A-1*" or higher by Moody's or "A+" or higher by S&P or the equivalent rating category of another Nationally Recognized Statistical Rating Organization on the date of the Indenture, for the payment of which the full faith and credit of such country is pledged or (2) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of any such country the payment of which is unconditionally Guaranteed as a full faith and credit obligation by such country, which, in either case under the preceding clause (1) or (2), is not callable or redeemable at the option of the issuer thereof.

"*European Union*" means all members of the European Union as of December 31, 2018 (including for the avoidance of doubt the United Kingdom).

"*Exchange Act*" means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the SEC promulgated thereunder, as amended.

"*Excluded Contribution*" means Net Cash Proceeds or property or assets received by the Issuer or any Restricted Subsidiary as capital contributions to the equity (other than through the issuance of Disqualified Stock or Designated Preferred Stock) of the Issuer or any Restricted Subsidiary after the Acquisition Closing Date or from the issuance or sale (other than to the Issuer or a Restricted Subsidiary or an employee stock ownership plan or trust established by the Issuer or any Subsidiary of the Issuer for the benefit of their employees to the extent funded by the Issuer (other than the Transaction Equity Contribution) or any Restricted Subsidiary) of Capital Stock (other than Disqualified Stock or Designated Preferred Stock), or Subordinated Shareholder Funding of the Issuer or any Restricted Subsidiary, in each case, following the Acquisition Closing Date to the extent designated as an Excluded Contribution pursuant to an Officer's Certificate of the Issuer.

"*Existing Debt*" means the outstanding Indebtedness (and any interest, coupon, premia, fees, costs or expenses accruing thereon) under (a) any Existing Debt Document and (b) any hedging agreement or related or ancillary agreement entered into in connection with any Existing Debt Document.

"*Existing Debt Document*" means any document or instrument constituting, documenting or evidencing any indebtedness made available to or guaranteed or secured by any member of the Target Group and existing immediately prior to the Acquisition Closing Date.

"*Facility B*" means the senior secured term loan facility B made available under the Senior Secured Credit Facilities Agreement on or about the Acquisition Closing Date.

"*fair market value*" wherever such term is used (except as otherwise specifically provided in the Indenture), may be conclusively established by means of an Officer's Certificate or a resolution of the Board of Directors of the Issuer setting out such fair market value as determined by such Officer or Board of Directors in good faith.

"*Finance Documents*" has the meaning assigned to such term in the Intercreditor Agreement.

"*Financial Reporting Group*" means the applicable Financial Reporting Entity and each of its Subsidiaries from time to time, but excluding any Unrestricted Subsidiaries.

"*Fitch*" means Fitch Ratings, Inc. or any of its successors or assigns that is a Nationally Recognized Statistical Rating Organization.

"*Fixed Charge Coverage Ratio*" means the ratio of LTM EBITDA to the Fixed Charges of the Group as at the Applicable Reporting Date for the Relevant Period ending on such Applicable Reporting Date (the "reference period"), *provided* that, for purposes of calculating the Fixed Charge Coverage Ratio, Fixed Charges may, at the Issuer's option, exclude any interest expenses related to leases incurred during the reference period. In the event that the Issuer or any Restricted Subsidiary Incurs, assumes, Guarantees, redeems, defeases, retires, extinguishes or otherwise discharges any Indebtedness (other than Indebtedness Incurred under any revolving credit facility unless such Indebtedness has been permanently repaid and has not been replaced) or has caused any Reserved Indebtedness Amount to be deemed to be Incurred or issues or redeems Disqualified Stock or Preferred Stock, in each case, subsequent to the commencement of the reference period but prior to or simultaneously with the event for which the calculation of the Fixed Charge Coverage Ratio is made (the "Fixed Charge Coverage Ratio Calculation Date"), then the Fixed Charge Coverage Ratio shall be calculated giving pro forma effect to such Incurrence, deemed Incurrence, assumption, Guarantee, redemption, defeasance, retirement, extinguishment or other discharge of Indebtedness, or such issuance or redemption of Disqualified Stock or Preferred Stock, as if the same had occurred at the beginning of the reference period; *provided* that the pro forma calculation shall not give effect to:

(a) any Fixed Charges attributable to Indebtedness Incurred on such determination date pursuant to the provisions described in the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" (other than Indebtedness Incurred in reliance upon the Fixed Charge Coverage Ratio pursuant to clauses (i)(D), (i)(E) or (v)(B)(1) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*");

(b) any Fixed Charges attributable to Indebtedness Incurred pursuant to clause (iv)(A) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*"; or

(c) any Fixed Charges attributable to any Indebtedness discharged on such determination date of any Indebtedness to the extent that such discharge results from the application of the proceeds of Indebtedness Incurred on the determination date pursuant to the provisions described in the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" (other than Indebtedness Incurred in reliance upon the Fixed Charge Coverage Ratio pursuant to clauses (i)(D), (i)(E) or (v)(B)(1) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*").

For purposes of making the computation referred to above, any Purchase or Sale that has been made by the Issuer or any of the Restricted Subsidiaries, during the reference period or subsequent to the reference period shall be calculated on a pro forma basis assuming that such Purchase or Sale (and the change in any associated fixed charge obligations and the change in LTM EBITDA resulting therefrom) had occurred on the first day of the reference period.

If any Indebtedness bears a floating rate of interest and is being given pro forma effect, the interest on such Indebtedness shall be calculated as if the rate in effect on the Fixed Charge Coverage Ratio Calculation Date had been the applicable rate for the entire reference period (taking into account any Hedging Obligations applicable to such Indebtedness). Interest on a Capitalized Lease Obligation shall be deemed to accrue at an interest rate reasonably determined by an Officer of the Issuer to be the rate of interest implicit in such Capitalized Lease Obligation in accordance with IFRS. For purposes of making the computation referred to above, interest on any Indebtedness under a revolving credit facility computed with a pro forma basis shall be computed based upon the average daily balance of such Indebtedness during the reference period except as set forth in the first paragraph of this definition. Interest on Indebtedness that may optionally be determined at an interest rate based upon a factor of a prime or similar rate, a eurocurrency interbank offered rate, or other rate, shall be determined to have been based upon the rate actually chosen, or if none, then based upon such optional rate chosen as the Issuer may designate.

For the purposes of this definition, "Consolidated Interest Expense" will be calculated using an assumed interest rate based on the indicative interest margin contained in any financing commitment documentation with respect to such Indebtedness or, if no such indicative interest margin exists, as reasonably determined by the Issuer in good faith.

All Applicable Metrics described in this definition will be calculated as set forth in the section "*—Financial and Other Calculations*" above.

"*Fixed Charges*" means, with respect to any person for any period, the sum of:

(a) Consolidated Interest Expense of such person for such period;

(b) all cash dividends or other distributions paid (excluding items eliminated in consolidation) on any series of Preferred Stock of any Restricted Subsidiary of such person during such period; and

(c) all cash dividends or other distributions paid (excluding items eliminated in consolidation) on any series of Disqualified Stock during this period.

"*Group Initiative*" means any action or step (including any restructuring, reorganization, new or revised contract, information and technology systems establishment, modernization or modification or the implementation of an operating improvement initiative, efficiency initiative, cost savings initiative, opening and/ or development of any facility, site or operation, capacity increases, capacity utilization or any other adjustments or similar initiative) taken, committed or expected (unilaterally, conditionally or otherwise) to be taken by the Group.

"*Guarantee*" means, any obligation, contingent or otherwise, of any person directly or indirectly guaranteeing any Indebtedness of any other person, including any such obligation, direct or indirect, contingent or otherwise, of such person:

(a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness of such other person (whether arising by virtue of partnership arrangements, or by agreements to keep-well, to purchase assets, goods, securities or services, to take-or-pay or to maintain financial statement conditions or otherwise); or

(b) entered into primarily for purposes of assuring in any other manner the obligee of such Indebtedness of the payment thereof or to protect such obligee against loss in respect thereof (in whole or in part),

provided that the term "Guarantee" will not include:

(i) endorsements for collection or deposit in the ordinary course of business; and

(ii) standard contractual indemnities or product warranties provided in the ordinary course of business, and provided, further, that the amount of any Guarantee shall be deemed to be the lower of:

(A) an amount equal to the stated or determinable amount of the primary obligation in respect of which such Guarantee is made; and

(B) the maximum amount for which such guaranteeing person may be liable pursuant to the terms of the instrument embodying such Guarantee or, if such Guarantee is not an unconditional guarantee of the entire amount of the primary obligation and such maximum amount is not stated or determinable, the amount of such guaranteeing person's maximum reasonably anticipated liability in respect thereof as determined by such person in good faith.

The term "Guarantee" used as a verb has a corresponding meaning.

"*Guarantee Limitations*" means, in respect of any Guarantor and any payments such Guarantor is required to make in its capacity as a guarantor or as the provider of an indemnity or as debtor of costs or disbursements or with respect to any other payment obligation under the Indenture or any other Note Document, the limitations and restrictions applicable to such entity pursuant to the guarantee provisions of the Indenture and any relevant wording in any supplemental indenture applicable to such additional Guarantor.

"*Guarantor*" means any Restricted Subsidiary that provides a Note Guarantee in accordance with the provisions of the Indenture and its successors and assigns, in each case, until such Note Guarantee is released in accordance with the terms of the Indenture.

"*Hedging Obligations*" means, with respect to any person, the obligations of such person under any interest rate swap agreement, interest rate cap agreement, interest rate collar agreement, commodity swap agreement, interest rate protection agreement, interest rate future agreement, interest rate option agreement, interest rate hedge agreement, commodity cap agreement, commodity collar agreement, commodity purchase agreement, commodity futures or forward agreement, commodity option agreement, commodities derivative agreement, foreign exchange contracts, currency swap agreement, currency futures agreement, currency option agreement, currency derivatives or similar agreement providing for the transfer or mitigation of interest rate, commodity price or currency risks either generally or under specific contingencies.

"*Holder*" means each Person in whose name the Notes are registered on the registrar's books, which shall initially be the respective nominee of the Relevant Clearing System, as applicable.

"*IFRS*" means International Financial Reporting Standards (formerly International Accounting Standards) endorsed from time to time by the EU or any variation thereof with which the Financial Reporting Entity or the Restricted Subsidiaries are, or may be, required to comply, as in effect on the Issue Date, *provided* that:

(a) except as otherwise set forth in the Indenture, all ratios and calculations based on IFRS contained in the Indenture shall be computed in accordance with IFRS as in effect on the Issue Date;

(b) at any time after the Issue Date, the Issuer may elect to establish that IFRS shall mean IFRS as in effect on or prior to the date of such election; *provided, further*, that any such election, once made, shall be irrevocable; and

(c) at any time after the Issue Date, the Issuer may elect to apply other Accounting Principles in lieu of IFRS and, upon any such election, references herein to IFRS shall thereafter be construed to mean such other Accounting Principles (except as otherwise provided in the Indenture), including as to the ability of the Issuer to make an election pursuant to clause (b) above, *provided, further*, that any calculation or determination in the Indenture that require the application of IFRS for periods that include financial quarters ended prior to the Financial Reporting Entity's election to apply such other Accounting Principles shall remain as previously calculated or determined in accordance with IFRS.

"*Immediate Family Members*" means, with respect to any individual, such individual's child, stepchild, grandchild or more remote descendant, parent, stepparent, grandparent, spouse, former spouse, qualified domestic partner, sibling, mother-in-law, father-in-law, son-in-law and daughter-in-law (including adoptive relationships) and any trust, partnership or other bona fide estate-planning vehicle the only beneficiaries of which are any of the foregoing individuals or any private foundation or fund that is controlled by any of the foregoing individuals or any donor-advised fund of which any such individual is the donor.

"*Incur*" means issue, create, assume, enter into any Guarantee of, incur, extend or otherwise become liable for; provided that any Indebtedness or Capital Stock of a person existing at the time such person becomes a Restricted Subsidiary (whether by merger, amalgamation, consolidation, acquisition or otherwise) will be deemed to be Incurred by such Restricted Subsidiary at the time it becomes a Restricted Subsidiary and the terms "Incurred" and "Incurrence" have meanings correlative to the foregoing and any Indebtedness pursuant to any revolving credit or similar facility shall only be "Incurred" at the time any funds are borrowed thereunder, subject to the definition of Reserved Indebtedness Amount and related provisions.

"*Indebtedness*" means, with respect to any person on any date of determination (without duplication):

(a) the principal of indebtedness of such person for borrowed money;

(b) the principal of obligations of such person evidenced by bonds, debentures, notes or other similar instruments;

(c) all reimbursement obligations of such person in respect of letters of credit, bankers' acceptances or other similar instruments (the amount of such obligations being equal at any time to the aggregate then undrawn and unexpired amount of such letters of credit or other instruments plus the aggregate amount of drawings thereunder that have not been reimbursed) (except to the extent such reimbursement obligations relate to trade payables and such obligations are satisfied within 30 days of Incurrence);

(d) the principal component of all obligations of such person to pay the deferred and unpaid purchase price of property (except trade payables or similar obligation, including accrued expenses owed, to a trade creditor), which purchase price is due more than one year after the date of placing such property in service or taking final delivery and title thereto;

(e) Capitalized Lease Obligations of such person;

(f) the principal component of all obligations, or liquidation preference, of such person with respect to any Disqualified Stock or, with respect to any Restricted Subsidiary, any Preferred Stock (but excluding, in each case, any accrued dividends);

(g) the principal component of all Indebtedness of other persons secured by a Lien on any asset of such person, whether or not such Indebtedness is assumed by such person; provided that the amount of such Indebtedness will be the lesser of (x) the fair market value of such asset at such date of determination (as determined in good faith by the Issuer) and (y) the amount of such Indebtedness of such other persons;

(h) Guarantees by such person of the principal component of Indebtedness of the type referred to in clauses (a), (b), (c), (d) and (e) above and clause (i) below of other persons to the extent Guaranteed by such person; and

(i) to the extent not otherwise included in this definition, net obligations of such person under Hedging Obligations (the amount of any such obligations to be equal at any time to the net payments under such agreement or arrangement giving rise to such obligation that would be payable by such person at the termination of such agreement or arrangement),

with respect to clauses (a), (b), (d) and (e) above, if and to the extent that any of the foregoing Indebtedness (other than letters of credit and Hedging Obligations) would appear as a liability upon a balance sheet (excluding the footnotes thereto) of such person prepared in accordance with IFRS.

The amount of any Indebtedness outstanding as of any date shall be (A) the accreted value thereof in the case of any Indebtedness issued with original issue discount and (B) the principal amount of Indebtedness, or liquidation preference thereof, in the case of any other Indebtedness.

Notwithstanding the above provisions, in no event shall the following constitute Indebtedness:

(i) Contingent Obligations Incurred in the ordinary course of business;

(ii) all contingent liabilities under a guarantee, indemnity, bond, standby or documentary letter of credit or other similar instruments unless and until a valid demand for reimbursement has been made under such instrument and remains unpaid for 30 days;

(iii) Cash Management Services;

(iv) any prepayments of deposits received from clients or customers in the ordinary course of business;

(v) obligations under any license, permit or other approval (or Guarantees given in respect of such obligations) incurred prior to the Acquisition Closing Date or in the ordinary course of business;

(vi) in connection with the purchase by the Issuer or any Restricted Subsidiary of any business or any other Permitted Acquisition, any post-closing payment adjustments to which the seller or investor may become entitled to the extent such payment is determined by a final closing balance sheet or such payment depends on the performance of such business after the closing; provided that, at the time of closing, the amount of any such payment is not determinable and, to the extent such payment thereafter becomes fixed and determined, the amount is paid in a timely manner;

(vii) for the avoidance of doubt, any obligations in respect of workers' compensation claims, early retirement or termination obligations, pension fund obligations or contributions or similar claims, obligations or contributions or social security or wage Taxes;

(viii) obligations under or in respect of Qualified Securitization Financings or Receivables Facilities;

(ix) Indebtedness of any Parent Entity appearing on the balance sheet of the Issuer solely by reason of push down accounting under IFRS;

(x) Capital Stock (other than Disqualified Stock of the Issuer and Preferred Stock of a Restricted Subsidiary);

(xi) amounts owed to (A) dissenting stockholders pursuant to applicable law (including in connection with, or as a result of, exercise of appraisal rights and the settlement of any claims or action (whether actual, contingent or potential)), pursuant to or in connection with a consolidation, merger or transfer of all or substantially all of the assets of the Issuer and the Restricted Subsidiaries, taken as a whole, that complies with the covenants described under "*—Merger and Consolidation—The Issuer*" and "*—Merger and Consolidation—Guarantors*" or (B) minority shareholders in connection with any domination and profit and loss transfer agreement;

(xii) Subordinated Shareholder Funding;

(xiii) any joint and several liability or any netting or set-off arrangement arising in each case by operation of law as a result of the existence or establishment of a fiscal unity between Restricted Subsidiaries solely for corporate income tax or value added tax purposes in any jurisdiction of which the Issuer or a Restricted Subsidiary is or becomes a member;

(xiv) any liability pursuant to or in connection with Section 8a of the German Old-Age Part Time Act (*Altersteilzeitgesetz*) or Section 7e of the Fourth Book of the German Social Code (*Sozialgesetzbuch IV*);

(xv) liabilities in relation to the minority interests line in the balance sheet of any member of the Group; or

(xvi) any utilization of a Credit Facility drawn to fund original issue discount flex.

"*Independent Financial Advisor*" means an investment banking or accounting firm of international standing or any third-party appraiser of international standing, provided that such firm or appraiser is not an Affiliate of the Issuer.

"*Initial Investors*" means:

(a) one or more funds, limited partnerships, co-investment vehicles and/or other similar vehicles entities or accounts entities and/or other persons managed by or otherwise advised by BC Partners LLP, BC Partners XI Lux Platform S.à. r.l., BC XI AGE LUXEMBOURG SCSP, BC Partners XI GE-2 LP, BC XI AGD LUXEMBOURG SCSP, BC PARTNERS XI GD 2 LP, BC PARTNERS XI LE - SCSP, BC PARTNERS XI LE-2 FEEDER SCSP, BC PARTNERS XI LE - 2 SCSP, BC PARTNERS XI LE - FEEDER SCSP, BCEC MEMBER CO 1 LIMITED, BC PARTNERS XI LE - 1 SCSP, BC PARTNERS XI LUX GP SARL, BCEC MEMBER CO 1 LIMITED, BC PARTNERS XI LUX AGGREGATORS GP SARL, BC PARTNERS XI GE - 1 LP and/or BC PARTNERS XI GD - 3 LP, and/or any of its Affiliates, Related Funds and/or respective "associates" (as defined in the Companies Act 2006) and/or any of their respective successors; and

(b) one or more funds, limited partnerships, co-investment vehicles and/or other similar vehicles entities or accounts entities and/or other persons managed by or otherwise advised by any of or collectively Canada Pension Plan Investment Board, and/or any of its Affiliates, Related Funds and/or "associates" (as defined in the Companies Act 2006) and/or any of their respective successors,

in each case, other than any portfolio operating companies and their subsidiary undertakings.

"*Initial Public Offering*" means an Equity Offering of common stock or other common equity interests of a member of the Group, a "Pushdown Entity" (as defined in the Intercreditor Agreement) or any Parent Entity or any successor of such member of the Group, Pushdown Entity or any Parent Entity (the "IPO Entity") following which there is a public market and, as a result of which, the shares of common stock or other common equity interests of the IPO Entity in such offering are listed on an internationally recognized exchange or traded on an internationally recognized market.

"*Intercreditor Agreement*" means the Intercreditor Agreement dated on or prior to the Issue Date, by and among, *inter alios*, the Issuer, the Trustee, Bidco, the Security Agent and the agent under the Senior Secured Credit Facilities Agreement, as amended, restated, replaced, supplemented, modified or otherwise changed from time to time.

"*Investment*" means, with respect to any person, all investments by such person in other persons (including Affiliates) in the form of advances, loans or other extensions of credit (other than advances or extensions of credit to customers, suppliers, directors, officers or employees of any person in the ordinary course of business, and excluding any debt or extension of credit represented by a bank deposit other than a time deposit) or capital contribution to (by means of any transfer of cash or other property to others or any payment for property or services for the account or use of others), or the Incurrence of a Guarantee of any obligation of, or any purchase or acquisition of Capital Stock, Indebtedness or other similar instruments issued by, such other persons and all other items that are or would be classified as investments on a balance sheet prepared on the basis of IFRS; provided that endorsements of negotiable instruments and documents in the ordinary course of business will not be deemed to be an Investment. If the Issuer or any Restricted Subsidiary issues, sells or otherwise disposes of any Capital Stock of a person that is a Restricted Subsidiary such that, after giving effect thereto, such person is no longer a Restricted Subsidiary, any Investment by the Issuer or any Restricted Subsidiary in such person remaining after giving effect thereto will be deemed to be a new Investment at such time.

For purposes of the covenants described under "—*Certain Covenants—Limitation on Indebtedness*" and "—*Certain Covenants—Designation of Restricted and Unrestricted Subsidiaries*":

(a) "Investment" will include the portion (proportionate to the Issuer's equity interest in a Restricted Subsidiary to be designated as an Unrestricted Subsidiary) of the fair market value of the net assets of such Restricted Subsidiary at the time that such Restricted Subsidiary is designated an Unrestricted Subsidiary; provided that upon a redesignation of such Subsidiary as a Restricted Subsidiary, the Issuer will be deemed to continue to have a permanent "Investment" in an Unrestricted Subsidiary in an amount (if positive) equal to:

  (i) the Issuer's "Investment" in such Subsidiary at the time of such redesignation; less

  (ii) the portion (proportionate to the Issuer's equity interest in such Subsidiary) of the fair market value of the net assets (as determined by the Issuer) of such Subsidiary at the time that such Subsidiary is so re-designated a Restricted Subsidiary; and

  (b) any property transferred to or from an Unrestricted Subsidiary will be valued at its fair market value at the time of such transfer, in each case as determined by the Issuer.

"*Investment Grade Securities*" means:

(a) securities issued or directly and fully Guaranteed or insured by Australia, the Canadian government, the EU or a member state of the EU, Japan, Norway, Switzerland, the UK, the US government or, in each case, any agency or instrumentality thereof (other than Cash Equivalent Investments);

(b) debt securities or debt instruments with a rating of "A-" or higher from S&P or Fitch or "A3" or higher by Moody's or the equivalent of such rating by such rating organization or, if no rating of Moody's, Fitch or S&P then exists, the equivalent of such rating by any other Nationally Recognized Statistical Ratings Organization, but excluding any debt securities or instruments constituting loans or advances among the Issuer and its Subsidiaries; and

(c) Investments in any fund that invests exclusively in investments of the type described in clauses (a) and (b), above which fund may also hold cash and Cash Equivalent Investments pending investment or distribution.

"*Investment Grade Status*" shall occur when the Notes receive two of the following:

(1) a rating of "BBB-" or higher from S&P;

(2) a rating of "Baa3" or higher from Moody's; or

(3) a rating of "BBB-" or higher from Fitch;

or the equivalent of such rating by such rating organization or, if no rating of S&P, Moody's or Fitch then exists, the equivalent of such rating by any other Nationally Recognized Statistical Ratings Organization.

"*IPO Market Capitalization*" means an amount equal to (i) the total number of issued and outstanding shares of common stock or common equity interests of the IPO Entity at the time of closing of the Initial Public Offering multiplied by (ii) the price per share at which such shares of common stock or common equity interests are sold in such Initial Public Offering.

"*IPO Proceeds*" means the cash proceeds received by members of the Group or any Parent Holding Company of the Issuer from a Listing or a primary issue of shares in connection with such a Listing after deducting:

(a) all taxes incurred and required to be paid or reserved against (as reasonably determined by the Issuer on the basis of their existing rates) by the seller in relation to a Listing (including any Taxes incurred as a result of the transfer of any cash consideration intra-Group);

(b) fees, costs and expenses (including, for the avoidance of doubt, reasonable legal fees, reasonable agents' commission, reasonable auditors' fees, reasonable out of pocket reorganization costs (including redundancy, closure and other restructuring costs, both preparatory to, and in consequence of, a Listing));

(c) any amount required to be applied in repayment or prepayment of any Indebtedness other than Facility B (including to an entity the subject of a disposal, amounts to be repaid or prepaid to the entity disposed of in respect of intra-Group indebtedness and any third party debt secured on the assets disposed of which is to be repaid or prepaid out of those proceeds) or amounts owed to partners in permitted joint ventures as a consequence of that Listing; and

(d) any reasonable amounts retained to cover indemnities, contingent and other liabilities in connection with the Listing.

"*Issue Date*" means .

"*Lien*" means any mortgage, pledge, security interest, encumbrance, lien, hypothecation or charge of any kind (including any conditional sale or other title retention agreement or lease in the nature thereof); provided that in no event shall an operating lease be deemed to constitute a Lien.

"*Listing*" means the listing or the admission to trading of all or any part of the share capital of any member of the Group or any Parent Holding Company (the only material assets of which are shares or other investments (directly or indirectly in the Group)) of a member of the Group (other than the Initial Investors) on any recognized investment exchange (as that term is used in the Financial Services and Markets Act 2000) or in or on any other exchange or market in any jurisdiction or country or any other sale or issue by way of listing, flotation or public offering or any equivalent circumstances in relation to any member of the Group or any such Parent Holding Company of any member of the Group (other than the Initial Investors and their Parent Holding Companies) in any jurisdiction or country.

"*LTM EBITDA*" means on any day, Consolidated EBITDA of the Group for the Relevant Period ending on the Applicable Reporting Date; *provided* that in the event any indebtedness, loan, investment, disposal, guarantee, payment or other transaction is committed, incurred or made by any member of the Group based on the amount of LTM EBITDA as determined for a given Applicable Test Date, that indebtedness, loan, investment, disposal, guarantee, payment or other transaction shall not constitute, or be deemed to constitute, or result in, a breach of any provision of the Indenture or the other Finance Documents if there is a change in the amount of LTM EBITDA for any Relevant Period ending subsequent to such Applicable Test Date.

"*Management Advances*" means loans or advances made to, or Guarantees with respect to loans or advances made to, directors, managers, officers, employees, contractors or consultants (or their respective Controlled Investment Affiliates or Immediate Family Members) of any Parent Entity, the Issuer or any Restricted Subsidiary, or to any management equity plan, stock option plan, any other management or employee benefit, bonus or incentive plan or any trust, partnership or other entity of, established for the benefit of or the beneficial owner of which (directly or indirectly) is the directors, managers, officers, employees, contractors or consultants (or their respective Controlled Investment Affiliates or Immediate Family Members) of any Parent Entity, the Issuer or any Restricted Subsidiary:

(a) in respect of any expenses (including travel, entertainment and moving expenses) Incurred in the ordinary course of business;

(b) for purposes of funding any such person's purchase (or the purchase by any management equity plan) of Capital Stock or Subordinated Shareholder Funding (or similar obligations) of the Issuer, its Subsidiaries or any Parent Entity with the approval of the Board of Directors of the Issuer, or otherwise relating to any management equity plan, stock option plan any other management or employee benefit, bonus or incentive plan;

(c) in respect of moving related expenses Incurred in connection with any closing or consolidation of any facility or office;

(d) in respect of additional loans to directors, officers, employees, contractors or consultants (or their respective Controlled Investment Affiliates or Immediate Family Members) of any Parent Entity, the Company or any Restricted Subsidiary, or to any management equity plan, stock option plan, any other management or employee benefit, bonus or incentive plan, an amount not exceeding the greater of (i) €20.7 million and (ii) an amount equal to 7.5% per cent. of LTM EBITDA in the aggregate outstanding as of the Applicable Test Date in any calendar year; or

(e) otherwise in an amount not exceeding the greater of (i) €20.7 million and (ii) an amount equal to 7.5% of LTM EBITDA in the aggregate outstanding as of the Applicable Test Date.

"*Management Stockholders*" means the current or former officers, directors, employees and other members of management of, or consultants to, the Issuer (or any Parent Entity) or its Subsidiaries (or any of their respective Related Persons) who beneficially own or have the right to acquire, or are holders of Capital Stock of the Issuer or of any Parent Entity on the Acquisition Closing Date or will become holders of such Capital Stock in connection with the Transaction or participate in an employee arrangement that tracks equity value and is designed to distribute amounts based on a sale, share repurchase, dividend or other shareholder exit event.

"*Market Capitalization*" means an amount equal to (i) the total number of issued and outstanding shares of common stock or common equity interests of the IPO Entity on the date of the declaration of the relevant dividend multiplied by (ii) the arithmetic mean of the closing prices per share of such common stock or common equity interests for the 30 consecutive trading days immediately preceding the date of declaration of such dividend.

"*Material Event of Default*" means an Event of Default under clauses (a), (b) or (e) of the first paragraph under "*—Events of Default*".

"*Moody's*" means Moody's Investors Service, Inc. or any of its successors or assigns that is a Nationally Recognized Statistical Rating Organization.

"*Nationally Recognized Statistical Rating Organization*" means a nationally recognized statistical rating organization within the meaning of Section 3(a)(62) under the Securities Act.

"*Net Available Cash*" from an Asset Disposition means cash payments received (including any cash payments received by way of deferred payment of principal pursuant to a note or instalment receivable or otherwise and net proceeds from the sale or other disposition of any securities received as consideration, but only as and when received, but excluding any other consideration received in the form of assumption by the acquiring person of Indebtedness or other obligations relating to the properties or assets that are the subject of such Asset Disposition or received in any other non-cash form) therefrom, in each case net of:

(a) all legal, accounting, investment banking, title and recording tax expenses, commissions and other fees and expenses Incurred, and all Taxes paid, reasonably estimated to be actually payable or accrued as a liability under IFRS (including, for the avoidance of doubt, any income, withholding and other Taxes payable as a result of the distribution of such proceeds to the Issuer and after taking into account any available tax credits or deductions and any tax-sharing agreements), as a consequence of such Asset Disposition, including distributions for Related Taxes and Permitted Tax Distributions;

(b) all payments made on any Indebtedness which is secured by any assets subject to such Asset Disposition, in accordance with the terms of any Lien upon such assets, or which by applicable law be repaid out of the proceeds from such Asset Disposition;

(c) all distributions and other payments required to be made to minority interest holders (other than any Parent Entity, the Issuer or any of its respective Subsidiaries) in Subsidiaries or joint ventures as a result of such Asset Disposition;

(d) the deduction of appropriate amounts required to be provided by the seller as a reserve, on the basis of IFRS, against any liabilities associated with the assets disposed of in such Asset Disposition and retained by the Issuer or any Restricted Subsidiary after such Asset Disposition; and

(e) any funded escrow established pursuant to the documents evidencing any such sale or disposition to secure any indemnification obligations or adjustments to the purchase price associated with any such Asset Disposition.

"*Net Cash Proceeds*" with respect to any issuance or sale of Capital Stock or Subordinated Shareholder Funding, means the cash proceeds of such issuance or sale net of attorneys' fees, accountants' fees, underwriters' or placement agents' fees, listing fees, discounts or commissions and brokerage, consultant and other fees and charges actually Incurred in connection with such issuance or sale and net of Taxes paid or reasonably estimated to be actually payable as a result of such issuance or sale (including, for the avoidance of doubt, any income, withholding and other Taxes payable as a result of the distribution of such proceeds to the Issuer and after taking into account any available tax credit or deductions and any tax-sharing agreements, and including distributions for Related Taxes and Permitted Tax Distributions).

"*Net Short*" means a Holder or a beneficial owner of any Notes (or any affiliate of such Person (provided that for purposes of this paragraph, affiliates shall not include Persons that are subject to customary procedures to prevent the sharing of confidential information between such Holders or beneficial owner and such Person and such Person is managed having independent fiduciary duties to the investors or other equityholders of such Person) that, as a result of its interest in any total return swap, total rate of return swap, credit default swap or other derivative contract (other than any such total return swap, total rate of return swap, credit default swap or other derivative contract entered into pursuant to bona fide market making activities), has a net short position with respect to the Notes. For purposes of determining whether a Holder has a "net short position" on any date of determination: (i) derivative contracts with respect to the Notes and such contracts that are the functional equivalent thereof shall be counted at the notional amount thereof in euro, (ii) notional amounts in other currencies shall be converted to the Euro Equivalent thereof by such Holder or beneficial owner in a commercially reasonable manner consistent with generally accepted financial practices and based on the prevailing conversion rate (determined on a mid-market basis) on the date of determination, (iii) derivative contracts in respect of an index that includes any of the Issuer or the Guarantors or any instrument issued or guaranteed by any of the Issuer or the Guarantors shall not be deemed to create a short position with respect to the Notes or any Note Guarantee, so long as (x) such index is not created, designed, administered or requested by such Holder or beneficial owner or its respective Affiliates and (y) the Issuer or the Guarantors and any instrument issued or guaranteed by any of the Issuer or the Guarantors, collectively, shall represent less than 5% of the components of such index, (iv) derivative transactions that are documented using either the 2014 ISDA Credit Derivatives Definitions or the 2003 ISDA Credit Derivatives Definitions (collectively, the "ISDA CDS Definitions") shall be deemed to create a short position with respect to the Notes or the Note Guarantees if such Holder or beneficial owner is a protection buyer or the equivalent thereof for such derivative transaction and (x) the Notes or the Note Guarantees are a "Reference Obligation" under the terms of such derivative transaction (whether specified by name in the related documentation, included as a "Standard Reference Obligation" on the most recent list published by Markit, if "Standard Reference Obligation" is specified as applicable in the relevant documentation or in any other manner), (y) the Notes or the Note Guarantees would be a "Deliverable Obligation" under the terms of such derivative transaction or (z) any of the Issuer or the Guarantors (or any of its or their respective successors) is designated as a "Reference Entity" under the terms of such derivative transactions, and (v) credit derivative transactions or other derivatives transactions not documented using the ISDA CDS Definitions shall be deemed to create a short position with respect to the Notes and/or the Note Guarantees if such transactions are functionally equivalent to a transaction that offers the Holder or beneficial owner or its affiliates protection against a decline in the value of the Notes or the Note Guarantees, or as to the credit quality of any of the Issuer or the Guarantors other than, in each case, as part of an index so long as (x) such index is not created, designed, administered or requested by such Holder or beneficial owner and (y) the Issuer or the Guarantor and any instrument issued or guaranteed by any of the Issuer or the Guarantors, collectively, shall represent less than 5% of the components of such index. Notwithstanding the foregoing, no Holder or beneficial owner of Notes that is a regulated bank shall be deemed "Net Short" for any purpose under the Indenture.

"*Note Documents*" means the Notes (including Additional Notes), the Indenture (including the Note Guarantees), the Transaction Security Documents, the Intercreditor Agreement and any Additional Intercreditor Agreement.

"*Obligations*" means any principal, interest (including Post-Petition Interest and fees accruing on or after the filing of any petition in bankruptcy or for reorganization relating to the Issuer or any Guarantor whether or not a claim for Post-Petition Interest or fees is allowed in such proceedings), penalties, fees, indemnifications, reimbursements (including reimbursement obligations with respect to letters of credit and bankers' acceptances), damages and other liabilities payable under the documentation governing any Indebtedness.

"*Officer*" means, with respect to any Person:

(a) the chairman of the Board of Directors, the CEO, the president, the CFO, any vice president, the treasurer, any director, managing director or the company secretary (or, in each case, any person holding a similar or equivalent role):

(i) of such Person; and/or

(ii) if such person is owned or managed or represented by a single entity, of such entity; and/or

(b) any other individual designated as an "Officer" or an "authorized signatory" with respect to such Person.

"*Officer's Certificate*" means, with respect to any Person, a certificate signed by one Officer of such Person.

"*Opinion of Counsel*" means a written opinion (which may be subject to customary assumptions and exclusions) from legal counsel that is reasonably satisfactory to the Trustee. The counsel may be an employee of or counsel to the Issuer or its Subsidiaries.

"*Original Revolving Facility*" means the €250.0 million multi-currency revolving credit facility made available under the Senior Secured Credit Facilities Agreement.

"*Parent*" means

(a) CTEC I GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany, having its registered office at Schwanthalerstraße 73, 80336 Munich, Germany and registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267745 (or any successor entity); and

(b) any other person that has provided Transaction Security over its shares in and receivables owed to it (if any) by the Issuer, but is not the Issuer or a Guarantor and has acceded to the Indenture as "Parent" and acceded to the Intercreditor Agreement as a "Investor Subordinated Creditor" and "Topco Independent Obligor" (each term as defined in the Intercreditor Agreement),

and, in each case, which entity has not ceased to be "Investor Subordinated Creditor" and "Topco Independent Obligor" in accordance with the terms of the Intercreditor Agreement.

"*Parent Entity*" means any direct or indirect parent of the Issuer.

"*Parent Entity Expenses*" means:

(a) costs (including all legal, accounting and other professional fees and expenses) Incurred by any Parent Entity in connection with reporting obligations under or otherwise Incurred in connection with compliance with applicable laws, rules or regulations of any governmental, regulatory or self-regulatory body or stock exchange, any agreement or instrument relating to any Indebtedness of the Issuer or any Restricted Subsidiary or a Parent Entity (including the Senior Secured Credit Facilities and any Notes), including in respect of any reports filed or delivered with respect to the Securities Act, Exchange Act or the respective rules and regulations promulgated thereunder;

(b) customary indemnification obligations of any Parent Entity owing to directors, officers, employees or other persons under its articles, charter, by-laws, partnership agreement or other organizational documents or pursuant to written agreements with any such person to the extent relating to the Issuer and its Subsidiaries;

(c) obligations of any Parent Entity in respect of director and officer insurance (including premiums therefor) to the extent relating to the Issuer and its Subsidiaries;

(d) any (i) general corporate overhead expenses, including all legal, accounting and other professional fees and expenses, (ii) other operational expenses of any Parent Entity related to the ownership or operation of the business of the Issuer or any of the Restricted Subsidiaries, (iii) costs and expenses with respect to the ownership, directly or indirectly, of the Group by any Parent Entity, (iv) costs and expenses with respect to the maintenance of any equity incentive or compensation plan with respect to the Group, (v) any Taxes and other fees and expenses required to maintain such Parent Entity's corporate existence and to provide for other ordinary course operating costs, including customary salary, bonus and other benefits payable to, and indemnities provided on behalf of, officers and employees of such Parent Entity and (vi) costs and expenses to reimburse reasonable out-of-pocket expenses of the board of directors of such Parent Entity; and

(e) expenses Incurred by any Parent Entity in connection with (i) any offering, sale, conversion or exchange of Subordinated Shareholder Funding, Capital Stock or Indebtedness and (ii) any related compensation paid to officers, directors, and employees of such Parent Entity.

"*Parent Holding Company*" means, in relation to any Person, any other Person of which it is a Subsidiary.

"*Pari Passu Indebtedness*" means:

(a) with respect to the Issuer, any Indebtedness that ranks equally in right of payment with the Notes; and

(b) with respect to any Guarantor, any Indebtedness that ranks equally in right of payment with the Note Guarantees.

"*Paying Agent*" means any Person authorized by the Issuer to pay the principal of (and premium, if any) or interest on any Note on behalf of the Issuer.

"*Permitted Acquisition*" means any Permitted Investment under paragraphs (a)(ii) or (b) of the definition of Permitted Investment or any other acquisition or Investment not prohibited by the Indenture.

"*Permitted Asset Swap*" means the concurrent purchase and sale or exchange of assets used or useful in a Similar Business or a combination of such assets and cash, Cash Equivalent Investments between the Issuer or any of the Restricted Subsidiaries and another person; provided that any cash or Cash Equivalent Investments received in excess of the value of any cash or Cash Equivalent Investments sold or exchanged must be applied in accordance with the covenant described under "*—Certain Covenants—Limitation on Sales of Assets and Subsidiary Stock*."

"*Permitted Change of Control*" means any Change of Control that does not constitute a Change of Control Triggering Event.

"*Permitted Collateral Liens*" means Liens on the Charged Property:

(a) that are described in one or more of clauses (b), (c), (d), (e), (f), (g), (h), (k), (o), (q), (r), (w), (x), (hh) and (kk) of the definition of "Permitted Liens" and Liens arising by operation of law that would not materially interfere with the ability of the Security Agent to enforce the Security Interests in the Charged Property;

(b) to secure all obligations (including paid-in-kind interest) in respect of:

(i) the Notes (excluding any Additional Notes) and the Note Guarantees;

(ii) the Indebtedness described under:

(A) the first paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*"; or

(B) clauses (i), (ii) (to the extent such guarantee is in respect of Indebtedness otherwise permitted to be secured and specified in this definition), (iv), (v), (vi), (vii) (other than with respect to Capitalized Lease Obligations), (viii)(E), (x), (xiii), (xix) or (xx) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" (clauses (A) and (B) together, the "PCL Debt Baskets");

provided, in each case, that such Indebtedness constitutes Pari Passu Indebtedness or Subordinated Indebtedness of the Issuer; *provided* that (y) if such Indebtedness is Pari Passu Indebtedness such Liens rank equal with or junior to the Liens securing the Notes and (z) if such Indebtedness is Subordinated Indebtedness, such Liens rank junior to the Liens securing the Notes;

(iii) Indebtedness of the Issuer permitted to be incurred under the PCL Debt Baskets to the extent that such Indebtedness constitutes Subordinated Indebtedness of the Issuer; *provided* that such Liens rank junior to the Liens securing the Notes;

(iv) Indebtedness of a Guarantor in the form of a guarantee of Pari Passu Indebtedness of the Issuer; *provided* that such Liens rank equal with or junior to the Liens securing the Note Guarantees;

(v) Indebtedness of a Guarantor in the form of a guarantee of Subordinated Indebtedness of the Issuer; *provided* that such Liens rank junior to the Liens securing the Note Guarantees; or

(vi) any Refinancing Indebtedness in respect of Indebtedness referred to in clauses (i) to (v) above; *provided* that any Lien securing such Refinancing Indebtedness shall have the same priority to the Lien on such Charged Property securing the Notes, as the Lien securing the original Indebtedness would be permitted to have; and

(c) Liens on the Shared Collateral (or any other Charged Property which secures the Notes or the Note Guarantees on a junior-ranking basis) to secure:

(i) the Senior Secured Credit Facilities, including any Guarantees thereof;

(ii) Indebtedness of the Issuer described under the PCL Debt Baskets or clause (iv) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*"; *provided* that (x) if such Indebtedness is Pari Passu Indebtedness of the Issuer, such Liens rank equal to or junior to the Liens securing the Notes, and (y) if such Indebtedness is Subordinated Indebtedness of the Issuer, such Liens rank junior to the Liens securing the Notes;

(iii) Indebtedness of a Guarantor permitted to be incurred under the PCL Debt Baskets or clause (iv) second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*"; *provided* that (x) if such Indebtedness is Pari Passu Indebtedness of such Guarantor, such Liens rank equal with or junior to the Liens on such Charged Property securing the Notes or the Note Guarantees and (y) if such Indebtedness is Subordinated Indebtedness of such Guarantor, such Liens rank junior to the Liens on such Collateral securing the Notes or the Note Guarantees;

(iv) Indebtedness permitted to be incurred under the PCL Debt Baskets or clause (iv) second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" of a Restricted Subsidiary that is not a Guarantor to the extent such Indebtedness is permitted under the Indenture; *provided* that such Liens rank (1) equal with all other Liens on such Charged Property securing Senior Indebtedness or Indebtedness of any Restricted Subsidiary that is not a Guarantor or (2) equal with or junior to the Liens on such Collateral securing the Notes or the Note Guarantees; and

(v) any Refinancing Indebtedness in respect of Indebtedness set forth in the foregoing sub-clauses (i) to (iv); *provided* that any Lien securing such Refinancing Indebtedness shall be equal or senior relative to the Lien on the same Charged Property securing the Notes or the Note Guarantees only to the extent the Lien securing the original Indebtedness would have been so permitted; or

(d) Liens on the Charged Property incurred in the ordinary course of business of the Issuer or any of the Restricted Subsidiaries with respect to obligations that in total do not exceed the greater of (x) €13.8 million and (y) an amount equal to 5% of LTM EBITDA at any time outstanding and that (A) are not Incurred in connection with the borrowing of money and (B) do not in the aggregate materially detract from the value of the property or materially impair the use thereof or the operation of the Issuer's or such Restricted Subsidiary's business; or

(e) Liens granted in compliance with clause (i)(B) of the first paragraph of the covenant described under "*—Certain Covenants—Limitation on Liens*",

provided that, in the case of clauses (b) and (c) above, each of the secured parties to any such Indebtedness that individually exceeds an aggregate principal amount of the greater of (x) €41.4 million and (y) an amount equal to 15% of LTM EBITDA that is to share in all or substantially all of the Transaction Security will have entered into the Intercreditor Agreement or an Additional Intercreditor Agreement; and *provided, further*, that for purposes of determining compliance with this definition, in the event that a Permitted Collateral Lien meets the criteria of more than one of the categories of Permitted Collateral Liens described in clauses (a) through (e) above, the Issuer will be permitted to classify such Permitted Collateral Lien on the date of its Incurrence and reclassify such Permitted Collateral Lien at any time and in any manner that complies with this definition.

"*Permitted Holders*" means, collectively:

(a) the Initial Investors;

(b) any one or more persons, together with such persons' Affiliates, whose beneficial ownership constitutes or results in a Change of Control in respect of which a Change of Control offer is made in accordance with the requirements of the Indenture;

(c) the Management Stockholders;

(d) any person who is acting solely as an underwriter in connection with a public or private offering of Capital Stock of any IPO Entity, acting in such capacity;

(e) any group (within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act or any successor provision) of which any of the foregoing are members; provided that, in the case of such group and without giving effect to the existence of such group or any other group, no person other than persons referred to in clauses (a) to (d) above collectively, has beneficial ownership of more than 50% of the total voting power of the Voting Stock of the Issuer or any Parent Entity held by such group;

(f) any Person or group whose acquisition of beneficial ownership (i) results in a Permitted Change of Control or (ii) constitutes a Change of Control in respect of which a Change of Control Offer is made or waived in accordance with the requirements of the Indenture, in each case, will thereafter, together with its Affiliates, constitute an additional Permitted Holder; and

(g) any Related Person of any of the persons referred to in clauses (a), (b), (c) and (f) above, but excluding, for the avoidance of doubt, the Vendor and any Rollover Investor.

"*Permitted Investment*" means (in each case, by the Issuer or any of the Restricted Subsidiaries):

(a) Investments in:

(i) a Restricted Subsidiary (including the Capital Stock of a Restricted Subsidiary) or the Issuer; or

(ii) a person (including the Capital Stock of any such person) that will, upon the making of such Investment, become a Restricted Subsidiary;

(b) Investments in another person and as a result of such Investment such other person is merged, amalgamated, consolidated or otherwise combined with or into, or transfers or conveys all or substantially all its assets to, the Issuer or a Restricted Subsidiary;

(c) Investments in cash or Cash Equivalent Investments;

(d) Investments in receivables owing to the Issuer or any Restricted Subsidiary created or acquired in the ordinary course of business;

(e) Investments in payroll, travel, relocation, entertainment, moving related and similar advances to cover matters that are expected at the time of such advances ultimately to be treated as expenses for accounting purposes and that are made in the ordinary course of business;

(f) Management Advances;

(g) Investments in Capital Stock, obligations or securities received in settlement of debts created in the ordinary course of business and owing to the Issuer or any Restricted Subsidiary or in exchange for any other Investment or accounts receivable held by the Issuer or any such Restricted Subsidiary, or as a result of foreclosure, perfection or enforcement of any Lien, or in satisfaction of judgments or pursuant to any plan of reorganization or similar arrangement including upon the bankruptcy or insolvency of a debtor or otherwise with respect to any secured Investment or other transfer of title with respect to any secured Investment in default;

(h) Investments made as a result of the receipt of non-cash consideration from a sale or other disposition of property or assets, or through the provision of any services including an Asset Disposition;

(i) Investments existing or pursuant to agreements or arrangements in effect or existence on the Acquisition Closing Date and any modification, replacement, renewal or extension thereof; *provided* that the amount of any such Investment may not be increased except (i) as required by the terms of such Investment as in existence on the Acquisition Closing Date or (ii) as otherwise permitted under the Indenture;

(j) Hedging Obligations, which transactions or obligations are Incurred in compliance with the covenant described under "—*Certain Covenants—Limitation on Indebtedness*";

(k) pledges or deposits with respect to leases or utilities provided to third parties in the ordinary course of business or Liens otherwise described in the definition of "Permitted Liens" or made in connection with Liens permitted under the covenant described under "—*Certain Covenants—Limitation on Liens*";

(l) any Investment to the extent made using Capital Stock of the Issuer (other than Disqualified Stock), Subordinated Shareholder Funding or Capital Stock of any Parent Entity as consideration;

(m) any transaction to the extent constituting an Investment that is permitted and made in accordance with the provisions of the second paragraph of the covenant described under "—*Certain Covenants— Limitation on Affiliate Transactions*" (except those described in clauses (i), (iii), (vi), (vii), (ix), (xii) and (xiv) thereof);

(n) Investments consisting of purchases and acquisitions of inventory, supplies, materials and equipment or licenses or leases of intellectual property, in any case, in the ordinary course of business, and in accordance with the Indenture;

(o) any:

  (i) Guarantees of Indebtedness not prohibited by the covenant described under "—*Certain Covenants—Limitation on Indebtedness*" and (other than with respect to Indebtedness) guarantees, keepwells and similar arrangements in the ordinary course of business; and

  (ii) performance guarantees with respect to obligations that are not prohibited by the Indenture;

(p) Investments consisting of earnest money deposits required in connection with a purchase agreement, or letter of intent, or other acquisitions to the extent not otherwise prohibited by the Indenture;

(q) Investments of a Restricted Subsidiary acquired after the Issue Date or of an entity merged or amalgamated into the Issuer or merged or amalgamated into or consolidated with a Restricted Subsidiary after the Issue Date to the extent that such Investments were not made in contemplation of or in connection with such acquisition, merger, amalgamation or consolidation and were in existence on the date of such acquisition, merger, amalgamation or consolidation;

(r) Investments consisting of licensing or contribution of intellectual property pursuant to joint marketing arrangements with other persons;

(s) contributions to a "rabbi" trust for the benefit of employees or other grantor trust subject to claims of creditors in the case of a bankruptcy of the Issuer;

(t) Investments in joint ventures and similar entities and Similar Businesses:

(i) in existence on the Acquisition Closing Date; or

(ii) otherwise, having an aggregate fair market value, when taken together with all other Investments made pursuant to this clause (t)(ii) that are at the time outstanding, not to exceed:

(A) the greater of (x) €69.0 million and (y) an amount equal to 25% of LTM EBITDA at the time of such Investment (with the fair market value of each Investment being measured at the time made and without giving effect to subsequent changes in value); plus

(B) the amount of any returns (including dividends, payments, interest, distributions, returns of principal, profits on sale, repayments, income and similar amounts) in respect of such Investments,

(without duplication for purposes of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*" of any amounts applied pursuant to clause (C) of the first paragraph of such covenant) with the fair market value of each Investment being measured at the time made and without giving effect to subsequent changes in value; *provided* that if any Investment pursuant to this definition is made in any person that is not the Issuer or a Restricted Subsidiary at the date of the making of such Investment and such person becomes the Issuer or a Restricted Subsidiary after such date, such Investment shall thereafter be deemed to have been made pursuant to clauses (a) or (b) of this definition and shall cease to have been made pursuant to this clause for so long as such person continues to be the Issuer or a Restricted Subsidiary;

(u) additional Investments having an aggregate fair market value, when taken together with all other Investments made pursuant to this clause (u) that are at that time outstanding, not to exceed:

(i) the greater of (x) €96.6 million and (y) an amount equal to 35% of LTM EBITDA; plus

(ii) the amount of any returns (including dividends, payments, interest, distributions, returns of principal, profits on sale, repayments, income and similar amounts) in respect of such Investments,

(without duplication for purposes of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*" of any amounts applied pursuant to clause (C) of the first paragraph of such covenant) with the fair market value of each Investment being measured at the time made and without giving effect to subsequent changes in value; *provided* that if any Investment pursuant to this clause is made in any person that is not the Issuer or a Restricted Subsidiary at the date of the making of such Investment and such person becomes the Issuer or a Restricted Subsidiary after such date, such Investment shall thereafter be deemed to have been made pursuant to clauses (a) or (b) of this definition and shall cease to have been made pursuant to this clause for so long as such person continues to be the Issuer or a Restricted Subsidiary;

(v) Investments in Unrestricted Subsidiaries having an aggregate fair market value, when taken together with all other Investments made pursuant to this clause (v) that are at the time outstanding, not to exceed:

(i) the greater of (x) €69.0 million and (y) an amount equal to 25% of LTM EBITDA at the time of such Investment; plus

(ii) the amount of any returns (including dividends, payments, interest, distributions, returns of principal, profits on sale, repayments, income and similar amounts) in respect of such Investments,

(without duplication for purposes of the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*" of any amounts applied pursuant to clause (C) of the first paragraph of such covenant) with the fair market value of each Investment being measured at the time made and without giving effect to subsequent changes in value; provided that if any Investment pursuant to this definition is made in any person that is not the Issuer or a Restricted Subsidiary at the date of the making of such Investment and such person becomes the Issuer or a Restricted Subsidiary after such date, such Investment shall thereafter be deemed to have been made pursuant to clauses (a) or (b) of this definition and shall cease to have been made pursuant to this clause for so long as such person continues to be the Issuer or a Restricted Subsidiary;

(w) Investments (i) arising in connection with a Qualified Securitization Financing or Receivables Facility and (ii) constituting distributions or payments of Securitization Fees and purchases of Securitization Assets or Receivables Assets in connection with a Qualified Securitization Financing or Receivables Facility;

(x) Investments in connection with the Transaction;

(y) Investments (including repurchases) in Indebtedness of the Issuer and the Restricted Subsidiaries;

(z) Investments by an Unrestricted Subsidiary entered into prior to the day such Unrestricted Subsidiary is redesignated as a Restricted Subsidiary as described under the covenant "*—Certain Covenants—Designation of Restricted and Unrestricted Subsidiaries*";

(aa) guarantee and indemnification obligations arising in connection with surety bonds issued in the ordinary course of business;

(bb) Investments consisting of purchases and acquisitions of real property, any other assets or services in the ordinary course of business or made in the ordinary course of business in connection with obtaining, maintaining or renewing customer or client contacts and loans or advances made to distributors in the ordinary course of business;

(cc) Investments in prepaid expenses, negotiable instruments held for collection and lease, utility and workers compensation, performance and similar deposits entered into as a result of the operations of the business in the ordinary course of business;

(dd) Investments in the ordinary course of business consisting of Uniform Commercial Code Article 3 endorsements for collection of deposit and Article 4 customary trade arrangements with customers in the ordinary course of business;

(ee) transactions entered into in order to consummate a Permitted Tax Restructuring; and

(ff) Investments made at a time when no Material Event of Default is continuing; *provided* that either:

(i) immediately after giving pro forma effect to such Investment, at the Issuer's option, the Total Net Leverage Ratio:

(A) would be no greater than 7.10:1.00; or

(B) would not be greater than it was immediately prior to such Investment; or

(ii) such Investments are funded from the Available Amount;

provided, however, that any Investment consisting of the transfer of any Material Intellectual Property (as defined in the Senior Secured Credit Facilities Agreement) by the Issuer or any of the Restricted Subsidiaries to an Unrestricted Subsidiary shall not constitute a Permitted Investment.

"*Permitted Liens*" means, with respect to any person:

(a) (i) Liens on assets or property of the Issuer or a Restricted Subsidiary securing any Senior Indebtedness; and (ii) Liens on assets or property of a Restricted Subsidiary that is not a Guarantor securing Indebtedness and other Obligations of any Restricted Subsidiary that is not a Guarantor;

(b) pledges, deposits or Liens under workmen's compensation laws, old-age-part-time arrangements, payroll taxes, unemployment insurance laws, social security laws or similar legislation (including any Liens given pursuant to Section 8a of the German Old Age Employees Part Time Act (*Altersteilzeitgesetz*) or Section 7e of the Fourth Book of the German Social Code (*Sozialgesetzbuch IV*), or insurance related obligations (including pledges or deposits securing liability to insurance carriers under insurance or self-insurance arrangements) or pension related liabilities and obligations, or in connection with bids, tenders, completion guarantees, contracts (other than for borrowed money) or leases, or to secure utilities, licenses, public or statutory obligations, or to secure the performance of bids, trade contracts, government contracts and leases, statutory obligations, surety, stay, indemnity, judgment, customs, appeal or performance bonds (including pledges, deposits or Liens under any indemnities, undertakings, guarantees, counter guarantees or indemnities and contractual obligations provided in connection with such surety, stay, indemnity, judgment, customs, appeal or performance bonds), guarantees of government contracts, return-of-money bonds, bankers' acceptance facilities (or other similar bonds, instruments or obligations), obligations in respect of letters of credit, bank guarantees or similar instruments that have been posted to support the same, or as security for contested taxes or import or customs duties or for the payment of (or obligations of credit insurers with respect thereof) rent, or other obligations of like nature, in each case Incurred in the ordinary course of business;

(c) Liens with respect to outstanding motor vehicle fines and Liens imposed by law, including carriers', warehousemen's, mechanics', landlords', materialmen's, repairmen's, construction contractors' or other like Liens, in each case for sums not yet overdue for a period of more than 60 days or that are bonded or being contested in good faith by appropriate proceedings;

(d) Liens for Taxes, assessments or governmental charges which are not overdue for a period of more than 30 days from the date on which the Issuer becomes aware such amounts are overdue or which are being contested in good faith by appropriate proceedings; *provided* that appropriate reserves required pursuant to IFRS (or other applicable accounting principles) have been made in respect thereof;

(e) encumbrances, charges, ground leases, easements (including reciprocal easement agreements), survey exceptions, restrictions, encroachments, protrusions, by-law, regulation, zoning restrictions or reservations of, or rights of others for, licenses, rights of way, sewers, electric lines, telegraph and telephone lines and other similar purposes, or zoning, building codes or other restrictions (including minor defects or irregularities in title and similar encumbrances) as to the use of real properties or Liens incidental to the conduct of the business of the Issuer and the Restricted Subsidiaries or to the ownership of their properties, including servicing agreements, development agreements, site plan agreements, subdivision agreements, facilities sharing agreements, cost sharing agreements and other agreements, which do not in the aggregate materially adversely affect the value of said properties or materially impair their use in the operation of the business of the Issuer and the Restricted Subsidiaries, including (i) ground leases entered into by the Issuer or any of its Restricted Subsidiaries in connection with any development, construction, operation or improvement of assets on any real property owned by the Issuer or any of its Restricted Subsidiaries (and any Liens created by the lessee in connection with any such ground lease, including easements and rights of way, or on any of its assets located on the real property subject to such ground lease) and (ii) leases, licenses, subleases and sublicenses in respect of real property to any trading counterparty to which the Issuer or any of its Restricted Subsidiaries provides services on such real property;

(f) Liens:

(i) on assets, capital stock or property of the Issuer or any Restricted Subsidiary securing Hedging Obligations or Cash Management Services permitted under the Indenture;

(ii) that are statutory, common law or contractual rights of set-off (including, for the avoidance of doubt, Liens arising under the general terms and conditions of banks or saving banks (*Allgemeine Geschäftsbedingungen der Banken und Sparkassen*)) or, in the case of sub-clauses (A) or (B) below, other bankers' Liens:

(A) relating to treasury, depository and Cash Management Services or any automated clearing house transfers of funds in the ordinary course of business and not given in connection with the issuance of Indebtedness;

(B) relating to pooled deposit or sweep accounts to permit satisfaction of overdraft or similar obligations incurred in the ordinary course of business of the Issuer or any Subsidiary of the Issuer; or

(C) relating to purchase orders and other agreements entered into with customers of the Issuer or any Restricted Subsidiary in the ordinary course of business;

(iii) on cash accounts securing Indebtedness and other Obligations permitted to be Incurred under clauses (viii)(D) or (viii)(E) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" with financial institutions;

(iv) encumbering reasonable customary initial deposits and margin deposits and similar Liens attaching to commodity trading accounts or other brokerage accounts incurred in the ordinary course of business and not for speculative purposes;

(v) of a collection bank arising under Section 4-210 of the UCC (or a similar statutory provision in another applicable jurisdiction) on items in the course of collection;

(vi) in favor of a banking institution arising as a matter of law encumbering deposits (including the right of set-off) arising in the ordinary course of business in connection with the maintenance of such accounts; and/or (vii) arising under customary general terms of the account bank in relation to any bank account maintained with such bank and attaching only to such account and the products and proceeds thereof, which Liens, in any event, do not secure any Indebtedness (including Liens of members of the Group under the German general terms and conditions of banks and saving banks (*Allgemeine Geschäftsbedingungen der Banken und Sparkassen*));

(g) leases, licenses, subleases and sublicenses of assets (including real property and intellectual property rights), in each case entered into in the ordinary course of business;

(h) Liens securing or otherwise arising out of judgments, decrees, attachments, orders or awards not giving rise to an Event of Default so long as:

(i) any appropriate legal proceedings which may have been duly initiated for the review of such judgment, decree, order or award have not been finally terminated;

(ii) the period within which such proceedings may be initiated has not expired; or

(iii) no more than 60 days have passed after (A) such judgment, decree, order or award has become final or (B) such period within which such proceedings may be initiated has expired;

(i) Liens:

(i) on assets or property of the Issuer or any Restricted Subsidiary for the purpose of securing (x) Capitalized Lease Obligations or Purchase Money Obligations, or (y) the payment of all or a part of the purchase price of, or securing Indebtedness or other Obligations Incurred to finance or refinance the acquisition, improvement or construction of, assets or property acquired or constructed in the ordinary course of business, provided that:

(A) the aggregate principal amount of Indebtedness secured by such Liens is otherwise permitted to be Incurred under the Indenture; and

(B) in the case of sub-clause (y), any such Liens may not extend to any assets or property of the Issuer or any Restricted Subsidiary other than assets or property acquired, improved, constructed or leased with the proceeds of such Indebtedness and any improvements or accessions and/or fixtures to such assets and property, including any real property on which such improvements or construction relates; and (ii) any interest or title of a lessor under any Capitalized Lease Obligations or operating lease;

(j) Liens perfected or evidenced by UCC financing statement filings, including precautionary UCC financing statements (or similar filings in other applicable jurisdictions) regarding operating leases entered into by the Issuer and the Restricted Subsidiaries in the ordinary course of business;

(k) Liens existing on, or provided for or required to be granted under written agreements existing on, the Acquisition Closing Date (other than Liens securing the Notes);

(l) Liens on property, other assets or shares of stock of a person at the time such person becomes a Restricted Subsidiary (or at the time the Issuer or a Restricted Subsidiary acquires such property, other assets or shares of stock, including any acquisition by means of a merger, amalgamation, consolidation or other business combination transaction with or into the Issuer or any Restricted Subsidiary); *provided* that such Liens are not created, Incurred or assumed in anticipation of or in connection with such other person becoming a Restricted Subsidiary (or such acquisition of such property, other assets or stock); *provided, further*, that such Liens are limited to all or part of the same property, other assets or stock (plus improvements, accession, proceeds or dividends or distributions in connection with the original property, other assets or stock) that secured (or, under the written arrangements under which such Liens arose, could secure) the obligations to which such Liens relate;

(m) Liens on assets or property of the Issuer or any Restricted Subsidiary securing Indebtedness or other Obligations of the Issuer or such Restricted Subsidiary owing to the Issuer or another Restricted Subsidiary, or Liens in favor of the Issuer or any Restricted Subsidiary;

(n) Liens securing Refinancing Indebtedness Incurred to refinance Indebtedness that was previously so secured, and permitted to be secured under the Indenture (other than with respect to Liens Incurred under clause (cc) of this definition of "Permitted Liens"); *provided* that any such Lien is limited to all or part of the same property or assets (plus improvements, accessions, proceeds or dividends or distributions in respect thereof) that secured (or, under the written arrangements under which the original Lien arose, could secure) the Indebtedness or other Obligations being refinanced or is in respect of property that is or could be the security for or subject to a Permitted Lien hereunder;

(o) Liens constituting:

(i) mortgages, liens, security interests, restrictions, encumbrances or any other matters of record that have been placed by any government, statutory or regulatory authority, developer, landlord or other third party on property over which the Issuer or any Restricted Subsidiary has easement rights or on any leased property and subordination or similar arrangements relating thereto; and
(ii) any condemnation or eminent domain proceedings affecting any real property;

(p) any encumbrance or restriction (including put and call arrangements) with respect to Capital Stock of any joint venture, associate or similar arrangement (i) pursuant to any joint venture or similar agreement or arrangement (including articles, by-laws and other governing documents of such entity) or (ii) securing obligations of joint ventures, Associates or similar entities or arrangements;

(q) Liens on property or assets under construction (and related rights) in favor of a contractor or developer or arising from progress or partial payments by a third party relating to such property or assets;

(r) Liens arising out of conditional sale, title retention, hire purchase, consignment or similar arrangements for the sale of goods or receivables resulting from the sale of goods entered into in the ordinary course of business;

(s) Liens securing Indebtedness and other Obligations permitted to be Incurred by the Issuer and its Restricted Subsidiaries pursuant to any of clauses (iv)(A), (iv)(C)(solely as it relates to sub-clause (iv)(A)), (v), (vi), (vii), (xiv), (xvi), (xix) and (xx) of the second paragraph of the covenant described under "—*Certain Covenants—Limitation on Indebtedness*," provided that:

(i) in the case of clause (v)(y) of the second paragraph of the covenant described under "—*Certain Covenants—Limitation on Indebtedness*," only if such Liens are limited to all or a part of the same property or assets, including Capital Stock acquired (plus improvements, accessions, proceeds or dividends or distributions in respect thereof, or replacements of any thereof), or of a Person acquired or merged or consolidated with or into the Issuer or any Restricted Subsidiary, in any transaction to which such Indebtedness relates; and

(ii) in the case of clause (xvi) of the second paragraph of the covenant described under "—*Certain Covenants—Limitation on Indebtedness*" only if such Liens are limited to the extent of such property or assets financed;

(t) Permitted Collateral Liens;

(u) Liens:

(i) on Capital Stock or other securities or assets of any Unrestricted Subsidiary that secure Indebtedness of such Unrestricted Subsidiary; and

(ii) Liens then existing with respect to assets of an Unrestricted Subsidiary on the day such Unrestricted Subsidiary is redesignated as a Restricted Subsidiary as described under the covenant "—*Certain Covenants—Designation of Restricted and Unrestricted Subsidiaries*";

(iii) in respect of any credit support in favor of any provider of credit insurance relating to the Issuer and or any Restricted Subsidiary;

(v) any security granted over the marketable securities portfolio described in clause (h) of the definition of "Cash Equivalents" in connection with the disposal thereof to a third party;

(w) Liens on:

(i) goods the purchase price of which is financed by a documentary letter of credit issued for the account of the Issuer or any Restricted Subsidiary or Liens on bills of lading, drafts or other documents of title arising by operation of law or pursuant to the standard terms of agreements relating to letters of credit, bank guarantees and other similar instruments; and
(ii) specific items of inventory of other goods and proceeds of any person securing such person's obligations in respect of bankers' acceptances issued or created for the account of such person to facilitate the purchase, shipment or storage of such inventory or other goods;

(x) Liens on equipment of the Issuer or any Restricted Subsidiary and located on the premises of any client or supplier in the ordinary course of business;

(y) Liens on assets or securities deemed to arise in connection with and solely as a result of the execution, delivery or performance of contracts to sell such assets or securities if such sale is otherwise permitted by the Indenture;

(z) Liens arising by operation of law or contract on insurance policies and the proceeds thereof to secure premiums thereunder, and Liens, pledges and deposits in the ordinary course of business securing liability for premiums or reimbursement or indemnification obligations of (including obligations in respect of letters of credit or bank guarantees for the benefits of) insurance carriers;

(aa) Liens solely on any cash earnest money deposits made in connection with any letter of intent or purchase agreement permitted under the Indenture;

(bb) Liens:

(i) on cash advances in favor of the seller of any property to be acquired in an Investment permitted pursuant to Permitted Investments to be applied against the purchase price for such Investment; and

(ii) consisting of an agreement to sell any property in an asset sale permitted under the covenant described under "—*Certain Covenants—Limitation on Sales of Assets and Subsidiary Stock*" in each case, solely to the extent such Investment or asset sale, as the case may be, would have been permitted on the date of the creation of such Lien;

(cc) Liens on property and assets of the Issuer and its Restricted Subsidiaries securing Indebtedness and other Obligations of the Issuer and its Restricted Subsidiaries in an aggregate principal amount not to exceed the greater of (x) €138.0 million and (y) an amount equal to 50% of LTM EBITDA at the time Incurred;

(dd) Liens deemed to exist in connection with Investments in repurchase agreements permitted by the covenant described under "—*Certain Covenants—Limitation on Indebtedness*," provided that such Liens do not extend to any assets other than those that are the subject of such repurchase agreement;

(ee) Liens arising in connection with a Qualified Securitization Financing or a Receivables Facility or factoring financings, securitizations, asset-backed loans and financings (howsoever described or structured), receivables financings or similar arrangements;

(ff) Settlement Liens;

(gg) rights of recapture of unused real property in favor of the seller of such property set forth in customary purchase agreements and related arrangements with any government, statutory or regulatory authority;

(hh) the rights reserved to or vested in any person or government, statutory or regulatory authority by the terms of any lease, license, franchise, grant or permit held by the Issuer or any Restricted Subsidiary or by a statutory provision, to terminate any such lease, license, franchise, grant or permit, or to require annual or periodic payments as a condition to the continuance thereof;

(ii) restrictive covenants affecting the use to which real property may be put;

(jj) Liens or covenants restricting or prohibiting access to or from lands abutting on controlled access highways or covenants affecting the use to which lands may be put; provided that such Liens or covenants do not interfere with the ordinary conduct of the business of the Issuer or any Restricted Subsidiary;

(kk) Liens arising or incurred in connection with any Permitted Tax Restructuring;

(ll) Liens required to be granted under mandatory law in favor of creditors as a consequence of a merger or conversion permitted under the Indenture due to §§ 22, 204 German Transformation Act (*Umwandlungsgesetz—UmwG*);

(mm) Liens on Escrowed Proceeds or Liens for the benefit of the related holders of debt securities or other Indebtedness (or the underwriters or arrangers thereof) or on cash set aside at the time of the Incurrence of any Indebtedness or government securities purchased with such cash, in either case, to the extent such cash or government securities are held in an escrow account or similar arrangement, including in each case any interest or premium thereon;

(nn) Liens arising in connection with any joint and several liability and any netting or set-off arrangement arising in each case by operation of law as a result of the existence or establishment of a fiscal unity between Restricted Subsidiaries solely for corporate income tax or value added tax purposes in any jurisdiction of which the Issuer or a Restricted Subsidiary is or becomes a member;

(oo) standard terms relating to banker's Liens or similar general terms and conditions of banks (including liens of members of the Group under the German general terms and conditions of banks and saving banks *(Allgemeine Geschäftsbedingungen der Banken und Sparkassen*) with whom the Issuer or a Restricted Subsidiary maintains a banking relationship in the ordinary course of business, rights of set-off or similar rights and remedies as to deposit accounts or other funds maintained with a depositary or financial institution;

(pp) Liens securing or arising by reason of any netting or set-off arrangement entered into in the ordinary course of banking or consistent with past practice or other trading activities, or liens over cash accounts and receivables securing cash pooling or cash management arrangements;

(qq) (i) Liens created for the benefit of or to secure, directly or indirectly, the Notes, (ii) Liens pursuant to the Intercreditor Agreement, any Additional Intercreditor Agreement and/or the Transaction Security Documents, (iii) Liens in respect of property and assets securing Indebtedness if the recovery in respect of such Liens is subject to loss-sharing as among the Holders and the creditors of such Indebtedness pursuant to the Intercreditor Agreement or an Additional Intercreditor Agreement, (iv) Liens securing Indebtedness Incurred under clauses (i)(A), (i)(B) or (i)(C) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" to the extent the Agreed Security Principles permit such Lien to be granted to such Indebtedness without being granted to the Notes or would not permit such Lien to be granted to the Notes and (v) Liens on rights under any proceeds loan that are assigned to the third party creditors of the Indebtedness Incurred by the Issuer or any Restricted Subsidiary to finance such proceeds loan and incurred in compliance with the Indenture and securing that Indebtedness;

(rr) Liens created or subsisting in order to secure any pension liabilities or partial retirement liabilities or any liabilities arising in connection with any pension insurance plan;

(ss) any extension, renewal or replacement, in whole or in part, of any Lien described in this definition of Permitted Lien, *provided* that any such extension, renewal or replacement shall not extend in any material respect to any additional property or assets;

(tt) any Lien pursuant to or in connection with Section 8a of the German Old-Age Part Time Act (*Altersteilzeitgesetz*) or Section 7e of the Fourth Book of the German Social Code (*Sozialgesetzbuch IV*);

(uu) any Lien or other security interest or right of set-off in favor of Dutch banks arising under (x) articles 24 or 25 respectively of the general terms and conditions (*algemene voorwaarden*) of any member of the Dutch Bankers' Association (*Nederlandse Vereniging van Banken*) or (y) any other applicable banking terms and conditions; and

(vv) any Lien not securing Indebtedness.

In the event that a Permitted Lien meets the criteria of more than one of the types of Permitted Liens (at the time of Incurrence or at a later date), the Issuer in its sole discretion may divide, classify or from time to time reclassify all or any portion of such Permitted Lien in any manner that complies with the Indenture and such Permitted Lien shall be treated as having been made pursuant only to the clause or clauses of the definition of Permitted Lien to which such Permitted Lien has been classified or reclassified.

"*Permitted Reorganization*" means any amalgamation, demerger, merger, voluntary liquidation, consolidation, reorganization, winding up or corporate reconstruction involving the Issuer or any of the Restricted Subsidiaries (a "Reorganization") that is made on a solvent basis; provided that:

(a) any payments or assets distributed in connection with such Reorganization remain within the Issuer and the Restricted Subsidiaries; and

(b) if any shares or other assets form part of the Charged Property, substantially equivalent Liens must be granted over such shares or assets of the recipient such that they form part of the Charged Property (ignoring for the purposes of assessing such equivalency any limitations required in accordance with the Agreed Security Principles or hardening periods (or any similar or equivalent concept)).

"*Permitted Tax Distribution*" means if and for so long as the Issuer is a member of a fiscal unity (whether resulting from a domination and profit or loss pooling agreement or otherwise) or a group filing a consolidated or combined tax return with any Parent Entity, any dividends, intercompany loans, other intercompany balances or other distributions to fund any income Taxes for which such Parent Entity is liable up to an amount not to exceed with respect to such Taxes the amount of any such Taxes that the Issuer and its Subsidiaries would have been required to pay on a separate company basis or on a consolidated basis calculated as if the Issuer and its Subsidiaries had paid Tax on a consolidated, combined, group, affiliated or unitary basis on behalf of an affiliated group consisting only of the Issuer and its Subsidiaries.

"*Permitted Tax Restructuring*" means any reorganizations and other activities related to tax planning and tax reorganization entered into prior to, on or after the date hereof so long as such Permitted Tax Restructuring is not materially adverse to the Holders, individually or in the aggregate (as determined by the Issuer in good faith).

"*Permitted Transaction*" means:

(a) any step, circumstance, payment, event, reorganization or transaction contemplated by or relating to the Transaction Documents, the final tax structure memorandum in relation to the Transaction (other than any exit steps described therein) or otherwise described in this offering memorandum and any intermediate steps or actions necessary to implement the steps, circumstances, payments or transactions described in each such document;

(b) any step, circumstance, event or transaction as part of the Debt Pushdown and any intermediate steps or actions necessary to implement the Debt Pushdown;

(c) a Permitted Reorganization;

(d) any step, circumstance, payment or transaction contemplated by or relating to the Acquisition (and related Acquisition Documents) or any exercise of any set off of any claims or receivables of the Issuer (or its Affiliates) arising under, contemplated by or relating to the Acquisition (and related Acquisition Documents) against any liabilities owed by the Issuer (or its Affiliates) to the respective vendors under the Acquisition Agreement, their Affiliates or assigns and any intermediate steps or actions necessary to implement such steps, circumstances, payments, transactions or set-off;

(e) any step, circumstance or transaction which is mandatorily required by law (including arising under an order of attachment or injunction or similar legal process);

(f) any conversion of a loan, credit or any other indebtedness outstanding into distributable reserves, share capital, share premium or other equity interests of any member of the Group or any other capitalization, forgiveness, waiver, release or other discharge of any loan, credit or other indebtedness of any member of the Group, in each case on a cashless basis;

(g) any repurchase of shares in any person upon the exercise of warrants, options or other securities convertible into or exchangeable for shares, if such shares represent all or a portion of the exercise price of such warrants, options or other securities convertible into or exchangeable for shares as part of a cashless exercise;

(h) any transfer of the shares in, or issue of shares by, a member of the Group or any step, action or transaction including share issue or acquisition or consumption of debt, for the purpose of creating the group structure for the Acquisition or effecting the Transaction as described in this offering memorandum, including inserting any Holding Company or incorporating or inserting any Subsidiary in connection therewith, *provided* that after completion of such steps no Change of Control shall have occurred;

(i) any closure of bank accounts in the ordinary course of business;

(j) any "Liabilities Acquisition" (as defined in the Intercreditor Agreement);

(k) any intermediate steps or actions necessary to implement steps, circumstances, payments or transactions permitted by the Indenture; and

(l) any action to be taken by a member of the Group that, in the reasonable opinion of the Issuer, is necessary to implement or complete the Acquisition.

"*Person*" means any individual, corporation, partnership, joint venture, association, joint-stock company, trust, unincorporated organization, limited liability company, government or any agency or political subdivision thereof or any other entity.

"*Post-Petition Interest*" means any interest or entitlement to fees or expenses or other charges that accrue after the commencement of any bankruptcy or insolvency proceeding, whether or not allowed or allowable as a claim in any such bankruptcy or insolvency proceeding.

"*Preferred Stock*", as applied to the Capital Stock of any person, means Capital Stock of any class or classes (however designated) which is preferred as to the payment of dividends or as to the distribution of assets upon any voluntary or involuntary liquidation or dissolution of such person, over shares of Capital Stock of any other class of such person.

"*Public Debt*" means any Indebtedness consisting of bonds, debentures, notes or other similar debt securities issued in (i) a public offering registered under the Securities Act or (ii) a private placement to institutional and other investors, in each case, that are not Affiliates of the Issuer, (x) in accordance with Section 4(a)(2) under the Securities Act or (y) acquired for resale in accordance with Rule 144A and/or Regulation S under the Securities Act, whether or not it includes registration rights entitling the holders of such debt securities to registration thereof with the SEC for public resale.

"*Public Offering*" means any offering, including an Initial Public Offering, of shares of common stock or other common equity interests that are listed on an exchange or publicly offered (which shall include an offering pursuant to Rule 144A or Regulation S under the Securities Act to professional market investors or similar persons).

"*Purchase Money Obligations*" means any Indebtedness Incurred to finance or refinance the acquisition, leasing, construction or improvement of property (real or personal) or assets (including Capital Stock), and whether acquired through the direct acquisition of such property or assets or the acquisition of the Capital Stock of any person owning such property or assets, or otherwise.

"*Qualified Securitization Financing*" means any Securitization Facility that meets the following conditions:

(a) the Board of Directors shall have determined in good faith that such Qualified Securitization Financing (including financing terms, covenants, termination events and other provisions) is in the aggregate economically fair and reasonable to the Issuer and the Restricted Subsidiaries;

(b) all sales of Securitization Assets and related assets by the Issuer or any Restricted Subsidiary to the Securitization Subsidiary or any other person are made for fair consideration (as determined in good faith by the Issuer); and

(c) the financing terms, covenants, termination events and other provisions thereof shall be fair and reasonable terms (as determined in good faith by the Issuer) and may include Standard Securitization Undertakings.

"*Receivables Assets*" means:

(a) any accounts receivable owed to the Issuer or a Restricted Subsidiary subject to a Receivables Facility and the proceeds thereof; and

(b) all collateral securing such accounts receivable, all contracts and contract rights, guarantees or other obligations in respect of such accounts receivable, all records with respect to such accounts receivable and any other assets customarily transferred together with accounts receivable in connection with a non-recourse accounts receivable factoring arrangement,

and which are sold, conveyed, assigned or otherwise transferred or pledged by the Issuer or such Restricted Subsidiary (as applicable) in a transaction or series of transactions in connection with a Receivables Facility.

"*Receivables Facility*" means an arrangement between the Issuer or a Restricted Subsidiary and a counterparty pursuant to which:

(a) the Issuer or such Restricted Subsidiary, as applicable, sells (directly or indirectly) accounts receivable owing by customers, together with Receivables Assets related thereto;

(b) the obligations of the Issuer or such Restricted Subsidiary, as applicable, thereunder are non-recourse (except for Securitization Repurchase Obligations) to the Issuer and such Restricted Subsidiary; and

(c) the financing terms, covenants, termination events and other provisions thereof shall be on market terms (as determined in good faith by the Issuer) and may include Standard Securitization Undertakings, and shall include any guaranty in respect of such arrangements.

"*Refinance*" means refinance, refund, replace, renew, repay, modify, restate, defer, substitute, supplement, reissue, resell, extend or increase (including pursuant to any defeasance or discharge mechanism) and the terms "refinances", "refinanced" and "refinancing" as used for any purpose in the Indenture shall have a correlative meaning.

"*Refinancing Indebtedness*" means Indebtedness that is Incurred to refund, refinance, replace, exchange, renew, repay or extend (including pursuant to any defeasance or discharge mechanism) any Indebtedness existing on the Acquisition Closing Date or Incurred in compliance with the Indenture (including Indebtedness of the Issuer that refinances Indebtedness of any Restricted Subsidiary and Indebtedness of any Restricted Subsidiary that refinances Indebtedness of the Issuer or another Restricted Subsidiary) including Indebtedness that refinances Refinancing Indebtedness, *provided* that:

(a) such Refinancing Indebtedness:

(i) has a Weighted Average Life to Maturity at the time such Refinancing Indebtedness is Incurred which is not less than the remaining Weighted Average Life to Maturity of the Indebtedness, Disqualified Stock or Preferred Stock being refunded or refinanced; and

(ii) to the extent refinancing Subordinated Indebtedness, Disqualified Stock or Preferred Stock, is Subordinated Indebtedness, Disqualified Stock or Preferred Stock, respectively, and, in the case of Subordinated Indebtedness, is subordinated to the Notes on terms at least as favorable to the Holders as those contained in the documentation governing the Indebtedness being refinanced;

(b) Refinancing Indebtedness shall not include Indebtedness, Disqualified Stock or Preferred Stock of the Issuer or a Restricted Subsidiary that refinances Indebtedness, Disqualified Stock or Preferred Stock of an Unrestricted Subsidiary;

(c) such Refinancing Indebtedness has an aggregate principal amount (or if Incurred with original issue discount, an aggregate issue price) that is equal to or less than the aggregate principal amount (or if Incurred with original issue discount, the aggregate accreted value) then outstanding (plus the aggregate amount of accrued and unpaid interest and any fees and expenses (including original issue discount, upfront fees or similar fees), including any premium and defeasance costs, indemnity fees, discounts, premiums and other costs and expenses Incurred or payable in connection with such refinancing) under the Indebtedness being Refinanced; and

(d) Refinancing Indebtedness in respect of any Credit Facility or any other Indebtedness may be Incurred from time to time after the termination, discharge or repayment of any such Credit Facility or other Indebtedness.

"*Registrar*" means any Person authorized by the Issuer to which Notes may be presented for registration and transfer.

"*Related Fund*" in relation to a fund (the "first fund"), means a fund which is managed or advised by the same investment manager or investment adviser as the first fund or, if it is managed by a different investment manager or investment adviser, a fund whose investment manager or investment adviser is an Affiliate of the investment manager or investment adviser of the first fund.

"*Related Person*" with respect to any Permitted Holder, means:

(a) any controlling equity holder or Subsidiary of such person;

(b) in the case of an individual, any spouse, former spouse, family member or relative of such individual, any trust or partnership for the benefit of one or more of such individual and any such spouse, former spouse, family member or relative, or the estate, executor, administrator, committee or beneficiaries of any thereof;

(c) any trust, corporation, partnership or other person for which one or more of the Permitted Holders and other Related Persons of any thereof constitute the beneficiary, stockholders, partners or owners thereof, or persons beneficially holding in the aggregate a majority (or more) controlling interest therein; and

(d) any investment fund or vehicle managed, sponsored or advised by such person or any successor thereto, or by any Affiliate of such person or any such successor.

"*Related Taxes*" means any Taxes, including sales, use, transfer, rental, ad valorem, value added, stamp, property, consumption, franchise, license, capital, registration, business, customs, net worth, gross receipts, excise, occupancy, intangibles or similar Taxes and other fees and expenses (other than (x) Taxes measured by income and (y) withholding Taxes), required to be paid (*provided* that such Taxes are in fact paid) by any Parent Entity by virtue of its:

(a) being organized or otherwise being established or having Capital Stock outstanding (but not by virtue of owning stock or other equity interests of any corporation or other entity other than, directly or indirectly, the Issuer or any of the Issuer's Subsidiaries) or otherwise required to be paid to maintain its existence or good standing under applicable law;

(b) being a holding company parent, directly or indirectly, of the Issuer or any Subsidiaries of the Issuer;

(c) issuing or holding Subordinated Shareholder Funding;

(d) receiving dividends from or other distributions in respect of the Capital Stock of, directly or indirectly, the Issuer or any Subsidiaries of the Issuer, or

(e) having made (i) any payment in respect to any of the items for which the Issuer is permitted to make payments to any Parent Entity pursuant to the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*" or (ii) any Permitted Tax Distribution.

"*Relevant Period*" means:

(a) if ending on the last day of a fiscal quarter, each period of four consecutive fiscal quarters ending on the last day of a fiscal quarter; or

(b) if ending on the last day of a calendar month or any other date not being the last day of a fiscal quarter, the period of 12 consecutive months ending on the last day of a calendar month or such other appropriate date,

which in each case for the avoidance of doubt may include periods prior to the Acquisition Closing Date as described under the section "*—Financial and Other Calculations*" above.

"*Relevant Third Party*" means 13184374 Canada Inc.

"*Restricted Investment*" means any Investment other than a Permitted Investment.

"*Restricted Subsidiary*" means any Subsidiary of the Issuer other than an Unrestricted Subsidiary.

"*Restructuring Costs*" means costs or expenses relating to employee relocation, retraining, severance and termination, business interruption, reorganization and other restructuring or cost cutting measures, the rationalization, re-branding, start-up, reduction or elimination of product lines, assets or businesses, the consolidation, relocation or closure of retail, administrative or production locations and other similar items (for the avoidance of doubt, excluding any related capital expenditure).

"*Revolving Facility*" means any additional revolving facility.

"*Rolled Proceeds*" means the proceeds received by a Rollover Investor pursuant to or in connection with any Acquisition and which are (or which the Issuer reasonably anticipates are to be) reinvested in or advanced to, directly or indirectly, the Issuer, its Subsidiaries or any Holding Company of the Issuer (in each case including on a non-cash basis).

"*Rollover Investor*" means any (direct or indirect) shareholder in the Target Group immediately prior to the Acquisition Closing Date or any other director or member of the management or other person which reinvests or advances (or which the Issuer reasonably anticipates will reinvest or advance) any proceeds payable or received pursuant to or in connection with the Acquisition (directly or indirectly) in the Issuer, its Subsidiaries or any Parent Holding Company of the Issuer (including on a non-cash basis).

"*S&P*" means Standard & Poor's Investors Ratings Services or any of its successors or assigns that is a Nationally Recognized Statistical Rating Organization.

"*Sale and Leaseback Transaction*" means any arrangement providing for the leasing by the Issuer or any of the Restricted Subsidiaries of any real or tangible personal property, which property has been or is to be sold or transferred by the Issuer or such Restricted Subsidiary to a third person in contemplation of such leasing.

"*SEC*" means the Securities and Exchange Commission or any successor thereto.

"*Second Lien Indebtedness*" means Indebtedness of the Group included in the definition of Total Debt that constitutes Second Lien Liabilities.

"*Second Lien Liabilities*" has the meaning given to that term in the Intercreditor Agreement.

"*Securities Act*" means the Securities Act of 1933, as amended, and the rules and regulations of the SEC promulgated thereunder, as amended.

"*Securitization Asset*" means:

(a) any accounts receivable, mortgage receivables, loan receivables, royalty, franchise fee, license fee, patent or other revenue streams and other rights to payment or related assets and the proceeds thereof; and

(b) all collateral securing such receivable or asset, all contracts and contract rights, guarantees or other obligations in respect of such receivable or asset, lockbox accounts and records with respect to such account or asset and any other assets customarily transferred (or in respect of which security interests are customarily granted) together with accounts or assets in connection with a securitization, factoring or receivable sale transaction.

"*Securitization Facility*" means any of one or more securitization, financing, factoring or sales transactions, as amended, supplemented, modified, extended, renewed, restated or refunded from time to time, pursuant to which the Issuer or any of the Restricted Subsidiaries sells, transfers, pledges or otherwise conveys any Securitization Assets (whether now existing or arising in the future) to a Securitization Subsidiary or any other person.

"*Securitization Fees*" means distributions or payments made directly or by means of discounts with respect to any Securitization Asset or participation interest therein issued or sold in connection with, and other fees and expenses (including reasonable fees and expenses of legal counsel) paid in connection with, any Qualified Securitization Financing or Receivables Facility.

"*Securitization Repurchase Obligation*" means any obligation of a seller of Securitization Assets or Receivables Assets in a Qualified Securitization Financing or a Receivables Facility to repurchase or otherwise make payments with respect to Securitization Assets or Receivables Assets arising as a result of a breach of a representation, warranty or covenant or otherwise, including as a result of a receivable or portion thereof becoming subject to any asserted defense, dispute, offset or counterclaim of any kind as a result of any action taken by, any failure to take action by or any other event relating to the seller.

"*Securitization Subsidiary*" means any Subsidiary of the Issuer in each case formed for the purpose of and that solely engages in one or more Qualified Securitization Financings and other activities reasonably related thereto or another person formed for this purpose.

"*Security*" means a mortgage, charge, pledge, lien, security assignment, security transfer of title or other security interest having a similar effect.

"*Senior Indebtedness*" means, whether outstanding on the Issue Date or thereafter incurred, all amounts payable by, under or in respect of all other Indebtedness of the Issuer (only with respect to a Guarantee by the Issuer of Senior Indebtedness of a Restricted Subsidiary) or any Restricted Subsidiary, including premiums and accrued and unpaid interest (including interest accruing on or after the filing of any petition in bankruptcy or for reorganization relating to such Restricted Subsidiary at the rate specified in the documentation with respect thereto whether or not a claim for post filing interest is allowed in such proceeding) and fees relating thereto; *provided* that Senior Indebtedness will not include:

(a) any Indebtedness Incurred in violation of the Indenture;

(b) any obligation of any Restricted Subsidiary to another Restricted Subsidiary;

(c) any liability for taxes owed or owing by any Restricted Subsidiary;

(d) any accounts payable or other liability to trade creditors arising in the ordinary course of business (including guarantees thereof or instruments evidencing such liabilities);

(e) any Indebtedness of any Restricted Subsidiary that ranks pari passu in right of payment with the Note Guarantee of such Restricted Subsidiary (including Pari Passu Indebtedness);

(f) any Indebtedness that is expressly subordinated or junior in right of payment to any other Indebtedness of such Restricted Subsidiary (including Subordinated Indebtedness and Subordinated Shareholder Funding); and

(g) any Capital Stock.

"*Security Interests*" means the security interests in the Charged Property that are created by the Transaction Security Documents.

"*Senior Secured Credit Facilities*" means the credit facilities made available under the Senior Secured Credit Facilities Agreement.

"*Senior Secured Credit Facilities Agreement*" means the agreement dated on or about the Issue Date, by and among, *inter alios*, Bidco, as original borrower and the lenders named therein, together with the related documents thereto (including the revolving loans thereunder, any letters of credit and reimbursement obligations related thereto, any guarantees and security documents), as amended, extended, renewed, restated, refunded, replaced, refinanced, supplemented, modified or otherwise changed (in whole or in part, and without limitation as to amount, terms, conditions, covenants and other provisions) from time to time, and any one or more agreements (and related documents) governing Indebtedness, including indentures, incurred to refinance, substitute, supplement, replace or add to (including increasing the amount available for borrowing or adding or removing any Person as a borrower, issuer or guarantor thereunder, in whole or in part), the borrowings and commitments then outstanding or permitted to be outstanding under such Senior Secured Credit Facilities Agreement or one or more successors to the Senior Secured Credit Facilities Agreement or one or more new Senior Secured Credit Facilities Agreements.

"*Senior Secured Indebtedness*" means Indebtedness of the Group included in the definition of Total Debt that constitutes Senior Secured Liabilities.

"*Senior Secured Liabilities*" has the meaning given to that term in the Intercreditor Agreement.

"*Senior Secured Net Leverage Ratio*" means, as of any date of determination, the ratio of:

(a) the sum of:

(i) Senior Secured Indebtedness as of such date; and

(ii) the Reserved Indebtedness Amount in respect of Indebtedness which, once incurred, would constitute Senior Secured Indebtedness,

less the aggregate amount of cash and Cash Equivalent Investments of the Group on a consolidated basis; to

(b) LTM EBITDA,

provided that such calculation shall not give effect to:

(i) any Indebtedness Incurred on such determination date pursuant to the provisions described in the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" (other than Senior Secured Indebtedness Incurred pursuant to clauses (i)(C) and (v)(B)(1)(I) of the second paragraph thereof);

(ii) any Indebtedness Incurred pursuant to clauses (iv)(A), (iv)(B) or (xiv)(B) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*"; or

(iii) the discharge on such determination date of any Indebtedness to the extent that such discharge results from proceeds of Indebtedness Incurred on the determination date pursuant to the provisions described in the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" (other than Senior Secured Indebtedness Incurred pursuant to clauses (i)(C) and (v)(B)(1)(I) of the second paragraph thereof).

All Applicable Metrics described in this definition will be calculated as set forth in the section "*—Financial and Other Calculations*" above.

"*Settlement*" means the transfer of cash or other property with respect to any credit or debit card charge, check or other instrument, electronic funds transfer, or other type of paper-based or electronic payment, transfer, or charge transaction for which a person acts as a processor, remitter, funds recipient or funds transmitter in the ordinary course of its business.

"*Settlement Asset*" means any cash, receivable or other property, including a Settlement Receivable, due or conveyed to a person in consideration for a Settlement made or arranged, or to be made or arranged, by such person or an Affiliate of such person.

"*Settlement Indebtedness*" means any payment or reimbursement obligation in respect of a Settlement Payment.

"*Settlement Lien*" means any Lien relating to any Settlement or Settlement Indebtedness (and may include, for the avoidance of doubt, the grant of a Lien in or other assignment of a Settlement Asset in consideration of a Settlement Payment, Liens securing intraday and overnight overdraft and automated clearing house exposure, and similar Liens).

"*Settlement Payment*" means the transfer, or contractual undertaking (including by automated clearing house transaction) to effect a transfer, of cash or other property to effect a Settlement.

"*Settlement Receivable*" means any general intangible, payment intangible, or instrument representing or reflecting an obligation to make payments to or for the benefit of a person in consideration for a Settlement made or arranged, or to be made or arranged, by such person.

"*Significant Subsidiary*" means any Restricted Subsidiary or group of Restricted Subsidiaries (taken together) whose proportionate share of Consolidated EBITDA exceeds 10% of the Consolidated EBITDA by reference to the latest Annual Financial Statements (or, if no such Annual Financial Statements have been delivered, the Original Financial Statements), *provided* that a determination by the Issuer that a Restricted Subsidiary (or group of Restricted Subsidiaries (taken together)) is or is not a Significant Subsidiary shall, in the absence of manifest error, be conclusive and binding on all Parties.

"*Similar Business*" means (a) any businesses, services or activities engaged in by the Issuer or any of its Subsidiaries or any Associates (including, for the avoidance of doubt, the Target Group) on the Acquisition Closing Date and (b) any businesses, services and activities engaged in by the Issuer or any of its Subsidiaries or any Associates that are related, complementary, incidental, ancillary or similar to any of the foregoing or are extensions or developments of any thereof.

"*Standard Securitization Undertakings*" means representations, warranties, covenants, guarantees and indemnities entered into by the Issuer or any Subsidiary of the Issuer which the Issuer has determined in good faith to be customary in a Securitization Facility, including those relating to the servicing of the assets of a Securitization Subsidiary, it being understood that any Securitization Repurchase Obligation shall be deemed to be a Standard Securitization Undertaking or, in the case of a Receivables Facility, a non-credit related recourse accounts receivable factoring arrangement.

"*Stated Maturity*" means, with respect to any Indebtedness, the date specified in the instrument governing such Indebtedness as the fixed date on which the payment of principal of such security is due and payable, including pursuant to any mandatory redemption provision, but shall not include any Contingent Obligations to repay, redeem or repurchase any such principal prior to the date originally scheduled for the payment thereof.

"*Subordinated Indebtedness*" means:

(a) with respect to the Issuer, any Indebtedness (whether outstanding on the Issue Date or thereafter Incurred) which is expressly subordinated in right of payment or security to the Notes pursuant to a written agreement; and

(b) with respect to any Guarantor, any Indebtedness of such Guarantor that is expressly subordinated in right of payment to the Note Guarantee of such Guarantor.

No Indebtedness will be deemed to be subordinated in right of payment to any other Indebtedness solely by virtue of being unsecured or by virtue of being secured on a junior basis or on different assets, or due to the fact that holders (or an agent, trustee or representative thereof) of any Indebtedness have entered into intercreditor or similar arrangements giving one or more of such holders priority over the other holders in the collateral held by them or by virtue of the application of "waterfall" or similar payment ordering provisions affecting tranches of Indebtedness.

"*Subordinated Liabilities*" has the meaning given to that term in the Intercreditor Agreement.

"*Subordinated Shareholder Funding*" means, collectively, any funds provided to the Issuer by any Parent Entity, any Affiliate of any Parent Entity or any Permitted Holder or any Affiliate thereof, in exchange for or pursuant to any security, instrument or agreement other than Capital Stock, in each case issued to and held by any of the foregoing persons, together with any such security, instrument or agreement and any other security or instrument other than Capital Stock issued in payment of any obligation under any Subordinated Shareholder Funding; *provided* that such Subordinated Shareholder Funding:

(a) does not mature or require any amortization, redemption or other repayment of principal or any sinking fund payment prior to the date that is 6 months after the Stated Maturity of the Notes (other than through conversion or exchange of such funding into Capital Stock (other than Disqualified Stock) of the Issuer or any funding meeting the requirements of this definition) or the making of any such payment prior to the date that is six months after the Stated Maturity of the Notes is restricted by the Intercreditor Agreement, an Additional Intercreditor Agreement or another intercreditor agreement;

(b) does not require, prior to the date that is six months after the Stated Maturity of the Notes, payment of cash interest, cash withholding amounts or other cash gross-ups, or any similar cash amounts or the making of any such payment prior to the date that is six months after the Stated Maturity of the Notes is restricted by the Intercreditor Agreement or an Additional Intercreditor Agreement;

(c) contains no change of control, asset sale or similar provisions and does not accelerate and has no right to declare a Default or event of default or take any enforcement action or otherwise require any cash payment, in each case, prior to the date that is six months after the Stated Maturity of the Notes or the payment of any amount as a result of any such action or provision or the exercise of any rights or enforcement action, in each case, prior to the date that is six months after the Stated Maturity of the Notes is restricted by the Intercreditor Agreement or an Additional Intercreditor Agreement;

(d) does not provide for or require any security interest or encumbrance over any asset of the Issuer or any of its Subsidiaries;

(e) pursuant to its terms or to the Intercreditor Agreement, an Additional Intercreditor Agreement or another intercreditor agreement, is fully subordinated and junior in right of payment to the Notes and any Note Guarantee pursuant to subordination, payment blockage and enforcement limitation terms which are customary in all material respects for similar funding or are no less favorable in any material respect to Holders than those contained in the Intercreditor Agreement as in effect on the Acquisition Closing Date with respect to the Subordinated Liabilities;

(f) is not Guaranteed by any Subsidiary of the Issuer; and

(g) does not (including upon the happening of any event) restrict the payment of amounts due in respect of the Notes or any Note Guarantee thereof or compliance by the Issuer or any Guarantor with its obligations under the Notes, any Note Guarantee or the Indenture.

"*Subsidiary*" means, in relation to any person, any entity which is controlled directly or indirectly by that Person and any entity (whether or not so controlled) treated as a subsidiary in the latest financial statements of that person from time to time, and control for this purpose means the direct or indirect ownership of the majority of the voting share capital of such entity or the right or ability to direct management to comply with the type of material restrictions and obligations contemplated in the Indenture or to determine the composition of a majority of the Board of Directors (or like board) of such entity, in each case, whether by virtue of ownership of share capital, contract or otherwise, provided that notwithstanding anything to the contrary no Unrestricted Subsidiary shall be deemed to be a member of the Group or a "Subsidiary" of a member of the Group.

"*Tax*" means any tax, levy, impost, duty, assessment, withholding or other charge of a similar nature (including any penalty or interest payable in connection with any failure to pay or any delay in paying any of the same) imposed or levied by any government or other taxing authority, and "Taxes" shall be construed accordingly.

"*Tax Sharing Agreement*" means any tax sharing or profit and loss pooling or similar agreement with customary or arm's-length terms entered into with any Parent Entity or Unrestricted Subsidiary, as the same may be amended, supplemented, waived or otherwise modified from time to time in accordance with the terms thereof and of the Indenture, and any arrangements or transactions made between the Issuer and/or any of its Subsidiaries and any Parent Entity in order to satisfy the obligations arising under any such Tax Sharing Agreement (including, for the avoidance of doubt, distributions for purposes of compensating accounting losses in relation to a profit and loss pooling agreement and/or upstream loans to any Parent Entity to enable a Parent Entity to compensate the Issuer or such Subsidiary for losses incurred which may need to be compensated by a Parent under any profit and loss pooling agreement).

"*Temporary Cash Investments*" means any of the following:

(a) any Investment in:

(i) direct obligations of, or obligations Guaranteed by, (A) the US or Canada, (B) any EU member state, (C) the UK, (D) Australia, Japan, Norway or Switzerland, (E) any country in whose currency funds are being held specifically pending application in the making of an investment or capital expenditure by the Issuer or a Restricted Subsidiary in that country with such funds or (F) any agency or instrumentality of any such country or member state; or

(ii) direct obligations of any country recognized by the US rated at least "A" by S&P or Fitch or "A-1" by Moody's (or, in either case, the equivalent of such rating by such organization or, if no rating of S&P, Fitch or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization);

(b) overnight bank deposits, and investments in time deposit accounts, certificates of deposit, bankers' acceptances and money market deposits (or, with respect to foreign banks, similar instruments) maturing not more than one year after the date of acquisition thereof issued by:

(i) any lender under any of the Senior Secured Credit Facilities Agreement;

(ii) any institution authorized to operate as a bank in any of the countries or member states referred to in sub-clause (a)(i) above; or (iii) any bank or trust company organized under the laws of any such country or member state or any political subdivision thereof, in each case, having capital and surplus aggregating in excess of €250 million (or the foreign currency equivalent thereof) and whose long-term debt is rated at least "A" by S&P or Fitch or "A-2" by Moody's (or, in either case, the equivalent of such rating by such organization or, if no rating of S&P, Fitch or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization) at the time such Investment is made;

(c) repurchase obligations with a term of not more than 30 days for underlying securities of the types described in clauses (a) or (b) above entered into with a person meeting the qualifications described in clause (b) above;

(d) Investments in commercial paper, maturing not more than 270 days after the date of acquisition, issued by a person (other than the Issuer or any of the Restricted Subsidiaries), with a rating at the time as of which any Investment therein is made of "P-2" (or higher) according to Moody's or "F2" (or higher) according to Fitch or "A-2" (or higher) according to S&P (or, in either case, the equivalent of such rating by such organization or, if no rating of S&P, Fitch or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization);

(e) Investments in securities maturing not more than one year after the date of acquisition issued or fully Guaranteed by Australia, Canada, any European Union member state, Japan, Norway, Switzerland, the UK, any state, commonwealth or territory of the US, or by any political subdivision or taxing authority of any such state, commonwealth, territory, country or member state of any of the foregoing, and rated at least "BBB-" by S&P or Fitch or "Baa3" by Moody's (or, in either case, the equivalent of such rating by such organization or, if no rating of S&P, Fitch or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization);

(f) bills of exchange issued in Australia, Canada, a member state of the European Union, Japan, Norway, Switzerland, the UK or the US eligible for rediscount at the relevant central bank and accepted by a bank (or any dematerialized equivalent);

(g) any money market deposit accounts issued or offered by a commercial bank organized under the laws of a country that is a member of the Organization for Economic Co-operation and Development, in each case, having capital and surplus in excess of €250 million (or the foreign currency equivalent thereof) or whose long term debt is rated at least "A" by S&P or Fitch or "A2" by Moody's (or, in either case, the equivalent of such rating by such organization or, if no rating of S&P, Fitch or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization) at the time such Investment is made;

(h) Investment funds investing 90% of their assets in securities of the type described in clauses (a) through (g) above (which funds may also hold reasonable amounts of cash pending investment or distribution); and

(i) investments in money market funds complying with the risk limiting conditions of Rule 2a-7 (or any successor rule) of the SEC under the US Investment Company Act of 1940, as amended.

"*Total Debt*" means, as of any date of determination, the aggregate principal amount of Indebtedness for borrowed money of the Group, but excluding any Indebtedness of the Group under or with respect to Cash Management Services, intra-Group Indebtedness, Hedging Obligations, Receivables Facilities or Securitization Facilities.

"*Total Net Leverage Ratio*" means, as of any date of determination, the ratio of:

(a) the sum of:

(i) Total Debt as of such date; and

(ii) the Reserved Indebtedness Amount in respect of Indebtedness which, once incurred, would be included in the calculation of Total Debt,

less the aggregate amount of cash and Cash Equivalent Investments of the Group on a consolidated basis; to

(b) LTM EBITDA,

provided that such calculation shall not give effect to:

(i) any Indebtedness Incurred on such determination date pursuant to the provisions described in the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" (other than Indebtedness Incurred pursuant to clauses (i)(C), (i)(D), (i)(E) and (v)(B)(1) thereof);

(ii) any Indebtedness Incurred pursuant to clauses (b)(iv)(A) and (xiv)(B) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*"; or

(iii) the discharge on such determination date of any Indebtedness to the extent that such discharge results from proceeds of Indebtedness Incurred on the determination date pursuant to the provisions described in the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" (other than the discharge of Indebtedness Incurred pursuant to clause (i)(C), (i)(D), (i)(E) and (v)(B)(1) thereof).

All Applicable Metrics described in this paragraph will be calculated as set forth in the section "*—Financial and Other Calculations*" above.

"*Total Secured Debt*" means, as of any date of determination, the aggregate principal amount of Indebtedness for borrowed money of the Group constituting Senior Secured Indebtedness or Second Lien Indebtedness (excluding, for the avoidance of doubt, the aggregate principal amount of any Notes or any Note Guarantees (or the aggregate principal amount of any Indebtedness that refinances, redeems or repays any Notes or Note Guarantees or other Indebtedness (which may include Additional Notes) that is pari passu with the Notes to the extent it is secured only by the Charged Property)).

"*Total Secured Net Leverage Ratio*" means, as of any date of determination, the ratio of:

(a) the sum of:

(i) Total Secured Debt as of such date; and

(ii) the Reserved Indebtedness Amount in respect of Indebtedness which, once incurred, would be included in the calculation of Total Secured Debt,

less the aggregate amount of cash and Cash Equivalent Investments of the Group on a consolidated basis; to

(b) LTM EBITDA,

provided that such calculation shall not give effect to:

(i) any Indebtedness Incurred on such determination date pursuant to the provisions described in the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" (other than Senior Secured Indebtedness or Second Lien Indebtedness Incurred pursuant to clauses (i)(C), (i)(D), (v)(B)(1)(I) and (v)(B)(1)(II) thereof);

(ii) any Indebtedness Incurred pursuant to clauses (iv)(A), (iv)(B) or (xiv)(B) of the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*"; or

(iii) the discharge on such determination date of any Indebtedness to the extent that such discharge results from proceeds of Indebtedness Incurred on the determination date pursuant to the provisions described in the second paragraph of the covenant described under "*—Certain Covenants—Limitation on Indebtedness*" (other than Senior Secured Indebtedness or Second Lien Indebtedness Incurred pursuant to clauses (i)(C), (i)(D), (v)(B)(1)(I) and (v)(B)(1)(II) thereof).

All Applicable Metrics described in this paragraph will be calculated as set forth in the section "*—Financial and Other Calculations*" above.

"*Total Transaction Uses*" means:

(a) the aggregate of:

(i) the total aggregate cash consideration payable to the Vendor under the Acquisition Agreement on the Acquisition Closing Date; and

(ii) the principal amount of Existing Debt to be refinanced on the Acquisition Closing Date (other than any amount which relates to cash pooling, working capital or similar operational debt),

less:

(b) all cash and Cash Equivalents Investments held by the members of the Group and the Target Group acquired on or as at the Acquisition Closing Date,

in each case, as identified in any funds flow statement or, if no funds flow statement is delivered, any sources and uses statement included in the tax structure memorandum related to the Acquisition.

"*Transaction*" means any transactions directly or indirectly related to (in each case, including any financing or refinancing thereof) (i) the Acquisition, (ii) the issuance of the Notes and the Note Guarantees and the entry into the Indenture, (iii) the entry into and/or utilization of the Senior Secured Credit Facilities; (iv) the refinancing or otherwise discharging of certain Existing Debt; (v) any other transactions contemplated by the Transaction Documents or described in this offering memorandum; (vi) other associated transactions taken in relation to or incidental to any of the foregoing; and (vii) the payment or incurrence of any fees, expenses, taxes or charges associated with any of the foregoing.

"*Transaction Documents*" means the Acquisition Documents, the Equity Documents, the Note Documents, the Finance Documents, the finance documents relating to the Senior Secured Credit Facilities and each Topco Proceeds Loan Agreement (as defined in the Intercreditor Agreement).

"*Transaction Equity Contribution*" means shareholder funding provided by the Initial Investors in connection with the Minimum Equity Condition (as defined in and pursuant to the Senior Secured Credit Facilities Agreement); provided that the aggregate amount of such shareholder funding counted as a Transaction Equity Contribution shall not exceed an amount equal to the percentage of Total Transaction Uses specified in the Senior Secured Credit Facilities Agreement.

"*Transaction Expenses*" means any fees or expenses incurred or paid by the Issuer or any Restricted Subsidiary in connection with the Transaction.

"*Transaction Security*" means the Security created or expressed to be created in favor of the Security Agent and/or the Holders (represented by the Security Agent, as the case may be) pursuant to the Transaction Security Documents.

"*Transaction Security Documents*" means all security agreements, pledge agreements, collateral assignments, and any other instrument and document executed and delivered pursuant to the Indenture or otherwise or any of the foregoing, as the same may be amended, supplemented or otherwise modified from time to time, creating the Security Interests in the Charged Property.

"*Trust Indenture Act*" means the Trust Indenture Act of 1939, as amended.

"*UCC*" means the Uniform Commercial Code as in effect from time to time in the State of New York; *provided* that at any time, if by reason of mandatory provisions of law, any or all of the perfection or priority of a collateral agent's security interest in any item or portion of the Charged Property is governed by the Uniform Commercial Code as in effect in a jurisdiction other than the State of New York, the term "UCC" shall mean the Uniform Commercial Code as in effect, at such time, in such other jurisdiction for purposes of the provisions hereof relating to such perfection or priority and for purposes of definitions relating to such provisions.

"*Unrestricted Subsidiary*" means:

(a) any Subsidiary of the Issuer that at the time of determination is an Unrestricted Subsidiary (as designated by the Issuer in the manner provided below); and

(b) any Subsidiary of an Unrestricted Subsidiary, provided that the Issuer may designate any Subsidiary of the Issuer (including any newly acquired or newly formed Subsidiary or a person becoming a Subsidiary through merger, consolidation or other business combination transaction, or Investment therein) to be an Unrestricted Subsidiary only if:

(i) such Subsidiary or any of its Subsidiaries does not own any Capital Stock of the Issuer or any other Subsidiary of the Issuer which is not a Subsidiary of the Subsidiary to be so designated or otherwise an Unrestricted Subsidiary; and

(ii) such designation and the Investment, if any, of the Issuer in such Subsidiary complies with the covenant described under "*—Certain Covenants—Limitation on Restricted Payments*."

"*U.S. Bankruptcy Code*" means Title 11 of the United States Code, as amended.

"*U.S. GAAP*" means generally accepted accounting principles in the United States of America.

"*Vendor*" means each person identified as a seller under the Acquisition Agreement.

"*Voting Stock*" of a person means all classes of Capital Stock of such person then outstanding and normally entitled to vote in the election of directors or managers.

"*Weighted Average Life to Maturity*" means, when applied to any Indebtedness, Disqualified Stock or Preferred Stock, as the case may be, at any date, the quotient obtained by dividing:

(a) the sum of the products of the number of years from the date of determination to the date of each successive scheduled principal payment of such Indebtedness or redemption or similar payment with respect to such Disqualified Stock or Preferred Stock multiplied by the amount of such payment; by

(b) the sum of all such payments.

"*Wholly Owned Subsidiary*" means a Restricted Subsidiary, all of the Capital Stock of which (other than directors' qualifying shares or shares required by any applicable law or regulation to be held by a Person other than the Issuer or another Wholly Owned Subsidiary) is owned by the Issuer or another Wholly Owned Subsidiary.

BOOK-ENTRY, DELIVERY AND FORM

General

The Notes sold within the United States to qualified institutional buyers pursuant to Rule 144A will initially be represented by one or more global notes in registered form without interest coupons attached (the "Rule 144A Global Notes"). The Notes sold outside the United States in offshore transactions in reliance on Regulation S under the Securities Act will initially be represented by one or more global notes in registered form without interest coupons attached (the "Regulation S Global Notes" and together with the Rule 144A Global Notes, the "Global Notes"). On the Issue Date, the Global Notes will be deposited upon issuance with a common depositary and registered in the name of the nominee of the common depositary for the accounts of Euroclear and Clearstream.

Ownership of interests in the Rule 144A Global Notes (the "144A Book-Entry Interests") and ownership of interests in the Regulation S Global Notes (the "Regulation S Book-Entry Interests" and, together with the 144A Book-Entry Interests, the "Book-Entry Interests") will be limited to persons that have accounts with Euroclear and/or Clearstream or persons that may hold interests through such participants. Book-Entry Interests will be shown on, and transfers thereof will be effected only through, records maintained in book-entry form by Euroclear and/or Clearstream and their participants. The Book-Entry Interests in Global Notes will only be issued in minimum denominations of €100,000 and in integral multiples of €1,000 in excess thereof.

The Book-Entry Interests will not be held in definitive form. Instead, Euroclear and/or Clearstream, as applicable, will credit on their respective book-entry registration and transfer systems a participant's account with the interest beneficially owned by such participant. The laws of some jurisdictions, including certain states of the United States, may require that certain purchasers of securities take physical delivery of such securities in definitive form. The foregoing limitations may impair the ability to own, transfer or pledge Book-Entry Interests. In addition, while the Notes are in global form, owners of interests in the Global Notes will not have the Notes registered in their names, will not receive physical delivery of the Notes in certificated form (subject to very limited exceptions) and will not be considered the registered owners or "Holder" of the Notes under the Indenture for any purpose.

So long as the Notes are held in global form, the common depositary for Euroclear and/or Clearstream, as applicable (or its respective nominee), will be considered the holder of the Notes for all purposes under the Indenture. As such, participants and indirect participants must rely on the procedures of Euroclear and/or Clearstream, as applicable, and the participants through which they own Book-Entry Interests in order to exercise any rights of holders of the Notes under the Indenture.

None of the Issuer, the Initial Purchasers, the Trustee, the Registrar, the Paying Agent, the Transfer Agent nor any of their respective agents will have any responsibility or be liable for any aspect of the records relating to the Book-Entry Interests.

Issuance of Definitive Registered Notes

Under the terms of the Indenture, owners of the Book-Entry Interests will receive definitive Notes in registered form (the "Definitive Registered Notes"):

(1) if Euroclear or Clearstream notifies us that it is unwilling or unable to continue to act as depositary and a successor depositary is not appointed by the Issuer within 120 days;

(2) if Euroclear or Clearstream so requests following an Event of Default (as defined under "*Description of the Notes*") under the Indenture; or

(3) if the owner of a Book-Entry Interest requests such exchange in writing delivered through Euroclear or Clearstream following an Event of Default under the Indenture.

Euroclear and Clearstream have advised us that upon request by an owner of a Book-Entry Interest described in the immediately preceding clause (3), their current procedure is to request that we issue or cause to be issued Notes in definitive registered form to all owners of Book-Entry Interests.

In such an event, the Issuer will issue Definitive Registered Notes, registered in the name or names and issued in any approved denominations, requested by or on behalf of Euroclear and/or Clearstream, as applicable (in accordance with their respective customary procedures and based upon directions received from participants reflecting the beneficial ownership of Book-Entry Interests), and such Definitive Registered Notes will bear the restrictive legend as provided in the Indenture, unless that legend is not required by the Indenture or applicable law.

In the case of the issue of Definitive Registered Notes, the holder of a Definitive Registered Note may transfer such Definitive Registered Note by surrendering it to the Registrar. In the event of a partial transfer or a partial redemption of one

Definitive Registered Note, a new Definitive Registered Note will be issued to the transferee in respect of the part transferred, and a new Definitive Registered Note will be issued to the transferor or the holder, as applicable, in respect of the balance of the holding not transferred or redeemed; provided that a Definitive Registered Note will only be issued in minimum denominations of €100,000 and in integral multiples of €1,000 in excess thereof.

If Definitive Registered Notes are issued and a holder thereof claims that such Definitive Registered Notes have been lost, destroyed or wrongfully taken, or if such Definitive Registered Notes are mutilated and are surrendered to the Registrar or at the office of the Transfer Agent, we will issue and the Trustee or an authenticating agent appointed by the Trustee will authenticate a replacement Definitive Registered Note if the Trustee's and our requirements are met. We or the Trustee may require a holder requesting replacement of a Definitive Registered Note to furnish an indemnity bond sufficient in the judgment of both the Trustee and us to protect us, the Trustee and the applicable Paying Agent appointed pursuant to the Indenture from any loss which any of them may suffer if a Definitive Registered Note is replaced. We and/or the Trustee may charge for expenses in replacing a Definitive Registered Note.

In case any such mutilated, destroyed, lost or stolen Definitive Registered Note has become or is about to become due and payable, or is about to be redeemed or purchased by us pursuant to the provisions of the Indenture, we in our discretion may, instead of issuing a new Definitive Registered Note, pay, redeem or purchase such Definitive Registered Note, as the case may be.

Definitive Registered Notes may be transferred and exchanged for Book-Entry Interests only in accordance with the Indenture and, if required, only after the transferor first delivers to the Transfer Agent a written certification (in the form provided in the Indenture) to the effect that such transfer will comply with the transfer restrictions applicable to such Notes. See "*Transfer Restrictions*."

To the extent permitted by law, we, the Trustee, the Paying Agent, the Transfer Agent, the Registrar and any of their respective agents shall be entitled to treat the registered holder of any Global Note as the absolute owner thereof and no person will be liable for treating the registered holder as such. Ownership of the Global Notes will be evidenced through registration from time to time at the registered office of the Issuer, and such registration is a means of evidencing title to the Notes.

We will not impose any fees or other charges in respect of the Notes; however, owners of the Book-Entry Interests may incur fees normally payable in respect of the maintenance and operation of accounts in Euroclear and/or Clearstream, as applicable.

Redemption of the Global Notes

In the event any Global Note, or any portion thereof, is redeemed, Euroclear and/or Clearstream, as applicable, will distribute the amount received by it in respect of the Global Note so redeemed to the holders of the Book-Entry Interests in such Global Note from the amount received by it in respect of the redemption of such Global Note. The redemption price payable in connection with the redemption of such Book-Entry Interests will be equal to the amount received by Euroclear and/or Clearstream, as applicable, in connection with the redemption of such Global Note (or any portion thereof). The Issuer understands that under existing practices of Euroclear and Clearstream, if fewer than all of the Notes are to be redeemed at any time, Euroclear and/or Clearstream, as applicable, will credit their respective participants' accounts on a proportionate basis (with adjustments to prevent fractions) or by lot or on such other basis as they deem fair and appropriate in accordance with their respective operational procedures; provided, however, that no Book-Entry Interest of less than €100,000 principal amount at maturity may be redeemed in part.

Payments on Global Notes

Payments of amounts owing in respect of the Global Notes (including principal, premium, interest, additional interest and additional amounts) will be made by the Issuer to the Paying Agent. The Paying Agent will, in turn, make such payments to Euroclear and/or Clearstream, as applicable, which will distribute such payments to participants in accordance with their respective procedures.

Under the terms of the Indenture governing the Notes, the Issuer, the Trustee, the Paying Agent, the Transfer Agent, the Registrar and any of their respective agents will treat the registered holder of the Global Notes (for example, Euroclear and/or Clearstream, as applicable, or their respective nominees) as the owner thereof for the purpose of receiving payments and for all other purposes. Consequently, none of the Issuer, the Trustee, the Registrar, the Transfer Agent, the Paying Agent nor any of their respective agents has or will have any responsibility or liability for:

- any aspects of the records of Euroclear and/or Clearstream, as applicable, or any participant or indirect participant relating to or payments made on account of a Book-Entry Interest, for any such payments made by Euroclear and/or Clearstream, as applicable, or any participant or indirect participant, or for maintaining, supervising or reviewing the records of Euroclear and/or Clearstream, as applicable, or any participant or indirect participant relating to, or payments made on account of, a Book-Entry Interest;

- payments made by Euroclear and/or Clearstream, as applicable, or any participant or indirect participant, or for maintaining, supervising or reviewing the records of Euroclear and/or Clearstream, as applicable, or any participant or indirect participant relating to or payments made on account of a Book-Entry Interest;

- Euroclear and/or Clearstream, as applicable, or any participant or indirect participant; or

- the records of the custodian or common depositary, as applicable.

Payments by participants to owners of Book-Entry Interests held through participants are the responsibility of such participants, as is now the case with securities held for the accounts of subscribers registered in "street name."

Payments will be subject in all cases to any fiscal or other laws and regulations (including any regulations of the applicable clearing system) applicable thereto. None of the Issuer, the Trustee, the Initial Purchasers, the Paying Agent, the Transfer Agent, the Registrar nor any of their respective agents will be liable to any holder of a Global Note or any other person for any commissions, costs, losses or expenses in relation to or resulting from any currency conversion or rounding effected in connection with any such payment. Holders may be subject to foreign exchange risks that may have economic and tax consequences to them.

Currency of Payment for the Global Notes

The principal of, premium, if any, and interest on, and all other amounts payable in respect of, the Global Notes will be paid to holders of interests in such Notes through Euroclear and/or Clearstream in euro.

Action by Owners of Book-Entry Interests

Euroclear and Clearstream have advised the Issuer that they will take any action permitted to be taken by a holder of the Notes only at the direction of one or more participants to whose account the Book-Entry Interests in the Global Notes are credited and only in respect of such portion of the aggregate principal amount of the Notes as to which such participant or participants has or have given such direction. Euroclear and Clearstream will not exercise any discretion in the granting of consents, waivers or the taking of any other action in respect of the Global Notes. However, if there is an Event of Default under the Notes, each of Euroclear and Clearstream reserves the right to exchange the Global Notes for Definitive Registered Notes in certificated form, and to distribute such Definitive Registered Notes to their respective participants.

Transfers

Subject to compliance with the transfer restrictions applicable to the Notes described herein, transfers between participants in Euroclear and Clearstream, as applicable, will be done in accordance with Euroclear and Clearstream rules and will be settled in immediately available funds. If a holder requires physical delivery of Definitive Registered Notes for any reason, including to sell the Notes to persons in states which require physical delivery of such securities or to pledge such securities, such holder must transfer its interest in the Global Notes in accordance with the normal procedures of Euroclear and Clearstream and in accordance with the provisions of the Indenture.

The Global Notes will bear a legend to the effect set forth in "*Transfer Restrictions*." Book-Entry Interests in the Global Notes will be subject to the restrictions on transfer discussed in "*Transfer Restrictions*."

Beneficial interests in a 144A Global Note may be transferred to a person who takes delivery in the form of a beneficial interest in the Regulation S Global Note denominated in the same currency only upon receipt by the Trustee of a written certification (in the form provided in the Indenture) from the transferor to the effect that such transfer is being made in accordance with Regulation S or Rule 144 or any other exemption (if available under the Securities Act). Through and including the 40th day after the later of the commencement of the offering of the Notes and the closing of the Offering (the "distribution compliance period"), Regulation S Book-Entry Interests will be limited to persons that have accounts with Euroclear or Clearstream or persons who hold interests through Euroclear or Clearstream, and any sale or transfer of such interest to U.S. persons shall not be permitted during such period unless such resale or transfer is made pursuant to Rule 144A under the Securities Act. Regulation S Book-Entry Interests may be transferred to (i) a person who takes delivery in the form of 144A Book-Entry Interests only upon delivery by the transferor of a written certification (in the form provided in the Indenture) to the effect that such transfer is being made to a person who the transferor reasonably believes is a qualified institutional buyer within the meaning of Rule 144A under the Securities Act in a transaction meeting the requirements of Rule 144A under the Securities Act or (ii) otherwise in accordance with the transfer restrictions described under "*Transfer Restrictions*" and in accordance with any applicable securities laws of any other jurisdiction.

Subject to the foregoing, and as set forth in "*Transfer Restrictions*," Book-Entry Interests may be transferred and exchanged as described under "*Description of the Notes—Transfer and Exchange*." Any Book-Entry Interest in one of the Global Notes of any series that is transferred to a person who takes delivery in the form of a Book- Entry Interest in the other Global Note of such series will, upon transfer, cease to be a Book-Entry Interest in the first mentioned Global Note and become a Book-Entry Interest in the other Global Note, and accordingly, will thereafter be subject to all transfer restrictions, if any, and other procedures applicable to Book-Entry Interests in such other Global Note for as long as it retains such a Book-Entry Interest.

In connection with transfers involving exchanges between Regulation S Book-Entry Interests and 144A Book-Entry Interests, appropriate adjustments will be made to reflect a decrease in the principal amount of the relevant Global Note and a corresponding increase in the principal amount of the other relevant Global Note.

Definitive Registered Notes may be transferred and exchanged for Book-Entry Interests in a Global Note only as described under "*Description of the Notes—Transfer and Exchange*" and, if required, only if the transferor first delivers to the Trustee and the Registrar a written certificate (in the form provided in the Indenture) to the effect that such transfer will comply with the appropriate transfer restrictions applicable to such notes. See "Transfer Restrictions."

Information Concerning Euroclear and Clearstream

All Book-Entry Interests will be subject to the operations and procedures of Euroclear and Clearstream, as applicable. The Issuer provides the following summaries of those operations and procedures solely for the convenience of investors. The operations and procedures of each settlement system are controlled by that settlement system and may be changed at any time. None of the Issuer, the Initial Purchasers, the Trustee, the Paying Agent, the Transfer Agent, the Registrar nor any of their respective agents are responsible for those operations or procedures.

Euroclear and Clearstream hold securities for participating organizations and also facilitate the clearance and settlement of securities transactions between their respective participants through electronic book-entry changes in the accounts of such participants. Euroclear and Clearstream provide various services to their participants, including the safekeeping, administration, clearance, settlement, lending and borrowing of internationally traded securities. Euroclear and Clearstream interface with domestic securities markets. Euroclear and Clearstream participants are financial institutions, such as underwriters, securities brokers and dealers, banks, trust companies and certain other organizations. Indirect access to Euroclear and Clearstream is also available to others, such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Euroclear and Clearstream participant, either directly or indirectly.

Because Euroclear and Clearstream can only act on behalf of participants, who in turn act on behalf of indirect participants and certain banks, the ability of an owner of a beneficial interest to pledge such interest to persons or entities that do not participate in the Euroclear or Clearstream systems, or otherwise take actions in respect of such interest, may be limited by the lack of a definite certificate for that interest. The laws of some jurisdictions require that certain persons take physical delivery of securities in definitive form. Consequently, the ability to transfer beneficial interests to such person may be limited. In addition, owners of beneficial interests through the Euroclear or Clearstream systems will receive distributions attributable to the Rule 144A Global Notes only through Euroclear or Clearstream participants.

Global Clearance and Settlement under the Book-Entry System

The Notes represented by the Global Notes are expected to be listed and admitted to trading on the Official List of the Exchange. Transfers of interests in the Global Notes between participants in Euroclear or Clearstream will be effected in the ordinary way in accordance with their respective system's rules and operating procedures.

Transfers of interests in the Global Notes between participants in Euroclear and Clearstream will be effected in the ordinary way in accordance with their respective system's rules and operating procedures.

Although Euroclear and Clearstream currently follow the foregoing procedures in order to facilitate transfers of interests in the Global Notes among participants in Euroclear and Clearstream, as applicable, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued or modified at any time. None of the Issuer, the Guarantors, the Initial Purchasers, the Trustee, the Transfer Agent, the Registrar, the Paying Agent nor any of their respective agents will have any responsibility for the performance by Euroclear, Clearstream or their participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

Initial Settlement

Initial settlement for the Notes will be made in euro. Book-Entry Interests owned through Euroclear or Clearstream accounts will follow the settlement procedures applicable to conventional bonds in registered form. Book-Entry Interests will be credited to the securities custody accounts of Euroclear and Clearstream holders on the business day following the settlement date against payment for value on the settlement date.

Secondary Market Trading

The Book-Entry Interests will trade through participants of Euroclear or Clearstream and will settle in same day funds. Since the purchase determines the place of delivery, it is important to establish at the time of trading of any Book-Entry Interests where both the purchaser's and the seller's accounts are located to ensure that settlement can be made on the desired value date.

Special Timing Considerations

You should be aware that investors will only be able to make and receive deliveries, payments and other communications involving the Notes through Euroclear or Clearstream on days when those systems are open for business.

CERTAIN TAX CONSEQUENCES

German Taxation

The following is a general discussion of certain German tax consequences of the acquisition, holding and disposal of the Notes. It does not purport to be a comprehensive description of all German tax considerations that may be relevant to a decision to purchase Notes and, in particular, does not consider any specific facts or circumstances that may apply to a particular purchaser. This summary is based on the tax laws of Germany currently in force and as applied on the date of this offering memorandum, which are subject to change, possibly with retroactive or retrospective effect.

Prospective purchasers of the Notes are advised to consult their own tax advisors as to the tax consequences of the purchase, ownership and disposition of the Notes, including the effect of any state or local or church taxes under the tax laws of Germany and any country of which they are residents or whose tax laws apply to them for other reasons.

Withholding Tax

Resident Holders

Ongoing interest payments received by an individual holder of the Notes who is a German tax resident (i.e. persons whose residence, habitual abode, statutory seat or place of effective management is located in Germany) will be subject to German withholding tax (*Kapitalertragsteuer*) if the Notes are kept or administered in a custodial account with or presented for an over the counter payment to a German branch of a German or non-German bank or financial services institution, a German securities trading company or a German securities trading bank or if no German bank or financial institution is the Disbursing Agent, the Issuer (each, a "Disbursing Agent," *inländische auszahlende Stelle*). The withholding tax rate to be withheld by the Disbursing Agent is 25% (plus solidarity surcharge at a rate of 5.5% thereon, the total withholding being 26.375%, plus church tax, if applicable). Church tax will be collected by the Disbursing Agent by way of withholding unless the holder has filed a blocking notice (*Sperrvermerk*) with the German Federal Central Tax Office (*Bundeszentralamt für Steuern*) in which case the holders will have to include the income in the tax return and will then be assessed for church tax. The Issuers of the Notes should under German law not be required to deduct withholding tax from the proceeds of the investment in the Notes.

The same treatment applies to capital gains (i.e., the difference between the proceeds from the disposal, redemption, repayment or assignment after deduction of expenses directly related to the disposal, redemption, repayment or assignment and the cost of acquisition taking into account currency gains and losses, if any) and interest accrued on the Notes ("Accrued Interest," *Stückzinsen*) derived by an individual holder who is a German tax resident irrespective of any holding period provided that the Notes have been held in a custodial account with the same Disbursing Agent since the time of their acquisition. If interest coupons or interest claims are disposed of separately (i.e., without the Notes), the proceeds from the disposition are subject to withholding tax. The same applies to proceeds from the redemption of interest coupons or the payment of interest claims if the Notes have been disposed of separately.

To the extent that the Notes have not been kept or administered in a custodial account with the same Disbursing Agent since the time of their acquisition, upon their disposal, redemption, repayment or assignment withholding tax applies at a rate of 25% (plus solidarity surcharge at a rate of 5.5% thereon, the total withholding being 26.375%, plus church tax, if applicable) on 30% of the disposal proceeds (plus Accrued Interest, if any), unless the current Disbursing Agent has been provided with evidence of the actual acquisition costs of the Notes by the previous Disbursing Agent or by a statement of a bank or financial services institution within the European Union, the EEA or the countries/territories Luxembourg, Austria, the Swiss Confederation, the Principality of Liechtenstein, the Republic of San Marino, the Principality of Monaco, the Principality of Andorra, Curacao and Sint Maarten. If the withholding tax on a disposal, redemption, repayment or assignment of the Notes has been calculated on the basis of 30% of the disposal proceeds (rather than from the actual gain), a German tax resident individual holder may also apply for an assessment on the basis of its actual acquisition costs; however, in case the actual gain is higher than 30% of the disposal proceeds a German tax resident individual holder is obliged to apply for an assessment on the basis of its actual acquisition costs.

In computing any German withholding tax, the Disbursing Agent may generally deduct from the basis of the withholding tax negative investment income realized by the individual holder of the Notes via the Disbursing Agent (e.g., losses from the sale of other securities with the exception of shares). The Disbursing Agent may also deduct Accrued Interest on the Notes or other securities paid separately upon the acquisition of the respective security via the Disbursing Agent. In addition, subject to certain requirements and restrictions, the Disbursing Agent may credit foreign withholding taxes levied on investment income in a given year regarding securities held by the individual holder in the custodial account with the Disbursing Agent.

Upon the individual holder filing an exemption certificate (*Freistellungsauftrag*) with the Disbursing Agent, the Disbursing Agent will take a maximum annual allowance (*Sparer-Pauschbetrag*) of €801 (€1,602 for married couples and for partners in accordance with the registered partnership law (*Gesetz über die Eingetragene Lebenspartnerschaft*) filing jointly) into account when computing the amount of tax to be withheld from the gross payment to be made by the Disbursing Agent. No withholding tax will be deducted if the holder of the Notes has submitted to the Disbursing Agent a certificate of non-assessment (*Nichtveranlagungsbescheinigung*) issued by the competent tax authorities.

German withholding tax will generally not apply to gains from the disposal, redemption, repayment or assignment of Notes held by a corporate holder who is a German tax resident (including via a commercial partnership, as the case may be, and provided that in the case of corporations of certain legal forms the status of corporation has been evidenced by a certificate of the competent tax authorities) while ongoing payments, such as interest payments, are subject to withholding tax (irrespective of any deductions of foreign tax and losses incurred). The same may apply where the Notes form part of a trade or business (of an individual or of a commercial partnership) subject to further requirements being met.

Non-Resident Holders

Non-residents of Germany are, in general, not subject to German withholding tax on investment income and the solidarity surcharge thereon. However, where the interest or capital gain is subject to German taxation (as outlined below under "*—Taxation of Current Income and Capital Gains—Non Tax Residents*") and the Notes are held in a custodial account with a German Disbursing Agent, withholding tax will be levied under certain circumstances. The withholding tax may be refunded based on an assessment to tax or under an applicable tax treaty (*Doppelbesteuerungsabkommen*).

Furthermore, payments made to a holder resident in a so-called "non-cooperative jurisdiction" (*nicht kooperatives Steuerhoheitsgebiet*) may be subject to a tax deduction by the Issuer in Germany at a rate of 15% (plus solidarity surcharge) of the gross payment pursuant to the Defence against Tax Havens Act (*Gesetz zur Abwehr von Steuervermeidung und unfairem Steuerwettbewerb und zur Änderung weiterer Gesetze*—"StAbwG") which was passed by the Bundesrat on June 25, 2021 (see BR-Drs. 509/21(B) and BGBl. I p. 2056). The exact scope of this new law, in particular the application to third party financings, is, however, unclear.

Taxation of Current Income and Capital Gains

Tax Resident Holder

This subsection "*—Tax Residents*" refers to persons who are tax residents of Germany (i.e., persons whose residence, habitual abode, statutory seat, or place of effective management and control is located in Germany).

Income derived from capital investments under the Notes held by an individual holder who is tax resident in Germany is in general subject to German income tax at a flat-tax rate of 25% (plus solidarity surcharge and church tax, if applicable, thereon) (*Abgeltungsteuer*) if the Notes are held as private investment (*Privatvermögen*). Individual holders who are tax resident in Germany are entitled to a maximum annual allowance (*Sparer-Pauschbetrag*) of €801 (€1,602 for married couples and for partners in accordance with the registered partnership law (*Gesetz über die Eingetragene Lebenspartnerschaft*) filing jointly), whereby actually incurred higher expenses directly attributable to a capital investment are not deductible.

The personal income tax liability of an individual holder who is tax resident in Germany on income from capital investments under the Notes will, in principle, be satisfied by the tax withheld (as described under "*—Withholding Tax*" above). To the extent that withholding tax has not been levied, such as in the case of Notes kept in custody abroad or if no Disbursing Agent being involved in the payment process or if the withholding tax on disposal, redemption, repayment or assignment has been calculated from 30% of the disposal proceeds (rather than the actual gain), the individual holder must include its interest income and capital gains derived from the Notes in its annual tax return and will then also be taxed at a rate of 25% (plus solidarity surcharge and, where applicable, church tax thereon). Further, an individual holder may apply for a taxation of all investment income of a given year at its lower individual tax rate based upon an assessment to tax with any amounts over-withheld being refunded. In each case, the deduction of expenses (other than transaction costs) on an itemized basis is not permitted. Losses incurred with respect to the Notes may only be offset with investment income of the individual holder realized in the same or following assessment periods.

Pursuant to recent legislative changes, losses arising from a bad debt loss (*Forderungsausfall*), a waiver of a receivable (*Forderungsverzicht*) or a transfer of an impaired receivable to a third-party or from any other default can only be offset against other income from capital investments and only up to an amount of €20,000 per year. Respective losses exceeding the amount of €20,000 can be carried forward and might be usable in future tax periods (together with current capital investment losses of each such tax period) up to an amount of €20,000 per year. Given that this offset with losses will not be applied by the Disbursing Agent (as defined above) holding the Notes in custody, holders suffering losses are required to declare such losses in their income tax return.

Where Notes form part of a trade or business of an individual or corporate holder or the income from the Notes qualifies as income from the letting and leasing of property, the withholding tax, if any, will not satisfy the personal or corporate income tax liability. Rather, the income is subject to individual or corporate income tax (plus solidarity surcharge and, where applicable, church tax). Where Notes form part of a trade or business, interest (including Accrued Interest) and capital gains must be taken into account as income. The respective holder must include income and related (business) expenses in the annual tax return and the balance will be taxed at the holder's applicable tax rate. Withholding tax levied, if any, will be credited as advance payment against the personal or corporate income tax liability of the holder or, to the extent exceeding this personal or corporate income tax liability, be refunded. Where Notes form part of a German trade or business the current income and gains from the disposal, redemption, repayment or assignment of the Notes may also be subject to German trade tax (*Gewerbesteuer*). The trade tax liability depends on the municipal trade tax factor (*Gewerbesteuerhebesatz*) applicable to the holder. If the holder is an individual or an individual partner of a partnership, the trade tax may generally be completely or partly credited against the personal income tax pursuant to a lump sum tax credit method.

Non-Tax Resident Holder

This subsection "*—Non-Tax Residents*" refers to persons who are not tax residents of Germany (i.e., persons whose residence, habitual abode, statutory seat, and place of effective management and control is not located in Germany).

Interest and capital gains (which include Accrued Interest and currency gains and losses, if any) from the disposal, redemption, repayment or assignment of the Notes received by holders who are not tax resident in Germany are generally not subject to German taxation, unless (i) the Notes form part of the business property of a permanent establishment, including a permanent representative, or a fixed base maintained in Germany by the holder or (ii) the income otherwise constitutes German source income (such as income from the letting and leasing of certain German situs property or income from capital investments directly or indirectly secured by German situs real estate or income from a hybrid instrument issued by a German tax resident issuer, unless the Notes qualify as global certificates (*Sammelurkunden*) within the meaning of Section 9a of the German Custody Act (*Depotgesetz*) or as fungible notes representing the same issue (*Teilschuldverschreibungen*)). We expect the Notes to qualify for this exception so long as they are held in global form. In cases (i) and (ii) a tax regime similar to that explained above under "*—Tax Residents*" applies. Furthermore, the holders who are not tax resident in Germany may become subject to German withholding tax in case they receive the proceeds by way of an over the counter payment by a German Disbursing Agent and the Notes are not held in custody with the same German Disbursing Agent. Subject to certain requirements a holder who is not tax resident in Germany may benefit from tax reductions or tax exemptions provided by an applicable tax treaty.

Where the Issuer makes a tax deduction from a payment to a holder of the Notes tax resident in a non-cooperative jurisdiction under the StAbwG (as set forth under "*—Withholding Tax*"), such holder should in principle incur a definitive tax charge.

Abolishment of Solidarity Surcharge

According to a bill enacted in December 2019, the solidarity surcharge has been partially abolished as of the assessment period 2021 for certain individuals. The solidarity surcharge, however, continues to apply for capital investments and, thus, on withholding taxes levied. In case the individual income tax burden for an individual holder is lower than 25% the holder can apply for his/her capital investment income being assessed at his/her individual tariff-based income tax rate in which case solidarity surcharge would be refunded.

Inheritance and Gift Tax

A gratuitous transfer of Notes by reason of death or as a gift will be subject to German inheritance or gift tax if the decedent or donor or the heir, donee or other beneficiary is at the time of the transfer a resident or deemed to be a resident of Germany. If neither the holder nor the recipient is a resident or deemed to be a resident of Germany at the time of the transfer, no German inheritance or gift taxes will be levied unless (i) the Notes are attributable to a German trade or business for which a permanent establishment is maintained or a permanent representative has been appointed in Germany or (ii) the obligations under the Notes are directly or indirectly secured by German situs real estate (unless the Notes qualify as fungible notes representing the same issue (*Teilschuldverschreibungen*)). We expect the Notes to qualify for this exception so long as they are held in global form. Exceptions from this rule apply to certain German citizens who previously maintained a residence in Germany.

Other Taxes

No stamp, issue or registration taxes or such duties will be payable in Germany in connection with the issuance, delivery or execution of the Notes. Currently, net assets tax (*Vermögenssteuer*) is not levied in Germany.

The Proposed Financial Transactions Tax

The EU Commission and certain EU member states (including Germany) are currently intending to introduce a financial transaction tax (presumably on secondary market transactions involving at least one financial intermediary). The timing of its potential introduction is, however, still unclear. Prospective holders of the Notes are advised to seek their own professional advice in relation to the financial transaction tax.

Proposed Abolishment of German flat taxation on Interest Income

For some time, there has been a discussion in Germany on whether the current flat taxation (*Abgeltungsteuer*) of 25% (plus solidarity surcharge at a rate of 5.5% thereon, the total withholding being 26.375%, plus church tax, if applicable) on interest income received by private individuals shall be increased or abolished. It is still unclear whether, how and when any such change will be implemented. As a result, interest on the Notes could become subject to a taxation at a respective Note holder's individual personal tax rate (where such noteholder is a tax resident of Germany) up to a tax rate of 45% (plus solidarity surcharge at a rate of 5.5% thereon, the total withholding being 26.375%, plus church tax, if applicable).

Certain U.S. Federal Income Tax Considerations

The following is a summary of certain U.S. federal income tax consequences to U.S. Holders (as defined below), except for the discussions below under "Foreign Account Tax Compliance Act" which apply to both U.S. Holders and non-U.S. Holders, of the purchase, ownership and disposition of the Notes, but does not purport to be a complete analysis of all potential tax effects. The summary does not address any U.S. federal income tax consequences to Non-U.S. Holders relating to the Notes, nor does it address the effects of any U.S. federal tax laws other than U.S. federal income tax laws (such as estate and gift tax laws) or any state, local or non-U.S. tax laws.

This discussion is based upon the federal income tax laws of the United States, including the U.S. Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations issued thereunder, and judicial and administrative interpretations thereof and other applicable authorities, each as in effect on the date hereof, and all of which are subject to change at any time, possibly with retroactive effect which could significantly affect the U.S. federal income tax consequences described below. No rulings from the U.S. Internal Revenue Service ("IRS") have been or are expected to be sought with respect to the matters discussed below. There can be no assurance that the IRS or a court will not take a different position concerning the tax consequences of the purchase, ownership or disposition of the Notes than those discussed herein or that any such position would not be sustained in the event of litigation. A different treatment than that assumed below could adversely affect the amount, timing and character of income, gain or loss, or otherwise result in adverse tax consequences, in respect of an investment in the Notes.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of a Note that is, for U.S. federal income tax purposes, (i) an individual who is a citizen or resident of the United States, (ii) a corporation or any entity taxable as a corporation for U.S. federal income tax purposes created or organized in the United States or under the laws of the United States, any state thereof or the District of Columbia, (iii) any estate the income of which is subject to U.S. federal income taxation regardless of its source or (iv) any trust if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more "United States persons" (as defined in section 7701(a)(30) of the Code) have the authority to control all substantial decisions of the trust, or if the trust has a valid election in place to be treated as a "United States person" (as defined in section 7701(a)(30) of the Code).

This summary is general in nature and does not address all of the U.S. federal income tax consequences that may be relevant to a U.S. Holder in light of such holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income or special tax accounting rules that apply as a result of gross income with respect to the Notes being taken into account on an applicable financial statement. In addition, this summary does not represent a detailed description of the U.S. federal income tax consequences applicable to U.S. Holders that are subject to special treatment under the U.S. federal income tax laws. For example, this summary does not address tax consequences to banks, broker dealers, mutual funds, certain financial institutions, U.S. expatriates, insurance companies, individual retirement and other tax deferred accounts, dealers in securities or currencies, traders in securities, U.S. Holders whose functional currency is not the U.S. dollar, tax exempt entities, regulated investment companies, real estate investment trusts, partnerships, subchapter S corporations, or other pass through entities or arrangements and investors in such entities or arrangements, persons liable for alternative minimum tax, persons subject to the base erosion and anti-abuse tax, "controlled foreign corporations," "passive foreign investment companies," corporations that accumulate earnings to avoid U.S. federal income tax, entities covered by the anti-inversion rules and persons holding the Notes as part of a "straddle," "hedge," "conversion transaction" or other integrated transaction, and persons who own, actually or under applicable constructive ownership rules, 10% or more of our ordinary shares (by vote or value). In addition, this discussion is limited to persons who purchase the Notes in the offering hereby at the "issue price" (the first price at which a substantial amount of such Notes is sold for money, not including sales to bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers), and who hold the Notes as capital assets (generally, property held for investment) within the meaning of section 1221 of the Code.

If any entity or arrangement which is treated as a partnership (or other pass through entity) for U.S. federal income tax purposes holds the Notes, the U.S. tax treatment of a partner or member in the partnership (or other pass through entity) generally will depend upon the status of the partner or member and the activities of the partner or member and the partnership (or other pass through entity). A partnership (or other pass through entity) considering an investment in the Notes, and partners in such a partnership, should consult their tax advisors regarding the U.S. federal income tax consequences of the purchase, ownership and disposition of the Notes.

The summary of certain U.S. federal income tax considerations set forth below is for general information purposes only. Prospective purchasers of the Notes should consult their tax advisors concerning the tax consequences of holding Notes in light of their particular circumstances, including the application of the U.S. federal income tax considerations discussed below, as well as the application of U.S. federal estate and gift tax laws and state, local, non-U.S. or other tax laws and the applicability of any applicable tax treaty.

IPO Debt Pushdown

Under certain circumstances, we may undertake an IPO Debt Pushdown (as described under "*Description of the Notes—IPO Debt Pushdown*"), pursuant to which the Issuer is entitled to give notice that the terms of the Debt Documents will automatically operate so that, amongst other things the Issuer (and all related provisions) will now refer to the IPO Pushdown Entity and its Restricted Subsidiaries. In such event, each holding company of the IPO Pushdown Entity would be released from its obligations under the indenture governing the Notes. Such a modification to the terms of the Notes could be treated for U.S. federal income tax purposes as a deemed exchange of (i) the Notes as in place prior to such modifications for (ii) new Notes as in place after such modifications ("New Notes"). If such modifications resulted in a deemed exchange, such a deemed exchange could be treated as a taxable transaction for U.S. federal income tax purposes in which certain beneficial owners of the Notes could be required to recognize gain or loss. The amount of any gain or loss recognized upon such a deemed exchange of a Note for a New Note would be determined by reference to the "issue price" of the New Note. The issue price of a New Note will equal the fair market value of such Note or such New Note at the time of the deemed exchange if, as seems likely, such Note or such New Note were considered "publicly traded" for U.S. federal income tax purposes. If the IPO Debt Pushdown is treated as a taxable transaction for U.S. federal income tax purposes, a U.S. Holder's holding period in a New Note treated as received in the IPO Debt Pushdown generally will commence on the day after the IPO Debt Pushdown, and tax basis in such New Note would generally equal the issue price of such New Note. Generally, any gain or loss recognized as a result of such deemed exchange will be taxed under the rules described below under "*—Sale, Exchange or Other Taxable Disposition of the Notes*." If the issue price of such New Note is less than its stated redemption price at maturity by more than a de minimis amount, such New Note will be treated as issued with original issue discount ("OID") for U.S. federal income tax purposes. In such event, U.S. Holders would be required to include that OID in their income as it accrues, in advance of the receipt of cash corresponding to such income. U.S. Holders should consult their own tax advisors as to the U.S. federal income tax considerations relating to modification of the Notes in connection with the IPO Debt Pushdown, including the U.S. federal income tax considerations of a deemed exchange and resulting OID, if any.

Additional Payments

In certain circumstances (see, e.g., "*Description of the Notes—Change of Control*," "*Description of the Notes—Optional Redemption*," "*Description of the Notes—Redemption for Taxation Reasons*," "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*" and "*Description of the Notes—Withholding Taxes*") we may be obligated or elect to pay amounts in excess of stated interest and principal on the Notes. Although the issue is not free from doubt, we intend to take the position that the possibility of such additional amounts payable on the Notes is a remote or incidental contingency within the meaning of applicable Treasury regulations as of the date hereof, and thus does not result in the Notes being treated as contingent payment debt instruments under applicable Treasury regulations.

Our determination that the Notes are not contingent payment debt instruments is binding on a U.S. Holder, unless such holder explicitly discloses to the IRS on its tax return for the year during which it acquires the Notes that it is taking a different position. However, our position is not binding on the IRS. If the IRS takes a contrary position to that described above, among other adverse tax consequences, a U.S. Holder may be required to accrue income on its Notes based on a comparable yield, regardless of its method of accounting. The "comparable yield" is the yield at which we would issue a fixed rate debt instrument with no contingent payments, but with terms and conditions otherwise similar to those of the Notes. In addition, a U.S. Holder may be required to treat as ordinary income rather than capital gain some or all of any income recognized on the sale, exchange, redemption, retirement, or other taxable disposition of the Notes, and, with respect to a U.S. Holder of a Note, to recognize foreign currency exchange gain or loss with respect to such income in a manner different than that described below. In the event a contingency occurs, the amount, timing and character of a U.S. Holder's income, gain or loss with respect to the Notes may be affected. U.S. Holders should consult their tax advisor regarding the tax consequences if the Notes were treated as contingent payment debt instruments. The discussion below assumes that the Notes will not be treated as contingent payment debt instruments for U.S. federal income tax purposes.

Payments of Stated Interest

We expect, and this discussion assumes, that the Notes will not be considered as issued with original issue discount ("OID") for U.S. federal income tax purposes. The Notes generally will be treated as issued without OID if the difference between their principal amount and their issue price is less than the product of one fourth of one percent (0.25 percent) of their principal amount multiplied by the number of full years to their maturity. In general, however, if the Notes are issued with OID for U.S. federal income tax purposes, a U.S. Holder will be required to include OID in gross income, as ordinary income, under a "constant-yield method" before the receipt of cash attributable to such income, regardless of the U.S. Holder's regular method of accounting for U.S. federal income tax purposes.

Subject to the foreign currency rules discussed below, payments of stated interest on the Notes (as well as any additional amounts paid in respect of withholding taxes and without reduction for any amounts withheld) generally will be taxable to a U.S. Holder as ordinary income at the time that such payments are received or accrued, in accordance with such U.S. Holder's method of accounting for U.S. federal income tax purposes.

A U.S. Holder of the Notes that uses the cash method of tax accounting will be required to include in income (as ordinary income) the U.S. dollar value of the euro denominated interest payment on the Notes based on the spot rate of exchange on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars on that date. No foreign currency exchange gain or loss will be recognized with respect to the receipt of such payment, but such U.S. Holder may have exchange gain or loss attributable to the actual disposition of the euros so received.

A U.S. Holder of the Notes that uses the accrual method of tax accounting (or who otherwise is required to accrue interest prior to receipt) will accrue interest income on the Notes in euro and translate the amount accrued into U.S. dollars based on either:

- the average spot rate of exchange in effect during the interest accrual period, or portion thereof, within such U.S. Holder's taxable year; or

- at such U.S. Holder's election (a "Spot Rate Convention Election"), at the spot rate of exchange on (1) the last day of the accrual period, or the last day of the taxable year within such accrual period if the accrual period spans more than one taxable year, or (2) the date of receipt, if such date is within five business days of the last day of the accrual period. Such election must be applied consistently by the U.S. Holder to all debt instruments held by the U.S. Holder at the beginning of the first taxable year to which the election applies or thereafter acquired by the U.S. Holder and can be changed only with the consent of the IRS. U.S. Holders should consult their own tax advisor regarding the advisability of making the Spot Rate Convention Election.

Whether or not the Spot Rate Convention Election is made, upon receipt of an interest payment on a Note (including, upon the disposition of a Note, the receipt of proceeds which include amounts attributable to accrued interest previously included in income), a U.S. Holder of the Notes that uses the accrual method of tax accounting will recognize foreign currency exchange gain or loss with respect to the Notes on the receipt of an interest payment equal to the difference between (i) the value of the euro received as interest, as translated into U.S. dollars using the spot rate of exchange on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars on such date, and (ii) the U.S. dollar amount previously included in income with respect to such payment. Such foreign currency exchange gain or loss generally will be treated as U.S.-source ordinary income or loss.

Foreign Tax Credits

Interest attributable to the Notes generally will be income from sources outside of the United States and, for purposes of the U.S. foreign tax credit, generally will be considered passive category income or, in certain cases, general category income. Any non-U.S. withholding tax with respect to the Notes held by a U.S. Holder at the rate applicable to such holder may be eligible for foreign tax credits (or deduction in lieu of such credits) for U.S. federal income tax purposes, subject to applicable limitations. The calculation of foreign tax credits involves the application of complex rules that depend on a U.S. Holder's particular circumstances. U.S. Holders should consult their tax advisors regarding the availability of foreign tax credits.

Sale, Exchange or Other Taxable Disposition of the Notes

Upon the sale, exchange, retirement, redemption or other taxable disposition of a Note, except as noted below with respect to foreign currency exchange gain or loss, a U.S. Holder generally will recognize capital gain or loss equal to the difference between the amount realized by such U.S. Holder (except to the extent such amount is attributable to accrued but unpaid interest, which will be taxable as described above under "*—Payments of Stated Interest*") and such U.S. Holder's adjusted tax basis in such Note, in each case as determined in U.S. dollars. Subject to the discussion below, the adjusted tax basis of a Note to a U.S. Holder will generally be the U.S. dollar value of the euro purchase price of that Note calculated at the spot rate of exchange on the date of purchase. The amount realized by a U.S. Holder upon the disposition of a Note generally will be the U.S. dollar value of the euro received calculated at the spot rate of exchange on the date of disposition.

If the Notes are traded on an established securities market, a U.S. Holder that uses the cash method of tax accounting, and if it so elects, a U.S. Holder that uses the accrual method of tax accounting, will determine the U.S. dollar values of its adjusted tax bases in a Note and the amount realized on the disposition of a Note by translating euro amounts at the spot rate of exchange on the settlement date of the purchase or the disposition, respectively. The election available to accrual basis U.S. Holders discussed above must be applied consistently by the U.S. Holder to all debt instruments from year to year and can be changed only with the consent of the IRS.

An accrual basis U.S. Holder of Notes that does not make the special election generally will recognize foreign currency exchange gain or loss to the extent that there are exchange fluctuations between the disposition date and the settlement date, and such gain or loss generally will constitute U.S. source ordinary income or loss.

Subject to the foreign currency rules discussed below, any gain or loss recognized by a U.S. Holder upon the sale, exchange, retirement, redemption or other taxable disposition of a Note generally will be capital gain or loss and will be long term capital gain or loss if the U.S. Holder's holding period for the Note exceeds one year on the date of disposition. Long term capital gains recognized by non-corporate U.S. Holders generally are eligible for reduced rates of taxation. Capital gain or loss, if any, recognized by a U.S. Holder generally will be treated as U.S. source income or loss for purposes of calculating the U.S. foreign tax credit limitation. The deductibility of capital losses is subject to limitations.

Gain or loss recognized by a U.S. Holder on a sale, exchange, retirement, redemption or other taxable disposition of a Note generally will be treated as ordinary income or loss to the extent that the gain or loss is attributable to changes in the euro to U.S. dollar exchange rate with respect to the principal amount of such Note during the period in which the U.S. Holder held such Note. For these purposes, the "principal amount" of a Note is the U.S. Holder's foreign currency purchase price of the Note. Such foreign currency exchange gain or loss will equal the difference between the U.S. dollar value of the euro purchase price calculated at the spot rate of exchange on the date (1) the Note is disposed of (or the spot rate on the settlement date, if applicable) and (2) of purchase (or the spot rate on the settlement date, if applicable). In addition, upon the sale, exchange, retirement, redemption or other taxable disposition of a Note, an accrual basis U.S. Holder may realize foreign currency exchange gain or loss attributable to amounts received with respect to previously accrued but unpaid interest, which will be treated as discussed above under "—Payments of Stated Interest." The recognition of foreign currency exchange gain or loss described in this paragraph will be limited to the amount of overall gain or loss realized on the disposition of a Note, and will be treated as ordinary income generally from sources within the United States for U.S. foreign tax credit limitation purposes.

Exchange of Foreign Currency

On a sale or other taxable disposition of foreign currency, a U.S. Holder generally will recognize gain or loss in an amount equal to the difference between (i) the amount of U.S. dollars, or the fair market value in U.S. dollars of other property, received by the U.S. Holder in the disposition and (ii) the holder's tax basis in the foreign currency. Any such gain or loss generally will be ordinary income or loss and will not be treated as interest income or expense, except to the extent provided by administrative pronouncements of the IRS. Foreign currency received as interest on a Note or on the sale, retirement or other taxable disposition of a Note will have a tax basis equal to its U.S. dollar value at the time the foreign currency is received (except that foreign currency received from the sale, retirement or other taxable disposition of a Note that is traded on an established securities market will have a tax basis equal to its U.S. dollar value on the trade date in the case of an accrual basis taxpayer that does not make the election described above).

Reportable Transactions

Under applicable Treasury regulations, a U.S. Holder who participates in "reportable transactions" (as defined in the Treasury regulations) must attach to its U.S. federal income tax return a disclosure statement on IRS Form 8886 (Reportable Transaction Disclosure Statement). The Treasury regulations could be interpreted to cover transactions generally not regarded as tax shelters, including certain foreign currency transactions giving rise to losses in excess of a certain minimum amount, such as the receipt or accrual of interest or a sale, exchange, retirement or other taxable disposition of a foreign currency note or foreign currency received in respect of a foreign currency note. U.S. Holders should consult their tax advisors to determine the tax reporting obligations, if any, including any requirement to file IRS Form 8886, with respect to the ownership or disposition of the Notes or any related transaction such as the disposition of any Euros received in respect of the Notes.

Information Reporting and Backup Withholding

Payments of principal and interest on, and the proceeds of sale or other disposition of, the Notes by a U.S. paying agent or other U.S. intermediary may be reported to the IRS and to the U.S. Holder as may be required under applicable regulations. Additionally, backup withholding may apply to these payments if the U.S. Holder fails to provide an accurate taxpayer identification number or certification of exempt status or fails to report all interest and dividends required to be shown on its U.S. federal income tax returns.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax liability provided that the required information is timely furnished to the IRS. U.S. Holders should consult their tax advisors as to their qualification for exemption from backup withholding and the procedure for obtaining an exemption.

Information with Respect to Foreign Financial Assets

Certain U.S. Holders who are individuals and who hold an interest in "specified foreign financial assets" (as defined in section 6038D of the Code) exceeding certain threshold amounts generally are required to report information relating to such assets, subject to certain exceptions. The Notes generally will constitute specified foreign financial assets subject to these reporting requirements, unless the Notes are held in accounts maintained by certain financial institutions. Under certain circumstances, an entity may be treated as an individual for purposes of the foregoing rules. U.S. Holders should consult their tax advisors regarding the effect, if any, of this requirement on their ownership and disposition of the Notes.

Foreign Account Tax Compliance

Sections 1471 through 1474 of the Code and the Treasury regulations promulgated thereunder ("FATCA") generally impose a withholding tax (currently at a rate of 30%) on interest income paid on a debt obligation if such interest income is treated as a "foreign passthru payment" attributable to certain U.S. source payments. However, under proposed U.S.

Treasury regulations issued in December 2018 (and upon which taxpayers may rely until final regulations are issued), such withholding does not apply to any "foreign passthru payment" that is made before the date that is two years after the date on which applicable final U.S. Treasury regulations defining "foreign passthru payments" are issued. Additionally, obligations issued on or prior to the date that is six months after the date on which applicable final Treasury Regulations defining "foreign passthru payments" are issued generally would be "grandfathered" unless such obligations are materially modified more than six months after such date. As of the date of this Offering Memorandum, applicable final Treasury Regulations have not yet been issued. Accordingly, if the Issuer is treated as a foreign financial institution, FATCA would apply to payments on the Notes only if there is a significant modification of the Notes for U.S. federal income tax purposes after the expiration of this grandfathering period. Non-U.S. governments have entered into, and others are expected to enter into, intergovernmental agreements with the United States to implement FATCA in a manner that alters the rules described herein. U.S. holders should consult their own tax advisors on how these rules may apply to their investment in the Notes. In the event any withholding under FATCA is imposed with respect to any payments on the Notes, there generally will be no additional amounts payable to compensate for the withheld amount.

Possible Alternative Tax Treatment of the Notes

Although not free from doubt, the Issuer intends to take the position that payments of interest on the Notes should be treated as from sources outside the United States for U.S. federal income tax purposes. Accordingly, a beneficial owner of a Note that is neither a U.S. Holder nor a partnership for U.S. federal income tax purposes (a "non-U.S. holder") should not be subject to U.S. federal withholding tax with respect to the Notes. Because, however, a portion of the net proceeds of this offering is expected to be directly or indirectly on-lent by the Issuer to a U.S. subsidiary and used in the United States to repay existing debt, the IRS may successfully assert that there is a potential tax avoidance plan and that all or a portion of any payment of interest on the Notes should be treated as from sources within the United States for U.S. federal income tax purposes. In that case, a non-U.S. holder may be subject to U.S. federal withholding tax at a rate of 30% (or a lower treaty rate) with respect to interest payments on the Notes unless certain certification requirements have been fulfilled (such as providing applicable IRS W-8 Forms). We have not sought and will not seek any rulings from the IRS with respect to the tax treatment of the Notes and there can be no assurance the IRS or a court will not take a contrary position concerning the tax treatment described in this paragraph. We currently do not intend to withhold on any payment made with respect to the Notes to non-U.S. holders. However, in the event that the interest income were treated as from sources within the United States for U.S. federal income tax purpose, we or the applicable withholding agent may withhold on payments made with respect to the Notes to non-U.S. holders unless the certification requirements described above are met, and we will not be required to pay any additional amounts with respect to amounts so withheld.

In that connection, each holder and beneficial owner of the Notes, by its purchase and acceptance of the Notes, will be deemed to have acknowledged, represented to and agreed with the Issuer and the Initial Purchasers as follows:

(a) if such holder or beneficial owner is not a United States person as defined in Section 7701(a)(30) of the Code, (i) such holder or beneficial owner qualifies for an exemption from U.S. federal withholding tax with respect to payments of interest pursuant to an applicable income tax treaty to which the United States is a party; or (ii)(x) such holder or beneficial owner does not, actually or constructively, own 10% or more of the Issuer's voting stock within the meaning of Section 871(h)(3) of the Code; (y) such holder or beneficial owner is not a controlled foreign corporation related to the Issuer through actual or constructive stock ownership for U.S. federal income tax purposes; and (z) such holder or beneficial owner is not a bank;

(b) such holder or beneficial owner (and any intermediary through which such holder or beneficial owner holds the Notes) qualifies for an exemption from any taxes imposed under the U.S. Foreign Account Tax Compliance Act (which shall, for this purpose, refer to any taxes imposed under Sections 1471 through 1474 of the Code (and any amended or successor version), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code, or any law or regulation implementing an intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing);

(c) such holder or beneficial owner is able to provide any required U.S. tax documentation to certify to the foregoing representations or to such holder's or beneficial owner's status as a United States person as defined in Section 7701(a)(30) of the Code upon reasonable request by the Issuer or an applicable withholding agent;

(d) such holder or beneficial owner agrees to give to each person to whom such holder or beneficial owner transfers the Notes notice of its requirement to meet the foregoing tax representations and documentation requirements.

Non-U.S. holders should consult their tax advisors regarding the possible U.S. federal income tax consequences of an investment in the Notes.

Payment by a Guarantor

If a Guarantor makes any payments in respect of (or that are classified as) interest on the Notes, it is possible that such payments may be subject to withholding tax at applicable rates subject to such relief as may be available under the provisions of any applicable double taxation treaty or to any other exemption which may apply. It is not certain that such payments by the Guarantor will be eligible for exemption from withholding tax and that a tax credit will be available in such case.

THE DISCUSSION ABOVE IS A GENERAL SUMMARY. IT DOES NOT COVER ALL TAX MATTERS THAT MAY BE OF IMPORTANCE TO A PARTICULAR INVESTOR. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS TAX ADVISOR ABOUT THE TAX CONSEQUENCES TO IT OF AN INVESTMENT IN THE NOTES IN LIGHT OF THE INVESTOR'S OWN CIRCUMSTANCES.

CERTAIN INSOLVENCY LAW CONSIDERATIONS AND LIMITATIONS ON THE VALIDITY AND ENFORCEABILITY OF THE NOTE GUARANTEES AND SECURITY INTERESTS

The Issuer and certain of the Guarantors are organized under the laws of Germany and the United States. Set forth below is a summary of certain limitations on the enforceability of the Note Guarantees and the security interests, and a summary of certain insolvency law considerations, in Germany. This is a summary only, and bankruptcy, insolvency or a similar proceeding could be initiated in Germany, the United States and in the jurisdiction of organization of a future guarantor of the Notes. The application of these various laws in multiple jurisdictions could trigger disputes over which jurisdiction's law should apply and could adversely affect your ability to enforce your rights and to collect payment in full under the Notes, the Note Guarantees and the security interests on the Collateral.

European Union

The Issuer and certain of the Guarantors are incorporated under the laws of Germany, which is a Member States of the European Union.

Pursuant to Regulation (EU) no. 2015/848 of the European Parliament and of the Council of May 20, 2015 on insolvency proceedings (recast), as amended (the "EU Insolvency Regulation"), and starting from June 26, 2017, which applies within the European Union, other than Denmark, the court which shall have jurisdiction to commence main insolvency proceedings in relation to a company organized under the laws of a Member State is the court of the Member State (other than Denmark) where the company concerned has its "centre of main interests" (as that term is used in Article 3(1) of the EU Insolvency Regulation). The determination of where a company has its "centre of main interests" is a question of fact on which the courts of the different Member States may have differing and even conflicting views. The EU Insolvency Regulation applies to insolvency proceedings, which are collective insolvency proceedings of the types referred to in Annex A to the EU Insolvency Regulation.

The "centre of main interests" is not a static concept. Although there is a rebuttable presumption under Article 3(1) of the EU Insolvency Regulation that a company has its "centre of main interests" in the Member State in which it has its registered office in the absence of proof to the contrary (which presumption shall not apply if the registered office has been moved to another Member State within the three month period prior to the request for the opening of insolvency proceedings), Article 3(1), second sentence, of the EU Insolvency Regulation states that the "centre of main interests" shall be the place where the debtor conducts the administration of its interests on a regular basis and "which is ascertainable by third parties." The courts have taken into consideration a number of factors in determining the "centre of main interests" of a company in that respect, including, in particular, where board meetings are held, the location where the company conducts the majority of its business or has its head office, and the location where the large majority of the company's creditors are established.

If the centre of main interests of a company is and will remain located in a Member State in which it has its registered office, the main insolvency proceedings in respect of the company under the EU Insolvency Regulation would be commenced in such jurisdiction and accordingly a court in such jurisdiction would be entitled to commence the types of insolvency proceedings referred to in Annex A to the EU Insolvency Regulation. Insolvency proceedings initiated in one Member State under the EU Insolvency Regulation are automatically recognized in the Member States (other than Denmark), although territorial (secondary) insolvency proceedings may be commenced in another Member State, subject to the conditions set out below.

If the "centre of main interests" of a company is in one Member State (other than Denmark) under Article 3(2) of the EU Insolvency Regulation, the courts of another Member State (other than Denmark) have jurisdiction to open territorial (secondary) insolvency proceedings against that company only if such company has an "establishment" (within the meaning and as defined in Article 2(10) of the EU Insolvency Regulation) in the territory of such other Member State. An "establishment" is defined to mean "any place of operations where a company carries out or has carried out in the three month period prior to the request to open main insolvency proceedings a non-transitory economic activity with human means and assets." Accordingly, the opening of territorial (secondary) insolvency proceedings in another Member State will also be possible if the debtor had an establishment in such Member State in the three month period prior to the request for commencement of main insolvency proceedings.

The effects of those territorial (secondary) insolvency proceedings opened in that other Member State are restricted to the assets of the company situated in such other Member State. Where main proceedings in the Member State in which the debtor has its "centre of main interests" have not yet been commenced, pursuant to Article 3 (4) of the EU Insolvency Regulation, territorial (secondary) insolvency proceedings may only be commenced in another Member State where the debtor has an establishment where either (a) insolvency proceedings cannot be commenced in the Member State in which the company's "centre of main interests" is situated under that Member State's law; or (b) the territorial (secondary) insolvency proceedings are commenced at the request of (i) a creditor whose claim arises from or is in connection with the operation of an establishment situated within the territory of the Member State where the commencement of territorial (secondary) proceedings is requested or (ii) a public authority that has the right to make such a request under the law of the Member State in which the establishment is located. Irrespective of whether the insolvency proceedings are main or territorial insolvency proceedings, such proceedings will, subject to certain exceptions, be governed by the lex fori concursus, i.e., the local insolvency law of the court that has assumed jurisdiction over the insolvency proceedings of the debtor. Furthermore, pursuant to Article 6 of the EU Insolvency Regulation, the courts of the Member State within the territory of which insolvency proceedings have been opened in accordance with its Article 3 shall have jurisdiction for any action that derives directly from the insolvency proceedings and is closely linked with them, such as avoidance actions.

The opening of insolvency proceedings in a Member State pursuant to the EU Insolvency Regulation shall not affect the rights in rem of creditors or third parties in respect of tangible or intangible, moveable or immoveable assets, both specific assets and collections of indefinite assets as a whole that change from time to time, belonging to the debtor that are situated within the territory of another Member State at the time of the opening of proceedings. Rights in rem include:

- the right to dispose of assets or have them disposed of and to obtain satisfaction from the proceeds of or income from those assets, in particular by virtue of a lien or a mortgage;

- the exclusive right to have a claim met, in particular a right guaranteed by a lien in respect of the claim or by assignment of the claim by way of a guarantee;

- the right to demand assets from, and/or to require restitution by, anyone having possession or use of them contrary to the wishes of the party so entitled; and

- a right in rem to the beneficial use of assets.

The courts of all Member States (other than Denmark) must recognize the judgment of the court commencing main proceedings, which will be given the same effect in the other Member States so long as no secondary proceedings have been commenced there. The insolvency practitioner appointed by a court in a Member State that has jurisdiction to commence main proceedings (because the debtor's "centre of main interest" is located there) may exercise the powers conferred on it by the laws of that Member State in another Member State (such as to remove assets of the debtor from that other Member State) subject to certain limitations, as long as no insolvency proceedings have been commenced in that other Member State or no preservation measures have been taken to the contrary further to a request to commence insolvency proceedings in that other Member State where the debtor has assets. The insolvency practitioner may, in particular, remove the debtor's assets from the territory of the Member State in which they are situated.

However, under Article 36 of the EU Insolvency Regulation, the insolvency practitioner in the main insolvency proceedings may attempt to avoid the opening of secondary insolvency proceedings in another Member State by giving a unilateral undertaking in respect of the assets located in the Member State in which secondary insolvency proceedings could be opened that the distribution of those assets or of the proceeds received as a result of their realization, will comply with the distribution and priority rights that would apply under the relevant national law if secondary insolvency proceedings were opened in such other Member State. Such undertaking must be made in writing and is subject to approval by a qualified majority of known local creditors, determined in accordance with the local law of such other Member State. If approved, the undertaking is binding on the insolvency estate and if a court is requested to open secondary insolvency proceedings, it shall, at the request of the insolvency practitioner in the main insolvency proceedings, refuse to open such proceedings if it is satisfied that the undertaking adequately protects the general interests of local creditors.

Additionally, under Article 38 of the EU Insolvency Regulation, where a temporary stay of individual enforcement proceedings has been granted in order to allow for negotiations between a company and its creditors, the court, at the request of the company (as debtor-in-possession) or of the insolvency practitioner in the main insolvency proceedings, may stay the opening of secondary insolvency proceedings for a period not exceeding three months, provided that suitable measures are in place to protect the interests of local creditors. Under Article 46 of the EU Insolvency Regulation, the court that opened the secondary insolvency proceedings will also stay the process of realization of assets in whole or in part upon receipt of a request from the insolvency practitioner in the main insolvency proceedings, for a period of up to three months, unless such a request is manifestly of no interest to the creditors in the main insolvency proceedings. Such stay may be continued or renewed for similar periods. Where the court stays the process of realization of the assets, the court may require the insolvency practitioner in the main insolvency proceedings to take any suitable measure to guarantee the interests of the creditors in the secondary insolvency proceedings and of individual classes of creditors.

The EU Insolvency Regulation has created a treatment for groups of companies experiencing difficulties by the commencement of group coordination proceedings and the appointment of an insolvency practitioner in order to facilitate the effective administration of the insolvency proceedings of the group's members. The EU Insolvency Regulations provides

- for cooperation between (i) insolvency practitioners of the main insolvency proceedings and of the secondary insolvency proceedings, (ii) jurisdictions and (iii) jurisdictions and insolvency practitioners;

- for specific cooperation, communication and coordination measures in order to ensure the efficient administration of insolvency proceedings relating to different companies forming part of the same group;

- that the Member States shall establish and maintain a register of insolvency proceedings; and

- that the European Commission shall establish a decentralized system for the interconnection of such insolvency registers.

In the event that the Issuer or a Guarantor experiences financial difficulty, it is not possible to predict with certainty in which jurisdiction or jurisdictions insolvency or similar proceedings would be commenced, or the outcome of such proceedings. Applicable insolvency laws may affect the enforceability of the obligations of the Issuer and the Guarantors. The insolvency, administration and other laws of the jurisdictions in which the respective companies are organized or operate may be materially different from, or conflict with, each other and there is no assurance as to how the insolvency laws of the potentially involved jurisdictions will be applied in relation to one another.

EU directive on preventative restructuring frameworks

The EU directive 2019/1023 of the European Parliament and the Council of June 20, 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 (Directive on restructuring and insolvency) (the "EU Restructuring Directive") was published on June 26, 2019.

The objectives of the EU Restructuring Directive are to ensure that (i) viable enterprises and entrepreneurs that are in financial difficulties have access to effective national preventive restructuring frameworks that enable them to continue operating, (ii) honest insolvent or over-indebted entrepreneurs (i.e. individuals) can benefit from a full discharge of debt after a reasonable period of time, thereby affording them a second chance and (iii) the effectiveness of procedures concerning restructuring, insolvency and discharge of debt is improved, in particular with a view to shortening their length.

The Restructuring Directive aims to achieve a higher degree of harmonization in the field of restructuring, insolvency, discharge of debt and disqualifications by establishing substantive minimum standards for preventive restructuring procedures as well as for procedures leading to a discharge of debt for entrepreneurs in order to promote a culture that encourages early preventive restructuring to address financial difficulties at an early stage, when it appears likely that insolvency can be prevented and the viability of the business can be ensured. Most notably, the Restructuring Directive provides for a framework pursuant to which (a) a stay of individual enforcement actions by creditors against debtors must be introduced by Member States, (b) all creditor claims shall be grouped into separate classes each of which shall reflect a commonality of interests (at a minimum, creditors of secured and unsecured claims shall be treated in separate classes), (c) creditor claims may be restructured in a restructuring plan by majority vote with a majority of not more than 75% of the amount of the claims in each class and, where the Member State so requires, a majority in number of affected parties in each class and (d) a cross-class cram-down is introduced whereby a restructuring plan may, under certain conditions, be adopted and bind dissenting creditors even if the creditors of one or more classes do not consent to the restructuring plan with the required majority. In order to be adopted the plan will have to be confirmed by a judicial or administrative authority that will in particular ensure the protection of each type of creditors' rights and compliance with the priority rules governing the adoption of the plan. The transposition of the Restructuring Directive into national legislation shall protect new financing and interim financing and may also provide priority ranking to new or interim financing granted in the context of the restructuring.

The EU Restructuring Directive shall be transposed into national laws or regulations by Member States by July 17, 2021 (with the exception of the provisions relating to the use of electronic means of communication for which the time period for the transposition expires in certain respects on July 17, 2024 or, in others, on July 17, 2026), subject to a maximum 1 year extension of the transposition period for Member States encountering particular difficulties in implementing the EU Restructuring Directive.

Germany

Certain of the Guarantors (and the Issuer) are organized under the laws of Germany and have their registered offices in Germany and substantially all of their assets are located in Germany. In the event of an insolvency of the Issuer or a Guarantor organized under the laws of Germany and/or having its "center of main interests" in Germany (each a "Relevant German Entity" and, collectively, the "Relevant German Entities") at the time the petition for the opening of insolvency proceedings (*Insolvenzeröffnungsantrag*) is filed, any main insolvency proceedings would most likely be initiated in Germany. Such proceedings would then be governed by German law. Under certain circumstances, insolvency proceedings over certain assets of a Relevant German Entity may be opened in other jurisdictions, in particular if such assets are located in another Member State of the European Union. With respect to cross-border group insolvencies, Art 56 et seq. EU Insolvency Regulation introduced requirements facilitating communication and cooperation between the administrators and courts involved. In addition, a coordination procedure may be initiated, which involves the appointment of a coordinator and the adoption of a cross-border coordination plan. See "*—European Union.*"

The insolvency laws of Germany and, in particular, the provisions of the German Insolvency Code (*Insolvenzordnung*) or the Corporate Stabilization and Restructuring Act (*StaRUG*), may not be as favorable to your interests as creditors than the insolvency laws of the United States or another jurisdiction with which you may be familiar, including in respect of priority of creditors' claims, the ability to obtain post-petition interest as well as in certain circumstances priority recovery for secured creditors and the duration of the insolvency proceedings, and thus may limit your ability to recover payments due on the Notes to an extent exceeding the limitations arising under other insolvency laws.

Insolvency

The following is a brief description of certain aspects of the insolvency laws of Germany:

Under German insolvency law, insolvency proceedings are not initiated by the competent insolvency court ex officio, but require that the debtor and/or a creditor files a petition for the opening of insolvency proceedings. Insolvency proceedings can be initiated either by the debtor or by a creditor in the event of over indebtedness (*Überschuldung*) of the debtor or in the event of its illiquidity (*Zahlungsunfähigkeit*), meaning that the debtor is unable to pay 10% or more of its debts as and when they fall due for a period longer than three weeks. According to the relevant provision of the German Insolvency Code (*Insolvenzordnung*), a debtor is over indebted when its liabilities exceed the value of its assets (based on their liquidation values), unless a continuation of the debtor's business as a going concern is predominantly likely (*überwiegend wahrscheinlich*) based on a 12 months' forecast horizon (*positive Fortführungsprognose*). If a limited liability company (*Gesellschaft mit beschränkter Haftung*), a public limited liability company (*Aktiengesellschaft*), a European law stock corporation based in Germany (*Societas Europaea*) or a partnership (*Kommanditgesellschaft*) or limited liability partnership not having an individual as personally liable shareholder or partner (e.g., GmbH & Co. KG) finds itself in a situation of illiquidity (*Zahlungsunfähigkeit*) and/or over indebtedness (*Überschuldung*), each managing director or general partner (in the case of a partnership) of such person and, in certain circumstances, its shareholders or members of the supervisory board, are obligated to file for insolvency without undue delay but not later than three weeks after such illiquidity (*Zahlungsunfähigkeit*) and/or six weeks after such over indebtedness (*Überschuldung*) occurred or (as the case may be) was established. Noncompliance with these obligations exposes management to both severe damages claims as well as sanctions under criminal law. In addition, only the debtor, but not the creditors, can file for the opening of insolvency proceedings or for restructuring proceedings (see "*—Preventive Restructuring Framework*") in the event of imminent illiquidity (*drohende Zahlungsunfähigkeit*), if there is the imminent risk of the company being unable to pay its debts as and when they fall due at some point in time within a prognosis period of usually 24 months, whereas imminent illiquidity (*drohende Zahlungsunfähigkeit*) does not give rise to an obligation for the management of the debtor to file for insolvency proceedings.

The Act to Temporarily Suspend the Obligation to File for Insolvency and to Limit Directors' Liability in the Case of Insolvency Caused by the COVID 19 Pandemic, which was adopted on March 27, 2020 (as amended from time to time, the "COVInsAG"), provided, inter alia, for a suspension of the obligation to file for insolvency until April 30, 2021. The suspension—as in force from January 1, 2021 until April 30, 2021—applied to debtors who, in the period from November 1, 2020 to February 28, 2021, have applied for financial assistance under state assistance programs to mitigate the consequences of the COVID-19 pandemic or have been prevented, as eligible debtors, from filing such application for financial assistance for legal or factual reasons, unless the insolvency is not caused by consequences of the COVID-19 pandemic and there is obviously no prospect of obtaining the state financial assistance or the assistance that can be obtained is insufficient to eliminate the over-indebtedness or illiquidity. If the debtor fulfilled the requirements for the suspension of filing duties, the COVInsAG also provides for a certain relief from claw back provisions for the satisfaction of claims or the provision of collateral for these claims, which the creditor was entitled to receive and unless the creditor knew that the restructuring and refinancing efforts of the debtor were not suitable to eliminate an existing illiquidity of the debtor in the meaning of section 17 of the German Insolvency Code (*Insolvenzordnung*). Furthermore, for an interim period until December 31, 2021, the COVInsAG reduces the forecast period (*Fortführungsprognose*) relevant for determining whether a continuation of the debtor's business is predominantly likely (*überwiegend wahrscheinlich*) for the purposes of the assessment of the insolvency ground of over-indebtedness from twelve months to four months provided that the debtor's over-indebtedness is caused by the COVID-19 Pandemic, which is assumed if (i) the debtor was not illiquid (*zahlungsunfähig*) as of December 31, 2019, (ii) the debtor's result from its ordinary business activity was positive in the last financial year prior to January 1, 2020, and (iii) the revenue from the debtors' ordinary business activity in calendar year 2020 was more than 30% lower than the revenue in calendar year 2019.

Further, following heavy rainfall and floodings in parts of Germany in July 2021, on September 7, 2021 the German Bundestag passed an Act to establish a special fund "*Aufbauhilfe 2021*" of up to EUR 30 billion to finance aids for private households, companies and other facilities affected by the heavy rainfall and floodings (*Aufbauhilfegesetz 2021—AufbhG 2021*). To further supplement those financial measures, the above-mentioned Act also contains a temporary suspension of the obligation to file for insolvency until January 31, 2022 (which may be extended until April 30, 2022) if a debtor's illiquidity or over-indebtedness directly results from the impact of the heavy rainfall and floodings in July 2021 and the relevant debtor conducts serious financing or restructuring negotiations and therefore has reasonable prospects for a successful reconstruction.

A company may also file for preliminary "debtor-in-possession" proceedings (*vorläufige Eigenverwaltung*), if, in general, the company has developed a comprehensive and conclusive turn-around plan to be implemented by way of debtor-in-possession proceedings and the insolvency court is not aware of any circumstances that indicate that key aspects of the filed turn-around plan are based on incorrect assumptions. If a company faces imminent illiquidity (*drohende Zahlungsunfähigkeit*) and/or is over-indebted (*überschuldet*), but not illiquid (*zahlungsunfähig*), it may also file for preliminary "debtor-in-possession" protective shield proceedings (*Schutzschirmverfahren*), unless—from a third party perspective—there is no reasonable chance for a successful restructuring. Upon such filing by the debtor, the court will appoint a preliminary trustee (*vorläufiger Sachwalter*) and prohibit enforcement measures (other than with respect to immovable assets). It may also implement other preliminary measures to protect the debtor from creditor enforcement actions for up to three months. During that period, the debtor shall prepare an insolvency plan, which ideally shall be implemented in formal “debtor-in- possession” proceedings (*Eigenverwaltung*) after formal insolvency proceedings have been opened. During the period of either the preliminary debtor-in-possession proceedings (*vorläufige Eigenverwaltung*) or the protective shield proceedings (*Schutzschirmverfahren*), the debtor shall prepare an insolvency plan, which ideally shall be implemented in formal “debtor-in-possession” proceedings (*Eigenverwaltung*) after formal insolvency proceedings have been opened.

The insolvency proceedings are controlled by the competent insolvency court, which monitors the due performance of the proceedings. Upon receipt of the insolvency petition, the insolvency court may take preliminary measures to secure the property of the debtor during the preliminary proceedings (*Insolvenzeröffnungsverfahren*). In particular, the insolvency court may prohibit or suspend any measures taken to enforce individual claims against the debtor’s assets during these preliminary proceedings (other than with respect to immoveable assets) or, to the extent required to ensure the continuation of the debtor’s business, prohibit the enforcement of any collateral granted over claims, rights or other movable assets of debtor. If the enforcement of collateral is prohibited by the insolvency court, secured creditors have to be adequately compensated by the insolvency estate.

Unless the debtor has applied for debtor-in-possession proceedings (*Eigenverwaltung*) (in which event the court will generally only appoint a preliminary trustee (*vorläufiger Sachwalter*) who will supervise the management of the affairs by the debtor) the insolvency court will in most cases appoint a preliminary insolvency administrator (*vorläufiger Insolvenzverwalter*). The rights and duties of the preliminary administrator or the preliminary trustee depend on the decision of the court. The duties of the preliminary administrator may include safeguarding and preserving the debtor’s property and assessing whether the debtor’s net assets will be sufficient to cover at least the costs of the insolvency proceedings. Depending on the decision of the court, even the right to manage the business and dispose of the assets of the debtor may pass to the preliminary insolvency administrator (*vorläufiger Insolvenzverwalter*), whilst in debtor-in-possession proceedings, the debtor’s management retains the right to manage business. However, the court may also order that certain disposals of the debtor may require the preliminary trustee’s (*vorläufiger Sachwalter*) consent also in debtor-in-possession proceedings. The insolvency court can also order a stay of all enforcement measures by unsecured creditors against the debtor.

During preliminary insolvency proceedings, the insolvency court has to appoint a “preliminary creditors’ committee” (*vorläufiger Gläubigerausschuss*) if the debtor satisfies at least two of the following three requirements:

- a balance sheet total of at least €6,000,000 (after deducting an equity shortfall if the debtor is over indebted);
- revenues of at least €12,000,000 in the twelve months prior to the last day of the financial year preceding the filing; and/or
- fifty or more employees on an annualized average basis (including, inter alios, part time employees).

The requirements are assessed with reference to the entity subject to the proceedings only without taking into account the assets of other group companies. The preliminary creditors’ committee will be able to participate in certain important decisions made in the preliminary insolvency proceedings. It will, for example, have the power to influence the following: the selection of a preliminary insolvency administrator (*vorläufiger Insolvenzverwalter*) / preliminary trustee (*vorläufiger Sachwalter*) and an insolvency administrator (*Insolvenzverwalter*) / trustee (*Sachwalter*); and court orders for “debtor-in-possession” proceedings (*Anordnung der Eigenverwaltung*).

The court opens formal insolvency proceedings (*Eröffnung des Insolvenzverfahrens*) if certain formal requirements are met, including if (i) the debtor is in a situation of imminent illiquidity (*drohend zahlungsunfähig*) (if the petition has been filed by the debtor), illiquidity (*zahlungsunfähig*) and/or over indebtedness (*überschuldet*) and (ii) if there are sufficient assets to cover at least the cost of the insolvency proceedings. If the assets of the debtor are not expected to be sufficient to cover such costs, the insolvency court will only open formal insolvency proceedings if third parties (e.g., creditors), advance the costs themselves. In the absence of such advancement, the petition for the opening of insolvency proceedings will usually be refused for insufficiency of assets (*Abweisung mangels Masse*).

Unless the court has granted “debtor-in-possession” proceedings (*Eigenverwaltung*) (in which case the court will only appoint a trustee (*Sachwalter*) who will supervise the management of the affairs by the debtor), upon opening of the insolvency proceedings, the court will appoint an insolvency administrator (*Insolvenzverwalter*) who has full administrative and disposal authority over the debtor’s assets, whereas the debtor is no longer entitled to dispose of its assets. The insolvency creditors (*Insolvenzgläubiger*) will only be entitled to change the individual appointed as insolvency administrator at the occasion of the first creditors’ assembly (*erste Gläubigerversammlung*) with such change requiring that (i) a simple majority of votes cast (by heads and amount of insolvency claims) has voted in favor of the proposed individual to become insolvency administrator and (ii) the proposed individual being eligible as officeholder, i.e., sufficiently qualified, business experienced and impartial. Individual creditors, or the debtor, can request the insolvency court to remove the insolvency administrator only on the grounds of a lack of impartiality and only within six months from the appointment. The insolvency administrator (or in the case of debtor-in-possession proceedings, the debtor) may raise new financial indebtedness and incur other liabilities to continue the debtor’s operations, and satisfaction of these liabilities as preferential debts of the estate (*Masseverbindlichkeiten*) which will be preferred to any unsecured insolvency liabilities created by the debtor including, e.g., the Note Guarantees. Residual claims of a secured insolvency creditors remaining after realization of the respective collateral (if any) also qualify as unsecured insolvency claim in this regard. However, in “debtor-in-possession” proceedings, the debtor shall only incur estate liabilities in the ordinary course of business without the trustee’s (*Sachwalter*) consent.

Powers of attorney granted by the relevant debtor and certain other legal relationships cease to be effective upon the opening of insolvency proceedings. Certain executory contracts become unenforceable at such time unless and until the insolvency administrator opts for performance.

The insolvency administrator (*Insolvenzverwalter*) (or trustee (*Sachwalter*) in case of debtor-in-possession proceedings) may also challenge transactions that are deemed detrimental to insolvency creditors and which were effected prior to the opening of the insolvency proceedings (See "—Hardening Periods and Fraudulent Transfer").

For the holders of the Notes, the consequences of the opening of German insolvency proceedings over the assets of any Relevant German Entity would include, among possible voidance actions and other things, the following:

(a) unless the court orders "debtor-in-possession" proceedings (*Eigenverwaltung*), the right to administer and dispose of the Relevant German Entity's assets would generally pass to the insolvency administrator (*Insolvenzverwalter*) as sole representative of the insolvency estate;

(b) unless the court orders "debtor-in-possession" proceedings (*Eigenverwaltung*), disposals effected by the Relevant German Entity's management after the opening of insolvency proceedings are null and void by operation of law;

(c) if, during the final month preceding the date of filing for insolvency proceedings or thereafter, a creditor in the insolvency proceedings acquires through execution (e.g., attachment) a security interest in part of the relevant insolvency debtor's property that would normally form part of the insolvency estate, such security becomes null and void by operation of law upon the opening of the insolvency proceedings;

(d) claims against the relevant debtor may generally only be pursued in accordance with the rules set forth in the German Insolvency Code (*Insolvenzordnung*); and

(e) any person that has a right for separation (*Aussonderung*), i.e., the relevant asset of this person does not constitute a part of the insolvency estate, does not participate in the insolvency proceedings; the claim for separation must be enforced in the course of ordinary court proceedings against the insolvency administrator (*Insolvenzverwalter*).

Certain of these consequences could be achieved by decision of the insolvency court following the insolvency petition and prior to the opening of insolvency proceedings.

Under German insolvency and restructuring law, termination rights, automatic termination events or "escape clauses" entitling one party to terminate an agreement, or resulting in an automatic termination of an agreement, upon the opening of insolvency proceedings in respect of the other party, the filing for insolvency or restructuring proceedings or the occurrence of reasons justifying the opening of insolvency or restructuring proceedings (*insolvenzbezogene Kündigungsrechte oder Lösungsklauseln*) may be invalid in case of insolvency proceedings if such clause would frustrate the election right of the insolvency administrator whether or not to perform the contract (*Wahlrecht des Insolvenzverwalters*) unless such clause only reflects termination rights applicable under statutory law. This may also relate to agreements that are not governed by German law.

All other creditors, whether secured or unsecured (unless they have a right to segregate an asset from the insolvency estate (*Aussonderungsrecht*) or are preferred creditors (*Massegläubiger*) as opposed to a preferential right (*Absonderungsrecht*)), who wish to assert claims against the debtor need to participate in the insolvency proceedings and have to file their claims against the debtor and the rights they claim in the assets of the debtor with the insolvency administrator. With the exception of certain secured creditors, an individual enforcement action brought against the debtor by any of its creditors is subject to an automatic stay once the insolvency proceedings have been opened (and, if so ordered by a court, also between the time when an insolvency petition is filed and the time when insolvency proceedings are opened). German insolvency proceedings are collective proceedings and creditors may generally no longer pursue their individual claims in the insolvency proceedings separately, but can instead only enforce them in compliance with the restrictions of the German Insolvency Code (*Insolvenzordnung*). Accordingly, all unsecured creditors may file their claims in the insolvency proceedings and will be paid on a pro rata basis from the insolvency estate (to the extent sufficient assets are available). Secured creditors are generally not entitled to enforce their security interests after insolvency proceedings have been commenced to the extent the German Insolvency Code (*Insolvenzordnung*) authorizes the insolvency administrator to dispose of the relevant collateral but have only certain preferential rights (*Absonderungsrechte*) in the insolvency proceedings. In this case, secured creditors will only have a right to claim the recoveries (minus costs and fees) from such realization. Whether or not, after the initiation of insolvency proceedings, a secured creditor remains entitled to enforce security granted to it by the relevant debtor depends on the type of security: The insolvency administrator (*Insolvenzverwalter*) generally has the sole right (i) to realize any movable assets within its possession that are subject to preferential rights (*Absonderungsrechte*) (e.g., pledges over movable assets and rights (*Mobiliarpfandrechte*), transfer by way of security (*Sicherungsübereignung*)) and (ii) to collect any claims that are subject to security assignment agreements (*Sicherungsabtretungen*). According to some voices in legal literature, it is uncertain whether the secured creditors are entitled to initiate the enforcement process in respect of pledged uncertificated shares on their own or, insofar as the pledged assets are part of any insolvency estate, whether the insolvency administrator (*Insolvenzverwalter*) has standing to realize the pledges on behalf of and for the benefit of the secured creditors. However, there is no authoritative case law on this question. That having been said, the German Federal Court of Justice (*Bundesgerichtshof*) views the insolvency administrator competent to realize pledged shares in a corporation that have been certificated (verbrieft) and are hold in a custodian account (Depot) in Germany in case the shares represent more than 20% in the issued share capital of the pledged company. It therefore appears likely that in this particular case, secured creditors would not be held competent to realize the respective share pledges.

Even if the law vests the right of disposal regarding the relevant collateral in the insolvency administrator, the secured creditor retains the right of preferred satisfaction with regard to the disposal proceeds (*Ersatzabsonderungsrecht*). Consequently, the enforcement proceeds minus certain contributory charges of 9% (or as agreed upon individually, but in any case at least 4%) for (i) assessing the value of the secured assets and (ii) realizing the secured assets are paid to the creditor holding a security interest in the relevant collateral up to an amount equal to its secured claims. Remaining amounts ("excess proceeds") will be allocated to the insolvency estate (*Insolvenzmasse*) (being the remaining unencumbered assets of the debtor) and would, after deduction of the costs of the insolvency proceedings (e.g., fees for and expenses of the preliminary insolvency administrator (*vorläufiger Insolvenzverwalter*), the insolvency administrator (*Insolvenzverwalter*) and the insolvency court as well as the members of the (preliminary) creditors' committee) and after satisfaction of certain preferential liabilities be distributed among the non-preferential unsecured creditors, including the holders of the Notes (to the extent not satisfied after enforcement of the Collateral securing the Notes). If a Relevant German Entity or a subsidiary thereof subject to German insolvency proceedings grants security over its assets to creditors other than the holders of the Notes, such security may result in a preferred satisfaction of creditors secured by such security (however, the preferential treatment would be limited to the proceeds obtained through the disposal of the relevant collateral). The excess proceeds resulting from such collateral may not be sufficient to satisfy the obligations under the respective Note Guarantee by the respective Relevant German Entity after such secured creditors have been satisfied.

The right of a creditor to preferred satisfaction (*Absonderungsrecht*) may not necessarily prevent the insolvency administrator (*Insolvenzverwalter*) from using a movable asset that is subject to this right. The insolvency administrator (*Insolvenzverwalter*), however, must compensate the creditor in accordance with specific rules.

In addition, it may take several years before proceeds from the liquidation of the insolvency estate, if any, are distributed to unsecured creditors.

A different distribution of enforcement proceeds can be proposed in an insolvency plan (*Insolvenzplan*) that can be submitted by the debtor or the insolvency administrator or, in debtor-in-possession proceedings, by the trustee (upon instruction of the preliminary creditors' committee or the creditors' meeting) and which requires, in principle, the consent of the debtor as well as the consent of each class of creditors in accordance with specific majority rules. The insolvency court may order the deemed approval of one or more opposing creditor groups under certain conditions (cram down). The insolvency plan (*Insolvenzplan*) may derogate from the provisions of the German Insolvency Code (*Insolvenzordnung*). In particular, it may contain provisions regarding the discharge of secured and unsecured creditors, the disposal of the insolvency estate as well as procedure. It may also create, modify, transfer or terminate rights in rem such as property rights or security interests. If the debtor is a corporate entity, the shares or, as the case may be, the partnership interests in the debtor can also be included in the insolvency plan, including an issuance of shares or partnership interests to third parties or to creditors based on a debt-to-equity swap. Thus, an insolvency plan could under certain circumstances provide for provisions, inter alia, regarding the Notes or the Note Guarantees or the Collateral which are less favorable to the holders of the Notes than the provisions of the German Insolvency Code (*Insolvenzordnung*), such as the release of the Collateral or the release of obligations under the Notes or the Note Guarantees. Under certain conditions, such provisions could be adopted against the votes of the affected holders of the Notes. However, it will not be possible to force a creditor into a debt-to-equity conversion if it does not consent to such debt-for-equity swap under the proposed insolvency plan (*Insolvenzplan*).

An insolvency plan can further provide for the release or other impairment of guarantees or other security interests provided by debtor affiliates (*gruppeninterne Drittsicherheiten*), without such debtor affiliates being required to become subject of the debtor's or separate insolvency proceedings, provided that the relevant debtor affiliate consents to the impairment. Creditors affected by such impairment are entitled to receive adequate compensation. This means that the claims under the Note Guarantees can get impaired if a Relevant German Entity would enter into German insolvency proceedings, regardless of whether or not the Relevant German Entity is itself subject of insolvency proceedings.

Under German insolvency law, there is no consolidation of the assets and liabilities of a group of companies in the event of insolvency. In the case of a group of companies, each entity, from an insolvency law point of view, has to be dealt with separately. As a consequence, there is, in particular, no pooling of claims among the respective entities of a group, but rather claims of and vis à vis each entity have to be dealt with separately. However, the German Insolvency Code (*Insolvenzordnung*) has provisions to facilitate the coordination of and cooperation between insolvency proceedings of group companies. Whereas these provisions do not provide for a consolidation of the insolvency proceedings of the insolvent group companies, or a consolidation of the assets and liabilities of a group of companies or pooling of claims among the respective entities of a group, they stipulate four key measures in order to facilitate an efficient administration of group insolvencies: (i) a single court may assume jurisdiction for other group company insolvency proceedings (*Gruppengerichtsstand*); (ii) a single person may be appointed as insolvency administrator (*Insolvenzverwalter*) for all relevant group companies; (iii) certain coordination obligations are imposed on insolvency courts, insolvency administrators and creditors' committees; and (iv) certain parties may apply for "coordination proceedings" (*Koordinationsverfahren*) and the appointment of a "coordinator" (*Verfahrenskoordinator*) with the ability to propose a "coordination plan" (*Koordinationsplan*) for approval by the coordination court (*Koordinationsgericht*).

As a general principle, the claims arising from the Notes and the Note Guarantees may be enforced against a Relevant German Entity outside of the insolvency proceedings over the assets of the Relevant German Entity. Any insolvency proceedings over the assets of a Relevant German Entity would, however, be a rather strong indication that the overall financial situation of the entire group of affiliated companies has significantly deteriorated, which may cause other Relevant German Entity or other affiliated companies to subsequently file for insolvency.

German insolvency law provides for certain creditors and their claims to be subordinated by law (including, but not limited to, claims made by shareholders (unless privileged) of the relevant debtor for the return of repayment of shareholder loans or comparable actions, but except for government developments banks and its affiliates). The restrictive nature of the covenants and undertakings in the Indenture may result in the holders of the Notes and/or the applicable Trustee being considered in a "shareholder like" position (*gesellschafterähnliche Stellung*). In that event, in an insolvency proceeding over the assets of a Relevant German Entity, the claims arising from the Notes or a Note Guarantee could be treated as a subordinated insolvency claim (*nachrangige Insolvenzforderungen*). Subordinated insolvency claims are not eligible to participate in the insolvency proceedings over the assets of a Relevant German Entity unless the insolvency court handling the case has granted special permission allowing these subordinated insolvency claims to be filed which is not granted in the vast majority of insolvency cases governed by German law. Claims of a person who becomes a creditor of the insolvency estate only after the opening of insolvency proceedings generally rank senior to claims of regular, unsecured creditors.

Hardening periods and fraudulent transfer

Under the German Insolvency Code (*Insolvenzordnung*), an insolvency administrator or, in the event that "debtor-in-possession" proceedings (*Eigenverwaltung*) have been granted, the trustee (*Sachwalter*) may also challenge (*anfechten*) transactions, performances or other acts that are deemed detrimental to insolvency creditors and were effected prior to the commencement of insolvency proceedings during the applicable voidance periods. The administrator's or the trustee's right to challenge transactions can, depending on the circumstances, extend to transactions during the ten-year period prior to the filing of the petition for commencement of insolvency proceedings.

In the event of insolvency proceedings based on and governed by the insolvency laws of Germany, the payment of any amounts to the holders of Notes as well as the granting of Collateral for or providing credit support for the benefit of the Notes could be subject to potential challenges by an insolvency administrator (*Insolvenzverwalter*) or, as the case may be, a trustee (*Sachwalter*) under the rules of avoidance as set forth in the German Insolvency Code (*Insolvenzordnung*). If the validity or enforceability of the Notes, the respective Note Guarantees or any Collateral in favor of the Notes is challenged successfully, the holder of the Notes may not be able to recover any amounts under the Notes, the respective Note Guarantees or the relevant Collateral. If payments have already been made under the Notes, the respective Note Guarantees or Collateral, any amounts received from a transaction that had been challenged would have to be repaid to the insolvency estate. In this case, holders of the Notes would only have a general unsecured claim under the Notes or relevant Note Guarantee without preference in insolvency proceedings.

In particular, an act (*Rechtshandlung*) or a transaction (*Rechtsgeschäft*) (which terms also include the provision of security or the repayment of debt) may be avoided in the following cases:

- any act granting an insolvency creditor, or enabling an insolvency creditor to obtain, security (including a guarantee) (*Sicherung*) or satisfaction (*Befriedigung*) if such act was taken (a) during the last three months prior to the filing of a petition for the commencement of insolvency proceedings, if the debtor was illiquid (*zahlungsunfähig*) at the time such act was taken and the creditor knew of such illiquidity (or of circumstances that imperatively suggest that the debtor was illiquid (*zahlungsunfähig*)) at such time, or (b) after the filing of the petition for the opening of insolvency proceedings, if the creditor knew of the debtor's illiquidity (*Zahlungsunfähigkeit*) or the filing of such petition (or of circumstances imperatively suggesting such illiquidity (*Zahlungsunfähigkeit*) or filing); whereby in each case an "affiliated party" (*nahestehende* Person) as described below shall be presumed to have been aware of the debtor's insolvency or of the filing to open insolvency proceedings;

- any act granting an insolvency creditor, or enabling an insolvency creditor to obtain, security (including a guarantee) (*Sicherung*) or satisfaction (*Befriedigung*) to which such creditor was not entitled or which was granted or obtained in a form in which or at a time at which such creditor was not entitled to such security or satisfaction, if (a) such act was taken during the last month prior to the filing of the petition for the commencement of insolvency proceedings or after such filing, (b) such act was taken during the second or third month prior to the filing of the petition and the debtor was illiquid (*zahlungsunfähig*) at such time or (c) such act was taken during the second or third month prior to the filing of the petition for the opening of insolvency proceedings and the creditor knew at the time such act was taken that such act was detrimental to the other insolvency creditors (or had knowledge of circumstances that imperatively suggest such detrimental effect); whereby in each case an "affiliated party" (*nahestehende Person*) as described below shall be presumed to have been aware of the detrimental nature of such transaction for other creditors;

- any transaction by the debtor that is directly detrimental to the insolvency creditors or by which the debtor loses a right or the ability to enforce a right or by which a proprietary claim against a debtor is obtained or becomes enforceable, provided it was entered into (a) during the three months prior to the filing of the petition of the commencement of insolvency proceedings and the debtor was illiquid (*zahlungsunfähig*) at the time of such transaction and the counterparty to such transaction knew of the illiquidity (*Zahlungsunfähigkeit*) at such time or (b) after the filing of the petition for the commencement of insolvency proceedings and the counterparty to such transaction knew of either the debtor's illiquidity (*Zahlungsunfähigkeit*) or such filing at the time of the transaction (or of circumstances imperatively suggesting such illiquidity (*Zahlungsunfähigkeit*) or filing); whereby in each case an "affiliated party" (*nahestehende* Person) as described below shall be presumed to have been aware of the debtor's illiquidity (*Zahlungsunfähigkeit*) or of the filing to open insolvency proceedings;

- any act by the debtor without (adequate) consideration (e.g., whereby a debtor grants security (including a guarantee) for a third-party debt, which might be regarded as having been granted gratuitously (*unentgeltlich*)), if it was effected in the four years prior to the filing of the petition for the commencement of insolvency proceedings;

- any act performed by the debtor during the ten years prior to the filing of the petition for the commencement of insolvency proceedings or at any time after the filing with the intent to prejudice the insolvency creditors if the other party knew of such intention at the time of such act with such knowledge being presumed if the beneficiary knew that the debtor's illiquidity was at least imminent (*drohende Zahlungsunfähigkeit*) and that the transaction disadvantaged the other creditors. For granting an insolvency creditor, or enabling an insolvency creditor, to obtain security or satisfaction to which such creditor was entitled, such knowledge is (solely) presumed if such creditor knew that the debtor was illiquid (*zahlungsunfähig*) (as opposed to the knowledge of imminent illiquidity (*drohende Zahlungsunfähigkeit*) in regular cases) and that the transaction disadvantaged the other creditors. Apart from that, such acts granting an insolvency creditor, or enabling an insolvency creditor, to obtain security (*Sicherung*) or satisfaction (*Befriedigung*) (whether or not it was granted or obtained in a form or at a time to which or at which such creditor was entitled to such security or satisfaction), may only be avoided if they were effected in the four years prior to the filing of the petition for the commencement of insolvency proceedings or at a time after the filing. There is a rebuttable presumption that, if the debtor reached a payment agreement (*Zahlungsvereinbarung*) with the creditor or the creditor granted any other form of deferred payment (*Zahlungserleichterungen*) to the debtor, he had no knowledge of the debtor's illiquidity (*Zahlungsunfähigkeit*) at the time of the transaction;

- any non-gratuitous contract (*entgeltlicher Vertrag*) concluded between the debtor and an "affiliated party" (*nahestehende* Person), as described below, which directly operates to the detriment of the creditors can be challenged unless such contract was concluded earlier than two years prior to the filing of the petition for the opening of insolvency proceedings or the other party had no knowledge of the debtor's intention to disadvantage its creditors as of the time the contract was concluded;

- any act that grants security (including a guarantee) (*Sicherung*) or satisfaction (*Befriedigung*) for a claim under a shareholder loan granted to the debtor or an equivalent claim if (a) in the case of the granting of security, the act took place during the ten years prior to the filing of the petition for the commencement of insolvency proceedings or after the filing of such petition, or (b) in the case of satisfaction, the act took place during the last year prior to the filing of the petition for the opening of insolvency proceedings or after the filing of such petition. This does not apply (a) to shareholders that own 10% or less of the shares or interest and are not engaged in management and (b) until the sustainable restructuring (*nachhaltige Sanierung*) of the debtor in case a creditor for the first time acquires shares during over indebtedness, illiquidity or imminent illiquidity with the intension to restructure the debtor; and

- any act whereby the debtor grants satisfaction to a third party for a loan claim or an equivalent claim if (a) the transaction was effected in the last year prior to the filing of a petition for the commencement of insolvency proceedings or thereafter and (b) a shareholder of the debtor had granted security for such loan or was liable as a guarantor or surety provider (*Garant oder Bürge*) for such loan (in which case the shareholder has to compensate the debtor for the amounts paid (subject to further conditions)).

In this context, "knowledge" is generally deemed to exist if the other party is aware of the facts from which the conclusion must be drawn that, e.g., the respective debtor (e.g., a Relevant German Entity) was unable to pay its debts generally as they fell due, that a petition for the opening of insolvency proceedings had been filed, or that the act was detrimental to, or intended to prejudice, the insolvency creditors, as the case may be. Knowledge of pending restructuring proceedings (see—“Preventive Restructuring Framework”) per se does not suffice for a creditor to be deemed to have such “knowledge.” A person is further deemed to have knowledge of the debtor’s intention to prejudice the insolvency creditors if it knew of the debtor’s imminent illiquidity and that the transaction prejudiced the debtor’s creditors. If the relevant act granted an insolvency creditor, or enabled an insolvency creditor to obtain, security (including a guarantee) (*Sicherung*) or satisfaction (*Befriedigung*) in a form in which and at a time at which such creditor was entitled to such security or satisfaction (*kongruente Deckungshandlung*), the words “imminent illiquidity” (*drohende Zahlungsunfähigkeit*) in the preceding sentence have to be replaced by “actual illiquidity” (*eingetretene Zahlungsunfähigkeit*). With respect to an “affiliated party” (*nahestehende Person*) as described below there is a general statutory presumption that such party had “knowledge” as indicated above.

In relation to corporate entities, the term “affiliated party” (*nahestehende Person*) includes, subject to certain limitations, members of the management or supervisory board, general partners and shareholders owning more than 25% of the debtor’s share capital, persons or companies holding comparable positions that give them access to information about the economic situation of the debtor, and other persons who are spouses, relatives or members of the household of any of the foregoing persons.

The granting of security concurrently with the incurrence of debt funded as new money may be qualified as a “cash transaction” and may as such be privileged. Meaning, under certain circumstances it may not be subject to avoidance rights under the German Insolvency Code (*Bargeschäftsprivileg*). According to recent case law of the German Federal Court of Justice (*Bundesgerichtshof*), however, this privilege does not apply to claims under a shareholder loan agreement or economically equivalent transactions as described above.

Furthermore, any transactions contemplated by a restructuring plan (see—“*Preventive Restructuring Framework*”) are not subject to avoidance actions until a sustainable restructuring (*nachhaltige Sanierung*) of the debtor is achieved, unless the restructuring plan was based on incorrect or incomplete information presented by the debtor and the addressee of the avoidance action had knowledge thereof. This privilege does not apply to shareholder loans or economically similar transactions or collateral provided therefor.

Any amounts obtained from transactions that have been challenged would have to be repaid to the insolvency estate.

In addition, under German law, a creditor who provided additional, or extended existing funding to a debtor or obtained security from a debtor may be liable towards another creditor if (i) such creditor was aware of the debtor’s (impending) insolvency or of circumstances indicating such debtor’s (impending) insolvency (for which knowledge of pendent restructuring proceedings (see —“*Preventive Restructuring Framework*”) per se does not suffice) at the time such funding was provided or extended or such security was granted and (ii) the other creditor suffered losses caused by a delayed filing for insolvency based on the additional or extended existing funding. The German Federal Supreme Court (*Bundesgerichtshof*) held that this could be the case if, e.g., the creditor was to act with the intention of detrimentally influencing the position of the other creditors of the debtor in violation of the legal principle of bonos mores (*Sittenwidrigkeit*). Such intention could be present if the beneficiary of the transaction was aware of any circumstances indicating that the debtor as the grantor of the guarantee or security was close to collapse (*Zusammenbruch*), or had reason to enquire further with respect thereto. If, however, such was additional funding has been provided or existing funding has been extended or respective collateral has been granted between March 1, 2020 and September 30, 2020 (in certain cases, until December 31, 2020 or April 30, 2021), any such transaction is statutorily exempted from the lender liability concept as laid out above.

The COVInsAG provides for privileged treatment of new financing and shareholder loans under German insolvency law claw-back provisions during a certain time during the COVID-19 pandemic. On that basis, the repayment (including reasonable interest payments) of third-party financing and shareholder loans by before September 30, 2023 shall not be considered disadvantageous to creditors if the relevant financing is granted between March 1, 2020 and April 30, 2021 and the debtor fulfilled the requirements for the suspension of the filing duties at the time. This privilege also covers the provision of collateral in favor of third-party financing providers, but does not apply in case of the provision of collateral to secure the repayment of shareholder loans or receivables resulting from legal transactions which are economically equivalent to such a loan.

Satisfaction of subordinated claims

The insolvency estate shall serve to satisfy the liquidated claims held by the personal creditors against the debtor on the date when the insolvency proceedings were opened. The following claims shall be satisfied ranking below the other claims of insolvency creditors in the order given below, and according to the proportion of their amounts if ranking with equal status: (i) interest and penalty payments accrued on the claims of the insolvency creditors from the day of the opening of the insolvency proceedings; (ii) costs incurred by individual insolvency creditors due to their participation in the proceedings; (iii) fines, regulatory fines, coercive fines and administrative fines, as well as such incidental legal consequences of a criminal or administrative offence binding the debtor to pay money; (iv) claims to the debtor’s gratuitous performance of a consideration; and (v) claims for restitution of a shareholder loan (*Gesellschafterdarlehen*) or claims resulting from legal transactions corresponding in economic terms to such a loan.

The COVInsAG suspends the statutory subordination of shareholder loans and receivables from economically similar acts in insolvency proceedings applied for up until September 30, 2023 for newly granted shareholder loans that were granted between March 1, 2020 and September 30, 2020 or were granted between September 1, 2020 and December 31, 2020 if the debtor had been overindebted but not illiquid or were granted between January 1, 2021 and February 28, 2021 if the debtor had been granted state aids or between January 1 and April 30 2021 if the debtor has submitted an application for state aid under the German aid scheme on reasonable grounds and the state aid had been sufficient to prevent for the insolvency and in each case where the debtor fulfilled the requirements for the suspension of the filing duties at the time.

Preventive restructuring framework

The following is a brief description of certain aspects of the proceedings under the Corporate Stabilization and Restructuring Act (*StaRUG*).

In transforming the EU Restructuring Directive (see "*—European Union—EU directive on preventative restructuring frameworks*") into national law, the Corporate Stabilization and Restructuring Act (*StaRUG*) has come into force on January 1, 2021 in Germany. The Corporate Stabilization and Restructuring Act provides for a new pre-insolvency procedure to restructure the liabilities of debtors, whose "centre of main interest" is located in Germany. This may apply as of the date of this offering memorandum to certain of the Guarantors as well as to the Issuer.

As the Corporate Stabilization and Restructuring Act (*StaRUG*) has only come into force on January 1, 2021, little corresponding (court) practice exists as of the date of this offering memorandum and consequently any proceedings under the Corporate Stabilization and Restructuring Act (*StaRUG*) come with uncertainty.

For the holders of the Notes, among the relevant consequences of an initiation of restructuring proceedings by a Relevant German Entity having its "centre of main interest" in Germany would be in particular the following:

- potentially no or limited court review and/or supervision of the restructuring proceedings;
- any measures (such as reduction in principal and/or interest or deferrals) regulated by the restructuring plan may be approved within a class of creditors (e.g., the holders of the Notes) with a majority of 75% of the claims or by way of a so-called cross-class cram down by other classes under certain presumptions;
- any collateral granted by the debtor as well as intra-group collateral may be subject to restructuring proceedings potentially leading to a negative impact on the respective collateral; and
- restrictions on individual enforcement actions for all or certain creditors regarding their claims, or, if applicable, their respective collateral over moveable assets of up to eight months due to a moratorium.

Restructuring proceedings

Restructuring proceedings may only be initiated by the relevant debtor with a notification of the competent restructuring court of the commencement of restructuring proceedings. A debtor is eligible to file for restructuring proceedings if it has become imminently illiquid (*drohend zahlungsunfähig*). Such imminent illiquidity (*drohende Zahlungsunfähigkeit*) occurs if it is more likely than not that the debtor will be unable to pay its debts as and when they fall due within a two years' look-forward period.

During the restructuring proceedings, the debtor has to observe the duty of a prudent business manager, which includes safeguarding the best interest of all of the debtor's creditors. In particular, the debtor has to refrain from any actions, which cannot be reconciled with or potentially frustrate the restructuring goal (*Restrukturierungsziel*). This means that, generally, any claims, which shall be subject to the envisaged restructuring plan, must not be settled or collateralized during the restructuring proceedings.

During the restructuring proceedings, the duty to file for insolvency without undue delay if the debtor becomes illiquid (*zahlungsunfähig*) or over-indebted (*überschuldet*) is generally suspended. However, if such an insolvency event occurs, the debtor is obliged to notify the restructuring court accordingly without undue delay. The restructuring court then abrogates the restructuring proceedings unless, in the restructuring courts discretion, (i) the abrogation of the restructuring proceedings is, against the backdrop of the advanced status of restructuring proceedings, evidently not in the interest of all creditors or (ii) the illiquidity (*Zahlungsunfähigkeit*) or over- indebtedness (*Überschuldung*) is caused by the enforcement of any such claim that is envisaged to be subject to the restructuring plan provided the achievement of the restructuring goal (*Restrukturierungsziel*) remains predominantly likely. Once restructuring proceedings have been abrogated by the restructuring court, the debtor is again obliged to file for insolvency under the German Insolvency Code (*Insolvenzordnung*).

If (i) the envisaged restructuring also comprises of consumer claims or claims of small or medium enterprises or respective collateral granted for the benefit of such claims, (ii) the debtor has filed for a moratorium against all or essentially all creditors or (iii) the envisaged restructuring plan provides for specific supervision of the settlement of claims subject to the plan, the restructuring court has to appoint a mandatory restructuring officer (*Restrukturierungsbeauftragter*). A mandatory restructuring officer is also to be appointed by the restructuring court if the restructuring goal (*Restrukturierungsziel*) can predictably only be achieved by a cram-down of dissenting classes (unless only claims originated by financial institutions and/or shareholders are to be compromised).

The restructuring court may appoint as mandatory restructuring officer (*Restrukturierungsbeauftragter*) any person with experience in restructurings and insolvencies who is suitable for the respective individual case and who is qualified as a tax advisor, accountant, lawyer or has comparable qualifications (an "Eligible Restructuring Officer"); the court may take suggestions by the debtor, creditors or shareholders into account. If (i) the debtor is, based on expert opinion provided by an Eligible Restructuring Officer, eligible for a moratorium (see "*—Moratorium*"), or (ii) creditors of one class with at least 25% of the corresponding votes in such class propose a mandatory restructuring officer, the court may only appoint a mandatory restructuring officer different from the proposed Eligible Restructuring Officer if the proposed Eligible Restructuring Officer is evidently inadequate. If a mandatory restructuring officer is appointed based on the proposal of the debtor or a group of creditors, the restructuring court may appoint an additional mandatory restructuring officer in its own discretion.

The mandatory restructuring officer (*Restrukturierungsbeauftragter*) is entitled to decide on the procedure to be elected for the voting on the restructuring plan and can be empowered by the restructuring court to (i) supervise the debtor's board and business situation and (ii) receive payments to and approve payments made by the debtor. If a moratorium is granted, the mandatory restructuring officer is obliged to monitor that the respective prerequisites of such moratorium persist and, in case such prerequisites do not persist, entitled to file for a lifting of such moratorium. Additionally, the mandatory restructuring officer is obliged to comment on the proposed plan's prospects to remove the debtor's imminent illiquidity (*drohende Zahlungsunfähigkeit*) and restore the debtor's viability.

The mandatory restructuring officer (*Restrukturierungsbeauftragter*) has to perform its duties independently and the debtor is obliged to share all relevant information with the mandatory restructuring officer.

The restructuring court can remove the mandatory restructuring officer from office for good cause ex officio or, if the mandatory restructuring officer (*Restrukturierungsbeauftragter*) has not acted independently, on the debtor's or a creditor's petition.

Furthermore, the debtor or at least 25% of creditors in a voting class, can request the appointment of an optional restructuring officer to facilitate the development and negotiation of a restructuring plan. Creditors may only request such appointment if they agree to be jointly and severally liable for the costs of the optional restructuring officer. The optional restructuring officer is only obliged to support the stakeholders involved in the negotiations of the restructuring plan, but has no further powers. An optional restructuring officer can also be removed from office by the restructuring court ex officio for good cause or, if the optional restructuring officer has not acted independently, on the debtor's or a creditor's petition.

Prior to a confirmation and implementation of a restructuring plan, the restructuring court may terminate the restructuring proceedings for certain reasons, e.g., if the debtor notifies the restructuring court of the occurrence of an insolvency event unless, in the restructuring court's discretion (taking into account the actual status of the relevant restructuring proceedings), the opening of formal insolvency proceedings is obviously not in the interest of the entirety of the creditors or if the debtor files for insolvency or insolvency proceedings are opened over the assets of the debtor based on a creditor's filing.

Restructuring plan

Key element of the restructuring proceedings is the restructuring plan, which can comprise certain selected or all (with the exception of employees' claims, including pensions, and claims based on intentionally committed acts of tort) of the debtor's liabilities, or amend the terms of financial and other agreements to which more than the debtor and one other party are parties, including the terms and liabilities relating to the relevant debtor under the Indenture and the Intercreditor Agreement.

Any form of financial or operational debt may be compromised, including contingent claims and undue claims, and relating contractual arrangements including syndicated credit facilities and intercreditor agreements can be amended by virtue of the plan. Corresponding collateral provided by debtor affiliates (*gruppeninterne Drittsicherheiten*) may also be released and/or granted under a restructuring plan, provided that affected creditors are adequately compensated. Consequently, the Notes or the Note Guarantees could also be subject to a restructuring plan provided the respective debtor has its "centre of main interest" in Germany.

Further, a restructuring plan may provide for a (partial) debt-to-equity swap or other corporate law measures like a share-capital increase. Debt-to-equity swaps can be implemented without the shareholders' consent but require the willingness of at least certain creditors to equitize their debt claims as no creditor can be forced to take equity as a consideration under a restructuring plan. Hence, if, the Notes or the Note Guarantees were subject to a restructuring plan providing for debt-to-equity swap, single holders of the Notes could not be forced under the restructuring plan to take equity in the Issuer or a Guarantor without their respective consent.

The restructuring plan will be voted on by creditors of the debtor and must subsequently be confirmed by the restructuring court. The vote may take place by way of consent solicitation process or in a (virtual) creditors' meeting. Creditors will be divided into classes determined on the basis of the respective creditors' economic interests in the debtor. As a minimum distinction, secured creditors, unsecured creditors, creditors that benefit from intra-group credit support and subordinated creditors (e.g., shareholders) will form separate classes. However, also other factors like, e.g., cross-holdings, could be taken into account for class composition. 75% by value of all claims of one class will be required to approve the plan for such class. There is no numerosity requirement. Dissenting classes can be crammed down (or up), if

- the class members can be expected to be no worse off under the plan than absent the plan (whereby the alternative scenario must not necessarily be an in-court insolvent liquidation, but can also be an alternative out-of-court restructuring on a going concern basis);

- the crammed down (or up) class members receive an adequate share in the economic value created by the plan; and

- a majority of classes has accepted the plan.

A crammed down (or up) class receives an adequate share in the economic value created by the plan if (i) no other creditor receives more than its claim's par value, (ii) no creditors that would rank junior in insolvency proceedings, the debtor or its shareholders receive any value through the plan which is not covered by a respective stakeholder's contribution to the plan and (iii) no creditor that would rank *pari passu* in insolvency proceedings receives a preferential treatment compared to the dissenting class under the restructuring plan (unless such preferential treatment is appropriate (*sachgerecht*) in light of the individual situation of distress to overcome and the dissenting class accounts for no more than 50% of the rank's total claims). However, despite the prerequisite described under (ii) in the foregoing sentence, a creditor class can also be crammed down in case a shareholder retains equity without any additional contribution if the shareholder itself is crucial for and bindingly committed to the continuation of the debtor's business and the realization of the restructuring plan or the creditors' rights are only compromised marginally (e.g., by a maturity extension of no more than 18 months).

Upon the debtor's decision, either the debtor or the restructuring court can lead the voting on the plan. In case the voting has been led by the debtor, the restructuring court has to hold a hearing of affected stakeholders before the plan can be confirmed.

The restructuring court will confirm the plan unless (i) the debtor is not (longer) imminently illiquid (*drohend zahlungsunfähig*), (ii) there is a material breach of statutory provisions regarding the procedure to adopt the restructuring plan or its permitted content that cannot or has not been cured upon the restructuring court's notice, (iii) claims contemplated by or surviving the restructuring plan can obviously be not satisfied by the debtor or (iv), if new money financing is contemplated under the restructuring plan, the underlying restructuring concept is incoherent or appears to be based on incorrect facts or to have no reasonable prospect of success. Additionally, dissenting creditors can request the restructuring court to reject the restructuring plan if the applicant will be expectedly worse off under the restructuring plan than without the proposed restructuring plan and the applicant has already raised such concern in the creditors' meeting or creditors' hearing, as applicable. However, such application has no merits if the restructuring plan provides for funds to be distributed to creditors that can prove to be worse-off, irrespective of whether any such applicant actually benefits from such funds.

Dissenting creditors can appeal against the restructuring court's confirmation order of the plan if they are able to produce prima facie evidence (*glaubhaft machen*) that they are worse-off under the restructuring plan and funds provided thereunder to compensate worse-off creditors (if any) will not suffice for their individual compensation. Such appeal will only have suspensive effect (*aufschiebende Wirkung*) against the effectiveness of the restructuring plan if requested by the dissenting creditor and ordered by the court based on serious and irreversible disadvantages for such dissenting creditor that are not in proportion to the benefits of an immediate implementation of the restructuring plan.

Restructuring plans, which are negotiated and approved in public proceedings and confirmed by a German restructuring court will be recognized in any EU member state pursuant to the EU Insolvency Proceedings Regulation upon the restructuring proceedings being included as a recognized proceeding in Exhibit A of the EU Insolvency Proceedings Regulation. This is expected to occur in July 2022. In any other case, the recognition of the restructuring plan is subject to certain rules and regulations under applicable international private law. As the Corporate Stabilization and Restructuring Act (*StaRUG*) has only come into force on January 1, 2021, any such recognition has not yet been tested as of the date of this offering memorandum.

Moratorium

In order for the debtor to be able to draw up and negotiate the restructuring plan, the Corporate Stabilization and Restructuring Act (*StaRUG*) offers the possibility of having a moratorium ordered by the competent court upon application by the debtor, which can restrict enforcement measures by certain or all creditors with regards to their payment claims or the realization of respective collateral over moveable assets. The moratorium can initially be ordered for a maximum period of up to three months, with subsequent orders to extend the moratorium up to a maximum of eight months permissible under certain conditions. Such moratorium may also be sanctioned with regards to collateral provided by the debtor's affiliates (*gruppeninterne Drittsicherheiten*).

The moratorium does not suspend the relevant creditor's interest claims. However, whereas creditors may still file an insolvency petition against the debtor during a moratorium, correspondingly initiated insolvency proceedings are suspended for the time of the moratorium. Under certain conditions, in particular if the requirements to terminate restructuring proceedings are met or the debtor does not comply with certain statutory duties under the Corporate Stabilization and Restructuring Act (*StaRUG*) the competent court may lift the moratorium, also on a creditor's application.

Limitations on Enforcement

Some of the German Guarantors are incorporated in Germany in the form of a limited liability company (*Gesellschaft mit beschränkter Haftung—"GmbH*"). Consequently, the granting of guarantees, indemnities and security interests by these companies is subject to certain provisions of the German Limited Liability Company Act (*Gesetz betreffend die Gesellschaften mit beschränkter Haftung, "GmbHG*") and other laws. These provisions would also apply to any future German Guarantor in the form of a GmbH or a partnership with a GmbH as unlimited liability partner (e.g., *Gesellschaft mit beschränkter Haftung & Compagnie Kommanditgesellschaft, "GmbH & Co. KG*").

GmbH Limitation Language—general

As a general rule, Sections 30 and 31 of the GmbHG ("Sections 30 and 31") prohibit a GmbH from disbursing its assets to its direct or indirect shareholders, to the extent that the amount of the GmbH's net assets (meaning, assets minus liabilities and liability reserves as determined under German Generally Accepted Accounting Principles) is already less or would fall below the amount of its stated share capital (*Stammkapital*); in case of a GmbH & Co. KG, such provisions apply to the general partner which is a GmbH. The granting or enforcement of guarantees or security interests by a GmbH or by a GmbH & Co. KG in order to guarantee or secure liabilities of a direct or indirect parent or sister company may be considered disbursements under Sections 30 and 31. Therefore, in order to enable German subsidiaries to issue guarantees or create security interests to secure liabilities of a direct or indirect parent or sister company without the risk of violating Sections 30 and 31, it is standard market practice for indentures, certain credit agreements, guarantees and security documents to contain "limitation language" in relation to subsidiaries incorporated or established in Germany in the legal form of a GmbH or a GmbH & Co. KG. Pursuant to such limitation language, the beneficiaries of the guarantees or the security interests agree, subject to certain adjustments and exemptions, to enforce the guarantees or the security interests against the German subsidiary only to the extent that such enforcement does not result in the GmbH's (or, in case of a KG, its general partner that is a GmbH) net assets falling below its stated share capital or, as the case may be, if the net assets are already below the amount of its stated share capital, to cause such amount to be further reduced. Accordingly, the Notes Guarantee, the Indenture and the Transaction Security Documents provided by the German Guarantors will contain such limitation language and therefore the enforcement of the Notes Guarantees, the Indenture and the Collateral is limited in the manner described. This could lead to a situation in which the respective Notes Guarantee or security granted by the relevant German Guarantor cannot be enforced at all.

German Limitation Language—"Wording"

The limitation language for any GmbH or GmbH & Co. KG to be incorporated into the relevant Notes Documents (as defined in "Description of the Notes"), in particular in the Indenture, will substantially be in the form as follows:

(a) Definitions

In this Section:

"**AktG**" means the German Stock Corporation Act (*Aktiengesetz, AktG*).

"**Auditor's Determination**" means the determination pursuant to paragraph (b)(iv) below.

"**BGB**" means the German Civil Code (*Bürgerliches Gesetzbuch, BGB*).

"**DPLA**" means a domination and/or profit and loss pooling agreement (*Beherrschungs- und/oder Gewinnabführungsvertrag*) as defined in § 291 (1) AktG.

"**EU Guarantor**" means any limited liability company (or limited partnership with a limited liability company as its general partner) incorporated in a jurisdiction other than Germany whose centre of main interest (as that term is used in Article 3(1) of Regulation (EU) No. 2015/848 of 20 May 2015 on Insolvency Proceedings) is in Germany.

"**German Guarantor**" means any GmbH Guarantor and any EU Guarantor.

"**GmbH**" means (i) a limited liability company (*Gesellschaft mit beschränkter Haftung, GmbH*) incorporated under German law and/or (ii) a limited partnership (*Kommanditgesellschaft*) with a limited liability company (*Gesellschaft mit beschränkter Haftung, GmbH*) as general partner (*Komplementär*).

"**GmbH Capital Impairment**" means the GmbH Net Assets of a GmbH Guarantor falling below the amount (*Entstehung einer Unterbilanz*) required to maintain that GmbH Guarantor's registered share capital (*Stammkapital*) or an increase of an existing shortage (*Vertiefung einer Unterbilanz*) of its registered share capital (*Stammkapital*) and thereby violating §§ 30, 31 GmbHG.

"**GmbH Guarantor**" means a Guarantor which is a GmbH.

"**GmbH Net Assets**" means the net assets (*Reinvermögen*) of a GmbH Guarantor calculated in accordance with § 42 GmbHG, §§ 242, 264 HGB and the generally accepted accounting principles applicable (*Grundsätze ordnungsgemäßer Buchführung*) from time to time in Germany as adjusted pursuant to paragraph (b)(vi) below.

"**GmbHG**" means the German Limited Liability Company Act (*Gesetz betreffend die Gesellschaften mit beschränkter Haftung, GmbHG*).

"**HGB**" means the German Commercial Code (*Handelsgesetzbuch, HGB*). "InsO" means the German Insolvency Code (*Insolvenzordnung, InsO*).

"**Limited Obligation**" means any guarantee and any other liability, indemnity or other payment obligation under any provision of the Notes Documents.

"**Limited Upstream Obligation**" means any Limited Obligation if and to the extent such Limited Obligation secures or relates to liabilities which are owed by direct or indirect shareholders of the relevant German Guarantor (upstream) or Subsidiaries of such shareholders (such Subsidiaries not to include the relevant German Guarantor and the Subsidiaries of that relevant German Guarantor) (cross-stream).

"**Liquidity Impairment**" means a German Guarantor being deprived of the liquidity necessary to fulfil its liabilities towards its creditors and thereby violating § 15 b (5) InsO.

"**Management Notification**" means the notification pursuant to paragraph (b)(iii) below.

(b) GmbH Capital Impairment Limitation Language

(i) Save as set out in this paragraph (b), the Trustee shall not enforce, and any GmbH Guarantor (and/or the relevant subsidiary of a GmbH Guarantor) shall have a defense (*Einrede*) against, any Limited Upstream Obligation if and to the extent a discharge (*Erfüllung*) or enforcement (*Vollstreckung*) in respect of a Limited Upstream Obligation would cause a GmbH Capital Impairment to occur.

(ii) The restrictions in paragraph (i) shall not apply:

(A) if and to the extent the Limited Upstream Obligation of the GmbH Guarantor secures any indebtedness under any Notes Document in respect of:

(1) loans to the extent such loans which are (directly or indirectly) on-lent or otherwise passed on to the relevant GmbH Guarantor or its Subsidiaries; or

(2) bank guarantees or letters of credit that are issued for the benefit of any of the creditors of the GmbH Guarantor or the GmbH Guarantor's Subsidiaries,

in each case, to the extent that any such on-lending or otherwise passing on or bank guarantees or letters of credit are still outstanding at the time of the enforcement of the relevant Limited Upstream Obligation; for the avoidance of doubt, nothing in this paragraph (ii) shall have the effect that such on-lent amounts may be enforced multiple times (no double dip);

(B) if, at the time of enforcement of the Limited Upstream Obligation, a DPLA (either directly or indirectly through an unbroken chain of domination and/or profit transfer agreements) exists between the Issuer or the relevant Guarantor whose obligations are secured by the relevant Limited Upstream Obligation as dominating company (*herrschendes Unternehmen*) and the relevant GmbH Guarantor as a dominated company (*beherrschtes Unternehmen*), provided that:

(1) the GmbH Guarantor is a Subsidiary of the Issuer or the relevant Guarantor whose obligations are secured by the relevant Limited Upstream Obligation; or

(2) the GmbH Guarantor and the Issuer or the relevant Guarantor whose obligations are secured by the relevant Limited Upstream Obligation are both Subsidiaries of a joint (direct or indirect) parent company with such parent company as dominating entity (*beherrschendes Unternehmen*),

in each case to the extent the relevant GmbH Guarantor has a fully valuable recourse claim (*vollwertiger Verlustausgleichsanspruch*) against the dominating company, unless a decision of the German Federal Supreme Court (*Bundesgerichtshof*) explicitly confirmed with reasons (and not, for example, as an obiter dictum) in a third party case that the mere existence of such DPLA leads to the inapplicability of § 30 (1) sentence 1 GmbHG;

(C) if and to the extent any payment under the Limited Upstream Obligation is covered (*gedeckt*) by a fully valuable and recoverable consideration or recourse claim (*vollwertiger Gegenleistungs- oder Rückgewähranspruch*) of the GmbH Guarantor against the Issuer or the relevant Guarantor whose obligations are secured by the relevant Limited Upstream Obligation; or

(D) if the relevant GmbH Guarantor has not complied with its obligations pursuant to paragraphs (iii) and/or (iv) (as applicable) below; however, if and to the extent that the relevant Limited Upstream Obligation has been enforced without regard to the restrictions contained in this paragraph (b) because the Management Notification and/or the Auditor's Determination has not (or not in a timely manner) been delivered pursuant to paragraphs (iii) and/or (iv) (as applicable) below, but the Auditor's Determination has then been delivered within four months from its due date in accordance with paragraphs (iv) below, the Trustee shall upon demand of the GmbH Guarantor to the Trustee repay any amount received from the GmbH Guarantor which pursuant to the Auditor's Determination would not have been available for enforcement, if the Auditor's Determination had been delivered in a timely manner.

(iii) If the relevant GmbH Guarantor does not notify the Trustee within fifteen (15) Business Days after the making of a demand against that GmbH Guarantor under the relevant Limited Upstream Obligation:

(A) to what extent such Limited Upstream Obligation is an upstream or cross-stream guarantee or indemnity; and

(B) to what extent a GmbH Capital Impairment would occur as a result of an enforcement of the Limited Upstream Obligation (setting out in reasonable detail the amount of its GmbH Net Assets, providing an up-to-date pro forma balance sheet),

then the restrictions set out in paragraph (i) above shall cease to apply until a Management Notification has been provided.

(iv) If the Trustee disagrees with the Management Notification, it may within twenty (20) Business Days of its receipt, request the relevant GmbH Guarantor to provide to the Trustee within forty-five (45) Business Days of receipt of such request a determination by the Auditors or any other auditors of international standard and reputation appointed by the GmbH Guarantor (at its own cost and expense) setting out in reasonable detail the amount in which the payment under the Limited Upstream Obligation would cause a GmbH Capital Impairment subject to the terms set out under this paragraph (b). Save for manifest errors, the Auditor's Determination shall be binding on all parties.

(v) If, after it has been provided with an Auditor's Determination which prevented it from demanding any or only partial payment under the Limited Upstream Obligation, the Trustee ascertains in good faith that the financial conditions of the GmbH Guarantor as set out in the Auditor's Determination has substantially improved, the Trustee (acting reasonably) may, at the GmbH Guarantor's cost and expense, arrange for the preparation of an updated balance sheet of the GmbH Guarantor by applying the same principles that were used for the preparation of the Auditor's Determination by the auditors who prepared the Auditor's Determination in order for such Auditors to determine whether (and, if so, to what extent) the GmbH Capital Impairment has been cured as result of the improvement of the financial condition of the GmbH Guarantor. The Trustee may not arrange for the preparation of an Auditor's Determination prior to the expiry of three months from the date of the issuance of the preceding Auditor's Determination. The Trustee may only demand payment under the Limited Upstream Obligation to the extent the Auditors determine that the GmbH Capital Impairment have been cured.

(vi) The GmbH Net Assets shall be adjusted as follows:

(A) the amount of any increase in the registered share capital of the relevant GmbH Guarantor which was carried out after the relevant GmbH Guarantor became a party to this Indenture and made from retained earnings (*Kapitalerhöhung aus Gesellschaftsmitteln*) shall be deducted from the amount of the registered share capital (*Stammkapital*) of the relevant GmbH Guarantor if it is expressly prohibited under the Notes Documents and has been carried out without the prior written consent of the Trustee;

(B) the amount of non-distributable assets according to § 253 (6) HGB shall not be included in the calculation of GmbH Net Assets;

(C) the amount of non-distributable assets according to § 268 (8) HGB shall not be included in the calculation of GmbH Net Assets;

(D) the amount of non-distributable assets according to § 272 (5) HGB shall not be included in the calculation of GmbH Net Assets; and

(E) loans or other liabilities incurred by the relevant GmbH Guarantor in willful or grossly negligent violation of the Notes Documents shall not be taken into account as liabilities.

(vii) Where a GmbH Guarantor claims in accordance with the provisions of this paragraph (b) that the Guarantee can only be enforced in a limited amount, it shall realize, to the extent lawful and within reasonable opinion commercially justifiable, any and all of its assets that are shown in the balance sheet with a book value (*Buchwert*) that is significantly lower than the market value of the assets and are not necessary for the relevant GmbH Guarantor's business (*nicht betriebsnotwendig*).

(c) Liquidity Impairment Limitation Language

(i) Save as set out in this paragraph (c), the Trustee shall not enforce, and any German Guarantor shall have a defense (*Einrede*) against, any Limited Upstream Obligation if and to the extent a payment and/or enforcement in respect of a Limited Upstream Obligation would cause a Liquidity Impairment for such German Guarantor.

(ii) Paragraphs (b)(iii), (b)(iv), (b)(v) and (b)(vii) above (including the repayment contemplated in paragraph (b)(ii)(D) above) shall apply mutatis mutandis to the restriction in paragraph (i) above.

(d) Where the provisions of this Section apply to a limited partnership (*Kommanditgesellschaft*), all references to the assets of a German Guarantor shall mutatis mutandis include a reference to the assets of the general partner (*Komplementär*) of such limited partnership (*Kommanditgesellschaft*).

(e) In addition to the restrictions set out in paragraphs (b) through (d) above, if a German Guarantor demonstrates that, according to the decisions of the German Federal Supreme Court (*Bundesgerichtshof*) or a higher regional court of appeals (*Oberlandesgericht*), the payment under and/ or enforcement of any Limited Upstream Obligation against such German Guarantor would result in personal liability of its managing director(s) (*Geschäftsführer*) or director(s) (*Vorstände*) for a reimbursement of payments made under any Limited Upstream Obligation (including, without limitation, pursuant to §§ 30, 31, 43 GmbHG, § 15b (5) InsO and/or § 826 BGB), the German Guarantor shall have a defense (Einrede) against the Limited Upstream Obligation to the extent required in order not to incur such liability.

(f) For the avoidance of doubt, the validity and enforceability of any Limited Upstream Obligation granted by a German Guarantor or of any subsidiary of a German Guarantor in respect of any borrowing liabilities which are owed by that German Guarantor or any of its subsidiaries shall not be limited under this Section.

(g) Nothing in this Section shall prevent the Trustee or a German Guarantor from claiming in court that payments under and/or an enforcement of the Limited Upstream Obligations do or do not fall within the scope of §§ 30, 31, 43 GmbHG, § 15b InsO and/or § 826 BGB (as applicable).

(h) Nothing in this Section shall constitute a waiver (*Verzicht*) of any right granted under this Indenture or any other Notes Document to the Trustee or vice versa.

(i) Each reference in this Section to a statutory provision shall be construed to be a reference to the relevant equivalent statutory provision (if any) as amended, re-enacted or replaced from time to time.

(j) Notwithstanding anything to the contrary in this Indenture, this Section and any rights and/or obligations arising out of it shall be governed by, and construed in accordance with, German law.

General Comments regarding GmbH Limitation Language

German capital maintenance, liquidity maintenance and financial assistance rules (including with respect to Sections 30, 31 GmbHG and Section 15b InsO), are subject to evolving case law. We cannot assure you that future court rulings may not further limit the access of shareholders to assets of its subsidiaries constituted in the form of a GmbH, which can negatively affect the ability of the German Guarantors to make payments on the Notes or the Notes Guarantees or the enforceability of the Notes Guarantees, the Indenture and the Transaction Security Documents relating to the Collateral provided by the German Guarantors.

In addition, it cannot be ruled out that the case law of the German Federal Supreme Court (*Bundesgerichtshof*) regarding destructive interference (*existenzvernichtender Eingriff*) (meaning, a situation in which a shareholder deprives a GmbH of the liquidity necessary for it to meet its own payment obligations) may be applied by courts with respect to the enforcement of a Guarantee or other collateral granted by the German Guarantors. In such a case, the amount of proceeds to be realized in an enforcement process may be reduced, even to nil. Moreover, according to a decision of the German Federal Supreme Court (*Bundesgerichtshof*), a security agreement may be void due to tortious inducement of breach of contract if a creditor knows about the stressed financial situation of the debtor and anticipates that the debtor will only be able to grant collateral by disregarding the vital interests of its other business partners. It cannot be ruled out that German courts may apply this case law with respect to the granting of the Guarantee or any Collateral by the German Guarantors.

The enforcement of security granted by a German Guarantor may also be excluded (entirely) in case the granting or enforcement of such security and/or the filing for insolvency as a consequence of a claim by any so secured finance party under such security resulted or would result in any personal liability of the relevant German Guarantor's managing directors pursuant to Section 15(b) InsO.

Furthermore, the beneficiary (for example, a holder of Notes) of a transaction qualifying as a repayment of the stated share capital of the grantor of a guarantee or security interest, as applicable, (for example, the provision or the enforcement of a guarantee or security interest) could moreover become personally liable under exceptional circumstances. The German Federal Supreme Court (Bundesgerichtshof) ruled that this could be the case if, for example, the creditor were to act with the intention of detrimentally influencing the position of the other creditors of the debtor in violation of the legal principle of bonos mores (Sittenwidrigkeit). Such intention could be present if the beneficiary of the transaction was aware of any circumstances indicating that the grantor of the guarantee or provider of security interest is close to collapse (Zusammenbruch), or had reason to enquire further with respect thereto.

Parallel Debt; Security Interests

Under German law, certain "accessory" security interests such as pledges (*Pfandrechte*) require that the pledgee and the creditor of the secured claim be the same person. Such accessory security interests (*akzessorische Sicherungsrechte*) cannot be held on behalf of third parties who do not (yet) hold the secured claim, will automatically lapse to the extent a secured claims is settled, discharged or novated, and may not be assigned independently, but will automatically follow the claims they secure in case the relevant secured claim is assigned. The holders of the Notes from time to time will not be party to the Transaction Security Documents. In order to permit the holders of the Notes from time to time to benefit from pledges granted to the Security Agent under German law, the Intercreditor Agreement will provide for the creation of a Parallel Debt (as defined therein). Pursuant to the creation of the Parallel Debt, the Security Agent has its own separate and independent claim equal to each amount payable by each obligor under, in particular, the Notes and the Notes Guarantees. The pledges governed by German law will directly and exclusively secure the Parallel Debt rather than the obligations under the Notes or the Notes Guarantees or the holders of the Notes directly. The validity of the Parallel Debt concept and of the pledges granted under German law to secure such Parallel Debt has not been tested before German courts, and there is no certainty that it will eliminate or mitigate the risk of unenforceability posed by German law. Therefore, the ability of the Security Agent to enforce the Collateral may be restricted. In addition, holders of the Notes bear some risk associated with a possible insolvency or bankruptcy of the Security Agent. See "*Risk Factors—Risks Related to the Notes—The Escrow Charge will be granted to the Trustee and the security interests in the remaining Collateral will be granted to the Security Agent, in each case, rather than directly to the holders of the Notes. The ability of the Trustee or the Security Agent, as applicable, to enforce the Collateral may be restricted by local law.*"

German law does not generally permit the appropriation of pledged assets by the pledgee upon enforcement of the pledge. The enforcement of a share pledge under German law usually requires the sale of the asset constituting the collateral through a formal process involving a public auction to which certain waiting periods and notice requirements apply. Under German law, it is unclear whether the security interest in the collateral gives the Security Agent the right to prevent other creditors of the entities having granted such security from foreclosing on and realizing the asset constituting the collateral.

Some courts have held that certain types of security interests only give their holders priority (according to their ranking) in the distribution of any proceeds from the realization of the asset constituting the collateral and no right to intervene (meaning, the right to request the court to impose a stay on proceedings initiated by other creditors).

In addition, under German law, a creditor who provided additional, or extended existing funding to a debtor or obtained security from a debtor may be liable in tort if such creditor was aware of the debtor's (impending) insolvency or of circumstances indicating such debtor's (impending) insolvency at the time such funding was provided or extended or such security was granted. The German Federal Supreme Court (*Bundesgerichtshof*) held that this could be the case if, for example, the creditor was to act with the intention of detrimentally influencing the position of the other creditors of the debtor in violation of the legal principle of bonos mores (*Sittenwidrigkeit*). Such intention could be present if the beneficiary of the transaction was aware of any circumstances indicating that the debtor as the grantor of the guarantee or security was close to collapse (*Zusammenbruch*), or had reason to enquire further with respect thereto.

TRANSFER RESTRICTIONS

You are advised to consult legal counsel prior to making any offer, resale, pledge or other transfer of any of the Notes offered hereby.

The Notes and the Note Guarantees (together, the "Securities") have not been, and will not be, registered under the Securities Act, or the securities laws of any other jurisdiction, and, unless so registered, may not be offered or sold except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and the securities laws of any other applicable jurisdiction. Accordingly, the Securities offered hereby are being offered and sold only to qualified institutional buyers (as defined in Rule 144A under the Securities Act) in reliance on Rule 144A under the Securities Act and in offshore transactions outside of the United States (in each case, as defined in Regulation S) in reliance on Regulation S under the Securities Act.

We use the terms "offshore transaction" and the "United States" with the meanings given to them in Regulation S.

Each purchaser of the Securities (other than the Initial Purchasers), by its acceptance thereof, will be deemed to have acknowledged, represented to, warranted to and agreed with the Issuer, each Guarantor and the Initial Purchasers as follows:

(1) The purchaser understands and acknowledges that the Securities have not been registered under the Securities Act or the securities laws of any other applicable jurisdiction and that the Securities are being offered for resale in transactions not requiring registration under the Securities Act or any other securities laws, including sales pursuant to Rule 144A under the Securities Act, and, unless so registered, may not be offered, sold or otherwise transferred except in compliance with the registration requirements of the Securities Act and any other applicable securities laws or pursuant to an exemption therefrom or in any transaction not subject thereto and, in each case, in compliance with the conditions for transfer set forth in paragraphs (4) and (5) below;

(2) The purchaser is not an "affiliate" (as defined in Rule 144 under the Securities Act) of the Issuer or any Guarantor, is not acting on behalf of the Issuer or any Guarantor and is either:

    (a) a qualified institutional buyer, within the meaning of Rule 144A under the Securities Act, and is aware that any sale of these Securities to them will be made in reliance on Rule 144A under the Securities Act, and such acquisition will be for their own account or for the account of another qualified institutional buyer; or

    (b) purchasing the Securities outside the United States in an offshore transaction in accordance with Regulation S under the Securities Act and, if resident in a member state of the EEA or the United Kingdom, not an EEA Retail Investor or a UK Retail Investor (as applicable);

(3) The purchaser acknowledges that none of the Issuer, the Guarantors, or the Initial Purchasers, nor any person representing any of them, has made any representation to it with respect to us or the offer or sale of any of the Securities, other than the information contained in this offering memorandum, which offering memorandum has been delivered to it and upon which it is relying in making its investment decision with respect to the Securities. It acknowledges that neither the Initial Purchasers nor any person representing the Initial Purchasers make any representation or warranty as to the accuracy or completeness of this offering memorandum. It has had access to such financial and other information concerning the Group and the Securities as it has deemed necessary in connection with its decision to purchase any of the Securities, including an opportunity to ask questions of, and request information from, the Issuer and the Initial Purchasers;

(4) The purchaser is purchasing the Securities for its own account, or for one or more investor accounts for which it is acting as a fiduciary or agent, in each case, for investment, and not with a view to, or for offer or sale in connection with, any distribution thereof in violation of the Securities Act or the securities laws of any other jurisdiction, subject to any requirement of law that the disposition of its property or the property of such investor account or accounts be at all times within its or their control and subject to its or their ability to resell such Securities to a qualified institutional buyer pursuant to Rule 144A, in offshore transactions outside the United States pursuant to Regulation S or any other exemption from registration available under the Securities Act, or in any transaction not subject to the Securities Act;

(5) The purchaser understands and agrees on its own behalf and on behalf of any investor account for which it is purchasing the Securities, and each subsequent holder of the Securities by its acceptance thereof will be deemed to agree, that if in the future it decides to resell, pledge or otherwise transfer any Securities or any beneficial interests in any Securities, it will do so prior to the date which is, in the case of Securities offered to qualified institutional buyers, one year after the later of the original issue date of such Securities, the original issue date of the issuance of any additional securities and the last date on which the

Issuer or any affiliate of the Issuer was the owner of such Security (or any predecessor of such Security) only (i) to the Issuer, the Guarantors or any subsidiary thereof, (ii) pursuant to a registration statement that has been declared effective under the Securities Act, (iii) for so long as the Securities are eligible for resale pursuant to Rule 144A under the Securities Act, to a person it reasonably believes is a qualified institutional buyer that purchases for its own account or for the account of a qualified institutional buyer to whom notice is given that the transfer is being made in reliance on Rule 144A under the Securities Act, (iv) pursuant to offers and sales that occur in offshore transactions outside the United States in compliance with Regulation S under the Securities Act or (v) pursuant to any other available exemption from the registration requirements of the Securities Act, subject in each of the foregoing cases to any requirement of law that the disposition of its property or the property of such investor account or accounts be at all times within its or their control and to compliance with any applicable state securities laws, and any applicable local laws and regulations, and further subject to the Issuer's and the Trustee's rights prior to any such offer, sale or transfer (I) pursuant to clause (v) to require the delivery of an opinion of counsel, certification and/or other information satisfactory to each of them and (II) in each of the foregoing cases, to require that a certificate of transfer in the form appearing on the reverse of the Security is completed and delivered by the transferor to the Trustee. The foregoing restrictions on resale will not apply subsequent to the Resale Restriction Termination Date;

(6) Each purchaser acknowledges that each Note sold in reliance on Rule 144A will contain a legend substantially to the following effect:

THIS SECURITY HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR THE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION. NEITHER THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE OFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH TRANSACTION IS EXEMPT FROM, OR NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT.

BY ITS ACQUISITION HEREOF, THE HOLDER OF THIS SECURITY (1) REPRESENTS THAT (A) IT IS A "QUALIFIED INSTITUTIONAL BUYER" (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) ("QIB"); (2) AGREES ON ITS OWN BEHALF AND ON BEHALF OF ANY INVESTOR FOR WHICH IT HAS PURCHASED SECURITIES TO OFFER, SELL OR OTHERWISE TRANSFER THIS SECURITY OR A BENEFICIAL INTEREST IN THIS SECURITY, PRIOR TO THE DATE WHICH IS ONE YEAR AFTER THE LATER OF THE ORIGINAL ISSUE DATE OF SUCH SECURITIES, THE ORIGINAL ISSUE DATE OF THE ISSUANCE OF ANY ADDITIONAL SECURITIES AND THE LAST DATE ON WHICH THE ISSUER OR ANY AFFILIATE OF THE ISSUER WAS THE OWNER OF SUCH SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY) ONLY (A) TO THE ISSUER, THE GUARANTORS OR ANY SUBSIDIARY THEREOF, (B) PURSUANT TO A REGISTRATION STATEMENT WHICH HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT, (C) FOR SO LONG AS THIS SECURITY IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT, TO A PERSON IT REASONABLY BELIEVES IS A "QUALIFIED INSTITUTIONAL BUYER" AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A UNDER THE SECURITIES ACT, (D) PURSUANT TO OFFERS AND SALES THAT OCCUR OUTSIDE THE UNITED STATES IN OFFSHORE TRANSACTIONS IN COMPLIANCE WITH REGULATION S UNDER THE SECURITIES ACT OR (E) PURSUANT TO ANY OTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, SUBJECT IN EACH OF THE FOREGOING CASES TO COMPLIANCE WITH ANY APPLICABLE STATE SECURITIES LAWS AND ANY APPLICABLE LOCAL LAWS AND REGULATIONS, AND FURTHER SUBJECT TO THE ISSUER'S AND THE TRUSTEE'S RIGHTS PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER PURSUANT TO CLAUSE (E) TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION AND/OR OTHER INFORMATION SATISFACTORY TO IT, INCLUDING A CERTIFICATE OF TRANSFER IN THE FORM APPEARING ON THE REVERSE OF THIS SECURITY; AND (3) AGREES THAT IT WILL TRANSFER TO EACH PERSON TO WHOM THIS SECURITY IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND.

If the purchaser purchases Securities, it will also be deemed to acknowledge that the foregoing restrictions apply to holders of beneficial interests in these Securities as well as to holders of these Securities.

(7) The purchaser agrees that it will give to each person to whom it transfers the Securities notice of any restrictions on the transfer of such Securities;

(8) The purchaser acknowledges that the Registrar will not be required to accept for registration or transfer any Securities acquired by it except upon presentation of evidence satisfactory to the Issuer and the Registrar that the restrictions set forth therein have been complied with;

(9) The purchaser acknowledges that the Issuer, the Initial Purchasers and others will rely upon the truth and accuracy of its acknowledgements, representations, warranties and agreements and agrees that if any of the acknowledgements, representations, warranties and agreements deemed to have been made by its purchase of the Securities is no longer accurate, it shall promptly notify the Initial Purchasers. If it is acquiring any Securities as a fiduciary or agent for one or more investor accounts, it represents that it has sole investment discretion with respect to each such investor account and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each such investor account; and

(10) The purchaser understands that no action has been taken in any jurisdiction (including the United States) by the Issuer or the Initial Purchasers that would result in a public offering of the Securities or the possession, circulation or distribution of this offering memorandum or any other material relating to us or the Securities in any jurisdiction where action for such purpose is required. Consequently, any transfer of the Securities will be subject to the selling restrictions set forth under "*Plan of Distribution*" and "*Transfer Restrictions*."

(11) The purchaser acknowledges that the Issuer, the Initial Purchasers and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations, warranties and agreements and agrees that if any of the acknowledgements, representations, warranties and agreements deemed to have been made by its purchase of the Notes (including the Note Guarantees) is no longer accurate, it will promptly notify the Initial Purchasers. If the purchaser is acquiring any Notes (including the Note Guarantees) as a fiduciary or agent for one or more investor accounts, the purchaser represents that it has sole investment discretion with respect to each such investor account and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each such investor account.

(12) The purchaser represents, warrants and agrees that:

(c) if such holder or beneficial owner is not a United States person as defined in Section 7701(a)(30) of the Code, (i) such holder or beneficial owner qualifies for an exemption from U.S. federal withholding tax with respect to payments of interest pursuant to an applicable income tax treaty to which the United States is a party; or (ii)(x) such holder or beneficial owner does not, actually or constructively, own 10% or more of the Issuer's voting stock within the meaning of Section 871(h)(3) of the Code; (y) such holder or beneficial owner is not a controlled foreign corporation related to the Issuer through actual or constructive stock ownership for U.S. federal income tax purposes; and (z) such holder or beneficial owner is not a bank;

(d) such holder or beneficial owner (and any intermediary through which such holder or beneficial owner holds the Notes) qualifies for an exemption from any taxes imposed under the U.S. Foreign Account Tax Compliance Act (which shall, for this purpose, refer to any taxes imposed under Sections 1471 through 1474 of the Code (and any amended or successor version), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code, or any law or regulation implementing an intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing);

(e) such holder or beneficial owner is able to provide any required U.S. tax documentation to certify to the foregoing representations or to such holder's or beneficial owner's status as a United States person as defined in Section 7701(a)(30) of the Code upon reasonable request by the Issuer or an applicable withholding agent;

(f) such holder or beneficial owner agrees to give to each person to whom such holder or beneficial owner transfers the Notes notice of its requirement to meet the foregoing tax representations and documentation requirements.

Persons who come into possession of this offering memorandum are advised to inform themselves about and to observe any restrictions relating to the offering, the distribution of this offering memorandum and resale of the Notes. See "*Important Information About This Offering Memorandum*," and "*Plan of Distribution*."

PLAN OF DISTRIBUTION

The Issuer has agreed to sell to the Initial Purchasers, and the Initial Purchasers have agreed, severally and not jointly, to purchase from the Issuer, the entire principal amount of the Notes at the price specified on the cover of this offering memorandum. The sale of the Notes will be made pursuant to a purchase agreement among the Issuer and the Initial Purchasers to be dated the date of the final offering memorandum (the "Purchase Agreement").

The obligations of the Initial Purchasers under the Purchase Agreement, including their agreement to purchase the Notes from the Issuer, are several and not joint. The Purchase Agreement provides that the Initial Purchasers will purchase all the Notes if they purchase any of them.

The Initial Purchasers initially propose to offer the Notes for resale at the issue price that appears on the cover of this offering memorandum. Depending on market conditions, certain of the Initial Purchasers may decide to initially purchase and hold a portion of the Notes for their own accounts. After the initial Offering, the Initial Purchasers may change the price at which the Notes are offered and any other selling terms at any time without notice. The Initial Purchasers may offer and sell the Notes through certain of their affiliates, including in respect of sales into the United States. To the extent that any Initial Purchaser that is not a U.S. registered broker dealer intends to effect any sales of the Notes in the United States, it will do so through one or more U.S. registered broker dealer affiliates as permitted by guidelines promulgated by the Financial Industry Regulatory Authority. The Initial Purchasers reserve the right to withdraw, cancel or modify offers to investors and to reject orders in whole or in part.

Persons who purchase the Notes from the Initial Purchasers may be required to pay stamp duty, taxes and other charges in accordance with the laws and practice of the country of purchase in addition to the offering price set forth on the cover page hereof.

The Issuer has agreed to pay the Initial Purchasers certain customary fees for their services in connection with this Offering and to reimburse them for certain out of pocket expenses.

The Sponsor or its affiliates may place a purchase order for and be allocated the Notes at a purchase price per Note equal to the issue price set forth on the cover page of this offering memorandum, subject to a pass through of the Initial Purchasers' discount (ignoring any credit) in respect of the Notes purchased by such persons.

Investment funds advised by entities affiliated with the Sponsor may purchase Notes in the Offering at a purchase price per Note equal to the issue price set forth on the cover page of this offering memorandum, and in the case of investment funds registered under the Investment Company Act of 1940, as amended (the "1940 Act"), subject to the 1940 Act. The Purchase Agreement between the Issuer and the Initial Purchasers will not restrict the ability of the funds and the affiliates of the Sponsor to buy or sell the Notes in the future and, as a result, these investment funds and affiliates of the Sponsor may buy or sell Notes in open market transactions at any time following the consummation of the Offering.

The Purchase Agreement provides that the obligations of the Initial Purchasers to pay for and accept delivery of Notes are subject to, among other conditions, the delivery of certain legal opinions by counsel. The Purchase Agreement also provides that, if an Initial Purchaser defaults, the purchase commitments of the non-defaulting Initial Purchasers may be increased or, in some cases, the Offering may be terminated.

The Purchase Agreement provides that the Issuer and each of the Guarantors will indemnify and hold harmless the Initial Purchasers against certain liabilities, including liabilities under the Securities Act, and will contribute to payments that the Initial Purchasers may be required to make in respect thereof. We have agreed not to offer, sell, contract to sell or otherwise dispose of, except as provided under the Purchase Agreement, any debt securities of, or guaranteed by, the Issuer and the Guarantors or any of their subsidiaries that are substantially similar to the Notes during the period from the date of the Purchase Agreement through and including the date falling 45 days after the closing of the Offering without the prior written consent of the representatives of the Initial Purchasers.

The Notes and the Note Guarantees have not been and will not be registered under the Securities Act and may not be offered or sold within the United States except to qualified institutional buyers in reliance on Rule 144A and in offshore transactions outside the United States in reliance on Regulation S. Terms used in this paragraph have the meanings given to them by Regulation S. Resales of the Notes are restricted as described under "*Notice to Certain Investors*" and "*Transfer Restrictions*."

Each Initial Purchaser has, severally and not jointly, represented, warranted and agreed that it:

- has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which section 21(1) of the FSMA does not apply to the Issuer or any Guarantor; and

- has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the EEA. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; (ii) a customer within the meaning of the Insurance Distribution Directive, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in the Prospectus Regulation. Consequently no key information document required by the PRIIPs Regulation for offering or selling the securities or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

Solely for the purposes of each manufacturer's approval process, the target market assessment in respect of the securities described in this offering memorandum has led to the conclusion that: (i) the target market for such securities is ECPs and professional clients only, each as defined in MiFID II; and (ii) all channels for distribution of such securities to ECPs and professional clients are appropriate. Any distributor should take into consideration the manufacturers' target market assessment; however, and without prejudice to the Issuer's obligations in accordance with MiFID II, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of such securities (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the UK. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; (ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA. Consequently, no key information document required by the UK PRIIPs Regulation for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and, therefore, offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the securities described in this offering memorandum has led to the conclusion that: (i) the target market for such securities is only eligible counterparties, as defined in the COBS, and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of UK MiFIR; and (ii) all channels for distribution of such securities to eligible counterparties and professional clients are appropriate. Any distributor should take into consideration the manufacturer's target market assessment; however, a distributor subject to the UK MiFIR Product Governance Rules is responsible for undertaking its own target market assessment in respect of such securities (by either adopting or refining the manufacturer's target market assessment) and determining appropriate distribution channels.

This offering memorandum has been prepared on the basis that any offer of Notes in any Member State of the EEA or in the UK will be made pursuant to an exemption under the Prospectus Regulation and the UK Prospectus Regulation, respectively, from the requirement to publish a prospectus for offers of Notes. This offering memorandum is not a prospectus for the purposes of the Prospectus Regulation and the UK Prospectus Regulation.

No action has been taken in any jurisdiction, including the United States and the United Kingdom, by us or the Initial Purchasers that would permit a public offering of the Notes or the possession, circulation or distribution of this offering memorandum or any other material relating to us or the Notes in any jurisdiction where action for this purpose is required. Accordingly, the Notes may not be offered or sold, directly or indirectly, and neither this offering memorandum nor any other offering material or advertisements in connection with the Notes may be distributed or published, in or from any country or jurisdiction, except in compliance with any applicable rules and regulations of any such country or jurisdiction. This offering memorandum does not constitute an offer to sell or a solicitation of an offer to purchase in any jurisdiction where such offer or solicitation would be unlawful. Persons into whose possession this offering memorandum comes are advised to inform themselves about and to observe any restrictions relating to the offering of the Notes, the distribution of this offering memorandum and resale of the Notes. See "*Notice to Certain Investors*" "*Transfer Restrictions*."

The Issuer has also agreed that they will not at any time offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any securities under circumstances in which such offer, sale, pledge, contract or disposition would cause the exemption afforded by Section 4(a)(2) of the Securities Act or the safe harbors of Rule 144A and Regulation S to cease to be applicable to the offer and sale of the Notes.

The Issuer will apply, through their Listing Agent, for the listing of and permission to deal in the Notes on the Official List of the Exchange; however, the Issuer cannot assure you that such listing will be obtained or, if obtained, maintained.

The Initial Purchasers have advised us that they intend to make a market in the Notes as permitted by applicable law. The Initial Purchasers are not obligated, however, to make a market in the Notes, and any market making activity may be discontinued at any time at the sole discretion of the Initial Purchasers without notice. In addition, any such market making activity will be subject to the limits imposed by law. Accordingly, we cannot assure you that any market for the Notes will develop, that it will be liquid if it does develop, or that you will be able to sell any Notes at a particular time or at a price which will be favorable to you. See "*Risk Factors—Risks Relating the Notes—Transfer of the Notes will be restricted, which may adversely affect the value of the Notes.*"

In connection with the offering, the Stabilizing Manager, or a person acting on its behalf, may engage in transactions that stabilize, maintain or otherwise affect the price of the Notes. Specifically, the Stabilizing Manager may bid for and purchase Notes in the open markets for the purpose of pegging, fixing or maintaining the price of the Notes. The Stabilizing Manager may also over-allot the Offering, creating a syndicate short position, and may bid for and purchase Notes in the open market to cover the syndicate short position. In addition, the Stabilizing Manager may bid for and purchase Notes in market making transactions as permitted by applicable laws and regulations and impose penalty bids. These activities may stabilize or maintain the respective market price of the Notes above market levels that may otherwise prevail. The Stabilizing Manager is not required to engage in these activities, and may end these activities at any time. Accordingly, no assurance can be given as to the liquidity of, or trading markets for, the Notes. See "*Risk Factors—Risks Related to the Notes—Transfer of the Notes will be restricted, which may adversely affect the value of the Notes*."

These stabilizing transactions, covering transactions and penalty bids may cause the price of the Notes to be higher than it would otherwise be in the absence of these transactions. These transactions may begin on or after the date on which adequate public disclosure of the terms of the offering of the Notes is made and, if commenced, may be discontinued at any time at the sole discretion of the Initial Purchasers. If these activities are commenced, they must end no later than the earlier of 30 calendar days after the date of issuance of the Notes and 60 calendar days after the date of the allotment of the Notes. These transactions may be effected in the over the counter market or otherwise.

Under Rule 15c6-1 of the U.S. Exchange Act, trades in the secondary market generally are required to settle in two business days (as such term is used for purposes of Rule 15c6 1 of the U.S. Exchange Act) unless the parties to any such trade expressly agree otherwise. We expect that delivery of the Notes will be made against payment on or about the date specified on the cover page of this offering memorandum, which will be business days following the date of pricing of the Notes (this settlement cycle is being referred to as "T+ "). Accordingly, purchasers who wish to trade such Notes on the date of this offering memorandum or the next succeeding business days will be required to specify an alternative settlement cycle at the time of any such trade to prevent a failed settlement. Purchasers of the Notes who wish to make such trades should consult their own advisors.

The Initial Purchasers and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Initial Purchasers or their respective affiliates from time to time have provided in the past, are currently providing, or may in the future provide, investment banking, financial advisory, commercial banking, various lending, hedging, cash management, guarantee or other banking or budgeting services to us and our affiliates under bilateral agreements or local facilities in the ordinary course of business, for which they have received or may receive customary fees and commissions. The Initial Purchasers or their affiliates may also receive allocations of the Notes. In addition, the Initial Purchasers or their respective affiliates will act as mandated lead arrangers and original lenders, as applicable, under the Senior Secured Credit Facilities Agreement, which we will enter into as borrowers and draw to provide financing for the Acquisition. The Initial Purchasers and their respective affiliates may also act as counterparties in hedging arrangements. In addition, certain of the Initial Purchasers or certain of their respective affiliates advised the Sponsors on the Acquisition. The Initial Purchasers or their respective affiliates have provided a bridge facility that will be cancelled, including all commitments thereunder, on the Issue Date. In addition, Deutsche Bank AG, London Branch, an affiliate of Deutsche Bank Aktiengesellschaft, will act as administrative agent and security agent under the Senior Secured Credit Facilities Agreement. Certain of the Initial Purchasers and/or its affiliates are lenders under the Existing Credit Facilities Agreement which will be repaid and terminated on or around the Acquisition Closing Date. In connection with their services in such capacities, the Initial Purchasers and their respective affiliates have received in the past, or will receive in the future, customary fees and commissions.

In the ordinary course of their business activities, the Initial Purchasers and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and instruments of ours or our affiliates, including the Notes. If the Initial Purchasers or their affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. Typically, the Initial Purchasers and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities, including potentially the Notes offered hereby. Any such short positions could adversely affect future trading prices of the Notes offered hereby. The Initial Purchasers and their affiliates may also make investment recommendations and publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to customers that they acquire, long and short positions in such securities and instruments.

SERVICE OF PROCESS AND ENFORCEMENT OF CIVIL LIABILITIES

The Issuer and certain Guarantors are incorporated under the laws of Germany. Most of our managers and executive officers live outside the United States. A substantial portion of our assets and the assets of our directors, managers and executive officers are located outside the United States. As a result, although we have appointed an agent for service of process under the Indenture governing the Notes, it may be difficult for you to serve process on those persons or us in the United States or to enforce judgments obtained in U.S. courts against them or us based on civil liability provisions of the securities laws of the United States.

Germany

We have been advised by our German counsel that there is doubt as to the enforceability in Germany of civil liabilities based on federal or state securities laws of the United States, either in an original action or in an action to enforce a judgment obtained in U.S. federal or state courts. The United States and the Federal Republic of Germany currently do not have a treaty providing for the reciprocal recognition and enforcement of judgments, other than arbitration awards, in civil and commercial matters. The enforceability of final judgments therefore may depend on the laws of the relevant U.S. state and federal laws of the United States. Consequently, a final judgment for payment given by any federal or state court in the United States, whether or not predicated solely upon U.S. federal or state securities laws, would not automatically be enforceable in Germany. A final judgment by a U.S. federal or state court, however, may be recognized and enforced in Germany in an action before a court of competent jurisdiction in accordance with the proceedings set forth by the German Code of Civil Procedure (*Zivilprozessordnung*). In such an action, a German court generally will not reinvestigate the merits of the original matter decided by a U.S. court, except as noted below.

German courts will, in particular, not recognize and enforce such judgments if the judgment is not final under applicable U.S. federal or state law or if any of the reasons for excluding enforceability set forth in section 328(1) of the German Code of Civil Procedure exist:

- if, pursuant to German law, the U.S. federal or state court having rendered the foreign judgment did not have jurisdiction;
- if process has not been duly served or has not been served in a timely fashion to permit a defense, provided that the defendant did not actively participate in such process and pleads accordingly;
- if the judgment is incompatible with a prior judgment rendered by a German court or by a foreign court which is to be recognized in Germany;
- if the judgment, or the proceeding resulting in the judgment, to be recognized is incompatible with a proceeding in Germany which was pending (*rechtshängig*) before a German court before the U.S. federal or state court entered its judgment;
- if a recognition of the judgment would be obviously incompatible with essential principles of German law, in particular, if the recognition would be incompatible with the civil rights (*Grundrechte*) guaranteed by virtue of the German Constitution (*Grundgesetz*); and
- if reciprocity is not ensured (i.e., the U.S. federal or state courts would not recognize and enforce a comparable judgment by a German court in equivalent circumstances).

Subject to the foregoing, holders of the Notes may be able to enforce judgments in civil and commercial matters obtained from U.S. federal or state courts in Germany. There is some German case law to the effect that reciprocity of the recognition of judgments is ensured in relation to claims relating to assets (*vermögensrechtliche Ansprüche*) with regard to various U.S. states. We cannot, however, assure you that attempts to enforce judgments in Germany will be successful. It is also doubtful whether a German court would accept jurisdiction and impose civil liability in an original action solely predicated by U.S. federal securities laws.

In addition, the recognition and enforcement of punitive damages are usually denied by German courts as incompatible with the essential principles of German law. Moreover, a German court may reduce the amount of damages granted by a U.S. court and recognize damages only to the extent that they are necessary to compensate actual losses or damages.

Consequently, judgments awarding monetary damages under civil liabilities provisions of the U.S. federal securities laws may not be enforceable to the extent they provide for a compensation that would qualify as being of a penal or punitive nature.

German civil procedure differs substantially from U.S. civil procedure in a number of respects. In so far as the production of evidence is concerned, U.S. law and the laws of several other jurisdictions based on common law provided for pretrial discovery, a process by which parties to the proceedings may, prior to trial, compel the production of documents by adverse or third parties and/or the deposition of witnesses. Evidence obtained in this matter may be decisive in the outcome of any proceeding. No such pretrial discovery process exists under German law.

If the party in whose favor such final judgment is rendered brings a new lawsuit in a competent court in Germany, such party may submit to the German court the final judgment rendered in the United States. Under such circumstances, a judgment by a federal or state court of the United States against the Issuer or such persons will be regarded by a German court only as evidence of the outcome of the dispute to which such judgment relates. A German court may choose to re-hear the dispute and may render a judgment not in line with the judgment rendered by a federal or state court of the United States.

In addition, it may under certain circumstances also not be possible for investors to effect service of process within Germany upon the German Guarantors or those persons under the Convention on the Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters of November 15, 1965 and the German law implementing such convention if such service were deemed to infringe German sovereignty or security, which may be the case if such service violated the fundamental principles of German law, in particular the civil rights (*Grundrechte*) guaranteed by virtue of the German Constitution (*Grundgesetz*). However, the German Constitutional Court (*Bundesverfassungsgericht*) held in 2013 that service may not be denied solely because the action before the U.S. court contains claims for punitive damages.

LEGAL MATTERS

Certain legal matters in connection with the Offering will be passed upon for us by Kirkland & Ellis International LLP, as to matters of U.S. federal, New York State, English and German law. Certain legal matters in connection with the Offering will be passed upon for the Initial Purchasers by Latham & Watkins (London) LLP, as to matters of U.S. federal, New York State and English law, and Latham & Watkins LLP, as to matters of German law.

INDEPENDENT AUDITORS

The Audited Financial Statements included in this offering memorandum, have been audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Friedrichstraße 14, 70174 Stuttgart, Germany, a member of the German Chamber of Public Accountants (*Wirtschaftsprüferkammer*), Berlin ("PwC"), as independent auditors, as stated in each of their reports appearing herein. English language translations of the German-language Audited Financial Statements and the respective auditor's reports thereon are included in this offering memorandum. The independent auditor's reports issued on the Audited Financial Statements also refer to the respective group management reports. The group management reports as a whole are not included or incorporated by reference in this offering memorandum. These were prepared by and are the sole responsibility of Target's management in accordance with German generally accepted accounting principles. The examinations of and the auditor's report upon such group management reports are required and were performed in accordance with section 317 of the German Commercial Code (*Handelsgesetzbuch, HGB*) and German generally accepted standards for the audit of management reports promulgated by the German *Institut der Wirtschaftsprüfer* (IDW). Those examinations were not made in accordance with generally accepted auditing or attestation standards in the United States. Accordingly, PwC does not express any opinion on this information or on the Audited Financial Statements included in the Offering Memorandum, in each case in accordance with U.S. generally accepted auditing standards or U.S. attestation standards. The information contained in such group management reports and the auditor's reports upon such group management reports should not be relied upon by U.S. investors.

Change in auditors

On October 28, 2021, CeramTec appointed Deloitte GmbH as independent auditors for the annual financial statements as of and for the year ended December 31, 2021.

WHERE YOU CAN FIND OTHER INFORMATION

Each purchaser of the Notes from the Initial Purchasers will be furnished with a copy of this offering memorandum and any related amendments or supplements to this offering memorandum. Each person receiving this offering memorandum and any related amendments or supplements to the offering memorandum acknowledges that:

(1) such person has been afforded an opportunity to request from us, and to review and has received, all additional information considered by it to be necessary to verify the accuracy and completeness of the information herein;

(2) such person has not relied on the Initial Purchasers or any person affiliated with the Initial Purchasers in connection with its investigation of the accuracy of such information or its investment decision; and

(3) except as provided pursuant to (1) above, no person has been authorized to give any information or to make any representation concerning the Notes offered hereby other than those contained herein and, if given or made, such other information or representation should not be relied upon as having been authorized by us or the Initial Purchasers.

While any of the Notes remain outstanding and are "restricted securities" within the meaning of the Rule 144(a)(3) under the Securities Act, we will, during any period in which we are neither subject to the reporting requirements of Section 13 or 15(d) of the U.S. Exchange Act, nor exempt from the reporting requirements under Rule 12g3 2(b) of the U.S. Exchange Act, provide to any holder or beneficial owner of such restricted securities or to any prospective purchaser of such restricted securities designated by such holder or beneficial owner, in each case upon the written request of such holder, beneficial owner or prospective purchaser, the information required to be provided by Rule 144A(d)(4) under the Securities Act.

Pursuant to the Indenture governing the Notes, and so long as the Notes are outstanding, we will furnish periodic information to holders of the Notes. See "*Description of the Notes—Certain Covenants—Reports*."

Copies of the Issuer's organizational documents, the Indenture and the most recent financial statements published by us may be inspected at the office of the Paying Agent during normal business hours for a period of 14 days following the grant of listing of the Notes. See "*Listing and General Information*." Copies of such documents will also be available at the office of the Issuer following written request to the address of the Issuer on and after the grant of listing of the Notes.

LISTING AND GENERAL INFORMATION

Admission to Trading and Listing

Application will be made to the Authority for the listing of and permission to deal in the Notes on the Official List of the Exchange. There can be no assurance that the Notes will be listed on the Official List of the Exchange, that such permission to deal in the Notes will be granted or that such listing will be maintained.

The Notes are only intended to be offered in the primary market to, and held by, investors who are particularly knowledgeable in investment matters.

Clearing Information

The Notes have been, or will be, accepted for clearance through the facilities of Euroclear and Clearstream, as applicable, under the common codes and ISIN numbers set forth below:

	ISIN	Common Code
Rule 144 Global Note		
Regulation S Global Note		

Periodic Reporting Under the Exchange Act

The Issuer is currently not subject to the periodic reporting and other information requirements of the Exchange Act.

Resolutions, Authorizations and Approvals by Virtue of which the Notes have been Issued

The Issuer and the Guarantors have, or will have, obtained all necessary consents, approvals and authorizations (if any) in connection with the issuance of the Notes and the issuance of the Note Guarantees thereon, respectively. The issuance of the Notes will be approved by the board of managers or shareholders, as applicable, of the Issuer prior to the Issue Date.

General Information on the Issuer

The Issuer is a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany. As of the date of this offering memorandum, the Issuer has no material assets or liabilities and has not engaged in any activities other than those related to its formation and the Transactions. The Issuer is registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under registration number HRB 267748. The Issuer's registered office is at Schwanthalerstraße 73, c/o SCUR24 Holding GmbH, 80336 Munich, Germany. The Issuer's Legal Entity Identifier is 98450044C9BACG3DA974.

General Information on the Issue Date Guarantors

The Issue Date Guarantors are listed and described below.

CTEC III GmbH is a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of Germany, registered in the commercial register of the local court (*Amtsgericht*) of Munich under HRB 267814, with business address at Schwanthalerstraße 73, c/o SCUR24 Holding GmbH, 80336 Munich, Germany.

Post-Closing Guarantors

Within 120 days from the business day immediately after the Acquisition Closing Date, subject to and in accordance with the Agreed Security Principles and to certain material limitations pursuant to applicable laws, the Notes are expected to be guaranteed on a senior subordinated basis by certain members of the Target Group that will guarantee the Senior Secured Credit Facilities Agreement. Such members of the Target Group granting such Note Guarantees are currently expected to be CeramTec GmbH and CeramTec North America LLC.

Post-Issue Reporting

Except as otherwise provided in this offering memorandum or as required by applicable law or regulation, we do not intend to provide post-issue information regarding the Notes. See "*Description of the Notes*" and "*Where You Can Find Other Information*."

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CeramTec TopCo GmbH

Plochingen

Interim Condensed
Consolidated Financial Statements
for the period ended
30 September 2021

CeramTec TopCo GmbH, Plochingen

Interim condensed consolidated statement of financial position as at 30 September 2021

Assets	Notes	30 September 2021	31 December 2020
		EUR k	EUR k
Goodwill	4.1	898,226	874,613
Other intangible assets	4.1	954,463	976,472
Property, plant and equipment	4.2	282,185	278,689
Other financial assets	4.3	24,779	10,275
Other assets	4.4	3,922	4,078
Deferred tax assets		718	934
Non-current assets		**2,164,293**	**2,145,061**
Inventories		98,299	91,565
Trade receivables	4.5	74,657	51,880
Income tax receivables		2,873	3,015
Other financial assets	4.3	1,815	3,262
Other receivables and assets	4.4	9,289	8,303
Cash and cash equivalents	4.6	275,965	244,118
Current assets		**462,898**	**402,143**
Total Assets		**2,627,191**	**2,547,204**

Equity and Liabilities	Notes	30 September 2021	31 December 2020
		EUR k	EUR k
Issued capital	4.7	25	25
Capital reserves	4.7	780,371	780,371
Accumulated losses	4.7	-539,022	-598,134
Accumulated other comprehensive income	4.7	-340	-1,305
Equity		**241,034**	**180,957**
Provisions for pension obligations	4.8	114,986	124,350
Other provisions		2,759	2,761
Financial liabilities to affiliates	4.9	288,665	273,523
Financial liabilities to third parties	4.10	1,604,509	1,597,098
Other liabilities	4.11	1,051	3,763
Deferred tax liabilities		267,679	270,110
Non-current liabilities		**2,279,649**	**2,271,605**
Other provisions		21,376	15,797
Provision for taxes		7,527	3,929
Financial liabilities to affiliates	4.9	0	312
Financial liabilities to third parties	4.10	29,502	23,973
Trade payables		24,839	29,034
Other liabilities	4.11	23,264	21,597
Current liabilities		**106,508**	**94,642**
Total liabilities		**2,386,157**	**2,366,247**
Total equity and liabilities		**2,627,191**	**2,547,204**

CeramTec TopCo GmbH, Plochingen

Interim condensed consolidated statement of comprehensive income from 1 January to 30 September 2021

	Notes	1 July to 30 September 2021	1 July to 30 September 2020	1 January to 30 September 2021	1 January to 30 September 2020
		EUR k	EUR k	EUR k	EUR k
Revenue	3.1	157,424	138,113	495,060	418,316
Cost of sales	3.2	89,339	82,359	275,119	251,263
Gross profit		**68,085**	**55,754**	**219,941**	**167,053**
Selling costs	3.3	23,730	20,624	72,827	65,778
Research and development costs	3.4	5,494	4,834	16,991	15,602
General administrative costs	3.5	6,930	5,893	19,126	17,741
Other income and expenses (-), net	3.6	366	-647	3,153	-136,487
Operating income		**32,297**	**23,756**	**114,150**	**-68,555**
Interest income and other finance income		11,128	6,130	26,105	2,408
Interest expenses and other finance costs		23,214	19,435	65,343	85,515
Financial result	3.7	**-12,086**	**-13,305**	**-39,238**	**-83,107**
Profit / loss (-) before income tax		**20,211**	**10,451**	**74,912**	**-151,662**
Income tax expense		-7,369	-4,756	-24,217	-1,920
Net profit / net loss (-) for the period		**12,842**	**5,695**	**50,695**	**-153,582**
Items that will not be reclassified through profit or loss					
Income / expenses (-) from the remeasurement of pension provisions		380	-5,496	11,838	-6,514
Deferred taxes		-110	1,588	-3,421	1,885
		270	**-3,908**	**8,417**	**-4,629**
Items that may be reclassified subsequently to profit or loss					
Losses (-) / gains on cash flow hedges		-259	3	-75	-736
Deferred taxes		75	-1	22	213
		-184	**2**	**-53**	**-523**
Exchange differences on translation of foreign operations		848	-679	1,018	-2,137
Other comprehensive income / loss (-), net of income tax		**934**	**-4,585**	**9,382**	**-7,289**
Total comprehensive income / loss (-)		**13,776**	**1,110**	**60,077**	**-160,871**

CeramTec TopCo GmbH, Plochingen

Interim condensed consolidated statement of cash flows from 1 January to 30 September 2021

	1 January to 30 September 2021	1 January to 30 September 2020
	EUR k	EUR k
Net profit / net loss (-) for the period	50,695	-153,582
Income tax expense	24,217	1,920
Interest result (without changes in fair value of derivatives)	60,262	56,051
Amortisation, depreciation and impairment charges of non-current assets	82,440	217,272
Loss on disposal of property, plant and equipment and intangible assets	317	41
Increase in provisions (excluding deferred taxes)	6,669	634
Income tax payment (-)	-28,721	-21,955
Other non-cash income (-) / expenses, net	-22,573	22,283
Increase (-) / decrease in inventories	-2,465	3,058
Increase (-) in trade receivables	-22,075	-13,164
Increase (-) / decrease in other receivables and (financial) assets	603	-1,847
Decrease (-) in trade payables	-1,680	-4,490
Increase / decrease (-) in other (financial) liabilities	3,896	-4,335
Cash flow from operating activities	**151,585**	**101,886**
Cash received from disposals of property, plant and equipment	231	203
Cash paid (-) for investments in property, plant and equipment	-24,383	-24,677
Cash paid (-) for investments in intangible assets	-2,683	-2,377
Cash paid (-) for the acquisition of entities	-48,960	0
Cash flow from investing activities	**-75,795**	**-26,851**
Interest paid (-)	-42,825	-80,687
Repayment (-) of shareholder loan	0	-19,599
Cash paid for capitalized leases (right-of-use assets)	-2,568	-1,956
Cash flow from financing activities	**-45,393**	**-102,241**
Change in cash and cash equivalents	**30,397**	**-27,207**
Net foreign exchange difference	1,450	-689
Cash and cash equivalents at the beginning of the period	244,118	64,380
Cash and cash equivalents at the end of the period	**275,965**	**36,484**

Please refer to notes, section 5

CeramTec TopCo GmbH, Plochingen

Interim condensed consolidated statement of changes in equity for the period ended 30 September 2021

	Issued capital	Capital reserves	Accumulated losses	Accumulated other comprehensive income: Cash flow hedge reserve	Accumulated other comprehensive income: Difference from currency translation	Equity
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
31 December 2019	**25**	**780,371**	**-442,793**	**510**	**355**	**338,468**
Net loss for the period	0	0	-153,582	0	0	-153,582
Other comprehensive loss	0	0	-4,629[1]	-523[2]	-2,137[2]	-7,289
Total comprehensive loss	*0*	*0*	*-158,211*	*-523*	*-2,137*	-160,871
30 September 2020	**25**	**780,371**	**-601,004**	**-13**	**-1,782**	**177,597**
31 December 2020	**25**	**780,371**	**-598,134**	**223**	**-1,528**	**180,957**
Net income for the period	0	0	50,695	0	0	50,695
Other comprehensive income / loss (-)	0	0	8,417[1]	-53[2]	1,018[2]	9,382
Total comprehensive income / loss (-)	*0*	*0*	*59,112*	*-53*	*1,018*	60,077
30 September 2021	**25**	**780,371**	**-539,022**	**170**	**-510**	**241,034**

1) Other comprehensive income that will not be reclassified to profit or loss in the future

2) Other comprehensive income to be reclassified to the income statement in the future under certain conditions

CeramTec TopCo GmbH

Plochingen

Selected explanatory notes to the Interim Condensed Consolidated Financial Statements for the period ended 30 September 2021

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1 General

1.1 Corporate information and purpose of the Company

The purpose of CeramTec TopCo GmbH (hereinafter "CeramTec TopCo") is to render management services as well as administrative, financial and business services in return for remuneration to entities in which it has a direct or indirect controlling shareholding or to entities that are controlled by the same ultimate controlling shareholder. It establishes branch offices, legal entities and other operations in Germany and abroad, and acquires, invests in and holds these investments and/or manages them as well as enters into and/or issues various financial instruments.

CeramTec TopCo and its subsidiaries are leading global developers, manufacturers and suppliers of high performance ceramics ("HPC") solutions. The HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological/chemical, mechanical, thermal or electric properties compared to competing products made from metal or polymers (plastics). The operations can be divided into two businesses – Medical Products and Industrial. Medical Products business focuses on developing and manufacturing ceramic components for hip joint prostheses. Industrial business develops, manufactures and supplies a broad range of highly specialized, performance critical HPC solutions for customers spanning a wide range for industrial areas as mobility, electronics and industrial applications.

CeramTec TopCo's registered office is located at CeramTec-Platz 1-9 in 73207 Plochingen, Germany, and the entity is registered with the Amtsgericht (local court) Stuttgart, Germany, under the number HRB 764651. CeramTec TopCo is the parent company of the Group ("CeramTec TopCo Group" or "Group") and the ultimate parent, which prepares exempting interim condensed consolidated financial statements.

The management of CeramTec TopCo authorized for issue the interim condensed consolidated financial statements for the period ended 30 September 2021 on 12 November 2021.

1.2 Basis of preparation

The interim condensed consolidated financial statements are prepared in accordance with IAS 34 Interim Financial Reporting. These interim condensed consolidated financial statements do not include all of the information and disclosures required in the annual financial statements and should be read in conjunction with the CeramTec TopCo's annual consolidated financial statements as of 31 December 2020.

The interim condensed consolidated financial statements present fairly the financial position, financial performance and cash flows of the CeramTec TopCo Group.

The interim condensed consolidated financial statements are presented in Euro. The amounts are in thousands of Euros (EUR k). All amounts are rounded using standard commercial principles. In some cases, adding single values to the total values may therefore lead to differences.

Assets and liabilities are broken down into current and non-current items. Assets and liabilities are classified as current if they are expected to be realized within twelve months from the reporting date. The expense recognized in profit or loss is broken down using the cost of sales method. In the statement of cash flows, cash flow from operating activities is determined using the indirect method, while cash flow from investing and financing activities is determined using the direct method.

1.3 Changes to the consolidated group

With effect as of 4 January 2021, Dentalpoint AG, a company based in Spreitenbach, Switzerland, which is itself a 100% shareholder of the Dentalpoint Germany GmbH based in Lörrach, Germany, was acquired by CeramTec GmbH, Plochingen. With this acquisition, the CeramTec Group invests in the sharply growing future market for ceramic dental implants and continues to expand the offering in the Medical Products segment. In September 2021 the final purchase price of EUR 49,908k was agreed. The purchase price was paid using cash and cash equivalents.

The preliminary fair values of the acquired assets, net of liabilities are as follows:

	Fair Value
	EUR k
Customer relationships	13,550
Patents and other intellectual property	13,097
Other intangible assets	38
Intangible Assets	**26,685**
Machinery and equipment	1,691
Furniture and Fix	254
Right-of-Use Assets	2,383
Property, plant & equipment	**4,328**
Inventories	4,270
Trade receivables	702
Other assets	281
Cash and Cash equivalents	948
Assets	**37,214**
Deferred tax liabilities	2,394
Provisions	663
Bank loans	4,883
Trade payables	591
Other liabilities	2,388
Liabilities	**10,919**
Total net	26,295
Total consideration transferred	49,908
Goodwill from the acquisition	**23,613**

The acquisition is recognized on a preliminary basis as of the reporting date. As a result the purchase price allocation and the identification and measurement of the acquired assets and liabilities has not yet been concluded.

The fair value of purchased receivables equals the gross amount of contractual receivables as we believe the receivables can be fully recovered.

Goodwill reflects the value of the future earnings to be realized over the next few years. In addition, the consideration paid for the aforementioned ceramic dental implants business, included amounts in relation to benefit or expected synergies, revenue growth and future market developments. These benefits are not recognized separately from goodwill because they do not meet the recognition criteria of identifiable intangible assets.

Included in the consolidated statement of comprehensive income for the period are revenue respectively net loss of EUR 5,149k respectively EUR 1,762k. The net loss includes significant effects resulting from the purchase price allocation (PPA).

The costs associated with the acquisition amounted to EUR 843k in total. These are recognized in the consolidated statement of comprehensive income under the item “Other income / expenses (-), net” (see note 3.6).

1.4 Entities included in the consolidated financial statements

In addition to the financial statements of the parent company, the financial statements of the following subsidiaries in which CeramTec TopCo has a direct or indirect shareholding are included in the interim condensed consolidated financial statements in the reporting period:

Name of the entity	Share of capital in % 30 September 2021	31 December 2020	Business activities
CeramTec BondCo GmbH, Plochingen	100.00	100.00	1
CeramTec AcquiCo GmbH, Plochingen	100.00	100.00	1
CeramTec Holding GmbH, Plochingen	100.00	100.00	1
CeramTec Group GmbH, Plochingen	100.00	100.00	1
CeramTec FinCo GmbH, Plochingen	100.00	100.00	1
CeramTec GmbH, Plochingen	100.00	100.00	2
Cerasiv GmbH Innovatives Keramik-Engineering, Plochingen	100.00	100.00	1
CeramTec-ETEC GmbH, Lohmar	100.00	100.00	3
Emil Müller GmbH, Wilhermsdorf	100.00	100.00	3
CeramTec UK Ltd., Southampton/Great Britain	100.00	100.00	3
CeramTec Czech Republic s.r.o., Sumperk/ Czech Republic	100.00	100.00	3
CeramTec Ibérica Innovative Ceramic Engineering S.L., Vilassar de Mar/Spain	100.00	100.00	5
CeramTec Innovative Ceramic Engineering, (M) Sdn. Bhd., Seremban/Malaysia	100.00	100.00	3
CeramTec Korea Ltd., Suwon-Si/South Korea	100.00	100.00	3
CeramTec Suzhou Ltd., Suzhou/China	100.00	100.00	3
PST Press Sintertécnica Brasil Ltda., Nova Odessa/Brazil	100.00	100.00	3
CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji—Goa/India	99.90	99.90	3
Press and Sinter Technics de Mexico S.A. de C.V., Puebla/Mexico	100.00	100.00	3
Dentalpoint AG, Spreitenbach/Switzerland	100.00	0.00	4
Dentalpoint Germany GmbH, Lörrach	100.00	0.00	5
CeramTec BidCo LLC, Laurens/USA	100.00	100.00	1
CeramTec Acquisition LLC, Laurens/USA	100.00	100.00	1
CeramTec North America LLC, Laurens/USA	100.00	100.00	3
DAI Ceramics LLC, Willoughby/USA	100.00	100.00	3
PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland	100.00	100.00	3

1 Entities perform the functions of a holding company.
2 Manufacturing and distribution companies operate in the Industrial and Medical Products business.
3 Manufacturing and distribution companies operate in the Industrial business.
4 Manufacturing and distribution companies operate in the Medical business.
5 Distribution companies.

CeramTec TopCo has a direct shareholding in CeramTec BondCo GmbH, and an indirect shareholding in the other subsidiaries.

2 Accounting principles and policies

The accounting policies and the consolidation principles applied in the interim condensed consolidated financial statements correspond to those applied in the most recent annual consolidated financial statements with the exception of the recently adopted accounting standards, if any. A detailed description of the accounting principles and policies is shown in the notes to the consolidated financial statements as of and for the year ended 31 December 2020.

Foreign currency translation

The exchange rates of significant currencies used for the currency translation to the euro are as follows:

		30 Sep 2021 Period-end exchange rate	1 Jul to 30 Sep 2021 Average exchange rate	1 Jan to 30 Sep 2021 Average exchange rate	31 Dec 2020 Period-end exchange rate	1 Jul to 30 Sep 2020 Average exchange rate	1 Jan to 30 Sep 2020 Average exchange rate
USD	USA	1.1579	1.1788	1.1967	1.2281	1.1695	1.1241
CNY	China	7.4847	7.6260	7.7407	8.0134	8.0879	7.8614
GBP	Great Brit.	0.8605	0.8553	0.8641	0.9031	0.9050	0.8845
PLN	Poland	4.6197	4.5661	4.5464	4.5565	4.4405	4.4226
CZK	Czech Rep.	25.4950	25.4995	25.7366	26.2520	26.4740	26.3861

The individual items in the consolidated statement of cash flows are translated at average rates, while cash and cash equivalents are measured at the spot rate at the balance sheet date.

Adoption of amended and new standards and interpretations: Changes in accounting policies due to first-time adoption of revised and newly issued IFRSs and IFRICs

IFRS amended for the first time in the reporting period

Standards and interpretations	Date of first-time adoption
IFRS 9 / IAS 39 / IFRS 7 / IFRS 4 / IFRS 16: "Interest Rate Benchmark Reform Phase 2"	1 January 2021
IFRS 4: "Extension of the Temporary Exemption from Applying IFRS 9"	1 January 2021
IFRS 16: "Covid-19-Related Rent Concessions beyond 30 June 2021"	1 April 2021

The aforementioned changes have no effect on the consolidated financial statements of CeramTec TopCo Group.

Revised and newly issued IFRSs and IFRICs not yet compulsory

Adoption of the following revised and newly issued IFRSs and IFRICs was not yet compulsory in the reporting period and/or they had not yet been endorsed by the European Commission for adoption in the European Union. In the reporting period, these new or amended standards and interpretations were not adopted earlier.

Standards and interpretations	Date of first-time adoption
IFRS 3: "Reference to the Conceptual Framework"	1 January 2022
IAS 37: "Onerous Contracts—Costs of Fulfilling a Contract"	1 January 2022
IAS 16: "PP&E: Proceeds before Intended Use"	1 January 2022
Annual Improvements Project (2018–2020): IFRS 1, IFRS 9, IFRS 16, IAS 41	1 January 2022
IFRS 17: "Insurance Contracts"	1 January 2023
IAS 1: "Classification of Liabilities as Current or Non-current"	1 January 2023
IAS 1: "Disclosure of Accounting Policies"	1 January 2023
IAS 8: "Definition of Accounting Estimates"	1 January 2023
IAS 12: "Deferred Tax related to Assets and Liabilities arising from a Single Transaction"	1 January 2023

3 Notes to the consolidated statement of comprehensive income

3.1 Revenue

Revenue results primarily from the sale of goods and merchandise. Revenue breaks down into regions and businesses as follows:

	1 July to 30 September 2021	1 July to 30 September 2020	1 January to 30 September 2021	1 January to 30 September 2020
	EUR k	EUR k	EUR k	EUR k
Regions				
Europe (w/o Germany)	72,093	51,386	216,569	174,248
Germany	28,682	26,487	97,172	84,775
Asia	26,497	32,888	89,902	77,741
North America	28,773	24,279	87,580	73,401
Rest of world	1,379	3,073	3,837	8,151
Total	**157,424**	**138,113**	**495,060**	**418,316**
Businesses				
Industrial	90,803	80,959	279,299	241,961
Medical products	66,621	57,154	215,761	176,355
Total	**157,424**	**138,113**	**495,060**	**418,316**

The increase in revenues is mostly due to the recovery from lower volumes across most product groups due to lower demand from customers and order cancellations respectively postponements following the covid-19 outbreak in 2020.

Orders on hand amount to EUR 244,632k as of the balance sheet date (30 September 2020: EUR 157,281k), of which EUR 192,699k (30 September 2020: EUR 111,743k) and EUR 51,933k (30 September 2020: EUR 45,538k) are attributable to the Industrial and Medical Products businesses respectively.

3.2 Cost of sales

The cost of sales breaks down as follows:

	1 July to 30 September 2021	1 July to 30 September 2020	1 January to 30 September 2021	1 January to 30 September 2020
	EUR k	EUR k	EUR k	EUR k
Personnel expenses	31,454	29,789	99,628	93,024
Material and packaging cost	30,360	24,747	90,754	74,272
Amortization and depreciat.	14,373	13,899	42,509	41,977
Other cost of sales	13,152	13,924	42,228	41,990
Total	**89,339**	**82,359**	**275,119**	**251,263**

Other costs of sales primarily contain energy costs, freight costs and maintenance expenses.

3.3 Selling costs

Selling costs primarily contain amortization and depreciation as well as personnel expenses.

3.4 Research and development costs

Research and development costs mainly contain personnel expenses.

3.5 General administrative costs

General administrative costs primarily contain personnel expenses.

3.6 Other income / expenses (-), net

Other income / expenses (-), net, breaks down as follows:

	1 July to 30 September 2021	1 July to 30 September 2020	1 January to 30 September 2021	1 January to 30 September 2020
	EUR k	EUR k	EUR k	EUR k
Foreign currency results	666	-412	1,291	585
Losses (-) on disposal of property, plant and equipment	-82	-8	-139	-41
Transaction costs	-10	-13	-108	-13
Income from the reversal of allowances for bad debt	1	160	81	371
Additions to allowance for bad debts	-41	-6	-71	-111
Impairment of goodwill	0	0	0	-137,065
Sundry other income	88	64	2,806	470
Sundry other expenses	-256	-432	-707	-683
Total	**366**	**-647**	**3,153**	**-136,487**

In the reporting period Sundry other income includes gains related to a discontinued product line with an amount of EUR 2,278k.

3.7 Financial result

The financial result breaks down as follows:

	1 July to 30 September 2021	1 July to 30 September 2020	1 January to 30 September 2021	1 January to 30 September 2020
	EUR k	EUR k	EUR k	EUR k
Interest income from derivatives	10,704	2,154	24,854	0
Interest income from effective interest method	382	364	1,132	1,079
Exchange rate gains	0	3,580	0	1,243
Other interest and financial income	42	32	119	86
Total interest income and other finance income	**11,128**	**6,130**	**26,105**	**2,408**
Interest expense from syndicated loan	7,776	6,898	23,068	21,097
Interest expense from bond	5,329	5,329	15,986	15,986
Interest expense from shareholder loan	5,103	4,781	15,142	14,350
Expense from unwinding the discount on financial liabilities	2,059	1,535	6,008	3,717
Exchange rate losses	2,127	0	3,046	0
Interest expense from provision and use of revolving credit line	163	419	493	1,093
Interest expense from derivatives	0	0	0	28,010
Other interest expenses	768	642	2,066	1,734
Interest capitalized	-111	-169	-466	-472
Total interest expenses and other finance costs	**23,214**	**19,435**	**65,343**	**85,515**
Total financial result	**-12,086**	**-13,305**	**-39,238**	**-83,107**

Exchange rate gains and losses result from loans not designated in the functional currency of the group companies.

The other interest expenses include expenses from unwinding the discount on provisions with an amount of EUR 731k (1 July to 30 September 2021: EUR 245k; 1 January to 30 September 2020: EUR 1,007k; 1 July to 30 September 2020: EUR 334k).

4 Notes to the consolidated statement of financial position

4.1 Goodwill and intangible assets

Goodwill results mainly from the acquisition of CeramTec Holding and its subsidiaries in 2018. It was allocated to the groups of cash-generating units (CGUs) Medical and Industrial. The net carrying amount as of the reporting date of the CGU Medical amount to EUR 874,613k, the net carrying amount of the CGU Industrial was completely written down in 2020.

The CGU Medical includes the business activities designed to develop, manufacture and sell technical high-performance ceramics products used for medical technology, and the CGU Industrial includes the business activities designed to develop, manufacture and sell technical high-performance ceramics products used in industrial areas as electronics, automotive industries and for mechanical engineering.

With effect as of 4 January 2021, Dentalpoint AG, a company based in Spreitenbach, Switzerland, was acquired resulting in a preliminary goodwill of EUR 23,613k (see note 1.3). This preliminary goodwill was allocated to the CGU Medical resulting in a total goodwill of EUR 898,226k.

During the reporting period, CeramTec TopCo Group recognized amortization expenses for intangible assets in the amount of EUR 51,386k (1 July to 30 September 2021: EUR 17,146k;1 January to 30 September 2020: EUR 49,208k; 1 July to 30 September 2020: EUR 16,433k), which arise mainly from customer relationships and technology.

CeramTec TopCo Group purchased intangible assets at cost of EUR 2,683k (1 July to 30 September 2021: EUR 736k; 1 January to 30 September 2020: EUR 2,377k; 1 July to 30 September 2020: EUR 579k).

4.2 Property, plant and equipment

During the reporting period, additions to property, plant and equipment amount to EUR 28,178k (1 July to 30 September 2021: EUR 13,713k; 1 January to 30 September 2020: EUR 21,210k; 1 July to 30 September 2020: EUR 8,608k), from which no subsidies are deducted. Excluding the right-of-use assets CeramTec TopCo Group acquired assets at cost of EUR 21,277k (1 January to 30 September 2020: EUR 19,549k).

The recognized depreciation expenses amount to EUR 31,053k (1 July to 30 September 2021: EUR 10,584k; 1 January to 30 September 2020: EUR 30,999k; 1 July to 30 September 2020: EUR 10,198k).

There were contractual commitments to acquire property, plant and equipment of EUR 15,383k (31 December 2020: EUR 12,286k) as of the reporting date.

4.3 Other financial assets

The following table breaks down other financial assets as follows:

	30 September 2021	31 December 2020
	EUR k	EUR k
Other financial assets (non-current)		
Separated termination rights	24,603	10,221
Derivative financial instruments	65	0
Insurance claims	33	40
Minority non-controlling interest	4	4
Other financial assets	74	10
Total	**24,779**	**10,275**
Other financial assets (current)		
Receivables arising from amounts retained by a factor as a security	1,306	1,850
Derivative financial instruments	239	314
Other financial assets	270	1,098
Total	**1,815**	**3,262**

The CeramTec TopCo Group has a termination option for the issued bond. This termination option represents an embedded derivative, which is accounted for separately from the underlying transaction. Further explanations can be found in note 4.12.

Because of a low risk of default, in the reporting period no loss allowance for other financial assets was recognized.

4.4 Other receivables and assets

The following table breaks down other assets as follows:

	30 September 2021	31 December 2020
	EUR k	EUR k
Other non-current assets		
Deferred finance costs for the revolving credit line	314	478
Sundry assets	3,608	3,600
Total	**3,922**	**4,078**
Other current assets		
Prepaid insurance	2,172	2,017
VAT receivables	1,833	2,024
Receivables from energy tax refunds	1,661	1,809
Deferred finance costs for the revolving credit line	219	219
Sundry assets	3,404	2,234
Total	**9,289**	**8,303**

Sundry assets mainly include advance payments.

4.5 Trade receivables

At the end of the reporting period, trade receivables amounted to EUR 74,657k (31 December 2020: EUR 51,880k) after taking into account valuation allowance of EUR 503k (31 December 2020: EUR 495k). The receivables are seasonally impacted with lower levels in December due to less customer activity and temporary plant shut downs.

A factoring agreement was concluded whereby receivables of EUR 12,865k were sold as of the balance sheet date (31 December 2020: EUR 13,599k). Under the terms of the agreement, EUR 1,306k (31 December 2020: EUR 1,850k) was retained by the factor as of the balance sheet date as a security, and recognized in other short-term financial assets (see note 4.3).

The value and maturity structure of trade receivables before impairment breaks down as follows:

	30 September 2021	31 December 2020
	EUR k	EUR k
Carrying amount before impairment	**75,160**	**52,375**
thereof not yet due on the reporting date	65,759	40,066
thereof past due on the reporting date	9,401	12,309
past due up to 30 days	7,268	8,140
past due up to 60 days	1,355	3,286
past due up to 90 days	211	343
past due more than 90 days	567	540

Loss allowances are based on information about a customer developed internally or obtained from external sources, and an estimate of the likelihood of default. The loss allowances mainly include specific loss allowances for receivables due from customers that have entered into bankruptcy proceedings or are in severe financial difficulty.

4.6 Cash and cash equivalents

Cash and cash equivalents contain bank balances of EUR 275,960k (31 December 2020: EUR 244,113k) and cash in hand of EUR 5k (31 December 2020: EUR 5k).

4.7 Equity

The following table breaks down the equity as follows:

	30 September 2021	31 December 2020
	EUR k	EUR k
Issued capital	25	25
Capital reserves	780,371	780,371
Accumulated losses	-539,022	-598,134
Accumulated other comprehensive income	-340	-1,305
Total	**241,034**	**180,957**

4.8 Provisions for pension obligations

The reduction in provisions for pension obligations to EUR 114,986k as of the balance sheet date (31 December 2020: EUR 124,350k) mainly results from the remeasurements in financial assumptions resulting from an increase in the interest rate.

4.9 Financial liabilities to affiliates

Financial liabilities to affiliates comprise a loan payable to CTEC Acquisition S.à.r.l., Luxembourg, of EUR 288,665k (31 December 2020: EUR 273,835k).

	30 September 2021	31 December 2020
	EUR k	EUR k
Non-current financial liabilities		
Loan payable	273,523	273,523
Accrued interest	15,142	0
Total	**288,665**	**273,523**
Current financial liabilities		
Accrued interest	0	312
Total	**0**	**312**

Unpaid interest is added annually to the company‘s loan balance on 31 December, for the first time on 31 December 2020.

4.10 Financial liabilities to third parties

The financial liabilities to third parties are broken down as follows:

	30 September 2021	31 December 2020
	EUR k	EUR k
Non-current financial liabilities		
Liabilities to banks	1,169,736	1,156,680
Liabilities from the bond	413,161	414,293
Derivative financial instruments	11,745	22,489
Lease liabilities	9,867	3,636
Total	**1,604,509**	**1,597,098**
Current financial liabilities		
Discounts and bonuses	10,604	3,065
Liabilities from the bond	2,664	7,993
Derivative financial instruments	6,947	8,256
Liabilities to banks	4,489	141
Lease liabilities	2,257	1,759
Other current financial liabilities	2,541	2,759
Total	**29,502**	**23,973**

Liabilities to banks nominally amount to EUR 1,069,000k (31 December 2020: EUR 1,069,000k) from a tranche in EUR and EUR 128,681k (31 December 2020: EUR 121,326k) from two tranches in USD. These loans have variable interest rates and mature on 8 March 2025.Transaction costs associated with the loan of EUR 33,641k are spread over the term of the loan using the effective interest method.

The bond has a fixed interest rate and a nominal volume of EUR 406,000k (31 December 2020: EUR 406,000k). This bond matures on 15 December 2025. The CeramTec TopCo Group has a termination option for this bond, which is recognized as a separate financial asset (see note 4.3). Associated transaction costs of EUR 13,570k are spread over the term of the bond using the effective interest method. Further information on the loans, the bond and derivatives can be found in note 4.12.

4.11 Other liabilities

Other liabilities break down as follows:

	30 September 2021	31 December 2020
	EUR k	EUR k
Other non-current liabilities		
Contractual liabilities under contracts with customers	1,051	3,763
Other non-current liabilities	0	0
Total	**1,051**	**3,763**
Other current liabilities		
Wages and salaries including taxes	10,699	10,696
Contractual liabilities under contracts with customers	5,528	3,935
Real estate transfer tax	804	1,023
Other current liabilities	6,233	5,943
Total	**23,264**	**21,597**

The contractual liabilities from contracts with customers reported as non-current will be recognized in income from 1 October 2022 to 30 September 2023, while those reported as current will be recognized in income from 1 October 2021 to 30 September 2022.

Other current liabilities are mainly attributable to liabilities to employees, liabilities from social security contributions, liabilities to pension funds as well as deferred income.

4.12 Financial instruments

The following table shows the carrying amounts and fair values of the financial assets and financial liabilities reported in the interim condensed consolidated financial statements, sorted by class and measurement category in accordance with IFRS 9.

	30 September 2021		
	Measurement category of IFRS 9[1]	Carrying amount	Fair value
		EUR k	EUR k
Financial assets			
Trade receivables	AC	74,657	74,657
Separated termination rights	FVtPL	24,603	24,603
Cash and cash equivalents	AC	275,965	275,965
Fx forward hedges	FVtPL	239	239
Interest rate cap	FVtPL	65	65
Other financial assets	AC	1,687	1,687
Total		**377,216**	**377,216**
Financial liabilities			
Liabilities to banks	AC	1,174,225	1,199,482
Bond liabilities	AC	415,825	438,967
Liabilities to affiliates	AC	288,665	290,788
Trade payables	AC	24,839	24,839
Separated interest rate floors	FVtPL	15,772	15,772
Lease liabilities	AC	12,124	12,124
Interest rate cap	FVtPL	2,920	2,920
Other financial liabilities	AC	13,145	13,145
Total		**1,947,515**	**1,998,037**

1 AC: measured at amortised cost using the effective interest method; FVtPL: measured at fair value through profit or loss

	31 December 2020		
	Measurement category of IFRS 9[1]	Carrying amount	Fair value
		kEUR	kEUR
Financial assets			
Trade receivables	AC	51,880	51,880
Separated termination rights	FVtPL	10,221	10,221
Cash and cash equivalents	AC	244,118	244,118
Forward exchange transactions	FVtPL	314	314
Other financial assets	AC	3,001	3,001
Total		**309,534**	**309,534**
Financial liabilities			
Liabilities to banks	AC	1,156,821	1,190,326
Bond liabilities	AC	422,286	421,702
Liabilities to affiliates	AC	273,835	275,595
Trade payables	AC	29,034	29,034
Separated interest rate floors	FVtPL	26,079	26,079
Lease liabilities	AC	5,395	5,395
Interest rate cap	FVtPL	4,665	4,665
Other financial liabilities	AC	5,825	5,825
Total		**1,923,940**	**1,958,621**

1 AC: measured at amortized cost using the effective interest method; FVtPL: measured at fair value through profit or loss

If the fair value is not available in the form of a market price, it is calculated based on different valuation parameters. Depending on the availability of observable parameters and the significance of these parameters when calculating the fair value, the fair value is allocated to level 1, 2 or 3 of the fair value hierarchy. The allocation is based on the following factors:

- **Level 1:** Level 1 inputs are quoted (unadjusted) prices in markets for identical assets or liabilities that the entity can access at the measurement date

- **Level 2:** Level 2 inputs are inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly

- **Level 3:** Level 3 inputs are unobservable measurement parameters for the asset or liability.

The following table shows the fair value hierarchy for derivative financial instruments that are recognized at fair value in the consolidated financial statements:

	30 September 2021		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Separated termination rights	0	24,603	0
Interest rate caps	0	65	0
Forward exchange transactions	0	239	0
Financial liabilities			
Separated interest rate floors	0	15,772	0
Interest rate caps	0	2,920	0

	31 December 2020		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial assets			
Separated termination rights	0	10,221	0
Forward exchange transactions	0	314	0
Financial liabilities			
Separated interest rate floors	0	26,079	0
Interest rate cap	0	4,665	0

The following table shows the fair value hierarchy for the financial instruments that are not recognized at fair value in the consolidated financial statements; however, their fair value is provided in the notes to the financial statements. The Group does not disclose the fair values of financial instruments when their carrying amounts are a reasonable approximation of the fair values, such as current trade receivables and payables.

	30 September 2021		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial liabilities			
Bond liabilities	0	438,967	0
Liabilities to banks	0	1,199,482	0
Liabilities to affiliates	0	0	290,788
Lease liabilities	0	12,124	0

	31 December 2020		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial liabilities			
Bond liabilities	0	421,702	0
Liabilities to banks	0	1,190,326	0
Liabilities to affiliates	0	0	275,595
Lease liabilities	0	5,395	0

The fair value of the bond corresponds to the nominal value multiplied by the market value as of the reporting date, plus the separated termination right. Accordingly, the fair value measurement is allocated to level 2 in the fair value hierarchy.

Liabilities to banks are subject to interest based on the interest rates observable on the market, such as EURIBOR or LIBOR, on the basis of which the fair value is calculated. Accordingly, these are allocated to level 2 of the fair value hierarchy.

The fair values of the separated derivatives are measured using the Black-Scholes/Hull-White valuation model, which considers both the observable yield curves and the fluctuation intensity (volatility) of the currencies concerned. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement is therefore allocated to level 2 in the fair value hierarchy.

The fair value of the interest rate cap is measured using the Black-Scholes/Hull-White valuation model, which considers both the observable yield curves and the fluctuation intensity (volatility) of the currencies concerned. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement is therefore allocated to level 2 in the fair value hierarchy.

The fair value of all other financial instruments is calculated using a discounted cash flow method as well as by taking into account measurement parameters that are observable for the assets and liabilities, either directly or indirectly, at the market. Accordingly, these financial instruments were allocated to level 2 in the fair value hierarchy.

The fair value of the shareholder loan (level 3) is determined by using the discounted cash flow method with risk free rate and the credit spread of CeramTec as inputs.

For assets and liabilities that are recognized at fair value on a recurring basis, the CeramTec TopCo Group assesses whether a transfer between the levels of the fair value hierarchy took place as of the end of each reporting period (based on the lowest level that is significant to fair value measurement as a whole). There were no transfers between level 1 and 2 during the reporting period.

5 Notes to the interim condensed consolidated statement of cash flows

In the interim condensed consolidated statement of cash flows, cash flow from operating activities is determined using the indirect method, while cash flow from investing and financing activities is determined using the direct method. The cash and cash equivalents presented in the statement of cash flows correspond to the item of the interim condensed statement of financial position and comprise cash in hand, bank balances and cash investments with an original term of up to three months.

Other non-cash income and expenses primarily contain changes in the fair value of financial instruments and foreign exchange gains or losses.

The cash flow from investing activities includes the purchase price payment for the shares of the Dentalpoint AG (please refer to 1.3). In September 2021 the final purchase price of EUR 49,908k was agreed. Cash and cash equivalents with an amount of EUR 948k were taken over resulting in a cash-out net of EUR 48,960k.

Additions to property, plant and equipment in the reporting period amounted to EUR 2,058k that will affect cash during the following accounting period.

During the period CeramTec TopCo Group paid EUR 5,164k for property, plant and equipment previously purchased on account, which was not included in the statement of cash flows in previous reporting periods as it was a non-cash transaction.

Interest expenses of bond liabilities include income of EUR 1,132k associated with discounting of financial liabilities that arose because the effective interest method was applied.

6 Other notes

6.1 Contingent liabilities

The entities within the consolidated group are involved as parties in a number of lawsuits. These proceedings are linked to ordinary business activities and mainly relate to commercial, product liability and environmental processes. The Group accrues for such obligations if a liability is probable to arise and the amount of the potential claim can be sufficiently estimated. Where claims and obligations arising are not considered probable nor remote, such contingent liabilities are disclosed separately in the interim condensed consolidated financial statements.

6.2 Related party disclosures

Key management personnel

Key management personnel are people who are directly or indirectly responsible for the planning, directing and controlling the activities of the CeramTec TopCo Group.

In the reporting period, the key management personnel of CeramTec TopCo Group were:

Dr. Hadi Saleh
Chief Executive Officer

Richard Boulter
President Industrial

Eric Oellerer
Chief Financial Officer

Dr. Hadi Saleh is the sole general manager of CeramTec TopCo GmbH.

Transactions with related parties

Entities and natural persons are deemed to be related parties when they exercise control over the reporting company or over its subsidiaries or when they have a significant influence on the reporting company's financial and business policy. A loan of EUR 288,665k (31 December 2020: EUR 273,835k), including interest, with a fixed interest rate of 7.30 % p.a. has been obtained from CeramTec TopCo's controlling shareholder, CTEC Acquisition S.à.r.l., Luxembourg. Interest expenses of EUR 15,142k (1 January to 30 September 2020: EUR 14,350k) were incurred in the reporting period. Unpaid interest is added annually to the company's loan balance on 31 December, for the first time on 31 December 2020.

6.3 Significant changes in the current reporting period

Canada Pension Plan Investment Board ("CPP Investments"), through its wholly owned subsidiary, CPP Investment Board Europe S.àr.l, and BC Partners, a leading international investment firm, announced on 17 August 2021, an agreement to jointly acquire CeramTec TopCo Group, from existing owner BC European Capital X ("BCEC X") and its co-investors. On completion of the transaction, CeramTec TopCo will be jointly owned by CPP Investments and BC Partners Fund XI ("BC XI").

Under the new ownership structure, CPP Investments and BC XI, together with co-investors, will each hold a 50% stake in the CeramTec TopCo.

6.4 Subsequent events

In October 2021 it was agreed to pay an amount of EUR 5,093k of the shareholder loan to the shareholder, CTEC Acquisition S.à.r.l., consisting of a nominal amount of EUR 4,816k and the respective interest payable which has been accrued until the date of payment of EUR 277k.

7 Reconciliation to CeramTec BondCo GmbH

If the interim condensed consolidated statement of comprehensive income of CeramTec BondCo had been prepared instead of the interim condensed consolidated statement of comprehensive income of CeramTec TopCo, which is presented in these financial statements, this would have resulted in the following changes for the reporting period:

- lower general administrative expenses of EUR 723k (1 July to 30 September 2021: EUR 626k; 1 January to 30 September 2020: EUR 133k; 1 July to 30 September 2020: EUR 29k)

- lower tax expenses of EUR 23k (1 July to 30 September 2021: EUR 12k; 1 January to 30 September 2020: EUR 0k; 1 July to 30 September 2020: EUR 0k)

- lower interest expenses and other finance costs of EUR 18k (1 July to 30 September 2021: EUR 6k; 1 January to 30 September 2020: EUR 256k; 1 July to 30 September 2020: EUR 118k)

The total comprehensive income of CeramTec BondCo would therefore have been EUR 764k higher (1 July to 30 September 2021: EUR 645k; 1 January to 30 September 2020: EUR 389k; 1 July to 30 September 2020: EUR 147k) compared to the total comprehensive income recognized in these financial statements.

If the interim condensed consolidated statement of financial position of CeramTec BondCo had been prepared instead of the interim condensed consolidated statement of financial position of CeramTec TopCo, which is presented in these financial statements, this would have resulted in the following changes as of 30 September 2021:

- lower assets for current tax of EUR 15k (31 December 2020: EUR 0k)

- higher receivables from affiliates of EUR 988k (31 December 2020: EUR 684k)

- lower deferred tax assets of EUR 0k (31 December 2020: EUR 24k)

- lower other receivables from tax authorities of EUR 8k (31 December 2020: EUR 0k)

- lower liquid funds of EUR 9k (31 December 2020: EUR 10k)

- lower capital reserves of EUR 25k (31 December 2020: EUR 25k)

- lower trade payables of EUR 595k (31 December 2020: EUR 35k)

- lower income tax payables of EUR 6k (31 December 2020: EUR 150k)

- lower financial liabilities to third parties of EUR 133k (31 December 2020: EUR 91k)

This would have resulted in a EUR 1,690k (31 December 2020: EUR 926k) higher level of group equity for CeramTec BondCo compared to the group equity recognized in these financial statements.

There would have been no material impact on the interim condensed consolidated statement of cash flows if the interim condensed consolidated statement of cash flows of CeramTec BondCo had been prepared instead of the interim condensed consolidated statement of cash flows of CeramTec TopCo presented in these financial statements.

Plochingen, 12 November 2021

CeramTec TopCo GmbH

The management

Dr. Hadi Saleh

CeramTec TopCo GmbH
Plochingen

Consolidated Financial Statements
for the year ended
31 December 2020

CeramTec TopCo GmbH, Plochingen

Consolidated statement of financial position as at 31 December 2020

Assets	Notes	31 December 2020	31 December 2019
		EUR k	EUR k
Goodwill	4.1	874,613	1,011,678
Other intangible assets	4.1	976,472	1,038,533
Property, plant and equipment	4.2	278,689	289,387
Other financial assets	4.3	10,275	25,243
Other assets	4.4	4,078	1,107
Deferred tax assets		934	1,172
Non-current assets		**2,145,061**	**2,367,120**
Inventories	4.5	91,565	97,093
Trade receivables	4.6	51,880	52,740
Trade accounts receivable from affiliates		0	20
Income tax receivables		3,015	2,808
Other financial assets	4.3	3,262	3,074
Other receivables and assets	4.4	8,303	8,026
Cash and cash equivalents	4.7	244,118	64,380
Current assets		**402,143**	**228,141**
Total Assets		**2,547,204**	**2,595,261**

Equity and Liabilities	Notes	31 December 2020	31 December 2019
		EUR k	EUR k
Issued capital	4.8	25	25
Capital reserves	4.8	780,371	780,371
Accumulated losses	4.8	(598,134)	(442,793)
Accumulated other comprehensive income	4.8	(1,305)	865
Equity		**180,957**	**338,468**
Provisions for pension obligations	4.9	124,350	113,433
Other provisions	4.10	2,761	5,506
Financial liabilities to affiliates	4.11	273,523	256,270
Financial liabilities to third parties	4.12	1,597,098	1,433,324
Other liabilities	4.13	3,763	0
Deferred tax liabilities		270,110	298,417
Non-current liabilities		**2,271,605**	**2,106,950**
Other provisions	4.10	15,797	17,765
Provision for taxes	4.10	3,929	4,425
Financial liabilities to affiliates	4.11	312	55,233
Financial liabilities to third parties	4.12	23,973	25,406
Trade payables		29,034	30,277
Other liabilities	4.13	21,597	16,737
Current liabilities		**94,642**	**149,843**
Total liabilities		**2,366,247**	**2,256,793**
Total equity and liabilities		**2,547,204**	**2,595,261**

CeramTec TopCo GmbH, Plochingen

Consolidated statement of comprehensive income from 1 January to 31 December 2020

	Notes	1 January to 31 December 2020	1 January to 31 December 2019
		EUR k	EUR k
Revenue	3.1	552,702	620,376
Cost of sales	3.2	334,906	356,239
Gross profit		**217,796**	**264,137**
Selling costs	3.3	87,285	95,236
Research and development costs	3.4	20,628	23,341
General administrative costs	3.5	24,542	27,140
Other income and expenses (-), net	3.6	(138,975)	(342,887)
Operating income		**(53,634)**	**(224,467)**
Interest income and other finance income		6,849	2,135
Interest expenses and other finance costs		99,542	100,449
Financial result	3.7	**(92,693)**	**(98,314)**
Profit / loss (-) before income tax		**(146,327)**	**(322,781)**
Income tax expense	3.8	(2,848)	(16,498)
Net profit / net loss (-) for the period		**(149,175)**	**(339,279)**
Items that will not be reclassified through profit or loss			
Income / expenses (-) from the remeasurement of pension provisions		(8,638)	(10,386)
Deferred taxes		2,472	2,969
		(6,166)	**(7,417)**
Items that may be reclassified subsequently to profit or loss			
Losses (-) / gains on cash flow hedges		(404)	718
Deferred taxes		117	(208)
		(287)	**510**
Changes in the fair value of financial assets available for sale		0	(331)
Deferred taxes		0	95
		0	**(236)**
Exchange differences on translation of foreign operations		(1,884)	(676)
Other comprehensive loss, net of income tax		**(8,337)**	**(7,819)**
Total comprehensive income / loss (-)		**(157,512)**	**(347,098)**

CeramTec TopCo GmbH, Plochingen

Consolidated statement of cash flows from 1 January to 31 December 2020

	1 January to 31 December 2020	1 January to 31 December 2019
	EUR k	EUR k
Net loss for the period	(149,175)	(339,279)
Income tax expense	2,847	16,499
Interest result	74,867	96,997
Amortisation, depreciation and impairment charges of non-current assets	244,160	447,168
Loss on disposal of property, plant and equipment and intangible assets	799	1,059
Decrease (-) in provisions (excluding deferred taxes)	(3,491)	(817)
Income tax payment (-)	(28,832)	(35,950)
Other non-cash income (-) / expenses, net	11,749	(1,553)
Increase (-) / decrease in inventories	5,529	(596)
Decrease in trade receivables	860	5,140
Increase (-) / decrease in other receivables and (financial) assets	(3,990)	597
Increase / decrease (-) in trade payables	305	(6,820)
Increase in other (financial) liabilities	7,805	7,650
Cash flow from operating activities	**163,433**	**190,095**
Cash received from disposals of property, plant and equipment	625	355
Cash paid (-) for investments in property, plant and equipment	(34,328)	(38,417)
Cash paid (-) for investments in intangible assets	(3,935)	(3,027)
Cash flow from investing activities	**(37,638)**	**(41,089)**
Cash received from (+) / paid for (-) the sale / repurchase of bond	0	5,163
Cash received from syndicated loan	168,161	0
Repayment (-) of syndicated loan	0	(53,872)
Interest paid (-)	(90,831)	(54,565)
Repayment (-) of shareholder loan	(19,599)	0
Cash paid for capitalized leases (right-of-use assets)	(2,886)	(2,676)
Cash flow from financing activities	**54,845**	**(105,950)**
Increase in cash and cash equivalents	**180,640**	**43,056**
Net foreign exchange difference	(902)	266
Cash and cash equivalents at the beginning of the period	64,380	21,058
Cash and cash equivalents at the end of the period	**244,118**	**64,380**

Please refer to notes, section 5

CeramTec TopCo GmbH, Plochingen

Consolidated statement of changes in equity for the period ended 31 December 2020

				Accumulated other comprehensive income			
	Issued capital	Capital reserves	Accumulated losses	Cash flow hedge reserve	Financial assets available for sale	Difference from currency translation	Equity
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
31 December 2018	**25**	**500,417**	**(96,096)**	**0**	**236**	**1,031**	**405,613**
Net loss for the period	0	0	(339,279)	0	0	0	(339,279)
Other comprehensive income / loss (-)	0	0	(7,417)[1]	510[2]	(236)[2]	(676)[2]	(7,819)
Total comprehensive income / loss (-)	*0*	*0*	*(346,697)*	*510*	*(236)*	*(676)*	*(347,098)*
Contribution by owners	0	279,954	0	0	0	0	279,954
31 December 2019	**25**	**780,371**	**(442,793)**	**510**	**0**	**355.03**	**338,468**
31 December 2019	**25**	**780,371**	**(442,793)**	**510**	**0**	**355**	**338,468**
Net loss for the period	0	0	(149,175)	0	0	0	(149,175)
Other comprehensive loss	0	0	(6,166)[1]	(287)[2]	0[2]	(1,884)[2]	(8,336)
Total comprehensive loss	*0*	*0*	*(155,341)*	*(287)*	*0*	*(1,884)*	*(157,511)*
31 December 2020	**25**	**780,371**	**(598,134)**	**223**	**0**	**(1,528)**	**180,957**

1) Other comprehensive income that will not be reclassified to profit or loss in the future

2) Other comprehensive income to be reclassified to the income statement in the future under certain conditions

CeramTec TopCo GmbH

Plochingen

**Notes to the Consolidated Financial Statements
for the year ended December 31, 2020**

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CeramTec TopCo GmbH

Notes to the Consolidated Financial Statements

1 General

1.1 Corporate information and purpose of the Company

The purpose of CeramTec TopCo GmbH (hereinafter "CeramTec TopCo") is to render management services as well as administrative, financial and business services in return for remuneration to entities in which it has a direct or indirect controlling shareholding or to entities that are controlled by the same shareholder. It is authorized to establish branch offices, legal entities and other operations in Germany and abroad, and acquire, invest in and hold these investments and/or manage them as well as enter into and/or issue various financial instruments.

CeramTec TopCo and its subsidiaries are a group of leading global developers, manufacturers and suppliers of high performance ceramics ("HPC") solutions. The HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological, mechanical, electric, thermal and/or chemical properties compared to often competing products made from metal or organic polymers (plastics). The operations can be divided into two businesses—Medical Products and Industrial. The Medical Products business focuses on developing and manufacturing ceramic components for hip joint prostheses. The Industrial business develops, manufactures and supplies a broad range of highly specialized, application-intensive technical HPC solutions for customers spanning a range of industries including automotive, electronics, industrial machinery and medical equipment.

CeramTec TopCo's registered office is located at CeramTec-Platz 1-9 in 73207 Plochingen, Germany, and is registered at the Stuttgart local court (*Amtsgericht*) under the number HRB 764651. CeramTec TopCo is the parent company of the Group (hereinafter "CeramTec TopCo Group" or "Group") and the ultimate parent, which prepares exempting consolidated financial statements.

The management of CeramTec TopCo approved the consolidated financial statements on April 14, 2021 for submission to the shareholder meeting.

1.2 Basis for the preparation of the consolidated financial statements

As of March 8, 2018, the former owner Cinven closed the acquisition of CeramTec Group by a consortium led by funds advised by leading private equity firm BC Partners ("BC Partners"). The Public Sector Pension Investment Board (PSP Investments) and Ontario Teachers' Pension Plan (Ontario Teachers') are also part of the consortium. CeramTec AcquiCo GmbH (hereinafter "CeramTec AcquiCo") acquired the shares in CeramTec Holding GmbH (hereinafter "CeramTec Holding"). CeramTec AcquiCo is a 100% subsidiary of CeramTec BondCo GmbH (hereinafter "CeramTec BondCo"), which is itself a 100% subsidiary of CeramTec TopCo. CeramTec TopCo is the German ultimate parent company, and prepares consolidated financial statements. CTEC I S.a.r.l., Luxembourg, is the ultimate controlling parent company.

The consolidated financial statements are prepared pursuant to Section 315e (1) and (3) of the German Commercial Code (*Handelsgesetzbuch*—HGB) in accordance with the International Financial Reporting Standards (IFRS/IAS) as adopted by the EU as well as the interpretations of the IFRS Interpretations Committee (IFRS IC) applicable for the financial year and the supplementary requirements of German commercial law. These consolidated financial statements are prepared for the largest and smallest groups of consolidated companies.

The requirements of the standards and interpretations adopted were satisfied in full. Furthermore, all applicable requirements of German commercial law were observed during the preparation. The consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the CeramTec TopCo Group.

The consolidated financial statements are presented in euro. The amounts are shown in thousands of euros (kEUR) in the consolidated financial statements. All amounts are rounded using standard commercial principles. In individual cases, adding individual values to the total value may therefore lead to differences.

For the purpose of clarity, various items in the consolidated statement of financial position and consolidated statement of comprehensive income were combined and explained accordingly in the notes to the consolidated financial statements. Assets and liabilities are broken down into non-current and current items. Assets and liabilities are classified as current if they are expected to be realized within twelve months from the reporting date. The expense recognized in profit or loss is broken down using the cost of sales method. In the statement of cash flows, cash flow from operating activities is determined using the indirect method, while cash flow from investing and financing activities is determined using the direct method.

1.3 Entities included in the consolidated financial statements

In addition to the financial statements of the parent company, the financial statements of the following subsidiaries in which CeramTec TopCo has a direct or indirect shareholding are included in the consolidated financial statements for the financial year:

Name of the entity	Share of capital in % December 31, 2020	Share of capital in % December 31, 2019	Business activities
CeramTec BondCo GmbH, Plochingen	100.00	100.00	1
CeramTec AcquiCo GmbH, Plochingen	100.00	100.00	1
CeramTec Holding GmbH, Plochingen	100.00	100.00	1
CeramTec Group GmbH, Plochingen	100.00	100.00	1
CeramTec FinCo GmbH, Plochingen	100.00	100.00	1
CeramTec GmbH, Plochingen	100.00	100.00	2
Cerasiv GmbH Innovatives Keramik-Engineering, Plochingen	100.00	100.00	1
CeramTec-ETEC GmbH, Lohmar	100.00	100.00	3
Emil Müller GmbH, Wilhermsdorf	100.00	100.00	3
CeramTec UK Ltd., Southampton/Great Britain	100.00	100.00	3
CeramTec Czech Republic s.r.o., Sumperk/Czech Republic	100.00	100.00	3
CeramTec Ibérica Innovative Ceramic Engineering S.L., Vilassar de Mar/Spain	100.00	100.00	4
CeramTec Innovative Ceramic Engineering, (M) Sdn. Bhd., Seremban/Malaysia	100.00	100.00	3
CeramTec Korea Ltd., Suwon-Si/South Korea	100.00	100.00	3
CeramTec Suzhou Ltd., Suzhou/China	100.00	100.00	3
PST Press Sintertécnica Brasil Ltda., Nova Odessa/ Brazil	100.00	100.00	3
CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji—Goa/India	99.90	99.90	3
Press and Sinter Technics de Mexico S.A. de C.V., Puebla/Mexico	100.00	100.00	3
CeramTec BidCo LLC, Laurens/USA	100.00	100.00	1
CeramTec Acquisition LLC, Laurens/USA	100.00	100.00	1
CeramTec North America LLC, Laurens/USA	100.00	100.00	3
DAI Ceramics LLC, Willoughby/USA	100.00	100.00	3
PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland	100.00	100.00	3

1 Entities performing the functions of a holding company.
2 Manufacturing and distribution companies operating in the Industrial and Medical Products segments.
3 Manufacturing and distribution companies operating in the Industrial segment.
4 Distribution companies.

CeramTec TopCo has a direct shareholding in CeramTec BondCo, and an indirect shareholding in the other subsidiaries.

CeramTec BondCo, CeramTec AcquiCo, CeramTec Holding, CeramTec Group, CeramTec FinCo GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, Emil Müller GmbH and CeramTec-ETEC GmbH make use of the exemption from publishing the financial statements and the management report for the financial year 2020 pursuant to Section 264 (3) HGB.

2 Accounting Principles and Policies

2.1 Basis of consolidation

Entities included in the consolidated financial statements are included from the date on which CeramTec TopCo obtains control over them. They are deconsolidated on the date on which CeramTec TopCo ceases to have control.

In accordance with IFRS 10, uniform accounting policies are used to prepare the separate financial statements of the companies included in the consolidated financial statements.

All significant intercompany receivables and liabilities, revenue, income and expenses and any intercompany profits and losses are eliminated. Pursuant to IAS 12, deferred taxes are recognized for temporary differences arising from consolidation entries.

If less than 100% of equity in a subsidiary is allocable to CeramTec TopCo, the interests allocated to the other shareholders are generally disclosed separately under equity as non-controlling interests. For reasons of immateriality, this does not apply to the non-controlling interests in CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji—Goa, India.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value. This is determined as the total of the acquisition-date fair values of the transferred assets, the liabilities assumed from the former owners of the acquired entity and the equity instruments issued by the acquirer in exchange for control of the acquiree. Acquisition-related transaction costs are recognized in profit or loss as incurred.

Goodwill is measured as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the equity share in the acquiree previously held by the acquirer (if available) over the net of the acquisition-date fair value of the identifiable assets acquired and liabilities assumed. If the fair value of the acquired net assets is higher than the consideration transferred, CeramTec TopCo reassesses and examines whether it has correctly identified all acquired assets and all assumed liabilities. In the event of a negative difference, even after reassessment, the resulting gain is recognized directly in profit or loss.

For acquisitions of equity investments with shares in capital below 100%, IFRS 3 allows for the goodwill attributable to non-controlling interests to also be recognized. Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets. This option can be newly exercised each time a business combination takes place. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in other standards.

If a company which is part of the CeramTec TopCo Group acquires an entity, it measures the financial assets and liabilities for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as of the acquisition date. This also includes separating embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, previously held equity interests are remeasured at their acquisition-date fair value. Any gain or loss is recognized through profit or loss and is taken into account when determining goodwill.

All contingent consideration that must be transferred by the acquirer is recognized at fair value as of the date of acquisition. Any contingent consideration classified as an asset or liability, which is recognized as a financial instrument under IFRS 9 *Financial Instruments*, is measured at fair value. Changes in the fair value are recognized through profit or loss. Should the contingent consideration not fall under IFRS 9, it is accounted for under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets,* as appropriate. If the contingent consideration is classified as equity, it is not remeasured and its subsequent settlement is accounted for within equity.

After initial recognition, goodwill is measured at cost less any accumulated impairments. Goodwill is tested for impairment at least once a year (in the fourth quarter) as well as when there are indications of impairment. For the purpose of impairment testing, goodwill acquired in a business combination must, from the acquisition date, be allocated to each of the cash-generating units of CeramTec TopCo, which is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquirer are assigned to those units or groups.

If goodwill has been allocated to a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. If the internal management reporting structure is reorganized, any goodwill allocated to a cash-generating unit is reallocated based on the new reporting structure. Any goodwill reallocated under these circumstances is measured based on the relative values of the newly established operation and the portion of the cash-generating unit.

Foreign currency translation

The consolidated financial statements are prepared in euros, the functional currency of the CeramTec TopCo Group. The financial statements prepared by entities that use a different functional currency are translated into euros in accordance with IAS 21. The equity of the foreign entities included in the consolidated financial statements is translated at the historical rates. The remaining items of the statement of financial position are translated at the respective closing rates. Income and expenses are translated at annual average rates. These are calculated as the mean value from the individual monthly average rates of the past twelve months.

Differences from the currency translation of assets and liabilities compared to the translation of December 31, 2019 as well as exchange differences between the income statement and the statement of financial position are recognized under other comprehensive income and retained in equity under accumulated other comprehensive income. These amounts recognized under other comprehensive income are reclassified to the income statement upon the partial or complete disposal of a subsidiary included in the consolidated financial statements.

Foreign currency transactions in the local financial statements are translated at the spot rate at the date of the transaction.

The exchange rates of significant currencies used for the currency translation to the euro are as follows:

		2020		2019	
		Closing rate	**Average rate**	**Closing rate**	**Average rate**
USD	USA	1.2281	1.1412	1.1189	1.1196
CNY	China	8.0134	7.8706	7.8175	7.7338
GBP	Great Britain	0.9031	0.8892	0.8521	0.8773
PLN	Poland	4.5565	4.4429	4.2567	4.2975
CZK	Czech Republic	26.2520	26.4557	25.4630	25.6701

The individual items in the consolidated statement of cash flows are translated at average rates, while cash and cash equivalents are measured at the spot rate applicable at the balance sheet date.

2.2 Accounting policies

Revenue recognition

Revenue is recognized in accordance with the five-step model framework applied to all contracts with customers pursuant to IFRS 15. In accordance with this five-step model, the contract with the customer is first identified (step 1). The performance obligations in the contract are then identified (step 2). The transaction price is then determined (step 3) with explicit requirements stipulated on how to account for variable consideration, financing components, payments made to a customer, and exchanges of goods or services. After determining the transaction price, the transaction price is allocated to each of the performance obligations in the contract (step 4), by reference to their relative standalone selling prices. Finally, revenue is recognized when (or as) the entity satisfies a performance obligation (step 5). As a requirement, revenue can only be recognized once (or as) control of the goods or services is transferred to the customer.

The Group does not offer guarantees to customers that provide greater protection than that stipulated by law. The Group does usually not grant customers extensions of payment terms. However, in specific cases, special agreements can be concluded. In addition, agreements are in place with individual customers (mainly Medical Products customers), which provide for a bonus/malus system. Revenue is only recognized to the extent to which it is highly probable that a significant cancellation of revenue will not be necessary if the related uncertainty has ceased to exist. There is no significant financing component, as the agreed-upon payment terms are mainly between 30 and 60 days. A warranty provision is set up for the Group’s obligation to repair or replace defective products under standard warranty conditions.

Upon conclusion of a contract, the CeramTec TopCo Group companies determine whether revenue resulting from the contract should be recognized at a point in time or over time. The CeramTec TopCo Group uses specific criteria to determine whether control is transferred over time. If it is not, revenue is recognized when control is passed to the customer.

The CeramTec TopCo Group generates revenue mainly through the sale of goods and merchandise. Consequently, revenue from the majority of contracts with customers is recognized when control is transferred to a customer (when the customer has legal title to the asset, has the significant risks and rewards related to the ownership of the asset, or has formally accepted the asset).

Interest income, royalties, dividend income

Interest income is recognized pro rata temporis using the effective interest method. Income from royalties is recognized in accordance with the terms of the underlying contracts on an accrual and pro rata basis. Dividend income is recognized when the right to receive payment is established.

Research and development costs

Research costs are recognized as expenses in the period in which they are incurred. If the requirements for capitalization are not satisfied, development costs are recognized in profit or loss in the period in which they are incurred.

Intangible assets

Intangible assets are recognized if a future economic benefit is probable and can be measured reliably.

Individually acquired intangible assets are recognized at cost. The cost of intangible assets acquired in a business combination is their acquisition-date fair value. Internally generated intangible assets are stated at the cost that arises during the development phase if all of the following criteria are met:

- Technical feasibility of completing the intangible asset
- Intention to complete development of the intangible asset and use or sell it
- Ability to use or sell the intangible asset
- Existence of a market or demonstration of the usefulness of the intangible asset if it is to be used internally
- Availability of technical and financial resources to complete the development
- Ability to measure reliably the expenditure attributable to the intangible asset during its development

Following initial recognition, intangible assets are carried at cost less accumulated amortization and any accumulated impairments.

Intangible assets with finite useful lives are amortized on a straight-line basis over their useful life. Intangible assets acquired during the year are amortized pro rata temporis. The useful life and amortization method are reviewed at least annually at the end of each financial year. Changes are treated as changes in accounting estimates. Amortization is recognized in the cost of sales, research and development, general administrative and selling costs. The useful life for technology amounts to 10 to 18 years and for customer relationships it amounts to 5 to 18 years. Intangible assets with finite useful lives are tested for impairment if there is an indication that the asset may be impaired.

Intangible assets with an indefinite useful life are tested annually for impairment. If the carrying amount of the asset is no longer recoverable, an impairment is recognized. Trademarks are assigned an indefinite useful life based on expectations of future use.

Impairment is assessed by comparing the carrying amount of the intangible assets with its recoverable amount at the level of the cash-generating units. Intangible assets are grouped at the lowest level for which the cash flows can be separately identified. The recoverable amount of a cash-generating unit is defined as the higher of the cash-generating unit's fair value less the cost to sell or its value in use. An impairment is carried out if the carrying amount exceeds the recoverable amount. In the event of an impairment being reversed, the amortized cost is written up.

Property, plant and equipment

Property, plant and equipment are recognized at cost if a future economic benefit is probable and can be measured reliably. The cost of internally generated property, plant and equipment comprises direct material and labor costs as well as the directly attributable material and labor overheads. If the requirements of a qualifying asset are met, the cost also includes borrowing costs incurred during production pursuant to IAS 23. A qualifying asset is an asset that takes a substantial period of time to get ready for its intended use or sale.

Following initial recognition, property, plant and equipment are carried at cost less accumulated depreciation and any accumulated impairments.

Property, plant and equipment are generally depreciated using the straight-line method. Property, plant and equipment acquired during the year are depreciated pro rata temporis. The useful lives of property, plant and equipment amount to 10 to 40 years for buildings and building components, 3 to 25 years for plant and machinery and 3 to 12 years for other equipment, furniture and fixtures. Low-value assets with an acquisition cost not exceeding EUR 250 are expensed immediately. Low-value assets with cost of between EUR 250 and EUR 1,000 are recognized in a catch-all item and depreciated collectively over a period of five years using the straight-line method.

Property, plant and equipment are tested for impairment if there is an indication that the asset may be impaired. Impairment is assessed by comparing the carrying amount of the item of property, plant and equipment with its recoverable amount at the level of the cash-generating unit. Property, plant and equipment are grouped at the lowest level for which the cash flows can be separately identified. The recoverable amount of a cash-generating unit is defined as the higher of the cash-generating unit's fair value less the cost to sell or its value in use. An impairment is carried out if the carrying amount exceeds the recoverable amount. In the event of an impairment being reversed, the amortized cost is written up.

Leases

A lease within the meaning of IFRS 16 exists if a customer is contractually given the right to control an identified asset. For all leases, the lessee must account for the right-of-use asset (RoU asset) as well as a corresponding lease liability. Exceptions to this exist only for short-term leases and leases of low-value assets and for certain intangible assets.

The initial amount of the right-of-use asset corresponds to the amount of the lease liability. In subsequent reporting periods, the right-of-use asset is (apart from certain exceptions) measured at cost less accumulated depreciation and impairments, adjusted for any remeasurement of the lease liability. The lease liability is initially measured at the present value of the lease payments that are paid over the lease term. In addition to the contractual basic lease term, all facts and circumstances, which provide reasonable assurance of the economic incentive of exercising a termination or extension option, are taken into account in determining the lease term. The present values of the lease liabilities are generally discounted using an incremental borrowing rate. Subsequently, the carrying amount of the lease liability is adjusted for interest using the discount rate and reduced in the amount of the lease payments made. Modifications to the lease payments result in a remeasurement of the lease liability. Cash flows are broken down into payments of principal and payments of interest, which are part of the cash flow from financing activities and the cash flow from operating activities respectively.

Financial assets

Financial assets are recognized when a group entity becomes a party to the contractual provisions of the instrument.

Financial assets are initially measured at fair value. Transaction costs that are directly attributable to the acquisition of financial assets (other than financial assets at fair value through profit or loss) are added to the fair value of the financial assets on initial recognition. Transaction costs directly attributable to the acquisition of financial assets that are measured at fair value through profit or loss are recognized immediately in profit or loss.

Financial assets are recognized and derecognized on a trade date basis if delivery of the assets within the time frame established by regulation or convention in the marketplace is required.

All recognized financial assets are subsequently measured in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

Classification of financial assets

Debt instruments that meet the following conditions are subsequently measured at amortized cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms of the financial asset give rise solely to payments of principal and interest on the principal amount outstanding.

Debt instruments that meet the following conditions are measured at fair value through other comprehensive income (FVTOCI):

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets; and
- the contractual terms of the financial asset give rise to solely payments of principal and interest on the nominal amount outstanding.

All other financial assets that do not fulfill the aforementioned conditions are generally measured at fair value through profit or loss (FVTPL).

The Group neither recognizes debt instruments that are measured at FVTOCI nor equity instruments designated to be classified as FVTOCI.

Amortized cost and effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating interest income over the relevant period.

For financial assets for which no objective evidence of impairment was present upon their origination or purchase, the effective interest rate is the rate that discounts estimated future cash receipts (including all fees that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) excluding expected credit losses, through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount on initial recognition. For financial assets for which objective evidence of impairment was present upon their origination or purchase, a credit-adjusted effective interest rate is calculated by discounting the estimated future cash flows, including expected credit losses.

The amortized cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. The gross carrying amount of a financial asset is the amortized cost of a financial asset before adjusting for any loss allowance.

Interest income is recognized using the effective interest method for debt instruments measured at amortized cost or at FVTOCI. For financial assets for which objective evidence of impairment was present upon their origination or purchase, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets for which objective evidence of impairment subsequently arose. For these latter financial assets, interest income is recognized by applying the effective interest rate to the net carrying amount of the financial asset at the beginning of the reporting period that follows the occurrence of objective evidence of impairment. If, in subsequent reporting periods, the credit risk of such a financial instrument improves so that there is no longer objective evidence of impairment, interest income is recognized again by applying the effective interest rate to the gross carrying amount of the financial asset at the beginning of the following reporting period.

For purchased or originated credit-impaired financial assets, the Group recognizes interest income by applying the credit-adjusted effective interest rate to the amortized cost of the financial asset from initial recognition. The interest rate calculation does not revert to the gross basis even if the credit risk of the financial asset subsequently improves so that the financial asset is no longer credit-impaired.

Interest income is recognized in the consolidated statement of comprehensive income and is included in the "Interest income and other finance income" line item.

Financial assets at FVTPL

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognized in profit or loss to the extent they are not part of a designated hedging relationship. The net gain or loss recognized in profit or loss incorporates any dividend or interest earned on financial assets and is included in the "Interest income and other finance income" or "Interest expenses and other finance costs" line items respectively.

Impairment of financial assets

The Group generally recognizes a loss allowance for expected losses on financial investments in debt instruments that are measured at amortized cost or at FVTOCI, finance lease receivables, trade receivables and contract assets. The amount of expected losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group recognizes a loss allowance for all trade receivables in the amount of the expected losses based on debtor-specific factors and information about their current economic situations. When estimating this, reference is also made to actual credit loss experiences of debtors. Irrespective of the above approach, the Group considers a default to have occurred when a financial asset is more than 60 days/90 days past due unless the Group has reasonable and supportable information to demonstrate that a financial asset is still unimpaired.

For all other financial instruments, the Group recognizes a loss allowance in the amount of the expected losses over their lifetimes if the credit risk of the financial instrument has increased significantly since initial recognition. If, however, the credit risk of the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to the expected 12-month loss.

The Group directly writes off a financial asset and hence reduces the gross carrying amount when there is information indicating that the debtor is in significant financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures. Any recoveries made are recognized in profit or loss.

In addition to using external sources of information, the measurement of expected credit losses is based on the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information as described above.

Derecognition of financial assets

Derecognition of financial assets is carried out by the Group only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to a third party. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognize the financial asset and also recognizes a collateralized borrowing for the consideration received.

On derecognition of a financial asset measured at amortized cost, the difference between the asset’s carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. In addition, on derecognition of an investment in a debt instrument classified as at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation surplus is reclassified to profit or loss. In contrast, on derecognition of an investment in equity instruments which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation surplus is not reclassified to profit or loss, but is transferred to retained earnings.

Financial liabilities

Financial liabilities are recognized when a group entity becomes a party to the contractual provisions of the instrument. Financial liabilities are measured at amortized cost using the effective interest method, or at fair value through profit or loss.

Financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the issue of financial liabilities (other than financial liabilities at fair value through profit or loss) are deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial liabilities that are measured at fair value through profit or loss are recognized immediately in profit or loss.

Financial liabilities at FVTPL

Financial liabilities are classified as financial liabilities at FVTPL when the financial liability is contingent consideration of an acquirer in a business combination, is held for trading, or is voluntarily designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative, except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group’s documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and IFRS 9 permits the entire combined contract to be designated as at FVTPL.

Designated financial liabilities at FVTPL are measured at fair value. Any gains or losses arising on changes in the fair value are recognized in profit or loss unless the financial liabilities are designated as hedging instruments as part of a hedging relationship.

However, for financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognized in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. The remaining amount of change in the fair value of the liability is recognized in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognized in other comprehensive income are not subsequently reclassified to profit or loss; instead, they are transferred to retained earnings upon derecognition of the financial liability.

Financial liabilities measured at amortized cost

Financial liabilities that are not a contingent consideration of an acquirer in a business combination, held for trading, or voluntarily designated as at FVTPL, are financial liabilities subsequently measured at amortized cost using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or a shorter period, to the net carrying amount of a financial liability on initial recognition.

Derecognition of financial liabilities

Derecognition of financial liabilities is carried out by the Group when, and only when, the Group's obligations are discharged, canceled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

Derivative financial instruments

Derivative financial instruments are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately.

Derivatives embedded in non-derivative host contracts that are not financial assets within the scope of IFRS 9 (e.g. financial liabilities) are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the entire contract concerned is not measured at FVTPL.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount is reported in the statement of financial position if there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

Measurement at fair value

On the reporting date, the CeramTec TopCo Group measures derivative financial instruments at fair value. The fair value is also stated in the notes to the financial statements for all other financial instruments.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This applies regardless of whether the price is directly observable or has been determined by applying a valuation method. Measurement at fair value is based on the assumption that the transaction, in order to sell or transfer the asset or liability, is performed in one of the following places:

- On the principal market for the asset or the liability or,

- if there is no principal market, on the most advantageous market for the asset or the liability.

The principal market or the most advantageous market must be accessible for the CeramTec TopCo Group as of the reporting date.

When calculating the fair value of an asset or a liability, the Group takes into account certain characteristics of the asset or the liability (such as condition and location of the asset or limitations of sale and use) if market participants would also take these characteristics into account when determining the price for the acquisition of the respective asset or transferring the liability as of the reporting date.

Fair value measurement of a non-financial asset takes into account the ability of a market participant to generate economic benefits through the best use of the asset or by selling it to another market participant that would find the best use for the asset.

Inventories

Inventories are measured at the lower of cost or net realizable value.

Costs of purchase comprise the purchase price as well as all other ancillary costs directly attributable to the acquisition. Costs of purchase are determined using the moving weighted average cost method.

In addition to direct material and labor costs, production costs also comprise a share of production-related indirect material and labor overheads, including depreciation insofar as it is a consequence of the production process, as well as production-related administrative costs. Production costs do not contain any borrowing costs incurred during production as inventories held at the CeramTec TopCo Group are not qualifying assets pursuant to IAS 23.

Inventories are written down to reflect risks from reduced salability. The net realizable value is the selling price during the ordinary course of business less the estimated costs of completion and selling costs. Previously recognized write-downs are reversed if the reasons for the write-downs cease to apply. In this case, the write-up can at most be up to the original cost amount.

Cash and cash equivalents

Cash and cash equivalents generally comprise cash in hand and bank deposits as well as cash and short-term deposits with an original term of up to three months. The cash and cash equivalents reported in the statement of cash flows correspond to the amounts recognized in the statement of financial position.

Provisions for pension obligations

Defined benefit obligations are measured using the projected unit credit method. These take into account the benefits vested in the current period and previous periods in exchange for the work performed by employees. When calculating the amount of total obligations, adjustment to salaries and pensions expected in the future as well as the probability of employee turnover and employee age and gender are also factored into calculations. Pension obligations in Germany are determined on the basis of the 2018G Guideline Tables of Prof. Dr. Klaus Heubeck. Pension obligations outside of Germany are determined taking into account country-specific parameters.

The obligations are discounted using discount rates derived from high-quality, fixed-interest corporate bonds with the same currency and term. If no high-quality, fixed-interest corporate bonds are available, yields on government bonds are used instead. Net interest on the net liability is determined by multiplying the net liability with the discount rate.

Remeasurements comprise actuarial gains and losses, the return on plan assets and changes in the effect of the asset ceiling while excluding net interest on the net liability. These are recognized in other comprehensive income. Remeasurements are not reclassified to the income statement in later periods.

Past service cost results from the change in the present value of the defined benefit obligation arising from a plan amendment or curtailment and is recognized as an expense.

The fair value of the plan assets is deducted from the present value of the pension obligations. Plan assets are assets that are held by a long-term employee benefit fund. This fund must be legally separate from the reporting entity and exist solely to pay or fund employee benefits.

Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event and it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount of the provision. **Information on estimation uncertainties can be found in note 2.3.**

The amount of the provision recognized is the best estimate of the expenditure required to settle the present obligation as of the reporting date. The best estimate must take account of inherent risks and uncertainties. If a provision is measured on the basis of the estimated cash flow required to settle the obligation, these cash flows are discounted in cases where the effect of the time value of money is significant.

If it can be assumed that portions of or the entire economic benefits required to settle the provision are reimbursable by an external third party, this claim is recognized as an asset if the reimbursement is virtually certain and the amount can be reliably determined. The amount recognized for the reimbursement should not exceed the amount of the provision.

Contingent liabilities and contingent assets

Contingent liabilities are not recognized in the consolidated statement of financial position. A contingent liability is disclosed in the notes to the financial statements, unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are also not recognized in the statement of financial position. They are described in the notes to the financial statements provided an inflow of economic benefits is probable.

Taxes

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities based on the tax rates that have been enacted or substantively enacted as of the reporting date.

Deferred tax assets and liabilities are recorded for all deductible and taxable temporary differences between the carrying amounts in the tax accounts and the IFRS consolidated statement of financial position. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or the initial recognition (other than in a business combination) of other assets and liabilities in transactions that effect neither the taxable profit nor the accounting profit. Deferred tax assets are recognized to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax assets also include tax refund claims that result from the expected utilization of existing unused losses or interest carryforwards in subsequent years and the recognition of which, being based on future taxable profits, is ensured with reasonable assurance.

Deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply in the period when the temporary differences are likely to reverse, based on tax rates and tax laws that have been enacted or substantively enacted as of the reporting date of the relevant company.

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which event the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively.

Deferred tax assets and deferred tax liabilities are offset if the Group has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets relate to the same taxable entity and the same taxation authority.

There is a consolidated tax group for income tax purposes between CeramTec BondCo (as the parent company), CeramTec AcquiCo, CeramTec Holding, CeramTec Group, CeramTec FinCo GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH.

Furthermore, a consolidated tax group for VAT purposes is in place between CeramTec AcquiCo as the parent company and CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH.

2.3 Estimation uncertainties and exercise of judgment

The preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of income, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the reporting date. These estimates and assumptions are made to obtain an appropriate overview of the assets, liabilities, financial position and financial performance of the CeramTec TopCo Group. The underlying assumptions are revised regularly. However, the actual results may vary from those anticipated.

In the process of applying the accounting and valuation methods of the CeramTec TopCo Group, management performed the following measurements, which have a significant impact on the consolidated financial statements.

Business combinations

Business combinations are accounted for using the acquisition method. The acquired assets and liabilities are measured at their acquisition-date fair value.

Using the acquisition method requires certain estimates and judgments, particularly with regard to determining the fair value of the acquired intangible assets and property, plant and equipment as well as the fair value of liabilities assumed. In addition, the expected useful lives of acquired intangible assets and property, plant and equipment need to be determined.

This measurement is largely based on estimated future cash flows. Deviations between the actual cash flows and those determined when calculating the fair value can have a significant effect on the future net profit/loss for the period of the CeramTec TopCo Group.

Goodwill of EUR 874,613k (December 31, 2019: EUR 1,011,678k) and other intangible assets of EUR 976,472k (December 31, 2019: EUR 1,038,533k) were recognized as of the reporting date.

Impairment of non-financial assets

Assumptions were made to calculate the recoverable amount to determine whether impairment losses had to be recognized on intangible assets and property, plant and equipment. In this regard, future cash flows were derived from the budget planning and medium-term forecast for each of the cash-generating units. Management assumes that the assumptions and estimates, on which the discounted cash flows are based, are accurate. Nevertheless, changes in the economic environment and growth assumptions can affect impairment testing resulting in the need to recognize impairment losses or to reverse impairment losses in the future.

Impairment losses recognized on non-financial assets for the financial year can be found in notes 4.1 Goodwill and intangible assets and 4.2 Property, plant and equipment.

Valuation allowances on receivables

Allowances for receivables are recognized based on assumptions about default risk and expected loss given default. The CeramTec TopCo Group exercises judgment to make the assumptions and select inputs used in determining the allowances by reference to past default experience, prevailing market conditions, and forward-looking estimates as of the end of the reporting period.

Accordingly, receivables are reduced by appropriate specific allowances for amounts estimated to be irrecoverable (for example receivables from customers on whose assets insolvency proceedings have been initiated are written off in full to the extent that any collateral provided is not recoverable). The allowances are allocated to level 3 in the fair value hierarchy under IFRS 9. As of the reporting date, an impairment loss of EUR 495k was identified as necessary (December 31, 2019: EUR 760k).

Provisions for pension obligations

Defined benefit plans are measured using actuarial valuations. These contain assumptions of discount rates, future salary trends, mortality rates and future pension increases. Provisions for pension obligations of EUR 124,350k were recorded as of the end of the reporting period (December 31, 2019: EUR 113,433k).

Provisions

Provisions for the expected expenses from warranty obligations in accordance with national sales contract law are recognized as of the date on which the relevant products are sold according to the management’s best estimate regarding the expenses required to settle the Group’s obligation.

A provision is set up for the obligation to eliminate environmental damage if it is likely to occur and the costs can be estimated reliably. With ongoing examination and over the course of performing renovation measures, the provisions are adjusted in line with the knowledge gained. The amount of the individual provisions is influenced by factors such as the extent of the contamination, the renovation measures called for and additional demands from authorities, companies or private persons.

In the aggregate, provisions (other provisions and provisions for taxes) of EUR 22,487k were recorded as of the end of the reporting period (December 31, 2019: EUR 27,696k).

Deferred tax assets

The calculation of deferred tax assets requires assumptions to be made relating to the future taxable income and historical use of deferred tax assets. These assumptions take into account the anticipated development and effect on earnings from the reversal of taxable temporary differences. As future business developments cannot be foreseen with certainty and are not entirely within the CeramTec TopCo Group's sphere of influence, the measurement of deferred tax assets involves a level of uncertainty.

As of the reporting date, deferred tax assets of EUR 934k were recognized (December 31, 2019: EUR 1,172k).

2.4 Adoption of amended and new standards and interpretations: Changes in accounting and valuation policies due to first-time adoption of revised and newly issued IFRSs and IFRICs

The following IFRSs and IFRICs were revised:

Standards and interpretations	Date of first-time adoption
IFRS 3: "Business Combinations"	January 1, 2020
IAS 1 / IAS 8: "Definition of Material (Amendments to IAS 1 and IAS 8)"	January 1, 2020
IFRS 9 / IAS 39 / IFRS 7: "Interest Rate Benchmark Reform—Phase 1"	January 1, 2020
Revised Conceptual Framework IFRS	January 1, 2020
IFRS 16: "Covid-19 related Rent Concessions"	June 1, 2020

The aforementioned changes do not have an effect on the consolidated financial statements of the CeramTec TopCo Group.

Revised and newly issued IFRSs and IFRICs not yet mandatorily to be adopted

The following revised IFRSs and IFRICs were not yet to be adopted mandatorily in the financial year or have not yet been adopted by the Commission of the European Communities under the endorsement procedure for the European Union. In the financial year, none of these new or amended standards and interpretations has been early adopted.

Standards and interpretations	Date of first-time adoption
IFRS 9 / IAS 39 / IFRS 7 / IFRS 4 / IFRS 16: "Interest Rate Benchmark Reform—Phase 2"	January 1, 2021
IFRS 4: "Extension of the Temporary Exemption from Applying IFRS 9 (Amendments to IFRS 4)"	January 1, 2021
IFRS 3: "Reference to the Conceptual Framework (Amendments to IFRS 3)"	January 1, 2022
IAS 37: "Onerous Contracts—Cost of Fulfilling a Contract (Amendments to IAS 37)"	January 1, 2022
IAS 16: "Property, Plant and Equipment—Proceeds before Intended Use (Amendments to IAS 16)"	January 1, 2022
Annual Improvements to IFRS Standards (2018—2020) for IFRS 1, IFRS 9, IFRS 16 and IAS 41	January 1, 2022
IFRS 17: "Insurance Contracts"	January 1, 2023
IAS 1: "Classification of Liabilities as Current or Non-Current (Amendments to IAS 1)"	January 1, 2023

The aforementioned changes will not have a significant effect on the consolidated financial statements of the CeramTec TopCo Group.

3 Notes to the Consolidated Statement of Comprehensive Income

3.1 Revenue

Revenue results primarily from the sale of goods and merchandise. Revenue breaks down into regions and businesses as follows:

	2020	2019
	kEUR	kEUR
Regions		
Europe (w/o Germany)	233,661	270,261
Germany	111,748	141,908
Asia	105,435	100,416
North America	91,194	91,766
Other regions	10,664	16,025
Total	**552,702**	**620,376**
Businesses		
Industrial	322,531	361,689
Medical Products	230,171	258,687
Total	**552,702**	**620,376**

Orders on hand amount to EUR 196,360k as of the reporting date (December 31, 2019: EUR 177,262k), and will probably be realized within the next twelve months. Thereof, EUR 129,042k (December 31, 2019: EUR 117,676k) is attributable to the Industrial business and EUR 67,318k (December 31, 2019: EUR 59,586k) is attributable to the Medical Products business.

3.2 Cost of sales

The cost of sales breaks down as follows:

	2020	2019
	kEUR	kEUR
Personnel expenses	124,398	130,864
Material and packaging costs	101,459	116,295
Amortization and depreciation	55,817	55,885
Other costs of sales	53,232	53,195
Total	**334,906**	**356,239**

Other costs of sales primarily contain energy costs, freight costs and maintenance expenses.

3.3 Selling costs

Selling costs primarily contain amortization and depreciation as well as personnel expenses.

3.4 Research and development costs

Research and development costs mainly contain personnel expenses.

3.5 General administrative costs

General administrative costs primarily contain personnel expenses.

3.6 Other income / expenses (-), net

Other income / expenses (-) breaks down as follows:

	2020	2019
	kEUR	kEUR
Impairment of goodwill	(137,065)	(329,753)
Foreign currency results	(863)	(667)
Losses on disposal of property, plant and equipment	(799)	(1,059)
Income from reversal of allowances for bad debts	385	74
Addition to allowance for bad debts	(195)	(591)
Impairment of property, plant and equipment	(186)	(4,806)
Impairment of other intangible assets	0	(5,456)
Impairment of financial assets	0	(2)
Transaction costs	0	(146)
Sundry other income	562	484
Sundry other expenses	(814)	(965)
Total	**(138,975)**	**(342,887)**

The annual impairment test resulted in the need to recognize impairment losses of EUR 137,065k (prior year: EUR 329,753k) with regard to goodwill of the Industrial cash-generating unit (CGU). Please refer to note 4.1.

Impairment of property, plant and equipment of EUR 186k (prior year: EUR 4,806k) results mainly from the permanent shutdown of machinery. The losses on disposal of property, plant and equipment in the amount of EUR 799k (prior year: EUR 1,059k) result mainly from the scrapping of machinery.

Sundry other expenses include mainly costs related to a discontinued product line.

3.7 Financial result

The financial result breaks down as follows:

	2020	2019
	kEUR	kEUR
Foreign currency gains from financial liabilities	5,276	190
Income from discounting of financial liabilities	1,447	1,380
Other finance and interest income	126	565
Interest income and other finance income	**6,849**	**2,135**
Interest expense from syndicated loan	28,357	31,612
Interest expense from derivatives	22,710	1,274
Interest expense from bond	21,315	21,062
Interest expense from shareholder loan	19,131	38,768
Expense from unwinding the discount on financial liabilities	5,242	4,287
Interest expense from provision and use of revolving credit line	1,271	693
Other interest expenses	2,172	3,175
Interest capitalized	(656)	(422)
Interest expenses and other finance costs	**99,542**	**100,449**
Financial result	**(92,693)**	**(98,314)**

Other interest expenses include an amount of EUR 1,058k (prior year: EUR 1,897k), which is due to unwinding the discount on provisions.

3.8 Income tax

There is a consolidated tax group for income tax purposes between CeramTec BondCo and its German subsidiaries. CeramTec TopCo is not included in the German consolidated tax group for income tax purposes.

This means that German corporate income tax and trade tax is only levied at the level of the parent company, CeramTec BondCo.

CeramTec TopCo also has indirect shareholdings in foreign corporations.

The current income taxes of the CeramTec TopCo Group therefore include, in addition to German corporate income tax and trade tax, the tax expense of the foreign corporations, which was calculated based on taxable income according to local tax law and the tax rate applicable in each case.

The loss before income tax of EUR -146,327k (prior year: EUR -322,781k) is allocable to Germany and abroad as follows:

	2020	2019
	kEUR	kEUR
Germany	(170,883)	(343,446)
Abroad	24,556	20,665
Total	**(146,327)**	**(322,781)**

The tax expense of EUR -2,848k (prior year: EUR -16,498k) breaks down as follows:

	2020	2019
	kEUR	kEUR
Current income tax expense	(28,123)	(34,434)
Deferred tax income	25,275	17,936
Tax expense (-) / tax income (+)	**(2,848)**	**(16,498)**

Overall, the CeramTec TopCo Group’s tax rate, based on the profit before income tax and mainly driven by the German entities, is 28.9% (prior year: 28.7%), which will be used for the following reconciliation. The effective tax rate, i.e., tax expense in relation to profit before income tax, factors in both the current and the deferred tax expense and takes into account all influential factors, such as non-deductible operating expenses or a change in the assessment base.

	2020		2019	
	kEUR	%	kEUR	%
Profit (+) / loss (-) before income tax	**(146,327)**		**(322,781)**	
Expected tax income	42,284	28.9%	92,597	28.7%
Permanent differences	(3,246)	(2.2)%	(3,228)	(1.0)%
Non-tax deductible impairment of goodwill	(39,607)	(27.1)%	(94,597)	(29.3)%
Tax rate differences	1,830	1.3%	1,499	0.5%
Non-recognition of deferred tax assets on interest carryforwards	(5,947)	(4.1)%	(8,370)	(2.6)%
Tax expense (-) / tax income (+) for previous years	1,796	1.2%	(2,149)	(0.7)%
Effects of changed income tax rates	(441)	(0.3)%	(2,440)	(0.8)%
Other adjustments	483	0.3%	190	0.1%
Tax expense (-) / tax income (+) and effective tax rate	**(2,848)**	**(1.9)%**	**(16,498)**	**(5.1)%**

The effects of permanent differences result mainly from trade tax add-backs in the amount of EUR 2,229k as well as other non-deductible operating expenses of EUR 1,017k.

Deferred taxes

Deferred income taxes were calculated using the expected tax rate of the relevant company. The deferred taxes are offset where there is an enforceable legal right to offset current taxes and the taxes are levied by the same tax authority.

In the consolidated statement of financial position, deferred taxes are disclosed as follows:

	December 31, 2020	December 31, 2019
	kEUR	kEUR
Deferred tax assets	934	1,172
Deferred tax liabilities	270,110	298,417
Net amount of deferred tax liabilities	**269,176**	**297,245**

The deferred tax assets and liabilities stem from the following:

	December 31, 2020		December 31, 2019	
	Assets	Liabilities	Assets	Liabilities
	kEUR	kEUR	kEUR	kEUR
Tax loss carryforwards	71	0	48	0
Property, plant and equipment	733	22,432	820	25,080
Goodwill and other intangible assets	1,509	281,391	1,941	300,319
Inventories, receivables and other assets	16,366	4,245	14,832	8,695
Non-current provisions	27,559	6,525	25,664	6,394
Current provisions and other liabilities	3,870	4,691	5,587	5,649
Total deferred taxes	**50,108**	**319,284**	**48,892**	**346,137**
Offsetting	(49,174)	(49,174)	(47,720)	(47,720)
Deferred taxes	**934**	**270,110**	**1,172**	**298,417**

The following table shows the development of the net amount of deferred tax liabilities:

	2020	2019
	kEUR	kEUR
Net amount of deferred tax liabilities as of January 1	**297,245**	**317,837**
Deferred tax income shown in the income statement	(25,275)	(17,936)
Changes in deferred taxes recognized in other comprehensive income	(2,589)	(2,856)
Other changes (e.g. changes arising from foreign currency translation)	(205)	200
Net amount of deferred tax liabilities as of December 31	**269,176**	**297,245**

Other comprehensive income contains deferred tax income on the remeasurement of defined benefit plans of EUR 2,472k (prior year: EUR 2,969k) and deferred tax income on gain/loss arising from cash-flow hedges in the amount of EUR 117k (prior year: deferred tax expense in the amount of EUR 208k).

Unused losses and interest carryforwards

Unused losses and interest carryforwards break down as follows:

	December 31, 2020	December 31, 2019
	kEUR	kEUR
Interest carryforwards	81,568	83,551
on which no deferred tax assets are recognized	*81,568*	*83,551*
Foreign unused losses	513	551
on which no deferred tax assets are recognized	*320*	*357*
Total unused losses	678	941
on which no deferred tax assets are recognized	*320*	*747*

Deferred tax assets were recognized on unused tax losses in the amount of EUR 358k (December 31, 2019: EUR 194k).

Foreign unused losses, for which deferred tax assets have been capitalized, result from unused losses made by the group company in Spain of EUR 193k (December 31, 2019: EUR 194k). The tax loss carryforwards in Spain do not expire.

Temporary differences in connection with shares in subsidiaries in the amount of EUR 2,412k (prior year: EUR 1,974k) are not subject to deferred tax liabilities, because the Group is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

3.9 Government grants

In the context of the coronavirus pandemic, the following government grants (mainly social security contributions) were received in 2020 and recognized with a cost-reducing effect in the following functional areas:

	2020
	kEUR
Cost of sales	847
Selling costs	113
Research and development costs	56
General administrative costs	57
	1,073

3.10 Additional information on the type of expenses

Cost of materials

In the financial year, cost of materials amounted to EUR 119,438k (prior year: EUR 135,013k). Cost of materials is mainly contained in cost of sales.

Personnel expenses

Personnel expenses break down as follows:

	2020	2019
	kEUR	kEUR
Wages and salaries	152,397	162,660
Social security contributions	29,272	31,764
Pension expenses	7,106	6,581
Total	**188,775**	**201,005**

Personnel expenses are contained in cost of sales, selling, research and development, as well as general administrative costs.

Employees

On average, the Group employed 3,410 people in the financial year (prior year: 3,589). These break down as follows:

	2020 Headcount (average)	2019 Headcount (average)
Salaried employees	1,307	1,360
Wage earners	2,103	2,229
Total	**3,410**	**3,589**

Amortization and depreciation

Amortization, depreciation and impairment break down as follows:

	2020	2019
	kEUR	kEUR
Amortization of intangible assets	65,669	65,235
Depreciation of property, plant and equipment	41,239	41,915
Impairment of goodwill and intangible assets	137,065	335,209
Impairment of property, plant and equipment	186	4,807
Total	**244,159**	**447,166**

4 Notes to the Consolidated Statement of Financial Position

4.1 Goodwill and intangible assets

Goodwill and intangible assets break down as follows:

		Other intangible assets				
	Goodwill	Trademarks	Technology	Customer relationships	Other	Total
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Cost						
January 1, 2019	**1,341,431**	**59,000**	**335,777**	**761,800**	**37,167**	**2,535,175**
Additions	0	0	0	0	3,027	3,027
Disposals	0	0	0	0	(33,524)	(33,524)
Reclassifications	0	0	0	0	56	56
Exchange differences	0	0	498	0	18	516
December 31, 2019	**1,341,431**	**59,000**	**336,275**	**761,800**	**6,744**	**2,505,250**
Additions	0	0	0	0	3,935	3,935
Disposals	0	0	0	0	(44)	(44)
Exchange differences	0	0	(501)	0	(26)	(527)
December 31, 2020	**1,341,431**	**59,000**	**335,774**	**761,800**	**10,609**	**2,508,614**
Amortization/ impairment						
January 1, 2019	**0**	**0**	**15,566**	**38,187**	**34,317**	**88,070**
Additions to amortization	0	0	18,189	45,823	1,223	65,235
Additions to impairment	329,753	5,456	0	0	0	335,209
Disposals	0	0	0	0	(33,524)	(33,524)
Exchange differences	0	0	39	1	9	49
December 31, 2019	**329,753**	**5,456**	**33,794**	**84,011**	**2,025**	**455,039**
Additions to amortization	0	0	18,189	45,824	1,656	65,669
Additions to impairment	137,065	0	0	0	0	137,065
Disposals	0	0	0	0	(44)	(44)
Exchange differences	0	0	(61)	(120)	(19)	(200)
December 31, 2020	**466,818**	**5,456**	**51,921**	**129,715**	**3,618**	**657,529**
Net carrying amounts						
December 31, 2020	**874,613**	**53,544**	**283,852**	**632,085**	**6,991**	**1,851,086**
December 31, 2019	**1,011,678**	**53,544**	**302,481**	**677,789**	**4,719**	**2,050,211**

Goodwill results from the acquisition of CeramTec Holding and its subsidiaries in 2018 (see note 1.2). Goodwill was allocated to the groups of cash-generating units (CGUs) Medical Products (EUR 874,613k), and Industrial (EUR 466,818k).

The CGU Medical Products includes the business activities designed to develop, manufacture and supply technical high-performance ceramics products used for medical technology, and the CGU Industrial includes the business activities designed to develop, manufacture and supply technical high-performance ceramics products used in the electronics and automotive industries, and for mechanical engineering.

For the cash-generating units, the impairment test was performed as of November 30, 2020. The recoverable amount was calculated based on the asset's value in use. Value in use is calculated by discounting the future cash flow surpluses. The measurement is therefore allocable to level 3 pursuant to IFRS 13. The projected future cash inflows are based on the approved financial budgets, which are undertaken by the CeramTec TopCo Group and, as a rule, have a three-year planning horizon. For this purpose, assumptions are made in particular about future selling prices, quantities and costs.

The financial budgets are prepared on the basis of historical experience, and reflect the management's expectations for the following years.

Different benchmark companies were considered for the peer group of the CGU Medical Products and the CGU Industrial.

The growth rate of the perpetuity was assumed to be 1.00% (prior year: 1.00%). The weighted average cost of capital for the CGU Medical Products is 9.31% (prior year: 9.21%) before tax and 6.92% (prior year: 6.89%) after tax. The weighted average cost of capital for the CGU Industrial is 13.19% (prior year: 13.69%) before tax and 9.63% (prior year: 10.38%) after tax. Equity costs were calculated using a base interest rate of -0.10% (prior year: 0.17%) each and a market risk premium of 7.75% (prior year: 7.50%) each.

Due mainly to the decline in revenue and earnings expectations caused by the coronavirus pandemic, the impairment test performed during the year as of June 30, 2020 for the CGU Industrial resulted in the need to recognize impairment losses totaling EUR 137,065k, as the carrying amount exceeded the assets' value in use. Goodwill of the CGU Industrial has since been completely written down and accordingly has a carrying amount of EUR 0k as of December 31, 2020. The planning for the year 2021 is based on revenue of EUR 328,400k and an average moderate annual increase in revenues and EBITDA in the detail planning period.

According to our assessment, reasonably possible changes in significant basic assumptions (weighted average cost of capital, EBITDA margin) underlying the determination of value in use would not result in an excess of the carrying amount of the CGU Medical Products and the CGU Industrial over its value in use.

As of March 8, 2018, the CeramTec, BIOLOX, SPK and DAI Ceramics trademarks were identified within the scope of the purchase price allocation. The carrying amount of the above trademarks was EUR 53,544k as of December 31, 2020 (December 31, 2019: EUR 53,544k). As the recognized trademarks do not represent a product-specific trademark and do not have identifiable useful lives, the useful life for the recognized trademarks was classified as indefinite. Upon acquisition, the trademarks were allocated to the cash-generating units Medical Products (EUR 33,200k) and Industrial (EUR 25,800k). The impairment test with regard to the trademarks of the CGU Industrial did not result in any need to recognize impairment losses (prior year: EUR 5,456k).

Technology has a carrying amount of EUR 283,852k (December 31, 2019: EUR 302,481k) and primarily contains the basic technology underlying high-performance ceramics. This has an average weighted remaining useful life of 15.2 years (December 31, 2019: 16.2 years).

Customer relationships have a carrying amount of EUR 632,085k (December 31, 2019: EUR 677,789k) and primarily contain customer relationships from the Medical Products business. These have an average weighted remaining useful life of 14.1 years (December 31, 2019: 15.1 years).

Scheduled amortization of other intangible assets is recognized under cost of sales, selling expenses, research and development costs and general administrative costs, while impairment losses are recognized under other income and expenses (-), net.

4.2 Property, plant and equipment

Property, plant and equipment break down as follows:

	Land and buildings	Technical plant and machinery	Other equipment	Right-of-use assets	Assets under construction	Total
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Cost						
January 1, 2019	**107,830**	**190,794**	**8,674**	**0**	**15,418**	**322,716**
Additions	1,145	17,837	2,778	1,762	18,847	42,368
Additions from initial recognition	0	0	0	4,852	0	4,852
Disposals	(313)	(3,542)	(692)	0	(41)	(4,588)
Reclassifications	886	10,345	426	0	(11,714)	(56)
Exchange differences	367	1,148	73	27	52	1,668
December 31, 2019	**109,915**	**216,582**	**11,259**	**6,641**	**22,562**	**366,960**
Additions	972	10,011	2,790	2,761	19,007	35,541
Disposals	(588)	(2,417)	(596)	(2,111)	(3)	(5,716)
Reclassifications	800	10,882	469	(106)	(12,151)	(106)
Exchange differences	(1,215)	(3,271)	(291)	(136)	(185)	(5,098)
December 31, 2020	**109,884**	**231,788**	**13,630**	**7,049**	**29,230**	**391,581**
Depreciation/impairment						
January 1, 2019	**5,774**	**25,576**	**2,372**	**0**	**0**	**33,722**
Additions to depreciation	7,425	28,721	3,233	2,536	0	41,915
Additions to impairment	0	4,756	51	0	0	4,807
Disposals	(90)	(2,445)	(659)	0	0	(3,194)
Exchange differences	22	268	28	5	0	324
December 31, 2019	**13,131**	**56,876**	**5,025**	**2,542**	**0**	**77,573**
Additions to depreciation	7,456	27,932	3,267	2,584	0	41,239
Additions to impairment	0	99	0	0	87	186
Disposals	(8)	(1,638)	(570)	(2,074)	0	(4,290)
Reclassifications	79	0	1	(187)	0	(106)
Exchange differences	(228)	(1,299)	(152)	(31)	0	(1,709)
December 31, 2020	**20,430**	**81,970**	**7,570**	**2,834**	**87**	**112,891**
Net carrying amounts						
December 31, 2020	**89,453**	**149,817**	**6,060**	**4,215**	**29,143**	**278,689**
December 31, 2019	**96,784**	**159,707**	**6,234**	**4,099**	**22,562**	**289,387**

Scheduled depreciation of property, plant and equipment is recognized under cost of sales, selling costs, research and development costs and general administrative costs, while impairment losses are reported as other income and expenses.

In the financial year, borrowing costs of EUR 656k (prior year: EUR 422k) were capitalized in property, plant and equipment applying an unchanged interest rate of 5.80%.

There were contractual commitments to acquire property, plant and equipment in the amount of EUR 12,286k as of the reporting date (December 31, 2019: EUR 21,161k).

Property, plant and equipment under IAS 17 (finance leases) contain rented buildings capitalized in previous years with a net carrying amount of EUR 1,123k (December 31, 2019: EUR 1,208k), and furniture and fixtures with a net carrying amount of EUR 2k (December 31, 2019: EUR 3k).

4.3 Other financial assets

The breakdown of other financial assets is shown in the following table:

	December 31, 2020 kEUR	December 31, 2019 kEUR
Other non-current financial assets		
Separated termination rights	10,221	25,139
Insurance claims	40	45
Minority shareholding without controlling interest	4	0
Sundry financial assets	10	59
Total	**10,275**	**25,243**
Other current financial assets		
Receivables arising from amounts retained by the factor as a security	1,850	1,792
Derivative financial instruments	314	717
Sundry financial assets	1,098	565
Total	**3,262**	**3,074**

The CeramTec TopCo Group has a termination option for the issued bond. This termination option represents an embedded derivative, which is accounted for separately from the underlying transaction. Further explanations can be found in note 4.15.

Due to the default risk being classified as low, no impairment was recognized in relation to other financial assets in the reporting period.

4.4 Other assets

The breakdown of other assets is shown in the following table:

	December 31, 2020 kEUR	December 31, 2019 kEUR
Other non-current assets		
Deferred finance costs for the revolving credit line	478	697
Sundry assets	3,600	410
Total	**4,078**	**1,107**
Other current assets		
Prepaid insurance	2,017	2,454
Receivables from energy tax refunds	1,809	989
VAT receivables	2,024	2,383
Deferred finance costs for the revolving credit line	219	219
Sundry assets	2,234	1,981
Total	**8,303**	**8,026**

Other assets mainly include advance payments.

4.5 Inventories

Inventories break down as follows:

	December 31, 2020 kEUR	December 31, 2019 kEUR
Raw materials	35,331	38,267
Work in progress	28,018	29,233
Finished goods	25,237	25,209
Merchandise	1,656	2,971
Other inventories	1,323	1,413
Total	**91,565**	**97,093**

Other inventories include packaging materials and spare parts for machinery.

At the reporting date, the write-down of inventories amounts to EUR 15,994k (December 31, 2019: EUR 14,636k). The expense resulting from the increase of EUR 1,358k in the write-down is reported in cost of sales.

4.6 Trade receivables

As of the reporting date, trade receivables were recognized to the amount of EUR 51,880k (December 31, 2019: EUR 52,740k) after taking into account valuation allowances of EUR 495k (December 31, 2019: EUR 760k).

As part of the factoring agreement concluded in 2017, receivables of EUR 13,599k were sold as of the reporting date (December 31, 2019: EUR 14,422k). Under the terms of the agreement, EUR 1,850k was retained by the factor as of the reporting date as a security (December 31, 2019: EUR 1,792k), and is recognized in other current financial assets (see note 4.3).

The value and maturity structure of trade receivables before impairment losses breaks down as follows:

	December 31, 2020	December 31, 2019
	kEUR	kEUR
Carrying amount before impairment losses	**52,375**	**53,500**
thereof not yet due on the reporting date	40,066	41,248
thereof past due on the reporting date	12,309	12,252
past due up to 30 days	8,140	10,001
past due up to 60 days	3,286	896
past due up to 90 days	343	181
past due more than 90 days	540	1,174

The age structure of the impairment losses as of the reporting date breaks down as follows:

	December 31, 2020	December 31, 2019
	EUR	EUR
not yet due	2	0
past due up to 30 days	144	22
past due up to 60 days	0	55
past due up to 90 days	19	47
past due more than 90 days	330	636
Total	**495**	**760**

The age structure of receivables past due which are not impaired breaks down as follows:

	December 31, 2020	December 31, 2019
	kEUR	kEUR
past due up to 30 days	7,991	9,969
past due up to 60 days	3,286	817
past due up to 90 days	324	112
past due more than 90 days	199	247
Total	**11,800**	**11,145**

Loss allowances are based on information about a customer developed internally or obtained from external sources, and an estimate of the likelihood of default. The loss allowances mainly include specific loss allowances for receivables due from customers who have entered into bankruptcy proceedings or who are facing severe financial difficulties.

Default risks in the majority of trade receivables (usually between 75% and 80%) of CeramTec GmbH, Plochingen/Germany, the largest company that engages in operating activities, are covered by using credit insurance. After taking credit insurance into account, the maximum default risk on trade receivables of CeramTec TopCo Group comes to around 51% of the carrying amount as of the balance sheet date (December 31, 2019: 48%).

Based on the CeramTec TopCo Group's historical credit loss experience and customer structure, the Group is expected to sustain a small loss in the event of default, taking into account future-oriented macroeconomic information and existing insurance that protects the Group against loss on receivables. The resulting impairment loss on trade receivables is of minor importance.

There was no indication as of the reporting date that the debtors of receivables that were not impaired and not past due would not meet their payment obligations. On average, the Group has recognized loss allowances of around 40% in relation to all receivables past due more than 60 days.

The following table shows the development of loss allowances on trade receivables during the past reporting period. Additional general risks of non-payment are considered remote.

Loss allowances	2020 kEUR	2019 kEUR
As of January 1	**760**	**530**
Addition	195	591
Utilization	(40)	(226)
Reversal	(385)	(75)
Foreign currency translation	(35)	(61)
As of December 31	**495**	**760**

4.7 Cash and cash equivalents

The "Cash and cash equivalents" line item contains bank balances of EUR 244,113k (December 31, 2019: EUR 64,373k) and cash in hand of EUR 5k (December 31, 2019: EUR 7k).

4.8 Equity

Subscribed capital

The fully paid in capital stock of the parent company CeramTec TopCo amounts to EUR 25k (December 31, 2019: EUR 25k).

Capital reserve

Effective as of December 31, 2019, a nominal amount of EUR 247,929k of the existing shareholder loan and the interest payable in the amount of EUR 32,025k were contributed to the capital reserve.

The capital reserve is freely available and not subject to any earmarking.

Retained earnings and net profit/loss for the period

The "Retained earnings and net profit/loss for the period" line item contains the current profits/losses incurred by the CeramTec TopCo Group and those incurred in previous years. This also includes the change in the revaluation reserve for pension obligations (after tax) in the amount of EUR -6,166k (December 31, 2019: EUR -7,417k).

Accumulated other comprehensive income

Accumulated other comprehensive income relates to foreign currency translation adjustments and differences from the market valuation of financial assets and liabilities including deferred tax effects.

4.9 Provisions for pension obligations

Within the CeramTec TopCo Group, there are defined benefit and defined contribution plans in place granting eligible employees benefits in the event of retirement, occupational disability or death—in the latter case to employees' surviving dependents. These benefits are based, as a rule, on the length of service and level of remuneration or contributions of the eligible employees taking into account conditions in terms of tax, labor and welfare law in the respective country.

In Germany, there are various direct commitments that depend on the remuneration and length of service and are subject to a cap. These commitments do not contain any rights to inflation-related pension adjustments. These defined benefit plans were closed for employees that joined after January 1, 2002. There is also a defined benefit plan in place with direct commitments for a fixed pension amount which depends on the employee's length of service. This plan was also closed for employees that joined after January 1, 2002. For the management of the German CeramTec TopCo group companies, there are direct commitments in place comprising benefits that depend on the remuneration and length of service and are subject to a cap as well as benefits that are calculated based on the performance of the Company. The eligible employees are also entitled to deferred compensation which is subsidized by the relevant group company depending on the achievement of personal targets by employees.

Furthermore, since the end of 2014, the Company has committed itself to directly providing benefits as compensation to employees who have been enrolled into Hoechster Pensionskasse, which was subject to the realignment of pension funds that might be to their disadvantage. The obligation is measured annually by an actuarial expert.

The pension plan in the UK is a funded defined benefit plan. The plan is administered by an external sponsoring institution managed by employer and employee representatives. The representatives are legally obligated to represent the interests of the entitled employees and are responsible for the investment decisions and managing the assets. The pension plan is closed. The plan grants the entitled employees annual pension payments, the amount of which depends on the length of service and the last salary earned. Pension payments are also made in the event of death. The obligation is measured annually by an actuarial expert.

The provisions for pension obligations break down as follows:

	December 31, 2020	December 31, 2019
	kEUR	kEUR
Germany	120,622	109,504
UK	3,489	3,698
Other	239	231
Total	**124,350**	**113,433**

The following table shows the extent of the obligation and the amount of plan assets as well as the provisions and other assets disclosed in the consolidated statement of financial position as of December 31, 2020.

	2020		
	German plans	Foreign plans	Total
	kEUR	kEUR	kEUR
Change in benefit obligations			
Benefit obligations at the beginning of the financial year	**109,504**	**12,702**	**122,206**
Service cost	4,146	20	4,166
Interest expense	974	241	1,215
Remeasurements	8,363	983	9,346
from the change in demographic assumptions	*0*	*46*	*46*
from the change in financial assumptions	*9,748*	*937*	*10,685*
Experience adjustments	*(1,385)*	*0*	*(1,385)*
Foreign currency translation	0	(702)	(702)
Benefits paid	(2,365)	(443)	(2,808)
Benefit obligations at the end of the year	**120,622**	**12,801**	**133,423**
Change in plan assets			
Market value of plan assets at the beginning of the financial year	**0**	**8,773**	**8,773**
Interest income from plan assets	0	165	165
Expense for managing the plans	0	(89)	(89)
Employer contributions	0	448	448
Remeasurements	0	701	701
from the change in financial assumptions	*0*	*701*	*701*
Foreign currency translation	0	(492)	(492)
Benefits paid	0	(433)	(433)
Market value of plan assets at the end of the year	**0**	**9,073**	**9,073**
Net obligation amount / provisions for benefits	**120,622**	**3,728**	**124,350**

The change in financial assumptions primarily results from the declined interest rate.

The following table shows the extent of the obligation and the amount of plan assets as well as the provisions disclosed in the consolidated statement of financial position for the comparable period as of December 31, 2019.

	German plans kEUR	Foreign plans kEUR	Total kEUR
Change in benefit obligations			
Benefit obligations at the beginning of the financial year	**96,430**	**10,826**	**107,256**
Service cost	3,497	23	3,520
Interest expense	1,809	301	2,110
Remeasurements	10,121	1,229	11,350
from the change in demographic assumptions	*0*	*(108)*	*(108)*
from the change in financial assumptions	*9,734*	*1,337*	*11,071*
Experience adjustments	*387*	*0*	*387*
Foreign currency translation	0	666	666
Benefits paid	(2,353)	(343)	(2,696)
Benefit obligations at the end of the year	**109,504**	**12,702**	**122,206**
Change in plan assets			
Market value of plan assets at the beginning of the financial year	**0**	**7,056**	**7,056**
Interest income from plan assets	0	203	203
Expense for managing the plans	0	-93	-93
Employer contributions	0	527	527
Remeasurements	0	964	964
from the change in financial assumptions	*0*	*964*	*964*
Foreign currency translation	0	457	457
Benefits paid	0	(341)	(341)
Market value of plan assets at the end of the year	**0**	**8,773**	**8,773**
Net obligation amount / provisions for benefits	**109,504**	**3,929**	**113,433**

The calculation of the pension obligations was based on the following assumptions as of December 31, 2020:

	Germany	Abroad
Interest rate (in %)	0.50	1.40
Wage and salary trends (in %)	2.50	N/A
Pension trend (in %)	1.50	2.60 – 3.00
Life expectancy	2018 G Guideline Tables	Mortality Tables

The calculation of the pension obligations was based on the following assumptions as of December 31, 2019:

	Germany	Abroad
Interest rate (in %)	0.90	2.00
Wage and salary trends (in %)	3.00	N/A
Pension trend (in %)	1.50	3.00 – 3.20
Life expectancy	2018 G Guideline Tables	Mortality Tables

The average term of the benefit obligations amounts to 22.7 years in Germany (prior year: 22.2 years) and 16.0 years abroad (prior year: 16.0 years).

The employer contributions and benefit payments expected to be paid into the plans during the next financial year amount to EUR 450k (prior year: EUR 476k) and EUR 2,994k (prior year: EUR 2,694k) respectively.

The risk from changes in actuarial assumptions underlying the measurement of the defined pension plans is borne by the relevant group company. The sensitivity analyses presented in the table below were performed based on reasonably possible changes in the respective assumptions as of the reporting date. The change in key actuarial assumptions would have the following effects (in kEUR) on the present value of pension obligations:

	Change	Effect December 31, 2020
Discount rate	- 0.50 percentage points	15,895
	+ 0.50 percentage points	-13,540
Wage and salary trends	- 0.50 percentage points	-492
	+ 0.50 percentage points	514
Pension trend	- 0.50 percentage points	-14,368
	+ 0.50 percentage points	15,965
Life expectancy	+ 1 year	6,004

The change in key actuarial assumptions would have had the following impact (in kEUR) on the present value of pension obligations for the prior year:

	Change	Effect December 31, 2019
Discount rate	- 0.50 percentage points	14,082
	+ 0.50 percentage points	-12,032
Wage and salary trends	- 0.50 percentage points	-433
	+ 0.50 percentage points	452
Pension trend	- 0.50 percentage points	-13,581
	+ 0.50 percentage points	15,059
Life expectancy	+ 1 year	5,448

There are no plan assets for German plans. The plan assets of the foreign plans break down into the following assets:

	December 31, 2020	December 31, 2019
	kEUR	kEUR
Securities/shares	4,456	4,260
Equity funds and other funds	2,468	2,086
Fixed-interest securities	1,405	1,584
Real estate	744	843
	9,073	**8,773**

The fair values of the securities and shares were determined based on prices quoted on active markets, while the fair values of real estate are not based on prices quoted on active markets. The real estate contained in plan assets relates to non-owner-occupied property in the UK. The investment horizon for plan assets takes into account the expected payout profile.

From January 1, 2002 to December 31, 2014, all new hires at CeramTec GmbH, CeramTec Service and Emil Müller GmbH were members of the pension fund Dynamit Nobel VVaG. Furthermore, some active and former employees of CeramTec GmbH and Emil Müller GmbH are members of the pension fund Pensionskasse der Mitarbeiter der Hoechst-Gruppe VVaG. These pension funds are multi-employer plans which are generally defined benefit plans. The two pension funds are subject to regulatory supervision. In the event that the funds are unable to settle their obligations, the employer is legally liable for the vested benefits (secondary liability). This obligation remains in place even if the CeramTec TopCo Group were to terminate its participation in the plans. However, terminating its participation would generally not directly result in having to make supplementary payments. In the consolidated financial statements, these pension plans are classified as defined contribution plans in accordance with IAS 19.34. As several employers are responsible for these pension funds, contributions made by the CeramTec TopCo Group can under certain circumstances be used to finance another entity's employee benefits.

Dynamit Nobel VVaG is funded for commitments made before December 1, 2007 with income-based contributions by the entitled employees as well as variable employer contributions. The employers' contribution must, together with the member contributions and return on plan assets from the pension fund, sufficiently fund the agreed benefit payments according to actuarial principles. Once pension payments have begun, the pension fund assumes the statutory pension adjustments provided it has the sufficient means to do so. In the last few years, the pension adjustments could not be assumed by the pension fund and had to be funded by the employers. For commitments given as from December 1, 2007, the employees and employer made a fixed, income-based contribution. There is no obligation on the part of the employer to adjust current pension benefits. Surpluses are used to increase the pension benefits. Although the existing obligations are at present fully covered by assets in accordance with German accounting standards for pension funds, the additional capital requirements have not been satisfied. There is a plan approved by regulatory authorities in place to remedy the contravention of requirements. Negative budget variances, for example due to the pension fund earning an insufficient return on assets, may result in the CeramTec TopCo Group having to make additional payments. The proportion of members whose membership is based on an existing or former work contract with CeramTec GmbH, CeramTec Service or Emil Müller GmbH in the total number of pension fund members amounts to around 26% for active employees, around 11% for non-contributory employees and around 4% for pensioners.

The pension fund Pensionskasse der Mitarbeiter der Hoechst-Gruppe VVaG is funded with income-based contributions by entitled employees as well as variable employer contributions. The employers' contribution must, together with the employees' member contributions and pension fund surpluses, sufficiently fund the agreed benefit payments according to actuarial principles. Once pension payments have begun, the pension fund assumes the statutory pension adjustments provided it has the sufficient means to do so. The proportion of members whose membership is based on an existing or former work contract with the CeramTec TopCo Group in the total number of members for active employees, non-contributory employees and pensioners ranges between around 0.1% and 0.15% in each case.

As of December 1, 2014, company pension schemes underwent some realignment, and all employees whose membership was based on an existing contract with the pension fund Dynamit Nobel VVaG were enrolled into Hoechster Pensionskasse VVaG. Since January 1, 2015, contributions have not been paid anymore to the pension fund Dynamit Nobel VVaG, and the employees have become extraordinary members. All new hires become members of Hoechster Pensionskasse VVaG. The employees and employer make a fixed, income-based contribution to Hoechster Pensionskasse VVaG. There is no obligation on the part of the employer to adjust current pension benefits. Surpluses are used to increase the pension benefits. CeramTec GmbH has committed itself to directly providing benefits as compensation for the realignment which involved enrolling the employees into another pension fund, which may be to their disadvantage.

The contributions made to the pension funds amounted to EUR 2,413k in the financial year (prior year: EUR 2,558k). The expenses are recorded in cost of sales, selling expenses, research and development costs as well as general administrative costs. Planned contributions of EUR 2,426k are expected to be made in 2021 (prior year: EUR 2,451k).

The expenses for additional defined contribution plans related to the employer's share of contributions to the German state pension insurance scheme, and amounted to EUR 11,827k (prior year: EUR 11,754k).

4.10 Provisions

The development of provisions in the financial year was as follows:

	Balance as of December 31, 2019	Addition	Utilization	Reversal	Reclassification	Exchange difference	Balance as of December 31, 2020
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Provisions for employee bonuses	12,098	9,272	10,177	1,707	101	(294)	9,293
Provisions for warranties	3,170	2,120	950	895	0	0	3,445
Provisions for environmental risks	272	85	18	6	0	(18)	315
Provisions for long-service awards	923	212	390	0	0	0	745
Provision for solvency requirements	2,834	60	1,884	3	0	(1)	1,006
Provisions for litigation risks	1,077	190	346	370	0	(8)	543
Provisions for taxes	4,424	4,000	4,425	0	0	(70)	3,929
Sundry provisions	2,898	1,339	622	189	(101)	(114)	3,211
	27,696	**17,278**	**18,812**	**3,170**	**0**	**(505)**	**22,487**

Provisions for environmental risks relate to the elimination of residual pollution, renovation measures and water conservation practices. Estimations and, where possible, external expert opinions are used to measure the amount of the provisions.

A provision was recognized for the solvency plan for the pension fund Dynamit Nobel VVaG which has been approved by the German Federal Financial Supervisory Authority (Bafin).

The provision for taxes includes anticipated income tax payments for past assessment periods.

Sundry provisions primarily comprise provisions for severance pay, legal and consulting fees as well as provisions for other contingent liabilities.

The maturities of the provisions were as follows:

	December 31, 2020	December 31, 2019
	kEUR	kEUR
Current provisions	19,726	22,190
Non-current provisions	2,761	5,506
Total	**22,487**	**27,696**

The non-current provisions mainly relate to long-service awards and solvency obligations as well as environmental risks.

The cash outflow of current provisions takes place within one year.

4.11 Financial liabilities to affiliates

Financial liabilities to affiliates comprise a loan payable to CTEC Acquisition S.à.r.l., Luxembourg, in the amount of EUR 273,835k (December 31, 2019: EUR 311,503k) with a term until December 31, 2028.

	December 31, 2020	December 31, 2019
	kEUR	kEUR
Non-current financial liabilities		
Loan payable	273,523	256,270
	273,523	**256,270**
Current financial liabilities		
Loan payable	0	19,599
Accrued interest	312	35,634
	312	**55,233**
Total	**273,835**	**311,503**

Effective as of December 31, 2019, a nominal amount of EUR 247,929k of the existing shareholder loan and the interest payable in the amount of EUR 32,025k were contributed to the capital reserve.

The amount reported as current of EUR 312k (prior year: EUR 55,233k) was paid to the shareholder in January of the subsequent year in each case.

4.12 Financial liabilities to third parties

The financial liabilities to third parties are broken down as follows:

	December 31, 2020	December 31, 2019
	kEUR	kEUR
Non-current financial liabilities		
Liabilities to banks	1,156,680	999,334
Liabilities from the bond	414,293	415,740
Derivative financial instruments	22,489	15,179
Lease liabilities	3,636	3,071
Total	**1,597,098**	**1,433,324**
Current financial liabilities		
Derivative financial instruments	8,256	5,743
Liabilities from the bond	7,993	7,993
Discounts and bonuses	3,065	4,139
Lease liabilities	1,759	2,355
Liabilities to banks	141	2,672
Sundry current financial liabilities	2,759	2,504
Total	**23,973**	**25,406**

Within liabilities to banks, the funds raised under the EUR tranche were increased by a nominal amount of EUR 175,000k effective as of December 15, 2020, resulting in a total volume of EUR 1,069,000k from the EUR tranche. Furthermore, there are two USD tranches with a nominal volume of EUR 121,326k. The tranches have variable interest rates and mature on March 8, 2025. Transaction costs of EUR 33,641k associated with the loan are spread over the term of the loan using the effective interest method.

In 2019, voluntary repayments were made in relation to the syndicated loan of EUR 44,000k on the EUR tranche and EUR 9,872k on two USD tranches.

The bond has a fixed interest rate and a nominal volume of EUR 406,000k (December 31, 2019: nominal volume of EUR 406,000k). It is due to mature on December 15, 2025. The CeramTec TopCo Group has a termination option for this bond, which is recognized as a separate financial asset (note 4.3). Associated transaction costs of EUR 13,570k are spread over the term of the bond using the effective interest method. Further information on the loans, the bond and derivatives can be found in note 4.15.

Lease liabilities are composed of right-of-use assets capitalized in accordance with IFRS 16 (see note 4.14) in the amount of EUR 4,309k and finance leases recognized in previous years in accordance with IFRS 17 in the amount of EUR 1,086k.

4.13 Other liabilities

Other liabilities break down as follows:

	December 31, 2020 kEUR	December 31, 2019 kEUR
Other non-current liabilities		
Contractual liabilities under contracts with customers	3,763	0
Total	**3,763**	**0**
Other current liabilities		
Wages and salaries including taxes	10,696	12,208
Contractual liabilities under contracts with customers	3,935	907
Real estate transfer tax	1,023	1,023
Sundry current liabilities	5,943	2,599
Total	**21,597**	**16,737**

The contractual liabilities from contracts with customers reported as non-current will be recognized in income in 2022, while those reported as current will be recognized in income in 2021. All contractual liabilities under contracts with customers of the prior year were recognized as revenue in the current financial year.

Sundry current liabilities are mainly attributable to liabilities to employees, liabilities from social security contributions, liabilities to pension funds as well as deferred income.

4.14 Accounting for leases (IFRS 16)

In accordance with IFRS 16 the lessee is required to recognize a right-of-use asset (or “RoU asset”) and a corresponding lease liability for all leases. At the commencement date, the amount of the RoU asset corresponds to the amount of the lease liability. In the subsequent periods, the RoU asset is (apart from some exceptions) measured at its cost less any accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liability. The CeramTec TopCo Group primarily leases various office and warehouse buildings as well as vehicles.

The right-of-use assets can be related to the asset category of property, plant and equipment as follows:

	Land and buildings	Technical plant and machinery	Other equipment	Total
	kEUR	kEUR	kEUR	kEUR
Cost				
January 1, 2019	**0**	**0**	**0**	**0**
Initial adoption of IFRS 16 as of January 1, 2019	2,434	172	2,246	4,852
Additions	138	29	1,595	1,762
Exchange differences	25	1	1	27
December 31, 2019	**2,597**	**202**	**3,842**	**6,641**
Additions	1,100	220	1,441	2,761
Disposals	(202)	(362)	(1,546)	(2,111)
Reclassifications	(106)	0	0	(106)
Exchange differences	(105)	(3)	(28)	(136)
December 31, 2020	**3,284**	**57**	**3,708**	**7,049**
Depreciation/impairment				
January 1, 2019	**0**	**0**	**0**	**0**
Additions to depreciation	686	185	1,665	2,536
Exchange differences	4	0	1	5
December 31, 2019	**690**	**185**	**1,666**	**2,542**
Additions to depreciation	733	213	1,638	2,584
Disposals	(177)	(362)	(1,534)	(2,074)
Reclassifications	(187)	0	0	(187)
Exchange differences	13	(5)	(39)	(31)
December 31, 2020	**1,072**	**31**	**1,731**	**2,834**
Net carrying amounts				
December 31, 2020	**2,212**	**26**	**1,977**	**4,215**
December 31, 2019	**1,907**	**17**	**2,175**	**4,099**

At the commencement date, the lease liability is measured at the present value of the lease payments that are paid over the lease term. Subsequently, the carrying amount of the lease liability is adjusted for interest using the discount rate and reduced in the amount of the lease payments made. Modifications to the lease payments result in a remeasurement of the lease liability.

The following table shows the undiscounted cash flows for the lease liabilities existing as of the reporting date pursuant to IFRS 16:

	December 31, 2020						
	Carrying amount	2021	2022	2023	2024	2025	> 2025
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Lease liabilities (IFRS 16)	4,309	1,824	1,155	634	419	153	419

The effect of IFRS 16 on the consolidated statement of comprehensive income is as follows:

	2020	2019
	kEUR	kEUR
Depreciation of right-of-use-assets	2,584	2,536
Interest expense associated with unwinding of discount on lease liabilities	227	243
Total	**2,811**	**2,779**

In the financial year, expenses related to short-term leases, leases of low-value assets as well as software leases are included in the consolidated statement of comprehensive income at EUR 981k (prior year: EUR 900k).

The total cash outflows for leases, which are not recognized—as in the past—in accordance with IAS 17, amount to EUR 3,867k in the financial year (prior year: EUR 3,576k).

4.15 Financial instruments

The following table shows the carrying amounts and fair values of the financial assets and financial liabilities reported in the consolidated financial statements, sorted by class and measurement category in accordance with IFRS 9.

	December 31, 2020		
	Measurement category of IFRS 9[1]	Carrying amount	Fair value
		kEUR	kEUR
Financial assets			
Trade receivables	AC	51,880	51,880
Separated termination rights	FVtPL	10,221	10,221
Cash and cash equivalents	AC	244,118	244,118
Forward exchange transactions	FVtPL	314	314
Other financial assets	AC	3,001	3,001
Total		**309,534**	**309,534**
Financial liabilities			
Liabilities to banks	AC	1,156,821	1,190,326
Bond liabilities	AC	422,286	421,702
Liabilities to affiliates	AC	273,835	275,595
Trade payables	AC	29,034	29,034
Separated interest rate floors	FVtPL	26,079	26,079
Lease liabilities	AC	5,395	5,395
Interest rate cap	FVtPL	4,665	4,665
Other financial liabilities	AC	5,825	5,825
Total		**1,923,940**	**1,958,621**

[1] AC: measured at amortized cost using the effective interest method; FVtPL: measured at fair value through profit or loss

	December 31, 2019		
	Measurement category of IFRS 9[1]	Carrying amount	Fair value
		kEUR	kEUR
Financial assets			
Trade receivables	AC	52,740	52,740
Separated termination rights	FVtPL	25,139	25,139
Cash and cash equivalents	AC	64,380	64,380
Forward exchange transactions	FVtPL	717	717
Other financial assets	AC	2,461	2,461
Total		**145,437**	**145,437**
Financial liabilities			
Liabilities to banks	AC	1,002,006	1,027,167
Liabilities to affiliates	AC	311,503	314,158
Bond liabilities	AC	423,733	448,597
Trade payables	AC	30,277	30,277
Separated interest rate floors	FVtPL	15,272	15,272
Interest rate cap	FVtPL	5,650	5,650
Lease liabilities	AC	5,425	5,425
Other financial liabilities	AC	6,644	6,644
Total		**1,800,510**	**1,853,190**

[1] AC: measured at amortized cost using the effective interest method; FVtOCI: measured at fair value through other comprehensive income; FVtPL: measured at fair value through profit or loss

If the fair value is not available in the form of a market price, it is calculated based on different valuation parameters. Depending on the availability of observable parameters and the significance of these parameters when calculating the fair value, the fair value is allocated to level 1, 2 or 3 of the fair value hierarchy. The allocation is based on the following factors:

- **Level 1:** Level 1 inputs are quoted (unadjusted) prices in markets for identical assets or liabilities that the entity can access at the measurement date

- **Level 2:** Level 2 inputs are inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly
- **Level 3:** Level 3 inputs are unobservable measurement parameters for the asset or liability.

The following table shows the fair value hierarchy for derivative financial instruments that are recognized at fair value in the consolidated financial statements:

	December 31, 2020		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial assets			
Separated termination rights	0	10,221	0
Forward exchange transactions	0	314	0
Financial liabilities			
Separated interest rate floors	0	26,079	0
Interest rate cap	0	4,665	0

	December 31, 2019		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial assets			
Separated termination rights	0	25,139	0
Forward exchange transactions	0	717	0
Financial liabilities			
Separated interest rate floors	0	15,272	0
Interest rate cap	0	5,650	0

The following table shows the fair value hierarchy for the financial instruments that are not recognized at fair value in the consolidated financial statements; however, their fair value is provided in the notes to the financial statements. The Group does not disclose the fair values of financial instruments when their carrying amounts are a reasonable approximation of the fair values, such as current trade receivables and payables.

	December 31, 2020		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial liabilities			
Bond liabilities	0	421,702	0
Liabilities to banks	0	1,190,326	0
Liabilities to affiliates	0	0	275,595
Lease liabilities	0	5,395	0

	December 31, 2019		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial liabilities			
Bond liabilities	0	448,597	0
Liabilities to banks	0	1,027,167	0
Liabilities to affiliates	0	0	314,158
Lease liabilities	0	5,425	0

The fair value of the bond corresponds to the nominal value multiplied by the market value as of the reporting date, plus the separated termination right. Accordingly, the fair value measurement is allocated to level 2 in the fair value hierarchy.

Liabilities to banks are subject to interest based on the interest rates observable on the market, such as EURIBOR or LIBOR, on the basis of which the fair value was also calculated. Accordingly, these are allocated to level 2 of the fair value hierarchy.

The fair values of the separated derivatives are measured using the Black-Scholes/Hull-White valuation model, which considers both the observable yield curves and the fluctuation intensity (volatility) of the currencies concerned. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement is therefore allocated to level 2 in the fair value hierarchy.

The fair value of the interest rate cap is measured using the Black-Scholes/Hull-White valuation model, which considers both the observable yield curves and the fluctuation intensity (volatility) of the currencies concerned. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement is therefore allocated to level 2 in the fair value hierarchy.

The fair value of all other financial instruments is calculated using a discounted cash flow method as well as by taking into account measurement parameters that are observable for the assets and liabilities, either directly or indirectly, at the market. Accordingly, these financial instruments were allocated to level 2 in the fair value hierarchy.

For assets and liabilities that are recognized at fair value on a recurring basis, the CeramTec TopCo Group assesses whether a transfer between the levels of the fair value hierarchy took place as of the end of each reporting period (based on the lowest level that is significant to fair value measurement as a whole). There were no transfers between level 1 and 2 during the reporting period.

Net gains and losses as well as total interest income and expenses

The following table presents the net gains and losses from financial assets and liabilities in accordance with IFRS 9:

	December 31, 2020			
	Change in fair value	**Currency translation**	**Impairment loss**	**Total**
	kEUR	**kEUR**	**kEUR**	**kEUR**
Financial assets				
Trade receivables	0	293	189	482
Cash and cash equivalents	0	(1,156)	0	(1,156)
Separated termination rights—FVtPL	(14,917)	0	0	(14,917)
	(14,917)	(863)	189	(15,591)
Financial liabilities				
Interest rate floors—FVtPL	(7,793)	0	0	(7,793)
	(7,793)	0	0	(7,793)
Total	**(22,710)**	**(863)**	**189**	**(23,384)**

	December 31, 2019			
	Change in fair value	**Currency translation**	**Impairment loss**	**Total**
	kEUR	**kEUR**	**kEUR**	**kEUR**
Financial assets				
Trade receivables	0	(504)	(516)	(1,020)
Cash and cash equivalents	0	(163)	0	(163)
Separated termination rights—FVtPL	4,151	0	0	4,151
	4,151	(667)	(516)	2,967
Financial liabilities				
Interest rate floors—FVtPL	(5,425)	0	0	(5,425)
	(5,425)	0	0	(5,425)
Total	**(1,274)**	**(667)**	**(516)**	**(2,458)**

Net gains from the changes in the fair value of embedded derivatives are primarily due to changes in market interest rates.

The following table shows the total interest income and expenses from financial assets and liabilities that are measured at amortized cost using the effective interest method.

	2020	**2019**
	kEUR	**kEUR**
Total interest expense	74,905	96,277
Total interest income	1,573	1,582

No finance fees, which are not part of the effective interest method, were expensed in profit or loss in the reporting period and in the prior year.

Derivative financial instruments

The following table shows the fair value and nominal value of derivative financial instruments as of December 31, 2020:

	December 31, 2020	
	Nominal value	Fair value
	kEUR	kEUR
Derivatives with a positive fair value		
Separated termination rights	406,000	10,221
Forward exchange transactions	21,253	314
Derivatives with a negative fair value		
Separated interest rate floors	1,069,000	(26,079)
Interest rate cap	970,712	(4,665)
Total	**2,466,965**	**(20,210)**

	December 31, 2019	
	Nominal value	Fair value
	kEUR	kEUR
Derivatives with a positive fair value		
Separated termination rights	406,000	25,139
Forward exchange transactions	20,075	717
Derivatives with a negative fair value		
Separated interest rate floors	894,000	(15,272)
Interest rate cap	980,248	(5,650)
Total	**2,300,323**	**4,934**

Embedded derivatives

As described in note 4.12, the CeramTec TopCo Group took out a syndicated loan with one EUR and two USD tranches with a syndicate of banks in March 2018. These loans include embedded interest rate floors, which oblige the CeramTec TopCo Group to pay a minimum interest rate that exceeds the variable interest rate. Furthermore, the bond issued in December 2017 contains various agreements that entitle the CeramTec TopCo Group to prematurely repay the bond. Both the interest rate floors and termination rights were separated from the host contract in accordance with the provisions of IFRS 9 and subsequently recognized as stand-alone derivatives at fair value through profit or loss.

5 Notes to the Consolidated Statement of Cash Flows

In the consolidated statement of cash flows, cash flow from operating activities is determined using the indirect method, while cash flow from investing and financing activities is determined using the direct method. The cash and cash equivalents presented in the statement of cash flows correspond to the item of the statement of financial position and comprise cash in hand, bank balances and cash investments with an original term of up to three months. The bank balances are not subject to drawing restrictions.

Effective as of December 15, 2020, the funds raised under the EUR tranche were increased by a nominal amount of EUR 175,000k.

In 2019, voluntary repayments were made in relation to the syndicated loan of EUR 44,000k on the EUR tranche and EUR 9,872k on two USD tranches.

Other non-cash income and expenses primarily contain changes in the fair value of financial instruments and accrued interest.

During the financial year, the Group made cash payments for investments in property, plant and equipment in the amount of EUR 6,712k which have already been added to property, plant and equipment in the previous period. At the same time, additions to property, plant and equipment in the financial year amounted to EUR 5,164k that will affect cash only during the following accounting period.

Non-cash investing activities relate exclusively to the addition of right-of-use assets.

In the financial year, liabilities arising from financing activities developed as follows:

	Liabilities to banks	Liabilities from the bond	Liabilities from shareholder loans	Derivative financial instruments	Lease liabilities	Total
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Balance as of December 31, 2019	1,002,006	423,733	311,503	20,922	5,426	1,763,590
Change in cash flow from financing activities						
Cash receipts	168,161	0	0	0	0	168,161
Cash payments	0	0	(19,599)	0	(2,886)	(22,485)
Interest payments	(29,911)	(21,315)	(37,200)	(2,405)	0	(90,831)
	138,250	**(21,315)**	**(56,799)**	**(2,405)**	**(2,886)**	**54,845**
Interest expenses	34,870	19,868	19,131	209	227	74,305
Currency translation effect	(7,181)	0	0	(59)	(133)	(7,373)
Fair value changes	0	0	0	12,078	2,761	14,839
Effects from the increase in the syndicated loan not affecting profit or loss	(11,124)	0	0	0	0	(11,124)
	16,565	**19,868**	**19,131**	**12,228**	**2,855**	**70,647**
Balance as of December 31, 2020	**1,156,821**	**422,286**	**273,835**	**30,745**	**5,395**	**1,889,082**

In the prior year, liabilities arising from financing activities developed as follows:

	Liabilities to banks	Liabilities from the bond	Liabilities from shareholder loans	Derivative financial instruments	Lease liabilities	Total
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Balance as of December 31, 2018	1,048,961	419,884	552,688	17,760	1,256	2,040,550
Change in cash flow from financing activities						
Cash receipts	0	5,163	0	0	0	5,163
Cash payments	(53,872)	0	0	0	(2,676)	(56,548)
Interest payments	(30,833)	(21,315)	0	(2,417)	0	(54,565)
	(84,705)	**(16,152)**	**0**	**(2,417)**	**(2,676)**	**(105,950)**
Interest expenses	36,592	19,682	38,769	0	243	95,285
Currency translation effect	1,158	0	0	(76)	(10)	1,072
Fair value changes	0	0	0	5,680	1,765	7,445
Additions from initial recognition according to IFRS 16	0	0	0	0	4,848	4,848
Conversion into equity	0	0	(279,954)	0	0	(279,954)
Other changes	0	319	0	(25)	0	294
	37,750	**20,001**	**(241,185)**	**5,579**	**6,846**	**(171,009)**
Balance as of December 31, 2019	**1,002,006**	**423,733**	**311,503**	**20,922**	**5,426**	**1,763,590**

The interest expenses relating to liabilities from the bond in the current financial year include income of EUR 1,447k (prior year EUR 1,380k) associated with discounting of financial liabilities that arose because the effective interest method was applied.

6 Other Notes

6.1 Management of financial risks

The CeramTec TopCo Group is exposed to credit risks and various market risks. Credit risks are mainly due to receivables from customers. Market risks are primarily attributable to the risk of changes in variable interest rates and exchange rate risks. Furthermore, the CeramTec TopCo Group is exposed to liquidity risks, which mainly result from the EUR and USD loans taken out in EUR as well as the bond also issued in EUR.

The CeramTec TopCo Group operates on the basis of an appropriate framework to manage financial risks, which is an integral part of ongoing business operations and ongoing financing activities. Taking these risk management objectives into consideration, risks are identified, assessed and managed on an ongoing basis. In some cases, the CeramTec TopCo Group enters into derivative financial instruments to hedge certain financial risks. By contrast, it is not permitted to enter into derivative financial instruments for speculative purposes.

Market risks

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in market prices. Market risk particularly comprises risks arising from exchange rate and interest rate fluctuations and other price risks, such as share price risks and commodity price risks.

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. In connection with the loans in USD, the CeramTec TopCo Group is exposed in particular to foreign currency risks arising from changes in the USD/EUR exchange rate.

The following sensitivity analysis in terms of the foreign currency risk was prepared based on the assumption that the portion of financial instruments in foreign currency will remain constant. The table shows the effects on net profit/loss for the period and group equity taking into account a hypothetical change of +/- 10% to the closing rate and forward rate as of the reporting date for the CeramTec TopCo group companies' main foreign currency items.

		December 31, 2020					
	Change in the spot rate %	**USD**	**GBP**	**CZK**	**PLN**	**CNY**	**Total**
Effect on net profit/loss before tax in kEUR	+10%	7,046	79	26	(130)	(674)	**6,347**
	-10%	(8,612)	(97)	(32)	159	824	**(7,757)**

		December 31, 2019					
	Change in the spot rate %	**USD**	**GBP**	**CZK**	**PLN**	**CNY**	**Total**
Effect on net profit/loss before tax in kEUR	+10%	9,878	(54)	59	(96)	(677)	**9,110**
	-10%	(12,073)	66	(72)	117	828	**(11,134)**

Forward exchange transactions have been concluded until the end of 2021 to cover the monthly demand for local national currency of two subsidiaries:

	December 31, 2020	
	Total	**Residual term of up to 1 year**
	kEUR	**kEUR**
Nominal value	21,253	21,253
Fair value	314	314
Average rate		
GBP / EUR	0.9064	
USD / GBP	1.3613	
CZK / EUR	26.3018	

	December 31, 2019	
	Total	**Residual term of up to 1 year**
	kEUR	**kEUR**
Nominal value	20,075	20,075
Fair value	717	717
Average rate		
GBP / EUR	0.8583	
USD / GBP	1.3185	
CZK / EUR	25.7398	

Interest rate risk

Interest rate risk is the risk that the fair value of fixed-interest rate financial instruments or the future cash flows of variable-interest rate financial instruments will fluctuate because of changes in market interest rates.

The variable-interest rate loans in USD and EUR expose the CeramTec TopCo Group in particular to a cash flow risk from the change in the EURIBOR and LIBOR interest rates. By comparison, changes in variable interest rates relating to the fixed-interest rate bond may lead to a change in fair value. However, this risk does not impact the net profit/loss for the period or group equity, as the bond is carried at amortized cost and changes in fair value are not recognized.

CeramTec TopCo group companies entered into agreements governing interest rate caps until May 31, 2022 and until May 31, 2024 respectively, in the form of two successive EUR interest rate caps in the amount of EUR 873,000k each, linked to 3-month EURIBOR, and two successive USD interest rate caps of USD 120,000k and USD 149,000k respectively, linked to 3-month LIBOR. The interest rate caps limit the maximum variable interest rates to 0.75% or 0.25% (EURIBOR) and to 2.75% or 1.25% (LIBOR).

The following table shows the effects on the financial result assuming a hypothetical change of +/- 100 basis points to the variable USD and EUR interest rates.

	December 31, 2020			
	Increase/ decrease in basis points	Effect on loan interest rates	Effect on derivatives	Total effect on interest expense
		kEUR	kEUR	kEUR
EURO	+100	10,838	(32,280)	(21,441)
	-100	(10,838)	49,985	39,147
US dollar	+100	1,230	(1,806)	(575)
	-100	(1,230)	0	(1,230)

	December 31, 2019			
	Increase/ decrease in basis points	Effect on loan interest rates	Effect on derivatives	Total effect on interest expense
		kEUR	kEUR	kEUR
EURO	+100	9,039	(20,390)	(11,351)
	-100	(9,039)	44,635	35,595
US dollar	+100	1,346	(616)	730
	-100	(1,346)	40	(1,307)

If the interest rate increases, the increase in the loan interest rate will be more than compensated for mainly as a result of the lower valuation of the negative derivative from the interest rate floor.

Collateral

CeramTec AcquiCo, CeramTec BidCo LLC (hereinafter "US BidCo") and CeramTec GmbH are borrowers of the syndicated loan. In connection with the syndicated loan, certain assets of CeramTec BondCo, CeramTec AcquiCo, CeramTec Holding, CeramTec Group, CeramTec GmbH, US BidCo, CeramTec Acquisition LLC and CeramTec North America LLC (hereinafter "CeramTec NA") were provided as collateral. In the USA, (i) the shares in US BidCo, CeramTec Acqusition LLC and in CeramTec NA, (ii) all additional assets of US BidCo, CeramTec Acquisition LLC and CeramTec NA (including receivables, intellectual property and bank accounts) and (iii) CeramTec GmbH's intellectual property registered in the USA, were provided as collateral. In Germany, (i) the shares in CeramTec AcquiCo, CeramTec Holding, CeramTec Group and CeramTec GmbH, (ii) receivables of CeramTec BondCo (intercompany receivables only), CeramTec AcquiCo (intercompany receivables and receivables relating to acquisition agreements only), CeramTec Holding (insurance, intercompany and hedging receivables), CeramTec Group (insurance, intercompany and hedging receivables) and CeramTec GmbH (insurance, intercompany, hedging and trade receivables, (iii) bank accounts of CeramTec BondCo, CeramTec AcquiCo, CeramTec Holding, CeramTec Group and CeramTec GmbH and (iv) the intellectual property of CeramTec GmbH, were provided as collateral for the syndicated loan, or encumbered.

The financial assets falling under the above collateral in accordance with IFRS 9 (see note 4.15) are stated on the balance sheet as of December 31, 2020 to an amount of EUR 264,377k (December 31, 2019: EUR 93,627k).

Risk from compliance with financial covenants

Compliance with financial covenants was agreed to in connection with obtaining the syndicated loan. Accordingly, the CeramTec TopCo Group must comply with a covenant provided that the revolving credit line of EUR 67,000k is utilized to an extent as specified in the loan agreement. As the amount drawn down at the end of the fiscal year remained below the threshold specified, the Company was not required to review compliance with this financial covenant. In addition, an analysis must be undertaken by the end of the financial year to determine whether the volume of the collateral used to secure the syndicated loan does not fall below a certain threshold. If so, additional collateral would have to be provided. At the end of the current financial year, the collateral value did not fall below the threshold. The management expects that the Company will continue to comply with the financial covenants in the following financial year.

Liquidity risk

Liquidity risk is the risk that the CeramTec TopCo group companies will not be able to fulfill their financial obligations when they fall due. The objective of the management of the CeramTec TopCo Group is to minimize the liquidity risk as far as possible by ensuring sufficient financing and credit lines from banks. In light of this, the CeramTec TopCo group companies had an undrawn and confirmed credit line of EUR 75,000k as of the reporting date consisting of a revolving credit line of EUR 67,000k and another short-term credit line for the overdraft facility of EUR 8,000k. Furthermore, the CeramTec group companies had cash and cash equivalents of EUR 244,118k.

The table below shows the contractually agreed undiscounted cash flows for the financial liabilities and derivative financial instruments as of the reporting date. The following cash flows were taken into account:

- Undiscounted, contractually agreed interest and principal payments from the loans in USD and EUR, including payments that are attributable to the separated interest rate floor. Cash flows in USD were translated into EUR based on the USD/EUR forward rate applicable as of the reporting date. Premature, voluntary special payments or repayments have not been taken into account.

- Undiscounted, contractually agreed interest and principal payments for the bond. Premature, voluntary special payments or repayments have not been taken into account.

- Undiscounted, contractually agreed payments for the interest rate cap.

	December 31, 2020						
	Carrying amount	2021	2022	2023	2024	2025	> 2025
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Trade payables	29,034	29,034	0	0	0	0	0
Liabilities to banks	1,156,821	28,531	30,695	30,690	30,823	1,196,256	0
Bond liabilities	422,286	21,315	21,315	21,315	21,315	434,420	0
Liabilities to affiliates	273,835	312	0	0	0	0	484,437
Lease liabilities	5,395	1,948	1,229	737	522	256	1,185
Other financial liabilities	5,825	5,825	0	0	0	0	0
Derivatives with a negative fair value							
Interest rate cap	4,665	2,372	2,135	1,017	72	0	0

	December 31, 2019						
	Carrying amount	2020	2021	2022	2023	2024	> 2024
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Trade payables	30,277	30,277	0	0	0	0	0
Liabilities to banks	1,002,007	29,073	28,423	28,406	28,329	28,352	1,034,760
Bond liabilities	423,734	21,315	21,315	21,315	21,315	21,315	434,420
Liabilities to affiliates	311,503	56,799	0	0	0	0	484,989
Lease liabilities	5,425	1,883	1,197	648	516	397	1,301
Other financial liabilities	6,644	6,644	0	0	0	0	0
Derivatives with a negative fair value							
Interest rate cap	5,650	2,460	2,460	1,230	0	0	0

Default risk

Credit risk is the risk that a counterparty will not meet its obligations under financial instruments, leading to a financial loss on the part of the creditor. At the CeramTec TopCo Group, the credit risk is primarily associated with trade receivables, cash and cash equivalents and other receivables.

Trade receivables exist in respect of numerous customers in various sectors and regions. Default risks related to customer receivables are locally monitored, assessed and limited by using credit insurance. After taking credit insurance into account, the maximum default risk on trade receivables amounts to 51% of the carrying amount.

Cash and cash equivalents mainly comprise bank balances and cash in hand. In connection with the investment of cash and cash equivalents, the CeramTec TopCo group companies are exposed to losses from credit risks if counterparties do not meet their obligations. The resulting risk position is managed by diversifying the counterparties. For example, cash is only invested at banks with excellent credit ratings. There is no cash past due or impaired as of the reporting date. The maximum default risk for cash and cash equivalents corresponds to the carrying amount.

The CeramTec TopCo Group considers this default risk to be immaterial as of the reporting date.

The termination option separated from the bond and recognized as other financial asset is not exposed to any credit risk as of the reporting date, because the positive market value is based solely on a potential premature repayment of the bond and an associated more favorable opportunity to refinance for the CeramTec TopCo Group, without giving rise to any actual cash receivable from the banks.

Trade receivables

A loss allowance of EUR 495k was recognized for lifetime expected credit losses on trade receivables (in accordance with the simplified approach set out in IFRS 9). The net receivables portfolio amounts to EUR 51,880k after deducting the loss allowance from the gross receivables portfolio of EUR 52,375k. The gross receivables portfolio of receivables that are more than 30 days past due amounts to EUR 4,170k. The net receivables portfolio amounts to EUR 3,675k (level 3) after deducting the loss allowance of EUR 495k.

The loss allowance the Group is required to recognize is not determined based on external credit ratings. The expected credit losses are estimated by reference to factors that are specific to a debtor and information about the debtor's financial position. In addition, past default experience of the debtor is also taken into account in the assessment. It is allocated to level 3 of IFRS 9.

Non-payment risks are not expected to be associated with all other financial assets, including separated termination rights or the amount retained by a factor as a security for any bad debts that may arise.

Capital management

The objective of capital management in the consolidated group is securing liquidity to make investments that increase the value of the organization. Therefore, the focus is on optimizing cash flows from operating activities. Equity recognized on the balance sheet amounts to EUR 180,957k (December 31, 2019: EUR 338,468k). Liabilities of EUR 2,366,247k (December 31, 2019: EUR 2,256,793k) were recognized as of the reporting date. The equity ratio stands at 7.1% (prior year: 13.0%).

6.2 Contingent liabilities

The entities within the consolidated group are involved as parties in a number of lawsuits. These proceedings are linked to ordinary business activities and mainly relate to commercial, product liability and environmental processes. The group companies form provisions for such obligations if it is probable that a liability has been incurred and the amount of the potential claim can be sufficiently estimated. Where the possibility of an outflow in settlement is not unlikely, such obligations are disclosed in the notes to the financial statements.

6.3 Related party disclosures

Key management personnel

Key management personnel are those persons having direct or indirect authority and responsibility for the planning, management and monitoring of the activities of the CeramTec TopCo Group.

In the financial year, the key management personnel of CeramTec TopCo Group consisted of the following persons:

Dr. Hadi Saleh
Chief Executive Officer

Richard Boulter
President Industrial

Eric Oellerer
Chief Financial Officer

Dr. Hadi Saleh is the sole general manager of CeramTec TopCo GmbH.

The members of management in key positions received total remuneration (fixed and variable amounts) in the form of short-term employee benefits amounting to EUR 2,331k in the financial year (prior year: EUR 2,409k). The payments for post-employment benefits amount to EUR 588k (prior year: EUR 373k). This amount comprises the service cost for pension obligations and contributions to defined contribution plans. As has been the case in the prior year, former general managers were not granted any benefits in the financial year in the event of premature termination of management activities. Additionally, as of December 31, 2020 there are pension obligations to general managers in the amount of EUR 1,639k (prior year: EUR 1,405k) and to former general managers and their surviving dependents in the amount of EUR 4,427k (prior year: EUR 4,076k).

As part of a participation program, selected employees of the CeramTec TopCo Group were offered the option to directly acquire shares in CeramTec Management Beteiligungs GmbH & Co. KG and CeramTec Co-Investment GmbH & Co. KG. As of the reporting date, selected employees hold overall less than 10% of the shares in CeramTec TopCo GmbH indirectly. These shares were acquired at the shares' fair value at the grant date. The management participation program is intended to serve as an incentive instrument, motivating the management in view of growth and long-term business success of the CeramTec Group. For this purpose, the agreements define exit events (disposal, stock market flotation) upon the occurrence of which the entitled management will participate in any growth in value of the CeramTec Group in the same relation as the investors. In this case, depending on the respective exit event, the management has the right or the duty to sell their own shares. Given the case that the employment contract of an employee who holds shares in the Company is terminated before the occurrence of an exit event, this employee is obliged to offer his or her shares in CeramTec Management Beteiligungs GmbH & Co. KG for purchase to the Lead B.C. Investor or a third party determined by the Lead B.C. Investor. The amount of the purchase price for the management's interest varies between the fair market value of the shares and the contribution made, depending on the reason and time of withdrawal.

In accordance with IFRS 2, the granting of shares from the Participation and Shareholders' Agreements is treated as settled by equity instruments. As, under the purchase, the managers pay the fair value of the shares, the fair value of the allocated shares, when settled by equity instruments, is zero. For this reason, provided that the assessment in respect of the occurrence of a payment obligation does not change, an expense does not, at any time, need to be disclosed (neither in the case of an exit nor upon withdrawal of a manager).

Information about the remuneration of the management of CT TopCo according to Section 314 (1) No. 6 HGB is not provided.

CeramTec GmbH has a supervisory board in accordance with the articles of incorporation. The total remuneration of the supervisory board in the financial year 2020 amounted to EUR 148k (prior year: EUR 162k).

Transactions with related parties

Entities and natural persons are deemed to be related parties when they exercise control over the reporting company or over its subsidiaries or when they have a significant influence on the reporting company's financial and business policy. A loan of EUR 273,835k (December 31, 2019: EUR 311,503k), including interest, with a fixed interest rate of 7.3 % p.a. has been obtained from CeramTec TopCo's controlling shareholder, CTEC Acquisition S.à.r.l., Luxembourg. Interest expenses of EUR 19,131k were incurred in the financial year 2020. Unpaid interest is generally added annually to the Company's loan balance on December 31.

Potential transactions with portfolio companies of BC Partners are settled at market conditions.

6.4 Auditor's fees

The total auditor's fees for the CeramTec TopCo Group, recognized in profit or loss in the consolidated statement of comprehensive income, break down as follows:

	December 31, 2020	December 31, 2019
	kEUR	kEUR
Auditing services	416	425
Other services	10	12
	426	**437**

6.5 Events after the reporting period

With effect as of January 04, 2021, Dentalpoint AG, a company based in Spreitenbach, Switzerland, was acquired. With this acquisition, the CeramTec Group invests in the sharply growing future market for ceramic dental implants and continues to expand the offering in the Medical Products segment. The preliminary purchase price of EUR 50,975k was paid using cash and cash equivalents. Deviations from the preliminary purchase price will arise due to the purchase price mechanisms agreed upon. Due to the proximity of the transaction to the date of approval of the annual financial statements, there are not yet any results of the currently ongoing purchase price determination and allocation in accordance with IFRS 3. For the purchase price allocation, which is generally based on the fair values of the assets acquired and liabilities assumed, the recognition of intangible assets such as technologies, customer relationships and brands as well as goodwill is expected.

7 Reconciliation to CeramTec BondCo GmbH

If the consolidated statement of comprehensive income of CeramTec BondCo had been prepared instead of the consolidated statement of comprehensive income of CeramTec TopCo, which is presented in these financial statements, this would have resulted in the following adjustments for the financial year:

- Lower general administrative expenses of EUR 173k (prior year: EUR 16k)
- Lower interest expenses of EUR 260k (prior year: EUR 7k)
- Lower tax expense of EUR 127k (prior year: EUR 0k)

The total comprehensive income of CeramTec BondCo would therefore have been EUR 560k higher compared to the total comprehensive income recognized in these financial statements (prior year: EUR 23k).

If the consolidated statement of financial position of CeramTec BondCo had been prepared instead of the consolidated statement of financial position of CeramTec TopCo, which is presented in these financial statements, this would have resulted in the following adjustments as of December 31, 2020:

- Higher receivables from affiliates of EUR 684k (December 31, 2019: EUR 261k)
- Lower deferred tax assets of EUR 24k (December 31, 2019: EUR 0k)
- Lower liquid funds of EUR 10k (December 31, 2019: EUR 10k)
- Lower capital reserve of EUR 25k (December 31, 2019: EUR 25k)
- Lower trade payables of EUR 35k (December 31, 2019: EUR 0k)
- Lower tax liabilities of EUR 150k (December 31, 2019: EUR 0k)
- Lower financial liabilities to third parties of EUR 91k (December 31, 2019: EUR 114k).
- This would have resulted in a EUR 926k higher level of group equity for CeramTec BondCo compared to the group equity recognized in these financial statements (December 31, 2019: EUR 365k).

The impact on the consolidated statement of cash flows would have been EUR -10k if the consolidated statement of cash flows of CeramTec BondCo had been prepared instead of the consolidated statement of cash flows presented in these financial statements.

Plochingen, April 14, 2021

CeramTec TopCo GmbH

The Management

Dr. Hadi Saleh

The following independent auditor's report (Bestätigungsvermerk des unabhängigen Abschlussprüfers) has been issued in accordance with Section 322 of the German Commercial Code (Handelsgesetzbuch) on the consolidated financial statements and the group management report (Konzernlagebericht) of CeramTec TopCo GmbH, Plochingen, as of and for the financial year ended December 31, 2020. The group management report is neither included nor incorporated by reference in this Offering Memorandum. The above-mentioned independent auditor's report and the consolidated financial statements are both translations of respective German-language documents. In the event of discrepancies between the English language version and the German language original, the German language original will prevail.

Independent Auditor's Report

To CeramTec TopCo GmbH, Plochingen

Audit Opinions

We have audited the consolidated financial statements of CeramTec TopCo GmbH, Plochingen, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2020, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2020, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of CeramTec TopCo GmbH for the financial year from January 1 to December 31, 2020.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at December 31, 2020, and of its financial performance for the financial year from January 1 to December 31, 2020, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Responsibilities of the Executive Directors for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for dis- closing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and per- form audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Stuttgart, April 14, 2021

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

(sgd. Marcus Nickel) Wirtschaftsprüfer (German Public Auditor)	(sgd. ppa. Jürgen Steidel) Wirtschaftsprüfer (German Public Auditor)

CeramTec TopCo GmbH

Plochingen

Consolidated Financial Statements
for the year ended
31 December 2019

CeramTec TopCo GmbH, Plochingen

Consolidated statement of financial position as at 31 December 2019

Assets	Notes	31 December 2019	31 December 2018
		EUR k	EUR k
Goodwill	4.1	1,011,678	1,341,431
Other intangible assets	4.1	1,038,533	1,105,674
Property, plant and equipment	4.2	289,387	288,994
Other financial assets	4.3	25,243	21,063
Other assets	4.4	1,107	1,316
Deferred tax assets		1,172	363
Non-current assets		**2,367,120**	**2,758,841**
Inventories	4.5	97,093	96,497
Trade receivables	4.6	52,740	57,880
Trade accounts receivable from affiliates		20	0
Income tax receivables		2,808	3,242
Other financial assets	4.3	3,074	2,397
Other receivables and assets	4.4	8,026	8,667
Cash and cash equivalents	4.7	64,380	21,058
Current assets		**228,141**	**189,741**
Total Assets		**2,595,261**	**2,948,582**

Equity and Liabilities	Notes	31 December 2019	31 December 2018
		EUR k	EUR k
Issued capital	4.8	25	25
Capital reserves	4.8	780,371	500,417
Accumulated losses	4.8	(442,793)	(96,096)
Accumulated other comprehensive income	4.8	865	1,267
Equity		**338,468**	**405,613**
Provisions for pension obligations	4.9	113,433	100,200
Other provisions	4.10	5,506	4,883
Financial liabilities to affiliates	4.11	256,270	552,688
Financial liabilities to third parties	4.12	1,433,324	1,471,844
Deferred tax liabilities		298,417	318,200
Non-current liabilities		**2,106,950**	**2,447,815**
Other provisions	4.10	17,765	20,156
Provision for taxes	4.10	4,425	6,347
Financial liabilities to affiliates	4.11	55,233	0
Financial liabilities to third parties	4.12	25,406	22,227
Trade payables		30,277	34,907
Other liabilities	4.13	16,737	11,517
Current liabilities		**149,843**	**95,154**
Total liabilities		**2,256,793**	**2,542,969**
Total equity and liabilities		**2,595,261**	**2,948,582**

CeramTec TopCo GmbH, Plochingen

Consolidated statement of comprehensive income from 1 January to 31 December 2019

	Notes	1 January to 31 December 2019	1 January to 31 December 2018
		EUR k	EUR k
Revenue	3.1	620,376	496,909
Cost of sales	3.2	356,239	336,608
Gross profit		**264,137**	**160,301**
Selling costs	3.3	95,236	81,087
Research and development costs	3.4	23,341	18,571
General administrative costs	3.5	27,140	28,262
Other income and expenses (-), net	3.6	(342,887)	(11,189)
Operating income		**(224,467)**	**21,192**
Interest income and other finance income		2,135	1,626
Interest expenses and other finance costs		100,449	125,049
Financial result	**3.7**	**(98,314)**	**(123,423)**
Loss before income tax		**(322,781)**	**(102,231)**
Income tax benefit / expense (-)	3.8	(16,498)	15,095
Net loss for the period		**(339,279)**	**(87,136)**
Items that will not be reclassified through profit or loss			
Income / expenses (-) from the remeasurement of pension provisions		(10,386)	453
Deferred taxes		2,969	(116)
		(7,417)	**337**
Items that may be reclassified subsequently to profit or loss			
Losses (-) / gains on cash flow hedges		718	0
Deferred taxes		(208)	0
		510	**0**
Changes in the fair value of financial assets available for sale		(331)	331
Deferred taxes		95	(95)
		(236)	**236**
Exchange differences on translation of foreign operations		(676)	1,031
Other comprehensive income / loss (-), net of income tax		**(7,819)**	**1,604**
Total comprehensive loss		**(347,098)**	**(85,532)**

CeramTec TopCo GmbH, Plochingen

Consolidated statement of cash flows from 1 January to 31 December 2019

	1 January to 31 December 2019 EUR k	1 January to 31 December 2018 EUR k
Net loss for the period	(339,279)	(87,136)
Income tax expense / benefit (-)	16,499	(15,095)
Interest result	96,997	92,466
Amortisation, depreciation and impairment charges of non-current assets	447,168	122,561
Loss on disposal of property, plant and equipment and intangible assets	1,059	150
Decrease (-) in provisions (excluding deferred taxes)	(817)	(2,566)
Income tax payment (-)	(35,950)	(29,248)
Other non-cash income (-) / expenses, net	(1,553)	30,659
Increase (-) / decrease in inventories	(596)	7,094
Decrease in trade receivables	5,140	672
Decrease in other receivables and (financial) assets	597	32,955
Decrease in other receivables and (financial) assets	(6,820)	(42,361)
Decrease (-) in trade payables	7,650	646
Cash flow from operating activities	**190,095**	**110,797**
Cash received from disposals of property, plant and equipment	355	580
Cash paid (-) for investments in property, plant and equipment	(38,417)	(25,022)
Cash paid (-) for investments in intangible assets	(3,027)	(1,859)
Cash paid (-) for the acquisition of entities	0	(2,467,068)
Cash flow from investing activities	**(41,089)**	**(2,493,369)**
Cash received from contribution to capital reserve	0	500,367
Cash received from issuance of bond	0	392,430
Cash received from (+) / paid for (-) the sale / repurchase of bond	5,163	(4,814)
Cash received from syndicated loan	0	1,084,733
Repayment (-) of syndicated loan	(53,872)	(45,253)
Interest paid (-)	(54,565)	(47,670)
Cash received from shareholder loan	0	523,798
Cash paid for capitalized leases (right-of-use assets)	(2,676)	0
Cash flow from financing activities	**(105,950)**	**2,403,591**
Increase in cash and cash equivalents	**43,056**	**21,019**
Net foreign exchange difference	266	0
Cash and cash equivalents at the beginning of the period	21,058	39
Cash and cash equivalents at the end of the period	**64,380**	**21,058**

Please refer to notes, section 5

CeramTec TopCo GmbH, Plochingen

Consolidated statement of changes in equity for the period ended 31 December 2019

	Issued capital	Capital reserves	Accumulated losses	Accumulated other comprehensive income: Cash flow hedge reserve	Accumulated other comprehensive income: Financial assets available for sale	Accumulated other comprehensive income: Difference from currency translation	Equity
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
01 January 2018	**25**	**50**	**(9,297)**	**0**	**0**	**0**	**(9,222)**
Net loss for the period	0	0	(87,136)	0	0	0	(87,136)
Other comprehensive income	0	0	337	0	236	1,031	1,604
Total comprehensive income / loss (-)	*0*	*0*	*(86,799)*	*0*	*236*	*1,031*	*(85,532)*
Contribution by owners	0	500,367	0	0	0	0	500,367
31 December 2018	**25**	**500,417**	**(96,096)**	**0**	**236**	**1,031**	**405,613**
31 December 2018	**25**	**500,417**	**(96,096)**	**0**	**236**	**1,031**	**405,613**
Net loss for the period	0	0	(339,279)	0	0	0	(339,279)
Other comprehensive income / loss (-)	0	0	(7,417)	510	(236)	(676)	(7,819)
Total comprehensive income / loss (-)	*0*	*0*	*(346,697)*	*510*	*(236)*	*(676)*	*(347,098)*
Contribution by owners	0	279,954	0	0	0	0	279,954
31 December 2019	**25**	**780,371**	**(442,793)**	**510**	**0**	**355**	**338,468**

CeramTec TopCo GmbH

Plochingen

Notes to the Consolidated Financial Statements for the year ended December 31, 2019

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CeramTec TopCo GmbH

Notes to the Consolidated Financial Statements

1 General

1.1 Corporate information and purpose of the Company

The purpose of CeramTec TopCo GmbH (hereinafter "CeramTec TopCo") is to render management services as well as administrative, financial and business services in return for remuneration to entities in which it has a direct or indirect controlling shareholding or to entities that are controlled by the same shareholder. It is authorized to establish branch offices, legal entities and other operations in Germany and abroad, and acquire, invest in and hold these investments and/or manage them as well as enter into and/or issue various financial instruments.

CeramTec TopCo and its subsidiaries are a group of leading global developers, manufacturers and suppliers of high performance ceramics ("HPC") solutions. The HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological, mechanical, thermal, electric and/or chemical properties compared to competing products often made from metal or organic polymers (plastics). The operations can be divided into two businesses—Medical Products and Industrial. Medical Products business focuses on developing and manufacturing ceramic components for hip joint prostheses. Industrial business develops, manufactures and supplies a broad range of highly specialized, application-intensive HPC solutions for customers spanning a range of industries, including automotive, electronics, industrial machinery and medical equipment.

CeramTec TopCo's registered office is located at CeramTec-Platz 1-9 in 73207 Plochingen, Germany, and is registered at the Stuttgart local court (*Amtsgericht*) under the number HRB 764651. CeramTec TopCo is the parent company of the Group (hereinafter "CeramTec TopCo Group" or "Group") and the ultimate parent, which prepares exempting consolidated financial statements.

The management of CeramTec TopCo approved the consolidated financial statements on April 9, 2020 for submission to the shareholder meeting.

1.2 Basis for the preparation of the consolidated financial statements

As of March 8, 2018, the former owner Cinven closed the acquisition of CeramTec Group by a consortium led by funds advised by leading private equity firm BC Partners ("BC Partners"). The Public Sector Pension Investment Board (PSP Investments) and Ontario Teachers' Pension Plan (Ontario Teachers') are part of the consortium. On February 22, 2018, anti-trust authorities approved the takeover. As a result, CeramTec AcquiCo GmbH (hereafter "CeramTec AcquiCo") acquired the shares in CeramTec Holding GmbH (hereafter "CeramTec Holding"). CeramTec AcquiCo GmbH is a 100% subsidiary of CeramTec BondCo GmbH (hereafter "CeramTec BondCo"), which is itself a 100% subsidiary of CeramTec TopCo. CeramTec TopCo is the German ultimate parent, and prepares the consolidated financial statements. CTEC I S.a.r.l., Luxembourg, is the ultimate parent company.

The consolidated financial statements are prepared pursuant to Section 315e (1) and (3) of the German Commercial Code (*Handelsgesetzbuch*—HGB) in accordance with the International Financial Reporting Standards (IFRS/IAS) as adopted by the EU as well as the applicable interpretations of the IFRS Interpretations Committee (IFRS IC) for the financial year and the supplementary requirements of German commercial law. These consolidated financial statements are prepared for the largest and smallest groups of consolidated companies.

CeramTec TopCo and the subsidiaries CeramTec BondCo and CeramTec AcquiCo were founded in 2017. Until the CeramTec Group was acquired on March 8, 2018, the CeramTec TopCo Group consisted exclusively of the aforementioned holding companies without running an operational business activity.

The requirements of the standards and interpretations adopted were satisfied in full. Furthermore, all applicable requirements of German commercial law were observed during the preparation. The consolidated financial statements give a true and fair view of the financial position and financial performance of the CeramTec TopCo Group.

The consolidated financial statements are presented in euro. The amounts are in thousands of euros (kEUR). All amounts are rounded using standard commercial principles. In individual cases, adding individual values to the total value may therefore lead to differences.

For the purpose of clarity, various items in the consolidated statement of financial position and consolidated statement of comprehensive income were combined and explained accordingly in the notes to the consolidated financial statements. Assets and liabilities are broken down into current and non-current items. Assets and liabilities are classified as current if they are expected to be realized within twelve months from the reporting date. The expense recognized in profit or loss is broken down using the cost of sales method. In the cash flow statement, cash flow from operating activities is determined using the indirect method, while cash flow from investing and financing activities is determined using the direct method.

1.3 Business combination

CeramTec AcquiCo acquired 100% of the shares of CeramTec Holding, the former group parent company, effective as of March 8, 2018. CeramTec AcquiCo is a wholly owned subsidiary of CeramTec BondCo which, in turn, is a wholly owned subsidiary of CeramTec TopCo. CeramTec TopCo is the ultimate parent company in Germany.

The acquisition took place with the objectives of accelerating CeramTec's targeted growth, especially outside the core European markets, of supporting launches of new product initiatives, and of investing in the expansion of production facilities in order to support further growth in the hip implants market.

1.4 Entities included in the consolidated financial statements

In addition to the financial statements of the parent company, the financial statements of the following subsidiaries in which CeramTec TopCo has a direct or indirect shareholding are included in the consolidated financial statements for the financial year:

	Share of capital in %		
Name of the entity	December 31, 2019	December 31, 2018	Business activities
CeramTec BondCo GmbH, Plochingen	100.00	100.00	1
CeramTec AcquiCo GmbH, Plochingen	100.00	100.00	1
CeramTec Holding GmbH, Plochingen	100.00	100.00	1
CeramTec Group GmbH, Plochingen	100.00	100.00	1
CeramTec FinCo GmbH, Plochingen	100.00	100.00	1
CeramTec GmbH, Plochingen	100.00	100.00	2
Cerasiv GmbH Innovatives Keramik-Engineering, Plochingen	100.00	100.00	1
CeramTec-ETEC GmbH, Lohmar	100.00	100.00	3
Emil Müller GmbH, Wilhermsdorf	100.00	100.00	3
CeramTec UK Ltd., Southampton/Great Britain	100.00	100.00	3
CeramTec Czech Republic s.r.o., Sumperk/Czech Republic	100.00	100.00	3
CeramTec Ibérica Innovative Ceramic Engineering S.L., Vilassar de Mar/Spain	100.00	100.00	4
CeramTec Innovative Ceramic Engineering, (M) Sdn. Bhd., Seremban/Malaysia	100.00	100.00	3
CeramTec Korea Ltd., Suwon-Si/South Korea	100.00	100.00	3
CeramTec Suzhou Ltd., Suzhou/China	100.00	100.00	3
PST Press Sintertécnica Brasil Ltda., Nova Odessa/Brazil	100.00	100.00	3
CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji—Goa/India	99.90	99.90	3
Press and Sinter Technics de Mexico S.A. de C.V., Puebla/Mexico	100.00	100.00	3
CeramTec BidCo LLC, Laurens/USA	100.00	100.00	1
CeramTec Acquisition LLC, Laurens/USA	100.00	100.00	1
CeramTec North America LLC, Laurens/USA	100.00	100.00	3
DAI Ceramics Inc., Willoughby/USA	100.00	100.00	3
PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland	100.00	100.00	3

1 Entities performing the functions of a holding company.
2 Manufacturing and distribution companies operating in the Industrial and Medical Products segments.
3 Manufacturing and distribution companies operating in the Industrial segment.
4 Distribution companies.

CeramTec TopCo has a direct shareholding in CeramTec BondCo, and an indirect shareholding in the other subsidiaries.

CeramTec BondCo, CeramTec AcquiCo, CeramTec Holding, CeramTec Group, CeramTec FinCo GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, Emil Müller GmbH and CeramTec-ETEC GmbH make use of the exemption from publishing the financial statements and the management report for financial year 2019 pursuant to Section 264 (3) HGB.

2 Accounting Principles and Policies

2.1 Basis of consolidation

Entities included in the consolidated financial statements are included as of the date on which CeramTec TopCo obtains control over them. They are deconsolidated on the date on which CeramTec TopCo ceases to have control.

In accordance with IFRS 10, uniform accounting policies are used to prepare the separate financial statements of the companies included in the consolidated financial statements.

All significant intercompany receivables and liabilities, revenue, income and expenses and any inter-company profits and losses within the scope of consolidation are eliminated. Pursuant to IAS 12, deferred tax liabilities are recognized for temporary differences arising from consolidation procedures.

If less than 100% of equity in a subsidiary is allocable to CeramTec TopCo, the interests allocated to the other shareholders are generally disclosed separately under equity as non-controlling interests. For reasons of immateriality, this does not apply to the non-controlling interests in CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji—Goa, India.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value. This is determined as the total of the acquisition-date fair values of the transferred assets, the liabilities assumed from the former owners of the acquired entity and the equity instruments issued by the acquirer in exchange for control of the acquiree. Acquisition-related costs are recognized in profit or loss as incurred.

Goodwill is measured as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the equity share in the acquiree previously held by the acquirer (if available) over the net of the acquisition-date fair value of the identifiable assets acquired and liabilities assumed. If the fair value of the acquired net assets is higher than the consideration transferred, CeramTec TopCo reassesses and examines whether it has correctly identified all acquired assets and all assumed liabilities. In the event of a negative difference, even after reassessment, the resulting gain is recognized directly in profit or loss.

For acquisitions of equity investments with shares in capital below 100%, IFRS 3 allows for the goodwill attributable to non-controlling interests to also be recognized. Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity’s net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests’ proportionate share in the recognized amounts of the acquiree’s identifiable net assets. This option can be newly exercised each time a business combination takes place. Other types of non-controlling interests are measured at fair value or according to a basis specified in other standards.

If a company which is part of the CeramTec TopCo Group acquires an entity, it measures the financial assets and liabilities for appropriate classification and designation in accordance with the contractual terms, economic conditions and pertinent conditions as of the acquisition date. This also includes separating embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, previously held equity interests are remeasured at their acquisition-date fair value. Any gain or loss is recognized through profit or loss and is taken into account when determining goodwill.

All contingent consideration that must be transferred by the acquirer is recognized at fair value as of the date of acquisition. Any contingent consideration classified as an asset or liability, which is recognized as a financial instrument under IFRS 9 *Financial Instruments*, is measured at fair value. Changes in the fair value are recognized through profit or loss. Should the contingent consideration not fall under IFRS 9, it is accounted for under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. If the contingent consideration is classified as equity, it is not remeasured and its subsequent settlement is accounted for within equity.

After initial recognition, goodwill is measured at cost less any accumulated impairments. Goodwill is tested for impairment at least once a year (in the fourth quarter) as well as when there are indications of impairment. For the purpose of impairment testing, goodwill acquired in a business combination must, from the acquisition date, be allocated to each of the cash-generating units of CeramTec TopCo, which is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquirer are assigned to those units or groups.

If goodwill has been allocated to a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. If the internal management reporting structure is reorganized, any goodwill allocated to a cash-generating unit is reallocated based on the new reporting structure. Any goodwill reallocated under these circumstances is measured based on the relative values of the newly established operation and the portion of the cash-generating unit.

Foreign currency translation

The consolidated financial statements are prepared in euros, the functional currency of the CeramTec TopCo Group. The financial statements prepared by entities that use a different functional currency are translated into euros in accordance with IAS 21. The equity of the foreign entities included in the consolidated financial statements is translated at the historical rate. The remaining items of the statement of financial position are translated at the respective closing rates. Income and expenses are translated at average annual rates. These are calculated as the mean value from the individual average monthly rates of the past twelve months.

Differences from the currency translation of assets and liabilities compared to the translation of December 31, 2018 as well as exchange differences between the income statement and the statement of financial position are recognized under other comprehensive income and retained in equity under accumulated other comprehensive income. These amounts recognized under other comprehensive income are reclassified to the income statement upon the partial or complete disposal of a subsidiary included in the consolidated financial statements.

Foreign currency transactions in the local financial statements are translated at the spot rate at the date of the transaction.

The exchange rates of significant currencies used for the currency translation to the euro are as follows:

		2019		2018	
		Closing rate	**Average rate**	**Closing rate**	**Average rate**
USD	USA	1.1189	1.1196	1.1454	1.1815
CNY	China	7.8175	7.7338	7.8778	7.8071
GBP	Great Britain	0.8521	0.8773	0.9027	0.8848
PLN	Poland	4.2567	4.2975	4.3028	4.2604
CZK	Czech Republic	25.4630	25.6701	25.7780	25.6431

The individual items in the consolidated statement of cash flows are translated at average rates, while cash and cash equivalents are measured at the spot rate at the balance sheet date.

2.2 Accounting policies

Revenue recognition

Revenue is recognized in accordance with the five-step model framework in accordance with IFRS 15: First, the contract with a customer is identified (step 1). The performance obligations in the contract are then identified (step 2). The transaction price is then determined (step 3) with explicit requirements stipulated on how to account for variable consideration, financing components, payments made to a customer, and exchanges of goods or services. After determining the transaction price, the transaction price is allocated to the each of the performance obligations (step 4) by reference to their relative standalone selling prices. Finally, revenue is recognized when (or as) the entity satisfies a performance obligation (step 5). As a requirement, revenue can only be recognized once (or as) control of the goods or services is transferred to the customer.

The Group does not offer guarantees to customers that provide greater protection than that stipulated by the law. The Group does usually not grant customers extensions of payment terms. However, in specific cases, special agreements can be concluded. In addition, agreements are in place with individual customers (mainly Medical Products customers), which provide for a bonus//malus system. Revenues are recorded only to the extent that it is highly probable that a significant cancellation of revenues will not be necessary if the related uncertainty has ceased to exist. There is no significant financing component, as payment terms of between 30 and 60 days are mostly agreed. A warranty provision is set up for the Group’s obligation to repair defective products under standard warranty conditions or to replace such products. The Group does not offer substantial quantity discounts or price discounts to customers.

Upon conclusion of a contract, the CeramTec TopCo Group companies determine whether revenue should be recognized at a point in time or over time. The CeramTec TopCo Group uses specific criteria to determine whether control is transferred over time. If it is not, revenue is recognized when control is passed to the customer.

The CeramTec TopCo Group generates revenue mainly through the sale of goods and merchandise. Consequently, revenue from the majority of contracts with customers is recognized when control is transferred to a customer (when the customer has legal title to the asset, has the significant risks and rewards related to the ownership of the asset, or has formally accepted the asset).

Interest income, royalties, dividend income

Interest income is recognized pro rata temporis using the effective interest method. Income from royalties is recognized in accordance with the terms of the underlying contracts on an accrual and pro rata basis. Dividend income is recognized when the right to receive payment is established.

Research and development costs

Research costs are recognized as expenses in the period in which they are incurred. If the requirements for capitalization are not satisfied, development costs are also recognized in profit or loss in the period in which they are incurred.

Intangible assets

Intangible assets are recognized if a future economic benefit is probable and can be measured reliably.

Individually acquired intangible assets are recognized at cost. The cost of intangible assets acquired in a business combination is their acquisition-date fair value. Internally generated intangible assets are stated at the cost that arises during the development phase if all of the following criteria are met:

- Technical feasibility of completing the intangible asset
- Intention to complete development of the intangible asset and use or sell it
- Ability to use or sell the intangible asset
- Existence of a market or demonstration of the usefulness of the intangible asset if it is to be used internally
- Availability of technical and financial resources to complete the development
- Ability to measure reliably the expenditure attributable to the intangible asset during its development

Following initial recognition, intangible assets are carried at cost less accumulated amortization and any accumulated impairments.

Intangible assets with finite useful lives are amortized on a straight-line basis over their useful life. Intangible assets acquired during the year are amortized pro rata temporis. The useful life and amortization method are reviewed at least annually at the end of each financial year. Changes are treated as changes in accounting estimates. Amortization is recognized in the cost of sales, research and development, general administrative and selling costs. The useful life for technology amounts to 10 to 18 years and for customer relationships it amounts to 5 to 18 years. Intangible assets with finite useful lives are tested for impairment if there is an indication that the asset may be impaired.

Intangible assets with an indefinite useful life are tested annually for impairment. If the carrying amount of the asset is no longer recoverable, an impairment is recognized. Trademarks are assigned an indefinite useful life based on expectations of future use.

Impairment is assessed by comparing the carrying amount of the intangible assets with its recoverable amount at the level of the cash-generating units. Intangible assets are grouped at the lowest level for which the cash flows can be separately identified. The recoverable amount of a cash-generating unit is defined as the higher of the cash-generating unit's fair value less the cost to sell or its value in use. An impairment is carried out if the carrying amount exceeds the recoverable amount. In the event of an impairment being reversed, the amortized cost is written up.

Property, plant and equipment

Property, plant and equipment are recognized at cost if a future economic benefit is probable and can be measured reliably. The cost of internally generated property, plant and equipment comprises direct material and labor costs as well as the directly attributable material and labor overheads. If the requirements of a qualifying asset are met, the cost also includes borrowing costs incurred during production pursuant to IAS 23. A qualifying asset is an asset that takes a substantial period of time to get ready for its intended use or sale.

Following initial recognition, property, plant and equipment are carried at cost less accumulated depreciation and any accumulated impairments.

Property, plant and equipment are generally depreciated using the straight-line method. Property, plant and equipment acquired during the year are depreciated pro rata temporis. The useful lives of property, plant and equipment amount to 10 to 40 years for buildings and building components, 3 to 25 years for plant and machinery and 3 to 12 years for other equipment, furniture and fixtures. Low-value assets with an acquisition cost not exceeding EUR 250 are expensed immediately. Low-value assets with a cost of between EUR 250 and EUR 1,000 are recognized in a catch-all item and depreciated collectively over five years using the straight-line method.

Property, plant and equipment are tested for impairment if there is an indication that the asset may be impaired. Impairment is assessed by comparing the carrying amount of the item of property, plant and equipment with its recoverable amount at the level of the cash-generating unit. Property, plant and equipment are grouped at the lowest level for which the cash flows can be separately identified. The recoverable amount of a cash-generating unit is defined as the higher of the cash-generating unit's fair value less the cost to sell, or its value in use. An impairment is carried out if the carrying amount exceeds the recoverable amount. In the event of an impairment being reversed, the amortized cost is written up.

Leases

A lease within the meaning of IFRS 16 exists if a customer is contractually given the right to control an identified asset. For all leases, the lessee must account for the right-of-use asset (RoU asset) as well as a corresponding lease liability. Exceptions to this exist only for short-term leases and leases of low value assets.

The initial amount of the right-of-use asset corresponds to the amount of the lease liability. In subsequent reporting periods, the right-of-use asset is (apart from certain exceptions) measured at cost less accumulated depreciation and impairments, adjusted for any remeasurement of the lease liability. The lease liability is initially measured at the present value of the lease payments that will be paid over the lease term. The weighted average incremental borrowing rate used for discounting amounted to 4.20 % as of January 1, 2019. Subsequently, the carrying amount of the lease liability is adjusted for interest using the discount rate and reduced in the amount of the lease payments made. Modifications to the lease payments result in a remeasurement of the lease liability. Cash flows are broken down into payments of principal and payments of interest, which are part of the cash flow from financing activities and the cash flow from operating activities respectively.

Financial assets

Financial assets are recognized when a group entity becomes a party to the contractual provisions of the instrument.

Financial assets are initially measured at fair value. Transaction costs that are directly attributable to the acquisition of financial assets (other than financial assets at fair value through profit or loss) are added to the fair value of the financial assets on initial recognition. Transaction costs directly attributable to the acquisition of financial assets that are measured at fair value through profit or loss are recognized immediately in profit or loss.

Financial assets are recognized and derecognized on a trade date basis if their delivery takes place within the conventional timeframe for the market concerned.

All recognized financial assets are subsequently measured at either amortized cost or fair value, depending on the classification of the financial assets.

Classification of financial assets

Debt instruments that meet the following conditions are subsequently measured at amortized cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms of the financial asset give rise solely to payments of principal and interest on the principal amount outstanding.

Debt instruments that meet the following conditions are measured at FVTOCI:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets; and
- the contractual terms of the financial asset give rise solely to payments of principal and interest on the nominal amount outstanding.

All other financial assets that do not fulfill the aforementioned conditions are generally measured at FVTPL.

The Group neither recognizes debt instruments that are measured at FVTOCI nor equity instruments designated to be classified as FVTOCI.

Amortized cost and effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating interest income over the relevant period.

For financial assets for which no objective evidence of impairment was present upon their origination or purchase, the effective interest rate is the rate that discounts estimated future cash receipts (including all fees that form an integral part of the effective interest rate, transaction costs and other premiums or discounts), excluding expected credit losses, through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount on initial recognition. For financial assets for which objective evidence of impairment was already present upon their origination or purchase, a credit-adjusted effective interest rate is calculated based on the estimated future cash flows, including expected credit losses.

The amortized cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. The gross carrying amount of a financial asset is the amortized cost of a financial asset before adjusting for any loss allowance.

Interest income is recognized using the effective interest method for debt instruments measured at amortized cost or at FVTOCI. For financial assets for which no objective evidence of impairment was present upon their origination or purchase, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets for which objective evidence of impairment subsequently arose. For these latter financial assets, interest income is recognized by applying the original effective interest rate to the net carrying amount of the financial asset at the beginning of the reporting period that follows the occurrence of objective evidence of impairment. If, in subsequent reporting periods, the credit risk of such a financial instrument improves so that there is no longer objective evidence of impairment, interest income is recognized again by applying the effective interest rate to the gross carrying amount of the financial asset at the beginning of the following reporting period.

For purchased or originated credit-impaired financial assets, the Group recognizes interest income by applying the credit-adjusted effective interest rate to the amortized cost of the financial asset from initial recognition. The interest rate calculation does not revert to the gross basis even if the credit risk of the financial asset subsequently improves so that the financial asset is no longer credit-impaired.

Interest income is recognized in the consolidated statement of comprehensive income and is included in the “Interest income and other finance income” line item.

Financial assets at FVTPL

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognized in profit or loss to the extent they are not part of a designated hedging relationship. The net gain or loss recognized in profit or loss incorporates any dividend or interest earned on financial assets and is included in the “Interest income and other finance income” or “Interest expenses and other finance expenses” line item.

Impairment of financial assets

The Group generally recognizes a loss allowance for expected losses on financial investments in debt instruments that are measured at amortized cost or at FVTOCI, finance lease receivables, trade receivables and contract assets. The amount of expected losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group recognizes a loss allowance for all trade receivables in the amount of the expected losses based on debtor-specific factors and information about their current economic situations. When estimating this, reference is also made to actual credit loss experiences of debtors. Irrespective of the above approach, the Group considers a default to have occurred when a financial asset is more than 60 days/90 days past due unless the Group has reasonable and supportable information to demonstrate that a financial asset is still unimpaired.

For all other financial instruments, the Group recognizes a loss allowance in the amount of the expected losses over their lifetimes if the credit risk of the financial instrument has increased significantly since initial recognition. If, however, the credit risk of the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to the expected 12-month loss.

The Group directly writes off a financial asset and hence reduces the gross carrying amount when there is information indicating that the debtor is in significant financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures. Any recoveries made are recognized in profit or loss.

In addition to using external sources of information, the measurement of expected credit losses is based on the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information as described above.

Derecognition of financial assets

Derecognition of financial assets is carried out by the Group only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to a third party. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognize the financial asset and also recognizes a collateralized borrowing for the consideration received.

On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. In addition, on derecognition of an investment in a debt instrument classified as at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation surplus is reclassified to profit or loss. In contrast, on derecognition of an investment in equity instruments which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation surplus is not reclassified to profit or loss, but is transferred to retained earnings.

Financial liabilities

Financial liabilities are recognized when a group entity becomes a party to the contractual provisions of the instrument. Financial liabilities are measured at amortized cost using the effective interest method, or at fair value through profit or loss.

Financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the issue of financial liabilities (other than financial liabilities at fair value through profit or loss) are deducted from the fair value of the financial assets or financial liabilities on initial recognition. Transaction costs directly attributable to the acquisition of financial liabilities that are measured at fair value through profit or loss are recognized immediately in profit or loss.

Financial liabilities at FVTPL

Financial liabilities are classified as financial liabilities at FVTPL when the financial liability is contingent consideration of an acquirer in a business combination, is held for trading, or is voluntarily designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative, except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

- it forms part of a contract containing one or more embedded derivatives, and IFRS 9 permits the entire combined contract to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value with any gains or losses arising on changes in fair value recognized in profit or loss to the extent that they are not part of a designated hedging relationship.

However, for financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognized in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. The remaining amount of change in the fair value of the liability is recognized in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognized in other comprehensive income are not subsequently reclassified to profit or loss; instead, they are transferred to retained earnings upon derecognition of the financial liability.

Financial liabilities measured at amortized cost

Financial liabilities that are not contingent consideration of an acquirer in a business combination, held for trading, or voluntarily designated as at FVTPL, are financial liabilities subsequently measured at amortized cost using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or a shorter period, to the net carrying amount of a financial liability on initial recognition.

Derecognition of financial liabilities

Derecognition of financial liabilities is carried out by the Group when, and only when, the Group's obligations are discharged, canceled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

Derivative financial instruments

Derivative financial instruments are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately.

Derivatives embedded in non-derivative host contracts that are not financial assets within the scope of IFRS 9 (e.g. financial liabilities) are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the entire contract concerned is not measured at FVTPL.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position if there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

Measurement at fair value

On the reporting date, the CeramTec TopCo Group measures derivative financial instruments at fair value. The fair value is also stated in the notes to the financial statements for all other financial instruments.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This applies regardless of whether the price is directly observable or has been determined by applying a valuation method. Measurement at fair value is based on the assumption that the transaction, in order to sell or transfer the asset or liability, is performed in one of the following places:

- On the principal market for the asset or the liability or,
- if there is no principal market, on the most advantageous market for the asset or the liability.

The principal market or the most advantageous market must be accessible for the CeramTec TopCo Group as of the reporting date.

When calculating the fair value of an asset or a liability, the Group takes into account certain characteristics of the asset or the liability (such as condition and location of the asset or limitations of sale and use) if market participants also would also take these characteristics into account when determining the price for the acquisition of the respective asset or transferring the liability as of the reporting date.

Fair value measurement of a non-financial asset takes into account the ability of a market participant to generate economic benefits through the best use of the asset or by selling it to another market participant that would find the best use for the asset.

Inventories

Inventories are measured at the lower of cost or net realizable value.

Costs of purchase comprise the purchase price as well as all other ancillary costs directly attributable to the acquisition. Costs of purchase are determined using the moving weighted average cost method.

In addition to direct material and labor costs, costs of conversion comprise a share of production-related indirect material and labor overheads, including depreciation insofar as it is a consequence of the production process, as well as production-related administrative costs. Production costs do not contain any borrowing costs incurred during production as inventories held at the CeramTec TopCo Group are not qualifying assets pursuant to IAS 23.

Inventories are written down to reflect risks from reduced salability. The net realizable value is the selling price during the ordinary course of business less the estimated costs of completion and selling costs. Previously recognized write-downs are reversed if the reasons for the write-downs cease to apply. In this case, the write-up can at most be up to the original cost amount.

Cash and cash equivalents

Cash and cash equivalents generally comprise cash in hand and bank deposits as well as cash and short-term deposits with an original term of up to three months. The cash and cash equivalents reported in the statement of cash flows correspond to the amounts recognized in the statement of financial position.

Provisions for pension obligations

Defined benefit obligations are measured using the projected unit credit method. These take into account the benefits vested in the current period and previous periods in exchange for the work performed by employees. When calculating the amount of total obligations, adjustment to salaries and pensions expected in the future as well as the probability of employee turnover and employee age and gender are also factored into calculations. Pension obligations in Germany are determined on the basis of the 2018G Guideline Tables of Prof. Dr. Klaus Heubeck. Pension obligations outside of Germany are determined taking into account country-specific parameters.

The obligations are discounted using discount rates derived from high-quality, fixed-interest corporate bonds with the same currency and term. If no high-quality, fixed-interest corporate bonds are available, yields on government bonds are used instead. Net interest on the net liability is determined by multiplying the net liability with the discount rate.

Remeasurements comprise actuarial gains and losses, the return on plan assets and changes in the effect of the asset ceiling while excluding net interest on the net liability. These are recognized in other comprehensive income. Remeasurements are not reclassified to the income statement in later periods.

Past service cost results from the change in the present value of the defined benefit obligation arising from a plan amendment or curtailment and is recognized as an expense.

The fair value of the plan assets is deducted from the present value of the pension obligations. Plan assets are assets that are held by a long-term employee benefit fund. This fund must be legally separate from the reporting entity and exist solely to pay or fund employee benefits.

Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event and it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount of the provision. Information on estimation uncertainties can be found in note 2.3.

The amount of the provision recognized is the best estimate of the expenditure required to settle the present obligation as of the reporting date. The best estimate must take account of inherent risks and uncertainties. If a provision is measured on the basis of the estimated cash flow required to settle the obligation, these cash flows are discounted in cases where the effect of the time value of money is significant.

If it can be assumed that portions of or the entire economic benefits required to settle the provision are reimbursable by an external third party, this claim is recognized as an asset if the reimbursement is virtually certain and the amount can be reliably determined. The amount recognized for the reimbursement should not exceed the amount of the provision.

Contingent liabilities and contingent assets

Contingent liabilities are not recognized in the consolidated statement of financial position. A contingent liability is disclosed, unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are also not recognized in the statement of financial position. They are described in the notes to the financial statements provided an inflow of economic benefits is probable.

Taxes

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities based on the tax rates that have been enacted or substantively enacted as of the reporting date.

Deferred tax assets and liabilities are recorded for all deductible and taxable temporary differences between the carrying amounts in the tax accounts and the IFRS consolidated statement of financial position. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or the initial recognition (other than in a business combination) of other assets and liabilities in transactions that effect neither the taxable profit nor the accounting profit. Deferred tax assets are recognized to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax assets also include tax refund claims that result from the expected utilization of existing unused losses or interest carryforwards in subsequent years and the recognition of which is ensured with reasonable assurance.

Deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply in the period when the temporary differences are likely to reverse, based on tax rates and tax laws that have been enacted or substantively enacted as of the reporting date of the relevant company.

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which event the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively.

Deferred tax assets and deferred tax liabilities are offset if the Group has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets relate to the same taxable entity and the same taxation authority.

There is a consolidated tax group for income tax purposes between CeramTec BondCo (as the parent), CeramTec AcquiCo, CeramTec Holding (beginning on August 1, 2018), CeramTec Group, CeramTec FinCo GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH. In the abridged financial year January 1, 2018 – July 31, 2018, CeramTec Holding GmbH was not included in the consolidated tax group relationship with CeramTec BondCo, and was hence liable to income tax.

There was also a consolidated tax group for VAT purposes between CeramTec Service GmbH as the parent company and CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller

GmbH until May 2018 inclusive. Since June 2018, there has been a consolidated tax group for VAT purposes between CeramTec AcquiCo as the new parent company and CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH. In addition, until May 2018 inclusive, CeramTec AcquiCo was an independent entrepreneur as defined in the German Value Added Tax Act (UStG).

2.3 Estimation uncertainties and exercise of judgment

The preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of income, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the reporting date. These estimates and assumptions are made to obtain an appropriate overview of the financial position and financial performance of the CeramTec TopCo Group. The underlying assumptions are revised regularly. However, the actual results may vary from those anticipated.

In the process of applying the accounting and valuation methods of the CeramTec TopCo Group, management performed the following measurements, which have a significant impact on the consolidated financial statements.

Business combinations

Business combinations are accounted for using the acquisition method. The acquired assets and liabilities are measured at their acquisition-date fair value.

Using the acquisition method requires certain estimates and judgments, particularly with regard to determining the fair value of the acquired intangible assets and property, plant and equipment as well as the fair value of liabilities assumed. In addition, the expected useful lives of acquired intangible assets and property, plant and equipment need to be determined.

This measurement is largely based on estimated future cash flows. Deviations between the actual cash flows and those determined when calculating the fair value can have a significant effect on the future net profit/loss for the period of the CeramTec TopCo Group.

Goodwill of EUR 1,011,678k (December 31, 2018: EUR 1,341,431k) and other intangible assets of EUR 1,038,533k (December 31, 2018: EUR 1,105,674k) were recognized as of the reporting date.

Impairment of non-financial assets

Assumptions were made to calculate the recoverable amount to determine whether impairment losses had to be recognized on intangible assets and property, plant and equipment. In this regard, future cash flows were derived from the budget planning and medium-term forecast for each of the cash-generating units. Management assumes that the assumptions and estimates, on which the discounted cash flows are based, are accurate. Nevertheless, changes in the economic environment and growth assumptions can affect impairment testing resulting in the need to recognize impairment losses or to reverse impairment losses in the future.

Impairment losses recognized on non-financial assets for the financial year can be found in notes 4.1 Goodwill and intangible assets and 4.2 Property, plant and equipment.

Valuation allowances on receivables

Allowances for receivables are recognized based on assumptions about default risk and expected loss given default. The CeramTec TopCo Group exercises judgment to make the assumptions and select inputs used in determining the allowances by reference to past default experience, prevailing market conditions, and forward-looking estimates as of the end of the reporting period.

Accordingly, receivables are reduced by appropriate specific allowances for amounts estimated to be irrecoverable (for example receivables from customers on whose assets insolvency proceedings have been initiated are written off in full to the extent that any collateral provided is not recoverable). The allowances are allocated to level 3 in the fair value hierarchy under IFRS 9. As of the reporting date, an impairment loss of EUR 760k was identified as necessary (December 31, 2018: EUR 530k).

Provisions for pension obligations

Defined benefit plans are measured using actuarial valuations. These contain assumptions of discount rates, future salary trends, mortality rates and future pension increases.

Provisions for pension obligations of EUR 113,433k were recorded as of the end of the reporting period (December 31, 2018: EUR 100,200k).

Provisions

Provisions for the expected expenses from warranty obligations in accordance with national sales contract law are recognized as of the date on which the relevant products are sold according to the management's best estimate regarding the expenses required to settle the Group's obligation.

A provision is set up for the obligation to eliminate environmental damage if it is likely to occur and the costs can be estimated reliably. With ongoing examination and over the course of performing renovation measures, the provisions are adjusted in line with the knowledge gained. The amount of the individual provisions is influenced by factors such as the extent of the contamination, the renovation measures called for and additional demands from authorities, companies or private persons.

In the aggregate provisions (other provisions and provision for taxes) of EUR 27,696k were recorded as of the end of the reporting period (December 31, 2018: EUR 31,386k).

Deferred tax assets

The calculation of deferred tax assets requires assumptions to be made relating to the future taxable income and historical use of deferred tax assets. These assumptions take into account the anticipated development and effect on earnings from the reversal of taxable temporary differences. As future business developments cannot be foreseen with certainty and are not entirely within the CeramTec TopCo Group's sphere of influence, the measurement of deferred tax assets involves a level of uncertainty.

As of the reporting date, deferred tax assets of EUR 1,172k were recognized (December 31, 2018: EUR 363k).

2.4 Adoption of amended and new standards and interpretations: Changes in accounting and valuation policies due to first-time adoption of revised and newly issued IFRSs and IFRICs

The following revised IFRSs and IFRICs were adopted for the first time:

Standards and interpretations	Date of first-time adoption
IFRS 16: "Accounting for Leases"	January 1, 2019
IFRIC 23: "Uncertainty over Income Tax Treatments"	January 1, 2019
Amendments to IAS 28: "Long-term Interests in Associates and Joint Ventures"	January 1, 2019
Amendments to IFRS 9: "Prepayment Features with Negative Compensation"	January 1, 2019
Annual Improvements Project (2015 – 2017) for IFRS 3, IFRS 11, IAS 12 and IAS 23	January 1, 2019
IAS 19: "Employee Benefits"	January 1, 2019

The aforementioned changes will have no effect on the consolidated financial statements of the CeramTec TopCo Group, except for IFRS 16.

IFRS 16 introduces a comprehensive model for the identification of lease arrangements and accounting treatments for both lessors and lessees. IFRS 16 supersedes the current lease guidance including IAS 17 Leases and the related interpretations.

IFRS 16 distinguishes leases and service contracts on the basis of whether an identified asset is controlled by a customer. Previous distinctions of operating leases and finance leases are removed for lessees and are replaced by a model where a right-of-use asset (or RoU asset) and a corresponding liability have to be recognized for all leases by lessees (i.e. all on balance sheet) except for short-term leases and leases of low value assets.

At the commencement date, the amount of the right-of-use asset corresponds to the amount of the lease liability. In subsequent periods, the right-of-use asset is measured at cost (subject to certain exceptions) less accumulated depreciation and impairment losses, adjusted for any remeasurement of the lease liability. At the commencement date, the lease liability is measured at the present value of the lease payments that are paid over the lease term. Subsequently, the carrying amount of the lease liability is adjusted for interest using the discount rate and reduced in the amount of the lease payments made. Modifications to the lease payments result in a remeasurement of the lease liability. Furthermore, the classification of cash flows will also be affected as operating lease payments under IAS 17 are presented as operating cash flows; whereas under the IFRS 16 model, the lease payments will be split into a principal and an interest portion which will be presented as financing and operating cash flows respectively.

Furthermore, the disclosure requirements for lessees and lessors have become significantly more extensive in IFRS 16 when compared to IAS 17.

The operating result takes account of depreciation of right-of-use assets, and interest expense associated with unwinding of discount on lease liabilities is included in the financial result.

Revised and newly issued IFRSs and IFRICs not yet mandatorily to be adopted

The following revised and newly issued IFRSs and IFRICs were not yet to be adopted mandatorily in the financial year or have not yet been adopted by the Commission of the European Communities under the endorsement procedure for the European Union. In the financial year, none of these new or amended standards and interpretations has been early adopted.

Standards and interpretations	Date of first-time adoption
IFRS 3: "Business Combinations"	January 1, 2020
IAS 1 / IAS 8: "Definition of Material (Amendments to IAS 1/IAS 8)"	January 1, 2020
IFRS 9 / IAS 39 / IFRS 7: "Interest Rate Benchmark Reform"	January 1, 2020
IFRS 17: "Insurance Contracts"	January 1, 2021

The aforementioned changes will have no effect on the consolidated financial statements of the CeramTec TopCo Group.

3 Notes to the Consolidated Statement of Comprehensive Income

3.1 Revenue

Revenue results primarily from the sale of goods and merchandise. Revenue breaks down into regions and businesses as follows:

	2019	2018
	kEUR	kEUR
Regions		
Europe (w/o Germany)	270,261	215,843
Germany	141,908	125,734
Asia	100,416	75,126
North America	91,766	64,988
Other regions	16,025	15,218
Total	**620,376**	**496,909**
Businesses		
Industrial	361,689	309,393
Medical Products	258,687	187,516
Total	**620,376**	**496,909**

Orders on hand amount to EUR 177,262k as of the reporting date (December 31, 2018: EUR 206,201k)., of which EUR 117,676k (December 31, 2018: EUR 136,489k) and EUR 59,586k (December 31, 2018: EUR 69,712k) are attributable to the Industrial and Medical Products businesses respectively.

3.2 Cost of sales

The cost of sales breaks down as follows:

	2019	2018
	kEUR	kEUR
Personnel expenses	130,864	103,497
Material and packaging costs	116,295	100,040
Amortization and depreciation	55,885	79,898
Other costs of sales	53,195	53,173
Total	**356,239**	**336,608**

In the prior year, as part of the purchase price allocation, amortization and depreciation included an amount of EUR 33,500k from capitalized orders on hand. This amount had been written off by December 31, 2018 as scheduled.

Other costs of sales primarily contain energy costs, freight costs and maintenance expenses.

3.3 Selling costs

Selling costs primarily contain amortization and depreciation as well as personnel expenses.

3.4 Research and development costs

Research and development costs mainly contain personnel expenses.

3.5 General administrative costs

General administrative costs primarily contain personnel expenses.

3.6 Other income / expenses (-), net

Other income / expenses (-) breaks down as follows:

	2019	2018
	kEUR	kEUR
Impairment of goodwill	(329,753)	0
Impairment of other intangible assets	(5,456)	0
Write-downs and impairment of property, plant and equipment	(4,806)	(643)
Losses on disposal of property, plant and equipment	(1,059)	(150)
Foreign currency results	(667)	(63)
Addition to allowance for bad debts	(591)	(61)
Transaction costs	(146)	(10,346)
Income from reversal of allowances for bad debts	74	0
Impairment of financial assets	(2)	(254)
Sundry other income	484	521
Sundry other expenses	(965)	(193)
Total	**(342,887)**	**(11,189)**

The annual impairment test resulted in the need to recognize impairment losses of EUR 329,753k with regard to goodwill of the Industrial cash-generating unit (CGU) as well as of EUR 5,456k with regard to trademarks within other intangible assets (see note 4.1).

Write-downs and impairment of property, plant and equipment of EUR 4,806k (prior year: EUR 643k) resulted mainly from the permanent shutdown of machinery. The losses on disposal of property, plant and equipment in the amount of EUR 1,059k (prior year: EUR 150k) results mainly from the scrapping of machinery.

Transaction costs of EUR 146k (prior year: EUR 10,346k) were incurred in connection with the acquisition of CeramTec Holding and its subsidiaries with effect from March 8, 2018 (see note 1.3).

Other sundry expenses include mainly costs related to a discontinued product line.

3.7 Financial result

The financial result breaks down as follows:

	2019 kEUR	2018 kEUR
Income from discounting of financial liabilities	1,380	1,463
Foreign currency gains	190	0
Other finance and interest income	565	163
Interest income and other finance income	**2,135**	**1,626**
Interest expense from shareholder loan	38,768	31,971
Interest expense from syndicated loan	31,612	30,882
Interest expense from bond	21,062	21,723
Expense from unwinding the discount on financial liabilities	4,287	4,944
Interest expense from derivatives	1,274	22,028
Interest expense from provision and use of revolving line of credit	693	660
Foreign currency losses	0	8,707
Other interest expenses	3,175	4,196
Interest capitalized	(422)	(62)
Interest expenses and other finance costs	**100,449**	**125,049**
Financial result	**(98,314)**	**(123,423)**

Other finance and interest income includes an exchange gain of EUR 363k from the sale of bonds in the nominal amount of EUR 5,000k, which were acquired by a group company in the prior year.

Other interest expenses include an amount of EUR 1,897k (prior year: EUR 1,487k), which is due to unwinding the discount on provisions.

3.8 Income tax

Since January 1, 2018, there has been a consolidated tax group for income tax purposes between CeramTec BondCo and its German subsidiaries.

CeramTec TopCo is not included in the German consolidated tax group for income tax purposes and, in the abridged financial year January 1 – July 31, 2018, CeramTec Holding was not within the consolidated tax group.

This means that German corporate income tax and trade tax is only levied at the level of the parent company, CeramTec BondCo.

CeramTec TopCo also has indirect shareholdings in foreign corporations.

The current income taxes of the CeramTec TopCo Group therefore include, in addition to German corporate income tax and trade tax, the tax expense of the foreign corporations, which was calculated based on taxable income according to local tax law and the tax rate applicable in each case.

Loss before income tax of EUR -322,781k (prior year: EUR -102,231k) is allocable to Germany and abroad as follows:

	2019 kEUR	2018 kEUR
Germany	(343,446)	(110,661)
Abroad	20,665	8,430
Total	**(322,781)**	**(102,231)**

Tax expense (prior year: tax income) of EUR -16,498k (prior year: EUR 15,095k) breaks down as follows:

	2019 kEUR	2018 kEUR
Current income tax expense	(34,434)	(17,320)
Deferred tax income	17,936	32,415
Tax expense (-) /tax income (+)	**(16,498)**	**15,095**

Overall, the CeramTec TopCo Group's tax rate, based on the profit before tax and mainly driven by the German entities, is 28.7%, which will be used for the following reconciliation. The effective tax rate, i.e., tax expense in relation to profit before income tax, factors in both the current and the deferred tax expense and takes into account all influential factors, such as non-deductible operating expenses or a change in the assessment base.

	2019		2018	
	kEUR	%	kEUR	%
Profit (+) / loss (-) before income tax	**(322,781)**		**(102,231)**	
Expected tax income	92,597	28.7%	29,297	28.7%
Permanent differences	(3,228)	(1.0)%	(2,665)	(2.6)%
Non-tax deductible impairment of goodwill	(94,597)	(29.3)%	0	0.0%
Tax rate differences	1,499	0.5%	758	0.7%
Non-recognition of deferred tax assets on interest carryforwards	(8,370)	(2.6)%	(13,017)	(12.7)%
Tax expense (-)/ tax income (+) for previous years	(2,149)	(0.7)%	1,297	1.3%
Effects of changed income tax rates	(2,440)	(0.8)%	0	0.0%
Other adjustments	190	0.1%	(575)	(0.6)%
Tax expense (-) / tax income (+) and effective tax rate	**(16,498)**	**(5.1)%**	**15,095**	**14.8%**

The effects of permanent differences result mainly from trade tax add-backs in the amount of EUR 2,895k as well as other non-deductible operating expenses of EUR 247k.

Deferred taxes

Deferred income taxes were calculated using the expected tax rate of the relevant company. The deferred taxes are offset where there is an enforceable legal right to offset current taxes and the taxes are levied by the same tax authority.

In the consolidated statement of financial position, deferred taxes are disclosed as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Deferred tax assets	1,172	363
Deferred tax liabilities	298,417	318,200
Net amount of deferred tax liabilities	**297,245**	**317,837**

The deferred tax assets and liabilities stem from the following:

	December 31, 2019		December 31, 2018	
	Assets	Liabilities	Assets	Liabilities
	kEUR	kEUR	kEUR	kEUR
Tax loss carryforwards	48	0	53	0
Property, plant and equipment	820	25,080	194	25,256
Goodwill and other intangible assets	1,941	300,319	3,526	317,598
Inventories, receivables and other assets	14,832	8,695	17,060	7,404
Non-current provisions	25,664	6,394	22,222	6,998
Current provisions and other liabilities	5,587	5,649	4,448	8,084
Total deferred taxes	**48,892**	**346,137**	**47,503**	**365,340**
Offsetting	(47,720)	(47,720)	(47,140)	(47,140)
Deferred taxes	**1,172**	**298,417**	**363**	**318,200**

The following table shows the development of the net amount of deferred tax liabilities:

	2019	2018
	kEUR	kEUR
Net amount of deferred tax liabilities as of January 1	**317,837**	**1,933**
Deferred tax income shown in the income statement	(17,936)	(32,415)
Changes in deferred taxes recognized in other comprehensive income	(2,856)	211
Changes arising from acquisitions and disposals	0	348,111
Other changes (e.g. changes arising from foreign currency translation)	200	(3)
Net amount of deferred tax liabilities as of December 31	**297,245**	**317,837**

Other comprehensive income contains deferred tax income on the remeasurement of defined benefit plans of EUR 2,969k (prior year: deferred tax expense in the amount of EUR 116k), deferred tax expense from cashflow hedges in the amount of EUR 208k (prior year: EUR 0k) and deferred tax income on gain/loss arising on changes in the fair value of financial assets available for sale in the amount of EUR 95k (prior year: deferred tax expense in the amount of EUR 95k).

Unused losses and interest carryforwards

Unused losses and interest carryforwards break down as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Interest carryforwards	83,551	51,153
on which no deferred tax assets are recognized	*83,551*	*51,153*
Foreign unused losses	551	606
on which no deferred tax assets are recognized	*357*	*393*
Total unused losses	941	970
on which no deferred tax assets are recognized	*747*	*757*

Deferred tax assets were recognized on unused tax losses of EUR 194k (December 31, 2018: EUR 213k).

Foreign unused losses, for which deferred tax assets have been capitalized, result from unused losses made by a group company in Spain of EUR 194k (December 31, 2018: EUR 213k). The tax loss carryforwards in Spain do not expire.

Temporary differences in connection with shares in subsidiaries in the amount of EUR 1,974k (prior year: EUR 2,073k) are not subject to deferred tax liabilities, because the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary differences will not reverse in the foreseeable future.

3.9 Additional information on the type of expenses

Cost of materials

In the financial year, cost of materials amounted to EUR 135,013k (prior year: EUR 114,557k). Cost of materials is mainly contained in cost of sales.

Personnel expenses

Personnel expenses break down as follows:

	2019	2018
	kEUR	kEUR
Wages and salaries	162,660	129,383
Social security contributions	31,764	24,315
Pension expenses	6,581	6,986
Total	**201,005**	**160,684**

Personnel expenses are contained in cost of sales, selling, research and development, as well as general administrative costs.

Employees

On average, the Group employed 3,589 people in the financial year prior year: 3,554). These break down as follows:

	2019 Headcount (average)	2018 Headcount (average)
Salaried employees	1,360	1,335
Wage earners	2,229	2,219
Total	**3,589**	**3,554**

Amortization and depreciation

Amortization and depreciation break down as follows:

	2019	2018
	kEUR	kEUR
Amortization of intangible assets	65,235	88,077
Depreciation on property, plant and equipment	41,915	33,587
Impairment of goodwill and intangible assets	335,209	0
Impairment of property, plant and equipment	4,807	643
Total	**447,166**	**122,307**

4 Notes to the Consolidated Statement of Financial Position

4.1 Goodwill and intangible assets

Goodwill and intangible assets break down as follows:

		Other intangible assets				
	Goodwill	Trademarks	Technology	Customer relationships	Other	Total
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Cost						
January 1, 2018	**0**	**0**	**0**	**0**	**0**	**0**
Additions from business combinations	1,341,554	58,971	335,953	761,580	35,320	2,533,378
Additions	0	0	0	0	1,859	1,859
Disposals	0	0	0	0	(10)	(10)
Exchange differences	(123)	29	(176)	220	(2)	(52)
December 31, 2018	**1,341,431**	**59,000**	**335,777**	**761,800**	**37,167**	**2,535,175**
Additions	0	0	0	0	3,027	3,027
Disposals	0	0	0	0	(33,524)	(33,524)
Reclassifications	0	0	0	0	56	56
Exchange differences	0	0	498	0	18	516
December 31, 2019	**1,341,431**	**59,000**	**336,275**	**761,800**	**6,744**	**2,505,250**
Amortization/impairment January 1, 2018	**0**	**0**	**0**	**0**	**0**	**0**
Additions to amortization	0	(2)	15,574	38,180	34,325	88,077
Disposals	0	0	0	0	(10)	(10)
Exchange differences	0	2	(8)	7	2	3
December 31, 2018	**0**	**0**	**15,566**	**38,187**	**34,317**	**88,070**
Additions to amortization	0	0	18,189	45,823	1,223	65,235
Additions to impairments	329,753	5,456	0	0	0	335,209
Disposals	0	0	0	0	(33,524)	(33,524)
Exchange differences	0	0	39	1	9	49
December 31, 2019	**329,753**	**5,456**	**33,794**	**84,011**	**2,025**	**455,039**
Net carrying amounts						
December 31, 2019	**1,011,678**	**53,544**	**302,481**	**677,789**	**4,719**	**2,050,211**
December 31, 2018	**1,341,431**	**59,000**	**320,211**	**723,613**	**2,850**	**2,447,105**

Goodwill results from the acquisition of CeramTec Holding and its subsidiaries in the prior year (see note 1.3). Goodwill was allocated to the groups of cash-generating units (CGUs) Medical Products (EUR 874,613k) and Industrial (EUR 466,818k).

The CGU Medical Products includes the business activities designed to develop, manufacture and sell technical high-performance ceramics products used for medical technology, and the CGU Industrial includes the business activities designed to develop, manufacture and sell technical high-performance ceramics products used in the electronics and automotive industries, and for mechanical engineering.

For the cash-generating units, the annual impairment test was performed as of November 30, 2019. The recoverable amount was calculated based on the asset's value in use. Value in use is calculated by discounting the future cash flow surpluses. The measurement is therefore allocable to level 3 pursuant to IFRS 13. The projected future cash inflows are based on the approved financial budgets, which are undertaken by the CeramTec TopCo Group and, as a rule, have a three-year planning horizon. For this purpose, assumptions are made mainly about future selling prices, quantities and costs.

The financial budgets are prepared on the basis of historical experience, and reflect the management's expectations for the following years.

More recent and better knowledge on the benchmark companies of the peer group resulted in the consideration of different benchmark companies for the CGU Medical Products and the CGU Industrial.

The growth rate of the perpetuity was assumed to be 1.00% (prior year: 1.00%). The weighted capital cost rate for the CGU Medical Products is 9.21% (prior year: 11.75%) before tax and 6.89% (prior year: 8.70%) after tax. With regard to the CGU Industrial, the weighted capital cost rate before tax amounts to 13.69% (prior year: 11.33%) and 10.38% (prior year: 8.70%) after tax. Equity costs were calculated using a base interest rate of 0.17% (prior year: 1.25%) each and a market risk premium of 7.50% (prior year: 6.75%) each.

With regard to the CGU Industrial, there was need to recognize impairment losses totaling EUR 329,753k as the carrying amount exceeded the assets' value in use. The lower value in use in the amount of EUR 648,119k was mainly attributable to a more conservative revenue planning in consequence of a temporarily declined demand from the automotive and electronics industries given the slowdown in the macroeconomic development and a significant increase in the weighted average cost of capital. As of December 31, 2019, the carrying amount of goodwill attributable to the CGU Industrial after impairment amounts to EUR 137,065k. The planning assumes sales revenues of EUR 361,600k for 2020 and an average moderate annual increase in the detailed planning period.

With regard to the CGU Industrial, an increase by 0.25 percentage points in the weighted capital cost rate after tax would result in need to recognize additional impairment losses of EUR 17,700k; a decrease in the EBITDA margin by 0.5 percentage points would result in valuation allowances to be recognized in the amount of EUR 13,800k.

According to our assessment, reasonably possible changes in significant basic assumptions (weighted capital cost rate, EBITDA margin) underlying the determination of value in use would not result in an excess of the carrying amount of the CGU Medical Products over its value in use.

As of March 8, 2018, the trademarks CeramTec, BIOLOX, SPK and DAI Ceramics were identified. The carrying amount of the above trademarks was EUR 53,544k as of December 31, 2019(December 31, 2018: EUR 59,000k). As the recognized trademarks do not represent a product-specific trademark and do not have identifiable useful lives, the useful life for the recognized trademarks was classified as indefinite. The trademarks were allocated to the cash-generating units Medical Products (EUR 33,200k) and Industrial (EUR 25,800k). The annual impairment text of the CGU Industrial's trademarks resulted in need to recognize impairment losses of EUR 5,456k.

Technology has a carrying amount of EUR 302,481k (December 31, 2018: EUR 320,211k) and primarily contains the basic technology underlying high-performance ceramics. This has an average weighted remaining useful life of 16.2 years (December 31, 2018: 17.2 years).

Customer relationships have a carrying amount of EUR 677,789k (December 31, 2018: EUR 723,613k) and primarily contain customer relationships from the Medical Products business. These have an average weighted remaining useful life of 15.1 years (December 31, 2018: 16.1 years).

Scheduled amortization of other intangible assets is recognized under cost of sales, selling costs, research and development costs and general administrative costs, while impairment losses are recognized under other income and expenses (-), net.

4.2 Property, plant and equipment

Property, plant and equipment break down as follows:

	Land and buildings	Technical plant and machinery	Other equipment	Right-of-use assets	Assets under construction	Total
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Cost						
January 1, 2018	**0**	**0**	**0**	**0**	**0**	**0**
Additions from business combinations	106,555	168,918	6,292	0	12,841	294,606
Additions	797	12,161	2,549	0	13,102	28,608
Disposals	(38)	(471)	(356)	0	0	(866)
Reclassifications	923	9,549	152	0	(10,624)	0
Exchange differences	(407)	637	37	0	99	367
December 31, 2018	**107,830**	**190,794**	**8,674**	**0**	**15,418**	**322,716**
Additions	1,145	17,837	2,778	1,762	18,847	42,368
Additions from initial recognition	0	0	0	4,852	0	4,852
Disposals	(313)	(3,542)	(692)	0	(41)	(4,588)
Reclassifications	886	10,345	426	0	(11,714)	(56)
Exchange differences	367	1,148	73	27	52	1,668
December 31, 2019	**109,915**	**216,582**	**11,259**	**6,641**	**22,562**	**366,960**
Depreciation/impairment						
January 1, 2018	**0**	**0**	**0**	**0**	**0**	**0**
Additions to depreciation	5,760	25,106	2,721	0	0	33,587
Additions to impairment	0	643	0	0	0	643
Disposals	0	(246)	(352)	0	0	(599)
Exchange differences	14	73	3	0	0	90
December 31, 2018	**5,774**	**25,576**	**2,372**	**0**	**0**	**33,722**
Additions to depreciation	7,425	28,721	3,233	2,536	0	41,915
Additions to impairment	0	4,756	51	0	0	4,807
Disposals	(90)	(2,445)	(659)	0	0	(3,194)
Exchange differences	22	268	28	5	0	324
December 31, 2019	**13,131**	**56,876**	**5,025**	**2,542**	**0**	**77,573**
Net carrying amounts						
December 31, 2019	**96,784**	**159,707**	**6,234**	**4,099**	**22,562**	**289,387**
December 31, 2018	**102,056**	**165,219**	**6,301**	**0**	**15,418**	**288,994**

Scheduled depreciation of property, plant and equipment is recognized under cost of sales, selling costs, research and development costs and general administrative costs, while impairment losses are reported as other income and expenses.

In the financial year, borrowing costs of EUR 422k (prior year: EUR 62k) were capitalized in property, plant and equipment applying an interest rate of 5.80% .

There were contractual commitments to acquire property, plant and equipment in the amount of EUR 21,161k as of the reporting date (December 31, 2018: EUR 28,611k).

Property, plant and equipment under IAS 17 (finance leases) contain rented buildings capitalized in previous years with a net carrying amount of EUR 1,208k (December 31, 2018: EUR 1,252k), and furniture and fixtures with a net carrying amount of EUR 3k (December 31, 2018: EUR 4k).

4.3 Other financial assets

The breakdown of other financial assets is shown in the following table:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Other non-current financial assets		
Separated termination rights	25,139	20,988
Insurance claims	45	49
Derivative financial instruments	0	26
Sundry financial assets	59	0
Total	**25,243**	**21,063**
Other current financial assets		
Receivables arising from amounts retained by a factor as a security	1,792	2,032
Derivative financial instruments	717	0
Sundry financial assets	565	365
Total	**3,074**	**2,397**

The CeramTec TopCo Group has a termination option for the issued bond. This termination option represents an embedded derivative, which is accounted for separately from the underlying transaction. Further explanations can be found in note 4.15.

Due to the default risk being classified as low, no impairment was recognized in relation to other financial assets in the reporting period.

4.4 Other assets

The breakdown of other assets is shown in the following table:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Other non-current assets		
Deferred finance costs for the revolving credit line	697	916
Sundry assets	410	400
Total	**1,107**	**1,316**
Other current assets		
Prepaid insurance	2,454	2,869
VAT receivables	2,383	2,710
Receivables from energy tax refunds	989	1,154
Deferred finance costs for the revolving credit line	219	219
Sundry assets	1,981	1,715
Total	**8,026**	**8,667**

Sundry current assets primarily contain prepayments, e.g. for trade fair costs.

4.5 Inventories

Inventories break down as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Raw materials	38,267	32,042
Work in progress	29,233	32,144
Finished goods	25,209	27,670
Merchandise	2,971	3,097
Other inventories	1,413	1,544
Total	**97,093**	**96,497**

Other inventories include packaging materials and spare parts for machinery.

At the reporting date, the write-down of inventories amounts to EUR 14,636k (December 31, 2018: EUR 12,605k). The expense resulting from the increase in the write-down by EUR 2,031k is reported under cost of sales.

4.6 Trade receivables

As of the reporting date, trade receivables were recognized to the amount of EUR 52,740k (December 31, 2018: EUR 57,880k) after taking into account valuation allowances of EUR 760k (December 31, 2018: EUR 530k).

As part of the factoring agreement concluded in 2017, receivables of EUR 14,422k were sold as of the balance sheet date (December 31, 2018: EUR 14,146k). Under the terms of the agreement, EUR 1,792k was retained by the factor as of the balance sheet date as a security (December 31, 2018: EUR 2,032k), and is recognized in other current financial assets (see note 4.3).

The value and maturity structure of trade receivables before impairment losses breaks down as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Carrying amount before impairment losses	**53,500**	**58,410**
thereof not yet due on the reporting date	41,248	43,613
thereof past due on the reporting date	12,252	14,797
past due up to 30 days	10,001	11,255
past due up to 60 days	896	2,019
past due up to 90 days	181	506
past due more than 90 days	1,174	1,017

The age structure of the impairment losses as of the reporting date breaks down as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
not yet due	0	0
past due up to 30 days	22	22
past due up to 60 days	55	57
past due up to 90 days	47	47
past due more than 90 days	636	404
Total	**760**	**530**

The age structure of receivables past due which are not impaired breaks down as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
past due up to 30 days	9,969	11,224
past due up to 60 days	817	1,941
past due up to 90 days	112	442
past due more than 90 days	247	461
Total	**11,145**	**14,068**

Loss allowances are based on information about a customer developed internally or obtained from external sources, and an estimate of the likelihood of default. The loss allowances mainly include specific loss allowances for receivables due from customers who have entered into bankruptcy proceedings or who are facing severe financial difficulties.

Default risks in the majority of trade receivables (usually between 75% and 80%) of CeramTec GmbH, Plochingen/Germany, the largest company that engages in operating activities, are covered by using credit insurance. After taking credit insurance into account, the maximum default risk on trade receivables of CeramTec TopCo Group comes to around 48% of the carrying amount as of the balance sheet date (December 31, 2018: 51%).

Based on the CeramTec TopCo Group's historical credit loss experience and customer structure, the Group is expected to sustain a small loss in the event of default, taking into account future-oriented macroeconomic information and existing insurance that protects the Group against loss on receivables. The resulting impairment loss on trade receivables is of minor importance.

There was no indication as of the reporting date that the debtors of receivables that were not impaired and not past due would not meet their payment obligations. On average, the Group has recognized loss allowances of around 50% in relation to all receivables past due more than 60 days.

The following table shows the development of loss allowances on trade receivables during the past reporting period. Additional general risks of non-payment are considered remote.

	2019 kEUR	2018 kEUR
Loss allowances		
As of January 1	**530**	**0**
Addition	591	63
Utilization	(291)	(4)
Reversal	(75)	(2)
Foreign currency translation	5	12
Change recognized in profit or loss	760	69
Change to the consolidated group	0	461
As of December 31	**760**	**530**

4.7 Cash and cash equivalents

The "Cash and cash equivalents" line item contains bank balances of EUR 64,373k (December 31, 2018: EUR 21,049k) and cash in hand of EUR 7k (December 31, 2018: EUR 9k).

4.8 Equity

Subscribed capital

The fully paid in capital stock of the parent company CeramTec TopCo amounts to EUR 25k (December 31, 2018: EUR 25k).

Capital reserve

Effective as of March 8, 2018, CTEC Acquisition S.á.r.l., Luxembourg, acting in its capacity as the sole shareholder of CeramTec TopCo, increased CeramTec TopCo's capital reserve by EUR 500,417k.

Effective as of December 31, 2019, a nominal amount of EUR 247,929k of the existing shareholder loan and the interest payable in the amount of EUR 32,025k were contributed to the capital reserve.

The capital reserve is freely available and not subject to any earmarking.

Retained earnings and net profit/loss for the period

The "Retained earnings and net profit/loss for the period" line item contains the current profits/losses incurred by the CeramTec TopCo Group and those incurred in the prior year. This also includes the change in the revaluation reserve for pension obligations (after taxes) in the amount of EUR -7,417k (December 31, 2018: EUR 337k).

Accumulated other comprehensive income

Accumulated other comprehensive income relates to foreign currency translation adjustments and the reserve for financial assets available for sale, including deferred tax effects.

4.9 Provisions for pension obligations

Within the CeramTec TopCo Group, there are defined benefit and defined contribution plans in place granting eligible employees benefits in the event of retirement, occupational disability or death – in the latter case to employees' surviving dependents. These benefits are based, as a rule, on the length of service and level of remuneration or contributions of the eligible employees taking into account conditions in terms of tax, labor and welfare law in the respective country.

In Germany, there are various direct commitments that depend on the remuneration and length of service and are subject to a cap. These commitments do not contain any rights to inflation-related pension adjustments. These defined benefit plans were closed for employees that joined after January 1, 2002. There is also a defined benefit plan in place with direct commitments for a fixed pension amount which depends on the employee's length of service. This plan was also closed for employees that joined after January 1, 2002. For the management of the German CeramTec TopCo group companies, there are direct commitments in place comprising benefits that depend on the remuneration and length of service and are subject to a cap as well as benefits that are calculated based on the performance of the Company. The eligible employees are also entitled to deferred compensation which is subsidized by the relevant group company depending on the achievement of personal targets by employees.

Furthermore, since the end of 2014, the Company has committed itself to directly providing benefits as compensation to all employees who have been enrolled into Hoechster Pensionskasse, which was subject to the realignment of pension funds, that might be to their disadvantage. The obligation is measured annually by an actuarial expert.

The pension plan in the UK is a funded defined benefit plan. The plan is administered by an external sponsoring institution managed by employer and employee representatives. The representatives are legally obligated to represent the interests of the entitled employees and are responsible for the investment decisions and managing the assets. The pension plan is closed. The plan grants the entitled employees annual pension payments, the amount of which depends on the length of service and the last salary earned. Pension payments are also made in the event of death. The obligation is measured annually by an actuarial expert.

The provisions for pension obligations break down as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Germany	109,504	96,430
UK	3,698	3,559
Other	231	211
Total	**113,433**	**100,200**

The following table shows the extent of the obligation and the amount of plan assets as well as the provisions and other assets disclosed in the consolidated statement of financial position as of December 31, 2019.

	German plans	Foreign plans	Total
	kEUR	kEUR	kEUR
Change in benefit obligations			
Benefit obligations at the beginning of the financial year	**96,430**	**10,826**	**107,256**
Service cost	3,497	23	3,520
Interest expense	1,809	301	2,110
Remeasurements	10,121	1,229	11,350
from the change in demographic assumptions	*0*	*(108)*	*(108)*
from the change in financial assumptions	*9,734*	*1,337*	*11,071*
Experience adjustments	*387*	*0*	*387*
Foreign currency translation	0	666	666
Benefits paid	(2,353)	(343)	(2,696)
Benefit obligations at the end of the year	**109,504**	**12,702**	**122,206**
Change in plan assets			
Market value of plan assets at the beginning of the financial year	**0**	**7,056**	**7,056**
Interest income from plan assets	0	203	203
Expense for managing the plans	0	(93)	(93)
Employer contributions	0	527	527
Remeasurements	0	964	964
from the change in financial assumptions	*0*	*964*	*964*
Foreign currency translation	0	457	457
Benefits paid	0	(341)	(341)
Market value of plan assets at the end of the year	**0**	**8,773**	**8,773**
Net obligation amount / provisions for benefits	**109,504**	**3,929**	**113,433**

The change in financial assumptions primarily results from a declined interest rate.

The following table shows the extent of the obligation and the amount of plan assets as well as the provisions disclosed in the consolidated statement of financial position for the comparable period as of December 31, 2018.

	German plans	Foreign plans	Total
	kEUR	kEUR	kEUR
Change in benefit obligations			
Benefit obligations at the beginning of the financial year	**0**	**0**	**0**
Addition due to changes to the consolidated group	94,892	11,626	106,518
Service cost	2,506	139	2,645
Interest expense	1,322	276	1,598
Remeasurements	(339)	(510)	(849)
from the change in demographic assumptions	*1,353*	*(78)*	*1,275*
from the change in financial assumptions	*(3,369)*	*(436)*	*(3,805)*
Experience adjustments	*1,677*	*4*	*1,681*
Foreign currency translation	0	(248)	(248)
Benefits paid	(1,951)	(457)	(2,408)
Benefit obligations at the end of the year	**96,430**	**10,826**	**107,256**
Change in plan assets			
Market value of plan assets at the beginning of the financial year	**0**	**0**	**0**
Addition due to changes to the consolidated group	0	7,644	7,644
Interest income from plan assets	0	185	185
Expense for managing the plans	0	(125)	(125)
Employer contributions	0	327	327
Remeasurements	0	(394)	(394)
from the change in financial assumptions	*0*	*(394)*	*(394)*
Foreign currency translation	0	(166)	(166)
Benefits paid	0	(415)	(415)
Market value of plan assets at the end of the year	**0**	**7,056**	**7,056**
Net obligation amount / provisions for benefits	**96,430**	**3,770**	**100,200**

The calculation of the pension obligations was based on the following assumptions as of December 31, 2019:

	Germany	Abroad
Interest rate (in %)	0.90	2.00
Wage and salary trends (in %)	3.00	N/A
Pension trend (in %)	1.50	3.00 – 3.20
Life expectancy	2018 G Guideline Tables	Mortality Tables

The calculation of the pension obligations was based on the following assumptions as of December 31, 2018:

	Germany	Abroad
Interest rate (in %)	1.90	2.80
Wage and salary trends (in %)	3.50	N/A
Pension trend (in %)	2.00	3.00 – 3.40
Life expectancy	2018 G Guideline Tables	Mortality Tables

The average term of the benefit obligations amounts to 22.2 years in Germany (prior year: 21.3 years) and 16.0 years abroad (prior year: 16.0 years).

The employer contributions and benefit payments expected to be paid into the plans during the next financial year amount to EUR 476k (prior year: EUR 450k) and EUR 2,694k (prior year: EUR 2,748k) respectively.

The risk from changes in actuarial assumptions underlying the measurement of the defined pension plans is borne by the relevant group company. The sensitivity analyses presented in the table below were performed based on reasonably possible changes in the respective assumptions as of the reporting date. The change in key actuarial assumptions would have the following effects (in kEUR) on the present value of pension obligations:

	Change	Effect December 31, 2019
Discount rate	(0.50) percentage points	14,082
	+ 0.50 percentage points	(12,032)
Wage and salary trends	(0.50) percentage points	(433)
	+ 0.50 percentage points	452
Pension trend	(0.50) percentage points	(13,581)
	+ 0.50 percentage points	15,059
Life expectancy	+ 1 year	5,448

The change in key actuarial assumptions would have the following impact (in kEUR) on the present value of pension obligations for the prior year:

	Change	Effect December 31, 2018
Discount rate	(0.50) percentage points	11,784
	+ 0.50 percentage points	(10,115)
Wage and salary trends	(0.50) percentage points	(550)
	+ 0.50 percentage points	398
Pension trend	(0.50) percentage points	(10,576)
	+ 0.50 percentage points	11,697
Life expectancy	+ 1 year	4,608

There are no plan assets for German plans. The plan assets of the foreign plans break down into the following assets:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Securities/shares	4,260	3,046
Equity funds and other funds	2,085	0
Fixed-interest securities	1,584	3,610
Real estate	843	400
	8,773	**7,056**

The fair values of the securities and shares were determined based on prices quoted on active markets, while the fair values of real estate are not based on prices quoted on active markets. The real estate contained in plan assets relates to non-owner-occupied property in the UK. The investment horizon for plan assets takes into account the expected payout profile.

From January 1, 2002 to December 31, 2014, all new hires at CeramTec GmbH, CeramTec Service and Emil Müller GmbH joined the pension fund Dynamit Nobel VVaG. Furthermore, some active and former employees of CeramTec GmbH and Emil Müller GmbH are members of the pension fund Pensionskasse der Mitarbeiter der Hoechst-Gruppe VVaG. These pension funds are multi-employer plans which are generally defined benefit plans. The two pension funds are subject to regulatory supervision. In the event that the funds are unable to settle their obligations, the employer is legally liable for the vested benefits (secondary liability). This obligation remains in place even if the CeramTec TopCo Group were to terminate its participation in the plans. However, terminating its participation would generally not directly result in having to make supplementary payments. In the consolidated financial statements, these pension plans are classified as defined contribution plans in accordance with IAS 19.34. As several employers are responsible for these pension funds, contributions made by the CeramTec TopCo Group can under certain circumstances be used to finance another entity's employee benefits.

Dynamit Nobel VVaG is funded for commitments made before December 1, 2007 with income-based contributions by the entitled employees as well as variable employer contributions. The employers' contribution must, together with the member contributions and return on plan assets from the pension fund, sufficiently fund the agreed benefit payments according to actuarial principles. Once pension payments have begun, the pension fund assumes the statutory pension adjustments provided it has the sufficient means to do so. In the last few years, the pension adjustments could not be assumed by the pension fund and had to be funded by the employers. For commitments given as from December 1, 2007, the employees and employer made a fixed, income-based contribution. There is no obligation on the part of the employer to adjust current pension benefits. Surpluses are used to increase the pension benefits. Although the existing obligations are at present fully covered by assets in accordance with German accounting standards for pension funds, the additional capital requirements have not been satisfied. There is a plan approved by regulatory authorities in place to remedy the contravention of requirements. Negative budget variances, for example due to the pension fund earning an insufficient return on assets, may result in the CeramTec TopCo Group having to make additional payments. The proportion of members whose membership is based on an existing or former work contract with CeramTec GmbH, CeramTec Service or Emil Müller GmbH in the total number of pension fund members amounts to around 26% for active employees, around 11% for non-contributory employees and around 4% for pensioners.

The pension fund Pensionskasse der Mitarbeiter der Hoechst-Gruppe VVaG is funded with income-based contributions by entitled employees as well as variable employer contributions. The employers' contribution must, together with the employees' member contributions and pension fund surpluses, sufficiently fund the agreed benefit payments according to actuarial principles. Once pension payments have begun, the pension fund assumes the statutory pension adjustments provided it has the sufficient means to do so. The proportion of members whose membership is based on an existing or former work contract with the CeramTec TopCo Group in the total number of members for active employees, non-contributory employees and pensioners ranges between around 0.1% and 0.15% in each case.

As of December 1, 2014, company pension schemes underwent some realignment, and all employees whose membership was based on an existing contract with the pension fund Dynamit Nobel VVaG were enrolled into Hoechster Pensionskasse VVaG. Since January 1, 2015, contributions have not been paid anymore to the pension fund Dynamit Nobel VVaG, and the employees have become extraordinary members. All new hires become members of Hoechster Pensionskasse VVaG. The employees and employer make a fixed, income-based contribution to Hoechster Pensionskasse VVaG. There is no obligation on the part of the employer to adjust current pension benefits. Surpluses are used to increase the pension benefits. CeramTec GmbH has committed itself to directly providing benefits as compensation for the realignment which involved enrolling the employees into another pension fund, which may be to their disadvantage.

The contributions made to the pension funds amounted to EUR 2,558k in the financial year (prior year: EUR 2,139k). The expenses are recorded in cost of sales, selling costs, research and development costs as well as general administrative costs. Planned contributions of EUR 2,451k are expected to be made in 2020 (prior year: EUR 2,646k).

The expenses for additional defined contribution plans consisting of the employer's share of contributions to the German state pension insurance scheme amounted to EUR 11,754k (prior year: EUR 8,905k).

4.10 Provisions

The development of provisions in the financial year was as follows:

	Balance as of December 31, 2018	Additions	Utilization	Reversal	Unwinding of the discount	Exchange difference	Balance as of December 31, 2019
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Provisions for employee bonuses	12,972	11,553	10,917	1,615	0	105	12,098
Provisions for warranties	3,027	1,317	54	1,121	0	1	3,170
Provisions for environmental risks	299	2	33	1	0	5	272
Provisions for long-service awards	889	330	296	0	0	0	923
Provision for solvency requirements	3,990	0	1,156	0	0	0	2,834
Provisions for litigation risks	1,575	211	216	495	0	2	1,077
Provisions for taxes	6,347	4,365	6,346	0	0	58	4,424
Sundry provisions	2,287	1,320	264	490	1	44	2,898
	31,386	**19,098**	**19,282**	**3,722**	**1**	**215**	**27,696**

Provisions for environmental risks relate to the elimination of residual pollution, renovation measures and water conservation practices. Estimations and, where possible, external expert opinions are used to measure the amount of the provisions.

A provision was recognized for the solvency plan for the pension fund Dynamit Nobel VVaG which has been approved by the German Federal Financial Supervisory Authority (Bafin).

The provision for taxes includes anticipated income tax payments for past assessment periods.

Sundry provisions primarily comprise provisions for severance pay, legal and consulting fees as well as provisions for other contingent liabilities.

The maturities of the provisions were as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Current provisions	22,190	26,503
Non-current provisions	5,506	4,883
Total	**27,696**	**31,386**

The cash outflow of provisions is expected to be 80% within one year and 20% in a period between more than one year and 15 years.

4.11 Financial liabilities to affiliates

Financial liabilities to affiliates comprise a loan payable to CTEC Acquisition S.à.r.l., Luxembourg, in the amount of EUR 311,503k (December 31, 2018: EUR 552,688k).

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Non-current financial liabilities		
Loan payable	256,270	523,798
Accrued interest	0	28,890
	256,270	**552,688**
Current financial liabilities		
Loan payable	19,599	0
Accrued interest	35,634	0
	55,233	**0**
Total	**311,503**	**552,688**

Effective as of December 31, 2019, a nominal amount of EUR 247,929k of the existing shareholder loan and the interest payable in the amount of EUR 32,025k were contributed to the capital reserve.

The amount reported as current (EUR 55,233k) was paid to the shareholder in January 2020.

4.12 Financial liabilities to third parties

The financial liabilities to third parties are broken down as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Non-current financial liabilities		
Liabilities to banks	999,334	1,045,858
Liabilities from the bond	415,740	411,990
Derivative financial instruments	15,179	12,748
Lease liabilities	3,071	1,248
Total	**1,433,324**	**1,471,844**
Current financial liabilities		
Liabilities from the bond	7,993	7,895
Derivative financial instruments	5,743	5,012
Discounts and bonuses	4,139	2,961
Lease liabilities	2,355	8
Liabilities to banks	2,672	3,103
Sundry current financial liabilities	2,504	3,248
Total	**25,406**	**22,227**

Liabilities to banks consist of a tranche in EUR nominally amounting to EUR 894,000k and two tranches in USD amounting to EUR 133,167k. These loans have variable interest rates and mature on March 8, 2025. Transaction costs of EUR 26,803k associated with the loan are spread over the term of the loan using the effective interest method.

On May 31, 2019 and August 29, 2019, voluntary repayments were made in relation to the syndicated loan of EUR 44,000k (prior year: EUR 32,000k) to the EUR tranche and EUR 9,872k (prior year: EUR 13,253k) to two USD tranches.

The bond has a fixed interest rate and a nominal volume of EUR 406,000k (December 31, 2018: nominal volume of EUR 406,000k). In the financial year, the bonds with a nominal amount of EUR 5,000k which were acquired from a group company in the prior year were resold. This bond matures on December 15, 2025. The CeramTec TopCo Group has a termination option for this bond, which is recognized as a separate financial asset (note 4.3). Associated transaction costs of EUR 13,570k are spread over the term of the bond using the effective interest method. Further information on the loans, the bond and derivatives can be found in note 4.15.

Lease liabilities are composed of right-of-use assets capitalized in accordance with IFRS 16 (see note 4.14) in the amount of EUR 4,216k and finance leases recognized in previous years in accordance with IAS 17 in the amount of EUR 1,210k.

4.13 Other liabilities

Other liabilities break down as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Other current liabilities		
Wages and salaries including taxes	12,208	8,113
Real estate transfer tax	1,023	1,279
Contractual liabilities under contracts with customers	907	135
Sundry current liabilities	2,599	1,990
Total	**16,737**	**11,517**

Sundry current liabilities are mainly attributable to liabilities to employees, liabilities from social security contributions, liabilities to pension funds as well as deferred income.

4.14 Accounting for leases (IFRS 16)

In accordance with IFRS 16 the lessee is required to recognize a right-of-use asset (or "RoU asset") and a corresponding lease liability for all leases. At the commencement date, the amount of the RoU asset corresponds to the amount of the lease liability. In the subsequent periods, the RoU asset is (apart from some exceptions) measured at its cost less any accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liability.

The right-of-use assets can be related to the asset category of property, plant and equipment as follows:

	Land and buildings	Technical plant and machinery	Other equipment	Total
	kEUR	kEUR	kEUR	kEUR
Cost				
December 31, 2018	**0**	**0**	**0**	**0**
Initial adoption of IFRS 16 as of January 1, 2019	2,434	172	2,246	4,852
Additions	138	29	1,595	1,762
Exchange differences	25	1	1	27
December 31, 2019	**2,597**	**202**	**3,842**	**6,641**
Depreciation/impairment				
December 31, 2018	**0**	**0**	**0**	**0**
Additions to depreciation	686	185	1,665	2,536
Exchange differences	4	0	1	5
December 31, 2019	**690**	**185**	**1,666**	**2,542**
Net carrying amounts				
December 31, 2019	**1,907**	**17**	**2,175**	**4,099**
December 31, 2018	**0**	**0**	**0**	**0**

At the commencement date, the lease liability is measured at the present value of the lease payments that are paid over the lease term. Subsequently, the carrying amount of the lease liability is adjusted for interest using the discount rate and reduced in the amount of the lease payments made. Modifications to the lease payments result in a remeasurement of the lease liability.

The following table shows the undiscounted cash flows for the lease liabilities existing as of the reporting date:

	December 31, 2019						
	Carrying amount	2020	2021	2022	2023	2024	>2024
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Lease liabilities (IFRS 16)	4,216	1,759	1,132	559	411	291	411

The change from the operating lease liability stated as of December 31, 2018 to lease liabilities pursuant to IFRS 16, which have been accounted for on January 1, 2019 for the first time, mainly results from a differing incremental borrowing rate of the lessor, from extended lease agreements as well as current leases and leases of low-value assets recorded as expense on a straight-line basis.

The effect of IFRS 16 on the consolidated statement of comprehensive income is as follows:

	2019	2018
	kEUR	kEUR
Depreciation of right-of-use assets	2,536	0
Interest expense associated with unwinding of discount on lease liabilities	243	0
Total	**2,779**	**0**

In the financial year, expenses related to current leases, leases of low-value assets as well as software leases are included in cost of sales at the amount of EUR 553k, in selling costs at the amount of EUR 299k and in general administrative costs at the amount of EUR 48k.

4.15 Financial instruments

The following table shows the carrying amounts and fair values of the financial assets and financial liabilities reported in the consolidated financial statements, sorted by class and measurement category in accordance with IFRS 9.

	December 31, 2019		
	Measurement category of IFRS 9[1]	Carrying amount	Fair value
		kEUR	kEUR
Financial assets			
Trade receivables	AC	52,740	52,740
Separated termination rights	FVtPL	25,139	25,139
Cash and cash equivalents	AC	64,380	64,380
Forward exchange transactions	FVtPL	717	717
Other financial assets	AC	2,461	2,461
Total		**145,437**	**145,437**
Financial liabilities			
Liabilities to banks	AC	1,002,006	1,027,167
Liabilities to affiliates	AC	311,503	314,158
Bond liabilities	AC	423,733	448,597
Trade payables	AC	30,277	30,277
Separated interest rate floors	FVtPL	15,272	15,272
Interest rate cap	FVtPL	5,650	5,650
Lease liabilities	AC	5,425	5,425
Other financial liabilities	AC	6,644	6,644
Total		**1,800,510**	**1,853,190**

[1] AC: measured at amortized cost using the effective interest method; FVtOCI: measured at fair value through other comprehensive income; FVtPL: measured at fair value through profit or loss

	December 31, 2018		
	Measurement category of IFRS 9[1]	Carrying amount	Fair value
		kEUR	kEUR
Financial assets			
Cash and cash equivalents	AC	21,058	21,058
Trade receivables	AC	57,880	57,880
Other financial assets	AC	2,446	2,446
Interest rate cap	FVtPL	26	26
Separated termination rights	FVtPL	20,988	20,988
Total		**102,398**	**102,398**
Financial liabilities			
Bond liabilities [2]	AC	419,884	410,748
Liabilities to banks	AC	1,048,961	1,077,822
Trade payables	AC	34,907	34,907
Finance lease liabilities	AC	1,256	1,256
Other financial liabilities	AC	6,209	6,209
Liabilities to affiliates[3]	AC	552,688	557.926
Separated interest rate floors	FVtPL	12,205	12,205
Interest rate cap	FVtPL	5,556	5,556
Total		**2,081,666**	**2,106,629**

[1] AC: measured at amortized cost using the effective interest method; FVtOCI: measured at fair value through other comprehensive income; FVtPL: measured at fair value through profit or loss

[2] The fair value was adjusted taking into account the associated derivative

[3] The fair value was adjusted taking into account the method used in the current year

If the fair value is not available in the form of a market price, it is calculated based on different valuation parameters. Depending on the availability of observable parameters and the significance of these parameters when calculating the fair value, the fair value is allocated to level 1, 2 or 3 of the fair value hierarchy. The allocation is based on the following factors:

- **Level 1:** Level 1 inputs are quoted (unadjusted) prices in markets for identical assets or liabilities that the entity can access at the measurement date

- **Level 2:** Level 2 inputs are inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly

- **Level 3:** Level 3 inputs are unobservable measurement parameters for the asset or liability.

The following table shows the fair value hierarchy for derivative financial instruments that are recognized at fair value in the consolidated financial statements:

	December 31, 2019		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial assets			
Separated termination rights	0	25,139	0
Forward exchange transactions	0	717	0
Financial liabilities			
Separated interest rate floors	0	15,272	0
Interest rate cap	0	5,650	0

	December 31, 2018		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial assets			
Separated termination rights	0	20,988	0
Interest rate cap	0	26	0
Financial liabilities			
Separated interest rate floors	0	12,205	0
Interest rate cap	0	5,556	0

The following table shows the fair value hierarchy for the financial instruments that are not recognized at fair value in the consolidated financial statements; however, their fair value is provided in the notes to the financial statements. The Group does not disclose the fair values of financial instruments when their carrying amounts are a reasonable approximation of the fair values, such as current trade receivables and payables.

	December 31, 2019		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial liabilities			
Bond liabilities	0	448,597	0
Liabilities to banks	0	1,027,167	0
Liabilities to affiliates	0	0	314,158
Lease liabilities	0	5,425	0

	December 31, 2018		
	Level 1	Level 2	Level 3
	kEUR	kEUR	kEUR
Financial liabilities			
Bond liabilities[1]	0	410,748	0
Liabilities to banks	0	1,077,822	0
Liabilities to affiliates	0	0	557,926
Finance lease liabilities	0	1,256	0

[1] In the previous year's financial statements, the bond liabilities were reported under level 1

The fair value of the bond corresponds to the nominal value multiplied by the market value as of the reporting date, plus the separated termination right. Accordingly, the fair value measurement is allocated to level 1 in the fair value hierarchy.

Liabilities to banks are subject to interest based on the interest rates observable on the market, such as EURIBOR or LIBOR, on the basis of which the fair value is calculated. Accordingly, these are allocated to level 2 of the fair value hierarchy.

The fair values of the separated derivatives are measured using the Black-Scholes/Hull-White valuation model, which considers both the observable yield curves and the fluctuation intensity (volatility) of the currencies concerned. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement is therefore allocated to level 2 in the fair value hierarchy.

The fair value of the interest rate cap is measured using the Black-Scholes/Hull-White valuation model, which considers both the observable yield curves and the fluctuation intensity (volatility) of the currencies concerned. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement is therefore allocated to level 2 in the fair value hierarchy.

The fair value of all other financial instruments is calculated using a discounted cash flow method as well as by taking into account measurement parameters that are observable for the assets and liabilities, either directly or indirectly, at the market. Accordingly, these financial instruments were allocated to level 2 in the fair value hierarchy.

For assets and liabilities that are recognized at fair value on a recurring basis, the CeramTec TopCo Group assesses whether a transfer between the levels of the fair value hierarchy took place as of the end of each reporting period (based on the lowest level that is significant to fair value measurement as a whole). There were no transfers between level 1 and 2 during the reporting period.

Net gains and losses as well as total interest income and expenses

The following table presents the net gains and losses from financial assets and liabilities in accordance with IFRS 9:

	December 31, 2019			
	Change in fair value	Currency translation	Impairment loss	Total
	kEUR	kEUR	kEUR	kEUR
Financial assets				
Trade receivables	0	(504)	(516)	(1,020)
Cash and cash equivalents	0	(163)	0	(163)
Separated termination rights—FVtPL	4,151	0	0	4,151
	4,151	(667)	(516)	2,967
Financial liabilities				
Interest rate floors—FVtPL	(5,425)	0	0	(5,425)
Financial liabilities at amortized cost	0	0	0	0
Financial liabilities to affiliates	0	0	0	0
	(5,425)	0	0	(5,425)
Total	**(1,274)**	**(667)**	**(516)**	**(2,458)**

	December 31, 2018			
	Change in fair value	Currency translation	Impairment loss	Total
	kEUR	kEUR	kEUR	kEUR
Financial assets				
Trade receivables	0	(344)	(61)	(405)
Cash and cash equivalents	0	281	0	281
Separated termination rights—FVtPL	(13,032)	0	0	(13,032)
	(13,032)	(63)	(61)	(13,156)
Financial liabilities				
Interest rate floors—FVtPL[1]	(8,996)	0	0	(8,996)
Financial liabilities at amortized cost	0	(6,689)	0	(6,689)
Financial liabilities to affiliates	0	(2,018)	0	(2,018)
	(8,996)	(8,707)	0	(17,703)
Total	**(22,028)**	**(8,770)**	**(61)**	**(30,859)**

1 Amount was adjusted according to the presentation in the current year

Net gains from the changes in the fair value of embedded derivatives are primarily due to changes in market interest rates.

The following table shows the total interest income and expenses from financial assets and liabilities that are measured at amortized cost using the effective interest method.

	2019	2018
Total interest expense	96,277	90,209
Total interest income	1,582	1,626

No finance fees, which are not part of the effective interest method, were recognized in profit or loss during the reporting period (prior year: EUR 1,938k).

Derivative financial instruments

The following table shows the fair value and nominal value of derivative financial instruments as of December 31, 2019:

	December 31, 2019	
	Nominal value	Fair value
	kEUR	kEUR
Derivatives with a positive fair value		
Separated termination rights	406,000	25,139
Forward exchange transactions	20,075	717
Derivatives with a negative fair value		
Separated interest rate floors	894,000	(15,272)
Interest rate cap	1,013,763	(5,650)
Total	**2,333,838**	**4,934**

	December 31, 2018	
	Nominal value	Fair value
	kEUR	kEUR
Derivatives with a positive fair value		
Separated termination rights	401,000	20,988
Derivatives with a negative fair value		
Separated interest rate floors	938,000	(12,205)
Interest rate cap	1,010,507	(5,530)
Total	**2,349,507**	**3,253**

Embedded derivatives

As described in note 4.12, the CeramTec TopCo Group took out a syndicated loan with one EUR and two USD tranches with a syndicate of banks in March 2018. These loans include embedded interest rate floors, which oblige the CeramTec TopCo Group to pay a minimum interest rate that exceeds the variable interest rate. Furthermore, the bond issued in December 2017 contains various agreements that entitle the CeramTec TopCo Group to prematurely repay the bond. Both the interest rate floors and termination rights were separated from the host contract in accordance with the provisions of IFRS 9 and subsequently recognized as stand-alone derivatives at fair value through profit or loss.

5 Notes to the Consolidated Statement of Cash Flows

In the consolidated statement of cash flows, cash flow from operating activities is determined using the indirect method, while cash flow from investing and financing activities is determined using the direct method. The cash and cash equivalents presented in the statement of cash flows correspond to the item of the statement of financial position and comprise cash in hand, bank balances and cash investments with an original term of up to three months. The bank balances are not subject to drawing restrictions.

On May 31, 2019 and August 29, 2019, voluntary repayments were made in relation to the syndicated loan of EUR 44,000k (prior year: EUR 32,000k) to the EUR tranche and EUR 9,872k (prior year: EUR 13,253k) to two USD tranches.

In the prior year, the cash flow from investing activities included the purchase price payment (excluding cash) of EUR 2,478,949k for the acquisition of the shares in the former parent company of the Group, CeramTec Holding, effective as of March 8, 2018. Cash of EUR 11,881k was taken over.

Other non-cash income and expenses primarily contain changes in the fair value of financial instruments and accrued interest.

During the financial year, the Group made cash payments for investments in property, plant and equipment in the amount of EUR 4,523k which have already been added to property, plant and equipment in the previous period. At the same time, additions to property, plant and equipment in the financial year amounted to EUR 6,712k that will affect cash only during the following accounting period.

In the financial year, liabilities arising from financing activities developed as follows:

	Liabilities to banks	Liabilities from the bond	Liabilities from shareholder loan	Derivative financial instruments	Lease liabilities	Total
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Balance as of December 31, 2018	1,048,961	419,884	552,688	17,760	1,256	2,040,550
Change in cash flow from financing activities						
Cash receipts	0	5,163	0	0	0	5,163
Cash payments	(53,872)	0	0	0	(2,676)	(56,548)
Interest payments	(30,833)	(21,315)	0	(2,417)	0	(54,565)
	(84,705)	**(16,152)**	**0**	**(2,417)**	**(2,676)**	**(105,950)**
Interest expenses	36,592	19,682	38,769	0	243	95,285
Currency translation effect	1,158	0	0	(76)	(10)	1,072
Fair value changes	0	0	0	5,680	1,765	7,445
Additions from first-time IFRS 16 accounting	0	0	0	0	4,848	4,848
Conversion into equity	0	0	(279,954)	0	0	(279,954)
Other changes	0	319	0	(25)	0	294
	37,750	**20,001**	**(241,185)**	**5,579**	**6,846**	**(171,009)**
Balance as of December 31, 2019	**1,002,006**	**423,733**	**311,503**	**20,922**	**5,426**	**1,763,590**

In the prior year, liabilities arising from financing activities developed as follows:

	Liabilities to banks	Liabilities from the bond	Liabilities from shareholder loan	Derivative financial instruments	Liabilities from finance leases	Total
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Balance as of January 1, 2018	0	420,811	0	0	0	420,811
Change in cash flow from financing activities						
Cash receipts	1,039,480	392,430	523,798	0	0	1,955,708
Cash payments	0	(4,814)	0	0	0	(4,814)
Interest payments	(30,321)	(14,269)	(3,080)	0	0	(47,670)
	1,009,159	**373,347**	**520,718**	**0**	**0**	**1,903,224**
Interest expenses	39,961	20,259	31,970	199	76	92,466
Currency translation effect	1,334	0	0	0	(12)	1,322
Fair value changes	0	0	0	18,571	0	18,571
Addition due to business acquisition	0	0	0	0	1,299	1,299
Derecognition Other current financial assets	0	(406,000)	0	0	0	(406,000)
Other changes	(1,493)	11,468	0	(1,010)	(107)	8,859
	39,802	**(374,273)**	**31,970**	**17,760**	**1,256**	**(283,485)**
Balance as of December 31, 2018	**1,048,960**	**419,885**	**552,689**	**17,760**	**1,256**	**2,040,550**

Interest expenses relating to liabilities from the bond include income of EUR 1,380k associated with discounting of financial liabilities that arose because the effective interest method was applied.

6 Other Notes

6.1 Management of financial risks

The CeramTec TopCo Group is exposed to credit risks and various market risks. Credit risks are mainly due to receivables from customers. Market risks are primarily attributable to the risk of changes in variable interest rates and exchange rate risks. Furthermore, the CeramTec TopCo Group is exposed to liquidity risks, which mainly result from the EUR and USD loans taken out in EUR as well as the bond also issued in EUR.

The CeramTec TopCo Group operates on the basis of an appropriate framework to manage financial risks, which is an integral part of ongoing business operations and ongoing financing activities. Taking these risk management objectives into consideration, risks are identified, assessed and managed on an ongoing basis. In some cases, the CeramTec TopCo Group enters into derivative financial instruments to hedge certain financial risks. By contrast, it is not permitted to enter into derivative financial instruments for speculative purposes.

Market risks

Market risk is the risk that the fair value of future cash flows from financial instruments will fluctuate as a result of changes in market prices. Market risk particularly comprises risks arising from exchange rate and interest rate fluctuations and other price risks, such as share price risks and commodity price risks.

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. In connection with the loans in USD, the CeramTec TopCo Group is exposed in particular to foreign currency risks arising from changes in the USD/EUR exchange rate.

The following sensitivity analysis in terms of the foreign currency risk was prepared based on the assumption that the portion of financial instruments in foreign currency will remain constant. The table shows the effects on net profit/loss for the period and group equity taking into account a hypothetical change of +/- 10% to the closing rate and forward rate as of the reporting date for the CeramTec TopCo group companies' main foreign currency items.

		December 31, 2019					
	Change in the spot rate %	**USD**	**GBP**	**CZK**	**PLN**	**CNY**	**Total**
Effect on net profit/loss before tax in kEUR	+10%	9,878	(54)	59	(96)	(677)	**9,110**
	(10)%	(12,073)	66	(72)	117	828	**(11,134)**

Forward exchange transactions have been concluded for a period until 2020 to cover the monthly demand of local national currencies of two subsidiaries:

	December 31, 2019	
	Total	**Remaining term of up to 1 year**
	kEUR	**kEUR**
Nominal value	20,075	20,075
Fair value	717	717
Average exchange rate		
GBP / EUR	0,8583	
USD / GBP	1,3185	
CZK / EUR	25,7398	

Interest rate risk

Interest rate risk is the risk that the fair value of fixed-interest rate financial instruments or the future cash flows of variable-interest rate financial instruments will fluctuate because of changes in market interest rates.

The variable-interest rate loans in USD and EUR expose the CeramTec TopCo Group in particular to a cash flow risk arising from the change in the EURIBOR and LIBOR interest rates. By comparison, changes in variable interest rates relating to the fixed-interest rate bond may lead to a change in fair value. However, this risk does not impact the net profit/loss for the period or group equity, as the bond is carried at amortized cost and changes in fair value are not recognized.

CeramTec TopCo group companies entered into agreements governing interest rate caps in the amount of EUR 873,000k linked to 3-month EURIBOR respectively USD 120,000k linked to 3-month LIBOR. Effective as of May 31, 2019, the USD cap was reduced to USD 120,000k, analogous to the loan repayments made, to avoid potential over-collateralization. The interest rate caps limit the maximum variable interest rates to 0.75% respectively 2.75%.

The following table shows the effects on the financial result assuming a hypothetical change of+/- 100 basis points to the variable USD and EUR interest rates.

	December 31, 2019			
	Increase/ decrease in basis points	Effect on loan interest rates	Effect on derivatives	Total effect on interest expense
		kEUR	kEUR	kEUR
EURO	+100	9,039	(20,390)	(11,351)
	(100)	(9,039)	44,635	35,595
US Dollar	+100	1,346	(616)	730
	(100)	(1,346)	40	(1,307)

If the interest rate increases, the increase in the loan interest rate will be overcompensated mainly due to lower valuation of the negative derivative from the interest rate floor.

Collateral

CeramTec AcquiCo, CeramTec BidCo LLC (in the following "US BidCo") and CeramTec GmbH are borrowers of the syndicated loan. In connection with the syndicated loan, certain assets of CeramTec BondCo, CeramTec AcquiCo, CeramTec Holding, CeramTec Group, CeramTec GmbH, US BidCo, CeramTec Acquisition LLC and CeramTec North America LLC (in the following "CeramTec NA") were provided as collateral. In the USA, (i) the shares in US BidCo, CeramTec Acqusition LLC and in CeramTec NA, (ii) all additional assets of US BidCo, CeramTec Acquisition LLC and CeramTec NA (including receivables, intellectual property and bank accounts) and (iii) CeramTec GmbH's intellectual property registered in the USA, were provided as collateral. In Germany, (i) the shares in CeramTec AcquiCo, CeramTec Holding, CeramTec Group and CeramTec GmbH, (ii) receivables of CeramTec BondCo (intercompany receivables only), CeramTec AcquiCo (intercompany receivables and receivables relating to acquisition agreements only), CeramTec Holding (insurance, intercompany and hedging receivables), CeramTec Group (insurance, intercompany and hedging receivables) and CeramTec GmbH (insurance, intercompany, hedging and trade receivables), (iii) bank accounts of CeramTec BondCo, CeramTec AcquiCo, CeramTec Holding, CeramTec Group and CeramTec GmbH and (iv) the intellectual property of CeramTec GmbH, were provided as collateral for the syndicated loan, or encumbered.

Financial assets covered by this collateral in accordance with IFRS 9 (see note 4.15) are stated on the balance sheet as of December 31, 2019 at an amount of EUR 93,627k (December 31, 2018: EUR 52,715k).

Risk from compliance with financial covenants

Compliance with financial covenants was agreed to in connection with obtaining the syndicated loan. Accordingly, the CeramTec TopCo Group must comply with a covenant provided that the revolving credit line of EUR 75,000k is utilized to an extent as specified in the loan agreement. As the amount drawn down in the financial year remained below the threshold specified, the Company was not required to review compliance with this financial covenant. In addition, an analysis must be undertaken by the end of the financial year to determine whether the volume of the collateral used to secure the syndicated loan does not fall below a certain threshold. If so, additional collateral would have to be provided. At the end of the current financial year, the collateral value did not fall below the threshold. The management expects that the Company will continue to comply with the financial covenants in the following financial year.

Liquidity risk

Liquidity risk is the risk that the CeramTec TopCo group companies will not be able to fulfill their financial obligations when they fall due. The objective of the management of the CeramTec TopCo Group is to minimize the liquidity risk as far as possible by ensuring sufficient financing and credit lines from banks. In light of this, the CeramTec TopCo group companies had an undrawn and confirmed credit line of EUR 75,000k as of the reporting date. Furthermore, the CeramTec group companies had cash and cash equivalents of EUR 64,380k.

The table below shows the contractually agreed undiscounted cash flows for the financial liabilities and derivative financial instruments existing as of the reporting date. The following cash flows were taken into account:

- Undiscounted, contractually agreed interest and principal payments from the loans in USD and EUR, including payments that are attributable to the separated interest rate floor. Cash flows in USD were translated into EUR based on the USD/EUR forward rate applicable as of the reporting date. Premature, voluntary special payments or repayments have not been taken into account.

- Undiscounted, contractually agreed interest and principal payments for the bond. Premature, voluntary special payments or repayments have not been taken into account.

- Undiscounted, contractually agreed payments for the interest rate cap.

	December 31, 2019						
	Carrying amount	2020	2021	2022	2023	2024	>2024
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Trade payables	30,277	30,277	0	0	0	0	0
Liabilities to banks	1,002,007	29,073	28,423	28,406	28,329	28,352	1,034,760
Bond liabilities	423,734	21,315	21,315	21,315	21,315	21,315	434,420
Liabilities to affiliates	311,503	56,799	0	0	0	0	484,989
Lease liabilities	5,425	1,883	1,197	648	516	397	1,301
Other financial liabilities	6,644	6,644	0	0	0	0	0
Derivatives with a negative fair value							
Interest rate cap	5,650	2,460	2,460	1,230	0	0	0

	December 31, 2018						
	Carrying amount	2019	2020	2021	2022	2023	>2023
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Trade payables	34,907	34,907	0	0	0	0	0
Liabilities to banks	1,048,961	37,361	33,810	33,553	33,370	33,633	1,101,905
Bond liabilities	419,885	21,315	21,315	21,315	21,315	21,315	458,499
Liabilities to affiliates	552,688	0	0	0	0	0	1,125,273
Finance lease liabilities	1,256	61	57	61	65	70	946
Other financial liabilities	6,209	6,209	0	0	0	0	0
Derivatives with a negative fair value							
Interest rate cap	5,556	1,587	1,587	1,587	795	0	0

Default risk

Credit risk is the risk that a counterparty will not meet its obligations under financial instruments, leading to a financial loss on the part of the creditor. At the CeramTec TopCo Group, the credit risk is primarily associated with trade receivables, cash and cash equivalents and other receivables.

Trade receivables exist in respect of numerous customers in various sectors and regions. Default risks related to customer receivables are locally monitored, assessed and limited by using credit insurance. After taking credit insurance into account, the maximum default risk on trade receivables amounts to 48% of the carrying amount.

Cash and cash equivalents mainly comprise bank balances and cash in hand. In connection with the investment of cash and cash equivalents, the CeramTec TopCo group companies are exposed to losses from credit risks if counterparties do not meet their obligations. The resulting risk position is managed by diversifying the counterparties. For example, cash is only invested at banks with excellent credit ratings. There is no cash past due or impaired as of the reporting date. The maximum default risk for cash and cash equivalents corresponds to the carrying amount.

The CeramTec TopCo Group considers this default risk to be immaterial as of the reporting date.

The termination option separated from the bond and recognized as other financial asset is not exposed to any credit risk as of the reporting date, because the positive market value is based solely on a potential premature repayment of the bond and an associated more favorable opportunity to refinance for the CeramTec TopCo Group, without giving rise to any actual cash receivable from the banks.

Trade receivables

A loss allowance of EUR 760k was recognized for lifetime expected credit losses on trade receivables (in accordance with the simplified approach set out in IFRS 9). The net receivables portfolio amounts to EUR 52,740k after deducting this loss allowance from the gross receivables portfolio of EUR 53,500k. The gross receivables portfolio of receivables that are more than 30 days past due amounts to EUR 2,250k. The net receivables portfolio amounts to EUR 1,490k (level 3) after deducting the loss allowance of EUR 760k.

The loss allowance the Group is required to recognize is not determined based on external credit ratings. The expected credit losses are estimated by reference to factors that are specific to a debtor and information about the debtor's financial position. In addition, past default experience of the debtor is also taken into account in the assessment. It is allocated to level 3 of IFRS 9.

Non-payment risks are not expected to be associated with all other financial assets, including separated termination rights or the amount retained by a factor as a security for any bad debts that may arise.

Capital management

The objective of capital management in the consolidated group is securing liquidity to make investments that increase the value of the organization. Therefore, the focus is on optimizing cash flows from operating activities as well as repaying liabilities on schedule. Equity recognized on the balance sheet amounts to EUR 338,468k (December 31, 2018: EUR 405,613k). Liabilities of EUR 2,256,793k (December 31, 2018: EUR 2,542,969k) were recognized as of the reporting date. The equity ratio stands at 13.0% (prior year: 13.8%).

6.2 Contingent liabilities

The entities within the consolidated group are involved as parties in a number of lawsuits. These proceedings are linked to ordinary business activities and mainly relate to commercial, product liability and environmental processes. The group companies form provisions for such obligations if a liability is probable to arise and the amount of the potential claim can be sufficiently estimated. Where the possibility of an outflow in settlement is not unlikely, such obligations are disclosed in the notes to the financial statements.

6.3 Related party disclosures

Key management personnel

Key management personnel are those persons having direct or indirect authority and responsibility for the planning, management and monitoring of the activities of the CeramTec TopCo Group. In the financial year, the key management personnel of CeramTec TopCo Group consisted of the following persons:

Dr. Hadi Saleh
Chief Executive Officer

Richard Boulter
President Industrial

Eric Oellerer
Chief Financial Officer

Dr. Hadi Saleh is the sole general manager of CeramTec TopCo GmbH.

The members of management received total remuneration (fixed and variable amounts) in the form of short-term employee benefits amounting to EUR 2,409k in the financial year (prior year: EUR 6,303k). The payments for post-employment benefits amount to EUR 373k (prior year: EUR 146k). This amount comprises the service cost for pension obligations and contributions to defined contribution plans. In the financial year, there were no benefits granted to former general managers in the event of premature termination of management activities (prior year: EUR 180k). Additionally, as of December 31, 2019, there are pension obligations to general managers in the amount of EUR 1,405k (prior year: EUR 584k) as well as EUR 4,076k (prior year: EUR 3,533k) to former managers.

As part of a participation program, selected employees of the CeramTec TopCo Group were offered the option to directly acquire shares in CeramTec Management Beteiligungs GmbH & Co. KG and CeramTec Co-Investment GmbH & Co. KG. On the balance sheet date, selected employees continue to hold a total of less than 10% of the shares in CeramTec TopCo GmbH indirectly. These shares were acquired at the shares' fair value at the grant date. The management participation program aims at serving as an incentive instrument, motivating the management in view of growth and long-term business success of the CeramTec Group. For this purpose, the agreements define exit events (disposal, stock market flotation), on occurrence of which the entitled management will participate in any growth in value of the CeramTec Group in the same relation as the investors. In this case, depending on the respective exit event, the management has the right or the duty to sell their own shares. In the case that the employment contract of an employee who holds shares in the Company is terminated prior to the occurrence of an exit event, this employee is obliged to offer his shares in CeramTec Management Beteiligungs GmbH & Co. KG for purchase to the Lead B.C. Investor or to a third party determined by the Lead B.C. Investor. The amount of the purchase price for the management's interest varies between the fair market value of the shares and the contribution made, depending on reason and time of withdrawal. In accordance with IFRS 2, the granting of shares from the Participation and Shareholders' Agreements is treated as settled by equity instruments. As, under the purchase, the managers pay the fair value of the shares, the fair value of the allocated shares, when compensated by equity instruments, is zero. For this reason – provided that the assessment in respect of the occurrence of a payment obligation does not change – an expense does not need to be disclosed at any time (neither in the case of an exit nor upon withdrawal of a manager).

Information about the remuneration of the management of CT TopCo according to Section 314 (1) No. 6 HGB is not provided.

CeramTec GmbH has a supervisory board in accordance with the articles of incorporation.

The total remuneration of the supervisory board in the financial year 2019 amounted to EUR 162k (prior year: EUR 139k).

Transactions with related parties

Entities and natural persons are deemed to be related parties when they exercise control over the reporting company or over its subsidiaries or when they have a significant influence on the reporting company's financial and business policy. A loan of EUR 311,503k (December 31, 2018: EUR 552,688k), including interest, with a fixed interest rate of 7.3% p.a. has been obtained from CeramTec TopCo's controlling shareholder, CTEC Acquisition S.à.r.l., Luxembourg. Interest expenses of EUR 38,768k were incurred in the financial year 2019. Unpaid interest is generally added annually to the Company's loan balance on December 31, for the first time probably on December 31, 2020.

In the financial year, costs were incurred for CTEC Invest S.à r.l., Luxembourg, the parent company of the shareholder, CTEC Acquisition S.à.r.l., Luxembourg. This gave rise to an account receivable from affiliates of EUR 20k as of December 31, 2019.

6.4 Auditor's fees

The total auditor's fees for the CeramTec TopCo Group, recognized in profit or loss in the consolidated statement of comprehensive income, break down as follows:

	December 31, 2019	December 31, 2018
	kEUR	kEUR
Auditing services	425	626
Other affirmation services	0	54
Other services	12	50
	437	**730**

6.5 Events after the reporting period

In January 2020, an amount of EUR 56,799k of the shareholder loan was paid to the shareholder, CTEC Acquisition S.à.r.l., Luxembourg, consisting of a nominal amount of EUR 19,599k and interest payable which has been accrued until the date of payment of EUR 37,200k.

The economic impact of coronavirus is currently difficult to assess. We currently assume that the earnings situation (EBITDA) in 2020 will be significantly negatively affected. Based on the measures introduced for operational and strategic realignment, we do not expect any need for write-downs in 2020 based on current information. With regard to the financial position in 2020, cash flow from operating activities is likely to be significantly below the previous year's level, but should remain clearly positive.

At the end of March 2020, the existing revolving credit line with an amount of EUR 67,000k was drawn down for an initial period of 6 months to secure liquidity, which is currently still largely available for future payments. Furthermore, an additional credit line of EUR 8,000k is available, which can be drawn on daily if required.

7 Reconciliation to CeramTec BondCo GmbH

If the consolidated statement of comprehensive income of CeramTec BondCo had been prepared instead of the consolidated statement of comprehensive income of CeramTec TopCo, which is presented in these financial statements, this would have resulted in the following adjustments for the financial year:

- Lower general administrative expenses of EUR 16k (prior year: EUR 362k)
- Lower sundry other expenses of EUR 7k (prior year: EUR 2k)

The total comprehensive income of CeramTec BondCo would therefore have been EUR 23k higher compared to the total comprehensive income recognized in these financial statements (prior year: EUR 364k).

If the consolidated statement of financial position of CeramTec BondCo had been prepared instead of the consolidated statement of financial position of CeramTec TopCo, which is presented in these financial statements, this would have resulted in the following adjustments as of December 31, 2019:

- Higher receivables from affiliates of EUR 261k (December 31, 2018: EUR 187k)
- Lower liquid funds of EUR 10k (December 31, 2018: EUR 9k)
- Lower capital reserve of EUR 25k (December 31, 2018: EUR 25k)
- Lower financial liabilities to third parties of EUR 114k (December 31, 2018: EUR 164k).
- This would have resulted in a EUR 365k higher level of group equity for CeramTec BondCo compared to the group equity recognized in these financial statements (December 31, 2018: EUR 342k).

There would have been no impact on the consolidated statement of cash flows if the consolidated statement of cash flows of CeramTec BondCo had been prepared instead of the consolidated statement of cash flows presented in these financial statements.

Plochingen, April 9, 2020

CeramTec TopCo GmbH

The Management

Dr. Hadi Saleh

The following independent auditor's report (Bestätigungsvermerk des unabhängigen Abschlussprüfers) has been issued in accordance with Section 322 of the German Commercial Code (Handelsgesetzbuch) on the consolidated financial statements and the group management report (Konzernlagebericht) of CeramTec TopCo GmbH, Plochingen, as of and for the financial year ended December 31, 2019. The group management report is neither included nor incorporated by reference in this Offering Memorandum. The above-mentioned independent auditor's report and the consolidated financial statements are both translations of respective German-language documents. In the event of discrepancies between the English language version and the German language original, the German language original will prevail.

INDEPENDENT AUDITOR'S REPORT

To CeramTec TopCo GmbH, Plochingen

Audit Opinions

We have audited the consolidated financial statements of CeramTec TopCo GmbH, Plochingen, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2019, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of CeramTec TopCo GmbH for the financial year from January 1 to December 31, 2019.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at December 31, 2019, and of its financial performance for the financial year from January 1 to December 31, 2019, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Responsibilities of the Executive Directors for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

Auditor's Responsibility for the Audit of the Consolidated Financial Statements and the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Stuttgart, April 14, 2020

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

(sgd. Marcus Nickel)	(sgd. ppa. Jürgen Steidel)
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

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Offering Memorandum

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