IMPORTANT NOTICE

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

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 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 U.S. 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 OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S), EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE U.S. SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS.

THE FOLLOWING 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 U.S. SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS. IF YOU HAVE GAINED ACCESS TO THIS OFFERING MEMORANDUM CONTRARY TO ANY OF THE FORGOING RESTRICTIONS, YOU ARE NOT AUTHORIZED TO, AND WILL NOT BE ABLE TO, PURCHASE ANY OF THE NOTES.

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 not U.S. persons (as defined in Regulation S) and 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 European Economic Area are qualified investors (within the meaning of Article 2(1)(e) of Directive 2003/71/EC, as amended, and any relevant implementing measure in each member state of the European Economic Area). 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 attached offering memorandum), being the senders of the offering memorandum, that:

(1) you consent to delivery of such offering memorandum by electronic transmission; and

(2) either:

  (a) you and any customers you represent are QIBs; or

  (b) (i) you and any customers you represent are not U.S. persons and (ii) 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 European Economic Area, you are a qualified investor.

Prospective purchasers that are QIBs are hereby notified that the seller of the securities will be relying on the exemption from the provisions of Section 5 of the U.S. 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 the Initial Purchasers or any affiliate of the Initial Purchasers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by the Initial Purchasers or such affiliate on behalf of the respective 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 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) 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 Financial Services and Markets Act 2000) received by it in connection with the issue or sale of the securities other than in circumstances in which Section 21(1) of the Financial Services and Markets Act 2000 does not apply to us.

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, the Guarantors (each term, as defined in the attached offering memorandum), any of their respective directors, officers, employees or 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.

SUBJECT TO COMPLETION, DATED NOVEMBER 24, 2017

PRELIMINARY OFFERING MEMORANDUM
STRICTLY CONFIDENTIAL

NOT FOR GENERAL DISTRIBUTION
IN THE UNITED STATES

The information in this preliminary offering memorandum is not complete and may be changed. The Issuer may not sell the securities until the offering memorandum is delivered in final form. This preliminary offering memorandum is not an offer to sell these securities and the Issuer is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

CeramTec
THE CERAMIC EXPERTS

CTC BondCo GmbH

€406,000,000 % Senior Notes due 2025

CTC BondCo GmbH, a *Gesellschaft mit beschränkter Haftung* organized under the laws of Germany (the "Issuer"), is offering €406,000,000 aggregate principal amount of its % Senior Notes due 2025 (the "Notes") as part of the financing for the proposed acquisition (the "Acquisition") by CTC AcquiCo GmbH, a *Gesellschaft mit beschränkter Haftung* organized under the laws of Germany ("Bidco"), of 100% of the issued and outstanding shares in CeramTec Holding GmbH, a *Gesellschaft mit beschränkter Haftung* organized under the laws of Germany (the "Target").

The Notes will bear interest at a rate of % per annum and will mature on , 2025. The Issuer will pay interest on the Notes semi-annually in arrears on each of and , commencing on , 2018.

All or a portion of the Notes may be redeemed at any time prior to , 2020, in each case, 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 and the applicable "make-whole" premium, as described in this offering memorandum. The Notes may be redeemed at any time on or after , 2020, in each case, at the redemption prices set forth in this offering memorandum. At any time prior to , 2020, up to 40% of the aggregate principal amount of the Notes may be redeemed at a redemption price equal to % plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the redemption date, provided that at least 60% of the original aggregate principal amount of the Notes remains outstanding after the redemption, with the net proceeds of one or more specified equity offerings.

All of the Notes may also be redeemed upon the occurrence of certain changes in applicable tax law. In addition, in connection with certain tender offers for the Notes, if holders of not less than 90% in aggregate principal amount of the 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 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 highest price offered to each other holder of such Notes. Upon the occurrence of certain defined events constituting a change of control, 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.

Pending the consummation of the Acquisition, the gross proceeds from the offering of the Notes will be deposited into a separate escrow account for the benefit of the holders of the Notes. The release of escrow proceeds will be subject to the satisfaction of certain conditions, including the Acquisition being completed promptly following the escrow release pursuant to the terms of the Acquisition Agreement (as defined herein). The consummation of the Acquisition is subject to certain conditions, including regulatory approval. If the Acquisition is not consummated on or prior to August 10, 2018, the Notes will be subject to a special mandatory redemption. The special mandatory redemption price will be a price equal to 100% of the aggregate issue price of the Notes plus accrued and unpaid interest from the issue date of the Notes to the date of special mandatory redemption. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*."

On the Issue Date, the Notes will be guaranteed by Bidco on a senior subordinated basis. Subject to the Agreed Security Principles, on the earlier of (a) the date on which a Post-Completion Date Guarantor (as defined herein) provides a guarantee of the Senior Facilities (as defined herein) and (b) on or prior to a date falling 120 days after the Completion Date, the Notes will additionally be guaranteed on a senior subordinated basis by each Post-Completion Date Guarantor (as defined herein).

The Notes will be secured as of the Issue Date by (i) first-ranking pledge over all shares in the Issuer, an assignment of the Shareholder Loan (as defined herein) and a pledge over the escrow account to which the gross proceeds of the offering of the Notes will be deposited on the Issue Date and (ii) second-ranking pledges over the material bank accounts of the Issuer and the blocked account in respect of the profit and loss transfer agreement and all shares in Bidco as well as an assignment of certain future intercompany receivables owed to the Issuer. See "*Summary—The Offering—Collateral*." The validity and enforceability of the Guarantees and the security and the liability of each Guarantor and security provider will be subject to the limitations described in "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Guarantees and Security Interests*." The security interests in favor of the Notes and the 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 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.

Investing in the Notes involves a high degree of risk. See "*Risk Factors*" beginning on page 27.

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

The Notes and the Guarantees (as defined herein) have not been, and will not 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 to non-U.S. persons in offshore transactions in reliance on Regulation S under the Securities Act. 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 Investors*" for additional information about eligible offerees and transfer restrictions.

Delivery of the Notes will be made in book entry form through a common depositary of Euroclear Bank SA/NV ("Euroclear") and Clearstream Banking, *société anonyme* ("Clearstream") on or about December , 2017 (the "Issue Date").

The Notes will be in registered form in minimum denominations of €100,000 and integral multiples of €1,000 above €100,000.

Joint Global Coordinators

BofA Merrill Lynch **Morgan Stanley**

Joint Bookrunners

Deutsche Bank **Nomura** **UBS Investment Bank**

The date of this offering memorandum is November , 2017

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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 (as defined below) or any of the Initial Purchasers has authorized anyone to provide you with information that is different from the information contained herein. If given, 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.

IMPORTANT INFORMATION ABOUT THIS OFFERING MEMORANDUM

THE NOTES HAVE NOT BEEN REGISTERED UNDER THE U.S. 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 U.S. SECURITIES ACT, OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE U.S. SECURITIES ACT IS AVAILABLE. SEE "*PLAN OF DISTRIBUTION*" AND "*NOTICE TO INVESTORS*." 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 U.S. SECURITIES ACT PROVIDED BY RULE 144A UNDER THE U.S. SECURITIES ACT.

This offering memorandum has been prepared by the Issuer and the Guarantors solely for use in connection with the proposed offering of the Notes. This offering memorandum is personal to each offeree and does not constitute an offer to any other person or to the public generally to subscribe for or otherwise acquire the Notes. This offering memorandum may not be distributed to any person other than prospective investors and any person retained to advise such prospective investors with respect to the purchase of the Notes, and any disclosure of the contents of this offering memorandum without our prior written consent is prohibited. By accepting delivery of this offering memorandum, you agree to the foregoing and you agree to not make copies of this offering memorandum or any documents referred to in this offering memorandum.

The Issuer and the Guarantors, having made all reasonable enquiries, confirm that, to the best of their knowledge, information and belief (having taken all reasonable care to ensure that such is the case), this offering memorandum contains all information that is material in the context of the issuance and offering of the Notes and the Guarantees, that the information contained in this offering memorandum is true and accurate in all material respects and is not misleading in any material respect and that there are no other facts the omission of which would make this offering memorandum or any such information misleading in any material respect. The information contained in this offering memorandum is correct as of the date hereof. Neither the delivery of this offering memorandum nor any sale made under it shall, under any circumstances, create any implication that there has been no change in the affairs of the Issuer or the Guarantors since the date of this offering memorandum or that the information contained in this offering memorandum is correct as of any time subsequent to that date. The Issuer accordingly accepts responsibility for the information contained in this offering memorandum.

None of Merrill Lynch International, Deutsche Bank AG, London Branch, Morgan Stanley & Co. International plc, Nomura International plc and UBS Limited (each an "Initial Purchaser" and together, the "Initial Purchasers") nor any employee of the Initial Purchasers has authorized the contents or circulation of this offering memorandum and does not assume any responsibility for, and will not accept any liability for, any loss suffered as a result of, arising out of, or in connection with this document or any of the information or opinions contained in it.

In accordance with normal and accepted market practice, neither the Trustee (as defined below), the Security Agent (as defined below), the Paying Agent (as defined below), the Registrar (as defined below), nor the Transfer Agent (as defined below) is responsible for the contents of this offering memorandum or expresses any opinion as to the merits of the Notes under this offering memorandum.

No dealer, salesperson or other person has been authorized to give any information or to make any representation not contained in this offering memorandum and, if given or made, any such information or representation must not be relied upon as having been authorized by the Issuer, the Target, the Guarantors, any of their respective affiliates, or the Initial Purchasers. This offering memorandum does not constitute an offer of any securities other than those to which it relates or an offer to sell, or a solicitation of an offer to buy, to any person in any jurisdiction where such an offer or solicitation would be unlawful.

By receiving this offering memorandum, investors acknowledge that they have had an opportunity to request for review, and have received, all additional information they deem necessary to verify the accuracy and completeness of the information contained in this offering memorandum. Investors also acknowledge that they have not relied on the Initial Purchasers in connection with their investigation of the accuracy of this information or their decision whether to invest in the Notes. The contents of this offering memorandum are not to be considered legal, business, financial, investment, tax or other advice. Prospective investors should consult their own counsel, accountants and other advisors as to legal, business, financial, investment, tax and other aspects of a purchase of the Notes. In making an investment decision, investors must rely on their own examination of the Issuer and the Target Group, the terms of the Offering and the merits and risks involved.

The information set forth in those sections of this offering memorandum describing clearing and settlement is subject to any change or reinterpretation of the rules, regulations and procedures of Euroclear and Clearstream currently in effect. Investors wishing to use these clearing systems are advised to confirm the continued applicability of their rules, regulations and procedures. Each of the Issuer, the Guarantors, the Trustee, the Paying Agent, the Transfer Agent and the Registrar will not 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 such book-entry interests.

This Offering is being made in reliance upon exemptions from registration under the U.S. Securities Act for an offer and sale of securities that does not involve a public offering. The Notes have not been registered with, recommended by or approved by the U.S. Securities and Exchange Commission or any other U.S. federal, state or foreign securities commission or regulatory authority, nor has any such commission or regulatory authority reviewed or passed upon the accuracy or adequacy of this offering memorandum. Any representation to the contrary is a criminal offense.

The Initial Purchasers reserve the right to withdraw this Offering at any time and to reject any commitment to subscribe for the Notes, in whole or in part. The Initial Purchasers also reserve the right to allot less than the full amount of Notes sought by investors. The Initial Purchasers and certain related entities may acquire a portion of the Notes for their own account.

The laws of certain jurisdictions may restrict the distribution of this offering memorandum and the offer and sale of the Notes. Persons into whose possession this offering memorandum or any of the Notes come must inform themselves about, and observe any such restrictions. None of the Issuer, the Guarantors, the Initial Purchasers, the Trustee, the Paying Agent, the Security Agent or their respective representatives are making any representation to any offeree or any purchaser of the Notes regarding the legality of any investment in the Notes by such offeree or purchaser under applicable investment or similar laws or regulations. For a further description of certain restrictions on the Offering and sale of the Notes and the distribution of the offering memorandum, see "*Notice to Investors.*"

To purchase the Notes, investors must comply with all applicable laws and regulations in force in any jurisdiction in which investors purchase, offer or sell the Notes or possess or distribute this offering memorandum. Investors must also obtain any consent, approval or permission required by such jurisdiction for investors to purchase, offer or sell any of the Notes under the laws and regulations in force in any jurisdiction to which investors are subject. None of the Issuer, the Guarantors, the Initial Purchasers, the Trustee, the Paying Agent, the Security Agent or their respective affiliates will have any responsibility therefor.

No action has been taken by the Initial Purchasers, the Issuer, the Guarantors, or any other person that would permit an Offering or the circulation or distribution of this offering memorandum or any offering material in relation to the Issuer, the Guarantors, or the Notes in any country or jurisdiction where action for that purpose is required.

The Notes will only be issued in fully registered form and in denominations of €100,000 and integral multiples of €1,000 in excess thereof. Notes sold to qualified institutional buyers in reliance on Rule 144A under the U.S. Securities Act ("Rule 144A") will be represented by one or more global notes in registered form without interest coupons attached (the "144A Global Notes"). Notes sold to non-U.S. persons outside the United States in reliance on Regulation S under the U.S. Securities Act ("Regulation S") will be represented by one or more global notes in registered form without interest coupons attached (the "Regulation S Global Notes" and, together with the 144A Global Notes, the "Global Notes"). The Global Notes will be deposited with, or on behalf of, a common depositary for the accounts of the Euroclear System ("Euroclear") and Clearstream Banking société anonyme ("Clearstream") and registered in the name of the nominee of the common depositary. See "*Book-Entry, Delivery and Form.*"

Application will be made to The International Stock Exchange Authority Limited for the listing of and permission to deal in the Notes on the Official List of The International Stock Exchange (the "Exchange") and we intend to submit this offering memorandum to the competent authority in connection with the listing application. In the course of any review by the competent authority, we may be requested to make changes to the financial and other information included in this offering memorandum in producing listing particulars for such listing. Comments by the competent authority may require significant modification or reformulation of information contained in this offering memorandum or may require the inclusion of additional information. We may also be required to update the information in this offering memorandum to reflect changes in the business, financial position or results of operations and prospects of the Issuer, the Guarantors and their respective subsidiaries. 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 and settlement of the Notes is not conditioned on obtaining this listing. Any investor or potential investor in the European Economic Area (the "EEA") should not base any investment decision relating to the Notes on the information contained in this offering memorandum after publication of the listing particulars and should refer instead to those listing particulars.

STABILIZATION

IN CONNECTION WITH THIS ISSUE, MORGAN STANLEY & CO. INTERNATIONAL PLC (THE "STABILIZATION MANAGER") (OR PERSONS ACTING ON ITS BEHALF) MAY OVER-ALLOT OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL WHICH MIGHT NOT OTHERWISE PREVAIL. HOWEVER, THERE IS NO ASSURANCE THAT THE STABILIZATION MANAGER (OR PERSONS ACTING ON BEHALF OF THE STABILIZATION MANAGER) WILL UNDERTAKE STABILIZATION ACTION. ANY STABILIZATION ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE TERMS OF THE OFFER OF NOTES IS MADE AND, IF BEGUN, MAY BE ENDED AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES. ANY STABILIZATION ACTION

OR OVER-ALLOTMENT MUST BE CONDUCTED BY THE STABILIZATION MANAGER (OR PERSON(S) ACTING ON BEHALF OF THE STABILIZATION MANAGER) IN ACCORDANCE WITH ALL APPLICABLE LAWS AND RULES. FOR A DESCRIPTION OF THESE ACTIVITIES, SEE "*PLAN OF DISTRIBUTION*."

NOTICE TO U.S. INVESTORS

None of the U.S. Securities and Exchange Commission, any state securities commission or any other regulatory authority has approved or disapproved of the Notes or the 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 could be a criminal offence in certain 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 "*Notice to Investors*." The Notes have not been and will not be registered under the U.S. 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 U.S. Securities Act provided by Rule 144A. For a description of certain further restrictions on resale or transfer of the Notes, see "*Notice to Investors*."

NOTICE TO CANADIAN INVESTORS

The Notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

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.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the Initial Purchasers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

NOTICE TO CERTAIN EUROPEAN INVESTORS

European Economic Area

This offering memorandum has been prepared on the basis that all offers of the Notes will be made pursuant to an exemption under the Prospectus Directive (as defined below), from the requirement to produce a prospectus for offers of the Notes. In relation to each member state ("Member State") of the European Economic Area ("EEA") no offer of Notes to the public in that Member State may be made other than:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive); or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of Notes shall require us or any Initial Purchasers to publish a prospectus pursuant to Article 3 of the Prospectus Directive. Accordingly, any person making or intending to make any offer within the EEA of the Notes should only do so in circumstances in which no obligation arises for us or the Initial Purchasers to produce a prospectus for such offer. Neither we nor the Initial Purchasers have authorized, nor do authorize, the making of any offer of Notes through any financial intermediary, other than offers made by the Initial Purchasers, which constitute the final placement of the Notes contemplated in this offering memorandum.

For the purposes of this section, the expression an "offer of Notes to the public" in relation to any Notes in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe the Notes, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State. The expression "Prospectus Directive" means Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in the Member State.

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 Commission Regulation (EC) No. 809/2004 of April 29, 2014 as amended, 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, with which a securities prospectus may have been filed, pursuant to Section 17 Para. 3 of the German Securities Prospectus Act. 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. 6 of the German Securities Prospectus Act. Any resale of the Notes in Germany may only be made in accordance with the German Securities Prospectus Act and other applicable laws.

United Kingdom

This offering memorandum is for distribution only to 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) 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.

Netherlands

This offering memorandum is directed only at qualified investors (*gekwalificeerde beleggers*) as defined in the Prospectus Directive, as amended and as implemented in the Netherlands. The Notes have not, may not and will not be offered to the public in the Netherlands, other than exclusively to qualified investors (*gekwalificeerde beleggers*). For the purposes of this provision, the expression "offer of notes to the public" in relation to any Notes in the Netherlands means (i) to make a sufficiently specific offer addressed to more than one person as referred to in section 217(1) of Book 6 of the Dutch Civil Code to conclude a contract to purchase or otherwise acquire the Notes, or to issue an invitation to make an offer of the Notes, or (ii) the placement of the Notes through financial intermediaries as referred to in section 2(1)(d) of the Prospectus Directive.

FORWARD-LOOKING STATEMENTS

This offering memorandum contains forward-looking statements, including statements about market consolidation and our strategy, investment program, future operations, industry forecasts, expected acquisitions, transactions and investments (including the Acquisition and the Financing), and target levels of leverage and indebtedness. Forward-looking statements provide our current expectations, intentions or forecasts of future events. Forward-looking statements include statements about expectations, beliefs, plans, objectives, intentions, assumptions and other statements that are not statements of historical fact. Words or phrases such as "anticipate," "believe," "continue," "estimate," "expect," "intend," "may," "ongoing," "plan," "potential," "predict," "project," "seek," "target" 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 and uncertainties 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 projected future results include, but are not limited to:

- new entrants in the hip joint implant market;
- reliance on a number of large customers;
- the inability to retain existing customers or attract new ones;
- the requirements of the U.S. Food and Drug Administration ("FDA"), the European Medicines Agency or other foreign agencies;
- failure to obtain and maintain necessary governmental approvals;
- adverse medical events caused by our products;
- changes in health care reimbursement systems in the U.S. and elsewhere;
- product liability claims;
- global economic conditions, specifically in Europe and Germany, and the conditions in the end market we serve;
- failure to continue our technological innovation and failure to successfully introduce new products to the market;
- intense competitive pressures in several of our end markets;
- local business risk in different countries;
- price increases or interruptions in the supply of raw materials;
- fluctuations in energy costs;
- production curtailment or shutdowns from accidents, equipment malfunctions or other unexpected failures and from our complex manufacturing process;
- inadequate insurance that may not fully cover all potential exposures;
- maintaining operational efficiency and manufacturing quality;
- compliance with extensive environmental, health and safety laws;
- repayment of public subsidies;
- limited protection for our intellectual property and know-how;

- law suits alleging infringements of intellectual property rights of third parties;
- failure to renew agreements with material suppliers;
- losing key personnel or our inability to hire additional personnel;
- defects resulting from outsourcing processes;
- labor disputes;
- failure to comply with anti-corruption laws of the United States and of various international jurisdictions;
- compliance with anti-terrorism laws and regulations and applicable trade embargoes and export controls;
- the United Kingdom's withdrawal from the European Union;
- the break-up of the eurozone;
- security threats, security breaches and breakdowns in information technology systems;
- difficulties integrating acquired businesses with, or disposing of divested businesses from, our current operations;
- an economic downturn, a recession or market disruption in the capital and credit markets;
- unexpected payments to any pension plans;
- tax risks, including risks associated with transfer pricing;
- problems in suppliers' manufacturing processes;
- handling of personal data and patient health data;
- counterparty risks;
- exchange rate risks;
- various risks related to the completion of the Transactions, including the amount of the costs, fees, expenses and charges related to the Acquisition;
- risks relating to our substantial leverage and debt service obligations, the terms of our new Senior Facilities and our debt service obligations; and
- other factors discussed under "*Risk Factors*."

These risks and others described under "*Risk Factors*" are not exhaustive. Other sections of this offering memorandum describe additional factors that could adversely affect our financial position, results of operations and liquidity. 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.

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

Throughout this offering memorandum, we refer to our market position or market share in various markets or regions and the size and growth rates of various markets or regions. 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.

Certain market and industry data included in this offering memorandum, including the size of certain markets, are based on estimates of our management and commissioned reports. These estimates have been derived from our 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. 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 and uncertainties and are subject to change based on various factors, including those discussed under "*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 holder. The trademarks which the Target Group owns or has the right to use include, among others, BIOLOX®, PERLUCOR®, CeramCool®, SPK®, Ceramdisc®.

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

CERTAIN DEFINITIONS

"Acquisition"	means the acquisition of the Target by Bidco pursuant to the Acquisition Agreement;
"Acquisition Agreement"	means the sale, purchase and transfer agreement (including all exhibits and schedules thereto) relating to the sale and purchase of the Target by Bidco and made between Faenza Luxembourg S.à r.l., as seller, and Bidco, as purchaser;
"Agreed Security Principles"	has the meaning ascribed to it under "*Description of the Notes*";
"BC Partners"	means BC Partners LLP and its affiliates;
"CAGR"	means compound annual growth rate;
"Cash Conversion Rate"	means Management Adjusted EBITDA minus Capital Expenditures (net), divided by Management Adjusted EBITDA;
"ceramic-on-ceramic"	refers to the combination of ceramic ball heads and ceramic cup inserts in a hip prosthesis (see "*Business—Our Business—Medical Products—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 (see "*Business—Our Business—Medical Products—Materials for Hip Implant Components*");
"Cinven"	means Cinven Capital Management (V) General Partner Limited or its affiliates or predecessor entities;
"Clearstream"	means Clearstream Banking, *société anonyme* or any successor thereof;
"Collateral"	has the meaning ascribed to it under "*Summary—The Offering—Collateral*";
"Completion Date"	means the date of completion of the Acquisition;
"Equity Contribution"	has the meaning ascribed to it under "*Summary—The Transactions—The Acquisition*";
"Escrow Account"	means the account in which the proceeds of the Notes will be deposited pending completion of the Transactions;
"Escrow Agent"	means Deutsche Bank AG, London Branch;
"Escrow Agreement"	means the agreement to be dated the Issue Date between the Issuer, the Trustee and the Escrow Agent relating to the Escrow Account with which the proceeds of the Notes will be deposited pending consummation of the Acquisition;
"Escrow Long Stop Date"	means August 10, 2018;
"EU"	means the European Union;
"Euroclear"	means Euroclear Bank SA/NV or any successor thereof;
"Existing Debt"	means the financial liabilities of the Target Group outstanding under the Existing Notes and the Existing Senior Facilities Agreement;
"Existing Hedging Agreements"	means, collectively, (i) a letter agreement between CeramTec Service GmbH and Deutsche Bank AG, London Branch, dated August 8, 2013 and (ii) certain ISDA agreements and further hedging documents between CeramTec Service GmbH and each of Deutsche Bank AG London Branch, Royal Bank of Canada, UBS AG and Goldman Sachs International, dated on or about September 16, 2013, in relation to certain tranches made available to CeramTec Service GmbH under the Existing Senior Facilities Agreement;
"Existing Notes"	means the €306,700,000 8.25% Senior Notes due 2021 issued by CeramTec Group GmbH pursuant to an indenture dated August 8, 2013;

"Existing Senior Facilities Agreement"	means the senior secured credit facilities agreement, dated August 30, 2013, consisting of (i) a senior secured term loan facility in the aggregate principal amount of up to $472,500,000 and €291,300,000 and (ii) a senior secured revolving credit facility in an aggregate principal amount of up to €100,000,000 with, *inter alios*, Deutsche Bank Securities Inc., RBC Capital Markets and UBS Securities LLC as joint lead arrangers and joint bookrunners, Deutsche Bank AG New York Branch as administrative agent, swingline lender, collateral agent and L/C issuer and certain financial institutions as lenders;
"Existing Shareholder Loan"	means the shareholder loan by the Seller to the Target pursuant to a loan agreement dated August 29, 2013;
"Financing"	has the meaning ascribed to it under "*Summary—The Transactions—The Financing*";
"FTE"	means full time equivalent;
"German Guarantors"	means Bidco and the Post-Completion Date Guarantors incorporated in Germany;
"Group"	means the Issuer together with its subsidiaries from time to time;
"Guarantees"	has the meaning ascribed to it under "*Summary—The Offering—Guarantors*";
"Guarantors"	means Bidco, the Post-Completion Date Guarantors and any future guarantors of the Notes;
"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 to be dated on the Issue Date governing the Notes by and among, *inter alios*, the Issuer and the Trustee;
"Industrial"	refers to all of our clusters except medical products;
"Initial Purchasers"	means Merrill Lynch International, Deutsche Bank AG, London Branch, Morgan Stanley & Co. International plc, Nomura International plc and UBS Limited;
"Intercreditor Agreement"	means the intercreditor agreement to be dated on or about the Issue Date, between, among others, the Issuer, Deutsche Bank AG, London Branch, as security agent and the lenders and arrangers under the Senior Facilities Agreement;
"Issue Date"	means the date of original issuance of the Notes;
"Issuer"	means CTC BondCo GmbH;
"LTM Period"	means the last twelve-month period;
"Medical Products"	refers to our medical products business;
"Member State"	means a member state of the European Economic Area;
"Notes"	means the €406,000,000 aggregate principal amount of % Senior Notes due 2025 offered hereby;
"OEM"	means original equipment manufacturer;

"Offering"	means the offering of the Notes;
"Ontario Teachers"	means the Ontario Teachers' Pension Plan Board;
"Post-Completion Date Guarantors"	means the Target and its subsidiaries who will guarantee the Notes, subject to the Agreed Security Principles, on the earlier of (a) the date on which it provides a guarantee of the Senior Facilities and (b) on or prior to a date falling 120 days after the Completion Date, which are currently expected to be CeramTec Group GmbH, CeramTec Service GmbH, CeramTec GmbH, CeramTec Acquisition Corporation and CeramTec North America Corporation;
"PSP Investments"	means the Public Sector Pension Investment Board;
"R&D"	means research and development;
"Regulation S"	means Regulation S under the Securities Act;
"Revolving Credit Facility"	means the €75.0 million multicurrency revolving credit facility established under the Senior Facilities Agreement;
"Security Agent"	means Deutsche Bank AG, London Branch, as security agent for the Notes;
"Security Documents"	has the meaning ascribed to it under "*Description of the Notes*";
"Seller"	means Faenza Luxembourg S.à r.l., as seller under the Acquisition Agreement;
"Senior Facilities"	means the Term Loan Facility and the Revolving Credit Facility made available or which may be made available under the Senior Facilities Agreement;
"Senior Facilities Agreement"	means the senior credit facilities agreement, to be dated on or about the Issue Date, as amended from time to time among, *inter alios*, Bidco, as borrower and Deutsche Bank AG, London Branch, as agent and security agent;
"Shareholder Loan"	means the shareholder loan granted by CTEC Acquisition S.à r.l. to the Issuer as further described in "*Description of Certain Financing Arrangements—Shareholder Loan*";
"Sponsor"	means a consortium led by funds advised by BC Partners, in which PSP Investments and Ontario Teachers also hold a stake;
"Target" or "CeramTec"	means CeramTec Holding GmbH;
"Target Group"	means the Target together with its subsidiaries;
"Term Loan Facility"	means the €1,116.5 million (equivalent) term loan B facility of which an amount up to the U.S. dollar equivalent of €150.0 million may be made available as a U.S. dollar tranche;
"THR"	means total hip replacement;
"Topco"	means CTC TopCo GmbH, the parent entity of the Issuer;
"Transactions"	means the Acquisition and the related transactions (including the financing in connection with the Acquisition), as further described in "*Summary—The Transactions*";
"Trustee"	means Deutsche Trustee Company Limited;
"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. Guarantors"	means the Post-Completion Date Guarantors incorporated in the United States; and
"we," "us," "our" and other similar terms ...	means the Target Group, except where the context otherwise requires.

PRESENTATION OF FINANCIAL INFORMATION

Financial Information

The Issuer was incorporated on September 28, 2017 in connection with the Transactions and, as of the date of this offering memorandum, the Issuer is a holding, management and finance company with no revenue-generating activities and no business operations of its own. As of the date of this offering memorandum, the Issuer does not have any outstanding indebtedness and its only material assets or liabilities are currently, and are expected to be in the future, to be its interests in the issued and outstanding share capital of its subsidiaries and its outstanding indebtedness and intercompany balances incurred in connection with its incorporation and the Transactions. See "*Risk Factors—Risks Relating to Our Capital Structure—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 Target Group to be able to make payments on the Notes.*" As a result, no financial information of the Issuer is included in this offering memorandum, except for certain limited "as adjusted" financial data presented on a consolidated basis as adjusted to reflect certain effects of the Transactions. See "*Summary—Summary Consolidated Financial and Other Information*" and "*Capitalization.*"

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 subsidiaries on a consolidated basis.

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

- the unaudited interim condensed consolidated financial statements of the Target as of and for the nine months ended September 30, 2017, which are presented in accordance with International Accounting Standard 34 *Interim Financial Reporting* ("IAS 34") (the "Interim Financial Statements"); and

- the audited consolidated financial statements of the Target as of and for each of the three years ended December 31, 2014, 2015 and 2016, which have been prepared in accordance with IFRS, including the independent auditors' report thereon (the "Audited Financial Statements").

The financial information included in this offering memorandum was not prepared in accordance with generally accepted accounting principles in the United States ("U.S. GAAP"). There could be significant differences between IFRS, as applied by us, and U.S. GAAP. We neither describe the differences between IFRS and U.S. GAAP nor reconcile our IFRS financial statements to U.S. GAAP. Accordingly, such information is not available to investors, and investors should consider this in making their investment decision. The financial information included in this offering memorandum is not intended to comply with SEC reporting requirements. Compliance with such requirements would require the modification, reformulation or exclusion of certain financial measures. In addition, changes would be required in the presentation of certain other information.

All financial statements included in this offering memorandum should be read in conjunction with the relevant notes thereto.

In the future, we will report our consolidated financial condition and results of operations at the level of the Issuer or Topco. The fiscal year of the Issuer ends on December 31 of each calendar year and we expect that the first annual consolidated financial statements for the Issuer or Topco will be available in respect of the year ending December 31, 2017. The Issuer or Topco will account for the Acquisition using the acquisition method of accounting under IFRS. 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. If the Offering were registered under the U.S. Securities Act, we would be required to present *pro forma* consolidated financial statements to reflect such adjustments and the impact of the Transactions, but no *pro forma* consolidated financial statements are presented in this offering memorandum. We have not identified the fair value of assets acquired and liabilities to be assumed at the date of the Acquisition as of the date of this offering memorandum. 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. See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Factors Affecting Our Results of Operations and Financial Condition*."

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 (net), Cash Conversion Ratio, EBITDA, Management Adjusted EBITDA, 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 and certain leverage and coverage ratios (our "Non-IFRS Measures"). These non-IFRS Measures are not audited and constitute alternative performance measures under the European Securities and Markets Authority Guidelines on Alternative Performance Measures. Each of the EBITDA-based measures presented in this offering memorandum is defined and calculated differently from the definition of "Consolidated EBITDA" presented in the Indenture.

Our primary Non-IFRS Measures are defined as follows:

- "Capital Expenditures (net)" is defined as the sum of additions to intangible assets and additions to property, plant & equipment, net of government grants;

- "Cash Conversion Ratio" is defined as (i) Management Adjusted EBITDA minus Capital Expenditures (net), 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 costs and certain other non-recurring items;

- "Pro Forma Adjusted EBITDA" is defined as Management Adjusted EBITDA, adjusted for certain adjustments and expected cost savings identified by us and the Sponsor; and

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

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 EBITDA, Management Adjusted EBITDA, 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 (net) and Cash Conversion Ratio is useful to investors to assess our liquidity. For these reasons, we believe that our Non-IFRS Measures and similar measures are widely used by certain investors, securities analysts and other interested parties as supplemental measures of performance and liquidity.

Our Non-IFRS Measures and ratios are not measurements of our performance or liquidity under IFRS and should not be considered in isolation or as alternatives to performance measures derived in accordance with IFRS or any other generally accepted accounting principles. Each of our Non-IFRS Measures is defined and reconciled to its closest comparable IFRS measure under "*Summary—Summary Consolidated Financial and Other Information*." Our Non-IFRS 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. 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 consolidated 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;
- 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; 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, as well as further limitations discussed above, our Non-IFRS Measures should not be considered in isolation or as a substitute for performance measures calculated in accordance with IFRS. You should compensate for these limitations by relying primarily on our consolidated financial statements and using these Non-IFRS Measures only supplementally to evaluate our performance.

In consideration of the impact of the financing in connection with the Acquisition, we have also presented the following adjusted measures:

- "*pro forma as adjusted* interest expense" is defined as interest expense for the period from October 1, 2016 to September 30, 2017 as if the Transactions had been completed as of October 1, 2016 and consists of interest on the Term Loan Facility and the Notes;
- "*pro forma as adjusted* total net third-party senior secured indebtedness" is defined as third-party senior secured indebtedness minus cash and cash equivalents as adjusted for the Transactions reflecting the amounts outstanding under the Term Loan Facility, as if the Transactions had been completed as of September 30, 2017; and
- "*pro forma as adjusted* total net third-party indebtedness" is defined as total third-party indebtedness minus cash and cash equivalents as adjusted for the Transactions reflecting the amounts outstanding under the Term Loan Facility and the principal amount of the Notes as if the Transactions had been completed as of September 30, 2017.

The financial information for the last twelve-month period ("LTM Period") to September 30, 2017 is unaudited and has been calculated by adding the unaudited condensed consolidated financial information for the nine months ended September 30, 2017, derived from the Interim Financial Statement or the Group's accounting records or management reporting and the historical financial information for the year ended December 31, 2016, derived from the Audited Financial Statements or the Group's accounting records or management reporting, and subtracting the unaudited condensed consolidated financial information for the nine months ended September 30, 2016, also derived from the Interim Financial Statements or the Group's accounting records or management reporting. The financial information for the LTM Period to September 30, 2017, has not been audited or reviewed by our auditors, is not required by or presented in accordance with IFRS 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 a period or any future period or any financial position at any past or future date.

This offering memorandum includes certain *pro forma* financial information as of and for the LTM Period to September 30, 2017, presented at the level of the Target, on an adjusted basis to give *pro forma* effect to the Transactions and the application of the proceeds therefrom, including consolidated financial data as adjusted to reflect the effect of the Transactions on the Issuer's indebtedness as if the Transactions had occurred on September 30, 2017 and on the Issuer's interest expense as if the Transactions had occurred on October 1, 2016. The *pro forma* financial information as of and for the LTM Period to September 30, 2017, 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, 2017, or October 1, 2016, respectively; nor does it purport to project the Issuer's indebtedness or interest expense at any future date. The *pro forma* financial information as of and for the LTM Period to September 30, 2017, has not been prepared in accordance with IFRS. Neither the assumptions underlying the pro forma adjustments nor the resulting *pro forma* financial information as of and for the LTM Period to September 30, 2017, have been audited or reviewed in accordance with any generally accepted auditing standards.

Rounding

Certain numerical figures set out in this offering memorandum, including financial data presented in millions or thousands 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 the consolidated financial statements of the Target contained in this offering memorandum, as applicable, and not using the numerical data in the narrative description thereof.

EXCHANGE RATE INFORMATION

We publish our financial statements in euro. The following table sets forth, for the periods set forth below, the high, low, average and period end Bloomberg Composite Rate (London) expressed as U.S. dollars per €1.00. The Bloomberg Composite Rate is a "best market" calculation, in which, at any point in time, the bid rate is equal to the highest bid rate of all contributing bank indications and the ask rate is set to the lowest ask rate offered by these banks. The Bloomberg Composite Rate is a mid-value rate between the applied highest bid rate and the lowest ask rate. The below rates may differ from the actual rates used in the preparation of the consolidated financial statements and other financial information appearing in this offering memorandum. We make no representation that the euro or U.S. dollar amounts referred to in this offering memorandum have been, could have been or could, in the future, be converted into U.S. dollars or euro, as the case may be, at any particular rate, if at all.

The average rate for a year means the average of the Bloomberg Composite Rates on the last business day of each month during a year. The average rate for a month, or for any shorter period, means the average of the daily Bloomberg Composite Rates during that month, or shorter period, as the case may be.

The Bloomberg Composite Rate of the euro on November 22, 2017 was $1.1795 per €1.00.

	U.S. dollars per €1.00			
	Period end	Average	High	Low
Year				
2012	1.3197	1.2859	1.3463	1.2053
2013	1.3789	1.3300	1.3789	1.2819
2014	1.2100	1.3209	1.3866	1.2100
2015	1.0866	1.1032	1.1288	1.0560
2016	1.0547	1.1069	1.1527	1.0384
Month				
May 2017	1.1237	1.1055	1.1237	1.0867
June 2017	1.1413	1.1236	1.1430	1.1125
July 2017	1.1413	1.1236	1.1430	1.1125
August 2017	1.1881	1.1815	1.2016	1.1702
September 2017	1.1803	1.1904	1.2026	1.1752
October 2017	1.1648	1.1756	1.1846	1.1590
November 2017 (through November 22, 2017)	1.1795	1.1692	1.1802	1.1583

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," "Regulation" and our financial statements and the notes to those financial statements contained elsewhere in this offering memorandum.

Overview

We are a leading global developer, manufacturer and supplier of high performance ceramics ("HPC") solutions for various end markets including medical, automotive, industrial, consumer and electronics. Our HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological/chemical, mechanical, thermal, electric/magnetic or optical properties compared to competing products made from metal 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 currently offer a wide range of HPC solutions including hip joint prostheses components, actuators in engine valves for fuel injection systems, high speed cutting tools and transparent ceramic components for armor applications. The versatility of HPC products and resulting wide-range of applications provides us with a highly diversified end market and customer base.

Our operations can be divided into two businesses—Medical Products and Industrial.

Medical Products: Our Medical Products business focuses on developing and manufacturing ceramic components for hip joint prostheses, such as ball heads and cup inserts used in total hip replacement ("THR") procedures. In 2016, we generated 37.6% of our revenue and more than half of our Management Adjusted EBITDA from our Medical Products business. Ceramic materials are 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. Our HPC medical solutions are biologically inert and have high wear resistance and excellent friction behavior, making them one of the few materials that are durable and stable enough to withstand the corrosive effects of bodily fluids. More than 14 million of our BIOLOX® ceramic components have been implanted in patients globally to date. We estimate that nearly one in two hip joint implant systems sold worldwide in 2016 includes at least one ceramic component, and we estimate our BIOLOX® products represented more than 95% of the ceramic components used for these hip joint implant systems. Our customers are orthopedic implant OEMs including DePuy, Smith & Nephew, Stryker and Zimmer Biomet, the top four orthopedic implant OEMs who together have a market share of more than 60% in the worldwide market for hip joint implant systems. 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 anticipate that our HPC solutions will be used for various other joint replacements, such as knee and shoulder implants in the future.

Industrial: Our Industrial business develops, manufactures and supplies a broad range of highly specialized, performance critical HPC solutions for customers spanning a wide range of industries including automotive, defense, electronics, industrial machinery and medical equipment. In 2016, 62.4% of our revenue was generated by our Industrial business. 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, which when coupled with our state-of-the-art manufacturing facilities, enables us to efficiently produce solutions at scale while still adhering to all relevant industry standards. Due to the superior technological and performance characteristics of advanced ceramics, such as better wear and heat resistance than alternative materials, our HPC solutions are often 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 automotive engineering, HPC products, including our piezo ceramic components, play a vital role in increasing safety, improving cost-effectiveness and enhancing comfort in vehicles. Our ceramic substrates, which are ceramic plates with electrical, thermal and mechanical properties, 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, reduces the exposure of our Industrial business to any single industry or product.

At our state-of-the art development centers and laboratory facilities, we continuously research and develop materials as well as manufacturing and coating processes for new solutions in established and new markets. Our R&D is primarily focused on delivering customer-driven innovations and next generation solutions, which we are able to test through market leading digital simulation tools. We also develop new innovations with broader uses such as PERLUCOR®, a wear and chemical resistant transparent ceramic material that is three to four times the hardness and strength of glass and is already used in a wide range of applications.

In 2016, we generated 69.7% of our revenue in Europe (including Germany). However, our customers have a strong export focus as their end-products, such as automotive parts or ceramic hip implant components, are exported world-wide. In addition, we have a global manufacturing footprint with 20 facilities across Europe (including two facilities in the UK that were acquired in 2017 as part of our acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc), North America, Asia and South America.

In the LTM Period to September 30, 2017, we generated revenue of €536.7 million and Management Adjusted EBITDA of €199.9 million, respectively, representing a 37.3% Management Adjusted EBITDA margin. From 2014 to 2016, our revenue and Adjusted EBITDA registered a CAGR of 1.9% and 5.5% respectively, and our Cash Conversion Ratio increased from 70.0% to 91.5%. We believe we have a highly cash generative business supported by modest maintenance capital expenditure requirements, which typically comprise half of our total capital expenditures. For an explanation of the components of Management Adjusted EBITDA and Cash Conversion Ratio, see "*Summary—Summary Consolidated Financial and Other Information*."

Our Strengths

Compelling customer value through high-tech, tailored solutions for mission-critical applications

We are a leading global developer, manufacturer and supplier of HPC solutions. With over 100 years of experience in the HPC industry, we believe that our customers consider us a thought leader capable of developing and delivering innovative solutions and processes quickly and on an industrial scale. We believe that our value proposition lies in our dependability as a trusted partner with the materials expertise and manufacturing process know-how to develop tailor-made solutions to fit different customer needs at a consistent high quality. As a result, we have established strong, long-standing customer relationships with leading corporations across the world.

Our representative portfolio of mission-critical HPC solutions spans a variety of end markets and include the BIOLOX® family of products for in-body use, whose superior wear characteristics and biocompability are critical to the success of hip replacements, Cerasoft®G Surfaces, a versatile friction disc used in the textile industry with a long service life, CeramCool® heat sinks, which provide long lasting thermal management of high power electronics and PERLUCOR®, a superior value transparent ceramic material that is lighter and more resistant than conventional bulletproof glass.

R&D and manufacturing excellence with high degree of customer integration

Our decades of experience in the HPC industry have provided us with a strong foundation of proprietary material science and applications know-how that we continue to strengthen. For example, we have developed and materially enhanced a number of innovative materials including PERLUCOR® (high optical transparency and strength), polycrystalline cubic Boron Nitride ("pcBN") (very hard ceramic material with high fracture resistance) and Yttria-toughened Zirconia, with functional additives for high damage tolerance and edge stability ("HTZ 500"). To support our innovation efforts, we have a highly qualified R&D team of over 200 scientists and engineers, including 52 PhDs and an extensive portfolio of over 600 patents, which cover new materials, applications as well as process designs. We also frequently collaborate with leading research institutions and universities such as the Fraunhofer Institute and Imperial College London.

In addition to materials innovation, we have developed a unique combination of know-how, experience and equipment that allows us to manufacture complex solutions at an industrial scale while adhering to regulatory and customer quality requirements, as exemplified by the high volume production of our BIOLOX® solutions (with approximately 1.4 million components sold in the LTM Period to September 30, 2017) as well as our piezo ceramic tapes. In particular, we are able to draw on our proprietary process know-how to tailor the manufacturing process for each solution and thus rapidly progress from prototype to large volume production. As a result of the expansion of our facility in Marktredwitz, Germany in 2013 and 2014, we believe that we have ten times the production capacity of all our competitors combined in the ceramic hip component market and that we are the only hip component player capable of providing dual-site manufacturing of hip replacement components. Further, our strong culture and track record of quality control has resulted in state-of-the-art manufacturing facilities that have been awarded various quality and industry certifications (including FDA approval) and that contain a broad range of testing equipment. In addition, multiple checks and tests are undertaken in our Medical Products manufacturing facilities on each component during every stage of production and we have not experienced any major product recall in over ten years.

Our overall approach to R&D and manufacturing is driven by our focus on closely collaborating with customers during the entire development and production cycle and becoming embedded within our customers' innovation processes by offering value-added solutions. To support an integrated product development process, we have specialized technical sales personnel of 310 FTEs in 16 countries that provide local coverage to service customer needs and deliver bespoke technical support. The reorganization of our Industrial business that commenced in 2016 further streamlined, standardized and strengthened our commercial operations to improve lead times and customer service quality. Further, we continue to focus on developing breakthrough technology in the HPC industry with applications for end markets exhibiting attractive growth potential.

Leading market position in a critical and growing segment of the orthopedics market

We believe that via our Medical Products business, we are the market leader in ceramic solutions for hip replacement procedures globally and estimate that our BIOLOX® family of products represents approximately 95% of the ceramic solutions used for hip implant systems today. In 2016, we generated 37.6% of our revenue and more than half of our Management Adjusted EBITDA from our Medical Products business. With over 40 years of experience in the orthopedics market, we have long standing relationships that each span over 20 years with all top four orthopedic implant OEMs who, according to a leading international consultancy firm, together account for over 60% of total sales in the global hip implant market. Further, we believe that we are the only supplier of ceramic components that supplies all top four orthopedic implant OEMs. We closely collaborate with our major OEM customers in both training and marketing efforts such as including a "BIOLOX® inside" logo on the packaging of many of our customers' hip implant system and also organize technical training, attend medical seminars and, produce clinical articles to bolster brand awareness among surgeons and hospitals. As a result, we believe BIOLOX® is the only globally recognized brand in hip implant solutions among surgeons and, we believe, considered the industry standard for hip replacement procedures.

Our Medical Products business operates in a structurally growing market with favorable underlying demand drivers. According to an international consultancy firm, the number of THR procedures is expected to increase from 2016 to 2021 by a CAGR of 4.2% due to a number of factors including aging demographics, increased prevalence of obesity and improved healthcare access in emerging markets. Alongside the growth in hip replacement procedures, ceramic hip components are increasingly replacing other materials in hip replacement procedures, driven primarily by the chemical and mechanical characteristics of ceramics as well as patient safety concerns about the potential adverse effects of other alternatives such as the potential toxicity of cobalt chrome. According to an international consultancy firm, the penetration of THR procedures performed with ceramic ball heads is expected to increase from 45% in 2016 to 51% in 2021 while the ceramic ball head and insert market is expected to grow by a CAGR of 6.8% and 4.2%, respectively, from 2016 to 2021.

With more than ten times the production capacity of our competitors combined, we believe that we are the only industry player able to produce ceramic solutions for hip implants at an industrial scale to accommodate global OEMs with large volume demands while maintaining a consistently high quality level. Further, ceramic hip implant components like our solutions have superior wear properties and biocompatibility compared to alternative materials and are crucial to the performance of the overall hip replacement system but only represent a small portion of the total price of an implant. Given the critical nature and liability risks of hip replacement procedures, OEMs, surgeons, hospitals and patients demand high performance, reliability and quality in hip replacement components and would be reluctant to switch away from an existing trusted brand. In addition, our ceramic solutions are used in products that require regulatory approval (such as from the FDA) and any replacement of our solutions in our customers' end products would require new regulatory approvals, which may require significant financial investment and could take up to eight years.

Diversified industrial business delivering bespoke solutions to world leading OEMs

Our Industrial business contributed 62.4% of our revenue in 2016 and produces diverse solutions across a range of different end markets, which limits our exposure to any particular industry. We believe that we are the partner of choice to a diverse base of blue chip customers across these various end markets including Bosch, Honeywell and Volkswagen as a result of the following factors:

- *Material and manufacturing process expertise*. Over 100 years of experience in the HPC industry and a portfolio of over 600 patents provides us with a strong foundation of material knowledge and enables us to design tailored manufacturing processes.

- *Application development*. We have a strong track record of designing bespoke solutions to meet customer needs and over 70% of our solutions are custom made.

- *Flexible scale up production facilities*. Our global manufacturing footprint enables us to scale up or down production in order to meet changing customer needs while upholding a consistent level of quality.

- *Local coverage*. Our on-the-ground presence in 16 countries and familiarity with local markets and approval processes enables us to provide solutions to global customers at the local level.

- *Culture of customer integration*. We develop solutions in close collaboration with our customers and are often embedded into our customers' products and manufacturing processes.

We believe that the versatility of high performance ceramics opens up new possibilities when conventional materials reach their limits. As a result, our HPC expertise makes us well-placed to capitalize on the favorable growth dynamics exhibited by the multiple end markets addressed by our Industrial business. For example, in the automotive market, the rise of electric vehicles, electric car components and autonomous vehicles is likely to drive an increased demand for piezo ceramic components, which we currently produce. Our acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc in 2017 further bolstered our piezo ceramics platform. In addition, we believe we are well-placed to capitalize on other trends driving expected growth in certain end markets such as big data, Industry 4.0 and growth in high end appliances. The table below sets out the split of revenue from our Industrial business by end market for 2016 as well as the total size in 2016 and the expected market growth rates from 2016 to 2021 of the end markets of our Industrial business group.

End Market	Approximate % of 2016 Industrial business revenue[(1)] (%)	Total Size 2016 (€ billion)[(2)]	Expected Growth CAGR 2016 – 2021 (%)[(2)]
Medical Equipment	7%	€0.4 billion	6-7%
Electronics & Telecommunications	17%	€1.6 billion	3-4%
Industrial Applications	19%	€2.5 billion	4-5%
Automotive	34%	€1.3 billion	3-4%
Aeronautics/ Defense	8%	€1.0 billion	6-8%
Other	15%	€0.8 billion	3-4%

(1) Based on management estimate, unaudited. Based on Industrial business revenue for 2016, including estimated revenue contribution from acquisition of UK electro-ceramics business from Morgan Advanced Materials plc.

(2) Source: International consulting firm

Due to the bespoke nature, manufacturing complexity and quality requirements of our solutions, we benefit from long term customer relationships in our Industrial business with more than 90% of our customers having a relationship with us of more than five years. The collaborative nature of our development process with our customers often means that we are the sole supplier of a particular solution. Further, while our solutions are typically mission-critical, they usually account for a small portion of the overall cost of our customers' end products. As a result, we believe that the costs of switching to alternate suppliers are high in particular as customers may have to obtain end user approval in advance.

Strong financial track record bolstered by high cash generation

Our business is highly cash generative and has a track record of delivering strong financial results. Our Cash Conversion Ratio was 91.5% in 2016, driven by overall growth and margin expansion as well as low maintenance capital expenditure needs. From 2014 to 2016, our revenue and Management Adjusted EBITDA grew at a CAGR of 1.9% and 5.5%, respectively, due to strong volume growth and ongoing improvement projects such as the streamlining of our Industrial business in 2016 and 2017, pricing initiatives in our Medical Products business and certain productivity measures. Further, we believe that our prudent approach to cost management in sales and other supporting functions have also contributed to our profitability.

Our well-invested manufacturing footprint allows us to operate with low 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 flexibility to defer a significant part of planned expenditures to later periods.

Our Management Adjusted EBITDA margins were 32.4%, 32,7%, 34.7% and 37.3% in 2014, 2015, 2016 and the LTM Period to September 30, 2017, respectively, and our profitability has remained high throughout the economic cycle, including during the 2009 economic downturn. We believe that the stability of our business has been further strengthened by our flexible cost base, driven in part by the good relationships we have with our employees, as well as the growth of our Medical Products business, which has historically exhibited strong profitability and cash conversion.

Experienced management team supported by dedicated workforce

We have a seasoned senior management team with deep industry knowledge and extensive experience working for other global organizations such as Ruetgers, Biomet and Aventis. Our senior management team is further aided by a strong base of experienced second level management who have proven track records of developing and commercializing innovative HPC solutions across various end markets. We also benefit from a highly productive and loyal employee base with very low employee turnover as well as good relationships with all work councils and unions.

Our Strategy

Maintain leadership in high performance ceramics through commercial, operational and innovation excellence

We intend to maintain our leading position in the HPC industry by focusing on initiatives that drive excellence in all aspects of our business:

- *Commercial*. We apply value-driven pricing primarily in our Medical Products business to take into account the individual commercial propositions of our HPC solutions and also provides new service functions as we continue to strive to be closely attuned to our customers' needs.

- *Operational*. In order to grow our profitability while maintaining productivity and quality, we intend to continue to optimize our global operations, supply chain management and capacity utilization including by combining our European production facilities into a centralized unit where best practices become standardized.

- *Innovation*. To strengthen the commercialization capabilities of our R&D operations we have separated our innovation function between strategic research and customer projects, each with a clear funnel process to prioritize key innovations.

- *Industrial business streamlining*. We commenced the reorganization of our Industrial business in 2016 and we will continue to streamline our Industrial business by simplifying internal structures, aligning functions to reduce inefficiencies and standardizing processes across business clusters.

Focus on growth initiatives

We aim to expand further globally in markets with strong underlying fundamentals where we are underrepresented such as the United States and China. For example, China is becoming one of the most important markets for HPC solutions. In particular, China is one of the fastest growing markets for hip replacements with an expected THR procedure CAGR of 9% from 2016 to 2021 according to an international consulting firm. With an existing presence in Suzhou, China, we also intend to partner with local players to accelerate growth and achieve scale as well as maximize our existing expertise to focus on key projects and achieve true "local" status.

We historically have served German customers in the domestic market and over the years, have grown our geographic reach alongside our customers' own global expansions. As part of our growth initiatives, we intend to grow our customer base and partner with truly international corporations that would benefit from our extensive materials and process expertise, scale and global footprint.

In addition, we intend to focus on capturing emerging growth opportunities beyond our core markets as we believe the versatility of ceramics and continued technical advances across different end markets leave room for ceramics to expand into new fields of application. In our Medical Products business, we intend to maximize the value of existing solutions by exploring additional medical applications such as knee, shoulder and spine components as well as capitalize on our R&D strength and regulatory expertise to produce new innovations such as ceramic foam or ceramic implants for dental applications. In our Industrial business, which according to an international consulting firm benefits from an addressable market of €7.6 billion in 2016, which is expected to grow at a CAGR between 3% and 7% until 2021 in each of the industrial end markets. We are continuously monitoring technology trends such as 3D printing, e-mobility, autonomous vehicles and big data in order to consider how best to apply our materials expertise, manufacturing now-how and regulatory experience to develop relevant HPC solutions that can be successfully commercialized.

Maintain a disciplined approach to cash generated from our business

Supported by our well-invested manufacturing footprint and overall growth, our business is highly cash generative, with Cash Conversion Ratios of 70.0%, 83.7%, 91.5% and 89.9% in 2014, 2015, 2016 and the LTM Period to September 30, 2017. We intend to maintain a disciplined approach in using such cash while preserving attractive margins. Further, we have historically been successful at reducing overall indebtedness from a ratio of pro forma net third party debt to Management Adjusted EBITDA of 7.0x for the LTM Period to March 31, 2013 (when we issued our Existing Debt) to a ratio of net third party debt to Pro Forma Adjusted EBITDA of 4.3x for the LTM Period to September 30, 2017. We anticipate that our future uses of cash include engaging in value accretive M&A and maintaining an optimal capital structure.

Pursue value accretive M&A

We have demonstrated a successful track record of executing and integrating bolt-on acquisitions such as the acquisition of DAI Ceramics Inc. in 2015, which strengthened our presence in the United States and provided us access to the aeronautics end market, and the acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc in 2017, which bolstered our piezo ceramics platform. We intend to pursue a diligent approach to bolt-on M&A, with future acquisitions to be focused on gaining scale in attractive end markets and technologies as well as accessing new geographies.

The Transactions

The Acquisition

On October 10, 2017, Bidco, an entity beneficially owned by a consortium led by funds advised by BC Partners, in which PSP Investments and Ontario Teachers also hold a stake (the "Sponsor"), entered into the Acquisition Agreement with Faenza Luxembourg S.à r.l. (the "Seller") to acquire all the issued and outstanding capital stock of the Target (the "Acquisition"). The consummation of the Acquisition pursuant to the Acquisition Agreement is subject to the fulfilment or due waiver, as the case may be, of the condition precedent of the receipt of the approval of the Acquisition by all relevant authorities, including relevant merger control authorities as set out therein. If regulatory approvals are not obtained on or prior to July 10, 2018, or the actions to be undertaken at the scheduled date of consummation of the transaction are not conducted, the non-breaching party may withdraw from the Acquisition Agreement, unless such non-breaching party is solely responsible for the non-performance of the relevant closing action by the other party.

The Acquisition Agreement contains customary warranties given by the Seller as to capacity, title and certain disclosure matters as well as customary covenants given by the Seller regarding, among other things, the conduct of the business 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.

Bidco, a *Gesellschaft mit beschränkter Haftung* incorporated under the laws of Germany, is a wholly owned subsidiary of the Issuer, a *Gesellschaft mit beschränkter Haftung* incorporated under the laws of Germany. The Issuer, in turn, is a wholly owned subsidiary of CTC TopCo GmbH, a *Gesellschaft mit beschränkter Haftung* incorporated under the laws of Germany ("Topco"). Topco, in turn, is a wholly owned subsidiary of CTEC Acquisition S.à r.l., ("LuxCo3"), a *société à responsabilité limitée* incorporated under the laws of Luxembourg. LuxCo3, in turn, is a wholly owned subsidiary of CTEC Invest S.à r.l., ("LuxCo2"), a *société à responsabilité limitée* incorporated under the laws of Luxembourg. LuxCo2, in turn, is a wholly owned subsidiary of CTEC I S.à r.l., ("LuxCo1"), a *société à responsabilité limitée* incorporated under the laws of Luxembourg. Each of LuxCo1, LuxCo2, LuxCo3, Topco, Bidco and the Issuer were formed or acquired to facilitate the Transactions (as defined below).

The Financing

The total cash consideration for the Acquisition and repayment of the Existing Debt is expected to be €2,479.5 million. The Acquisition will be financed as follows:

- €1,040.8 million indirect cash contribution by the Sponsor (including through the Shareholder Loan) (the "Equity Contribution");
- the Issuer will issue the Notes in the aggregate principal amount of €406.0 million; and
- Bidco will utilize the Term Loan Facility under the Senior Facilities Agreement in the aggregate principal amount of €1,116.5 million (equivalent) comprised of a euro-denominated tranche and a U.S. dollar-denominated tranche with an aggregate principal amount of up to €150.0 million (equivalent).

The proceeds from the financing described above will be used to (i) finance the purchase price for the Target shares pursuant to the Acquisition Agreement, (ii) repay all amounts outstanding under the Existing Debt, including the redemption premium payable on the Existing Notes and (iii) pay the costs, fees and expenses incurred in connection with the Transactions, including commitment, underwriting, arranging, placement, original issue discount, financial advisory, legal, accounting, ratings advisory and other transaction costs, including real estate transfer tax and professional fees (together, the "Financing"). The Acquisition and the Financing together are hereinafter referred to as the "Transactions".

Pending the consummation of the Acquisition, the gross proceeds from the Offering of the Notes will be deposited into the Escrow Account in the name of the Issuer. The Escrow Account will be controlled by, and pledged on a first-priority basis in favor of, the Trustee on behalf of the holders of the Notes. The release of escrow proceeds is subject to the satisfaction of certain conditions, including the Acquisition being completed promptly following the escrow release pursuant to the terms of the Acquisition Agreement. If the Acquisition is not consummated on or prior to August 10, 2018 (the "Escrow Long Stop Date"), the Notes will be subject to a special mandatory redemption. The special mandatory redemption price will be a price equal to 100% of the aggregate issue price of the Notes plus accrued and unpaid interest and additional amounts, if any, from the relevant Issue Date to the date of special mandatory redemption. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*."

The estimated sources and uses for the Transactions are shown in the table below. Actual consideration paid on the Completion Date will vary due to factors such as the date of consummation of the Acquisition, changes in the level of cash on the Target's balance sheet, the amount of accrued interest on the Target's Existing Debt from June 30, 2017 up to the Completion Date, any adjustments to the cash consideration paid pursuant to the Acquisition Agreement as of the Completion Date and differences from our estimates of fees and expenses and different termination values of the Existing Hedging Agreements. We may decide not to terminate some or all of our Existing Hedging Agreements. Any changes in these amounts may be funded through drawings under our Revolving Credit Facility or as an increase or decrease, as the case may be, in the amount of cash and cash equivalents on the Target's balance sheet used or retained in connection with the Transactions. This table should be read in conjunction with "*Capitalization*" and "*The Transactions*."

Sources of Funds	(€ million)	Uses of Funds	(€ million)
Notes offered hereby	406.0	Total cash consideration for the Acquisition and repayment of Existing Debt(3)	2,479.5
Term Loan Facility (equivalent)(1)	1,116.5	Estimated Transaction costs(4)	83.8
Equity Contribution(2)	1,040.8		
Total sources	**2,563.3**	**Total uses**	**2,563.3**

(1) On or prior to the Issue Date, the Issuer will enter into a Senior Facilities Agreement which will provide for up to €1,191.5 million (equivalent) of committed borrowings, including (i) a Term Loan Facility comprised of a euro-denominated tranche and an up to €150.0 million (equivalent) U.S. dollar-denominated tranche and (ii) a €75.0 million Revolving Credit Facility. See "*Description of Certain Financing Arrangements*." While we do not currently expect to draw amounts under the Revolving Credit Facility as of the Completion Date, any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Revolving Credit Facility.

(2) Represents the €1,040.8 million indirect cash contribution (including through the Shareholder Loan) by the Sponsor.

(3) Represents the sum of (i) the cash consideration to be paid for the shares in the Target, (ii) the aggregate principal amount of the Existing Debt (including the redemption premium payable on the Existing Notes and accrued interest as of June 30, 2017) and (iii) the termination value of the Existing Hedging Agreements, net of cash retained on balance sheet, assuming estimated €3.5 million of cash retained on the Target's balance sheet. Actual consideration paid on the Completion Date will vary due to factors such as the date of consummation of the Acquisition, changes in the level of cash on the Target's balance sheet, the amount of accrued interest on the Target's Existing Debt from June 30, 2017 up to the Completion Date, any adjustments to the cash consideration paid pursuant to the Acquisition Agreement as of the Completion Date and differences from our estimates of fees and expenses and different termination values of the Existing Hedging Agreements. We may decide not to terminate some or all of our Existing Hedging Agreements.

(4) Represents estimated costs, fees and expenses incurred in connection with the Transactions, including commitment, underwriting, arranging, placement, original issue discount, financial advisory, legal, accounting, ratings and other advisory fees and other transaction costs, including real estate transfer tax and professional fees. These fees and expenses have been estimated as of the date of this offering memorandum and are subject to change.

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 funds advised by BC Partners. The Issuer is registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Hamburg under registration number HRB 148292. The Issuer's registered office is at Alsterarkaden 12, 20354 Hamburg.

Our Principal Shareholders

Following the Acquisition, the Target will be indirectly wholly-owned by a consortium led by funds advised by BC Partners, in which PSP Investments and Ontario Teachers also hold a stake. Further minority investors may be brought in as part of BC Partners' equity syndication process, their shareholdings will, however, not exceed 10%.

BC Partners is a leading international private equity firm with over €17 billion of assets under management. Established in 1986, BC Partners has played an active role in developing the European buy-out market for three decades. BC Partners executives operate as an integrated team through the firm's offices in Europe and North America, acquiring and developing businesses to create value in partnership with management. Since inception, BC Partners has completed 99 investments in companies with a total enterprise value of €121 billion and is currently investing its tenth private equity fund.

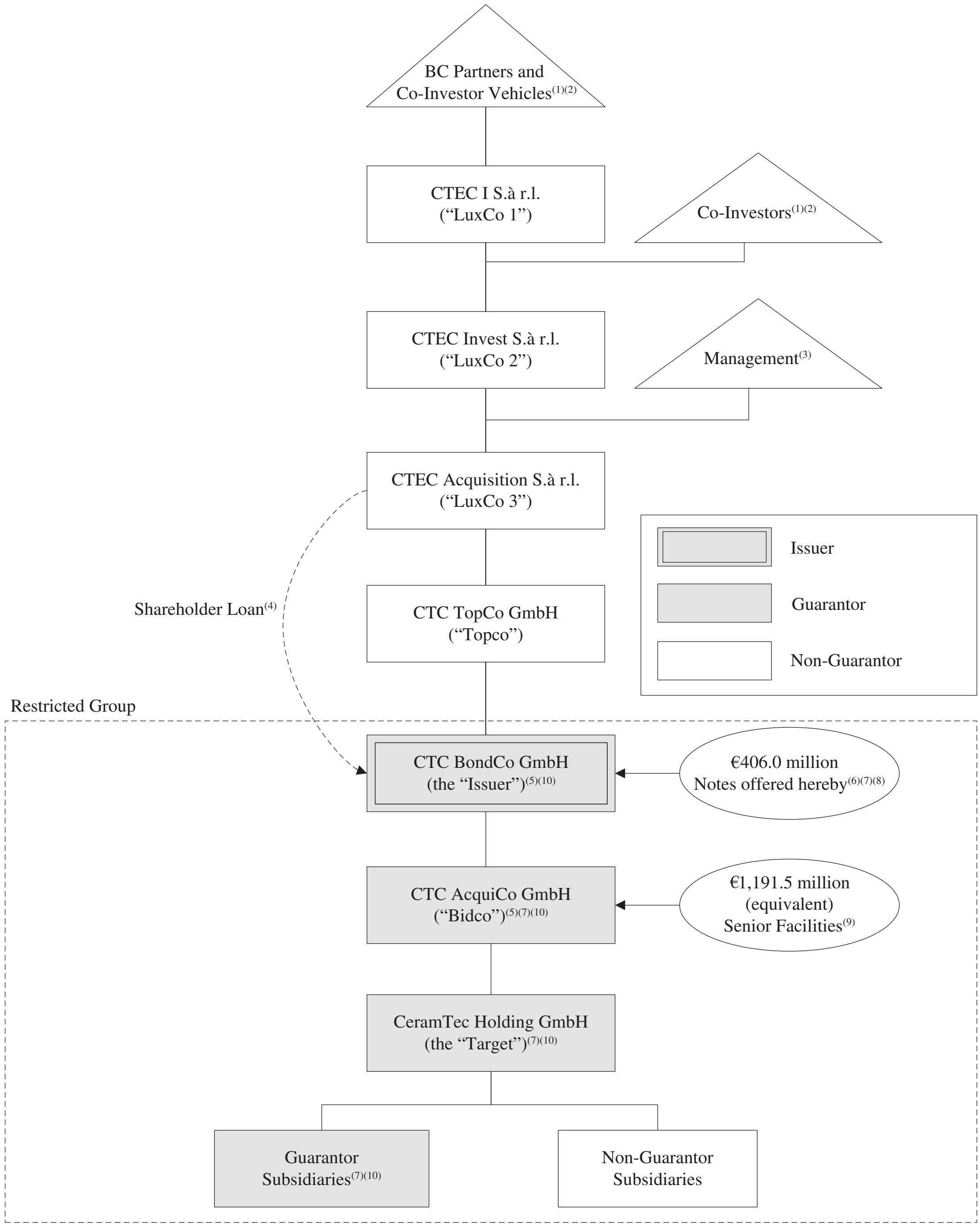
The Public Sector Pension Investment Board is one of Canada's largest pension investment managers with C$135.6 billion of net assets under management as at March 31, 2017. It manages a diversified global portfolio composed of investments in public financial markets, private equity, real estate, infrastructure, natural resources and private debt. Established in 1999, PSP Investments manages net contributions to the pension funds of Canada's federal Public Service, the

Canadian Armed Forces, the Royal Canadian Mounted Police and the Reserve Force. As at March 31, 2017, PSP Investments held private equity investments of C$15.9 billion (12% of its net assets). Since its inception, the private equity asset class has invested in more than 20 companies and 50 funds, deploying over C$10 billion in capital on a global scale. Since Headquartered in Ottawa, Canada, PSP Investments has its principal business office in Montréal and offices in New York and London, its European hub.

The Ontario Teachers' Pension Plan is Canada's largest single-profession pension plan, with C$180.5 billion in net assets as at June 30, 2017. It holds a diverse global portfolio of assets, approximately 80% of which is managed in-house, and has earned an annualized gross rate of return of 10.1% since the Plan's founding in 1990. As at June 30, 2017, OTPP held private equity investments of C$28.8 billion (16% of its net assets). Since inception, it has invested in more than 500 companies and funds, deploying approximately C$40 billion in capital on a global scale. Ontario Teachers' Pension Plan is an independent organization headquartered in Toronto. Its Asia-Pacific region office is located in Hong Kong and its Europe, Middle East & Africa region office is in London. The defined-benefit plan, which is fully funded, invests and administers the pensions of the province of Ontario's 318,000 active and retired teachers.

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 and the granting of the Guarantees by the Post-Completion Date Guarantors. Please refer to "*Capitalization*," "*Description of Certain Financing Arrangements*," and "*Description of the Notes*" for more information. All entities shown below are 100% owned, unless indicated. Actual amounts may vary from estimated amounts depending on several factors.



(1) Following the consummation of the Acquisition, the Target will be indirectly wholly-owned by a consortium led by funds advised by BC Partners, in which PSP Investments and Ontario Teachers also hold a stake (collectively, the "Sponsor"). The Sponsor may syndicate a portion of its shareholding to third-party investors. See "*Principal Shareholders*."

(2) In connection with the Transactions, the Sponsor will provide the Equity Contribution (including through the Shareholder Loan), the proceeds of which have been or will be contributed to the Issuer through intermediate holding companies. As of the date of this offering memorandum, the Issuer expects that the Equity Contribution to be provided by the Sponsor on the Completion Date will be equal to €1,040.8 million.

(3) In connection with the Acquisition, certain employees and members of management of the Target will be offered to invest in a management participation program, established by the Sponsor, on customary terms and conditions. See "*Management—Management Participation Program*."

(4) We currently expect to extend approximately €524.0 million as a shareholder loan from LuxCo 3 to the Issuer. See "*The Transactions*."

(5) The Issuer and Bidco, as of the date of this offering memorandum, have no material assets or liabilities other than, in the case of the Issuer, its shareholding in Bidco, and have not engaged in any activities other than those related to its formation and the Transactions. On the Completion Date, Bidco will acquire all shares in the Target, which is also a holding company.

(6) On the Issue Date, the Notes will be senior obligations of the Issuer and rank *pari passu* in right of payment with any existing and future debt of the Issuer that is not expressly subordinated in rights of payment to the Notes. The Notes will be effectively subordinated to any existing or future indebtedness or obligation of the Issuer that is secured by property and assets that do not secure the Notes or that is secured on a first-priority basis over property and assets that secure the Notes on a second-priority basis (including obligations under the Senior Facilities Agreement and certain hedging obligations), to the extent of the value of the property and assets securing such indebtedness or obligations and will be structurally subordinated to any existing and future indebtedness of the subsidiaries of the Issuer that do not guarantee the Notes, including their trade creditors. On the Issue Date, the Notes will be secured by (i) a first-ranking pledge over all shares in the Issuer, an assignment of the Shareholder Loan and a pledge over the escrow account to which the gross proceeds of the offering of the Notes will be deposited on the Issue Date and (ii) second-ranking pledges over the material bank accounts of the Issuer and the blocked account in respect of the profit and loss transfer agreement and all shares in Bidco as well as an assignment of certain future intercompany receivables owed to the Issuer.

(7) On the Issue Date, the Notes will be guaranteed by Bidco on a senior subordinated basis. Subject to the Agreed Security Principles, on the earlier of (a) the date on which a Post-Completion Date Guarantor provides a guarantee of the Senior Facilities and (b) on or prior to a date falling 120 days after the Completion Date, the Notes will additionally be guaranteed on a senior subordinated basis by each Post-Completion Date Guarantor. Each Guarantee will be a general senior subordinated obligation of the relevant Guarantor, be subordinated in right of payment to any existing and future senior indebtedness of that Guarantor (including the Senior Credit Facilities and certain hedging obligations), rank *pari passu* in right of payment with all existing and future subordinated indebtedness of that Guarantor that is not subordinated in right of payment to the Guarantee of that Guarantor, rank senior in right of payment to all existing and future indebtedness of that Guarantor that is subordinated in right of payment to the Guarantee of that Guarantor, be effectively subordinated to any existing or future indebtedness of that Guarantor and its subsidiaries that is secured by property and assets that do not secure the Notes or its Guarantee or that is secured on a first-priority basis over property and assets that secure the Notes and such Guarantee on a second-priority basis (including obligations under the Senior Credit Facilities Agreement and certain hedging obligations), to the extent of the value of the property and assets securing such indebtedness and be structurally subordinated to any existing or future indebtedness of the subsidiaries of that Guarantor that do not guarantee the Notes, including their obligations to trade creditors. As of and for the twelve months ended September 30, 2017, the Post-Completion Date Guarantors (including the Target) accounted for 89.4% of the total consolidated assets, 82.8% of the consolidated revenue and 88.9% of the consolidated EBITDA of the Target Group. The validity and enforceability of the Guarantees and the security interests and the liability of each Guarantor under a Guarantee will be subject to the limitations described in "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Guarantees and Security Interests*." The Guarantees may be released without the consent of the holders of the Notes under certain circumstances.

(8) On the Issue Date, the gross proceeds from the offering of the Notes will be deposited into the Escrow Account with the Escrow Agent. The Escrow Account will be controlled by, and pledged on a first-priority basis in favor of, the Trustee on behalf of the holders of the Notes. Upon delivery to the Trustee and the Escrow Agent of an officer's certificate of the Issuer stating that the conditions to the release of the proceeds from escrow are satisfied, the escrowed proceeds will be released to the Issuer. The release of escrow proceeds will be subject to the satisfaction of certain conditions, including the Acquisition being completed promptly following the escrow release pursuant to the terms of the Acquisition Agreement. The consummation of the Acquisition pursuant to the Acquisition Agreement is subject to the satisfaction of certain conditions, including regulatory approvals. Under certain circumstances, including in case of a termination of the Acquisition Agreement or the Acquisition not being consummated by the Escrow Long Stop Date, the Issuer will be required to redeem the Notes at a mandatory special redemption price equal to the issue price of the Notes, plus accrued and unpaid interest to, but excluding, the mandatory special redemption date and additional amounts and premium, if any. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*."

(9) On or prior to the Issue Date, the Issuer and Bidco will enter into a Senior Facilities Agreement which will provide for a Term Loan Facility in a principal amount of €1,116.5 million, of which an amount up to the U.S. dollar equivalent of €150.0 million may be made available as a U.S. dollar tranche, and the Revolving Credit Facility in the aggregate principal amount of €75.0 million. As of the Completion Date, we expect to draw the full amount of the Term Loan Facility. While we do not currently expect to draw amounts under the Revolving Credit Facility as of the Completion Date, any changes in the estimated amounts necessary to consummate the Transactions may be funded through drawings under our Revolving Credit Facility. Within 120 days of the Completion Date, the Target and certain of its subsidiaries will become guarantors under the Senior Facilities. See "*Description of Certain Financing Arrangements—Senior Facilities Agreement*" for further information. The Senior Facilities will be secured by (i) first-ranking security over the Shared Collateral as defined in "*Summary—The Offering—Collateral*", and (ii) certain additional collateral that does not secure the Notes. We intend to establish a U.S. entity that would, following the Completion Date, become a borrower under the U.S. dollar-denominated tranche of the Term Loan Facility and a Guarantor of the Notes.

(10) The Issuer and Bidco intend to enter into a profit and loss pooling agreement, and Bidco intends to enter into a profit and loss pooling agreement with the Target on or after the Completion Date to create a consolidated tax group including the Issuer (as the top entity of the consolidated tax group), BidCo, the Target and certain (direct or indirect) subsidiaries of the Target. Pursuant to such profit and loss pooling agreements, any subsidiary must generally transfer its entire profits to its parent entity which in turn must compensate such subsidiary for any annual balance sheet loss. The profit and loss pooling agreements may be combined with a domination agreement.

THE OFFERING

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

Issuer	CTC BondCo GmbH
Notes Offered	€406,000,000 % Senior Notes due 2025
Issue Date	, 2017
Issue Price	%
Maturity Date	, 2025
Interest Rate	% per annum
Interest Payment Dates	Interest on the Notes is payable semi-annually in arrears on and of each year, commencing on , 2018. Interest on the Notes will accrue from the Issue Date.
Form and Denomination	The Notes will only be issued in fully registered form and in minimum denominations of €100,000 and integral multiples of €1,000 in excess thereof. Notes in denominations of less than €100,000 will not be available.
Guarantors	On the Issue Date, the Notes will be guaranteed on a senior-subordinated basis solely by Bidco, a wholly owned subsidiary of the Issuer. Subject to the Agreed Security Principles, on the earlier of (a) the date on which a Post-Completion Date Guarantor provides a guarantee of the Senior Facilities and (b) on or prior to a date falling 120 days after the Completion Date, the Notes will additionally be guaranteed on a senior subordinated basis by each Post-Completion Date Guarantor. The obligations of each Guarantor will be limited as described under "*Description of the Notes—Guarantees*." Each Guarantee will be subject to certain contractual and legal limitations. See "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Guarantees and Security Interests*." Each Guarantee will be subject to the terms of the Intercreditor Agreement, including certain exceptions, payment blockage, standstill and turnover provisions. See "*Description of Certain Financing Arrangements—Intercreditor Agreement*." Each Guarantee will be subject to release under certain circumstances. See "*Description of the Notes—Guarantees—Guarantee Release.*"
	As of and for the twelve months ended September 30, 2017, the Post-Completion Date Guarantors (including the Target) accounted for 89.4% of the consolidated total assets, 82.8% of the consolidated revenue and 88.9% of the consolidated EBITDA of the Target Group.
Ranking of the Notes and the Guarantees	The Notes will: • be general senior obligations of the Issuer; • 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 all 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 of the Issuer and its subsidiaries that is secured by property and assets that do not secure the Notes or that is secured on a first-priority basis over property and assets that secure the Notes on a second-priority basis (including obligations under the Senior Facilities Agreement and certain hedging obligations), to the extent of the value of the property and assets securing such obligation or indebtedness; and
- 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.

Each Guarantee will:

- be a general, senior subordinated obligation of the relevant Guarantor;
- be subordinated in right of payment to any existing and future senior indebtedness of that Guarantor, including the Senior Facilities and certain hedging obligations;
- rank *pari passu* in right of payment with all existing and future subordinated indebtedness of that Guarantor that is not subordinated in right of payment to the Guarantee of that Guarantor;
- rank senior in right of payment to all existing and future indebtedness of that Guarantor that is subordinated in right of payment to its Guarantee;
- be effectively subordinated to any existing or future indebtedness of that Guarantor and its subsidiaries that is secured by property or assets that do not secure the Notes and its Guarantee or that is secured on a first-priority basis over property and assets that secure the Notes and such Guarantee on a second-priority basis (including obligations under the Senior Facilities Agreement and certain hedging obligations), to the extent of the value of the property and assets securing such indebtedness; and
- be structurally subordinated to any existing or future indebtedness of the subsidiaries of that Guarantor that do not guarantee the Notes, including their obligations to trade creditors.

Collateral . . . . Subject to the Agreed Security Principles and certain perfection requirements, the Notes and the Guarantees will be secured on the Issue Date

- on a first-priority basis, by a pledge of the shares in the Issuer, an assignment of the Shareholder Loan (the "First-Priority Collateral"), a pledge over the escrow account to which the gross proceeds of the offering of the Notes will be deposited on the Issue Date; and
- on a second-priority basis, by a pledge of the material bank accounts of the Issuer and a pledge of the blocked account in respect of the profit and loss transfer agreement, an assignment of certain future intercompany receivables owed by Bidco to the Issuer and a pledge of the shares in Bidco (the "Shared Collateral").

The Shared Collateral will also secure the Senior Facilities and certain hedging obligations on a first-priority basis.

The First-Priority Collateral, the Shared Collateral and any and all other assets from time to time in which a Security Interest has been or will be granted pursuant to any security document to secure the obligations under the Indenture, the Notes and/or any Guarantee are collectively referred to as the "Collateral".

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 Guarantees and Security Interests,*" and "*Risk Factors—Risks Relating to the Notes.*"

The security interests may be released under certain circumstances. See "*Risk Factors—Risks Relating to the Notes—There are circumstances other than the repayment or discharge of the Notes under which the Collateral securing the Notes will be released automatically without your consent or the Trustees or the Security Agent obtaining your further consent*," "*Description of Certain Financing Arrangements—Intercreditor Agreement*," "*Description of the Notes—Security—Release of Liens.*"

Escrow of Proceeds; Special Mandatory Redemption . . . . Pending the consummation of the Acquisition, the gross proceeds from the offering of the Notes will be deposited into the Escrow Account with the Escrow Agent. The Escrow Account will be controlled by, and pledged on a first-priority basis in favor of, the Trustee in its capacity on behalf of the holders of the Notes. Upon delivery to the Trustee and the Escrow Agent of an officer's certificate of the Issuer stating that the conditions to the release of the proceeds from escrow are satisfied, the escrowed proceeds will be released to the Issuer and utilized as described in "*The Transactions*," "*Use of Proceeds*," and "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*." The release of escrow proceeds will be subject to the satisfaction of certain conditions, including the Acquisition being completed promptly following the escrow release pursuant to the terms of the Acquisition Agreement. The consummation of the Acquisition pursuant to the Acquisition Agreement is subject to the satisfaction of certain conditions, including regulatory approvals.

In the event that (a) the Completion Date does not take place on or prior to August 10, 2018, (b) BC Partners has announced their intention to abandon the Acquisition or the sellers under the Acquisition Agreement have announced that they have decided to sell the Target Group or any of its direct or indirect parent entities or significant subsidiaries to an entity other than the Sponsor or one or more of its affiliates, (c) the Issuer notifies the Trustee and the Escrow Agent that in its reasonable judgment the Acquisition will not be completed by August 10, 2018, (d) the Acquisition Agreement terminates at any time prior to August 10, 2018, (e) funds advised by BC Partners cease to beneficially own and control a majority of the issued and outstanding capital stock of the Issuer and Bidco, or (f) certain insolvency events or events of default occur on or prior to August 10, 2018, the Notes will be subject to a special mandatory redemption. The special mandatory redemption price will, in each case, be a price equal to 100% of the aggregate issue price of the relevant Notes plus accrued and unpaid interest and additional amounts, if any, from the Issue Date to the date of special mandatory redemption. The relevant escrow proceeds would be applied to pay for any such special mandatory redemption. The Sponsor will be required (subject to a cap) to fund the accrued and unpaid interest and additional amounts, if any, payable to holders of the relevant Notes in the event of a special mandatory redemption, pursuant to a shortfall agreement. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*," and "*Risk Factors—Risks Related to the Acquisition—If the conditions to the escrow are not satisfied, the Issuer will be required to redeem the Notes, which means that you may not obtain the return you expect on the Notes*."

Use of Proceeds . . . . The proceeds from the offering of the Notes, together with amounts borrowed under the Senior Facilities and the Equity Contribution, will be used to

	(i) finance the purchase price for the Acquisition, (ii) repay all amounts outstanding under the Existing Debt (including breakage costs and redemption premium payable associated therewith) and (iii) pay the costs, fees and expenses incurred in connection with the Transactions, including commitment, underwriting, arranging, placement, original issue discount, financial advisory, legal, accounting, ratings advisory and other transaction costs, including real estate transfer tax and professional fees. See "*The Transactions—The Financing*" and "*Use of Proceeds*."
Additional Amounts	Any payments made by the Issuer or any Guarantor with respect to the Notes 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 in respect of such payments after the withholding or deduction is not less than the amounts which 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	The Issuer may redeem all or part of the Notes on or after , 2020, at the relevant redemption price set forth under "*Description of the Notes—Optional Redemption*." Prior to , 2020, the Issuer may redeem all or part of the Notes by paying a "make whole" premium as described under "*Description of the Notes—Optional Redemption*." Additionally, at any time prior to , 2020, the Issuer may on one or more occasions redeem upon notice up to 40% of the original aggregate principal amount of the Notes using the net proceeds from certain equity offerings, at a redemption price equal to % of the principal amount of the Notes, plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the date of redemption; provided that (a) in each case the redemption takes place not later than 180 days after the closing of the related equity offering and (b) at least 60% of the original aggregate principal amount of the Notes remains outstanding after such redemption. See "*Description of the Notes—Optional Redemption*."
Optional Redemption for Tax Reasons . . .	In the event of certain developments affecting taxation that become effective after the Issue Date, the Issuer may redeem the Notes in whole, but not in part, at any time, 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	If (i) the Issuer experiences a change of control event or (ii) the Issuer ceases to own 100% of Bidco or any successor entity (excluding director's qualifying shares), the holders of the Notes will have the right to require the Issuer to offer to repurchase the Notes at a purchase price equal to 101% of their principal amount, plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the date of purchase. See "*Description of the Notes—Change of Control.*"
Tender Offers	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 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 Notes. See "*Description of the Notes—Optional Redemption.*"

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 its subsidiaries to pay dividends or make other payments to the Issuer; • engage in certain transactions with affiliates; • consolidate or merge with other entities; and • impair the security interests for the benefit of the holders of the Notes. Certain of the covenants will be suspended if and for as long as the Notes achieve investment-grade ratings. See "*Description of the Notes—Certain Covenants—Suspension of Covenants on Achievement of Investment Grade Status*." Each of the covenants in the Indenture will be subject to significant exceptions and qualifications. See "*Description of the Notes—Certain Covenants*."
U.S. Federal Income Tax Considerations	For a discussion of certain U.S. federal income tax considerations of an investment in the Notes, see "*Certain Tax Considerations—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.
Original Issue Discount	If the stated principal amount of the Notes exceeds their issue price by an amount greater than or equal to a statutorily defined *de minimis* amount, then the Notes will be considered to be issued with original issue discount ("OID") for U.S. federal income tax purposes. A U.S. Holder (as defined in "*Certain Tax Considerations—Certain U.S. Federal Income Tax Considerations*") generally will be required to include such OID in gross income as ordinary income as it accrues on a constant yield basis for U.S. federal income tax purposes, generally in advance of the receipt of the cash payments to which such OID is attributable and regardless of such U.S. Holder's regular method of accounting for U.S. federal income tax purposes. See "*Certain Tax Considerations—Certain U.S. Federal Income Tax Considerations*."
Transfer Restrictions	The Notes and the Guarantees have not been registered under the U.S. 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 "*Notice to Investors.*" 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 no existing 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 is no assurance that an active trading market will develop for the Notes.

Listing	Application will be made to The International Stock Exchange Authority Limited 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.
Governing Law	The Indenture and the Notes will be governed by the laws of the State of New York. Under the terms of the Indenture, the governing law of the Indenture and the Notes, the Notes may be amended with the consent of holders of at least a majority (50%) in principal amount of the Notes then outstanding. The Intercreditor Agreement and the Escrow Agreement will be governed by the laws of England and Wales. Each 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 and Registrar	Deutsche Bank Luxembourg S.A.
Listing Sponsor	Carey Olsen Corporate Finance Limited
Escrow Agent	Deutsche Bank AG, London Branch

SUMMARY CONSOLIDATED FINANCIAL AND OTHER INFORMATION

The following tables set forth our summary historical audited consolidated financial information and our summary unaudited interim condensed consolidated financial information for the periods and dates indicated.

The summary historical financial information as of September 30, 2017 and for the nine months ended September 30, 2016 and 2017 has been derived from our Interim Financial Statements or is based on the Group's accounting records or management reporting. The Interim Financial Statements have been prepared in accordance with IAS 34. Our historical financial information included in this offering memorandum as of and for the years ended December 31, 2014, 2015 and 2016 has been derived from the Audited Financial Statements or is based on the Group's accounting records or management reporting. The Audited Financial Statements have been prepared in accordance with IFRS as adopted in the EU and the additional requirements of German commercial law pursuant to Section 315a (1) German Commercial Code (HGB). The Interim Financial Statements have been prepared using the recognition and measurement principles consistent to those applied in the Audited Financial Statements. The results of operations for prior years are not necessarily indicative of the results to be expected for the full fiscal year or any future period. Interim financial results are not necessarily indicative of results for the full fiscal year or any future reporting period.

The summary unaudited consolidated financial information for the last twelve-month period (the "LTM Period") to September 30, 2017 has been calculated by adding the unaudited interim condensed consolidated financial information for the nine months ended September 30, 2017 and the historical financial information for the year ended December 31, 2016 and subtracting the unaudited interim condensed consolidated financial information for the nine months ended September 30, 2016. The financial information for the LTM Period to September 30, 2017 has not been audited or reviewed by our auditors, is not required by or presented in accordance with IFRS 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 a period or any future period or any financial position at any past or future date.

In the future, we expect to report our consolidated financial condition and results of operations at the level of the Issuer or Topco. The Issuer or Topco will account for the Acquisition using the acquisition method of accounting under IFRS. 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. Since the Acquisition has not been consummated as of the date of this offering memorandum, we have not identified the fair value of assets acquired and liabilities to be assumed at the date of the Acquisition. In accordance with IFRS, we have up to 12 months from the Completion Date to finalize the allocation of the purchase price.

The following tables include certain *pro forma* financial information for the LTM Period to September 30, 2017 on an adjusted basis to give *pro forma* effect to the financing of the Acquisition and the application of the proceeds therefrom, including consolidated financial data as adjusted to reflect the effect of the Transactions on our indebtedness as if the Transactions had occurred on September 30, 2017 and on interest expense as if the Transactions had occurred on October 1, 2016. The *pro forma* financial information as of and for the LTM Period to September 30, 2017 has been prepared for illustrative purposes only and does not represent what our actual indebtedness or interest expense would have been had the Transactions occurred on September 30, 2017, or October 1, 2016, respectively; nor does it purport to project our indebtedness or interest expense at any future date. The *pro forma* financial information as of and for LTM Period to September 30, 2017 has not been prepared in accordance with IFRS. Neither the assumptions underlying the pro forma adjustments nor the resulting *pro forma* financial information as of and for the LTM Period to September 30, 2017 have been audited or reviewed in accordance with any generally accepted auditing standards.

This information is only a summary and should be read in conjunction with "*Presentation of Financial Information*," "*Risk Factors*," "*Capitalization*," "*Selected Consolidated Financial Information*," "*Management's Discussion and Analysis of Financial Condition and Results of Operations*," "*The Transactions*," and our Interim Financial Statements and accompanying notes and our Audited Financial Statements and the accompanying notes appearing elsewhere in this offering memorandum, as well as the other financial information included elsewhere in this offering memorandum.

Summary Consolidated Income Statement Information

	Year Ended December 31,			Nine Months Ended September 30,		Last Twelve Months to September 30,
	2014	2015	2016	2016	2017	2017
				(€ million)		
Revenue	474.8	501.3	493.3	376.4	419.7	536.7
Cost of sales	293.5	300.0	294.9	224.7	236.7	306.9
Gross profit	**181.3**	**201.4**	**198.4**	**151.7**	**183.1**	**229.8**
Selling costs	78.9	86.8	91.5	70.4	60.9	82.0
Research and development costs	24.1	24.2	22.8	17.8	15.4	20.4
General administrative costs	18.9	21.1	22.2	16.3	16.7	22.6
Other income and expenses (-), net	2.0	0.4	(2.2)	(0.0)	1.8	(0.4)
Operating income	**61.5**	**69.7**	**59.7**	**47.1**	**91.9**	**104.5**
Interest income and other finance income	0.2	5.4	18.7	5.2	4.4	17.9
Interest expenses and other finance costs	94.1	81.7	73.6	53.8	57.9	77.7
Financial result	**(93.9)**	**(76.3)**	**(54.9)**	**(48.6)**	**(53.5)**	**(59.8)**
(Loss)/profit before income tax	**(32.4)**	**(6.6)**	**4.8**	**(1.4)**	**38.3**	**44.5**
Income tax benefit/(expense)	1.0	(7.7)	(10.0)	(6.0)	(13.9)	(17.9)
Net (loss)/profit for the period	**(31.4)**	**(14.3)**	**(5.2)**	**(7.5)**	**24.4**	**26.7**

Summary Consolidated Statement of Financial Position Information

	December 31,			September 30,
	2014	2015	2016	2017
		(€ million)		
Assets				
Goodwill	550.8	557.6	558.0	570.1
Other intangible assets	639.8	603.9	557.4	550.5
Property, plant and equipment	309.7	300.2	275.5	263.7
Other financial assets	30.0	56.4	72.5	11.4
Other assets	1.7	1.2	0.7	0.7
Deferred tax assets	2.9	1.1	0.9	1.2
Non-current assets	**1,534.8**	**1,520.4**	**1,464.9**	**1,397.6**
Inventories	67.9	75.1	76.9	86.8
Trade receivables	47.5	53.2	53.6	61.3
Financial receivables from affiliates	—	1.0	—	—
Income tax receivables	6.5	1.7	1.3	1.9
Other financial assets	3.3	8.5	12.4	27.4
Other assets	5.2	5.2	4.3	5.1
Cash and cash equivalents	62.2	86.5	124.6	17.0
Non-current assets held for sale	—	0.0	—	—
Current assets	**192.6**	**231.2**	**272.9**	**199.5**
Total assets	**1,727.5**	**1,751.6**	**1,737.9**	**1,597.2**
Equity and Liabilities				
Issued capital	0.0	0.0	0.0	0.0
Capital reserves	378.1	378.1	378.1	378.1
Accumulated losses	(95.7)	(103.2)	(119.4)	(92.7)
Accumulated other comprehensive income	2.7	9.4	10.6	1.7
Equity	**285.2**	**284.4**	**269.4**	**287.2**
Provisions for pension obligations	91.5	86.1	102.4	97.8
Other provisions	3.7	3.7	10.6	6.2
Financial liabilities to affiliates	133.5	144.6	98.0	54.2
Other liabilities	—	—	—	0.0
Financial liabilities to third parties	949.4	956.9	927.0	663.6
Deferred tax liabilities	173.3	167.3	156.3	146.9
Non-current liabilities	**1,351.4**	**1,358.5**	**1,294.3**	**968.8**
Other provisions	14.0	13.1	16.4	19.5
Provisions for taxes	0.1	2.4	2.8	10.1
Financial liabilities to affiliates	—	—	56.4	—
Financial liabilities to third parties	40.8	55.0	62.5	274.4
Trade payables	22.4	24.4	22.4	23.6
Liabilities to affiliates	—	—	0.2	0.1
Other liabilities	13.6	13.9	13.5	13.6
Current liabilities	**90.9**	**108.7**	**174.2**	**341.2**
Total liabilities	**1,442.3**	**1,467.2**	**1,468.5**	**1,310.0**
Total equity and liabilities	**1,727.5**	**1,751.6**	**1,737.9**	**1,597.2**

Summary Consolidated Statement of Cash Flows Information

	Year Ended December 31,			Nine Months Ended September 30,		Last Twelve Months to September 30,
	2014	2015	2016	2016	2017	2017
	(€ million)					
Cash flow from operating activities	130.0	135.5	138.0	101.7	113.8	150.1
Cash flow from investing activities	(45.3)	(37.5)	(15.2)	(10.7)	(67.1)(1)	(71.7)(1)
Cash flow from financing activities	(89.8)	(74.0)	(84.2)	(68.8)	(153.3)(2)	(168.7)(2)
Change in cash and cash equivalents	**(5.1)**	**24.0**	**38.6**	**22.3**	**(106.6)**	**(90.3)**
Net foreign exchange difference	0.4	0.2	(0.4)	(0.5)	(0.9)	(0.9)
Cash and cash equivalents at the beginning of the period	67.0	62.2	86.5	86.5	124.6	108.3
Cash and cash equivalents at the end of the period	**62.2**	**86.5**	**124.6**	**108.3**	**17.0**	**17.0**

(1) Includes the purchase price payment of €55.5 million for assets, net of liabilities, for the UK electro-ceramics business of Morgan Advanced Materials plc, which comprised two manufacturing sites.

(2) Includes debt service payments (interest payments and partial repayment of principal) of €105.4 million relating to the Existing Shareholder Loan.

Other Unaudited Financial and Operating Data

	Year Ended December 31,			Nine Months Ended September 30,		Last Twelve Months to September 30,
	2014	2015	2016	2016	2017	2017
	(€ million, unless otherwise stated)					
Revenue Medical Products	177.6	182.7	185.6	141.8	155.2	198.9
Revenue Industrial	297.2	318.6	307.8	234.6	264.5	337.7
Total Revenue	474.8	501.3	493.3	376.4	419.7	536.7
EBITDA(1)	150.8	154.3	145.7	110.0	154.6	190.3
Management Adjusted EBITDA(1)	154.1	164.2	171.4	130.0	158.5	199.9
Management Adjusted EBITDA margin (%)(2)	32.4	32.7	34.7	34.5	37.8	37.3
Pro Forma Adjusted EBITDA(1)						207.9
Pro Forma Adjusted EBITDA margin (%)(2)						38.7
Capital Expenditures (net)(3)	46.3(5)	26.6	14.6	8.7	14.3	20.2
Cash Conversion Ratio (%)(4)	70.0	83.7	91.5	93.3	91.0	89.9
Number of our units sold (ball-heads and inserts) (in thousands)	1,259	1,291	1,368	1,039	1,161	1,490
Adjusted Cost of sales(5)	237.0	248.7	238.6	182.3	196.4	252.8
Adjusted Gross profit(5)	237.8	252.6	254.7	194.1	223.3	283.9
Adjusted Selling costs(5)	47.8	49.9	47.4	36.9	36.6	47.2
Adjusted Research and development costs(5)	21.9	22.4	19.9	15.4	13.8	18.3
Adjusted General administrative costs(5)	14.5	16.4	16.3	12.1	14.3	18.5
Adjusted Other income and expenses (-), net(5)	0.5	0.2	0.3	0.2	(0.1)	(0.0)

(1) We define EBITDA as net profit for the period before taxes on income, financial result and depreciation and amortization. We define Management Adjusted EBITDA as EBITDA, adjusted for certain costs and expenses which our management considers exceptional or non-recurring, as set forth below. We define Pro Forma Adjusted EBITDA as Management Adjusted EBITDA, adjusted for certain one-off and pro forma adjustments and expected cost savings identified by us and the Sponsor, as set forth below.

EBITDA, Management Adjusted EBITDA and Pro Forma Adjusted EBITDA and the related ratio data 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 Non-IFRS 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. Because of these and other limitations, EBITDA, Management Adjusted EBITDA and Pro Forma Adjusted EBITDA should not be considered in isolation or as a substitute for performance measures calculated in accordance with IFRS. You should compensate for these limitations by relying primarily on our consolidated financial statements and using these Non-IFRS Measures only supplementally 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 EBITDA, Management Adjusted EBITDA and Pro Forma Adjusted EBITDA should not be construed as an inference that our future results will be unaffected by unusual or non-recurring items. For additional information regarding EBITDA, Management Adjusted EBITDA and Pro Forma Adjusted EBITDA 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 net profit/(loss) to EBITDA, Management Adjusted EBITDA and Pro Forma Adjusted EBITDA for each of the periods presented:

	Year Ended December 31,			Nine Months Ended September 30,		Last Twelve Months to September 30,
	2014	2015	2016	2016	2017	2017
	(€ million)					
Net (loss)/profit	**(31.4)**	**(14.3)**	**(5.2)**	**(7.5)**	**24.4**	**26.7**
Income tax	(1.0)	7.7	10.0	6.0	13.9	17.9
Financial result	93.9	76.3	54.9	48.6	53.5	59.8
Depreciation and amortization	89.2	84.6	86.0	62.8	62.7	85.9
EBITDA	**150.8**	**154.3**	**145.7**	**110.0**	**154.6**	**190.3**
Restructuring costs[(a)]	4.6	1.2	3.3	2.5	2.2	3.0
Other non-recurring[(b)]	2.0	10.2	16.0	11.9	0.5	4.6
Foreign exchange conversion effects[(c)]	(1.8)	(2.0)	—	0.3	(0.1)	(0.4)
Additional contributions and release of provisions related to pensions[(d)]	(1.8)	(0.4)	5.3	5.3	—	—
Acquisition costs[(e)]	0.5	0.9	1.2	—	1.3	2.5
Management Adjusted EBITDA	**154.1**	**164.2**	**171.4**[(f)]	**130.0**	**158.5**[(f)]	**199.9**
Medical Products adjustments[(g)]						0.7
Industrial adjustments[(g)]						3.8
Adjustments for Acquisition of UK electro-ceramics business[(g)]						3.5
Pro Forma Adjusted EBITDA[(g)]						**207.9**

(a) Restructuring costs in 2014 reflect closing costs and severance payments for the reduction of staff in three subsidiaries of the Target (closure of production facility at CeramTec UK Ltd. and Durawear Corp. as well as the reduction of staff at CeramTec-ETEC GmbH). Restructuring costs in 2015 refer to severance payments for the reduction of staff at CeramTec-ETEC GmbH and CeramTec UK. Restructuring costs in 2016 mainly comprise severance payments for the reduction of staff at CeramTec GmbH and for management changes at CeramTec Service GmbH. Restructuring costs in the nine months ended September 30, 2017 mainly comprise costs related to our ODIN and SCORE projects, which were productivity initiatives undertaken in our Medical Products and Industrial businesses, respectively.

(b) Represents non-recurring consulting and litigation expenses, mainly related to a patent lawsuit, which was dismissed in 2017, and to a series of legal proceedings against C5 and Metoxit in relation to intellectual property rights.

(c) Represents certain unusual costs related to foreign exchange conversion effects that are accounted for in our operating income.

(d) For 2014, represents the release of pension related items in accordance to the Dynamit Nobel pension solvability plan. For 2016 and the nine months ended September 30, 2016 represents expenses relating to the Target Group's 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.

(e) Acquisition costs in 2014 and 2015 represent costs related to the acquisition of DAI Ceramics, Inc. by the Target Group. Acquisition costs in 2016, the nine months ended September 30, 2017 and the LTM Period to September 30, 2017, represent costs related to the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc, which the Target Group completed in April 2017.

(f) Management Adjusted EBITDA includes €4.0 million of expenses for jubilee provisions for the year ended December 31, 2016 and €4.1 million of income from the release of the same provision for the nine months ended September 30, 2017. The provision was booked in December 2016 and released in June 2017, reflecting the negotiated agreement with German workforce representatives. Had the provision not been booked, our Management Adjusted EBITDA would have been €175.4 million in the year ended December 31, 2016 and €154.4 million for the nine months ended September 30, 2017. The booking and release of the provision had no effect on the Management Adjusted EBITDA for the LTM Period to September 30, 2017.

(g) Pro Forma Adjusted EBITDA represents Management Adjusted EBITDA, adjusted for certain adjustments and expected cost savings identified by us and the Sponsor.

This presentation of Pro Forma Adjusted EBITDA is for informational purposes only. Pro Forma Adjusted EBITDA does not represent the results we would have achieved had each of the items above for which an adjustment is made occurred on or prior to October 1, 2016. Pro Forma Adjusted EBITDA is included in this offering memorandum because we believe that it provides a useful measure of our results of operations after giving effect to the Transactions and the initiatives described below; however, these numbers have not been, and cannot be, audited, reviewed or verified by any independent accounting firm, and this information does not constitute a measure of financial performance under IFRS. You should not consider Pro Forma Adjusted EBITDA as an alternative to net income or any other performance measure derived in accordance with IFRS or as a measure of our results of operations or liquidity. Other companies, including those in our industry, may calculate a similarly-titled financial measure differently from us, and so the presentation of such financial measures may not be comparable to other similarly titled measures of other companies. See also "*Presentation of Financial Information*."

	For the Last Twelve Months to September 30, 2017
	(€ million)
Medical Products	
Implemented price initiatives(i)	0.1
ODIN productivity initiative and consulting expenses(ii)	0.5
Product equipment relocation(iii)	0.1
Total (Medical Products)	**0.7**
Industrial	
Transparent ceramics start-up(iv)	2.7
SCORE—Industrial business simplification initiative(v)	1.0
MF carrier tape(vi)	0.1
Total (Industrial)	**3.8**
Acquisition of UK electro-ceramics business(vii)	**3.5**
Total	**8.0**

(i) Represents the estimated run-rate increase in Management Adjusted EBITDA after giving full year effect to contractual price changes in our Medical Product business that were implemented in June 2017.

(ii) Represents the estimated run-rate increase in Management Adjusted EBITDA after giving full year effect to the following productivity initiatives: (1) changes in the setup of production that were fully implemented in the second quarter of 2017 resulting in, for example, reduced raw material use that corresponded with reduced processing scrap and (2) changes in the organization of personnel as well as the introduction of productivity incentives in the second quarter of 2017, resulting in increased personnel productivity at our Plochingen facility, as well as one-off external consulting and support costs for implementation of such initiatives at our Plochingen facility.

(iii) Represents one-off costs related to the move within certain of our manufacturing facilities of injection molding equipment during the LTM Period to September 30, 2017.

(iv) Represents production ramp-up (in particular higher material costs and the reversal of the negative contribution of fixed manufacturing costs, in each case compared to our expected material and fixed manufacturing costs following completion of the ramp-up phase), R&D and selling and administrative costs related to the start-up of our transparent ceramics business.

(v) Represents the estimated run-rate increase in Management Adjusted EBITDA after giving full year effect to cost savings mainly related to the reduction of personnel implemented during the first to third quarter of 2017 as part of the ongoing simplification and standardization of the Industrial business.

(vi) Represents additional one-off costs incurred for the purchase of carrier tape required in the production of piezo tapes due to a change of a supplier's specification.

(vii) Represents the EBITDA of the UK electro-ceramics business of Morgan Advanced Materials plc from October 1, 2016 to April 2, 2017. The adjustment has been derived from the management accounts of Morgan Advanced Materials plc which are based on IFRS, in order to give estimated full year effect to the acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc had we completed the acquisition on October 1, 2016. This information does not purport to present the actual EBITDA or Management Adjusted EBITDA we would have achieved had the acquisition actually occurred on October 1, 2016. The historical EBITDA of the UK electro-ceramics business of Morgan Advanced Materials plc may not be representative of the EBITDA of such business following its acquisition by us and any deviation may be material.

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

(3) Capital expenditures (net) are the sum of additions to intangible assets and additions to property, plant & equipment, net of government grants. The following table shows the calculation of Capital expenditures (net):

	Year Ended December 31,			Nine Months Ended September 30,		Twelve Months Ended September 30,
	2014	2015	2016	2016	2017	2017
	(€ million)					
Additions to intangible assets	1.4	1.1	0.7	0.3	0.5	0.8
Additions to property, plant & equipment	48.0	26.7	13.9	8.2	13.8	19.4
Capital expenditures (gross)	**49.4**	**27.8**	**14.5**	**8.5**	**14.3**	**20.2**
Government grants	(3.0)	(1.3)	0.1	0.1	0.0	0.0
Capital expenditures (net)	**46.3**	**26.6**	**14.6**	**8.7**	**14.3**	**20.2**

(4) Cash Conversion Ratio is defined as (i) Management Adjusted EBITDA minus Capital Expenditures (net), divided by (ii) Management Adjusted EBITDA. The following table shows the calculation of Cash Conversion Ratio:

	Year Ended December 31,			Nine Months Ended September 30,		Last Twelve Months to September 30,
	2014	**2015**	**2016**	**2016**	**2017**	**2017**
	(€ million, except for ratios)					
Management Adjusted EBITDA	154.1	164.2	171.4	130.0	158.5	199.9
Capital Expenditures (net)	46.3[a]	26.6[a]	14.6[a]	8.7	14.3	20.2
Cash Conversion Ratio (%)	**70.0**	**83.7**	**91.5**	**93.3**	**91.0**	**89.9**

(a) Includes capital expenditures in the amount of €21.0 million (2014: €17.7 million, 2015: €3.2 million, 2016: €0.1 million) related to the Medical Products capacity expansion in Marktredwitz.

(5) 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 supplementally 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.

	Year Ended December 31,			Nine Months Ended September 30,		Last Twelve Months to September 30,
	2014	2015	2016	2016	2017	2017
				(€ million)		
Revenue	474.8	501.3	493.3	376.4	419.7	536.7
Cost of sales	(293.5)	(300.0)	(294.9)	(224.7)	(236.7)	(306.9)
thereof Depreciation and amortization	55.5	50.4	49.9	37.8	37.3	49.4
thereof Restructuring costs[(a)]	1.0	—	1.7	0.9	1.7	2.5
thereof Other non-recurring[(b)]	—	0.6	1.0	—	1.3	2.3
thereof Foreign exchange conversion effects[(c)]	—	—	—	—	—	—
thereof Additional contributions and release of provisions related to pensions[(d)]	—	—	3.7	3.7	—	—
thereof Acquisition costs[(e)]	—	0.2	—	—	—	—
Adjusted Cost of sales	**(237.0)**	**(248.7)**	**(238.6)**	**(182.3)**	**(196.4)**	**(252.8)**
Adjusted Gross profit	**237.8**	**252.6**	**254.7**	**194.1**	**223.3**	**283.9**
Selling costs	(78.9)	(86.8)	(91.5)	(70.4)	(60.9)	(82.0)
thereof Depreciation and amortization	29.2	29.9	30.0	22.4	22.8	30.4
thereof Restructuring costs[(a)]	—	—	0.5	0.3	0.4	0.5
thereof Other non-recurring[(b)]	1.9	7.0	13.0	10.3	1.1	3.8
thereof Foreign exchange conversion effects[(c)]	—	—	—	—	—	—
thereof Additional contributions and release of provisions related to pensions[(d)]	—	—	0.6	0.6	—	0.0
thereof Acquisition costs[(e)]	—	—	—	—	—	—
Adjusted Selling costs	**(47.8)**	**(49.9)**	**(47.4)**	**(36.9)**	**(36.6)**	**(47.2)**
Research and development costs	(24.1)	(24.2)	(22.8)	(17.8)	(15.4)	(20.4)
thereof Depreciation and amortization	2.0	1.9	2.0	1.5	1.4	1.9
thereof Restructuring costs[(a)]	0.1	—	0.4	0.4	0.2	0.2
thereof Other non-recurring[(b)]	—	—	—	—	—	0.0
thereof Foreign exchange conversion effects[(c)]	—	—	—	—	—	—
thereof Additional contributions and release of provisions related to pensions[(d)]	—	—	0.6	0.6	—	0.0
thereof Acquisition costs[(e)]	—	—	—	—	—	—
Adjusted Research and development costs	**(21.9)**	**(22.4)**	**(19.9)**	**(15.4)**	**(13.8)**	**(18.3)**
General administrative costs	(18.9)	(21.1)	(22.2)	(16.3)	(16.7)	(22.5)
thereof Depreciation and amortization	2.1	1.6	1.6	1.2	1.2	1.6
thereof Restructuring costs[(a)]	1.7	0.5	0.6	0.9	0.0	(0.3)
thereof Other non-recurring[(b)]	0.1	2.5	2.1	1.7	1.2	1.5
thereof Foreign exchange conversion effects[(c)]	—	—	—	—	—	—
thereof Additional contributions and release of provisions related to pensions[(d)]	—	—	0.4	0.4	—	0.0
thereof Acquisition costs[(e)]	0.5	—	1.2	—	—	—
Adjusted General administrative costs	**(14.5)**	**(16.4)**	**(16.3)**	**(12.1)**	**(14.3)**	**(18.5)**
Other income and expenses (-), net	2.0	0.4	(2.2)	(0.0)	1.8	(0.4)
thereof Depreciation and amortization	0.4	0.8	2.5	0.0	0.0	2.5
thereof Restructuring costs[(a)]	1.7	0.7	0.1	0.0		0.0
thereof Other non-recurring[(b)]	0.0	—	—	(0.1)	(3.2)	(3.1)
thereof Foreign exchange conversion effects[(c)]	(1.8)	(2.0)	(0.0)	0.3	(0.1)	(0.4)
thereof Additional contributions and release of provisions related to pensions[(d)]	(1.8)	(0.4)	—	—	—	0.0
thereof Acquisition costs[(e)]	—	0.6	—	—	1.3	1.3
Adjusted Other income and expenses (-), net	**0.5**	**0.2**	**0.3**	**0.2**	**(0.1)**	**(0.0)**
Operating income	**61.5**	**69.7**	**59.7**	**47.1**	**91.9**	**104.5**

(a) Restructuring costs in 2014 reflect closing costs and severance payments for the reduction of staff in three subsidiaries of the Target (closure of production facility at CeramTec UK Ltd. and Durawear Corp. as well as the reduction of staff at CeramTec-ETEC GmbH). Restructuring costs in 2015 refer to severance payments for the reduction of staff at CeramTec-ETEC GmbH and CeramTec UK. Restructuring costs in 2016 mainly comprise severance payments for the reduction of staff at CeramTec GmbH and for management changes at CeramTec Service GmbH. Restructuring costs in the nine months ended September 30, 2017 mainly comprise costs related to our ODIN and SCORE projects, which were productivity initiatives undertaken in our Medical Products and Industrial businesses, respectively.

(b) Represents non-recurring consulting and litigation expenses, mainly related to a patent lawsuit, which was dismissed in 2017, and to a series of legal proceedings against C5 and Metoxit in relation to intellectual property rights.

(c) Represents certain unusual costs related to foreign exchange conversion effects that are accounted for in our operating income.

(d) For 2014, represents the release of pension related items in accordance to the Dynamit Nobel pension solvability plan. For 2016 and the nine months ended September 30, 2016 represents expenses relating to the Target Group's 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.

(e) Acquisition costs in 2014 and 2015 represent costs related to the acquisition of DAI Ceramics, Inc. by the Target Group. Acquisition costs in 2016, the nine months ended September 30, 2017 and the LTM Period to September 30, 2017, represent costs related to the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc, which the Target Group completed in April 2017.

Unaudited Pro Forma As Adjusted Financial Information

	As of and for the Last Twelve Months to September 30, 2017
	(€million)
Pro forma as adjusted net third party senior secured indebtedness (period end)[(1)]	1,116.5
Pro forma as adjusted net third party indebtedness (period end)[(2)]	1,522.5
Pro forma as adjusted interest expense[(3)]	
Ratio of *pro forma as adjusted* net third party senior secured indebtedness to Pro Forma Adjusted EBITDA[(1)]	5.4x
Ratio of *pro forma as adjusted* net third party indebtedness to Pro Forma Adjusted EBITDA[(2)]	7.3x
Ratio of Pro Forma Adjusted EBITDA to *pro forma as adjusted* interest expense[(3)]	

(1) *Pro forma as adjusted* net third party senior secured indebtedness is defined as third party senior secured indebtedness minus cash and cash equivalents as adjusted for the Transactions, reflecting the amounts outstanding under the Term Loan Facility (euro equivalent), as if the Transactions had been completed as of September 30, 2017. See "*Capitalization*."

(2) *Pro forma as adjusted* net third party indebtedness is defined as third party indebtedness minus cash and cash equivalents as adjusted for the Transactions, reflecting the amounts outstanding under the Term Loan Facility and the principal amount of the Notes, as if the Transactions had been completed as of September 30, 2017. See "*Capitalization*."

(3) *Pro forma as adjusted* interest expense is defined as interest expense for the period from October 1, 2016 to September 30, 2017, as if the Transactions had been completed as of October 1, 2016 and consists of interest on the Term Loan Facility and the Notes as well as the commitment fees on our undrawn Revolving Credit Facility.

Revenue by Regions

	Year Ended December 31,			Nine Months Ended September 30,		Last Twelve Months to September 30,
	2014	2015	2016	2016	2017	2017
	(€ million)					
Europe (excluding Germany)	202.4	209.3	210.8	162.7	187.2	235.2
Germany	134.5	130.2	133.1	102.5	102.5	133.0
North America	68.8	83.5	73.0	54.3	62.8	81.5
Asia	55.8	62.7	61.4	45.0	54.2	70.5
Rest of World	13.4	15.5	15.1	11.8	13.1	16.4
Total revenue	**474.8**	**501.3**	**493.3**	**376.4**	**419.7**	**536.7**

Revenue by Business

We began implementing a comprehensive reorganization of our Industrial business in 2016 and 2017 in order to streamline our internal structure by bundling together similar clusters, aligning our marketing and sales team across the business, standardizing key processes and centralizing R&D know-how. As part of the reorganization, we began in the second fiscal quarter of 2017, to present revenue in our Industrial business by different clusters. As a result, the presentation of our revenue by cluster for the Industrial business for the years ended December 31, 2014, 2015 and 2016 is not comparable to the presentation for the nine months ended September 30, 2017.

The table below sets out our revenue by cluster for the years ended December 31, 2014, 2015 and 2016, including revenue attributable to our Industrial business along our historical clusters.

	Year Ended December 31,		
	2014	2015	2016
	(€ million)		
Medical Products(1)	**177.6**	**182.7**	**185.6**
Industrial(1)	**297.2**	**318.6**	**307.8**
thereof Multifunctional Ceramics	47.2	46.1	47.4
thereof Electronic Applications	46.9	53.2	49.6
thereof SPK Cutting Tools	38.8	39.9	38.8
thereof Mechanical Systems	36.0	35.8	34.8
thereof Mechanical Applications	23.3	21.8	21.3
thereof Other	150.6	172.9	164.3
Consolidation(2)	(45.5)	(51.1)	(48.5)
Total revenue	**474.8**	**501.3**	**493.3**

(1) The numbers presented for Medical Products and Industrial represent external revenue to third parties.

(2) The revenue presented for the individual units in Industrial includes internal revenue to Target Group companies. The line item "Consolidation" represents all internal revenue between the clusters listed under Industrial to show the amount by which the total revenue figure for Industrial has been reduced to account for such internal revenue. However, our management believes that revenue including internal sales for the clusters in our Industrial business provides a better description of trends in these clusters due to substantial internal revenue between our clusters in Industrial.

The table below sets out our revenue by cluster for the nine months ended September 30, 2016 and 2017, including revenue attributable to our Industrial business along our new clusters.

	Nine Months Ended September 30,	
	2016	2017
	(€ million)	
Medical Products(1)	**141.8**	**155.2**
Industrial(1)	**234.6**	**264.5**
thereof Specialty Applications	63.0	68.7
thereof Industrial Solutions	104.1	109.0
thereof CT North America	33.6	42.7
thereof Emil Müller Companies	18.1	16.4
thereof other units / consolidation(2)	15.8	27.7
Total revenue	**376.4**	**419.7**

(1) The numbers presented for Medical Products and Industrial represent external revenue to third parties.

(2) The revenue presented for the individual units in Industrial includes internal revenue to Target Group companies. The line item "other units / consolidation" includes all internal revenue between the clusters listed under "Industrial" to show the amount by which the total revenue figure for Industrial has been reduced to account for such internal revenue. However, our management believes that revenue including internal sales for our clusters in Industrial provides a better description of trends in these clusters due to substantial internal revenue between our clusters in Industrial.

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. 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.

Risks Relating to Our Business and Industry

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.

The majority of our EBITDA is derived from sales of our ceramic components for hip implant systems. In addition, a significant part of our growth in revenue and EBITDA in recent years has been due to growth in our Medical Products business. Because the market for hip joint implants is expected to grow steadily and due to high profit margins in this market, new competitors may aim to enter this market. For example in 2016, two of our competitors received FDA approval for their ceramic ball head products and these competitors may in the future gain market share in the U.S., Europe, Asia or elsewhere. We are also susceptible to changes in the market dynamics of the industry in which our Medical Products customers operate. For example, there may be further consolidation in the medical implant industry following the merger of Zimmer and Biomet 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 in our Medical Products business and for our Group overall. As a result, our results of operations, financial condition and cash flows could be materially and adversely affected.

We rely on a limited number of large customers, in particular in our Medical Products business, 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 our Medical Products business. The customer base for our hip joint implants is highly concentrated. In 2016, the top four Medical Products customers made up 56% of the business group's revenue and the top ten customers accounted for 79% of revenue. The four main orthopedic implant OEMs, Zimmer Biomet, DePuy, Smith & Nephew and Stryker together have a market share of more than 60% in the worldwide market for hip joint implant systems and customer concentration has further increased following the merger of Biomet and Zimmer in 2015. As a result, these main OEMs have considerable pricing power. For example, in 2015 and 2016 we faced pricing pressure as a result of the merger of Biomet and Zimmer, which resulted in uniform prices for the merged entity at the low end of previous prices. Any further 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 results of operations, financial condition and cash flows.

We maintain good and long-standing customer relationships with each of the top four 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 cash flows.

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. 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, our results of operations, financial condition and cash flows could be materially and adversely affected.

Some of 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, 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 passed 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 Directive. Compliance with these requirements entitles our customers to affix a CE mark to their medical devices verifying that the products meet EU safety, health or environmental requirements. As implantable devices for hip joint prostheses, 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". 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.

In addition, the EU legal framework for the commercialization of medical products has recently changed with the Medical Devices Regulation having come into force in April 2017, with transition periods ending in May 2020. This new regulation, inter alia, generally increases standards applicable to conformity assessment procedures and requires more stringent scrutiny by notified bodies when conducting audits. We are still evaluating the impact of the Medical Devices Regulation on our products and may need to incur additional costs and undertake increased efforts in order to continue to comply with this requirements in the future.

The FDA may take three years or longer to grant premarket approval of 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 financial position 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, our customers' hip joint prostheses systems have obtained premarket approval ("PMA") or premarket clearance (commonly referred to as the 510(k) process) 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 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 provide approval or clearance 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 results of operations, financial condition and cash flows.

Our medical products may cause or contribute to adverse medical events that our customers are required to report to the FDA. 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.

Some of our customers are subject to the FDA's medical device reporting regulations and similar national and international regulations, which require them to report to the FDA when they receive or become 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 any of our customers fail to comply with their reporting obligations, including as a result of our 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 their 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. However, this excise tax was subsequently suspended by the U.S. Congress for medical device sales during calendar years 2016 and 2017. Absent further Congressional action, this excise tax will be reinstated for medical device sales beginning January 1, 2018. 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. In addition, numerous proposals that would affect the U.S. healthcare system have recently been introduced in Congress, including material modifications to or repeal efforts of the Affordable Care Act. We cannot predict at this time the full impact of the ACA, or any U.S. legislation enacted in the future on our revenues, profit margins, operating cash flows and results of operations. We expect that government regulation and third-party coverage and reimbursement policies will continue to limit the amounts that federal and state governments and other third-party payors will pay for healthcare products, which could adversely impact our business, financial condition, results of operations and prospects.

Internationally, 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. We have been named as defendants in numerous 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.

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 automotive 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 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 approval 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, our results of operations, financial condition and cash flows could be materially and adversely affected.

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

With the exception of Medical Products, our business is generally significantly affected by changes in the overall global economy and, in particular, economic conditions in Europe. In 2016, our operations in Europe (Germany, France, Italy, Spain and the UK) together accounted for 69.7% of our total revenue, with Germany accounting for 27.0% of our total revenue. Following the credit crisis in 2008 and 2009 and the European sovereign debt crisis in 2012 and 2013, GDP growth in many of our main markets has remained subdued for an extended period of time and debt levels remain significantly higher than they were before 2008. Future developments are dependent upon a number of political and economic factors, including the effectiveness of measures by the European Commission and EU member states to address debt burdens of certain countries in Europe, the overall stability of the eurozone, the future relationship between the United Kingdom and the European Union and the future situation in Spain with respect to Catalonia's declaration of independence in October 2017.

In addition, the automotive, 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 automotive 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 results of operations, financial condition and cash flows.

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

Some of the industries and end markets into which we sell our products experience rapid technological change and product improvement. Manufacturers in the high performance ceramics business periodically introduce new generations of products or require new technological capacity to develop customized products. Our products could 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 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 PEEK inserts, surgeon preferences, or any other real or perceived issues related to Ceramic-on-Ceramic hip implants, such as audible squeaking. In the past several years a substantial part of our revenue was driven by components which were newly introduced to the market or modified for new customers. Revenue from products that were either newly developed and introduced, materially modified existing products or products modified for sale to a new customer less than five years before the relevant period represented approximately 25 to 30% of our total revenue in the last five years.

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.

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 several of our Industrial end markets.

Our Industrial business operates 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 automotive and several niche industrial end markets where product-oriented competition is acute. Various competitors such as 3M Company 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 manufacturing 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, South Korea, and the United Kingdom. Our products are also distributed, directly or indirectly, in more than 65 countries and we believe that underlying demand outside of Europe drives approximately 40% of our revenue. 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:

- political, social, economic, financial and market instability and volatility;
- 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 the inadequate protection of intellectual property rights or can jeopardize the enforcement of receivables and other claims;

- burdensome taxes and tariffs and other trade barriers;
- 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;
- 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 results of operations, financial condition and cash flows.

Price increases or interruptions in the supply of raw materials 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 any single-sourced raw material, such as lead oxide and titanium dioxide, and our risk management monitors critical suppliers, but there can be no guarantee 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.

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.

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

Energy purchases in 2016 constituted approximately 5% of our cost of sales. Energy prices have been volatile in the past and may increase in the future. 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 to increase over the coming years. Rising energy costs may increase our raw material 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 our complex manufacturing process may lead to production curtailment or shutdowns.

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. 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. In addition to such revenue losses, 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.

While we maintain product liability, property, business interruption 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. 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. Losses and liabilities from uninsured or underinsured events and delay in the payment of insurance proceeds could have a material adverse effect on our 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 extensive environmental, health and safety laws could require material expenditures or changes in our operations.

Our operations are subject to extensive environmental, health and safety laws and regulations at national, international and local levels in numerous jurisdictions. In addition, our production facilities and a number of our distribution centers 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 2016, our capital expenditures for safety, health and environmental matters were €1.3 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.

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 at two of our current facilities and one site formerly owned by us. As of December 31, 2016, we have provisions set up for environmental risks in the amount of €0.4 million. There can be no assurance that these provisions will be sufficient to fund our portion of any clean-up costs.

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, we have received subsidies from a public body in Germany in relation to the capacity expansion at our Marktredwitz facility. The subsidy amounted to €7.3 million in total, of which we received €6.1 million in 2014, €1.1 million in 2015 and €0.1 million in 2016, and was calculated by the relevant authority based on the expenditures undertaken by us in relation to the expansion project in Marktredwitz. The subsidy is subject to certain conditions, such as the creation and maintenance of a certain number of permanent jobs until the end of 2020. Prior to expiry of this period, we will be required to confirm in writing, that we have created and maintained the required number of permanent employees. If these and certain other conditions are not met, we could be required to repay the subsidies we have received. If we fail to meet the conditions for this or any other 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.

Our success depends significantly upon our ability to protect and preserve our intellectual property rights and technological know-how and expertise (including, in particular, in our Medical Products business). Though we have a large number of patents, we rely most heavily on our manufacturing expertise as a barrier to entry which is not a legally protected right. 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 2015 we have been involved in a series of legal proceedings against C5 and Metoxit 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. 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. Our inability to protect our intellectual property rights 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 results of operations, financial condition and cash flows 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 end market, 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 materially adversely affect our results of operations, financial condition and cash flows.

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

We are highly dependent on our senior management and key employees, including our scientific, technical and sales personnel. The loss of any senior manager or key employee may significantly delay or prevent the achievement of our product development or business objectives. 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. 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. 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. In addition, increasing demand for higher wages may make it difficult for us to retain the necessary personnel.

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 manufacturing 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 our Medical Products business and capacity utilization or production yield problems at either plant may significantly impact our results of operation.

We could face labor disputes with our employees, which would disrupt our business.

As of September 30, 2017, we had over 3,400 employees (FTE) worldwide, consisting of sales, technical, manufacturing, operations, supply chain and customer service personnel. This figure is exclusive of contract labor (*Leiharbeiter*) of which there are about 130 workers. Most of our 1,960 employees (FTE) as of September 30, 2017 in Germany are covered by labor agreements, including works agreements and a substantial number of our employees globally are also covered by labor agreements, including works agreements. In the future, we may be subject to potential union campaigns, work stoppages, union negotiations and other potential labor disputes. 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 or break down and disrupt operations. Further, we may be subject to work stoppages at our suppliers or customers that are beyond our control. Any of the preceding outcomes could impair our ability to manufacture products and result in increased costs and adversely affect our results or operations, financial condition and cash flow.

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.

Doing business on a worldwide basis requires us to comply with international, EU, U.S. 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”), 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 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 antikickback 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 antikickback 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, Germany recently enacted criminal statutes (Sec. 299a and 299b of the German Criminal Code, *StGB*) specifically addressing 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 have developed and in 2016 have started to roll out a group-wide compliance management system, which provides a structure to identify and mitigate potential compliance risks. However, the process of fully implementing this compliance management system is not yet completed. There can be no assurance that we will be successful in implementing our compliance management systems in the expected timeframe or that the policies and procedures, once implemented, will effectively prevent violations by our employees or representatives. Any failure to comply with applicable anti-corruption and similar laws or regulations could have a material adverse effect on our results of operations, financial condition and cash flows.

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. 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.

In our Industrial business, 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.

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 results of operations, financial condition and cash flows.

The result of the United Kingdom's withdrawal from the European Union may have a negative effect on our business.

The United Kingdom's initiation of the process to withdraw from the European Union pursuant to Article 50 of the Treaty on European Union following the national referendum in June 2016 ("Brexit"), has created significant uncertainty about the future relationship between the United Kingdom, one of our current markets, the EU and its remaining member states and may constitute an additional risk for the financial markets and the European economy. Brexit could, among other outcomes, significantly disrupt trade between the United Kingdom and the EU, cause political and economic instability in other countries of the EU, in which we operate, including in Germany, France, Italy and Spain, contribute to instability in global financial and foreign exchange markets, including volatility in the value of the euro and pound sterling. Brexit might also affect our ability to maintain the current level of sales in the United Kingdom. In the LTM Period to September 30, 2017, which does not yet fully take into account the effect of the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc, which we completed in April 2017, revenue from CeramTec UK would have accounted for €27.0 million, or 5% of our revenue. Given the lack of comparable precedent, it is unclear what financial, trade and legal implications Brexit will have and whether, and to what extent, our business might be affected.

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 software or hardware malfunctions, malicious hacking, physical damage to vital data centers and computer virus infection. 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, 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. 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.

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. 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 of this 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.

We may seek to grow through strategic acquisitions such as our acquisition of DAI Ceramics, Inc. in 2015 and Morgan Electro Ceramics in 2017. 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. Additionally, we may not achieve the benefits we anticipate when we first enter into a transaction in the amount or timeframe anticipated. 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, *inter alia*, 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, 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 Acquisition 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. 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, our results of operations, financial condition and cash flows may be materially adversely affected.

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 materially adversely affect our results of operations, financial condition and cash flows.

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

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, the German tax authorities are currently conducting a tax audit with respect to the periods from 2013 to 2015. We have recorded a provision in the amount of €2.3 million as of September 30, 2017, to cover the estimated risk related to the ongoing tax audit for the years from 2013 to 2015. 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.

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.

Any of the risks described above may have a material adverse effect on our business, financial condition and results of operations.

We handle personal data including, to a minor extent, sensitive patient 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 process sensitive personal consumer data (including, in certain instances, consumer names, addresses, and to a minor extent, patient health data) as part of our business, and therefore we are subject to and must comply with complex and evolving European, U.S. and other foreign laws and regulations regarding privacy, data protection and other related matters. These laws and rules 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. 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 and our customers and suppliers who carry out our outsourcing, have been in the past and could be in the future subject to breaches of security by hackers. A future breach of our system or that of one of our customers or outsourcing partners may subject us to material losses or liability, including fines, claims for unauthorized use of personal and sensitive data or other claims. A misuse of such data or a cybersecurity breach could harm our reputation, increase our operating expenses in order to correct the breaches or failures, expose us to uninsured liability, increase our risk of regulatory scrutiny, subject us to lawsuits, result in the imposition of material penalties and fines under any applicable international laws or regulations, and adversely affect our business and results of operations.

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 clients 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 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 20 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 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.

Risks Relating to the Acquisition

The Acquisition is subject to significant uncertainties and risks.

On October 10, 2017, Bidco entered into a sale and purchase agreement pursuant to which it will acquire from Cinven and its affiliates all shares in the Target. The consummation of the Acquisition pursuant to the Acquisition

Agreement is subject to the fulfilment or due waiver, as the case may be, of the condition precedent of the receipt of the approval of the acquisition by all relevant authorities, including regulatory approval of the Acquisition by the European Commission, submission of a written notice to and clearance by the Committee on Foreign Investment in the United States and the United States Federal Trade Commission or Department of Justice, and clearance by the German Federal Cartel Office and the German Federal Ministry of Economic Affairs and Technology. We will not consummate the Acquisition until the clearance process is complete. In addition, these regulatory bodies may choose to prevent the Acquisition from taking place. Alternatively, any of them may permit the Acquisition but demand that Bidco and the Target Group implement remedies. Accordingly, we may not be permitted to undertake the Acquisition in a timely fashion, without remedies, or at all. Any such remedies may make the Acquisition less attractive.

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

The Target and its subsidiaries are currently controlled by Cinven. Bidco will not obtain control of the Target and its subsidiaries until completion of the Acquisition. We cannot assure you that Cinven will operate the business of the Target Group during the interim period in the same way that we would. The information contained in this offering memorandum has been derived from public sources and, in the case of historical and forward-looking information relating to the Target and its subsidiaries, has been provided to us by Cinven, the Target and its subsidiaries, and we have relied on such information supplied to us in its preparation. Furthermore, the Transactions themselves have required, and will likely continue to require, substantial time and focus from management, which could adversely affect their ability to operate the business. Likewise, other employees may be uncomfortable with the Transactions or feel otherwise affected by it, which could have an impact on work quality and retention.

In addition, prior to the Completion Date, neither the Target nor any of its subsidiaries will be subject to the covenants described in "*Description of the Notes*" to be included in the Indenture. As such, we cannot assure you that, prior to such date, the Target or any of its subsidiaries will not take an action that would otherwise have been prohibited by the Indenture had those covenants been applicable.

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

If the conditions to the escrow are not satisfied, the Issuer will be required to redeem the Notes, which means that you may not obtain the return you expect on the Notes.

The gross proceeds from the Offering will be held in an escrow account pending the satisfaction of certain conditions, some of which are outside of our control. Completion of the Acquisition is one of the conditions for the release of the proceeds from the Offering of the Notes from escrow. If the Acquisition is not consummated for any reason on or prior to August 10, 2018 and, as a result, the proceeds from the sale of the Notes to be held in escrow are not released, the Issuer will be required to redeem the Notes pursuant to the terms of the special mandatory redemption provided under the Indenture, and you may not obtain the investment return you expect on the Notes. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*."

The escrow funds will be initially limited to the gross proceeds of the Offering of the Notes 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, from the Issue Date for the Notes to, but excluding, the date of special mandatory redemption. The Sponsor will be required to fund (subject to a cap) the accrued and unpaid interest and additional amounts, if any, owing to the holders of the Notes, pursuant to a shortfall agreement. There can be no assurance that the relevant Sponsor funds providing such shortfall agreement will have sufficient funds to make these payments.

Your decision to invest in the Notes is made at the time of purchase. Changes in the business or financial condition of the Target, or the terms of the Acquisition or the financing thereof between the closing of the Offering and the Completion 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 we do not satisfy the conditions precedent for utilization of our new Senior Facilities, we may be required to seek alternative sources of financing for the Acquisition.

While we will enter into the Senior Facilities Agreement and material documents related thereto (including the Intercreditor Agreement) on or prior to the Issue Date, there can be no assurance that we will satisfy the conditions precedent to utilization of the credit facilities made available under the Senior Facilities Agreement. If we do not meet the conditions precedent to utilization of our new Senior Facilities, we will need to seek alternative sources of financing to finance the Acquisition. We may be unable to find such alternative financing, and even if we could obtain alternative financing, it might not be on terms that are favorable or acceptable to us. Any alternative financing could be at higher interest rates and may require us to comply with more onerous covenants, restricting our business operations. This could make it difficult for us to implement our strategy and repay the Notes.

We may not be able to enforce the tax indemnity as well as representations and warranties provided to us, and we are exposed to the credit risk of the seller under the Acquisition Agreement.

In connection with the Acquisition, Faenza Luxembourg S.à r.l., the seller under the Acquisition Agreement, being an indirect subsidiary of Cinven, has provided us with certain representations and warranties, subject to certain limitations, and agreed to indemnify us, subject to certain limitations, for certain tax liabilities and we intend to enter into a warranty and indemnity insurance with an insurance provider (the "W&I Insurer") which covers these warranties and indemnities. Nonetheless, third parties could seek to hold us responsible for any of these liabilities, and there can be no assurance that we will be able to enforce our claims under the indemnities against the W&I Insurer. Moreover, even if we ultimately succeed in recovering any amounts for which we are held liable from the W&I Insurer, we may temporarily be required to bear these losses ourselves. Moreover, the representations and warranties and the tax indemnity as insured by the W&I Insurer may be subject to significant financial and other caps and limitations.

The Target Group may have liabilities that are not known to us.

The Target Group may have liabilities that we failed or were unable to discover in the course of performing due diligence investigations in connection with the Acquisition. We may learn of additional information about the Target Group that adversely affects us, such as unknown or contingent liabilities and issues relating to compliance with applicable laws and regulations. Any such liabilities, individually or in the aggregate, could have a material adverse effect on the business of the Target Group, or on the financial condition and results of operations of the Target Group and our ability to fulfill our obligations under the Notes and the Guarantees. In conducting our due diligence, we have been required to rely on resources available to us, including public information, information provided by the seller and third-party advisers (including in the preparation of the offering memorandum). There can be no assurance that the due diligence we have undertaken has revealed or highlighted all relevant facts necessary or helpful in evaluating the Acquisition.

Furthermore, there can be no assurance as to the adequacy or accuracy of information provided during the due diligence exercise or that such information will be accurate or remain accurate in the period from the conclusion of the due diligence exercise until the completion of the Acquisition. The due diligence process is inherently subjective. If the due diligence investigation failed to identify material information regarding the Acquisition, the Target may later be forced to write down or write off certain assets, significantly modify the business plan for the Target Group or incur impairment or other charges. Similarly, the materialization of certain risks, which may or may not be identified during due diligence, may lead to a loss of property, loss of value and, potentially, subsequent contractual and statutory liability to various parties.

We may not be able to realize the anticipated operational, commercial and R&D efficiencies and cost savings following the Acquisition.

The Sponsor intends to continue with the implementation of certain operational, commercial and R&D efficiency and cost saving measures. We may not be able to realize the anticipated efficiencies and savings targeted by these measures, either in the amount or within the timeframe that we currently anticipate, and the costs of achieving these measures may be higher than what we expect.

Our estimated efficiency gains and costs savings are forward-looking and therefore subject to a number of assumptions about the timing, execution and costs associated with realizing the underlying measures. Such assumptions are inherently uncertain and are subject to significant business, economic and competition risks and uncertainties. There can be no assurance that such assumptions will turn out to be correct. In addition, the effects of these measures may be offset by deterioration in the markets in which the Target Group operates, increases in other expenses or unrelated challenges in the business. As a result, the amount of efficiency gains and savings that we will actually realize and/or the timing of any such realization may differ significantly (and may be significantly lower or later) from the ones that we currently estimate and we may incur significant costs in realizing the Transactions and in reaching the estimated gains and savings.

Failure to achieve the expected efficiency gains and savings may result in a lower return on investment for the Acquisition, and could have a material adverse effect on our business and results of operations.

The Acquisition may entitle the Target Group's customers or other business partners of the Target Group to terminate their agreements as a result of change of control provisions.

The Acquisition may constitute a change of control under certain agreements entered into by the Target and its subsidiaries. The counterparties to such agreements 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.

We may need to recognize impairment charges related to goodwill, identified intangible assets and fixed assets.

We expect to have substantial balances of goodwill and identified intangible assets as a result of the Transactions. We are required to test goodwill and any other intangible asset with an indefinite life for possible impairment on the same date each year and on an interim basis if there are indicators of a possible impairment. We are also required to evaluate amortizable intangible assets and fixed assets for impairment if there are indicators of a possible impairment.

There is significant judgment required in the analysis of a potential impairment of goodwill, identified intangible assets and fixed assets. If, as a result of a general economic slowdown, deterioration in one or more of the markets in which we operate or impairment in our financial performance and/or future outlook, the estimated fair value of our long-lived assets decreases, we may determine that one or more of our long-lived assets is impaired. An impairment charge would be determined based on the estimated fair value of the assets and any such impairment charge could have a material adverse effect on our results of operations and financial position.

Risks Relating to the Notes

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

The obligations of the Guarantors under their respective Guarantees 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 debt of such Guarantor. This senior debt includes, in the case of Bidco, its obligations under the Term Loan Facility, the Revolving Credit Facility and certain hedging arrangements. Although the Indenture will contain restrictions on the ability of the Issuer and the Guarantors to incur additional debt, any additional debt incurred may be substantial and senior to the Guarantees.

Upon any payment or distribution to creditors of a Guarantor in respect of an insolvency event, the holders of senior 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 the Guarantees. Until the senior 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 debt of such Guarantor as their interests may appear. As a result, in the event of insolvency of a Guarantor, holders of senior debt of such Guarantor may recover more, ratably, than the holders of Notes, in respect of the Guarantees.

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

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

- that if a payment event of default on any senior debt of a Guarantor has occurred and is continuing, such Guarantor may not make any payment in respect of its Guarantee until such event of default is remedied or waived;

- that if any other event of default occurs and is continuing on any designated senior indebtedness that permits the holders thereof to accelerate its maturity and the Trustee receives a notice of such event of default, such Guarantor may not make any payment in respect of the Notes, or pursuant to its Guarantee (subject, in each case, to certain exceptions), until (amongst others) the earlier of the waiver or cure of such event of default and 179 days after the date on which the applicable payment blockage notice is delivered; and

- that the holders of the Notes and the Trustee are prohibited, without the prior consent of the Majority Senior Secured Creditors, the Majority Second Lien Creditors or (as applicable) the Majority Super Senior Creditors (each as defined in the Intercreditor Agreement), from taking any enforcement action in relation to the Guarantees, 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 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 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 Guarantees in the event of an event of default by the Issuer or a Guarantor.

Security over the Shared Collateral ranks behind the security benefiting the lenders under the Term Loan Facility, the lenders under the Revolving Credit Facility and the counterparties to certain hedging arrangements, and your rights to enforce your security over the Collateral are limited.

The Shared Collateral is pledged to the Security Agent for the benefit of the lenders and other finance parties under the Term Loan Facility, Revolving Credit Facility and the counterparties to certain hedging arrangements, as well as to the Security Agent for the benefit of holders of the Notes. Under the Intercreditor Agreement and the security documents, the Term Loan Facility and Revolving Credit Facility are secured by first-ranking security interests in all of the Shared Collateral and the proceeds of any sale of the Shared Collateral on enforcement will be applied first to repay all amount owing to the lenders and other finance parties under the Term Loan Facility and Revolving Credit Facility and certain hedging obligations. Consequently, you may not be able to recover on such Shared Collateral because the lenders and other finance parties under the Term Loan Facility and Revolving Credit Facility and the counterparties to certain hedging obligations 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 has been 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."* The Shared Collateral will also secure the Term Loan Facility, the Revolving Credit Facility and hedge counterparties to certain hedging arrangements on a first-ranking basis, and may secure additional debt ranking senior to or *pari passu* with the Notes and the Guarantees. Although the First-Priority Collateral secures the Notes and the Guarantees thereof on a first-priority basis and will not secure the Term Loan Facility and the Revolving Credit Facility, 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 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 (as defined in the Intercreditor Agreement) has occurred), followed by (or unless the Designation Date (as defined in the Intercreditor Agreement) has not occurred) any Lenders under the Term Loan Facility, among others, before repayment of the Notes and Guarantees. To the extent the claims of the holders of the Notes exceed the value of the Collateral securing the Notes and the Guarantees, those claims will generally rank equally with the claims of the holders of all other existing and future senior unsecured debt ranking *pari passu* with the Notes and the 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 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 Guarantees will not benefit from the assets securing such secured debt and will rank equally with the holders of other 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 or such secured debt.

In addition, the Guarantees will be limited as set forth under "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Notes Guarantees and Security Interests*," which limitations could be significant. See also "*—Corporate benefit, financial assistance laws, capital maintenance and other limitations on the Guarantees and the Collateral may adversely affect the validity and enforceability of the Guarantees and the Collateral.*"

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 relation to the Shared Collateral, only after the lenders under the Term Loan Facility, the Revolving Credit Facility and the counterparties to certain hedging arrangements 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, the transfer of our operations may require, in certain jurisdictions, governmental or other regulatory consents, approvals or filings. 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 the Issuer and Bidco pledged to secure the Notes and the 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, leaving 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 assets and a subordinated, unsecured claim against the Guarantors' remaining assets.

The Indenture also permits 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 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.

The granting of the 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 Guarantees and security interests to secure the Notes may create hardening or voidance periods for such 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 permits 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 Notes 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 Guarantees thereof or the Collateral across multiple jurisdictions may prove difficult.

The Issuer is organized under the laws of Germany; the Guarantors and security providers are organized under the laws of Germany, the United States and Luxembourg; the Collateral includes the shares of the Issuer and Bidco, incorporated under the laws of Germany, material bank accounts of the Issuer and certain present and future intercompany loan receivables and the Shareholder Loan owed 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 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 German Guarantors may be materially different from, or conflict 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 Guarantees and the security documents in these jurisdictions or limit any amounts that you may receive.

The security interests in the Collateral will be granted to the Security Agent rather than directly to the holders of the Notes. The ability of the Security Agent 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 Guarantees thereof will not be granted directly to the holders of the Notes but to the Security Agent, and thus the holders of the Notes will not have any independent power to enforce, or have recourse to, any of the assets secured by the security documents or to exercise any rights or powers arising under the security documents except through the Security Agent as 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 is subject to mandatory provisions of the laws of each jurisdiction in which security interests over the 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 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 Security Agent. Therefore, the holders of the Notes will bear the risk of insolvency or bankruptcy of the Security Agent. In addition, the Parallel Debt construct has not been tested under law in certain of these jurisdictions 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 Notes 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. The Trustee and the Security Agent will not 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 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 guarantees of the Notes 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.

Furthermore, under German law a secured party is, upon request by the relevant security grantor, obligated to release security if the realizable value of the security is significantly higher than the value of the obligations secured by such security.

Finally, if the secured obligations are exchanged, novated or terminated, a pledge or other accessory security interest created pursuant to a security document governed by German law might be released as a matter of German law.

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 Guarantees and the Security Interests, including fraudulent conveyance statutes, may adversely affect their validity and enforceability.

The Issuer is organized under the laws of Germany and the Guarantors and security providers are organized under the laws of Germany, the United States and Luxembourg. 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 is the jurisdiction where the registered office is situated. In addition, the Collateral will include a pledge over the shares the Issuer and Bidco, both incorporated under the laws of Germany, material bank accounts of the Issuer and assignments of certain intercompany receivables and the Shareholder Loan owed by the Issuer and Bidco.

The insolvency laws of foreign 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 Guarantee against a Guarantor and the enforceability of the Security Interests (as defined below). In certain circumstances the court may also void the Security Interest or the 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 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 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 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 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 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 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 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 Guarantees and the Collateral may adversely affect the validity and enforceability of the 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 Guarantees were issued or the Security Interests created, the Guarantor or security provider:

- issued such 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 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 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 Guarantee or Security Interest on the basis that the 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 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 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; or
- 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.

Although we believe that each of the Issuer, Bidco and the Target Group 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 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 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 Guarantees and Security Interests, see *"Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Notes Guarantees and Security Interests."*

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

The German Guarantors are organized under the laws of Germany. Enforcement of the obligations under a Guarantee against, and/or any Collateral provided by, any such German Guarantor will be subject to certain defenses available to the Issuer or the relevant German 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 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 German Guarantor or security provider under the applicable laws of each jurisdiction, to the extent that the granting of such Guarantee or Collateral is not in the relevant German Guarantor's or security provider's corporate interests, or the burden of such Guarantee or Collateral exceeds the benefit to the relevant German Guarantor or security provider, or such 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 of such subsidiary German Guarantor or security provider to contravene their fiduciary duties and incur civil or criminal liability.

In particular, enforcement of any such Guarantee or Collateral against the relevant German Guarantor or security provider would be subject to certain contractual limitations (so called "limitation language") contained in the Indenture (or any other document governing the Guarantees) and Security Documents, respectively, designed to ensure compliance with statutory requirements applicable to the relevant German Guarantor or security provider.

As a result, the Target's and any other German Guarantor's or security provider's liability under its 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 Guarantee or Collateral cannot be enforced at all. It is possible that a German 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 German Guarantor or security provider, may contest the validity and enforceability of the Guarantor's Guarantee or the security provider's Collateral on any of the above grounds and that the applicable court may determine that the Guarantee or Collateral should be limited or voided. To the extent that any limitations on the relevant 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 German Guarantor or security provider. Future Guarantees and Collateral may be subject to similar limitations.

An increase in the amount of debt that benefits from such Guarantee without a corresponding increase in the amount of the Guarantee will dilute the value of such Guarantee to its beneficiaries, including the holders of the Notes. See *"Description of the Notes—The Guarantees"* and *"Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Notes 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 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, to non-U.S. persons 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 *"Notice to Investors."*

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.

Interests in the global Notes will trade in book-entry form only, and Notes in definitive registered form, or Definitive Registered Notes (as defined below), 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 Clearstream will be the sole registered holder 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 Clearstream. 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, the Issuer 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 Clearstream, and if investors are not participants in Euroclear and Clearstream, 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 Clearstream. 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 Clearstream. The procedures to be implemented through Euroclear and 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.

The Notes and the Guarantees will be structurally subordinated to the claims of creditors, including depositors, trade creditors and preferred stockholders (if any), of our non-Guarantor subsidiaries.

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 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.

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

The Issuer and the German Guarantors are organized or incorporated outside the United States, and their business is substantially conducted outside the United States. The directors and executive officers of the Issuer and the German Guarantors are non-residents of, and substantially all of their assets are located outside of, the United States. Although the Issuer and the German Guarantors 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 and executive officers of the Issuer and such German Guarantors. In addition, as substantially all of the assets of the Issuer and the German Guarantors and their subsidiaries and those of their directors 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 Issuer and the German Guarantors 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 Issuer, the German Guarantors and the directors 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 Facilities Agreement and 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 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 relevant 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—General."*

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.

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 Issue Date, the Notes issued under the Indenture receive an investment grade rating of Baa3 or better by Moody's and BBB- or better by S&P, and no default or event of default has occurred and is continuing, then beginning that day and continuing until such time as the Notes are no longer rated investment grade by either ratings agency, certain covenants will cease to be applicable to the 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 Exchange.

Application will be made to The International Stock Exchange Authority Limited for the listing of and permission to deal in the Notes on the Official List of The International Stock Exchange (the "Exchange"). However, there can be no assurance that the Notes will become or remain listed. 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 Exchange does not imply that a public offering of any of the Notes in the Channel Islands 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 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.

You may face foreign currency exchange risks or other tax consequences as a result of investing in the Notes.

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. Investing in the Notes by U.S. investors may have other significant tax consequences. See *"Certain Tax Considerations—Certain U.S. Federal Income Tax Considerations."*

Noteholders subject to U.S. federal income tax may be required to recognize taxable income on the Notes prior to receipt of cash payments made on the Notes.

The Notes may be issued with original issue discount ("OID") for U.S. federal income tax purposes. Holders that are subject to U.S. federal income tax will generally be required to include OID in gross income on a constant yield to maturity basis in advance of the receipt of cash payment thereof regardless of such holders' regular method of tax accounting for such purposes. See "*Certain Tax Considerations—Certain United States Federal Income Tax Considerations*" for a further discussion of certain U.S. federal income tax considerations with respect to an investment in the Notes.

Risks Relating 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 Guarantees.

After completion of the Transactions, we will be highly leveraged and have significant debt service obligations. As of September 30, 2017, after giving *pro forma* effect to the Transactions, we would have had net third party indebtedness in the amount of €1,522.5 million, consisting of the Notes and the Term Loan Facility. We anticipate that our high leverage will continue to exist for the foreseeable future. See *"Capitalization," "Description of Certain Financing Arrangements," "Description of the Notes."*

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

- making it more difficult for the Issuer to satisfy its obligations with respect to the Notes, the Senior 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; and
- 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.

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 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 Target Group to be able to make payments on the Notes.

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. Given the Target 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 (primarily the Target Group) and the ability of each of those subsidiaries to declare dividends under applicable law. 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.

Various agreements governing our debt may restrict and, in some cases may actually prohibit, the ability of these subsidiaries to move cash within their restricted group. Applicable tax laws may also subject such payments to further taxation. Applicable law 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 its debt when due. The Target is organized under German law which provides that dividends generally may only be distributed out of current profits and distributable reserves. The subsidiaries of the Issuer that do not guarantee the Notes have no direct obligation to make payments with respect to the Notes or the Guarantees.

While the Indenture limits the ability of the Issuer's subsidiaries to incur consensual restrictions on its ability to pay dividends or make other intercompany payments, these limitations are subject to significant qualifications and exceptions, including exceptions for restrictions imposed by 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 have the ability to borrow up to €75.0 million under our Revolving Credit Facility, which will be secured by collateral, and the Senior Facilities Agreement and the Indenture also permit the incurrence of additional debt thereunder. The Indenture and the Senior Facilities Agreement 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 or secure the Notes, and other debt could be secured or could mature prior to the Notes. Although the Senior 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 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 Guarantees.

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 for 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 tax group (*Organschaft*) for corporate tax 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 carry-forward may be forfeited in part or in full in connection with certain measures, such as a detrimental change of the ownership structure. Upon closing of the Acquisition, certain German tax resident companies of the Target Group may forfeit their existing interest carry-forwards on the Completion Date. Furthermore, on June 20, 2016, the European Council adopted the Directive (EU) 2016/1164 laying down rules against tax avoidance practices that directly affect the functioning of the internal market (the "Anti-Tax Avoidance Directive"). Although the Anti-Tax Avoidance Directive contains certain anti-abuse measures, which all member states are required to apply against common forms of aggressive tax planning since January 1, 2017, its implementation in Germany does not affect the prevailing interest barrier rules, which have already been in line with the interest limitation concept provided for by the Anti-Tax Avoidance Directive. The restriction of the deductibility of interest expenses for tax purposes may have adverse consequences for our financial position and results of operations.

In addition, certain of our German subsidiaries have tax loss carry-forwards. The use of such existing tax loss carry-forwards as well as interest carry-forwards and current year losses for German corporate tax and trade tax purposes may be forfeited in case of a direct or indirect transfer of shares, subject to certain limited exceptions such as the availability of hidden reserves in the tax accounts. Such restriction, applying to both corporate tax 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 25% of the share capital or voting rights are transferred to such an acquirer, tax loss carry-forwards as well as interest carry-forwards and current losses will be forfeited on a *pro rata* basis while a transfer of more than 50% will result in total forfeiture.

The Federal Constitutional Court (*Bundesverfassungsgericht*), in a decision dated March 29, 2017, has held that the German tax loss forfeiture rules, which generally apply also to interest carry-forwards, in the versions effective from January 1, 2008 to December 31, 2015, violate the German Constitution (*Grundgesetz*) to the extent they stipulate a partial forfeiture of a company's current and carried-forward tax losses upon a transfer of more than 25% but up to 50% of its shares. According to the decision, the German legislator is required to amend by December 31, 2018 at the latest with retroactive effect the current tax loss forfeiture rules in respect of the aforementioned period and transfer of shares, so they are consistent with the German Constitution. The ruling of the Federal Constitutional Court remains silent on whether or not the loss expiry rules are compliant with the German Constitution to the extent more than 50% of the subscribed capital or voting rights are transferred. However, this question is dealt with in cases still pending with the Federal Fiscal Court (*Bundesfinanzhof*). Furthermore, the Federal Constitutional Court did not decide whether the tax loss forfeiture rules as applicable since 2016 comply with the constitutional principle of equality in light of the enactment of a new rule on a going concern tax loss carry forward. Therefore, it is currently unclear if and to what extent the pertinent tax loss forfeiture rules will be further amended by the German legislator.

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

We are subject to restrictive covenants that limit our operating and financial flexibility.

The Senior Facilities Agreement and the Indenture contain covenants which impose significant operating and financial restrictions on us. These agreements 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 are 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 Facilities Agreement requires us to comply with certain affirmative covenants while amounts under the Senior Facilities remain outstanding. Furthermore, under certain circumstances, the Revolving Credit Facility under the Senior Facilities Agreement requires us to comply with a financial ratio while amounts exceeding a certain threshold remain outstanding under the Revolving Credit Facility. See *"Description of Certain Financing Arrangements—Senior Facilities Agreement."* Our ability to meet the financial ratio under the Revolving Credit Facility 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 Facilities Agreement, including our failure to comply with the financial ratio under the Revolving Credit Facility, could result in an event of default under the Senior Facilities Agreement. Upon the acceleration of indebtedness with respect to any event of default by the creditors under our Senior Facilities Agreement, the relevant creditors could cancel the availability of the Senior Facilities and elect to declare all amounts outstanding under the Senior Facilities, together with accrued interest, immediately due and payable. In addition, a default under the Senior Facilities, including our failure to comply with the financial ratio under the Revolving Credit Facility, 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 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 Facilities and our obligations under the Notes, and to fund our ongoing operations or expansion plans, 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 synergies 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 Facilities. At the maturity of the Senior Facilities (including the Revolving Credit Facility, which matures two years before the Notes and the Term Loan Facility, which matures one year before the Notes), 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, the Indenture and the Senior 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.

Drawings under the Senior Facilities and any future variable interest rate debt we incur in the future will bear interest at floating rates that could rise significantly, thereby increasing our costs and reducing our cash flow.

A portion of our debt bears interest at a variable rate, and we will be exposed to the risk of fluctuations in interest rates, primarily under the Senior Facilities, which are based on the Euro Interbank Offered Rate (EURIBOR) and the London Interbank Offered Rate (LIBOR) plus an applicable margin. These interest 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. The Senior Facilities Agreement will contain a covenant requiring us to put in place interest rate hedging for a minimum amount of the indebtedness incurred pursuant that agreement (there will be no limit on over-hedging). The Indenture does not contain a covenant requiring us to hedge all or any portion of our floating rate debt.

Although we may enter into and maintain certain hedging arrangements designed to fix a portion of these rates, there can be no assurance that hedging will 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 interest rates were to rise significantly, our interest expense would correspondingly increase, thus reducing cash flow.

Following allegations of manipulation of LIBOR, a different measure of inter-bank lending rates, regulators and law enforcement agencies from a number of governments and the European Union are conducting investigations into whether the banks that contribute data in connection with the calculation of daily EURIBOR or the calculation of LIBOR may have been manipulating or attempting to manipulate EURIBOR and LIBOR. In addition, LIBOR, EURIBOR and other interest rates or other types of rates and indices which are deemed to be “benchmarks” are the subject of ongoing national and international regulatory reform, including the implementation of the IOSCO Principles for Financial Market Benchmarks (July 2013) and the new European regulation on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds, which entered into force on June 30, 2016. Following the implementation of any such reforms, the manner of administration of benchmarks may change, with the result that they may perform differently than in the past, or benchmarks could be eliminated entirely, or there could be other consequences which cannot be predicted. For example, on July 27, 2017, the UK Financial Conduct Authority announced that it will no longer persuade or compel banks to submit rates for the calculation of the LIBOR benchmark after 2021 (the “FCA Announcement”). The FCA Announcement indicates that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021. The potential elimination of the LIBOR benchmark or any other benchmark, changes in the manner of administration of any benchmark, or actions by regulators or law enforcement agencies could result in changes to the manner in which EURIBOR or LIBOR is determined, which could require an adjustment to the terms and conditions, or result in other consequences, in respect of any debt linked to such benchmark (including but not limited to the Senior Facilities whose interest rates are linked to LIBOR and EURIBOR). Any such change, as well as manipulative practices or the cessation thereof, may result in a sudden or prolonged increase in reported EURIBOR or LIBOR, which could have an adverse impact on our ability to service debt that bears interest at floating rates of interest.

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

The Sponsor, a consortium led by funds advised by BC Partners, indirectly owns the majority of the shares of the Issuer. As a result, our shareholders 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 shareholders. Our shareholders' 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 shareholders could vote to cause us to incur additional indebtedness. Our shareholders are in the business of making investments in companies and may acquire and hold interests in businesses that compete directly or indirectly with us. Our shareholders 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, our shareholders have held, hold or may hold interests in suppliers or customers of the Target Group. Our shareholders and their 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.

THE TRANSACTIONS

The Acquisition

On October 10, 2017, Bidco, an entity beneficially owned by a consortium led by funds advised by BC Partners, in which PSP Investments and Ontario Teachers also hold a stake (the “Sponsor”), entered into the Acquisition Agreement with Faenza Luxembourg S.à r.l. (the “Seller”) to acquire all the issued and outstanding capital stock of the Target (the “Acquisition”). The consummation of the Acquisition pursuant to the Acquisition Agreement is subject to the fulfilment or due waiver, as the case may be, of the condition precedent of the receipt of the approval of the Acquisition by all relevant authorities, including relevant merger control authorities as set out therein. If regulatory approvals are not obtained on or prior to July 10, 2018, or the actions to be undertaken at the scheduled date of consummation of the transaction are not conducted, the non-breaching party may withdraw from the Acquisition Agreement, unless such non-breaching party is solely responsible for the non-performance of the relevant closing action by the other party.

The Acquisition Agreement contains customary warranties given by the Seller as to capacity, title and certain disclosure matters as well as customary covenants given by the Seller regarding, among other things, the conduct of the business 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.

Bidco, a *Gesellschaft mit beschränkter Haftung* incorporated under the laws of Germany, is a wholly owned subsidiary of the Issuer, a *Gesellschaft mit beschränkter Haftung* incorporated under the laws of Germany. The Issuer, in turn, is a wholly owned subsidiary of CTC TopCo GmbH, a *Gesellschaft mit beschränkter Haftung* incorporated under the laws of Germany (“Topco”). Topco, in turn, is a wholly owned subsidiary of CTEC Acquisition S.à r.l., (“LuxCo3”), a *société à responsabilité limitée* incorporated under the laws of Luxembourg. LuxCo3, in turn, is a wholly owned subsidiary of CTEC Invest S.à r.l., (“LuxCo2”), a *société à responsabilité limitée* incorporated under the laws of Luxembourg. LuxCo2, in turn, is a wholly owned subsidiary of CTEC I S.à r.l., (“LuxCo1”), a *société à responsabilité limitée* incorporated under the laws of Luxembourg. Each of LuxCo1, LuxCo2, LuxCo3, Topco, Bidco and the Issuer were formed or acquired to facilitate the Transactions (as defined below).

The Financing

The total cash consideration for the Acquisition and repayment of the Existing Debt is expected to be €2,479.5 million. The Acquisition will be financed as follows:

- €1,040.8 million indirect cash contribution by the Sponsor (including through the Shareholder Loan) (the “Equity Contribution”);
- the Issuer will issue the Notes in the aggregate principal amount of €406.0 million; and
- Bidco will utilize the Term Loan Facility under the Senior Facilities Agreement in the aggregate principal amount of €1,116.5 million (equivalent) comprised of a euro-denominated tranche and a U.S. dollar-denominated tranche with an aggregate principal amount of up to €150.0 million (equivalent).

The proceeds from the financing described above will be used to (i) finance the purchase price for the Target shares pursuant to the Acquisition Agreement, (ii) repay all amounts outstanding under the Existing Debt, including the redemption premium payable on the Existing Notes and (iii) pay the costs, fees and expenses incurred in connection with the Transactions, including commitment, underwriting, arranging, placement, original issue discount, financial advisory, legal, accounting, ratings advisory and other transaction costs, including real estate transfer tax and professional fees (together, the “Financing”). The Acquisition and the Financing together are hereinafter referred to as the “Transactions”.

Pending the consummation of the Acquisition, the gross proceeds from the Offering of the Notes will be deposited into the Escrow Account in the name of the Issuer. The Escrow Account will be controlled by, and pledged on a first-priority basis in favor of, the Trustee on behalf of the holders of the Notes. The release of escrow proceeds is subject to the satisfaction of certain conditions, including the Acquisition being completed promptly following the escrow release pursuant to the terms of the Acquisition Agreement. If the Acquisition is not consummated on or prior to August 10, 2018 (the “Escrow Long Stop Date”), the Notes will be subject to a special mandatory redemption. The special mandatory redemption price will be a price equal to 100% of the aggregate issue price of the Notes plus accrued and unpaid interest and additional amounts, if any, from the relevant Issue Date to the date of special mandatory redemption. See “*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*.”

The estimated sources and uses for the Transactions are shown in the table below. Actual consideration paid on the Completion Date will vary due to factors such as the date of consummation of the Acquisition, changes in the level of cash on the Target’s balance sheet, the amount of accrued interest on the Target’s Existing Debt from June 30, 2017 up to the

Completion Date, any adjustments to the cash consideration paid pursuant to the Acquisition Agreement as of the Completion Date and differences from our estimates of fees and expenses and different termination values of the Existing Hedging Agreements. We may decide not to terminate some or all of our Existing Hedging Agreements. Any changes in these amounts may be funded through drawings under our Revolving Credit Facility or as an increase or decrease, as the case may be, in the amount of cash and cash equivalents on the Target's balance sheet used or retained in connection with the Transactions. This table should be read in conjunction with "*Capitalization*" and "*The Transactions*."

Sources of Funds	**(€ million)**	**Uses of Funds**	**(€ million)**
Notes offered hereby	406.0	Total cash consideration for the Acquisition and repayment of Existing Debt[3]	2,479.5
Term Loan Facility (equivalent)[1]	1,116.5	Estimated Transaction costs[4]	83.8
Equity Contribution[2]	1,040.8		
Total sources	**2,563.3**	**Total uses**	**2,563.3**

(1) On or prior to the Issue Date, the Issuer will enter into a Senior Facilities Agreement which will provide for up to €1,191.5 million (equivalent) of committed borrowings, including (i) a Term Loan Facility comprised of a euro-denominated tranche and an up to €150.0 million (equivalent) U.S. dollar-denominated tranche and (ii) a €75.0 million Revolving Credit Facility. See "*Description of Certain Financing Arrangements*." While we do not currently expect to draw amounts under the Revolving Credit Facility as of the Completion Date, any changes in the estimated amounts necessary to consummate the transactions may be funded through drawings under our Revolving Credit Facility.

(2) Represents the €1,040.8 million indirect cash contribution (including through the Shareholder Loan) by the Sponsor.

(3) Represents the sum of (i) the cash consideration to be paid for the shares in the Target, (ii) the aggregate principal amount of the Existing Debt (including the redemption premium payable on the Existing Notes and accrued interest as of June 30, 2017) and (iii) the termination value of the Existing Hedging Agreements, net of cash retained on balance sheet, assuming estimated €3.5 million of cash retained on the Target's balance sheet. Actual consideration paid on the Completion Date will vary due to factors such as the date of consummation of the Acquisition, changes in the level of cash on the Target's balance sheet, the amount of accrued interest on the Target's Existing Debt from June 30, 2017 up to the Completion Date, any adjustments to the cash consideration paid pursuant to the Acquisition Agreement as of the Completion Date and differences from our estimates of fees and expenses and different termination values of the Existing Hedging Agreements. We may decide not to terminate some or all of our Existing Hedging Agreements.

(4) Represents estimated costs, fees and expenses incurred in connection with the Transactions, including commitment, underwriting, arranging, placement, original issue discount, financial advisory, legal, accounting, ratings and other advisory fees and other transaction costs, including real estate transfer tax and professional fees. These fees and expenses have been estimated as of the date of this offering memorandum and are subject to change.

Post-Closing Reorganization

The Issuer and Bidco intend to enter into a profit and loss pooling agreement and Bidco intends to enter into a profit and loss pooling agreement with the Target on or after the Completion Date to create a consolidated tax group including the Issuer (as the top entity of the consolidated tax group), BidCo, the Target and certain (direct or indirect) subsidiaries of the Target. Pursuant to such profit and loss pooling agreements, any subsidiary must generally transfer its entire profits to its parent entity which in turn must compensate such subsidiary for any annual balance sheet loss. The profit and loss pooling agreements may be combined with a domination agreement.

It is envisaged that a newly established U.S. entity that will be a direct subsidiary of Bidco will accede to the Senior Facilities Agreement as a borrower under the Term Loan Facility (the "U.S. Borrower") prior to the date of first utilization of the Senior Facilities (the "Utilization Date") in order to be able to utilize the Term Loan Facility on such date. Upon such accession, the U.S. Borrower will also guarantee the Senior Facilities and grant security in accordance with the agreed security principles set out in the Senior Facilities Agreement. The U.S. Borrower will also then become a Guarantor of the Notes. We intend that a portion of the purchase price of the Acquisition equal to the amount of the Term Loan Facility utilized by the U.S. Borrower on the Utilization Date will be paid by the U.S. Borrower to the Seller on behalf of Bidco in connection with the Acquisition.

Following the Completion Date, we are considering having the U.S. Borrower acquire the shares of CeramTec Acquisition Corporation, the U.S. holding company of the Target's U.S. subsidiaries, from CeramTec Service GmbH. In addition, we may consider merging the Target and/or certain of the Target's subsidiaries with Bidco. Any such merger with Bidco will require Bidco to be the surviving entity. We may also consider merging the U.S. Borrower with certain U.S. subsidiaries of the Target. In any such merger, the U.S. Borrower will be required to be the surviving entity.

Furthermore, we are considering a debt pushdown of all or part of the Term Loan Facility into certain of the German and/or U.S. subsidiaries of Bidco.

USE OF PROCEEDS

We estimate that the gross proceeds of the offering of the Notes will be €406.0 million. The proceeds from the Offering, together with the proceeds from the Equity Contribution, borrowings under the Term Loan Facility and cash on Target statement of financial position, will be used to (i) finance the purchase price for the Acquisition, (ii) repay all amounts outstanding under the Existing Debt (including breakage costs and redemption premium payable associated therewith) and (iii) pay the costs, fees and expenses incurred in connection with the Transactions, including commitment, underwriting, arranging, placement, original issue discount, financial advisory, legal, accounting, ratings and other advisory and other transaction costs, including real estate transfer tax and professional fees.

Pending the consummation of the Acquisition, the gross proceeds from the Offering of the Notes will be deposited into the Escrow Account in the name of the Issuer. The Escrow Account will be controlled by the Trustee on behalf of the holders of the Notes. The release of escrow proceeds is subject to the satisfaction of certain conditions, including the Acquisition being completed promptly following the escrow release pursuant to the terms of the Acquisition Agreement. If the Acquisition is not consummated on or prior to August 10, 2018, the Notes will be subject to a special mandatory redemption. The special mandatory redemption price will be a price equal to 100% of the aggregate issue price of the Notes plus accrued and unpaid interest and additional amounts, if any, from the relevant Issue Date to the date of special mandatory redemption. See "*Description of the Notes—Escrow of Proceeds; Special Mandatory Redemption*."

The estimated sources and uses for the Transactions are shown in the table below. Actual consideration paid on the Completion Date will vary due to factors such as the date of consummation of the Acquisition, changes in the level of cash on the Target's balance sheet, the amount of accrued interest on the Target's Existing Debt from June 30, 2017 up to the Completion Date, any adjustments to the cash consideration paid pursuant to the Acquisition Agreement as of the Completion Date and differences from our estimates of fees and expenses and different termination values of the Existing Hedging Agreements. We may decide not to terminate some or all of our Existing Hedging Agreements. Any changes in these amounts may be funded through drawings under our Revolving Credit Facility or as an increase or decrease, as the case may be, in the amount of cash and cash equivalents on the Target's balance sheet used or retained in connection with the Transactions. This table should be read in conjunction with "*Capitalization*" and "*The Transactions*."

Sources of Funds	**(€ million)**	**Uses of Funds**	**(€ million)**
Notes offered hereby	406.0	Total cash consideration for the Acquisition and repayment of Existing Debt(3)	2,479.5
Term Loan Facility (equivalent)(1)	1,116.5	Estimated Transaction costs(4)	83.8
Equity Contribution(2)	1,040.8		
Total sources	**2,563.3**	**Total uses**	**2,563.3**

(1) On or prior to the Issue Date, the Issuer and Bidco will enter into a Senior Facilities Agreement which will provide for (i) a Term Loan Facility in a principal amount of €1,116.5 million of which an amount up to the U.S. dollar equivalent of €150.0 million may be made available as a U.S. dollar tranche and (ii) a €75.0 million Revolving Credit Facility. See "*Description of Certain Financing Arrangements*." While we do not currently expect to draw amounts under the Revolving Credit Facility as of the Completion Date, any changes in the estimated amounts necessary to consummate the Transactions may be funded through drawings under our Revolving Credit Facility.

(2) Represents the €1,040.8 million indirect cash contribution (including through the Shareholder Loan) by the Sponsor.

(3) Represents the sum of (i) the cash consideration to be paid for the shares in the Target, (ii) the aggregate principal amount of the Existing Debt (including the redemption premium payable on the Existing Notes and accrued interest as of June 30, 2017) and (iii) the termination value of the Existing Hedging Agreements, net of cash retained on balance sheet and assuming estimated €3.5 million of cash retained on the Target's balance sheet. Actual consideration paid on the Completion Date will vary due to factors such as the date of consummation of the Acquisition, changes in the level of cash on the Target's balance sheet, the amount of accrued interest on the Target's Existing Debt from June 30, 2017 up to the Completion Date, any adjustments to the cash consideration paid pursuant to the Acquisition Agreement as of the Completion Date and differences from our estimates of fees and expenses and different termination values of the Existing Hedging Agreements. We may decide not to terminate some or all of our Existing Hedging Agreements.

(4) Represents estimated costs, fees and expenses incurred in connection with the Transactions, including commitment, underwriting, arranging, placement, original issue discount, financial advisory, legal, accounting, ratings and other advisory fees and other transaction costs, including real estate transfer tax and professional fees. 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 consolidated cash and cash equivalents and the consolidated capitalization (i) of the Target as of September 30, 2017, on a historical basis and (ii) of the Issuer as adjusted to give effect to the completion of the Transactions (including the Offering) and the application of the proceeds therefrom as described in "*Use of Proceeds*", as if they had occurred on September 30, 2017. This table is subject to the various assumptions regarding amounts as set forth under "*Use of Proceeds*." The historical consolidated financial information has been derived from the Interim Financial Statements of the Target prepared on the basis of IFRS included elsewhere in this offering memorandum and the management accounts of the Target.

You should read this table in conjunction with "*The Transactions*," "*Use of Proceeds,*" "*Selected Consolidated Financial Information,*" "*Management's Discussion and Analysis of Financial Condition and Results of Operations,*" "*Description of Certain Financing Arrangements,*" "*Description of the Notes*" and our Financial Statements included elsewhere in this offering memorandum.

	As of September 30, 2017		
	CeramTec Holding GmbH		**CTC BondCo GmbH**
	Historical	**Adjustments**	**Adjusted**
		(€ million)	
Cash and cash equivalents[1]	17.0	(17.0)	—
Indebtedness:			
Existing Debt (equivalent)[2]	930.8	(930.8)	—
Term Loan Facility (equivalent)[3]	—	1,116.5	1,116.5
Notes offered hereby	—	406.0	406.0
Other third party financial liabilities[4]	3.5	—	3.5
Total third party indebtedness	**934.3**	**591.7**	**1,526.0**
Existing Shareholder Loan[5]	54.2	(54.2)	—
New Shareholder Loan[6]	—	524.0	524.0
Total indebtedness	**988.5**	**1,061.5**	**2,050.0**
Existing Shareholders' Equity	287.2	(287.2)	—
New Shareholders' Equity[7]	—	516.8	516.8
Total capitalization	**1,275.7**	**1,291.1**	**2,566.8**

(1) Adjusted cash and cash equivalents reflects the Transactions. See footnote 3 to the table under "*Use of Proceeds.*"

(2) Existing Debt includes the nominal amount outstanding under the Existing Notes and the Existing Senior Facilities Agreement.

(3) Represents the euro-equivalent of the nominal amount outstanding under the Term Loan Facility of the Senior Facilities Agreement. While we do not currently expect to draw amounts under the Revolving Credit Facility as of the Completion Date, any changes in the estimated amounts necessary to consummate the Transactions may be funded through drawings under our Revolving Credit Facility.

(4) Represents the carrying amount of the finance lease liabilities and other financial liabilities of the Target Group. Does not include derivative financial instruments. For further detail, see note 4.8 to the Interim Financial Statements included elsewhere in this offering memorandum.

(5) Represents the carrying amount of the Existing Shareholder Loan extended by the Seller to the Target, which on or prior to the Completion Date, the Seller will contribute into the free capital reserve of the Target.

(6) Represents the nominal amount of the Shareholder Loan granted by CTEC Acquisition S.à r.l. to the Issuer as part of the Equity Contribution.

(7) The total shareholders' equity in the Issuer, as adjusted, reflects the total Equity Contribution of the Sponsor (excluding the Shareholder Loan).

SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following tables set forth selected historical consolidated financial information and selected unaudited interim condensed consolidated financial information for the periods and dates indicated.

The historical financial information as of September 30, 2017 and for the nine months ended September 30, 2016 and 2017 has been derived from our Interim Financial Statements or the Group's accounting records or management reporting. The Interim Financial Statements have been prepared in accordance with IAS 34. The Group's historical financial information included in this offering memorandum as of and for the years ended December 31, 2014, 2015 and 2016 has been derived from the Audited Financial Statements or the Group's accounting records or management reporting. The Audited Financial Statements have been prepared in accordance with IFRS as adopted in the EU. The Interim Financial Statements have been prepared using the recognition and measurement principles consistent to those applied in the Audited Financial Statements. The results of operations for prior years are not necessarily indicative of the results to be expected for the full fiscal year or any future period. Interim financial results are not necessarily indicative of results for the full fiscal year or any future reporting period.

In the future, we expect to report our consolidated financial condition and results of operations at the level of the Issuer or Topco. The Issuer or Topco will account for the Acquisition using the acquisition method of accounting under IFRS. 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. Since the Acquisition has not been consummated as of the date of this offering memorandum, we have not identified the fair value of assets acquired and liabilities to be assumed at the date of the Acquisition. In accordance with IFRS, we have up to 12 months from the Completion Date to finalize the allocation of the purchase price.

The information set forth below should be read in conjunction with the sections entitled "*Risk Factors*," "*Capitalization*," "*Management's Discussion and Analysis of Financial Condition and Results of Operations*," "*Summary—Summary Consolidated Financial and Other Information,*" "*The Transactions*" and our Interim Financial Statements and the notes thereto and our Audited Financial Statements and the accompanying notes appearing elsewhere in this offering memorandum, as well as the other financial information included in this offering memorandum.

Selected Consolidated Income Statement Information

	Year Ended December 31,			Nine Months Ended September 30,	
	2014	2015	2016	2016	2017
			(€ million)		
Revenue	474.8	501.3	493.3	376.4	419.7
Cost of sales	293.5	300.0	294.9	224.7	236.7
Gross profit	**181.3**	**201.4**	**198.4**	**151.7**	**183.1**
Selling costs	78.9	86.8	91.5	70.4	60.9
Research and development costs	24.1	24.2	22.8	17.8	15.4
General administrative costs	18.9	21.1	22.2	16.3	16.7
Other income and expenses (-), net	2.0	0.4	(2.2)	(0.0)	1.8
Operating income	**61.5**	**69.7**	**59.7**	**47.1**	**91.9**
Interest income and other finance income	0.2	5.4	18.7	5.2	4.4
Interest expenses and other finance costs	94.1	81.7	73.6	53.8	57.9
Financial result	**(93.9)**	**(76.3)**	**(54.9)**	**(48.6)**	**(53.5)**
(Loss)/profit before income tax	**(32.4)**	**(6.6)**	**4.8**	**(1.4)**	**38.3**
Income tax benefit/(expense)	1.0	(7.7)	(10.0)	(6.0)	(13.9)
Net (loss)/profit for the period	**(31.4)**	**(14.3)**	**(5.2)**	**(7.5)**	**24.4**

Selected Consolidated Balance Sheet Information

	December 31, 2014	December 31, 2015	December 31, 2016	September 30, 2017
	(€ million)			
Assets				
Goodwill	550.8	557.6	558.0	570.1
Other intangible assets	639.8	603.9	557.4	550.5
Property, plant and equipment	309.7	300.2	275.5	263.7
Other financial assets	30.0	56.4	72.5	11.4
Other assets	1.7	1.2	0.7	0.7
Deferred tax assets	2.9	1.1	0.9	1.2
Non-current assets	**1,534.8**	**1,520.4**	**1,464.9**	**1,397.6**
Inventories	67.9	75.1	76.9	86.8
Trade receivables	47.5	53.2	53.6	61.3
Financial receivables from affiliates	—	1.0	—	—
Income tax receivables	6.5	1.7	1.3	1.9
Other financial assets	3.3	8.5	12.4	27.4
Other assets	5.2	5.2	4.3	5.1
Cash and cash equivalents	62.2	86.5	124.6	17.0
Non-current assets held for sale	—	0.0	—	—
Current assets	**192.6**	**231.2**	**272.9**	**199.5**
Total assets	**1,727.5**	**1,751.6**	**1,737.9**	**1,597.2**
Equity and Liabilities				
Issued capital	0.0	0.0	0.0	0.0
Capital reserves	378.1	378.1	378.1	378.1
Accumulated losses	(95.7)	(103.2)	(119.4)	(92.7)
Accumulated other comprehensive income	2.7	9.4	10.6	1.7
Equity	**285.2**	**284.4**	**269.4**	**287.2**
Provisions for pension obligations	91.5	86.1	102.4	97.8
Other provisions	3.7	3.7	10.6	6.2
Financial liabilities to affiliates	133.5	144.6	98.0	54.2
Other liabilities	—	—	—	0.0
Financial liabilities to third parties	949.4	956.9	927.0	663.6
Deferred tax liabilities	173.3	167.3	156.3	146.9
Non-current liabilities	**1,351.4**	**1,358.5**	**1,294.3**	**968.8**
Other provisions	14.0	13.1	16.4	19.5
Provisions for taxes	0.1	2.4	2.8	10.1
Financial liabilities to affiliates	—	—	56.4	—
Financial liabilities to third parties	40.8	55.0	62.5	274.4
Trade payables	22.4	24.4	22.4	23.6
Liabilities to affiliates	—	—	0.2	0.1
Other liabilities	13.6	13.9	13.5	13.6
Current liabilities	**90.9**	**108.7**	**174.2**	**341.2**
Total liabilities	**1,442.3**	**1,467.2**	**1,468.5**	**1,310.0**
Total equity and liabilities	**1,727.5**	**1,751.6**	**1,737.9**	**1,597.2**

Selected Consolidated Cash Flow Statement Information

	Year Ended December 31, 2014	Year Ended December 31, 2015	Year Ended December 31, 2016	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2017
	(€ million)				
Cash flow from operating activities	130.0	135.5	138.0	101.7	113.8
Cash flow from investing activities	(45.3)	(37.5)	(15.2)	(10.7)	(67.1)
Cash flow from financing activities	(89.8)	(74.0)	(84.2)	(68.8)	(153.3)
Change in cash and cash equivalents	**(5.1)**	**24.0**	**38.6**	**22.3**	**(106.6)**
Net foreign exchange difference	0.4	0.2	(0.4)	(0.5)	(0.9)
Cash and cash equivalents at the beginning of the period	67.0	62.2	86.5	86.5	124.6
Cash and cash equivalents at the end of the period	**62.2**	**86.5**	**124.6**	**108.3**	**17.0**

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

The following discussion and analysis of our financial condition and results of operations addresses periods prior to the consummation of the Transactions. The historical financial data for the nine months ended September 30, 2016 and 2017 has been derived from our Interim Financial Statements or is based on our accounting records and management reporting. These interim results are not necessarily indicative of results to be expected for the full year. The Interim Financial Statements have been prepared in accordance with IAS 34. The historical financial information of the Target included in this offering memorandum for the years ended December 31, 2014, 2015 and 2016 has been derived from our Audited Financial Statements or is based on our accounting records and management reporting. The Audited Financial Statements are prepared in accordance with IFRS as adopted in the EU. The results of operations for prior years are not necessarily indicative of the results to be expected for any future period.

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," "Selected Consolidated 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 developer, manufacturer and supplier of high performance ceramics ("HPC") solutions for various end markets including medical, automotive, industrial, consumer and electronics. Our HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological/chemical, mechanical, thermal, electric/magnetic or optical properties compared to competing products made from metal 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 currently offer a wide range of HPC solutions including hip joint prostheses components, actuators in engine valves for fuel injection systems, high speed cutting tools and transparent ceramic components for armor applications. The versatility of HPC products and resulting wide-range of applications provides us with a highly diversified end market and customer base.

Our operations can be divided into two businesses—Medical Products and Industrial.

Medical Products: Our Medical Products business focuses on developing and manufacturing ceramic components for hip joint prostheses, such as ball heads and cup inserts used in total hip replacement ("THR") procedures. In 2016, we generated 37.6% of our revenue and more than half of our Management Adjusted EBITDA from our Medical Products business. Ceramic materials are 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. Our HPC medical solutions are biologically inert and have high wear resistance and excellent friction behavior, making them one of the few materials that are durable and stable enough to withstand the corrosive effects of bodily fluids. More than 14 million of our BIOLOX® ceramic components have been implanted in patients globally to date. We estimate that nearly one in two hip joint implant systems sold worldwide in 2016 includes at least one ceramic component, and we estimate our BIOLOX® products represented more than 95% of the ceramic components used for these hip joint implant systems. Our customers are orthopedic implant OEMs including DePuy, Smith & Nephew, Stryker and Zimmer Biomet, the top four orthopedic implant OEMs who together have a market share of more than 60% in the worldwide market for hip joint implant systems. 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 anticipate that our HPC solutions will be used for various other joint replacements, such as knee and shoulder implants in the future.

Industrial: Our Industrial business develops, manufactures and supplies a broad range of highly specialized, performance critical HPC solutions for customers spanning a wide range of industries including automotive, defense, electronics, industrial machinery and medical equipment. In 2016, 62.4% of our revenue was generated by our Industrial business. 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, which when coupled with our state-of-the-art manufacturing facilities, enables us to efficiently produce solutions at scale while still adhering to all relevant industry standards. Due to the superior technological and performance characteristics of advanced ceramics, such as better wear and heat resistance than alternative materials, our HPC solutions are often 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 automotive engineering, HPC products, including our piezo ceramic components, play a vital role in increasing safety, improving cost-effectiveness and enhancing comfort in vehicles. Our ceramic substrates, which are ceramic plates with electrical, thermal and mechanical properties, 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, reduces the exposure of our Industrial business to any single industry or product.

At our state-of-the art development centers and laboratory facilities, we continuously research and develop materials as well as manufacturing and coating processes for new solutions in established and new markets. Our R&D is primarily focused on delivering customer-driven innovations and next generation solutions, which we are able to test through market leading digital simulation tools. We also develop new innovations with broader uses such as PERLUCOR®, a wear and chemical resistant transparent ceramic material that is three to four times the hardness and strength of glass and is already used in a wide range of applications.

In 2016, we generated 69.7% of our revenue in Europe (including Germany). However, our customers have a strong export focus as their end-products, such as automotive parts or ceramic hip implant components, are exported world-wide. In addition, we have a global manufacturing footprint with 20 facilities across Europe (including two facilities in the UK that were acquired in 2017 as part of our acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc), North America, Asia and South America.

In the LTM Period to September 30, 2017, we generated revenue of €536.7 million and Management Adjusted EBITDA of €199.9 million, respectively, representing a 37.3% Management Adjusted EBITDA margin. From 2014 to 2016, our revenue and Adjusted EBITDA registered a CAGR of 1.9% and 5.5% respectively, and our Cash Conversion Ratio increased from 70.0% to 91.5%. We believe we have a highly cash generative business supported by modest maintenance capital expenditure requirements, which typically comprise half of our total capital expenditures. For an explanation of the components of Management Adjusted EBITDA and Cash Conversion Ratio, see "*Summary—Summary Consolidated Financial and Other Information*."

Key Factors Affecting Our Results of Operations and Financial Condition

Hip Replacement Market Growth and Ceramic Hip Implant Components Penetration

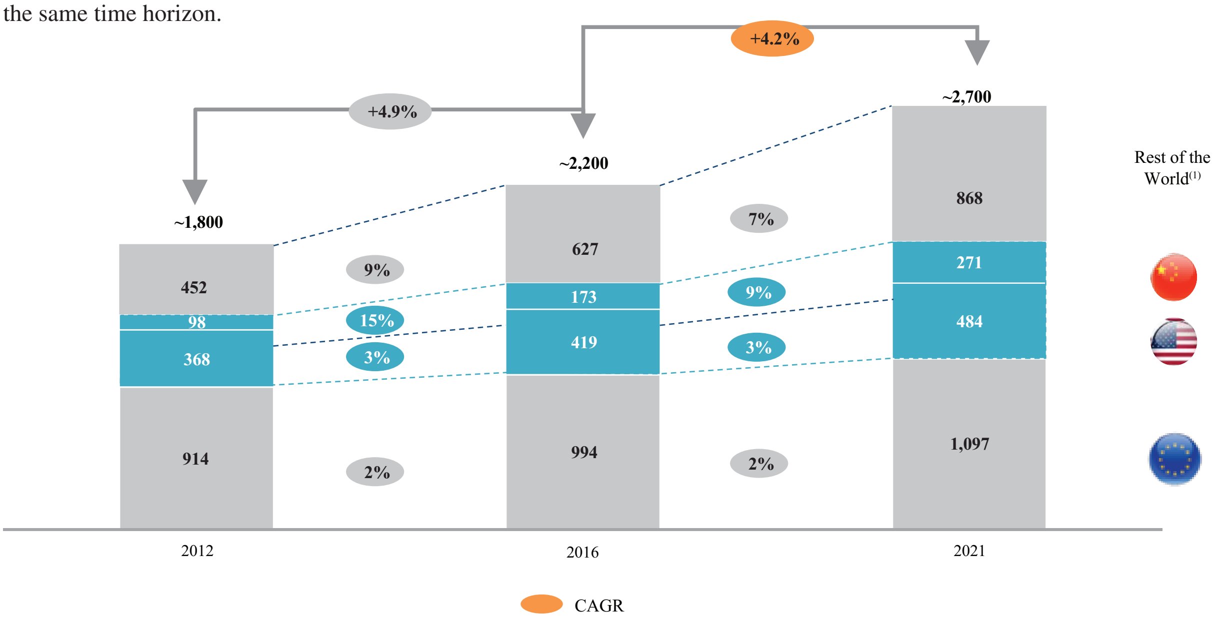
Our total revenues and operating profit are significantly influenced by the development of the market for hip replacements in general and the penetration rate for ceramic hip implants. The ceramic components we manufacture include ball heads and cup inserts. In 2008 we sold approximately 641,000 ball heads and cup inserts. Since then we have significantly increased the total annual number ball heads and cup inserts sold to approximately 1.4 million in 2016. To date, more than 14 million of our BIOLOX® ceramics components have been implanted in patients globally. Our Medical Products business, which represented over half of our Management Adjusted EBITDA for the years ended December 31, 2014, 2015 and 2016, respectively, has relatively high margins compared to our Industrial business and contributed significantly to the growth in our Management Adjusted EBITDA (from €154.1 million for the year ended December 31, 2014 to €199.9 million for the LTM Period to September 30, 2017) and our Management Adjusted EBITDA margin (from 32.4% for the year ended December 31, 2014 to 37.3% for the LTM Period to September 30, 2017).

The following table provides estimates of the growth in number of units sold and the estimated total number of hip procedures for the last five years (for more information on market trends in our target markets in Medical Products see "*Business—Our Business—Medical Products—Artificial Hip Joint Market*"):

	Year Ended December 31,					
	2012	2013	2014	2015	2016	CAGR 2012-2016
						(%)
Number of our units sold (ball-heads and inserts) (in thousands)[1]	1,009	1,152	1,259	1,291	1,368	7.9%

(1) On average, more than 75% 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-onpolyethylene components.

According to a leading international consultancy firm, there were an estimated 2.2 million total hip replacement (THR) procedures performed worldwide in 2016. In addition, an estimated 0.4 million revisions (of existing hip implants) and 0.5 million partial hip replacements (PHR, treat only the femoral side of the joint) were performed, bringing the total number of hip replacements in 2016 to an estimated 3.2 million. The number of THR procedures globally is expected to increase by 4.2% p.a. from 2016 to 2021 with the numbers of revisions expected to increase by 5.4% and PHR procedures by 4.2% over the same time horizon.



Source: International consulting firm
Notes: [1] Includes South Korea, Japan, India, LatAm and other

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 proliferation 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.

CeramTec services the hip replacement market with ball heads, cup inserts and option heads (used for revisions). The total size of the ball heads, inserts and option heads market addressed by CeramTec amounted to approximately €745 million in 2016 (including metal and polyethylene). The total addressable market is expected to grow with the number of THR procedures, a key driver of demand for ceramic ball heads and inserts. Further, ceramic as a material is increasingly used in revisions and PHR.

Our Position as Supplier of Choice for Ceramic Hip Implant Components

We have a strong market position in ceramic components for hip replacements. We estimate nearly one in two hip joint implant systems sold worldwide in 2016 included at least one ceramic component and we estimate that our BIOLOX® products represented more than 95% of the ceramic components for these hip joint implant systems. 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 not incentivized to replace our components. While two of our competitors have received FDA approval for their ball head products in 2016, we believe that their production output and market share is currently very small.

The top four orthopedic implant OEMs, DePuy, Smith & Nephew, Stryker and Zimmer Biomet, together have a market share of more than 60% in the worldwide market for hip joint implant systems. We maintain good and long-standing customer relationships each of these OEMs and we believe that we are the only supplier of ceramic components that supplies all top four orthopedic implant OEMs. We believe that our strategic relationship with each of the top four orthopedic implant OEMs 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 in our Medical Products business and results.

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 automotive 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. While we generated 69.7% of our revenue for 2016 from sales to our direct customers in Europe (including Germany), we estimate that the underlying demand outside Europe drives approximately 40% of our revenue.

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,		
	2014	2015	2016
		(%)	
Europe (excluding Germany)	42.6	41.7	42.7
Germany	28.3	26.0	27.0
North America	14.5	16.7	14.8
Asia	11.7	12.5	12.4
Rest of World	2.9	3.1	3.1
Total revenue	**100.0**	**100.0**	**100.0**

While our Medical Products are not particularly affected by macroeconomic developments in our geographic markets, revenue in our Industrial business is influenced by economic growth in our target markets, particularly in Europe. In the past, Germany has registered a GDP growth of 1.9% in 2016, 1.7% in 2015 and 1.9% in 2014, while GDP in the European Union grew by 1.9% in 2016, 2.3% in 2015 and 1.8% in 2014. As of September 2017, the OECD projects global growth of 3.5% in 2017 (from 3.1% in 2016) which is expected to accelerate to 3.7% in 2018. The United States' GDP is projected to grow by 2.1% in 2017 and 2.4% in 2018 (from 1.5% in 2016), while the eurozone's GDP is projected to grow at around 2.1% in 2017 and 1.9% 2018.

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 our industrial target markets. Additionally, while 62.4% of our total revenue were attributable to our Industrial business in 2016, our Medical Products business generated more than half of our Adjusted EBITDA in 2016. Historically, our Cash Conversion Ratio in Medical Products has been consistently higher than our overall Cash Conversion Ratio. 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.

Demand Cycles in Various End Markets Supplied by our Industrial Business

In addition to the overall GDP growth rate influencing the results of operations of our Industrial business, each of our industrial markets is also influenced by separate and distinct factors and has a different economic cycle. In particular, the automotive, 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, overall economic conditions can affect new car sales, impacting our automotive customers and thereby also influencing demand for our ceramic components in automobiles and engines.

By revenue, the automotive market was the largest single end market for our Industrial business, followed by the electronics market, textile, construction and various other industrial niche markets. Particularly for the automotive 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. For example, effects such as government 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

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, new medical solutions and selected own product innovations such as PERLUCOR®, a wear and chemical resistant transparent ceramic material that is three to four times the hardness and strength of glass and is already used in a wide range of applications. We believe that such growth investments are crucial to continued success in our target markets.

We have a strong, centralized R&D infrastructure with more than 200 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally (including the Fraunhofer Institute and Imperial

College London). Approximately 2,000 new products were newly introduced in the past five years. In 2016, our R&D expenses were €22.8 million, equal to 4.6% of revenue, which we fully expensed in our income statement in line with IFRS.

In the last few years, our innovations have played a fundamental role in our ability to maintain and grow our global market share in the different markets in which we operate. Revenue from products that were either newly developed and introduced, materially modified existing products or products modified for sale to a new customer within five years before the relevant period represented approximately 25% to 30% of our total revenue in the last five years. We expect that modification, innovation and new product design will continue to be a key driver of our revenue and Management Adjusted EBITDA in the future.

Expansion through Acquisitions and Growth Investment

We have over the past years engaged in M&A activity to strategically grow our business. In June 2015, we acquired DAI Ceramics, Inc., a producer of ceramic cores for precision casting applications. In April 2017, we acquired the UK electro-ceramics business from Morgan Advanced Materials plc, which produces integrated piezo components.

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. In particular, we have invested in the expansion of our manufacturing plant in Marktredwitz, Germany in 2013 and 2014 at a cost of approximately €38 million. Our expanded medical production facility increased our annual production capacity to approximately 2.0 million units as at September 30, 2017.

We believe that our capacity expansion in Marktredwitz, as well as the strategic acquisitions we completed in the past years, have already significantly contributed and will continue to contribute to our growth in revenue and Management Adjusted EBITDA.

Cost Effectiveness through Simplification of Industrial Business and Business Excellence Initiatives

In order to improve our earnings and cash flows, we have implemented a number of measures to increase organizational cost effectiveness and drive productivity in operations.

In our Industrial business, we began implementing a comprehensive reorganization (Project SCORE) in 2016 and 2017. The reorganization is based on three guiding principles: simplification, scale and standardization. As part of the reorganization, we combined various independent reporting units into three separate clusters within the Industrial business and consolidated our operations in Europe under a centralized unit. We increased cost effectiveness based on multiple improvement levers:

- reduced complexity of management setup;
- increased employee motivation through incentives and alignment in order to work towards common goals;
- increased focus on strategic customers;
- improved customer satisfaction and better understanding of customer needs through a structured sales approach;
- reduced response time and better lead conversion through harmonized customer service;
- economies of scale and aligned steering across production sites to improve asset utilization and flexibility;
- improved use of shared technology platforms across business clusters to leverage shared know-how; and
- synergies from pooling of assets and resources leading to better allocation of funding and resources to critical growth projects.

In our Medical Products business, we launched our Innovation Excellence initiative in 2016, which seeks to refocus our R&D organization to realign resources to the most attractive, customer-driven projects in the pipeline, based on a structured opportunity management process. With regards to production in the Medical Products business, we implemented an operational efficiency program (Project ODIN), which targets cost savings. A new logistics system on the shop floor and an optimized equipment layout were implemented with an aim to reduce lead times on the shop floor, reduce rework and quality costs, as well as tooling and overhead costs.

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 focuses primarily on our European operations and that aims to continuously improve our product quality, productivity and manufacturing processes' efficiency, as well as to improve the cost effectiveness of research and development, sales, and administrative functions. In addition to our Innovation Excellence initiative, 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 Pressure

Due to our position as the market leader in our core medical products market, our close relationship with our customers and high switching costs for our customers, price pressure due to competition has been historically limited. While we regularly renegotiate prices with several of our medical customers, we were able to keep our prices relatively stable. However, our customer base in Medical Products is highly concentrated and we faced pricing pressure in 2015 and 2016 as a result of the merger of Biomet and Zimmer, which resulted in uniform prices for the merged entity at the low end of previous prices. In 2017 we incrementally adjusted the contractual pricing conditions in the Medical Products business to better reflect the value of our BIOLOX® products and additional services we offer to customers.

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 automotive end market, the electronics end market and in our Catalyst Carriers cluster we have faced pressure from competitors in certain niche markets. Our customers in the Industrial business also regularly stipulate annual cost improvements.

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.

Acquisition Accounting in Connection with the Transactions

As a result of the Transactions and the application of acquisition accounting, our assets and liabilities will be adjusted based on their fair values as of the Completion Date. We anticipate these adjustments will result in an increase in our future operating expenses due to the depreciation and amortization expense related to the increased carrying amount of our fixed assets and the additional recognition of identifiable intangible assets. We also anticipate that the adjustments will result in an increase in the value of our inventory and, in turn, our cost of sales and negatively affecting our gross profit for the period in which the inventory is sold. Additionally, the excess of the total purchase price over the fair value of our assets and liabilities on the Completion Date will be recognized as goodwill. A preliminary assessment of the fair values of our assets indicates that the value at which we carry our intangible assets and goodwill will be higher than the amounts currently recognized. Any identifiable indefinite-lived assets, including goodwill, will be subject to annual impairment testing. *See "—Critical Accounting Policies and Significant Accounting Estimates—Goodwill*."

The preliminary purchase price allocation is subject to changes as a result of completion of an appraisal of fair value of assets acquired and liabilities assumed. The final purchase price allocation will be adjusted based on the completion of an appraisal of assets acquired and liabilities assumed and may differ materially from the estimated allocation.

Key Components of our Historical Results of Operations

Revenue

Revenue is recognized to the extent that it is probable that the economic benefits from the transaction will flow to the Group and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable less any trade discounts and volume rebates granted.

Revenue from the sale of goods is recognized upon delivery of the goods and transfer of ownership if the following criteria are satisfied: (i) the Group has transferred to the buyer the significant risks and rewards of ownership of the goods and merchandise sold, (ii) the Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods and merchandise sold, (iii) the amount of revenue can be measured reliably, (iv) it is probable that the economic benefits associated with the transaction will flow to the Group and (v) the costs incurred or to be incurred in respect of the transaction can be measured reliably.

Revenue from services is recognized using the percentage of completion method if (i) the amount of revenue can be determined reliably, (ii) it is probable that the economic benefits associated with the transaction will flow to the Group, (iii) the stage of completion of the transaction at the end of the reporting period can be determined reliably, and (iv) the costs incurred for the transaction and the costs to complete the transaction can be determined reliably.

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 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.

Research and development costs

Research and development costs mainly comprise personnel expenses attributable to our R&D employees.

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 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 Senior Facilities Agreement and the Existing Shareholder Loan, as well as 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 expense

There is a consolidated tax group for income tax purposes between the Target and its German subsidiaries. This means that German corporate income tax and trade tax is only levied at the level of the Target. 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.

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. In the following discussion, we present certain components also on an adjusted basis before giving effect to depreciation and amortization and certain extraordinary, non-recurring items. For a detailed reconciliation to the closest comparable IFRS measure. See "*Summary—Summary Consolidated Financial Information and Other Information—Other Unaudited Financial and Operating Data.*"

Nine Months Ended September 30, 2017 Compared to Nine Months Ended September 30, 2016

The following table sets forth amounts from our unaudited interim condensed consolidated financial information along with the percentage change for the nine months ended September 30, 2017 compared to the nine months ended September 30, 2016:

	Nine Months Ended September 30,		
	2016	2017	Change
	(€ million)		(%)
Revenue	376.4	419.7	11.5
Cost of sales	224.7	236.7	5.4
Gross profit	**151.7**	**183.1**	**20.7**
Selling costs	70.4	60.9	(13.5)
Research and development costs	17.8	15.4	(13.6)
General administrative costs	16.3	16.7	2.1
Other income and expenses (-), net	(0.0)	1.8	N/A
Operating income	**47.1**	**91.9**	**94.9**
Interest income and other financial income	5.2	4.4	(15.8)
Interest expenses and other financial expenses	(53.8)	(57.9)	7.7
Financial result	**(48.6)**	**(53.5)**	**10.2**
Profit/(loss) before income taxes	(1.4)	38.3	N/A
Income tax expense	(6.0)	(13.9)	132.0
Net profit/(loss) for the period	**(7.5)**	**24.4**	**N/A**

Revenue

The following table provides a breakdown of our revenue for the nine months ended September 30, 2017, compared to the nine months ended September 30, 2016 on a cluster level:

	Nine Months Ended September 30,		
	2016	2017	Change
	(€ million)		(%)
Medical Products(1)	**141.8**	**155.2**	**9.4**
Industrial(1)(2)	**234.6**	**264.5**	**12.8**
thereof Specialty Applications	63.0	68.7	9.0
thereof Industrial Solutions	104.1	109.0	4.7
thereof CT North America	33.6	42.7	27.1
thereof Emil Müller Companies	18.1	16.4	(9.4)
thereof other units / consolidation(3)	15.8	27.7	(75.3)
Total revenue	**376.4**	**419.7**	**11.5**

(1) The numbers presented for Medical Products and Industrial are external revenue to third parties.

(2) We began implementing a comprehensive reorganization of our Industrial business in 2016 and 2017 in order to streamline our internal structure by bundling together similar clusters, aligning our marketing and sales team across the business, standardizing key processes and centralizing R&D know-how. In the second fiscal quarter of 2017, we began presenting revenue in our Industrial business by new clusters as follows: Specialty Applications, Industrial Solutions, CeramTec North America, Emil Müller GmbH, and Other.

(3) The revenue presented for the individual units in Industrial includes internal revenue to Group companies. The line item "other units / consolidation" includes all internal revenue between the clusters listed under "Industrial" to show the amount by which the total revenue figure for Industrial has been reduced to account for such internal revenue. However, our management believes that revenue including internal sales for our clusters in Industrial provides a better description of trends in these clusters due to substantial internal revenue between our clusters in Industrial.

The following table provides a breakdown of our revenue for the nine months ended September 30, 2017, compared to the nine months ended September 30, 2016 by region:

	Nine Months Ended September 30,		
	2016	**2017**	**Change**
	(€ million)		**(%)**
Europe (excluding Germany)	162.7	187.2	15.0
Germany	102.5	102.5	(0.1)
North America	54.3	62.8	15.6
Asia	45.0	54.2	20.3
Rest of World	11.8	13.1	11.3
Total revenue	**376.4**	**419.7**	**11.5**

Revenue was €419.7 million for the nine months ended September 30, 2017, an increase of €43.4 million or 11.5%, as compared to €376.4 million for the nine months ended September 30, 2016. This increase was mainly due to higher volumes in both businesses and the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc which we completed in April 2017.

Revenue in our Medical Products business was €155.2 million for the nine months ended September 30, 2017, an increase of €13.4 million or 9.4%, as compared to €141.8 million for the nine months ended September 30, 2016. This increase was mainly due to a volume increase in ball-heads and inserts, partly offset by price reductions.

Revenue in our Industrial business was €264.5 million for the nine months ended September 30, 2017, an increase of €30.0 million or 12.8%, as compared to €234.6 million for the nine months ended September 30, 2016. This increase was mainly due to overall strong demand across major markets such as Textile, Automotive and strong U.S. market conditions. The increase is supported by organizational streamlining and commercial excellence initiatives and the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc. The decrease at our Emil Müller Companies cluster was mainly driven by lower volumes at a top customer in automotive.

Cost of sales and gross profit

The following table shows a breakdown of our costs of sales for the nine months ended September 30, 2016 and 2017:

	Nine Months Ended September 30,			
	2016		**2017**	
	(€ million)	**(% of revenue)**	**(€ million)**	**(% of revenue)**
Material and packing costs	67.4	17.9	79.8	19.0
Personnel expenses	85.1	22.6	87.7	20.9
Amortization and depreciation	37.8	10.0	37.3	8.9
Other costs of sales	34.4	9.2	32.0	7.6
Cost of sales	**224.7**	**59.7**	**236.7**	**56.4**

Cost of sales was €236.7 million (56.4% of revenue) for the nine months ended September 30, 2017, an increase of €12.0 million or 5.4%, as compared to €224.7 million (59.7% of revenue) for the nine months ended September 30, 2016. Excluding amortization and depreciation and non-recurring items, our Adjusted cost of sales increased by 7.8% from €182.3 million or 48.4% of revenue for the nine months ended September 30, 2016 to €196.4 million or 46.8% of revenue for the nine months ended September 30, 2017. This increase was mainly due to higher volumes partly offset by operational excellence measures and the release of a jubilee provision.

Gross profit was €183.1 million for the nine months ended September 30, 2017, an increase of €31.3 million or 20.7%, as compared to €151.7 million for the nine months ended September 30, 2016. Our Adjusted gross profit margin increased to 53.2% for the nine months ended September 30, 2017, from 51.6% for the nine months ended September 30, 2016, mainly due to higher sales and productivity excellence partly offset by cost increase and repairs, and further impacted by the release of a jubilee provision in 2017.

Selling costs

Selling costs were €60.9 million (14.5% of revenue) for the nine months ended September 30, 2017, a decrease of €9.5 million or 13.5%, as compared to €70.4 million (18.7% of revenue) for the nine months ended September 30, 2016. Excluding amortization and depreciation and non-recurring items, our Adjusted selling costs decreased to €36.6 million or

8.7% of revenue for the nine months ended September 30, 2017 from €36.9 million or 9.8% of revenue for the nine months ended September 30, 2016. This decrease was mainly due to organizational streamlining and commercial excellence measures.

Research and development costs

Research and development costs were €15.4 million (3.7% of revenue) for the nine months ended September 30, 2017, a decrease of €2.4 million or 13.6%, as compared to €17.8 million (4.7% of revenue) for the nine months ended September 30, 2016. Excluding amortization and depreciation and non-recurring items, our Adjusted research and development costs decreased to €13.8 million or 3.3% of revenue for the nine months ended September 30, 2017 from €15.4 million or 4.1% of revenue for the nine months ended September 30, 2016. This decrease was mainly due to streamlining medical R&D and the refocusing of our organization through the Innovation Excellence initiative.

General administrative costs

General administrative costs were €16.7 million (4.0% of revenue) for the nine months ended September 30, 2017, an increase of €0.3 million or 2.1%, as compared to €16.3 million (4.3% of revenue) for the nine months ended September 30, 2016. This increase was mainly due to higher bonus accruals. Excluding amortization and depreciation and non-recurring items, our Adjusted general administrative costs increased to €14.3 million or 3.4% of revenue for the nine months ended September 30, 2017 from €12.1 million or 3.2% of revenue for the nine months ended September 30, 2016 and remain broadly unchanged as a percentage of sales.

Other income and expenses, net

Other income was €1.8 million for the nine months ended September 30, 2017, an increase of €1.8 million compared to other expenses of €0.0 million for the nine months ended September 30, 2016. This increase was mainly due to a gain from a land sale related to our Colyton site, partially offset by acquisition costs for the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc and restructuring costs. Excluding non-recurring items and foreign exchange effects, our Adjusted other expenses, net, were €0.1 million for the nine months ended September 30, 2017, a decrease of €0.3 million as compared with Adjusted other income, net of €0.2 million for the nine months ended September 30, 2017, due to certain types of operating income not being present in the nine months ended September 30, 2017.

Interest income and other finance income

Interest income and other finance income was €4.4 million for the nine months ended September 30, 2017, a decrease of €0.8 million or 15.8%, as compared to €5.2 million for the nine months ended September 30, 2016. This decrease was mainly due to the lack of gains resulting from the fair value measurement of derivatives and higher foreign currency effects in the nine months ended September 30, 2017.

Interest expenses and other finance costs

Interest expenses and other finance costs were €57.9 million for the nine months ended September 30, 2017, an increase of €4.1 million or 7.7%, as compared to €53.8 million for the nine months ended September 30, 2016. This increase was mainly due to a loss resulting from the fair value measurement of derivatives largely compensated by lower interest expenses. The financial expenses of €57.9 million include €11.1 million of losses on derivative valuations, €35.6 million of interest expenses from syndicated loan, revolving credit line and bond, €4.4 million of expenses from the effective interest rate method, €5.3 million of interest expenses from a shareholder loan and €1.5 million of other interest expenses.

Income tax expenses

Income tax expenses were €13.9 million for the nine months ended September 30, 2017, an increase of €7.9 million as compared to €6.0 million for the nine months ended September 30, 2016. This increase was mainly due to an increase of taxable income, partly compensated by lower deferred tax expenses from valuation of derivatives.

Net profit/(loss) for the period

As a result of the developments described above, net profit for the period was €24.4 million for the nine months ended September 30, 2017, an increase of €31.8 million compared to a net loss of €7.5 million for the nine months ended September 30, 2016.

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

The following table sets forth amounts from our historical consolidated financial information along with the percentage change for the year ended December 31, 2016 compared to the year ended December 31, 2015:

	Year Ended December 31,		
	2015	2016	Change
	(€ million)		(%)
Revenue	501.3	493.3	(1.6)
Cost of sales	300.0	294.9	(1.7)
Gross profit	**201.4**	**198.4**	**(1.5)**
Selling costs	86.8	91.5	5.4
Research and development costs	24.2	22.8	(6.0)
General administrative costs	21.1	22.2	5.1
Other income and expenses (-), net	0.4	(2.2)	N/A
Operating income	**69.7**	**59.7**	**(14.3)**
Interest income and other finance income	5.4	18.7	>100.0
Interest expenses and other finance costs	81.7	73.6	(9.9)
Financial result	**(76.3)**	**(54.9)**	**(28.1)**
Profit/(loss) before income tax	**(6.6)**	**4.8**	**N/A**
Income tax expense	(7.7)	(10.0)	30.1
Net loss for the year	**(14.3)**	**(5.2)**	**(63.8)**

Revenue

The following table provides a breakdown of our revenue for the year ended December 31, 2016 compared to the year ended December 31, 2015 on a cluster level:

	Year Ended December 31,		
	2015	2016	Change
	(€ million)		(%)
Medical Products(1)	**182.7**	**185.6**	**1.5**
Industrial(1)(2)	**318.6**	**307.8**	**(3.4)**
Thereof Multifunctional Ceramics	46.1	47.4	2.8
Thereof Electronic Applications	53.2	49.6	(6.8)
Thereof SPK Cutting Tools	39.9	38.8	(2.8)
Thereof Mechanical Systems	35.8	34.8	(2.8)
Thereof Mechanical Applications	21.8	21.3	(2.3)
Thereof Other	172.9	164.3	(5.0)
Consolidation(3)	(51.1)	(48.5)	(5.1)
Total revenue	**501.3**	**493.3**	**(1.6)**

(1) The numbers presented for Medical Products and Industrial represent external revenue to third parties.

(2) We began implementing a comprehensive reorganization of our Industrial business in 2016 and 2017 in order to streamline our internal structure by bundling together similar clusters, aligning our marketing and sales team across the business, standardizing key processes and centralizing R&D know-how. As a result, the presentation of our revenue by cluster for the Industrial business for the years ended December 31, 2014, 2015 and 2016 is not comparable to the presentation for the nine months ended September 30, 2016 and 2017, respectively.

(3) The revenue presented for the individual units in Industrial includes internal revenue to Target Group companies. The line item "Consolidation" represents all internal revenue between the clusters listed under Industrial to show the amount by which the total revenue figure for Industrial has been reduced to account for such internal revenue. However, our management believes that revenue including internal sales for our clusters Industrial provides a better description of trends in these clusters due to substantial internal revenue between our clusters in Industrial.

The following table provides a breakdown of our revenue for the year ended December 31, 2016 compared to the year ended December 31, 2015 by region:

	Year Ended December 31,		
	2015	2016	Change
	(€ million)		(%)
Europe (excluding Germany)	209.3	210.8	0.7
Germany	130.2	133.1	2.2
North America	83.5	73.0	(12.7)
Asia	62.7	61.4	(2.1)
Rest of World	15.5	15.1	(2.5)
Total revenue	**501.3**	**493.3**	**(1.6)**

Revenue was €493.3 million for the year ended December 31, 2016, a decrease of €8.0 million or 1.6%, as compared to €501.3 million for the year ended December 31, 2015. This decrease was mainly due to the decrease in revenue of our Industrial business.

Revenue in our Medical Products business was €185.6 million for the year ended December 31, 2016, an increase of €2.8 million or 1.5%, as compared to €182.7 million for the year ended December 31, 2015. This increase was mainly due to an increase in volume growth, which more than offset adverse pricing effects at key customers.

Revenue in our Industrial business was €307.8 million for the year ended December 31, 2016, a decrease of €10.8 million or 3.4%, as compared to €318.6 million for the year ended December 31, 2015. This decrease was mainly due to several Industrial clusters not repeating their strong 2015 performance. While revenue in Industrial is influenced by the development of our target markets, the effect of the industrial cycle in the past has been offset by various particular developments, namely project activity in the ethylene oxide catalyst business of CeramTec North America was lower in 2016 due to reduced demand from Chinese end market customers, resulting in lower sales against the previous year. In Electronic Applications, sales to a key customer did not see a repetition of the extra volumes sold to this customer in 2015. Mechanical Systems and Mechanical Applications were facing lower demand in the construction and textile machinery markets in 2016 as a result of the economic cycle. This is partly compensated by positive developments in our ETEC division showing good ballistic sales, CeramTec Malaysia with additional volumes in the examination segment, CeramTec Suzhou showing a strong fourth quarter and the full year effect in 2016 of our acquisition of DAI Ceramics, Inc.

Cost of sales and gross profit

The following table shows a break-down of our costs of sales for the years ended December 31, 2015 and 2016:

	Year Ended December 31			
	2015		2016	
	(€ million)	(% of revenue)	(€ million)	(% of revenue)
Material and packing costs	94.8	18.9	88.7	18.0
Personnel expense	108.5	21.6	113.5	23.0
Amortization and depreciation	50.4	10.1	49.9	10.1
Other cost of sales	46.3	9.2	42.8	8.7
Cost of sales	**300.0**	**59.8**	**294.9**	**59.8**

Cost of sales was €294.9 million (59.8% of revenue) for the year ended December 31, 2016, a decrease of €5.0 million or 1.7%, as compared to €300.0 million (59.8% of revenue) for the year ended December 31, 2015. This decrease was mainly caused by lower volumes which were offset by additional contribution to pension fund (solvency) and severance payments.

Gross profit was €198.4 million for the year ended December 31, 2016, a decrease of €3.0 million or 1.5%, as compared to €201.4 million for the year ended December 31, 2015. Excluding amortization and depreciation and non-recurring items, our Adjusted gross profit increased by €2.0 million from €252.6 million for the year ended December 31, 2015 to €254.7 million for the year ended December 31, 2016, while our Adjusted gross profit margin increased by 1.2 percentage points from 50.4% to 51.6%.

Selling costs

Selling costs were €91.5 million (18.5% of revenue) for the year ended December 31, 2016, an increase of €4.7 million or 5.4%, as compared to €86.8 million (17.3% of revenue) for the year ended December 31, 2015. Excluding amortization and depreciation and non-recurring items (which, for both periods mainly comprised non-recurring litigation costs), our Adjusted selling costs decreased from €49.9 million or 9.9% of revenue for the year ended December 31, 2015 to €47.4 million or 9.6% of revenue for the year ended December 31, 2016 and remained broadly stable as a percentage of revenue.

Research and development costs

Research and development costs were €22.8 million for the year ended December 31, 2016, a decrease of €1.4 million or 6.0%, as compared to €24.2 million for the year ended December 31, 2015. Excluding amortization and depreciation and non-recurring items, our Adjusted research and development costs decreased to €19.9 million or 4.0% of revenue for the year ended December 31, 2016, as compared to €22.4 million or 4.5% of revenue for the year ended December 31, 2015. This decrease was mainly due to a re-focusing of our R&D expenses as part of our Innovation Excellence initiative.

General administrative costs

General administrative costs were €22.2 million for the year ended December 31, 2016, a decrease of €1.1 million or 5.1%, as compared to €21.1 million for the year ended December 31, 2015. Excluding amortization and depreciation and excluding non-recurring items, our Adjusted general administrative costs decreased from €16.4 million or 3.3% of revenue for the year ended December 31, 2015 to €16.3 million or 3.3% of revenue for the year ended December 31, 2016 and remain broadly unchanged in terms of percentage of revenue.

Other income and expenses, net

Other expenses were €2.2 million for the year ended December 31, 2016, a decrease of €2.7 million, as compared to other income of €0.4 million for the year ended December 31, 2015. This decrease was mainly due to foreign exchange effects, as a net gain on foreign exchange of €2.0 million in 2015 changed to a net gain on foreign exchange of €0.0 million in 2016, compensated by a reduction of €0.6 million acquisition costs and €0.7 million lower restructuring cost.

Interest income and other finance income

Interest income and other finance income was €18.7 million for the year ended December 31, 2016, an increase of €13.3 million as compared to €5.4 million for the year ended December 31, 2015. This increase was mainly due to a higher net gain resulting from the fair value measurement of derivatives.

Interest expenses and other finance costs

Interest expenses and other finance costs were €73.6 million for the year ended December 31, 2016, a decrease of €8.1 million or 9.9%, as compared to €81.7 million for the year ended December 31, 2015. This decrease was mainly due to the reduction of losses on foreign exchange differences and lower interest expenses. The financial expenses include €50.7 million in interest expenses from syndicated loan and bond, €5.7 million in expenses from the effective interest rate method, €11.9 million in interest expenses from shareholder loan and €5.2 million in exchange rate losses and other interest expenses.

Income tax expenses

Income tax expenses were €10.0 million for the year ended December 31, 2016, an increase of €2.3 million or 30.1%, as compared to expenses of €7.7 million for the year ended December 31, 2015. This increase was mainly due to an increase in income before tax.

Net loss

As a result of the developments described above, net loss for the period was €5.2 million for the year ended December 31, 2016, a decrease of €9.1 million or 63.8%, as compared to a net loss of €14.3 million for the year ended December 31, 2015.

Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014

The following table sets forth amounts from our historical consolidated financial information along with the percentage change for the year ended December 31, 2015 compared to the year ended December 31, 2014:

	Year Ended December 31,		
	2014	2015	Change
	(€ million)		(%)
Revenue	474.8	501.3	5.6
Cost of sales	293.5	300.0	2.2
Gross profit	**181.3**	**201.4**	**11.1**
Selling costs	78.9	86.8	10.0
Research and development costs	24.1	24.2	0.7
General administrative costs	18.9	21.1	11.9
Other income and expenses (-), net	2.0	0.4	(77.6)
Operating income	**61.5**	**69.7**	**13.3**
Interest income and other finance income	0.2	5.4	>100.0
Interest expenses and other finance costs	94.1	81.7	(13.2)
Financial result	**(93.9)**	**(76.3)**	**(18.7)**
Loss before income tax	**(32.4)**	**(6.6)**	**(79.6)**
Income tax expense	1.0	(7.7)	N/A
Net loss for the year	**(31.4)**	**(14.3)**	**(54.4)**

Revenue

The following table provides a breakdown of our revenue for the year ended December 31, 2015 compared to the year ended December 31, 2014 on a cluster level:

	Year Ended December 31,		
	2014	2015	Change
	(€ million)		(%)
Medical Products(1)	**177.6**	**182.7**	**2.9**
Industrial(1)(2)	**297.2**	**318.6**	**7.2**
Thereof Multifunctional Ceramics	47.2	46.1	(2.3)
Thereof Electronic Applications	46.9	53.2	13.4
Thereof SPK Cutting Tools	38.8	39.9	2.8
Thereof Mechanical Systems	36.0	35.8	(0.6)
Thereof Mechanical Applications	23.3	21.8	(6.4)
Thereof Other	150.6	172.9	14.8
Consolidation(3)	(45.5)	(51.1)	12.3
Total revenue	**474.8**	**501.3**	**5.6**

(1) The numbers presented for Medical Products and Industrial represent external revenue to third parties.

(2) We began implementing a comprehensive reorganization of our Industrial business in 2016 and 2017 in order to streamline our internal structure by bundling together similar clusters, aligning our marketing and sales team across the business, standardizing key processes and centralizing R&D know-how. As a result, the presentation of our revenue by cluster for the Industrial business for the years ended December 31, 2014, 2015 and 2016 is not comparable to the presentation for the nine months ended September 30, 2017.

(3) The revenue presented for the individual units in Industrial includes internal revenue to Target Group companies. The line item "Consolidation" represents all internal revenue between the clusters listed under Industrial to show the amount by which the total revenue figure for Industrial has been reduced to account for such internal revenue. However, our management believes that revenue including internal sales for our clusters Industrial provides a better description of trends in these clusters due to substantial internal revenue between our clusters in Industrial.

The following table provides a breakdown of our revenue for the year ended December 31, 2015 compared to the year ended December 31, 2014 by region:

	Year Ended December 31,		
	2014	2015	Change
	(€ million)		(%)
Europe (excluding Germany)	202.4	209.3	3.4
Germany	134.5	130.2	(3.2)
North America	68.8	83.5	21.4
Asia	55.8	62.7	12.5
Rest of World	13.4	15.5	15.8
Total revenue	**474.8**	**501.3**	**5.6**

Revenue was €501.3 million for the year ended December 31, 2015, an increase of €26.5 million or 5.6%, as compared to €474.8 million for the year ended December 31, 2014.

Revenue in our Medical Products business was €182.7 million for the year ended December 31, 2015, an increase of €5.1 million or 2.9%, as compared to €177.6 million for the year ended December 31, 2014. This increase was mainly due to our strong market position in the growing total hip replacement market and increased penetration of ceramic components. Performance in the Medical Products business was impacted by lower volumes of inserts but higher ball head volume growth.

Revenue in our Industrial business was €318.6 million for the year ended December 31, 2015, an increase of €21.4 million or 7.2%, as compared to €297.2 million for the year ended December 31, 2014. The revenue development in Industrial was mainly influenced by the Electronic Applications cluster, which grew by 13.4% as reported mainly due to increased volumes in sensor tapes to a top customer, Emil Mueller, with good volumes development to a key customer, the acquisition of DAI Ceramics, Inc. and supported by positive foreign exchange effects from translation. We continued experiencing overall good conditions in the automotive, construction and machine industries in 2015. Notable other effects include a delay in the roller bearing project in Mechanical Systems, softer textile business in China, which negatively impacted Mechanical Applications revenue, good volumes of ethylene oxide catalyst ("EOC") products compensating for the discontinuation of our e-cigarette business in CeramTec North America and the decline in business of our CT-ETEC division (lower wear protection volumes).

The regional split of revenue for the year ended December 31, 2015 is 26.0% for Germany, 41.8% for Europe (which includes most of the revenue from OEMs in our Medical Products business), 16.7% for North America, 12.5% for Asia and 3.1% for Rest of World. The geographical split remained broadly unchanged compared to the year ended December 31, 2014.

Cost of sales and gross profit

The following table shows a break-down of our cost of sales for the years ended December 31, 2014 and 2015:

	Year Ended December 31			
	2014		2015	
	(€ million)	(% of revenue)	(€ million)	(% of revenue)
Material and packing costs	88.7	18.7	94.8	18.9
Personnel expense	101.3	21.3	108.5	21.6
Amortization and depreciation	55.5	11.7	50.4	10.1
Other cost of sales	48.0	10.1	46.3	9.2
Cost of sales	**293.5**	**61.8**	**300.0**	**59.8**

Cost of sales was €300.0 million (59.8% of revenue) for the year ended December 31, 2015, an increase of €6.5 million or 2.2%, as compared to €293.5 million (61.8% of revenue) for the year ended December 31, 2014. This increase was mainly caused by higher volumes.

Gross profit was €201.4 million for the year ended December 31, 2015, an increase of €20.1 million or 11.1%, as compared to €181.3 million for the year ended December 31, 2014. Excluding amortization and depreciation, our Adjusted gross profit increased by €15.8 million from €237.8 million for the year ended December 31, 2014 to €252.6 million for the year ended December 31, 2015, while our gross margin increased by 0.3 percentage points from 50.1% to 50.4%.

Selling costs

Selling costs were €86.8 million for the year ended December 31, 2015, an increase of €7.9 million or 10.0%, as compared to €78.9 million for the year ended December 31, 2014. Excluding amortization and depreciation, our Adjusted selling costs increased by €7.2 million from €49.7 million or 10.5% of revenue for the year ended December 31, 2014 to €56.9 million or 11.4% of revenue for the year ended December 31, 2015, mainly due to increased revenue due to accelerated growth and affected by non-recurring litigation costs relating to litigation with C5/Metoxit.

Research and development costs

Research and development costs were €24.2 million (4.8% of revenue) for the year ended December 31, 2015, an increase of €0.2 million or 0.7%, as compared to €24.1 million (5.1% of revenue) for the year ended December 31, 2014. This increase was mainly due to increased efforts to develop new medical products and to support our other growth projects, offset by savings in our development of transparent ceramics which entered a more customer and application focused stage.

General administrative costs

General administrative costs were €21.1 million (4.2% of revenue) for the year ended December 31, 2015, an increase of €2.2 million or 11.9%, as compared to €18.9 million (4.0% of revenue) for the year ended December 31, 2014. This increase was broadly in line with our revenue growth and affected by non-recurring consulting costs.

Other income and expenses, net

Other income was €0.4 million for the year ended December 31, 2015, a decrease of €1.6 million or 77.6%, as compared to other income of €2.0 million for the year ended December 31, 2014. This decrease was mainly due a lower non-operating release of provisions for pension adjustment.

Interest income and other finance income

Interest income and other finance income was €5.4 million for the year ended December 31, 2015, an increase of €5.2 million as compared to €0.2 million for the year ended December 31, 2014. This increase was mainly due to a net gain on the fair value measurement of derivatives.

Interest expenses and other finance costs

Interest expenses and other finance costs were €81.7 million for the year ended December 31, 2015, a decrease of €12.4 million or 13.2%, as compared to €94.1 million for the year ended December 31, 2014. This decrease was mainly due to the reduction of losses on derivative valuations and lower expenses from application of the effective interest rate method. Interest expenses and other finance costs for the year ended December 31, 2015 include €54.1 million in interest expenses from syndicated loan and bond, €7.2 million in expenses from the effective interest rate method, €11.0 million in interest expenses from shareholder loan and €9.5 million in exchange rate losses and other interest expenses.

Income tax benefit/(expenses)

Income tax expenses were €7.7 million for the year ended December 31, 2015, an increase in expenses of €8.7 million, as compared to an income tax benefit of €1.0 million for the year ended December 31, 2014. This increase was mainly due to an increase in income and a decrease in deferred tax income from temporary differences.

Net loss

As a result of the developments described above, net loss was €14.3 million for the year ended December 31, 2015, a decrease of €17.0 million or 54.4%, as compared to a net loss of €31.4 million for the year ended December 31, 2014.

Liquidity and Capital Resources

Prior to the Transactions

Our principal source of liquidity prior to the consummation of the Transactions has been cash flows from operations as well as drawings under our revolving credit facility under the Existing Senior Facilities Agreement. Our liquidity needs arise primarily from debt service requirements related to our Existing Debt and the need to fund our working capital requirements, capital expenditures and restructuring costs.

Following the Transactions

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 Facilities Agreement, working capital requirements, capital expenditures, tax payments and restructuring costs, which we expect to be funded by cash flows from operations.

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 €75.0 million.

Cash Flows

The following table summarizes our cash flows for the years ended December 31, 2014, 2015 and 2016 and the nine months ended September 30, 2016 and 2017:

	Year Ended December 31,			Nine Months Ended September 30,	
	2014	**2015**	**2016**	**2016**	**2017**
			(€ million)		
Net income/(loss) for the period	(31.4)	(14.3)	(5.2)	(7.5)	24.4
Income tax expenses	(1.0)	7.7	10.0	6.0	13.9
Interest result	79.1	74.7	71.2	53.7	46.6
Depreciation and amortization on non-current assets	89.2	84.6	86.0	62.8	62.7
Gain/(Losses) from disposal of fixed assets	0.0	0.1	0.1	(0.0)	(3.2)
Increase/(decrease) in provisions (excluding deferred taxes)	3.2	1.2	9.4	8.1	(4.3)
Income tax refund/(payment)	(16.4)	(11.3)	(16.2)	(10.9)	(17.0)
Other non-cash expenses/income, net	15.5	1.7	(15.1)	(5.2)	3.0
(Increase)/decrease in inventories	3.4	(6.3)	(1.8)	0.7	(6.8)
(Increase)/decrease in trade receivables	(4.1)	(5.1)	(0.4)	(8.7)	(4.6)
(Increase)/decrease in other receivables and (financial) assets	0.4	0.6	1.7	1.5	(2.5)
Increase/(decrease) in trade accounts payable	(9.7)	1.9	(0.9)	(2.6)	(0.0)
Increase/(decrease) in other (financial) liabilities	1.8	0.1	(0.7)	3.7	1.6
Cash flows from operating activities	**130.0**	**135.5**	**138.0**	**101.7**	**113.8**
Cash received from disposals of property, plant and equipment	1.3	0.3	0.3	0.3	3.4
Cash (paid) for investments in property, plant and equipment	(47.7)	(26.9)	(15.0)	(10.7)	(14.6)
Cash received from grants	6.1	1.1	0.1	0.1	0.0
Cash received from/(paid for) investments in intangible assets	(1.4)	(1.1)	(0.7)	(0.3)	(0.5)
Cash paid for the acquisition of entities	(3.5)	(10.9)	0.0	0.0	(55.5)
Cash flows from investing activities	**(45.3)**	**(37.5)**	**(15.2)**	**(10.7)**	**(67.1)**
Repayment of syndicated loan	(7.5)	(18.7)(1)	(30.1)(2)	(21.7)	(27.8)(3)
Interest paid	(55.4)	(55.3)	(54.1)	(47.1)	(49.9)
Cash received from drawing of revolver loan	—	—	—	—	22.0
Repayment of shareholder loan	—	—	—	—	(97.6)
Transfer of profit/(loss) to former shareholder	(26.9)	—	—	—	—
Cash flows from financing activities	**(89.8)**	**(74.0)**	**(84.2)**	**(68.8)**	**(153.3)**
Change in cash and cash equivalents	**(5.1)**	**24.0**	**38.6**	**22.3**	**(106.6)**
Net foreign exchange difference	0.4	0.2	(0.4)	(0.5)	(0.9)
Cash and cash equivalents at the beginning of the period	67.0	62.2	86.5	86.5	124.6
Cash and cash equivalents at the end of the period	**62.2**	**86.5**	**124.6**	**108.3**	**17.0**

(1) Includes transaction costs of €0.5 million costs for the repricing of a term loan.

(2) Includes transaction costs of €0.3 million costs for the repricing of a term loan.

(3) Includes transaction costs of €0.3 million costs for the repricing of a term loan.

Cash flows from operating activities

Cash flows from operating activities increased from €101.7 million for the nine months ended September 30, 2016 to €113.8 million for the nine months ended September 30, 2017, principally due to an increase in our EBITDA, mainly driven by higher volumes with limited price erosion, higher productivity from operational excellence initiatives, as well as a decrease in selling, general and administrative expenses due to cost management.

Cash flows from operating activities increased from €135.5 million for the year ended December 31, 2015 to €138.0 million for the year ended December 31, 2016. This increase was mainly due to higher earnings and a stable working capital in 2016.

Cash flows from operating activities increased from €130.0 million for the year ended December 31, 2014 to €135.5 million for the year ended December 31, 2015. This increase was mainly due to a higher EBITDA in 2015, resulting from business growth in both our Medical Products as well as our Industrial business.

Cash flows used in investing activities

Cash flows used in investing activities increased from €10.7 million for the nine months ended September 30, 2016 to €67.1 million for the nine months ended September 30, 2017, principally due to the purchase price payment of €55.5 million for assets, net of liabilities, for the UK electro-ceramics business of Morgan Advanced Materials plc, which was comprised of two manufacturing sites.

Cash flows used in investing activities decreased from €37.5 million for the year ended December 31, 2015 to €15.2 million for the year ended December 31, 2016. This decrease was mainly caused by lower investments in property, plant and equipment compared to 2015 and the acquisition of DAI Ceramics, Inc. in 2015. There was no similar acquisition in 2016.

Cash flows used in investing activities decreased from €45.3 million for the year ended December 31, 2014 to €37.5 million for the year ended December 31, 2015. This decrease was primarily related to investments in 2014 for the expansion of manufacturing capacities in Marktredwitz. This effect was partially compensated by higher cash outflows for the acquisition of DAI Ceramics in 2015.

Cash flows used in financing activities

Cash flows used in financing activities increased from €68.8 million for the nine months ended September 30, 2016 to €153.3 million for the nine months ended September 30, 2017, principally due to debt service payments (interest payments and partial repayment of principal) of €105.4 million relating to the Existing Shareholder Loan.

Cash flows used in financing activities increased from €74.0 million for the year ended December 31, 2015 to €84.2 million for the year ended December 31, 2016. This increase was mainly due to increased voluntary repayments on the term loan under the Existing Senior Facilities Agreement.

Cash flows used in financing activities decreased from €89.8 million for the year ended December 31, 2014 to €74.0 million for the year ended December 31, 2015. This decrease mainly resulted from a transfer of profit/loss to a former shareholder in 2014, partially compensated by increased voluntary repayments on our term loan.

Capital Expenditures

The following table provides an overview of our capital expenditures for the years ended December 31, 2014, 2015 and 2016, the nine months ended September 30, 2016 and 2017 and the LTM Period to September 30, 2017:

	Year Ended December 31,			Nine Months Ended September 30,		Twelve Months Ended September 30,
	2014	**2015**	**2016**	**2016**	**2017**	**2017**
				(€ million)		
Additions to intangible assets	1.4	1.1	0.7	0.3	0.5	0.8
Additions to property, plant & equipment	48.0	26.7	13.9	8.2	13.8	19.4
Capital expenditures (gross)	**49.4**	**27.8**	**14.5**	**8.5**	**14.3**	**20.2**
Government grants	(3.0)	(1.3)	0.1	0.1	0.0	0.0
Capital expenditures (net)	**46.3**	**26.6**	**14.6**	**8.7**	**14.3**	**20.2**
Additions from business acquisitions	—	13.1	—	—	51.6	51.6

In general, our capital investment is split evenly, between maintenance and growth projects. The lower investment spending in the year ended December 31, 2016 was mainly driven by phasing of growth projects, which reflected the market conditions in the first half of 2016, and an increased focus on asset productivity.

We believe that our asset base is well invested, with sufficient machine capacity to accommodate expected growth in demand. We expect the centralized management of operations in Europe, which was conceived in 2016 and launched on January 1, 2017, to drive additional improvements in asset productivity, as capital expenditures and asset utilization are holistically managed across sites.

Our annual capital expenditures have typically amounted to between €25 million and €30 million, of which €10 million to €15 million has typically been related to maintenance and the remaining €10 million to €15 million to growth. Given the lower level of capital expenditures in 2016, we would expect certain catch-up effects in 2018, which may be significant, and would bring the three-year average capital expenditures back in line with our typical level.

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2016:

	Payments due by period						
	Carrying amount	2017	2018	2019	2020	2021	2022 and beyond
	(€ million)						
Contractual Obligations							
Trade payables	22.4	22.4	0.0	0.0	0.0	0.0	0.0
Trade payables owed to affiliates	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Liabilities to banks	664.8	28.4	29.3	27.4	668.2	0.0	0.0
Bond liabilities	308.7	25.3	25.3	25.3	25.3	332.0	0.0
Liabilities to affiliates	154.4	56.5	0.0	0.0	0.0	0.0	166.3
Finance lease liabilities	1.4	0.1	0.2	0.2	0.2	0.2	1.7
Other financial liabilities	3.6	3.6	0.0	0.0	0.0	0.0	0.0
Total	**1,155.5**	**136.5**	**54.8**	**52.9**	**693.7**	**332.2**	**168.0**

Lease Commitments

As of December 31, 2016, our future payment obligations from finance leases break down as follows:

	Total	Up to 1 year	1 to 5 years	More than 5 years
	(€ million)			
Finance lease commitments				
Present value of minimum lease payments	1.4	0.0	0.2	1.2
Interest effect	1.0	0.1	0.4	0.5
Minimum lease payments	**2.4**	**0.1**	**0.6**	**1.7**

Our operating lease commitments mainly relate to land and buildings as well as technical equipment and machinery. As of December 31, 2016, our future payment obligations from operating leases break down as follows:

	Up to 1 year	1 to 5 years	Total
	(€ million)		
Operating lease payment obligations	**1.7**	**0.9**	**2.6**

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 obligation and plan assets as well as the provisions and other assets for our defined benefit plans at the beginning and at the end of the year ended December 31, 2016:

	Year Ended December 31, 2016		
	German plans	Foreign plans	Total
		(€ million)	
Benefit obligations at the beginning of the year	**78.5**	**12.8**	**91.3**
Service costs	2.7	0.0	2.7
Interest expenses	1.9	0.4	2.3
Remeasurements	13.5	2.1	15.7
Foreign currency translation	0.0	(1.8)	(1.8)
Benefits paid	(2.3)	(1.1)	(3.4)
Benefit obligations at the end of the year	**94.4**	**12.5**	**106.8**
Market value of plan assets at the beginning of the year	**0.0**	**5.3**	**5.3**
Interest income from plan assets	0.0	0.2	0.2
Expense for managing the plans	0.0	(0.3)	(0.3)
Employer contributions	0.0	0.5	0.5
Remeasurements	0.0	0.5	0.5
Foreign currency translation	0.0	(0.7)	(0.7)
Benefits paid	0.0	(1.0)	(1.0)
Market value of the plan assets at the end of the year	**0.0**	**4.4**	**4.4**
Net obligation amount for pension benefits	**94.4**	**8.1**	**102.4**

The actuarial loss is primarily due to the decrease in the discount rate for the German plans of 1.6% for the year ended December 31, 2016, as compared to 2.4% for the year ended December 31, 2015. The expected contributions to the defined benefit plans by the employer until December 31, 2017 amount to €0.3 million. For the year ended December 31, 2017 the Target expects to make benefit payments in the amount of €2.6 million.

Off-Balance Sheet Arrangements

As of September 30, 2017, we have no off-balance sheet arrangements except for an uncommitted true sale and factoring program with PB Factoring GmbH in relation to certain accounts and receivables, as well as certain leases entered into in the normal course of business.

Critical Accounting Policies and Significant Accounting Estimates

Our principal accounting policies are described in note 2, titled "*Accounting principles*" of the 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 liabilities assumed. The expected useful lives of the acquired intangible assets and property, plant and equipment also have 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 income 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

The recoverability of trade receivables was assessed based on the estimated likelihood of default. Accordingly, receivables are reduced by appropriate 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 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 be utilized 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 temporal 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 our new Senior Facilities. We plan to fully draw €1,116.5 million of term loans under our new Term Loan Facility, all of which will be subject to variable interest rates. Additionally, we will have our new Revolving Credit Facility available to us in a maximum amount of €75.0 million. We do not currently expect to draw amounts under the Revolving Credit Facility as of the Completion Date. We intend to hedge our variable interest exposure through interest rate hedges on a majority of the borrowings under the Senior 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. In the past we were not significantly exposed to a particular foreign currency as most of our sales were denominated in euro.

The following table shows the effects on our net income for the year ended December 31, 2016 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, 2016					
	%	%	USD	GBP	CZK	PLN	CNY	Total
Earnings effect before tax (thousand €)	+10%		5,031	-142	30	-1,824	-524	**2,571**
	-10%		-6,149	174	-36	2,229	1,179	**-2,603**
Effect on equity (thousand €)		+10%	-1,902	0	0	0	0	**-1,902**
		-10%	2,769	0	0	0	0	**2,769**

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. We have in the past entered into currency swaps to reduce our exposure to fluctuations in the U.S. dollar to euro exchange rate. Our new Term Loan Facility will provide for a U.S. dollar tranche with an aggregate principal amount of up to €150 million (equivalent). As a result, although we expect that part of our currency rate exposure due to our new U.S. dollar term loan will be offset by our U.S. dollar revenues, we will be subject to significant foreign exchange rate risk in connection with our financing and interest payments on our Term Loan Facility.

Commodity price risk

We are subject to changes in our cost of sales caused by movements in underlying commodity prices (primarily oil and natural gas). Approximately 10% 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 leadoxid which is connected to lead prices, goldsalts which are connected to the gold price, silversalts which are connected to silver 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.

BUSINESS

Overview

We are a leading global developer, manufacturer and supplier of high performance ceramics ("HPC") solutions for various end markets including medical, automotive, industrial, consumer and electronics. Our HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological/chemical, mechanical, thermal, electric/magnetic or optical properties compared to competing products made from metal 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 currently offer a wide range of HPC solutions including hip joint prostheses components, actuators in engine valves for fuel injection systems, high speed cutting tools and transparent ceramic components for armor applications. The versatility of HPC products and resulting wide-range of applications provides us with a highly diversified end market and customer base.

Our operations can be divided into two businesses—Medical Products and Industrial.

Medical Products: Our Medical Products business focuses on developing and manufacturing ceramic components for hip joint prostheses, such as ball heads and cup inserts used in total hip replacement ("THR") procedures. In 2016, we generated 37.6% of our revenue and more than half of our Management Adjusted EBITDA from our Medical Products business. Ceramic materials are 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. Our HPC medical solutions are biologically inert and have high wear resistance and excellent friction behavior, making them one of the few materials that are durable and stable enough to withstand the corrosive effects of bodily fluids. More than 14 million of our BIOLOX® ceramic components have been implanted in patients globally to date. We estimate that nearly one in two hip joint implant systems sold worldwide in 2016 includes at least one ceramic component, and we estimate our BIOLOX® products represented more than 95% of the ceramic components used for these hip joint implant systems. Our customers are orthopedic implant OEMs including DePuy, Smith & Nephew, Stryker and Zimmer Biomet, the top four orthopedic implant OEMs who together have a market share of more than 60% in the worldwide market for hip joint implant systems. 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 anticipate that our HPC solutions will be used for various other joint replacements, such as knee and shoulder implants in the future.

Industrial: Our Industrial business develops, manufactures and supplies a broad range of highly specialized, performance critical HPC solutions for customers spanning a wide range of industries including automotive, defense, electronics, industrial machinery and medical equipment. In 2016, 62.4% of our revenue was generated by our Industrial business. 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, which when coupled with our state-of-the-art manufacturing facilities, enables us to efficiently produce solutions at scale while still adhering to all relevant industry standards. Due to the superior technological and performance characteristics of advanced ceramics, such as better wear and heat resistance than alternative materials, our HPC solutions are often 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 automotive engineering, HPC products, including our piezo ceramic components, play a vital role in increasing safety, improving cost-effectiveness and enhancing comfort in vehicles. Our ceramic substrates, which are ceramic plates with electrical, thermal and mechanical properties, 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, reduces the exposure of our Industrial business to any single industry or product.

At our state-of-the art development centers and laboratory facilities, we continuously research and develop materials as well as manufacturing and coating processes for new solutions in established and new markets. Our R&D is primarily focused on delivering customer-driven innovations and next generation solutions, which we are able to test through market leading digital simulation tools. We also develop new innovations with broader uses such as PERLUCOR®, a wear and chemical resistant transparent ceramic material that is three to four times the hardness and strength of glass and is already used in a wide range of applications.

In 2016, we generated 69.7% of our revenue in Europe (including Germany). However, our customers have a strong export focus as their end-products, such as automotive parts or ceramic hip implant components, are exported world-wide. In addition, we have a global manufacturing footprint with 20 facilities across Europe (including two facilities in the UK that were acquired in 2017 as part of our acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc), North America, Asia and South America.

In the LTM Period to September 30, 2017, we generated revenue of €536.7 million and Management Adjusted EBITDA of €199.9 million, respectively, representing a 37.3% Management Adjusted EBITDA margin. From 2014 to 2016, our revenue and Adjusted EBITDA registered a CAGR of 1.9% and 5.5% respectively, and our Cash Conversion Ratio increased from 70.0% to 91.5%. We believe we have a highly cash generative business supported by modest maintenance capital expenditure requirements, which typically comprise half of our total capital expenditures. For an explanation of the components of Management Adjusted EBITDA and Cash Conversion Ratio, see "*Summary—Summary Consolidated Financial and Other Information*."

Our Competitive Strengths

Compelling customer value through high-tech, tailored solutions for mission-critical applications

We are a leading global developer, manufacturer and supplier of HPC solutions. With over 100 years of experience in the HPC industry, we believe that our customers consider us a thought leader capable of developing and delivering innovative solutions and processes quickly and on an industrial scale. We believe that our value proposition lies in our dependability as a trusted partner with the materials expertise and manufacturing process know-how to develop tailor-made solutions to fit different customer needs at a consistent high quality. As a result, we have established strong, long-standing customer relationships with leading corporations across the world.

Our representative portfolio of mission-critical HPC solutions spans a variety of end markets and include the BIOLOX® family of products for in-body use, whose superior wear characteristics and biocompability are critical to the success of hip replacements, Cerasoft®G Surfaces, a versatile friction disc used in the textile industry with a long service life, CeramCool® heat sinks, which provide long lasting thermal management of high power electronics and PERLUCOR®, a superior value transparent ceramic material that is lighter and more resistant than conventional bulletproof glass.

R&D and manufacturing excellence with high degree of customer integration

Our decades of experience in the HPC industry have provided us with a strong foundation of proprietary material science and applications know-how that we continue to strengthen. For example, we have developed and materially enhanced a number of innovative materials including PERLUCOR® (high optical transparency and strength), polycrystalline cubic Boron Nitride ("pcBN") (very hard ceramic material with high fracture resistance) and Yttria-toughened Zirconia, with functional additives for high damage tolerance and edge stability ("HTZ 500"). To support our innovation efforts, we have a highly qualified R&D team of over 200 scientists and engineers, including 52 PhDs and an extensive portfolio of over 600 patents, which cover new materials, applications as well as process designs. We also frequently collaborate with leading research institutions and universities such as the Fraunhofer Institute and Imperial College London.

In addition to materials innovation, we have developed a unique combination of know-how, experience and equipment that allows us to manufacture complex solutions at an industrial scale while adhering to regulatory and customer quality requirements, as exemplified by the high volume production of our BIOLOX® solutions (with approximately 1.4 million components sold in the LTM Period to September 30, 2017) as well as our piezo ceramic tapes. In particular, we are able to draw on our proprietary process know-how to tailor the manufacturing process for each solution and thus rapidly progress from prototype to large volume production. As a result of the expansion of our facility in Marktredwitz, Germany in 2013 and 2014, we believe that we have ten times the production capacity of all our competitors combined in the ceramic hip component market and that we are the only hip component player capable of providing dual-site manufacturing of hip replacement components. Further, our strong culture and track record of quality control has resulted in state-of-the-art manufacturing facilities that have been awarded various quality and industry certifications (including FDA approval) and that contain a broad range of testing equipment. In addition, multiple checks and tests are undertaken in our Medical Products manufacturing facilities on each component during every stage of production and we have not experienced any major product recall in over ten years.

Our overall approach to R&D and manufacturing is driven by our focus on closely collaborating with customers during the entire development and production cycle and becoming embedded within our customers' innovation processes by offering value-added solutions. To support an integrated product development process, we have specialized technical sales personnel of 310 FTEs in 16 countries that provide local coverage to service customer needs and deliver bespoke technical support. The reorganization of our Industrial business that commenced in 2016 further streamlined, standardized and strengthened our commercial operations to improve lead times and customer service quality. Further, we continue to focus on developing breakthrough technology in the HPC industry with applications for end markets exhibiting attractive growth potential.

Leading market position in a critical and growing segment of the orthopedics market

We believe that via our Medical Products business, we are the market leader in ceramic solutions for hip replacement procedures globally and estimate that our BIOLOX® family of products represents approximately 95% of the ceramic solutions used for hip implant systems today. In 2016, we generated 37.6% of our revenue and more than half of our Management Adjusted EBITDA from our Medical Products business. With over 40 years of experience in the orthopedics market, we have long standing relationships that each span over 20 years with all top four orthopedic implant OEMs who, according to a leading international consultancy firm, together account for over 60% of total sales in the global hip implant market. Further, we believe that we are the only supplier of ceramic components that supplies all top four orthopedic implant OEMs. We closely collaborate with our major OEM customers in both training and marketing efforts such as including a “BIOLOX® inside” logo on the packaging of many of our customers’ hip implant system and also organize technical training, attend medical seminars and, produce clinical articles to bolster brand awareness among surgeons and hospitals. As a result, we believe BIOLOX® is the only globally recognized brand in hip implant solutions among surgeons and, we believe, considered the industry standard for hip replacement procedures.

Our Medical Products business operates in a structurally growing market with favorable underlying demand drivers. According to an international consultancy firm, the number of THR procedures is expected to increase from 2016 to 2021 by a CAGR of 4.2% due to a number of factors including aging demographics, increased prevalence of obesity and improved healthcare access in emerging markets. Alongside the growth in hip replacement procedures, ceramic hip components are increasingly replacing other materials in hip replacement procedures, driven primarily by the chemical and mechanical characteristics of ceramics as well as patient safety concerns about the potential adverse effects of other alternatives such as the potential toxicity of cobalt chrome. According to an international consultancy firm, the penetration of THR procedures performed with ceramic ball heads is expected to increase from 45% in 2016 to 51% in 2021 while the ceramic ball head and insert market is expected to grow by a CAGR of 6.8% and 4.2%, respectively, from 2016 to 2021.

With more than ten times the production capacity of our competitors combined, we believe that we are the only industry player able to produce ceramic solutions for hip implants at an industrial scale to accommodate global OEMs with large volume demands while maintaining a consistently high quality level. Further, ceramic hip implant components like our solutions have superior wear properties and biocompatibility compared to alternative materials and are crucial to the performance of the overall hip replacement system but only represent a small portion of the total price of an implant. Given the critical nature and liability risks of hip replacement procedures, OEMs, surgeons, hospitals and patients demand high performance, reliability and quality in hip replacement components and would be reluctant to switch away from an existing trusted brand. In addition, our ceramic solutions are used in products that require regulatory approval (such as from the FDA) and any replacement of our solutions in our customers’ end products would require new regulatory approvals, which may require significant financial investment and could take up to eight years.

Diversified industrial business delivering bespoke solutions to world leading OEMs

Our Industrial business contributed 62.4% of our revenue in 2016 and produces diverse solutions across a range of different end markets, which limits our exposure to any particular industry. We believe that we are the partner of choice to a diverse base of blue chip customers across these various end markets including Bosch, Honeywell and Volkswagen as a result of the following factors:

- *Material and manufacturing process expertise*. Over 100 years of experience in the HPC industry and a portfolio of over 600 patents provides us with a strong foundation of material knowledge and enables us to design tailored manufacturing processes.

- *Application development*. We have a strong track record of designing bespoke solutions to meet customer needs and over 70% of our solutions are custom made.

- *Flexible scale up production facilities*. Our global manufacturing footprint enables us to scale up or down production in order to meet changing customer needs while upholding a consistent level of quality.

- *Local coverage*. Our on-the-ground presence in 16 countries and familiarity with local markets and approval processes enables us to provide solutions to global customers at the local level.

- *Culture of customer integration*. We develop solutions in close collaboration with our customers and are often embedded into our customers’ products and manufacturing processes.

We believe that the versatility of high performance ceramics opens up new possibilities when conventional materials reach their limits. As a result, our HPC expertise makes us well-placed to capitalize on the favorable growth dynamics exhibited by the multiple end markets addressed by our Industrial business. For example, in the automotive market, the rise of electric vehicles, electric car components and autonomous vehicles is likely to drive an increased demand for piezo ceramic components, which we currently produce. Our acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc in 2017 further bolstered our piezo ceramics platform. In addition, we believe we are well-placed to capitalize on other trends driving expected growth in certain end markets such as big data, Industry 4.0 and growth in high end appliances. The table below sets out the split of revenue from our Industrial business by end market for 2016 as well as the total size in 2016 and the expected market growth rates from 2016 to 2021 of the end markets of our Industrial business group.

End Market	Approximate % of 2016 Industrial business revenue[1] (%)	Total Size 2016 (€ billion)[2]	Expected Growth CAGR 2016 – 2021 (%)[2]
Medical Equipment	7%	€0.4 billion	6-7%
Electronics & Telecommunications	17%	€1.6 billion	3-4%
Industrial Applications	19%	€2.5 billion	4-5%
Automotive	34%	€1.3 billion	3-4%
Aeronautics/ Defense	8%	€1.0 billion	6-8%
Other	15%	€0.8 billion	3-4%

(1) Based on management estimate, unaudited. Based on Industrial business revenue for 2016, including estimated revenue contribution from acquisition of UK electro-ceramics business from Morgan Advanced Materials plc.

(2) Source: International consulting firm

Due to the bespoke nature, manufacturing complexity and quality requirements of our solutions, we benefit from long term customer relationships in our Industrial business with more than 90% of our customers having a relationship with us of more than five years. The collaborative nature of our development process with our customers often means that we are the sole supplier of a particular solution. Further, while our solutions are typically mission-critical, they usually account for a small portion of the overall cost of our customers' end products. As a result, we believe that the costs of switching to alternate suppliers are high in particular as customers may have to obtain end user approval in advance.

Strong financial track record bolstered by high cash generation

Our business is highly cash generative and has a track record of delivering strong financial results. Our Cash Conversion Ratio was 91.5% in 2016, driven by overall growth and margin expansion as well as low maintenance capital expenditure needs. From 2014 to 2016, our revenue and Management Adjusted EBITDA grew at a CAGR of 1.9% and 5.5%, respectively, due to strong volume growth and ongoing improvement projects such as the streamlining of our Industrial business in 2016 and 2017, pricing initiatives in our Medical Products business and certain productivity measures. Further, we believe that our prudent approach to cost management in sales and other supporting functions have also contributed to our profitability.

Our well-invested manufacturing footprint allows us to operate with low 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 flexibility to defer a significant part of planned expenditures to later periods.

Our Management Adjusted EBITDA margins were 32.4%, 32,7%, 34.7% and 37.3% in 2014, 2015, 2016 and the LTM Period to September 30, 2017, respectively, and our profitability has remained high throughout the economic cycle, including during the 2009 economic downturn. We believe that the stability of our business has been further strengthened by our flexible cost base, driven in part by the good relationships we have with our employees, as well as the growth of our Medical Products business, which has historically exhibited strong profitability and cash conversion.

Experienced management team supported by dedicated workforce

We have a seasoned senior management team with deep industry knowledge and extensive experience working for other global organizations such as Ruetgers, Biomet and Aventis. Our senior management team is further aided by a strong base of experienced second level management who have proven track records of developing and commercializing innovative HPC solutions across various end markets. We also benefit from a highly productive and loyal employee base with very low employee turnover as well as good relationships with all work councils and unions.

Our Business Strategy

Maintain leadership in high performance ceramics through commercial, operational and innovation excellence

We intend to maintain our leading position in the HPC industry by focusing on initiatives that drive excellence in all aspects of our business:

- *Commercial*. We apply value-driven pricing primarily in our Medical Products business to take into account the individual commercial propositions of our HPC solutions and also provides new service functions as we continue to strive to be closely attuned to our customers' needs.

- *Operational*. In order to grow our profitability while maintaining productivity and quality, we intend to continue to optimize our global operations, supply chain management and capacity utilization including by combining our European production facilities into a centralized unit where best practices become standardized.

- *Innovation*. To strengthen the commercialization capabilities of our R&D operations we have separated our innovation function between strategic research and customer projects, each with a clear funnel process to prioritize key innovations.

- *Industrial business streamlining*. We commenced the reorganization of our Industrial business in 2016 and we will continue to streamline our Industrial business by simplifying internal structures, aligning functions to reduce inefficiencies and standardizing processes across business clusters.

Focus on growth initiatives

We aim to expand further globally in markets with strong underlying fundamentals where we are underrepresented such as the United States and China. For example, China is becoming one of the most important markets for HPC solutions. In particular, China is one of the fastest growing markets for hip replacements with an expected THR procedure CAGR of 9% from 2016 to 2021 according to an international consulting firm. With an existing presence in Suzhou, China, we also intend to partner with local players to accelerate growth and achieve scale as well as maximize our existing expertise to focus on key projects and achieve true "local" status.

We historically have served German customers in the domestic market and over the years, have grown our geographic reach alongside our customers' own global expansions. As part of our growth initiatives, we intend to grow our customer base and partner with truly international corporations that would benefit from our extensive materials and process expertise, scale and global footprint.

In addition, we intend to focus on capturing emerging growth opportunities beyond our core markets as we believe the versatility of ceramics and continued technical advances across different end markets leave room for ceramics to expand into new fields of application. In our Medical Products business, we intend to maximize the value of existing solutions by exploring additional medical applications such as knee, shoulder and spine components as well as capitalize on our R&D strength and regulatory expertise to produce new innovations such as ceramic foam or ceramic implants for dental applications. In our Industrial business, which according to an international consulting firm benefits from an addressable market of €7.6 billion in 2016, which is expected to grow at a CAGR between 3% and 7% until 2021 in each of the industrial end markets. We are continuously monitoring technology trends such as 3D printing, e-mobility, autonomous vehicles and big data in order to consider how best to apply our materials expertise, manufacturing now-how and regulatory experience to develop relevant HPC solutions that can be successfully commercialized.

Maintain a disciplined approach to cash generated from our business

Supported by our well-invested manufacturing footprint and overall growth, our business is highly cash generative, with Cash Conversion Ratios of 70.0%, 83.7%, 91.5% and 89.9% in 2014, 2015, 2016 and the LTM Period to September 30, 2017. We intend to maintain a disciplined approach in using such cash while preserving attractive margins. Further, we have historically been successful at reducing overall indebtedness from a ratio of pro forma net third party debt to Management Adjusted EBITDA of 7.0x for the LTM Period to March 31, 2013 (when we issued our Existing Debt) to a ratio of net third party debt to Pro Forma Adjusted EBITDA of 4.3x for the LTM Period to September 30, 2017. We anticipate that our future uses of cash include engaging in value accretive M&A and maintaining an optimal capital structure.

Pursue value accretive M&A

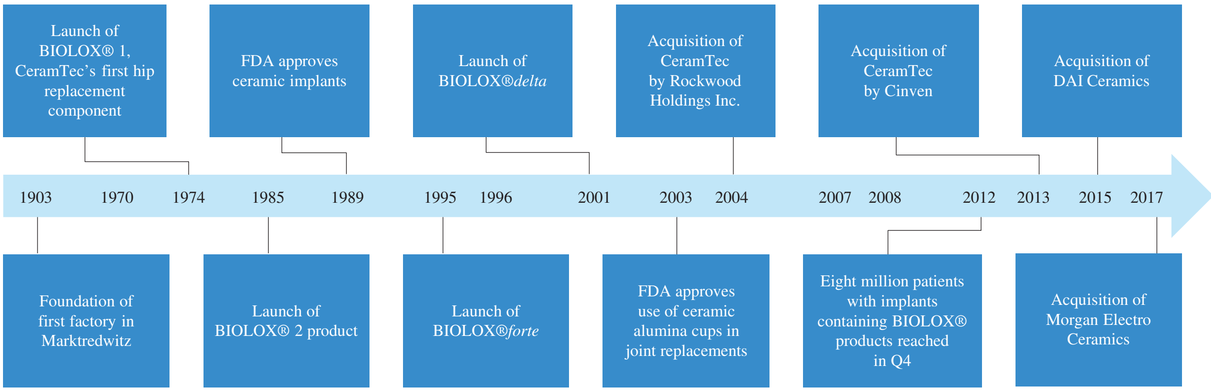
We have demonstrated a successful track record of executing and integrating bolt-on acquisitions such as the acquisition of DAI Ceramics Inc. in 2015, which strengthened our presence in the United States and provided us access to the aeronautics end market, and the acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc in 2017, which bolstered our piezo ceramics platform. We intend to pursue a diligent approach to bolt-on M&A, with future acquisitions to be focused on gaining scale in attractive end markets and technologies as well as accessing new geographies.

Our History

Our history dates back to 1903 when our first factory opened in Marktredwitz, Germany and started manufacturing advanced ceramics. In 1951 our first factory in Plochingen opened. Through a series of combinations, the Group in substantially its current form was established in 1996 when ceramic company Cerasiv GmbH and Hoechst CeramTec AG merged. The Rockwood Group acquired the Target Group in 2004 from Metallgesellschaft AG. Our current owners, Cinven, acquired the Group from the Rockwood Group in 2013. In October 2017, Bidco (an entity controlled by funds advised by BC Partners and a wholly-owned subsidiary of the Issuer) entered into the Acquisition Agreement with Faenza Luxembourg S.à r.l. (an entity controlled by Cinven) for the acquisition of the Target. See "*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 being the only manufacturer of ceramic-on-ceramic ball head and cup insert components for hip replacement systems approved by the FDA. 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 released four generations of BIOLOX® materials to date. Our BIOLOX® materials and related product manufacturing processes represent our core know-how and is exclusive to us. With each generation of BIOLOX® materials, we have continued to refine our BIOLOX® materials to target a wider range of applications. As of September 30, 2017, over 14 million BIOLOX® products have been delivered worldwide to date.

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 five key aspects: biological/chemical, mechanical, thermal, electric/magnetic and optical.

Dimension	Key Characteristics of HPC
Biological/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 **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)
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 examples 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 and lack of allergic reactions with the human body, HPC are regarded as the material of choice for implant prosthesis components, in particular for hip procedures;

- *Automotive—piezo systems:* The automotive 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;

- *Automotive—cutting tools:* The automotive industry utilize 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;

- *High-power LED—packages:* The high-power LED industry utilizes the thermal and electric characteristics of advanced ceramics for the production and manufacturing of packages, one of the structural components of an LED product, by incorporating ceramic substrates with high thermal conductivity and electrical insulation;

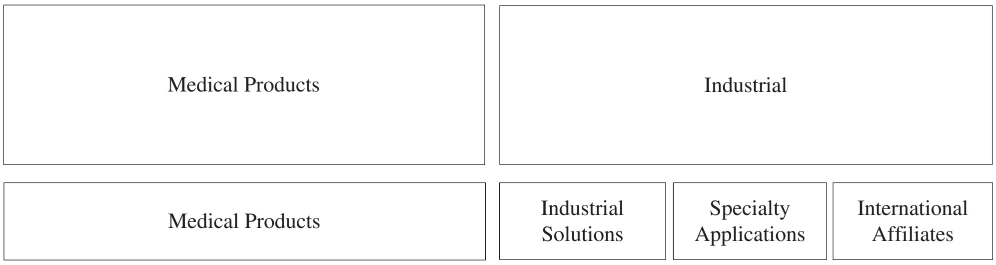
- *Electronics—packages:* The electronics industry utilizes the electric characteristic of advanced ceramics to embed transistor packages or integrated circuits in HPC products and provide insulation;

- *Sanitary—water tap:* The sanitary industry utilizes the mechanical and chemical characteristics of advanced ceramics for water taps to provide greater strength to cope with mechanical and water pressure as well as reduce corrosion; and

- *Defense—armored vehicles*: The defense industry utilizes transparent ceramics as a protective glass in armored vehicles to provide a clear view combined with high wear resistance and low weight.

Our Business

Our business can be divided into Medical Products and Industrial. In both our Medical Products and our Industrial business, we believe that 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. During the LTM Period to September 30, 2017, our Medical Products business accounted for €198.9 million, or 37.1%, of our revenue while our Industrial business accounted for €337.7 million, or 62.9% of our revenue. Our Medical Products business benefits from relatively high margins and following the expansion of our Marktredwitz facility in 2013 and 2014 has modest capital expenditure requirements compared to our Industrial business. The following chart provides an overview of how our business is presented in this offering memorandum:



Although 69.7% of our revenue originated in Europe (including Germany) in 2016, we have a global infrastructure with manufacturing facilities in Europe, North America, Asia and South America and over 3,400 employees (FTE) worldwide as of September 30, 2017. Further, many of our customers, especially in the medical and automotive markets have a strong export-focus which positions us as a company with a global sales footprint. As a result, we believe that underlying demand outside of Europe drives approximately 40% of our revenue. The following table provides an overview of our sales on the basis of customer location for the last three years:

	Year Ended December 31,					
Regional revenue (in € million, except as otherwise indicated)	**2014**	**%**	**2015**	**%**	**2016**	**%**
Germany	134.5	28.3%	130.2	26.0%	133.1	27.0%
Rest of Europe	202.4	42.6%	209.3	41.8%	210.8	42.7%
North America	68.8	14.5%	83.5	16.7%	73.0	14.8%
Asia	55.8	11.7%	62.7	12.5%	61.4	12.4%
Other regions	13.4	2.8%	15.5	3.1%	15.1	3.1%
Total	**474.8**	**100.0%**	**501.3**	**100.0%**	**493.3**	**100.0%**

Medical Products

Overview

Our Medical Products business focuses on ceramic components for hip joint prostheses, such as ball heads and cup inserts, used in THR procedures. Ceramic materials are replacing traditional materials such as metal contained in hip joint prosthetic components. Besides their wear resistance and excellent friction behavior, high performance ceramics are biologically inert, making them one of the few materials that are durable and stable enough to withstand the corrosive effects of bodily fluids. In addition no allergic reactions or carcinogen risks caused by high performance ceramics have been reported to us to date. Research has also shown that ceramic hip joint components are less susceptible to fracture than certain other alternative materials. 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.

BIOLOX® is our key brand and product line for our core medical business, and has become the product of choice for surgeons for hip implant systems around the globe. We estimate nearly one in two hip joint implant systems sold worldwide in 2016 included at least one ceramic component, and we estimate our BIOLOX® products represented more than 95% of the ceramic components used for these hip joint implant systems. Our end customers are orthopedic implant OEMs including DePuy, Smith & Nephew, Stryker and Zimmer Biomet, the top four orthopedic implant OEMs who together have a market share of more than 60% in the worldwide market for hip joint implant systems. We believe that we are the only supplier of ceramic ball heads and cup inserts that supplies all of these orthopedic implant OEMs. 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.

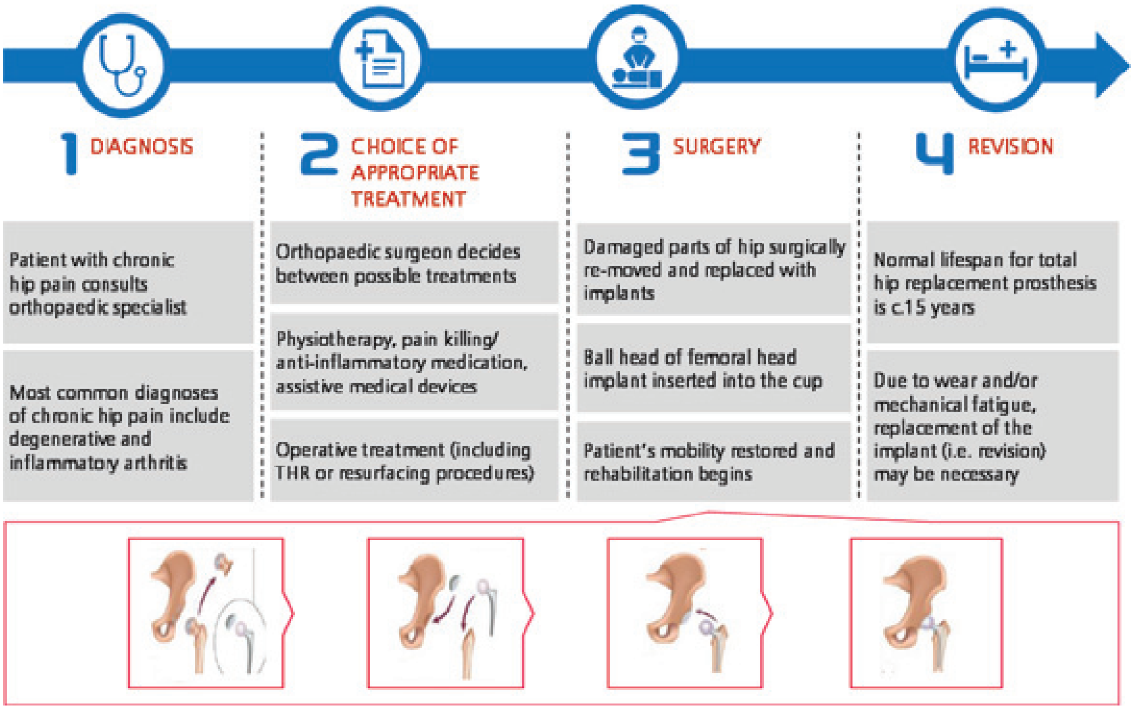
The ceramic components for hip joint prostheses are produced at our facilities in Marktredwitz and Plochingen in Germany and are sold to OEM orthopedic implant manufacturers globally. After successfully expanding our medical production facilities in Marktredwitz in 2013 and 2014, our annual production capacity totaled 2.0 million units as at September 30, 2017. We believe that our enhanced capacity allows us to further ensure security of supply for our customers and increase our ability to efficiently react to fluctuations in demands by having more 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 no longer work. 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, respectively, 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 2016, approximately 2.2 million hip replacement procedures (excluding partial procedures) 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.



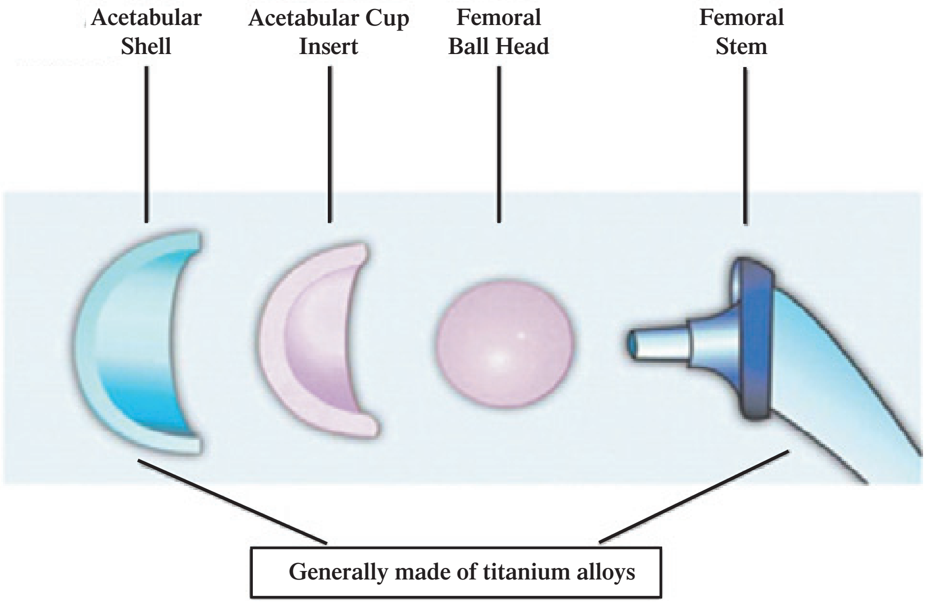
Hip replacement therapy is one of the most successful surgical procedures in modern medicine, according to the American Academy of Orthopedic Surgeons. First performed in 1960, improvements in both surgical techniques and materials have greatly increased the effectiveness of total hip replacement. A 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 acetabular cup forms the socket in the ball-and-socket structure of the hip joint implant. The femoral ball head allows the hip joint to rotate. The femoral stem is inserted into the femur and anchors the implant in place.

Hip Joint Replacement System

The diagram below illustrates the hip joint replacement system:



The acetabular cup insert, is made of ceramic, metal or polyethylene (plastic), while the acetabular 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 (MoM)
Description	▪ Latest combination; lowest wear rate	▪ Ceramics in combination with polyethylene	▪ Due to concerns around the potential release of metal ions, use is declining	▪ Generally withdrawn from the market due to wear particles resulting in metal toxicity

Offered by Medical Products business

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

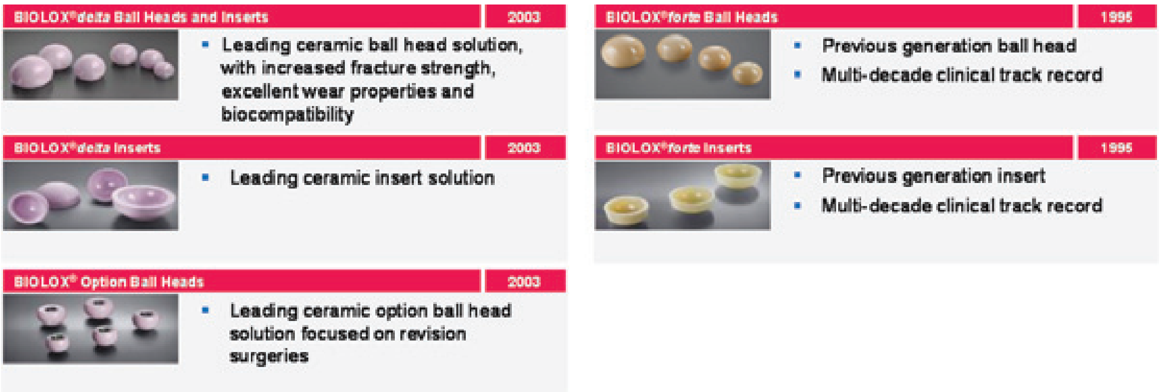
For ceramic ball heads and cup inserts used for hip joint implant systems, we believe our BIOLOX® brand has come to symbolize high quality and innovative products. More than 14 million BIOLOX® products have been implanted in patients worldwide and no patient allergic reaction caused by a BIOLOX® product has been reported to us to date. We believe that we are the market leader in ceramic components for hip joints globally. We sold almost 1.4 million BIOLOX® components in 2016, which we estimate were used in approximately 45% of the total hip joint implant systems sold worldwide.

We currently offer two different ceramic materials under our BIOLOX® brand which are compatible with each other.

- BIOLOX®*forte*, introduced in 1995, offers properties that 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 approval process. 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 nearly 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* is a newer material than BIOLOX®*forte*. It is 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 revision 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*.

We sell the following key products to our OEM implant manufacturer customers for use in their hip joint replacement systems.



- 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 insert, we are able to offer our customers a number of possibilities for their hip replacement systems. We produce ball heads with diameters of 22mm, 28mm, 30mm, 32mm, 34mm, 36mm, 38mm, 40mm and 44 mm (22 mm, 30mm and 38mm 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 (x-large 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.

In 2016, approximately two thirds of products sold (by piece) by the Medical Products business were BIOLOX®*delta* ball heads which can be used with ceramic cup insert or polyethylene cup inserts. The rest of the products sold were primarily other BIOLOX®*delta* products, such as BIOLOX®*delta* cup inserts or BIOLOX® *OPTION*, with BIOLOX®*forte* ball heads and cup inserts and BIOLOX® *DUO*. The following table provides an overview of the number of units sold in the past five years.

	2012	2013	2014	2015	2016	CAGR 2012-2016
	(in thousands)					(in %)
Total number of units	1,009	1,152	1,259	1,291	1,368	7.9%

Artificial Hip Joint Market

According to a leading international consultancy firm, there were an estimated 2.2 million THR procedures performed worldwide in 2016. In addition, an estimated 0.4 million revisions (of existing hip implants) and 0.5 million partial hip replacements ("PHR"), which treat only the femoral side of the joint, were performed, bringing the total number of hip replacement procedures in 2016 to an estimated 3.2 million. The number of THR procedures globally is expected to increase by 4.2% per annum from 2016 to 2021 with the numbers of revisions expected to increase by 5.4% per annum and PHR procedures by 4.2% per annum over the same period:

	Estimated CAGR for 2012 - 2016	Estimated number of total hip joint replacement procedures in 2016 (in thousands)	Expected CAGR for 2016 - 2021
Germany, France, Italy, Spain and the United Kingdom	2%	554	2%
Rest of Europe	2%	440	2%
United States	3%	419	3%
China	15%	173	9%
Rest of the World	9%	627	7%
Global	**5%**	**~2,200**	**4%**

Source: International consulting firm

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 proliferation 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.

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 has none of these drawbacks, which has led to increasing penetration rates as metal has been increasingly substituted with ceramic.

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 ball heads, inserts and option heads market addressed by us amounted to approximately €745 million in 2016 (including metal and polyethylene). The total addressable market is expected to grow with the number of THR 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 PHR procedures. The market for ceramic ball heads is significantly larger than for inserts and option heads as ball heads are used across all of THR, PHR and revision procedures.

The following table sets out the market size and historic growth rate for ceramic ball heads, inserts and option heads:

	No. of units (in thousands)		CAGR
	2013	2016	2013 -2016
Ceramic ball heads	838	1,066	8.4%
United States	141	194	11.2%
Germany, France, Italy, Spain and the United Kingdom	339	382	4.1%
China	29	58	26.0%
Other	329	432	9.5%
Ceramic inserts	258	260	0.3%
United States	10	8	(7.2%)
Germany, France, Italy, Spain and the United Kingdom	131	123	(2.1%)
China	15	24	17.0%
Other	102	105	1.0%
Ceramic option heads	63	95	14.7%
United States	11	15	10.9%
Germany, France, Italy, Spain and the United Kingdom	26	38	13.5%
China	3	6	26.0%
Other	23	36	16.1%

Source: International consulting firm

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.

The ceramic hip implant component penetration rate in the United States is significantly below the penetration level of major European markets. In Europe, the penetration levels of ceramic components have been relatively higher due to the difference in regulatory regimes and earlier introduction of ceramic products. The continued downturn in metal-on-metal implants has also benefitted ceramic components in Europe in recent years.

Globally, penetration of ceramic ball heads (ceramic-on-ceramic and ceramic-on-polyethylene) as a percentage of THR procedures performed was estimated at 45% in 2016, according to a leading international consulting firm. A further increase in ceramic penetration in ball heads is expected, particularly in the U.S. and China, according to the same source.

Competition in Medical Applications

We estimate our BIOLOX® products represent more than 95% of the ceramic components used for hip implant procedures with 1.4 million units sold by us in 2016. 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, Ceraver and Mathys, manufacture hip replacement systems (rather than only the components) and therefore compete directly against our customers.

Topic	CeramTec	Kyocera	CoorsTek	Nevz-Ceramics	Mathys	Metoxit	CERAM	CERAVER
Ceramic medical products	BIOLOX® • Ballheads • Cup inserts • Knee	BIOCERAM • Ballheads • Knee • Shoulder	• Ballheads • Cup inserts • Knee	• Ballheads	Bionit • Ballheads • Cup inserts Ceramys • Ballheads • Cup inserts • Knee	BIO HIP • Ballheads • Cup inserts	• Ballheads • Cup inserts	• Ballheads
Hip implant ceramic component market share	>95%	← Worldwide <5% →						

A number of challenges exist for any of our competitors to gain market share. Our ceramic ball heads and cup inserts have bespoke geometric specifications that accommodate our customers' hip implant systems. 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. 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 over 14 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, with a manufacturing output more than ten times that of our competitors combined, while still maintaining a strict quality control regime provides us with a competitive advantage that we believe would require significant investment for any competitor to replicate.

Given the foregoing, we enjoy a stable market leading position in our Medical Products business 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 four 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 DePuy, Smith & Nephew, Stryker and Zimmer Biomet, the top four orthopedic implant OEMs who together have a market share of more than 60% in the worldwide market for hip joint implant systems. We believe that we are the only supplier of ceramic ball heads and cup inserts that supplies all of these orthopedic implant OEMs. We believe that our strategic relationship with each of the top four 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. We believe that our manufacturing output for hip replacement components is more than ten times that of our competitors combined which enhances our ability and reliability for handling large volume orders and making timely deliveries in line with our customer's demands. The expansion of capacity at our Marktredwitz facility in 2013 and 2014 has further contributed to our global scale, which we believe would require significant investment for any competitor to replicate.

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. 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 Europe, surgeons are the paramount 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 brand awareness, 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. For example, some of our OEM customers market their implant systems with the "BIOLOX® inside" logo on their packaging, which we believe has contributed to our high level of brand awareness. We monitor all of these sales activities closely for compliance with applicable regulations on interactions with health care professionals.

Our key customers comprise the bulk of revenues generated by our Medical Products business. In 2016, the top four Medical Products customers made up 56% of revenue and the top ten customers accounted for 79% of revenue in our Medical Products business.

Additional Orthopedic Applications

Besides our core business in the hip joint replacement market, we believe that the markets for knee joint replacements, shoulder joint replacements, spine replacement disc products could provide for growth in revenue for our Medical Products business. We market and sell ceramic knee joints, although our hip joint components sales still constitute the vast majority of our sales in our Medical Products business. The total knee joint replacement market is larger than the total hip joint market. However, ceramic components have not reached a significant market share of the total knee implant market to date. We view the market for shoulder prostheses and spine replacement disc products as another attractive area of application for ceramic components and have products for this market in our development pipeline, which are expected to launch during 2018.

Product Regulation

United States

Medical devices, such as hip replacement systems, are subject to extensive regulation by the FDA under the Federal Food, Drug, and Cosmetic Act (the "FDCA") as well as other regulatory bodies in the United States. 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 could result in, among other things, warning letters, civil penalties, delays in approving or refusal to approve a product candidate, product recall, product seizure, interruption of production, operating restrictions, suspension or withdrawal of product approval, injunctions or criminal prosecution.

In the United States, the development, testing, marketing and manufacturing of medical devices are regulated under the Medical Device Amendments of 1976 to the Federal Food, Drug and Cosmetic Act, the Safe Medical Devices Act of 1990, the FDA Modernization Act of 1997, the Medical Device User Fee and Modernization Act of 2002, the FDA Amendments Act of 2007, the FDA Safety and Innovation Act of 2012, as well as amendments and reauthorizations thereof, and additional regulations promulgated by the FDA and various other federal, state and local agencies. In general, these statutes and regulations require that manufacturers adhere to certain standards designed to ensure the safety and efficacy of medical devices and related medical products.

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 our customers, for their products, and us, for our ceramics-on-polyethylene products, to demonstrate that the device is at least as safe and effective as, or "substantially equivalent" to, a legally marketed device before the hip prosthesis can receive an order from the FDA finding substantial equivalence and clearing the new device for commercial distribution in the United States. The order is granted to our customer for their hip replacement system which is sold to the end customer.

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 clinical and laboratory data that establishes that our ceramic-on-ceramic bearing is safe and effective due to our supply of key components of the overall hip replacement prostheses. The FDA will approve our customer's hip prosthesis for commercial distribution if it determines that the data and information in the PMA relating to design, materials, bench and animal testing and human clinical data, including the data on 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 to our customer for their hip replacement system containing our ceramic components, it 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 a master file with the FDA to support our customers through the regulatory process and protect our technology and know-how. The master file that we keep directly with the FDA contains data and information on our products 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 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 therefore our products in Europe falls primarily within the EEA, which currently consists of the twenty-eight Member States of the European Union plus Iceland, Liechtenstein and Norway, and has approximately 500 million inhabitants.

In the EEA, our customers' devices are required to comply with the essential requirements of the EU Medical Devices Directive (Council Directive 93/42/EEC of 14 June 1993 concerning medical devices, as amended). The EU Medical

Devices Directive will be replaced by the EU Medical Devices Regulation (Regulation (EU) 2017/745 of April 5, 2017 on medical devices), which came into force on May 26, 2017. Most articles of the regulation will apply from May 26, 2020. Only some provisions of this regulation, inter alia regarding the competent supervisory authorities and the cooperation of the member states, are already applicable (since November 26, 2017). The EU Medical Devices Directive is repealed accordingly with effect from May 26, 2020.

From May 26, 2020, the new Medical Devices Regulation will introduce a number of significant changes to the current 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, a new scrutiny mechanism for certain high-risk medical devices undergoing conformity assessments by "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 and adapt internal processes and documents by the time large parts of the Medical Device Regulation will be applicable in May 2020.

Compliance with these requirements entitles our customers to affix the CE conformity mark to their medical devices verifying that the products meet EU safety, health or environmental requirements and without which they cannot be commercialized in the EEA. 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 essential requirements. The European Commission has adopted various guidelines, consensus statements and interpretative documents aimed at ensuring the uniform application of the provisions of the Medical Devices Directive. In order to demonstrate compliance with the essential requirements and obtain the right to affix the CE conformity mark our customers 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), where the manufacturer can issue an EC Declaration of Conformity based on a self-assessment of the conformity of its products with the essential requirements of the Medical Devices Directive, a conformity assessment procedure requires the intervention of an independent and neutral institution appointed by a Member State of the EEA to conduct the conformity assessment (a "Notified Body"). Typically, the Notified Body, during the course of reviewing our customers' product application (Design Dossier), confirms that their Quality System certifications are being upheld through ongoing assessments which are conducted separately and must be in evidence to complete the conformity assessment. Based on the same Quality System certifications, our customers and we can draw up an EC Declaration of Conformity which allows our customers to affix the CE mark to their products.

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 governing the advertising and promotion of medical devices. 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.

Industrial

Our diverse Industrial business develops and manufactures highly specialized HPC solutions in close cooperation with a diverse customer base spanning multiple industries ranging from automotive, consumer electronics, power electronics and telecommunications. We are one of the only advanced ceramics players that produces a full-range of HPC products with a portfolio comprised of over 20,000 different solutions used across various end markets, which we believe reduces our exposure to a single industry or product. As a result of our materials and manufacturing process expertise, customers usually approach us when in need of a solution for which the superior properties of ceramic material can be considered. Further, 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.

We began implementing a comprehensive reorganization of our Industrial business group (Project SCORE) in 2016 and 2017. The reorganization is based on three guiding principles: simplification, scale and standardization. As part of the reorganization, we combined various independent reporting units into clusters within the Industrial business and consolidated our operations in Europe under a single leadership. We reduced the complexity of our management setup and realigned incentives to increase employee motivation. Following the reorganization, our Industrial business is formed of clusters including Industrial Solutions and Specialty Applications, as well as our International Affiliates.

Industrial Solutions

Our Industrial Solutions cluster focuses on the high-volume production of advanced ceramic components to serve our larger customers, who often have global operations. Such ceramic components have often been developed as a bespoke solution for specific customers, with typical development lead times of between 12 to 48 months. The key products offered by our Industrial Solutions business are 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 LED and power electronic applications. We believe that we are among the top manufacturers of both aluminum oxide and aluminum nitride 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 automotive 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. Automotive 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.

Specialty Applications

Our Specialty Applications cluster focuses on the production of small series of tailored finished products with advanced ceramic components for regional customers or the local operations of global players. Lead times in our Specialty Applications business tend to be shorter than for the Industrial Solutions business and range typically between two to five weeks from customer order to delivery. We believe that local customer service, supported by the global footprint of our sales offices, is a critical element of our success in this cluster. Selected products offered by our Specialty Applications business are further described below.

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. The most important geographic market for friction discs is China where four of the five largest machine builders for texturing machines are located.

Dental ceramics. We supply blanks from various zirconium oxide materials as precursors for crowns and bridges to the dental medicine market. The materials were developed in white and other natural colors to achieve natural teeth coloring. The high translucency makes the dental prostheses as light-transmissive as natural teeth so that they blend in with the color of neighboring teeth.

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.

PERLUCOR®. We are in the process of ramping up the production of PERLUCOR®, a wear and chemical resistant transparent ceramic material that is three to four times the hardness and strength of glass. PERLUCOR® is already used in a wide range of applications including lens in floor lighting, glass in diving watches, the inspection window of high-temperature furnaces and blasting cabinets and protection glass in armored vehicles.

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 automotive, 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 automotive OEMs and their suppliers including Volkswagen, Daimler, Akebono and Brembo.

International Affiliates

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 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 automotive, pump components and textile industries. In 2015, we completed the acquisition of DAI Ceramics, Inc., which produces ceramic cores for precision casting applications, such as the production of advanced components for aircraft engines and stationary gas turbines, medical implants and other delicate high-tech applications in foundries. The acquisition further strengthened our presence in the United States and provided us access to the aeronautics end market. CeramTec North America also produces ceramic catalyst carriers, which are used in the production of ethylene oxide, a basic chemical primarily used as an intermediate in the production of several industrial chemicals. Our catalyst carriers benefit from mechanical strength and exhibit low surface profile and chemical inertness.

CeramTec United Kingdom. In 2017, we completed the acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc, which included two manufacturing sites in the United Kingdom. The acquisition further bolstered our piezo ceramics platform and product portfolio.

Emil Müller Group. Emil Müller Group is a producer of foundry cores that are mainly used in the manufacturing process for pistons for automotive diesel engines. The foundry cores, which are made of water-soluble material, are used in aluminum casting in order to guarantee high surface performance in the finished component and thermal shock resistance during manufacturing.

CeramTec Suzhou/China. CeramTec Suzhou/China produces 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.

CeramTec Malaysia. CeramTec Malaysia produces and sells dipping formers for the production of rubber gloves for use in surgical procedures, examination, home and industry. The main end markets include laboratories and general industry.

CeramTec Korea/Laser Treatment for Ceramics. CeramTec Korea acts as a technology centre for laser treatment of ceramic substrates produced in Marktredwitz in Germany for the electronics market. The master plates (templates for products) are all produced in Marktredwitz, Germany where the laser technology and equipment is also developed.

Industrial End Markets

The overall addressable market of our Industrial business spans various end markets. The table below sets out the split of revenue from our Industrial business by end market for 2016 as well as the total size in 2016 and the expected market growth rates from 2016 to 2021 of the end markets of our Industrial business group.

End Market	**Approximate % of 2016 Industrial business revenue[(1)] (%)**	**Total Size 2016 (€ billion)[(2)]**	**Expected Growth CAGR 2016 – 2021 (%)[(2)]**
Medical Equipment	7%	€0.4 billion	6-7%
Electronics & Telecommunications	17%	€1.6 billion	3-4%
Industrial Applications	19%	€2.5 billion	4-5%
Automotive	34%	€1.3 billion	3-4%
Aeronautics/ Defense	8%	€1.0 billion	6-8%
Other	15%	€0.8 billion	3-4%

(1) Based on management estimates, unaudited. Based on Industrial business revenue for 2016, including estimated revenue contribution from acquisition of UK electro-ceramics business from Morgan Advanced Materials plc.

(2) Source: International consulting firm.

Medical Equipment End Market. In our Industrial business, certain advanced ceramics products are used in various medical devices, such as lithotripters and ultrasonic cleaners and in dental ceramics. We believe that in the future additional growth opportunities in the medical equipment end market may include ultrasonic imaging and high precision parts for medical machinery.

Automotive & Aeronautics/Defense End Market. The automotive and aeronautics/defense market is currently the largest end market for our Industrial business. Our advanced ceramics play a key role in increasing safety, cost effectiveness and comfort in vehicle engineering. Piezo ceramic components act as sensors for electronic controls and provide information on the vehicle's engine running smoothness, position and changes in direction. Electronic components based on ceramic substrates react to this information and control motor management, safety systems such as ABS and ASR and release the airbag when necessary. Piezo ceramic tapes are used for actuators in valves for diesel and gasoline injection systems. In engines, heat resistant ceramic parts like valve components, backings in the crankshaft housing and components for gasoline and water pumps ensure increased efficiency, less wear and lower noise emission. The automotive industry is subject to increasingly stringent environmental and emission standards as well as fuel efficiency limits, particularly in the European Union and the United States. These increased standards require car manufacturers to invest in new technologies that will provide additional demand for advanced ceramics. Further, we believe that the trend towards increasing customization of sensors as well as the development of self-driving cars, which require a significantly higher number of sensors provide growth opportunities that we are well-placed to capitalize on as a result of our significant presence in piezo ceramics.

Similarly, we provide a wide range of solutions for different segments in the aeronautics/defense market including transparent armor for ballistic protection. We believe that the future growth opportunities in this market may include high precision and reliable sensor components in planes and substituting body armor tiles and bulletproof glass with ceramic. Further, the aeronautics industry is increasingly driven by stringent environmental and emission standards as well as the need to increase fuel efficiency and in general decrease the cost of operations. These increasing demands drive continuous innovation at airplane producers and engine OEMs, who continue to invest in technologies that provide higher durability, higher operating temperatures, lighter weight and are in general produced to higher precision. We believe this will provide additional demand for advanced ceramics used either directly in end products or as consumables during the production process.

Electronics & Telecommunications End Market. We are one of the leading manufacturers of HPC components in electronic applications. Our substrates and various other components are used throughout the field of electronics from general electronic applications to consumer electronic applications. For example, ceramic heat sinks provide the right environment for high power electronics. Our components are used in the automotive industry, optoelectronics, measurement and control technology and in industry and entertainment electronics.

Industrial Machinery End Market. Our advanced ceramics make it possible to securely control processes, reduce emissions and take responsible care of scarce resources in many areas of chemicals and process engineering. 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.

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. Metalworking is another example where high-performance machining with SPK® cutting materials and tools offers high process reliability along with economic and efficient production by significantly reducing production times and costs. Our industrial end market is very diverse and spans across industries and niches such as metal works, energy infrastructure, textile machinery, mechanical engineering, sanitary goods, white goods and chemicals, among others.

Other. Our HPC solutions are also used in other markets including chemical processing and sanitary applications and consumer goods. For example, our HPC solutions are used as catalysts in the production of chemicals, as seals in certain domestic appliances and in water faucets cartridges.

Customers

We believe that we are the partner of choice to a diverse base of blue chip customers across these various end markets and more than 90% of our customers have a relationship with us of more than five years. Our key customers include BASF, BOSCH, Curamik Electronics, Delphi, Epcos, Grohe, Honeywell, Rheinmetall, Volkswagen, Wuxi Hongyan and Zeiss.

Competition in Industrial

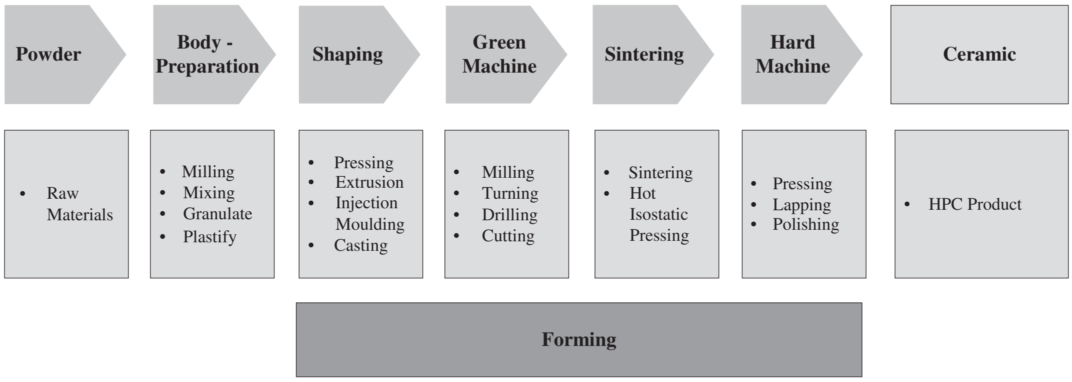
We believe that our key HPC competitors are Kyocera Corporation, CoorsTek Inc., 3M Company, Morgan Advanced Materials and Kennametal, Inc. However, each of these competitors has either a different geographic focus or product strategy. While competition varies based on the particular product group or 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 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 the 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 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 of an expert manufacturer like we are.

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, lasering 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 observe 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. Implants are subjected to a 100%—in other words piece by piece—final inspection.

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 audits conducted by our customers, which totaled over 20 in 2016 and health authorities from around the world including the FDA and our key Medical Products customers.

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 more than 200 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally. Revenue from products that were either newly developed and introduced, materially modified existing products or products modified for sale to a new customer less than five years before the relevant period represented approximately 25 to 30% of our total revenue in the last five years. Our total R&D expenses in 2016 were €22.8 million including €1.5 million for third party contract research and development. Parts of the development costs are customer-related. All our R&D cost is expensed and not capitalized on our balance sheet.

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, which following the recent reorganization of our Industrial business, has been bolstered by the partnering of our R&D teams with our commercial units. For example, to address needs of both surgeons and patients, we have developed a new generation of ring inserts to use in hip replacements that are easier to implant. Specific development topics for product groups are addressed in follow-up projects. Further, 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.

In 2016, we succeeded in completing various R&D innovations including:

- manufacturing transparent and durable ceramics on a series-production scale and transferring the advantages of ceramics to a transparent material;
- developed a new oxide composite material with improved strength and damage tolerance under extreme conditions;
- improved a process used to join high-performance cutting materials;
- continued development of fuel cells focused on electrolyte and anode supported cells made from ceramic materials; and
- developed and tested different oxide and nitride ceramic feedstocks for ceramic injection molding.

Our R&D innovations have received various awards and most recently, we received the 2017 Industry Prize of the "Hannover Messe" in Germany for most advanced industrial products and solutions (PERLUCOR®).

Manufacturing, Sales Offices and Operations

We operate 20 manufacturing facilities with more than 1,200 production machines in Europe, North America, Asia and South America and maintain nine international sales and representative offices. Our flexible manufacturing capacity enables us to scale up or scale down production to meet different customer volume demands. We have also been awarded various quality certifications at all of our sites. For example, all production sites are ISO 9001 certified, sites producing components for the automotive industry and sites producing medical applications have also obtained the relevant industry standard certifications.

We comply with several general certification standards, such as the ISO TS 16949 for the automotive industry and the ISO 13485 for medical products. Our suppliers are subject to guidelines to ensure the quality of deliveries. Further certifications include DIN EN ISO 14001 and AEO (Authorized Economic Operator), a European certification that allows our shipments to pass through customs clearance more quickly and easily, benefitting our customers. In addition, our energy management has been ISO 50001 certified.

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, 2017.

Location	Markets served	Size (in thousand m^2)	Leased/ Owned
Germany			
Plochingen	Medical, Auto, Industry	30	Owned
Ebersbach/Fils	Auto, Industry	33	Owned
Lauf	Auto, Electronics, Industry	46	Owned
Lohmar	Ballistic Protection	14	Owned
Marktredwitz	Electronics, Auto, Medical	153	Owned
Wilhermsdorf	Auto	10	Leased
Wittlich	General Industry	3	Leased
Rest of Europe			
Ruabon, UK	Auto	22	Owned
Southampton, UK	Auto	10	Leased
Sumperk, Czech Rep	General Industry	31	Owned
Gorzyce, Poland	Auto	3	Leased
Dolni Rychnov, Czech Rep	Electronics	1	Owned
Americas			
Laurens, SC	Auto, Electronics, Industry	807	Owned
Willoughby, OH	Auto	13	Owned
Puebla, Mexico	Auto	7	Owned
Nova Odessa, Brazil	Auto	4	Leased
Asia			
Patiala, India	Auto	1	Leased
Suzhou, China	General Industry	4	Leased
Suwon, Korea	Electronics	2	Leased
Seremban, Malaysia	Medical	24	Owned

Raw Materials

Our main raw materials are various aluminum oxide and zirconium oxide powders. The sourcing of our raw materials constitute approximately one third of our cost of products sold. 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 such as lead oxide and titanium dioxide, are each sourced from a single supplier given that the properties we require for such materials are highly specific. We keep additional safety stock for any single-sourced raw materials and our risk management function constantly monitors our suppliers for any possible supply chain disruptions. Our ten largest suppliers in 2016 accounted for €27.1 million, representing 9.2% of our costs of sales in the same period. We usually do not enter into long-term agreement with suppliers for our raw materials as they 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. As of September 30, 2017, we had a portfolio of over 140 trademarks registered and over 600 patents and protected designs. 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. None of our material patents are due to expire in the near future.

Sales and Marketing

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. In our Medical Products business, our sales and marketing team, including specially trained staff that act as scientific consultants, collaborates with customers to assist them with reaching surgeons and hospitals. Surgeons are key decision makers in relation to the choice of implant materials (ceramics, metal or polyethylene) for patients, based on circumstances, medical condition and personal preferences and drive demand for ceramic components.

In our Industrial business, our sales and marketing team is structured regionally to focus on local customer coverage and includes for example, customer service desks at each production site. The reorganization of our Industrial business, which began in 2016, further streamlined, standardized and strengthened our operations to improve lead times and customer service quality.

In total, we employed 310 sales people (FTE) worldwide (237 in Europe, 27 in the Americas and 46 in other parts of the world) as of September 30, 2017.

Customers

In 2016 we served approximately 4,400 different customers. The biggest customer accounted for 7.0% of total revenue. The top ten customers generated 38% of total revenue. Our next ten customers accounted for 11% of total revenue and our remaining customers for 51% of our revenue.

Our key customers include Aesculap, BASF, BOSCH, Curamik Electronics, DePuy, Epcos, Grohe, Rheinmetall, Smith & Nephew, Stryker, Volkswagen, Wuxi Hongyan and Zimmer Biomet.

Employees

As of September 30, 2017, we had over 3,400 employees (FTE) 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 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 where half of our workforce have been with us for more than ten years. In addition, we cooperate with high schools and colleges to offer opportunities for vocational education and training and had 141 apprentices in 2016.

The following table shows a breakdown of our employees by region and by function as at December 31, 2014, 2015 and 2016 and as at September 30, 2017.

	As at December 31,			As at September 30,
Full Time Equivalent	**2014**	**2015**	**2016**	**2017**
By Geography				
Germany	2,070	2,059	1,968	1,961
Americas	205	267	307	324
Asia	488	517	491	489
Rest of the world	452	401	378	646
By Function				
Production	2,497	2,522	2,467	2,694
Selling	300	294	293	310
Research & Development	189	202	163	177
Administrative	230	227	220	240
Total Number of Active Employees	**3,215**	**3,244**	**3,143**	**3,420**

Health, Safety and Environmental

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 Products—Regulation*."

Our environmental management system has been certified in accordance with DIN EN ISO 14001 and our energy management systems have been certified in accordance with ISO 50001. Capital expenditure and expenses related to environmental protection in our Group in 2016 amounted to €1.3 million (2015: €1.9 million; 2014: €4.2 million).

Legal Proceedings

We are from time to time party to legal proceedings that arise in the ordinary course of business. Those 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 in respect of our pink color trade dress and ordinary course contractual disputes. In the United States, in the past ten years, we have been involved in four product liability claims along with the OEM implant manufacturer and the medical office that performed the procedure. There was no evidence presented of a defect in our components in any of the cases. Each of the cases was settled out of court for a modest amount of less than €5 million.

There are no pending product liability cases in the United States as of the date of this offering memorandum. In Europe, there are 27 pending product liability cases (plus one case in French-Polynesia) involving fractured ceramic ball heads and cup inserts. The exposure per case is not material other than for three cases in Europe for which our counsel believe we have good merits for defense. We have sufficient reserves in line with our perceived risk in connection with the product liability claims.

MANAGEMENT

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 Sponsor. The Issuer is registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Hamburg under registration number HRB 148292. The Issuer's registered office is at Alsterarkaden 12, 20354 Hamburg. The Issuer's managing directors can be contacted at the Issuer's business address.

Name	Age	Position
Frank Rohwedder	47	Managing Director
Thomas Christian Weinmann	47	Managing Director
Julien Zornig	40	Managing Director

Management of the Target

The Target is a limited liability company (*Gesellschaft mit beschränkter Haftung)* organized under the laws of Germany. The Target is registered with the commercial register of the district court of Stuttgart under the number HRB 746625 and its business address is at CeramTec Platz 1-9, 73207 Plochingen, Germany. The Target is managed by its managing directors (*Geschäftsführer*) and is supervised by its Supervisory Board. The managing directors and the members of the Supervisory Board can be contacted at the Target's business address.

Management of the Target Prior to the Completion of the Acquisition

The Target has three managing directors. Set forth below is information concerning the managing directors.

Name	Age	Position
Henri Steinmetz	61	Chief Executive Officer
Dominique Janbon	51	Chief Financial Officer
Dr. Hadi Saleh	44	Chief Operating Officer Medical Products

The following section presents a brief summary of the biographies of our managing directors:

Henri Steinmetz was appointed CEO of the Target on March 14, 2016 and is also responsible for the Industrial business. He was last active at Belgium-based Ruetgers NV, a leading European manufacturer of chemical raw materials, where he was President and CEO since 2009. Before joining Ruetgers, he was from 2004 to 2008 a member of the executive board of Sulzer AG, a global industrial group based in Winterthur, Switzerland, and also President of the Sulzer Metco Division. Other stations in Henri Steinmetz's career include Great Lakes Chemicals in Indianapolis, Indiana (USA), where he was Corporate Executive Vice President and President of the Polymer Stabilizers Division, M.A. Hanna Company in Cleveland, Ohio (USA), where he was Director of Business Development Europe, and General Electric USA/Netherlands, where he had various management positions. He holds a Master of Sciences in Metallurgy from Clausthal University of Technology and an MBA from INSEAD, Fontainebleau, France.

Dominique Janbon has served as Chief Financial Officer of the Target since October 1, 2014. Mr. Janbon joined the Target from medical technology company Gambro AB, where he served as CFO and Senior Vice President since 2012. Dominique Janbon previously held senior positions in finance and commercial development at global pharmaceutical companies Amgen International and Aventis S.A. (now Sanofi S.A.). Dominique Janbon is a French national and holds a Master of Sciences in Accounting and Finance from the London School of Economics and a Master degree in Economics, Management and Finance from the Institut d'Etudes Politiques de Paris.

Dr. Hadi Saleh was appointed as a managing director of the Target on July 1, 2015 and is responsible for the Medical Products business as its Chief Operating Officer. Dr. Saleh worked in the medical technology sector, where, as Senior Vice President of Biomet Inc. and President of Biomet International, he was previously responsible for all Biomet product lines worldwide outside of the U.S. and Europe. Since 2001, Dr. Saleh has 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 this he earned his doctorate at the universities in Frankfurt am Main and Mainz, worked as an orthopedist at St. Josef's Hospital in Wiesbaden and at the University Clinic in Heidelberg and was a Senior Consultant at GAIA in Hamburg.

Managing Directors' Compensation

The managing directors of the Target received total remuneration (fixed and variable amounts) in the form of short-term employee benefits amounting to €2.3 million in 2016, and €2.2 million in 2015. The payments for post-employment benefits amounted to €0.2 million in 2016 and €0.3 million in 2015. This amount comprises the service cost for pension obligations and contributions to defined contribution plans.

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 different topics.

Management of the Target Following the Completion of the Acquisition

Following the Completion Date, LuxCo 2, through which the Sponsor invests in the Target Group, will establish an advisory board which will comprise members proposed for appointment by funds advised by BC Partners, PSP Investments and Ontario Teachers and independent members. Members proposed for appointment by funds advised by BC Partners will make up the majority of the advisory board. The size and composition of the advisory board of LuxCo 2 may change from time to time for various reasons, including in order to allow for representation of certain co-investors who may acquire direct or indirect participations in the Target.

The managing directors of the Target will continue to be responsible for the daily operations of the Target Group. We have a view of how the management team of CeramTec should evolve under our expected ownership. We do not yet own the Target and timing of closing is uncertain and remains subject to regulatory clearances. Any announcements will therefore be made at the appropriate time.

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") The Supervisory Board currently consists of 12 members and is established at the level of CeramTec GmbH. In accordance with the German Stock Corporation Act, The the Supervisory Board is responsible for supervision and control of the management of CeramTec GmbH in accordance with resolutions of CeramTec GmbH's shareholders' 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, following consummation of the Acquisition, certain employees and members of management will be offered to invest in a management participation program, established by the Sponsor, on customary terms and conditions. The terms of this management participation program have not yet been definitively determined. We expect that simultaneously with the consummation of the Acquisition, the management investors will enter into one or more stockholders agreements with affiliates of the Sponsor, 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 its shareholders, key management personnel and associates. Such transactions generally involve arm's length agreements on market terms. In addition, it is contemplated that new related party transactions will be entered into in connection with the Transactions.

From time to time, we may also enter into other employment or compensation arrangements with senior management or other key employees. See "*Management—Management of the Target Prior to the Completion of the Acquisition—Managing Directors' Compensation*."

Transactions with Related Companies

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, 2014, 2015 and 2016, see our Financial Statements included elsewhere herein.

Faenza Luxembourg S.à r.l., a controlling shareholder of the Target prior to the consummation of the Acquisition, has extended a loan to the Target, under which an amount of €154.4 million including interest was outstanding as of December 31, 2016. The loan will be repaid in full in connection with the consummation of the Acquisition.

In addition, Faenza Luxembourg S.à r.l. charged the Target Group €0.5 million in 2016 and 2015 for consultancy services and out-of-pocket expenses.

Transaction and Consulting Services Agreements

Upon consummation of the Acquisition, the Target Group may enter into transaction and consulting services agreements with the Sponsor pursuant to which the Target will make certain payments to the Sponsor for management, consulting, monitoring or advisory services and related expenses.

PRINCIPAL SHAREHOLDERS

Following the Acquisition, the Target will be indirectly wholly-owned by a consortium led by funds advised by BC Partners, in which PSP Investments and the Ontario Teachers' Pension Plan also hold a stake. Further minority investors may be brought in as part of BC Partners' equity syndication process, their shareholdings will, however, not exceed 10% of the total share capital. Certain employees and members of management will be offered to invest in a management participation program on customary terms and conditions following consummation of the Acquisition. See "*Management—Management of the Target Following the Completion of the Acquisition—Management Participation Program*." Upon completion of the acquisition, after giving effect to the management participation program, but subject to further changes resulting from the equity syndication process, BC Partners will indirectly hold approximately 51.5% of the shares in the Target.

BC Partners is a leading international private equity firm with over €17 billion of assets under management. Established in 1986, BC Partners has played an active role in developing the European buy-out market for three decades. BC Partners executives operate as an integrated team through the firm's offices in Europe and North America, acquiring and developing businesses to create value in partnership with management. Since inception, BC Partners has completed 99 investments in companies with a total enterprise value of €121 billion and is currently investing its tenth private equity fund.

The Public Sector Pension Investment Board is one of Canada's largest pension investment managers with C$135.6 billion of net assets under management as at March 31, 2017. It manages a diversified global portfolio composed of investments in public financial markets, private equity, real estate, infrastructure, natural resources and private debt. Established in 1999, PSP Investments manages net contributions to the pension funds of Canada's federal Public Service, the Canadian Armed Forces, the Royal Canadian Mounted Police and the Reserve Force. As at March 31, 2017, PSP Investments held private equity investments of C$15.9 billion (12% of its net assets). Since its inception, the private equity asset class has invested in more than 20 companies and 50 funds, deploying over C$10 billion in capital on a global scale. Since Headquartered in Ottawa, Canada, PSP Investments has its principal business office in Montréal and offices in New York and London, its European hub.

The Ontario Teachers' Pension Plan is Canada's largest single-profession pension plan, with C$180.5 billion in net assets as at June 30, 2017. It holds a diverse global portfolio of assets, approximately 80% of which is managed in-house, and has earned an annualized gross rate of return of 10.1% since the Plan's founding in 1990. As at June 30, 2017, OTPP held private equity investments of C$28.8 billion (16% of its net assets). Since inception, it has invested in more than 500 companies and funds, deploying approximately C$40 billion in capital on a global scale. Ontario Teachers' Pension Plan is an independent organization headquartered in Toronto. Its Asia-Pacific region office is located in Hong Kong and its Europe, Middle East & Africa region office is in London. The defined-benefit plan, which is fully funded, invests and administers the pensions of the province of Ontario's 318,000 active and retired teachers.

See "*Summary—Summary Corporate and Financing Structure*."

DESCRIPTION OF CERTAIN FINANCING ARRANGEMENTS

Senior Facilities Agreement

Overview and Structure

In connection with the financing of the Acquisition, Bidco, will enter into the Senior Facilities Agreement with, among others, Deutsche Bank AG, London Branch as agent, the Security Agent, and Bank of America, N.A. (London Branch), Bank of America Merrill Lynch International Limited, Deutsche Bank AG, London Branch, Morgan Stanley Bank International Limited, Nomura Bank International plc and UBS Limited, as arrangers. The Senior Facilities Agreement will provide for a revolving credit facility in a principal amount of €75.0 million (the "Revolving Credit Facility") and a senior term loan facility in a principal amount of €1,116.50 million of which an amount up to the USD equivalent of €150.0 million may be made available as a USD tranche ("Facility B") (the Revolving Credit Facility and Facility B are collectively referred to as the "Senior Facilities" for the purposes of this description).

Facility B may be utilized by Bidco and certain of its restricted subsidiaries which accede to the Senior Facilities Agreement as additional borrowers of that facility (the "Facility B Borrowers") and may be used to finance: (i) directly or indirectly in satisfaction of the consideration payable, or refinancing of the consideration paid or payable, for the shares in the Target pursuant to the Acquisition Agreement; (ii) directly or indirectly refinancing or otherwise discharging the Existing Senior Facilities Agreement and paying any related breakage costs, redemption premium, make-whole costs and other fees, costs and expenses payable in connection with the refinancing or discharge of any existing debt financing of the Target; (iii) directly or indirectly financing the payment of fees, costs and expenses incurred in connection with the Acquisition; and financing or refinancing all other related amounts, including fees, costs and expenses related to or incurred or charged in connection with the Acquisition, the debt financing to be made available in connection therewith and any transaction contemplated by the Senior Facilities Agreement and the related documentation; and/or the Notes and the related documentation; (iv) directly or indirectly financing any payments identified in the tax structure memorandum relating to the Acquisition and arising in connection with any existing debt refinancing of the Target and/or the Acquisition and any related fees, costs and expenses.

It is envisaged that a newly incorporated U.S. incorporated entity that will be a direct subsidiary of Bidco will accede to the Senior Facilities Agreement as a Facility B Borrower (the "U.S. Borrower") prior to the date of first utilization of the Senior Facilities (the "Closing Date") in order to be in a position to utilize Facility B on such date.

The Revolving Credit Facility may be utilized by Bidco and certain of its restricted subsidiaries which accede to the Senior Facilities Agreement as additional borrowers (the "RCF Borrowers"), in euros, sterling, U.S. dollars, Swiss francs and certain other currencies readily available in the London interbank market (subject to obtaining the consent of all the Revolving Credit Facility lenders) by the drawing of cash advances, the issue of letters of credit and ancillary facilities (on a bilateral and fronted basis).

The Revolving Credit Facility may be used for (directly or indirectly): (i) financing or refinancing the general corporate purposes and/or working capital requirements of the Group (including, without limitation, the financing or refinancing of capital expenditure, of above average net working capital at the Completion Date, any permitted acquisitions, the payment of fees, costs and expenses incurred in connection with the Acquisition, investments and joint ventures, operational restructurings and reorganisation requirements of the Group, financing or refinancing financial indebtedness of the Group or any acquisition target, any required original issue discount fees or any additional original issue discount fees or other fees arising as a result of any market flex, any ticking fees required to be paid in connection with and any interest accruing on the secured debt documents or any additional OID or other fees and any related fees, costs and expenses).

In addition to the Revolving Credit Facility and Facility B, the Senior Facilities Agreement will include (in addition to the other permissions under the limitation on indebtedness covenant) the ability (without double counting against the limitation on indebtedness covenant) to incur additional indebtedness (including under one or more uncommitted additional facilities within the Senior Facilities Agreement ("Additional Facilities") and/or any additional notes and/or other facilities or notes documented outside the Senior Facilities Agreement ("Permitted Alternative Debt")) up to (a) an amount equal to the aggregate of (i) an amount equal to the greater of (x) €102 million and (y) 50 per cent. of LTM EBITDA (as defined in the Senior Facilities Agreement); plus (ii) an amount equal to the greater of (x) €102 million and (y) 50 per cent. of LTM EBITDA provided that in the case of either (x) or (y) of this paragraph (ii) after giving pro forma effect to such incurrence, the consolidated total net leverage ratio (as defined in the Senior Facilities Agreement) does not exceed 8.00:1; plus (iii) in the case of an Additional Facility or any Permitted Alternative Debt, the principal amount or equivalent amount of the proposed Additional Facility or Permitted Alternative Debt as at its applicable commencement date, in each case to the extent that: (A) the proceeds constitute and are (or are to be) Refinancing Indebtedness (as defined in the Senior Facilities Agreement); or (B) the purpose of the Additional Facility or Permitted Alternative Debt is to extend the maturity of any existing indebtedness without an increase in the principal amount, and the proposed Additional Facility or Permitted Alternative Debt is applied for such purpose; plus (iv) the principal or equivalent amount of any of the Facilities, Additional Facilities, Permitted Alternative Debt, Permitted Acquired Indebtedness (as defined in the Senior Facilities Agreement) or Refinancing Indebtedness that have been prepaid, in each case, prior to the applicable commencement date (as the case may be); plus (v) the principal or equivalent amount of any of the Facilities, Additional Facilities, Permitted Alternative Debt, Permitted Acquired Indebtedness or Refinancing Indebtedness that are subject to a debt purchase transaction (or a similar or equivalent arrangement in connection with the Facilities, Additional Facility, Permitted Alternative Debt, Permitted Acquired Indebtedness or Refinancing Indebtedness) by a member of the Group, an Unrestricted Subsidiary or an Investor Affiliate (as defined in the Senior Facilities Agreement) which results in such Facilities, Additional Facilities, Permitted Alternative Debt, Permitted Acquired Indebtedness or Refinancing Indebtedness (as the case may be) being permanently prepaid and cancelled, in each case, prior to the applicable commencement date; plus (vi) the principal or equivalent amount of any undrawn commitments of any of the Facilities, Additional Facilities, Permitted Alternative Debt, Permitted Acquired Indebtedness or Refinancing Indebtedness that have been irrevocably cancelled prior to the applicable commencement date; plus (vii) an amount equal to all fees, underwriting discounts, premiums (including any original issue discount, payment of call protection or prepayment premium) and other costs and expenses incurred in connection with the incurrence of the amount set out in this paragraph (a); less (viii) the principal or equivalent amount of: (A) any Additional Facility incurred on or prior to the relevant commencement date in reliance on this paragraph (a); and (B) all Permitted Alternative Debt incurred on or prior to the relevant commencement date in reliance on this paragraph (a); plus (b) an unlimited amount by way of an Additional Facility or Permitted Alternative Debt so long as, Bidco has confirmed to the Agent, that such indebtedness: (i) (A) (if such indebtedness is secured by the security granted in respect of the Senior Facilities and subject to the Intercreditor Agreement such that such liabilities rank *pari passu* with Facility B) would not cause the Senior Secured Net Leverage Ratio (as defined below) to exceed 5.50:1 or (B) (if such indebtedness is not secured by the security granted in respect of the Senior Facilities) would not cause the consolidated total net leverage ratio to exceed 7.50:1 (assuming for the purpose of such calculation that the Senior Secured Net Leverage Ratio is no less than an amount equal to the greater of the Senior Secured Net Leverage Ratio as of such date and 5.50:1.00); or (ii) (if such indebtedness does not fall within paragraph (i) above) would not cause the fixed charge coverage ratio to be below 2.00:1, and in each case, subject to certain other conditions being met.

Availability

Facility B will, subject to the satisfaction of customary conditions precedent, be available on and from the date of the Senior Facilities Agreement up to (and including) the earliest to occur of: (a) 11.59 pm London time on the earliest to occur of: (i) the date on which the Acquisition Agreement terminates in accordance with its terms; (ii) the date falling 2 weeks after the Longstop Date (as defined in the Acquisition Agreement); and (iii) 19 July 2018; and (b) close of business on the Closing Date.

The Revolving Credit Facility may be utilized from (and including) the Closing Date to (and including) the date which is one month prior to the maturity date of the Revolving Credit Facility.

Conditions Precedent

Utilizations of the Senior Facilities will be subject to customary conditions precedent.

Interest and Fees

Loans under the Senior Facilities will initially bear interest at rates per annum equal to EURIBOR or, for loans denominated in sterling, U.S. dollars or Swiss Francs, LIBOR, 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 Facilities Agreement) (the "Senior Secured Net Leverage Ratio").

The initial margin applicable to Facility B shall be 3.25% per annum. From the first day following two complete financial quarters following the Closing Date, the margin applicable to Facility B will be subject to adjustment by reference to the Senior Secured Net Leverage Ratio as shown in the then most recent compliance certificate.

The initial margin applicable to the Revolving Credit Facility shall be 3.00% per annum. From the first day following two complete financial quarters following the Closing Date, the margin applicable to the Revolving Credit Facility will be subject to adjustment by reference to the Senior Secured Net Leverage Ratio as shown in the then most recent compliance certificate.

If LIBOR or EURIBOR is less than zero, LIBOR or EURIBOR (as the case may be) shall be deemed to be zero in respect of loans made under the Senior Facilities.

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 35% of the applicable margin for the Revolving Credit Facility. Commitment fees will be payable quarterly in arrears and on the date the Revolving Credit Facility is cancelled in full or on the date on which the relevant lender cancels its commitment.

Default interest will be calculated as an additional 1% 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 date falling six years from the Closing Date. Amounts repaid by the RCF Borrowers on loans made under the Revolving Credit Facility may be reborrowed, subject to certain conditions.

Mandatory Prepayment

The Senior 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:

1. upon the occurrence of a Change of Control (as defined in the Senior Facilities Agreement) or an initial public offering resulting in a Change of Control, each lender shall be entitled to require repayment of its commitment within prescribed time periods. A Change of Control shall include:

   - any person or group of persons becoming the beneficial owner of more than 50% of the voting power of the Issuer other than in connection with a transaction or series of transactions in which the Issuer shall become the wholly owned subsidiary of a parent entity (as defined in the Senior Facilities Agreement) subject to certain conditions;

   - the Issuer ceasing to directly own 100% of the total issued share capital of Bidco;

   - prior to certain potential mergers of the Target permitted by the Senior Facilities Agreement, the Company ceasing to (directly or indirectly) own 100% of the total issued share capital of the Target; and

   - the disposal of substantially all the business of the Group;

2. on an initial public offering which does not constitute a Change of Control (with the percentage of proceeds to be prepaid depending on the Group's Senior Secured Net Leverage Ratio) (a "Listing Prepayment");

3. from certain net cash proceeds received by the Group from certain asset disposals, to the extent required to be applied in prepayment of the Senior Facilities and subject to a *de minimis* amount; and

4. unless otherwise agreed by the majority lenders under the Senior Facilities Agreement, for each financial year (commencing with the first full financial year following the Closing Date), a percentage of excess cash flow, which percentage decreases as the Group's Senior Secured Net Leverage Ratio decreases, less a de minimis amount and amounts applied in voluntary prepayment or debt purchase transactions of the Senior Facilities (an "Excess Cash Flow Prepayment").

At the election of Bidco, amounts required to be prepaid pursuant to a Listing Prepayment or an Excess Cash Flow Prepayment may instead be applied in repayment of any other indebtedness of the Group which does not rank junior to the Senior Facilities.

Guarantees and Security

The Senior Facilities will initially be guaranteed by the Issuer and Bidco, and will be initially secured by (i) a first ranking pledge over the share capital of Bidco held by the Issuer; (ii) a first ranking pledge over the bank accounts of the Issuer and Bidco; (iii) first ranking security over the structural intra-group receivables owed to the Issuer by Bidco; (iv) a security assignment of the intercompany receivables owed to Bidco; (v) a security assignment of Bidco's claims under the Acquisition Agreement and (vi) a first ranking pledge over the share capital of Target to be held by Bidco.

To the extent the U.S. Borrower accedes to the Senior Facilities Agreement prior to the Closing Date, it will also guarantee the Senior Facilities and grant security in accordance with the agreed security principles set out in the Senior Facilities Agreement.

Subject to certain adjustments and agreed security principles in the Senior Facilities Agreement, the Senior Facilities Agreement will require Bidco to ensure that members of the Group that generate at least 80% of "Consolidated EBITDA" (as defined in the section entitled "Description of the Notes") and material subsidiaries that generate 5% of

EBITDA are guarantors under the Senior Facilities Agreement on the date that is 120 days after the Closing Date; and thereafter on the date when the annual financial statements of the Issuer are required to be delivered to the agent under the Senior Facilities Agreement.

The provision and the terms of the guarantees and security 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 Senior Facilities Agreement.

Representations and Warranties

The Senior Facilities Agreement will contain certain representations and warranties (subject to certain agreed qualifications and with certain representations being repeated), including: (i) status, binding obligations, non-conflict with other obligations, power and authority, validity and admissibility in evidence, governing law and enforcement, consents, fillings and laws applicable to operations and *pari passu* ranking; (ii) no insolvency, no litigation, environmental laws, taxation, and filing and stamp taxes; (iii) no default, financial statements, group structure, and no misleading information in relation to the information memorandum and the financial model relating to the Target Group and certain diligence reports provided; (iv) no liens, guarantees or indebtedness, except as permitted; (v) legal ownership and holding company activities; (vi) intellectual property and pension schemes; (vii) acquisition documents contain all material terms and conditions of the Acquisition; (viii) centre of main interests and compliance with sanctions and anti-money laundering laws; (ix) U.S. government regulation and (x) employee benefit plans.

The representations and warranties will be made on the date of signing of the Senior Facilities Agreement and certain of the representations and warranties will be repeated on the Closing Date, the date of each utilization, on the first day of each interest period and at certain other times, as applicable.

Covenants

The Senior Facilities Agreement will contain 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; (iv) limitation on restrictions on distributions from restricted subsidiaries; (v) limitations on sale of assets and subsidiary stock; (vi) limitations on affiliate transactions; (vii) designation of restricted and unrestricted subsidiaries; (viii) merger and consolidation; (ix) no impairment of security interests (x) additional guarantees; (xi) additional intercreditor agreements; and (xii) suspension of covenants on achievement of investment grade status.

In addition, the Senior Facilities Agreement will also require the Issuer 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) insurances; (v) payment of taxes; (vi) pension schemes; (vii) compliance with certain environmental laws; (viii) maintenance of centre of main interests; (xv) holding company activities, (ix) guarantees and security; (x) provision of further assurance; (xi) accession to the Intercreditor Agreement; (xii) compliance with sanctions and anti-money laundering laws; (xiii) maintenance of ratings; (xiv) preservation of assets; (xv) acquisition documents; (xvi) report reliance; (xvii) minimum hedging requirements; (xviii) payments in respect of a profit and loss transfer agreement (*Gewinnabführungsvertrag*) or a combination of a domination agreement (*Beherrschungsvertrag*) and a profit and loss transfer agreement (*Gewinnabführungsvertrag*); (xix) ERISA; (xx) use of proceeds; and (xi) Federal Margin Regulations.

Solely for the benefit of the lenders participating in the Revolving Credit Facility, the Senior Facilities Agreement will require that, in the event that the aggregate amount of all cash loans drawn under the Revolving Credit Facility (excluding any utilizations by way of letters of credit (or bank guarantees) or ancillary facilities or any amounts utilized to fund any agreed fees in connection with the syndication of the Senior Facilities) exceeds 40 per cent of the total commitments under the Revolving Credit Facility on the relevant testing date or, if higher, the total commitments under the Revolving Credit Facility as at the original date of the Senior Facilities Agreement (the "Revolving Test Condition"), the Senior Secured Net Leverage Ratio does not exceed 9.00 to 1.00. The ratio will be based on the definitions in the Senior Facilities Agreement, which may differ from similar definitions in the Indenture and the equivalent definitions described in this offering memorandum.

The Senior Facilities Agreement will contain an equity cure provision enabling the shareholders of the Parent to make shareholder injections by way of debt and/or equity to the Group to (i) increase the consolidated pro forma EBITDA under the Senior Facilities Agreement, (ii) decrease consolidated senior secured net debt or (iii) prepay the Revolving Credit Facility so that the Revolving Test Condition is no longer satisfied. The equity cure right may not be exercised on more than five occasions during the term of the Senior Facilities and may not be utilized in consecutive quarters. No overcures may be exercised with regards to the EBITDA cures.

It is intended that certain agreed covenants and other provisions of the Senior Facilities Agreement will fall-away on the satisfaction of certain release conditions, being (i) the occurrence of a listing in respect of which the Group's ratio of consolidated total net debt to consolidated pro forma EBITDA does not exceed an agreed ratio; (ii) Parent having a long-term corporate credit rating equal to or better than Baa3 according to Moody's Investor Services Limited or BBB- according to Standard & Poor's Rating Services; or (iii) Facility B has achieved and maintained investment grade status.

Events of Default

The Senior Facilities Agreement will provide for substantially the same events of default as under the Notes. In addition, the Senior Facilities Agreement will provide for additional events of default, subject to customary materiality qualifications and grace periods, including (i) breach of the financial covenant, provided that, in the event of such breach, only a majority of the Lenders under the Revolving Credit Facility shall initially be entitled to take enforcement action; (ii) inaccuracy of a representation or statement when made; (iii) invalidity and unlawfulness of the Senior Facilities financing documents; (iv) material failure to comply with the Intercreditor Agreement; (v) repudiation and rescission of the Senior Facilities financing documents; (vi) material litigation; (vii) cessation of business; (viii) expropriation; (ix) material adverse change; and (xi) employee benefit plan.

Governing Law

The Senior Facilities Agreement and any non-contractual obligations arising out of or in connection with it, will be governed by, construed in accordance with and will be enforced in accordance with English law although the information undertakings, restrictive covenants, events of default and related definitions scheduled to the Senior Facilities Agreement will be interpreted in accordance with New York law (without prejudice to the fact that the Senior Facilities Agreement is governed by English law).

Intercreditor Agreement

General

To establish the relative rights of certain of our creditors under our financing arrangements, the Issuer, Bidco and certain Guarantors will be party to, and certain other Guarantors and the trustee will accede to, an Intercreditor Agreement between, among others, the agent, arrangers and lenders under the Senior Facilities Agreement and the Security Agent.

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 will be governed by English law and will set out various matters governing the relationship of the creditors to our group including the relative ranking of certain debt of the Issuer, the Guarantors and any other person that becomes party to the Intercreditor Agreement as a Debtor or Third Party Security Provider, 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 that will be 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 discussion 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:

"Group" shall mean the Parent and each of its Restricted Subsidiaries from time to time.

References to the "Parent 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 Parent Borrower which are designated by Bidco (in its discretion) as Parent Notes in accordance with the terms of the Intercreditor Agreement.

The Intercreditor Agreement will use the term "the Parent" to refer to the Issuer and "Parent Notes Liabilities" to refer to the debts and liabilities under the Notes and related documents.

Ranking and Priority

Priority of Debts

The Intercreditor Agreement will provide that the liabilities owed by Bidco and each other debtor under the Intercreditor Agreement (together, the "Debtors") (other than any debtor that is the Parent or any holding company of the Parent or a direct wholly owned subsidiary of such holding company or an Affiliate thereof, in each case (other than in respect of the Parent), which is not a member of the Group and which is designated as a Parent Borrower by Bidco in accordance with the terms of the Intercreditor Agreement (a "Parent Borrower"), in its capacity as borrower or issuer, in respect of its Parent Liabilities) shall rank in right of priority and payment in the following order and are postponed and subordinated to any prior-ranking liabilities as follows:

(i) first, liabilities owed to (i) the lenders, issuing banks and ancillary lenders in relation to the Senior 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 is designated by Bidco as super senior (together the "Super Senior Liabilities" and creditors thereof being the "Super Senior Creditors"), (iii) 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 the 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) 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 agreement that are not Super Senior 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" and the liabilities to the lenders under a Second Lien Facility 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"), (ix) the Security Agent and (x) any agent or trustee under any finance documents relating to any of the aforementioned liabilities, any agent or trustee under the Parent Liabilities (as defined below) and any agent or trustee in relation to certain other unsecured liabilities (together the "Agent Liabilities") (and, in each case, together with the applicable Arranger Liabilities in respect thereof) *pari passu* and without any preference between them; and

(ii) 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 Parent Notes and any future notes issued by or in relation to which a New Debt Financing has been made available to or by a Parent Borrower and designated by Bidco as Parent Notes and the Security Agent in relation to such Parent Notes (the "Parent Notes Liabilities"), (ii) under any future loan facility designated as a Parent Facility Agreement by Bidco (the "Parent Facility Liabilities" and together with the Parent Notes Liabilities, the "Parent Liabilities") and (iii) the liabilities owed under any future loan (a "Parent Proceeds Loan") made by the Parent or any other Parent Investor to Bidco for the purpose of on-lending the proceeds of any Parent Notes or Parent Loans (the "Parent Proceeds Loan Liabilities") (and, in each case, together with the applicable Arranger Liabilities in respect thereof), *pari passu* and without any preference between them.

The Intercreditor Agreement will provide that the liabilities owed by any Parent Borrower (in its capacity as borrower or issuer, in respect of its Parent Liabilities) to the relevant Creditors 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 Parent Liabilities, (ix) the Parent Proceeds Loan Liabilities, (x) the applicable Agent Liabilities and (x) the applicable Arranger Liabilities.

The Intercreditor Agreement will provide that the intra-group liabilities owed by one member of the Group to another member of the Group (other than any Subordinated Liabilities, Senior Secured Notes Proceeds Loan Liabilities or Parent Proceeds Loan Liabilities and in the case of acceding Group members, subject to a threshold) (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 and Parent 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 will also provide that the liabilities owed by any member of the Group (other than any Parent Proceeds Loan Liabilities) to a holding company of the Parent 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, the Unsecured Creditors and to the Intra-Group Liabilities.

The Intercreditor Agreement will not rank or restrict the payment of any Topco Independent Obligor in such capacity of any liabilities of any Topco Independent Obligor in such capacity.

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 Parent Liabilities, the Parent 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), the Security Documents and any other document designated as such by the Security Agent and Bidco.

"Designation Date" means the first date after the date of the Intercreditor Agreement that Bidco designates any Liabilities as Super Senior Liabilities in accordance with the Intercreditor Agreement.

"Finance Documents" means the Senior Facilities Agreement, any Permitted Senior Secured Facilities Agreement, any Cash Management Facility Finance Documents, any Permitted Super Senior Secured Facilities Agreement, the indenture in respect of any Senior Secured Notes, the facility agreement documenting any Second Lien Facility, the indenture in respect of any Second Lien Notes, the facility documenting any Parent Facility, the indenture in respect of any Parent Notes and any document designated by Bidco as an unsecured finance document under and in accordance with the Intercreditor Agreement.

"Parent Shared Security" refers to security at any time which is created, or expressed to be created, over (a)(i) the shares in Bidco held by the Parent, (ii) all receivables owed to a Parent Investor (including any Parent Proceeds Loan and the Parent Proceeds Loan Liabilities, as applicable) and (iii) the material bank accounts of the Parent (including any blocked account in respect of a profit and loss transfer agreement), in each case to the extent provided for by the Parent Finance Documents at any time and designated as Parent Shared Security by the Parent (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 a class of Secured Parties) or in favor of the Security Agent under a parallel debt or similar structure). Parent Shared Security shall secure all liabilities and present and future obligations each Debtor and each Third Party Security Provider to the Secured Parties under the Secured Debt Documents.

"Secured Creditors" means the Senior Secured Creditors, Second Lien Creditors and (only to the extent of the Parent Shared Security and the Topco Independent Transaction Security) the Parent Creditors (each as defined below).

"Secured Debt Documents" means the documents relating to the Senior Secured Liabilities, Second Lien Liabilities and (to the extent of any Parent Liabilities secured by the Parent Shared Security and the Topco Independent Transaction Security) Parent Liabilities.

"Third Party Security Provider" means any person that is not a member of the Group that has provided Transaction 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 as such by Bidco (in its discretion).

"Topco Independent Obligor" means CTC Topco GmbH, CTEC Acquisition S.à r.l. and any Parent Borrower or any of its Affiliates (other than a member of the Group) which is designated as such by Bidco (in its discretion).

"Topco Independent Transaction Security" refers to security (other than Transaction Security) which is created, or expressed to be created, in favor of the Security Agent as agent or trustee for the other Parent Secured Parties (or a class of Parent Secured Parties) (or if such trustee arrangements are not legally possible, in favor of all the Parent Secured Parties (or a class of Parent Secured Parties) or in favor of the Security Agent under a parallel debt or similar structure) in respect of the Topco Independent Secured Obligations and designated as such by Bidco (in its discretion). Topco Independent Transaction Security shall secure all liabilities and present and future obligations of each Topco Independent Obligor to the Parent Secured Parties under the Parent Finance Documents.

"Transaction Security" refers to security (from the Group, any Third Party Security Provider and Parent Shared Security (but excluding, for the avoidance of doubt, Topco Independent Transaction Security), as defined below) which is created, or expressed to be created, 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 a class of Secured Parties) or in favor of the Security Agent under a parallel debt or similar structure). Transaction Security which is not Parent 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 Parent Liabilities (to the extent of the Parent Shared Security and the Topco Independent Transaction Security) (the "Parent Secured Parties")) under the Debt Documents (other than the finance documents relating to the Parent Liabilities (the "Parent Finance Documents")).

The Parent Notes and Parent Notes Guarantee will be Parent Notes Liabilities for the purposes of the Intercreditor Agreement. On the Issue Date, no 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: Parent Creditors

The creditors in respect of the Parent Liabilities (the "Parent Creditors") will have the right to take, accept or receive the benefit of:

(i) any guarantee, indemnity or other assurance against loss from any member of the Group in respect of the Parent Liabilities in addition to any guarantee, indemnity or assurance in the original form of any Parent Finance Documents or the Intercreditor Agreement, or given to all the Secured Parties as security for the liabilities of each member of the Group and Third Party Security Provider to the Secured Parties under the Debt Documents if, subject to any agreed security principles:

(A) (except for any guarantee, indemnity or other assurance permitted by the Finance Documents), the Secured Parties other than the Parent Creditors (the "Priority Secured Parties") (or applicable class thereof) already benefit from such a guarantee, indemnity or other assurance or at the same time it is also offered to the Priority Secured Parties (or applicable class thereof) and ranks in the same order of priority as described under "*Priority of Debts*" or "*Priority of Security*" above, as applicable; and

(B) all amounts received by any Parent Creditor with respect to such guarantee, indemnity or assurance are paid to the Security Agent for application as set out under "*Application of Proceeds*" below; and

(ii) any security, guarantee indemnity or other assurance against loss from any member of the Group:

(A) in connection with any escrow or similar arrangements relating to amounts held by a person which is not a member of the Group prior to release of those amounts to a member of the Group;

(B) 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

(C) as otherwise permitted by the Intercreditor Agreement.

No security (other than pursuant to the secured documents relating to Parent Independent Transaction Security or Parent Shared Security or as described above) shall be granted by a member of the Group in respect of any Parent Liabilities.

New Debt Financing

The Intercreditor Agreement will provide, subject to certain conditions, for the implementation of existing, additional, supplemental or new financing arrangements that will constitute, for the purposes of the Intercreditor Agreement, as applicable and *inter alia*, Senior Lender Liabilities, Senior Secured Notes Liabilities, Parent Liabilities or Super Senior 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 or supplemental financing arrangement under the Debt Documents. In connection with and in order to facilitate any New Debt Financing, each agent 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) subject to certain conditions, including as regards the terms of such security (which shall be, unless otherwise required by Bidco to the extent that the existing Transaction Security or Topco Independent Transaction Security is not being amended or released and the new Transaction Security or new Topco Independent Transaction Security only secures the New Debt Financing, substantially the same 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 otherwise combines with a Restricted Subsidiary or (ii) an asset of 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 later of a specified date and 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 Group or Third Party Security Provider or other relevant security provider in respect of any liabilities (including under any Debt Document) (i) over any Acquired Person or Asset if this would breach any contractual undertaking applicable to any member of the Group or Third Party Security Provider or other relevant security provider or otherwise is excluded or exempt from being given under the Agreed Security Principles (as defined in the Senior Facilities Agreement) or the Parent Agreed Security Principles, (ii) over any asset required (including subject to any condition) in connection with the provisions of credit support in relation to any Permitted Acquired Indebtedness (other than as a result of any obligation to extend any Transaction Security rateably 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 in relation to or constituting 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 rateably for the benefit of such Permitted Acquired Indebtedness) under or in relation thereto.

Permitted Payments

Permitted Payments in Respect of the Senior and Super Senior Debt

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 and the Agent Liabilities and Arranger Liabilities in respect thereof, 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 Facilities Agreement or any Permitted Senior Secured Facilities Agreement, Senior Secured Notes Indenture or Permitted Super Senior Secured Facilities Agreement or following certain insolvency events in relation to a Debtor, Material Subsidiary or Third Party Security Provider, payments may only be made by Debtors and Third Party Security Providers and received by creditors in accordance with the provisions described below under *"Application of Proceeds"*, provided further 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 a result of the operation of the ICA shall not prevent the occurrence of an event of default under such applicable Senior Secured Finance Documents.

Permitted Payments in Respect of the Second Lien Debt

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 Parent Liabilities being the "Secured Liabilities") have been discharged (the "Senior Secured Discharge Date"), the Debtors and Third Party Security Providers may only make specified 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 fees) is continuing under the Senior Facilities Agreement or 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 Parent Liabilities in (ii) of the next paragraph.

Permitted Payments in Respect of Parent 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"), the Debtors, Parent Borrowers and Third Party Security Providers may only make specified payments (which shall be construed to include any other direct or indirect step, matter, action or dealing in relation to any Parent Liabilities otherwise prohibited under the Intercreditor Agreement) under the Parent Liabilities or under any Parent Proceeds Loan (together the "Parent Group Liabilities") to the Parent Creditors (in respect of the Parent Liabilities) or any Parent Investor (in respect of any Parent Proceeds Loan Liabilities only) (such payments, collectively, "Permitted Parent Payments"):

(i) if:

(A) no Parent Payment Stop Notice (as defined below) is outstanding;

(B) no payment default (subject to a *de minimis* threshold in the case of amounts other than principal, interest or fees) has occurred and is continuing under the Senior Facilities Agreement or 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

(C) the payment is of (1) any amount of principal or capitalized interest in respect of the Parent Liabilities which is which is 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, (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))) and default interest on the Parent Liabilities accrued and payable in cash in accordance with the terms of the relevant Parent 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 Parent Liabilities and amounts in respect of currency indemnities in any Parent Finance Document, (3) made in pursuance of a debt buy-back programme approved by the Majority Senior Secured Creditors, Majority Super Senior Creditors and Majority Second Lien Creditors (each as defined below) or (4) any amount due under any syndication strategy letter relating to any Parent Facility Agreement or Parent Notes Indenture;

(ii) if, notwithstanding that a Parent Payment Stop Notice (as defined below) is outstanding and/or (other than in respect of paragraph (M) below) a Senior Secured Payment Default and/or a Second Lien Payment Default has occurred and is continuing and (if the Parent Borrower is a guarantor or borrower under any prior-ranking debt financing agreement at such time, other than in respect of paragraph (K) below) irrespective of whether an acceleration event under any prior-ranking financing agreement has occurred, 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 Parent 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 the relevant Parent Agent's fees, costs and expenses not covered by (A) and not exceeding €1,500,000 in aggregate, 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 Parent 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 Parent Finance Documents (including in relation to any reporting or listing requirements under the Parent Finance Documents), (F) of any other amount not exceeding €2,500,000 in any 12-month period, (G) of any amount of the Parent Liabilities which would have been payable but for the issue of a Parent Payment Stop Notice (which has since expired and no new Parent Payment Stop Notice is outstanding) which has been capitalized and added to the principal amount of the Parent Liabilities or where that amount is outstanding as a result of the accrual of cash interest payable in respect of the Parent Liabilities during a period when a Parent Payment Stop Notice was outstanding or any other amount described at (i)(C) above, provided that no such payment may be made if certain events of default have occurred in respect of 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 in respect of the Senior Secured Liabilities, Second Lien Liabilities or Parent Group Liabilities is continuing, all or part of the Parent Liabilities being released or otherwise discharged solely in consideration for the issue of shares in any holding company of the Parent (a "Debt for Equity Swap") provided that no cash or cash equivalent payment is made in respect of the Parent Liabilities, that it does not result in a Change of Control as defined in any prior-ranking finance agreement or Parent Finance Document and that any Liabilities owed by a member of the Group to another member of the Group, to the Subordinated Creditors or to any other holding company of the Parent 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 (subject to the Agreed Security Principles) in respect of any of those Intra-Group Liabilities or Subordinated Liabilities owed by a member of the Group, (I) of non-cash interest made by way of capitalizing interest or issuing a non cash-pay financial instrument which is subordinated on the same terms as the Parent Liabilities, (J) if the payment is funded directly or indirectly with the proceeds of Parent Liabilities incurred under or pursuant to any Parent Finance Documents, (K) if the payment is made by the Parent Borrower in respect of its obligations under the Parent Finance Documents and such payment is not directly or indirectly sourced from a member of the Group or such payment is funded from proceeds received by the Parent Borrower from the Group without breaching the terms of the Debt Documents unless the Parent Borrower is a guarantor or borrower under any prior-ranking financing agreement at such time and any such prior-ranking financing agreement has been accelerated or an Insolvency Event has occurred, (L) if the payment is of a principal amount of the Parent Liabilities in accordance with a provision in a Parent Finance Document relating to prepayment upon illegality or in relation to the prepayment of a single lender in the event of a tax gross-up, increased costs or other indemnity becoming payable or (M) 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 Parent Liabilities (provided that such maturity date is no earlier than that contained in the original form of the relevant Parent Finance Document as of the date of first issuance or borrowing (as the case may be) of the applicable Parent Liabilities; or

(iii) if the Majority Senior Secured Creditors, Majority Super Senior Creditors and Majority Second Lien Creditors give prior consent to that payment being made.

On or after the Priority Discharge Date, the Debtors, the Parent Borrowers and the Third Party Security Providers may make payments in respect of the Parent Group Liabilities in accordance with the Parent Finance Documents and any Parent Proceeds Loan Agreement (as applicable).

Parent Liabilities Payment Block Provisions

A Parent Payment Stop Notice (as defined below) is outstanding from the date on which, following the occurrence of an event of default in respect of any Senior Secured Liabilities (a "Senior Secured Event of Default") or an event of default in respect of any Second Lien Liabilities (a "Second Lien Event of Default"), the Security Agent (acting on the instructions of the Majority Super Senior Creditors, Majority Senior Secured Creditors or Majority Second Lien Creditors) issues a notice (a "Parent Payment Stop Notice") to the agent under any Parent Facility (each, a "Parent Agent") and the trustee under any Parent Notes (each, a "Parent Notes Trustee") advising that the Senior Secured Event of Default or Second Lien Event of Default is continuing and suspending payments by the Group of the Parent Group Liabilities, until the first to occur of:

(i) the date falling one hundred and seventy-nine (179) days after delivery of that Parent Payment Stop Notice;

(ii) the date on which a default occurs for failure to pay principal at the original scheduled maturity of the relevant Parent Liabilities;

(iii) if a Parent Standstill Period (as defined below) commences after the issue of that Parent Payment Stop Notice, the date on which such standstill period expires;

(iv) the date on which the relevant Senior Secured Event of Default or Second Lien Event of Default has been remedied or waived;

(v) the date on which the Security Agent (acting on the instructions of whichever of the Majority Super Senior Creditors, Majority Senior Secured Creditors or Majority Second Lien Creditors gave the instructions for the relevant stop notice to be delivered) delivers a notice to each Parent Borrower, the Parent Agent(s) and the Parent Notes Trustee(s) cancelling the payment stop notice;

(vi) the Priority Discharge Date; and

(vii) the date on which the Parent Creditors take any enforcement action that is permitted under the Intercreditor Agreement (see "*Permitted Parent Enforcement*" below).

No Parent 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 Parent Payment Stop Notice may be served (i) with respect to the same event or set of circumstances or (ii) in any period of 360 days.

Any failure to make a payment due in respect of the Parent Group Liabilities as a result of the issue of a Parent 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 Parent Group Liabilities or (ii) the issue of an enforcement notice in respect of an event of default under the finance documents documenting any Parent Group Liabilities (a "Parent Enforcement Notice") on behalf of the Parent Creditors.

Payment Obligations and Capitalization of Interest Continue

Nothing in the Second Lien or Parent payment block provisions will release any Debtor or (in the case of the Second Lien payment block provisions) any Debtor or Third Party Security Provider 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:

(i) at any time following the issue of a Parent Payment Stop Notice or the occurrence of a Senior Secured Payment Default or Second Lien Payment Default, that Parent 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

(ii) the relevant Debtor or Parent Borrower then promptly pays to the Parent Creditors or any party that has acceded to the Intercreditor Agreement as a creditor under a Parent Proceeds Loan (the "Parent Investors") (in respect of the Parent Proceeds Loan Liabilities only) an amount equal to any payments which had accrued under the Parent Finance Documents or the Parent Proceeds Loan Agreement (as applicable) and which would have been Permitted Parent Payments but for that Parent Payment Stop Notice or Senior Secured Payment Default or Second Lien Payment Default,

then any event of default which may have occurred under a Parent Finance Document or Parent Proceeds Loan Agreement and any Parent Enforcement Notice which may have been issued as a result of that suspension of payments or (as applicable) event of default shall be waived, revoked and cancelled without any further action being required.

Turnover

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 Parent Discharge Date (the "Final Discharge Date") any creditor (other than a Senior Secured Creditor, agent, trustee or arranger on or after the Designation Date) receives or recovers from any Debtor, member of the Group or Third Party Security Provider:

(i) 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*";

(ii) other than where the set-off provision in the Intercreditor Agreement applies, any amount by way of set-off which does not give effect to a payment permitted under the Intercreditor Agreement;

(iii) other than where the set-off provision in the Intercreditor Agreement applies, any amount:

(A) 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 an acceleration event or (II) as a result of any other litigation or proceedings against a Debtor, a member of the Group or any Third Party Security Provider (other than after the occurrence of an Insolvency Event); or

(B) 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 an acceleration event;

(iv) 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

(v) other than where the set-off provision in the Intercreditor Agreement or the provisions relating the New Debt Financings applies or apply, 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 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 Group or Third Party Security Provider,

that creditor will:

(i) 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

(ii) 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 the same terms will apply in the event that, at any time on or after the Designation Date but prior to the Final Discharge Date, any Senior Secured Creditor, agent, trustee or arranger receives or recovers from any Debtor or Third Party Security Provider (x) any proceeds from the enforcement of security or from a Distressed Disposal (as defined below) and, following an acceleration event, any other 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 broadly defined as, in relation to any Debtor, Material Subsidiary 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, (b) a composition, compromise, assignment or arrangement with any class of creditors generally (other than any Secured Party), (c) a moratorium is declared in relation to any of its indebtedness, (d) the appointment of any liquidator, receiver, examiner, administrator, administrative receiver, compulsory manager or other similar officer in respect of it or any of its assets or (e) any analogous procedure or step is taken in any jurisdiction, other than (in each case), frivolous or vexatious proceedings which, if capable of remedy, are discharged, stayed or dismissed within 20 Business Days of commencement or, if earlier, the date on which it is advertised (or such other period as agreed between Bidco and the relevant instructing group), proceedings or appointments which the Security Agent is satisfied will be withdrawn or unsuccessful or as permitted under the finance documents documenting the Senior Liabilities, Super Senior Liabilities or Second Lien Liabilities or otherwise not constituting a default.

The Intercreditor Agreement will provide 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, to the extent it is able to do so, 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 Debtor's, Material Subsidiary's or Third Party Security Provider's liabilities to creditors are, with certain exceptions, discharged by way of set-off (mandatory or otherwise) after the occurrence of an Insolvency Event, any creditor benefiting from such set-off shall (in the case of a Senior Secured Creditor on or after the Designation Date, only to the extent such amounts constitute proceeds of enforcement) 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 reasonably necessary to make recovery, in each case after the occurrence of an Insolvency Event in relation to a Debtor, Material Subsidiary 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 will provide that the Security Agent may not take any action to enforce the Transaction Security or the Topco Independent Transaction Security without instructions from an Instructing Group, Majority Second Lien Creditors or Majority Parent Creditors (as applicable) or 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 Parent Discharge Date, the Majority Parent Creditors; and

(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"), the Majority Senior Secured Creditors (as defined below) and the Majority Super Senior Creditors (as defined below) 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 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, the Majority Second Lien Creditors (as defined below); and

(iii) on or after the Priority Discharge Date but before the Parent Discharge Date, the Majority Parent Creditors (as defined below).

"Majority Senior Secured Creditors" means:

(a) at any time when there are any Senior Secured Notes Creditors, those Senior Secured Creditors (other than the Super Senior Creditors) whose Senior Secured Credit Participations at that time aggregate more than 50 per cent. of the total Senior Secured Credit Participations at that time; and

(b) at any time where there are no Senior Secured Notes Creditors, those Senior Secured Creditors (other than the Super Senior Creditors) whose Senior Credit Participations at that time aggregate more than 662/3 per cent. of the total Senior Credit Participations at that time.

"Majority Super Senior Creditors" means, at any time, those Super Senior Creditors whose Super Senior Credit Participations at that time aggregate more than 662/3 per cent. of the total Super Senior Credit Participations at that time.

"Majority Second Lien Creditors" means:

(a) at any time when there are any Second Lien Notes Creditors, those Second Lien Creditors whose Second Lien Credit Participations at that time aggregate more than 50% per cent. of the total Second Lien Credit Participations at that time; and

(b) at any time when there are no Second Lien Notes Creditors, the Majority Second Lien Lenders.

"Majority Parent Creditors" means:

(a) at any time when there are any Parent Notes Creditors, those Parent Creditors whose Parent Credit Participations at that time aggregate more than 50 per cent. of the total Parent Credit Participations at that time; and

(b) at any time when there are no Parent Notes Creditors, the Majority Parent Lenders.

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 given no instructions or has instructed the Security Agent not to enforce or to cease enforcing the Transaction Security (and the Instructing Group has not required any Debtor or Third Party Security Provider to make a Distressed Disposal (as defined below)), an agent or trustee in respect of 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) has (or have) given no instructions or has (or have) instructed the Security Agent not to enforce or to cease enforcing the Transaction Security (and the Instructing Group (or the Majority Second Lien Creditors) has (or have) not required any Debtor or Third Party Security Provider to make a Distressed Disposal), the Parent Agent(s) and the Parent Notes Trustee(s) (acting on the instructions of the Majority Parent Creditors).

Subject to the Transaction Security having become enforceable in accordance with its terms, the Instructing Group or any other persons then entitled to give instructions in accordance with the Intercreditor Agreement 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 paragraph, if at any time the agents or trustees of the Second Lien Creditors or Parent Creditors then entitled to give the Security Agent instructions either give such instructions or indicates any intention to give such instructions, then the Instructing Group may give instructions to the Security Agent to enforce the Transaction Security as the Instructing Group sees fit 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 or trustee 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 the Instructing Group concerned shall consult with each other agent and trustee (provided that any agent or trustee in respect of Parent Liabilities need only be consulted if such enforcement relates to Parent Shared Security) for a period of up to 10 Business Days (or such shorter period as each other agent and trustee and the Security Agent shall agree) (the "Consultation Period") and the Instructing Group will only be entitled to give the enforcement instructions described above 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, the relevant agents, trustees and/or hedge counterparties shall deliver a copy of those proposed instructions (an "Initial Enforcement Notice") to the Security Agent and to the other agents, trustees and hedge counterparties. Those enforcement instructions shall be consistent with the Enforcement Principles (as defined below).

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 (and notified the Security Agent of that determination in writing) within three months of the date of Initial Enforcement Notice or the Super Senior Discharge has not occurred within six months of the date 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 Majority 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 in issuing enforcement instructions could reasonably be expected to have a material adverse effect on the Security Agent's ability to enforce the Transaction Security or on expected realization proceeds of any enforcement of Transaction Security and the Majority Super Senior Creditors deliver instructions which they reasonably believe to be consistent with the Enforcement Principles and necessary or advisable to enhance the prospects of achieving the enforcement objective of maximising, to the extent consistent with a prompt and expeditious realization of value, the value realized from enforcement 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, neither the Majority Senior Secured Creditors nor the Majority Super Senior Creditors have provided instructions or both the Majority Senior Secured Creditors and the Majority Super Senior Creditors have instructed the Security Agent not to enforce or to cease enforcing the Transaction Security (and they have not 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 Majority Second Lien Creditors to enforce have arisen under the Intercreditor Agreement or (vi) if, prior to the latest of the Senior Secured Discharge Date, the Super Senior Discharge Date and the Second Lien Discharge Date, neither the Majority Senior Secured Creditors nor the Majority Super

Senior Creditors (nor the Majority Second Lien Creditors pursuant to paragraph (v)) have provided instructions or if both the Majority Senior Secured Creditors and the Majority Super Senior Creditors (or the Majority Second Lien Creditors pursuant to paragraph (v)) have instructed the Security Agent not to enforce or to cease enforcing the Transaction Security (and they have not required any Debtor or Third Party Security Provider to make a Distressed Disposal), an agent or trustee under the Parent Finance Documents (acting on the instructions of the Majority Parent Creditors).

Notwithstanding paragraphs (v) and (vi) above, if at any time the agents or trustees of the Second Lien Creditors or Parent Creditors then entitled to give the Security Agent instructions either give such instruction or indicate any intention to give such instruction, 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 and the Security Agent shall act on such instructions.

"Enforcement Principles" means certain requirements as to the manner of enforcement, including that (i) 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 (other than shares in a member of the Group over which Transaction Security exists) with an aggregate book value over €5,000,000 or of shares in a member of the Group over which Transaction Security exists, in each case, if not carried out by way of a public auction or other competitive sales process, shall (if the Security Agent is requested by the Majority Super Senior Creditors or Majority Senior Secured Creditors to appoint a reputable, independent and internationally recognized investment bank, firm of accountants or third party professional firm to provide a fairness opinion but subject to certain exceptions) benefit from a fairness opinion.

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 Parent Finance Documents (acting on the instructions of the Majority Parent 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, without limitation, 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 paragraphs shall instruct 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 Transaction Security or Topco Independent Transaction Security or to exercise any rights or powers 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 an Instructing Group (in the case of Topco Independent Transaction Security, being the Majority Parent Creditors) in accordance with the paragraphs above.

Enforcement Regime

Restrictions on Enforcement by Second Lien Creditors

Until the later of the Super Senior Discharge Date and the Senior Secured Discharge Date, except with the prior consent of or as required by an Instructing Group, no Second Lien Creditor shall take or require the taking of any Enforcement Action (as defined below) against a member of the Group or Third Party Security Provider in relation to the Second Lien Liabilities, except as permitted under the Intercreditor Agreement, 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.

Certain of the features set out below with respect to Parent Finance Parties apply to the Second Lien Creditors, with appropriate modifications for the relative position in the capital structure.

Restrictions on Enforcement by Parent Finance Parties

Until the Priority Discharge Date, except with the prior consent of or as required by an Instructing Group, (i) no Parent Finance Party or Parent Investor shall direct the Security Agent to enforce, or otherwise require the enforcement of, any Transaction Security (including the crystallization of any floating charge forming part of the Transaction Security), (ii) no Parent Finance Party nor Parent Investor shall take or require the taking of any Enforcement Action (as defined below) against any member of the Group or any Third Party Security Provider (other than in each case (and to the extent not restricted by (i) above or (iii) below) against a Parent Borrower) in relation to the Parent Group Liabilities and (iii) no Parent Finance Party, Parent Investor nor Parent Borrower shall take or require the taking of any Enforcement Action (as defined below) in relation to the Parent Proceeds Loan Liabilities, except in the case set out under "*Permitted Parent Enforcement*" below.

Other than as restricted by (i) and (iii) in the paragraph above, any Parent Creditors may at any time take any Enforcement Action (as defined below) against any Parent Investor, Parent Borrower or Parent Guarantor that is not a member of the Group or an Obligor under the Senior Facilities Agreement or any Permitted Senior Secured Facilities Agreement, Second Lien Facility Agreement or Permitted Super Senior Secured Facilities Agreement, in each case in accordance with the terms of the Parent Finance Documents.

Broadly, "Enforcement Action" is defined as:

(i) in relation to any liabilities (other than unsecured liabilities) the acceleration, putting on demand, making of a demand, requiring any Debtor 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 Debt Documents) or suing or commencing proceedings in relation to such liabilities;

(ii) premature termination or close-out of a hedging agreement, save to the extent permitted by the Intercreditor Agreement;

(iii) the taking of steps to enforce or require the enforcement of any 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;

(iv) entering into any composition, compromise, assignment or similar arrangement with any Third Party Security Provider or any Debtor which owes any liabilities or has given security or guarantees 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 not undertaken as part of an announced restructuring or turnaround plan or while a default was outstanding under the relevant Secured Debt Document); or

(v) petitioning, applying or 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 Debtor which owes any liabilities or has given security or guarantees in respect of liabilities owed to a creditor under the Intercreditor Agreement or any of such Third Party Security Provider or Debtor's assets or any suspension of payments or moratorium of any indebtedness of any such Third Party Security Provider or Debtor, or any analogous procedure or step in any jurisdiction,

except that the following shall not constitute Enforcement Action: (A) suing, commencing proceedings or taking any action referred to in paragraph (v) above where necessary to preserve a claim, (B) discussions between or proposals made by any Priority Secured Parties with respect to instructions to enforce any Transaction Security in accordance with the Intercreditor Agreement, (C) 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, (D) proceedings brought by a Secured Party solely to obtain injunctive relief or 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, (E) demands made by an Intra-Group Lender or a Subordinated Creditor to the extent they relate to payments permitted under the Intercreditor Agreement or the release of the liabilities owed to such creditors in return for the issue of shares in the relevant Debtor provided that the ownership interest of the Debtor is not diluted and any relevant shares remain subject to the same Transaction Security as existed prior to the issue and (F) 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 Parent Liabilities solely to obtain injunctive relief or specific performance with no claim for damages, to request judicial interpretation in relation to a Debt Document to which it is party with no claim for damages or in connection with any securities violation, securities or listing regulations or common law fraud.

Permitted Parent Enforcement

The restrictions set out above under "*Restrictions on Enforcement by Parent Finance Parties*" will not apply in respect of the Parent Group Liabilities or any Transaction Security securing the Parent Group Liabilities, if:

(i) an event of default under a Parent Finance Document or a Parent Proceeds Loan Agreement (the "Relevant Parent Default") is continuing;

(ii) the Security Agent, all agents and trustees in respect of the Super Senior Liabilities, Senior Lender Liabilities, Senior Secured Notes Liabilities and Second Lien Liabilities and all the other agents and trustees in respect of the Parent Group Liabilities and (as applicable) the other Parent Investor(s) have received notice of the Relevant Parent Default specifying the event or circumstance in relation to the Relevant Parent Default from the Parent Agent, Parent Notes Trustee or the Parent Investor in relation to the relevant Parent Group Liabilities;

(iii) a Parent Standstill Period (as defined below) has elapsed; and

(iv) the Relevant Parent Default is continuing at the end of that Parent Standstill Period.

Promptly upon becoming aware of an event of default under a Parent Finance Document or Parent Proceeds Loan Agreement, a Parent Notes Trustee, Parent Agent or Parent Investor (as the case may be) shall give a Parent Enforcement Notice notifying the Security Agent, each agent under a Permitted Senior Secured Facilities Agreement (the "Senior Agent") or under a Permitted Super Senior Secured Facilities Agreement, each senior secured notes trustee, Second Lien Agent and second lien notes trustee and each other Parent Notes Trustee, Parent Agent or Parent Investor of the existence of such event of default.

"Parent Standstill Period" means the period beginning on the date (the "Parent Standstill Start Date") a Parent Enforcement Notice is served in respect of such a Relevant Parent Default and ending on the earliest to occur of:

(i) the date falling one hundred and seventy-nine (179) days after the Parent Standstill Start Date;

(ii) the date the Priority Secured Parties take any Enforcement Action in relation to a particular Debtor, Material Subsidiary or Third Party Security Provider, *provided* that:

  (A) if a Parent Standstill Period ends pursuant to this paragraph (ii), the Parent Finance Parties or a Parent Investor (in respect of the Parent Proceeds Loan Liabilities only) may only take the same Enforcement Action in relation to any Parent Guarantor as the Enforcement Action taken by the Priority Secured Parties against such Parent Guarantor and not against any other Debtor, Material Subsidiary or Third Party Security Provider; and

  (B) Enforcement Action for the purpose of this paragraph shall not include action taken to preserve or protect any security as opposed to realize it;

(iii) the date of an Insolvency Event (as defined above) in relation to a particular Parent Guarantor against whom Enforcement Action is to be taken; and

(iv) the expiry of any other Parent Standstill Period outstanding at the date such first mentioned Parent Standstill Period commenced (such expiry to be determined in accordance with this definition without taking into account the application of any cure, waiver or other permitted remedy).

The Parent Finance Parties or Parent Investor (in respect of the Parent Proceeds Loan Liabilities only) may take Enforcement Action under the provisions described in this section (*Permitted Parent Enforcement*) in relation to a Relevant Parent Default even if, at the end of any relevant Parent Standstill Period or at any later time, a further Parent Standstill Period has begun as a result of any other event of default in respect of the Parent Liabilities.

Option to Purchase: Parent Creditors

Following acceleration or the enforcement of Transaction Security upon acceleration in respect of any Senior Secured Creditor Liabilities (other than Hedging Liabilities), Second Lien Liabilities or Parent Liabilities, Parent Creditors may elect to purchase 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 and subject to the satisfaction of certain other conditions. Parent Creditors may also elect for the counterparties to hedging obligations to transfer their hedging obligations to one or more Parent Creditors (or a nominee thereof) 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 or instruction from any creditor, other Secured Party, Debtor, Third Party Security Provider or Topco Independent Obligor) promptly following receipt of a written request from Bidco to the Security Agent:

(i) release (or procure the release) from the Transaction Security or Topco Independent Transaction Security and the Secured Debt Documents:

(A) 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 Group, but without prejudice to any obligation of any member of the Group in a Finance Document to provide replacement security);

(2) any other transaction not prohibited by the Finance Documents pursuant to which that asset will cease to be held or owned by a member of the Group,

and, in each case, where such disposal is not a Distressed Disposal (as defined below) (in each case, a "Non-Distressed Disposal");

(B) 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 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 obligation or take any action in relation to such document or agreement;

(C) any security (and/or other claim relating to a Debt Document) over any asset of any member of the Group which has ceased to be a Debtor or guarantor (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 is in accordance with the terms of each Finance Document or the Agreed Security Principles (as defined in the Senior Secured Facilities Agreement) or (as applicable) Parent Agreed Security Principles; and

(D) 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 each Finance Document or the Agreed Security Principles (as defined in the Senior Facilities Agreement) or (as applicable) the Parent Agreed Security Principles; and

(ii) in the case of a disposal of shares or other ownership interests in a Debtor, other member of the Group (or any holding company of any Debtor) or any other transaction pursuant to which a Debtor or other member of the Group (or any holding company of any Debtor) will cease to be a member of the Group or a Debtor, release or procure the release of that Debtor or other member of the Group and its subsidiaries from all present and future liabilities under the Secured Debt Documents and the respective assets of such Debtor, member of the Group or holding company and its subsidiaries (and the shares in any such Debtor, member of the Group or holding company 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).

When making any request for a release pursuant to paragraphs (i)(A) or (i)(B) above, Bidco shall confirm in writing to the Security Agent, that the relevant disposal or other action is not prohibited by the terms of any Finance Document 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 (i)(C) or (i)(D) 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 Facilities Agreement) or (as applicable) the Parent Agreed Security Principles.

In the case of a disposal of shares or other ownership interests in a Debtor or other member of the Group (or holding company of any Debtor) or any other transactions pursuant to which a Debtor or other member of the Group (or holding company of any Debtor) will cease to be a member of the Group or a Debtor, to the extent Bidco has confirmed to the Security Agent that such disposal is not prohibited by the Finance Documents, if such member of the Group or a Debtor is a borrower, issuer or primary debtor under or in respect of any Debt Document, such person shall have the right to voluntarily prepay all Liabilities outstanding under any Debt Document 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 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).

Distressed Disposals

"Distressed Disposal" means a disposal of an asset or shares of, or other financial securities issued by, a Debtor or, in the case of a Third Party Security Provider, any 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, (b) by enforcement of the Transaction Security as a result of an acceleration event or (c) after the occurrence of an acceleration event or the enforcement of security as a result of an acceleration event, by a Debtor or Third Party Security Provider to a person or persons which is not a member of the Group.

If a Distressed Disposal of any asset is being effected, the Security Agent is irrevocably authorized (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):

(i) to release the Transaction Security or any other claim over that asset, 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 necessary or desirable;

(ii) 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 Parent 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;

(iii) 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 Parent Investor, Subordinated Creditor or a Debtor over that holding company's assets or over the assets of any subsidiary of that holding company, on behalf of the relevant creditors, Third Party Security Providers and Debtors;

(iv) 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 any Debtors:

   (A) (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 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

   (B) (if the Security Agent (acting in accordance with the Intercreditor Agreement) does intend that any Transferee will be treated as a Secured Creditor or 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 Parties and all or part of any other liabilities,

   on behalf of, in each case, the relevant creditors, Third Party Security Providers and Debtors;

(v) 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 any 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:

(A) transfer all or part of the obligations in respect of those intra-group liabilities or liabilities 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

(B) (provided the Receiving Entity is a holding company of the Disposed Entity which is also a Guarantor of the Senior Secured Liabilities, the Second Lien Liabilities or the Parent Liabilities) accept the transfer of all or part of the obligations in respect of those intra-group liabilities or 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 in paragraphs (iv) and (v) 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 as described in paragraphs (iv) and (v) above) 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 or Subsidiary or holding company of a Debtor from any borrowing liabilities or guarantee liabilities owed to any Senior Secured Creditor unless those borrowing liabilities or guarantee 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, a cash management facility or an ancillary facility, made the subject of cash collateral arrangements acceptable to the relevant senior creditor) following that release.

If a Distressed Disposal is being effected at a time when the Majority Parent 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 or Subsidiary or holding company of a Debtor from any borrowing liabilities or guarantee liabilities owed to any Senior Secured Creditor or any Second Lien Creditor unless those borrowing liabilities or guarantee 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, a cash management facility or an ancillary facility, made the subject of cash collateral arrangements acceptable to the relevant senior creditor) following that release.

Where borrowing liabilities in respect of any Senior Secured Liabilities, Second Lien Liabilities, Senior Secured Notes Proceeds Loan Liabilities, Parent Liabilities or unsecured liabilities would otherwise be released pursuant to the Intercreditor Agreement, the creditor concerned may elect to have those borrowing liabilities transferred to a holding company of the Parent, 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 liabilities.

If before the Second Lien Discharge Date or the Parent Discharge Date, a Distressed Disposal is being effected such that the Second Lien Liabilities or the Parent Liabilities and Transaction Security over shares in a borrower or issuer in respect of Second Lien Liabilities or assets of a borrower or issuer in respect of Second Lien Liabilities, guarantor in respect of Second Lien Liabilities (a "Second Lien Guarantor") or Parent Guarantor will be released pursuant to the Intercreditor Agreement, it is a further condition to the release that either:

(i) the Second Lien Agent, Second Lien Notes Trustee, Parent Agent and Parent Notes Trustee (as applicable) have approved the release; or

(ii) where shares or assets of a borrower or issuer in respect of Second Lien Liabilities, a Second Lien Guarantor or Parent Guarantor are sold:

(A) the proceeds of such sale or disposal are in cash (or substantially in cash) and/or other marketable securities or, if the proceeds of such sale or disposal are not in cash (or substantially in cash) and/or other marketable securities, a valuation opinion has been obtained in accordance with paragraph (C)(II) below; and

(B) all claims of the Secured Creditors (other than in relation to performance bonds or guarantees or similar instruments issued by a Secured Creditor on behalf of a member of the Group) against a member of the Group (if any), all of whose shares (other than any minority interest not owned by members of the Group) are pledged in favor of the Priority Secured Parties and are being sold or disposed of pursuant to such Enforcement Action, are unconditionally released and discharged or sold or disposed of concurrently with such sale (and are not assumed by the purchaser or one of its affiliates), and all Transaction Security, Topco Independent Transaction Security and other security in favor of the Secured Parties in respect of the assets that are sold or disposed of is simultaneously and unconditionally released and discharged concurrently with such sale, provided that in the event of a sale or disposal of any such claim (instead of a release or discharge):

(I) where the Senior Secured Creditors (or any group or class of Senior Secured Creditors) constitute the Instructing Group, the Senior Agent and the senior secured notes trustee(s) (i) determine, acting reasonably and in good faith, that the Senior Secured Creditors will recover more than if such claim was released or discharged but nevertheless less than the outstanding Senior Secured Liabilities and (ii) serve a notice on the Security Agent notifying the Security Agent of the same;

(II) where the Second Lien Creditors constitute the Instructing Group, the Second Lien Agent(s) and the second lien notes trustee(s) (i) determine acting reasonably and in good faith that the Priority Secured Parties (collectively) will recover more than if such claim was released or discharged but nevertheless less than the outstanding amount of the Senior Secured Liabilities and the Second Lien Liabilities (the "Priority Secured Liabilities") and (ii) serve a notice on the Security Agent notifying the Security Agent of the same; or

(III) where the Parent Creditors constitute the Instructing Group, the Parent Agent and the Parent Notes Trustee(s) (i) determine acting reasonably and in good faith that the Priority Secured Parties and the Parent Creditors (collectively) will recover more than if such claim was released or discharged but nevertheless less than the outstanding Priority Secured Liabilities and the Parent Liabilities (collectively) and (ii) serve a notice on the Security Agent notifying the Security Agent of the same;

the Security Agent shall, in each case, be entitled immediately to sell and transfer such claim to such purchaser (or an affiliate of such purchaser) and the consideration for such sale or transfer may be in the form of non-cash consideration by way of the Senior Secured Creditors, Second Lien Creditors or Parent Creditors (whichever constitute the Instructing Group) bidding by an appropriate mechanic all or part of the Senior Secured Liabilities, Second Lien Liabilities or Parent Liabilities (as applicable) such that the relevant liabilities would, on completion, be discharged to the extent of an amount equal to the amount of the offer made by the relevant creditors; and

(C) 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 run in accordance with the advice of a reputable, independent and internationally recognized investment bank, firm of accountants or third party professional firm which is regularly engaged in such sale processes with a view to obtaining the best price reasonably obtainable taking into account all relevant circumstances and in which creditors under the Senior Secured Liabilities, Second Lien Liabilities and Parent Liabilities (as applicable) are entitled to participate as prospective buyers and/or financiers (including as part of a consortium); or

(II) where a reputable, independent and internally recognized investment bank, firm of accountants or third party professional firm which is regularly engaged in providing valuations in respect of the relevant type and size of assets concerned, in each case selected by the Security Agent, has delivered an opinion (including an enterprise valuation which can be relied upon by the Security Agent) in respect of such sale or disposal that the amount received in connection therewith is fair from a financial point of view, taking into account all relevant circumstances, including the method of enforcement, provided that the liability of such investment bank, firm of accountants or third party professional firm in giving such opinion may be limited to the amount of its fees in respect of such engagement.

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 any other security which is not Transaction Security or any guarantees provided by any holding company of the Parent or any subsidiary of any holding company of the Parent (other than a member of the Group) in respect of any Parent Liabilities or Parent Proceeds Loan Liabilities) or in connection with the realization or enforcement of all or any part of the Transaction Security shall be applied at any time as the Security Agent sees fit, in the following order of priority:

(i) in discharging any Agent Liabilities relating to the Senior Secured Liabilities, the Second Lien Liabilities or the Parent Liabilities and any sums owed to the Security Agent and any receiver or delegate on a *pari passu* basis;

(ii) 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;

(iii) if the Designation Date has occurred, for application towards the discharge of:

(A) the Super Senior Lender Liabilities and liabilities to arrangers and agents in connection therewith; and

(B) 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 (A) and (B) above, or, if the Super Senior Discharge Date has occurred (or the Designation Date has not occurred), for application towards the discharge of:

(A) the Senior Lender Liabilities and liabilities to arrangers in connection therewith;

(B) the Senior Secured Notes Liabilities;

(C) the Cash Management Facility Liabilities; and

(D) the Hedging Liabilities (which are, if the Designation Date has occurred, not Super Senior Hedging Liabilities),

on a *pro rata* basis and ranking *pari passu* between paragraphs (A), (B), (C) and (D) above;

(iv) for application towards the discharge of (x) the Second Lien Lender Liabilities and liabilities to arrangers in connection therewith and (y) the Second Lien Notes Liabilities, on a *pro rata* basis and ranking *pari passu* between themselves;

(v) solely to the extent such proceeds are from the realization or enforcement of the Parent Shared Security and any guarantees provided by a Parent Guarantor that is a member of the Group or Third Party Security Provider in respect of any of the Parent Liabilities, for application towards the discharge of (A) the Parent Facility Liabilities and liabilities to arrangers in connection therewith and (B) the Parent Notes Liabilities, on a *pro rata* basis and ranking *pari passu* between themselves;

(vi) if none of the Debtors or Third Party Security Providers is under any further actual or contingent liability under any Debt Document relating to the Senior Secured Liabilities, the Second Lien Liabilities or the Parent 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; and

(vii) 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 Parent Borrower pursuant to the terms of any Debt Document (other than in connection with the realization or enforcement 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 sees fit, in the following order of priority:

(A) in accordance with paragraph (i) above;

(B) in accordance with paragraph (ii) above;

(C) in accordance with paragraphs (iii), (iv) and (v) above (in each case, only to the extent there are liabilities due from the relevant Parent Borrower to such creditors), provided that such payments will be made on a *pro rata* and *pari passu* basis across all liabilities subject to such paragraphs;

(D) if none of the Debtors or Third Party Security Providers is under any further actual or contingent liability under any Secured Debt Document, in payment to any other person whom the Security Agent is obliged to pay in priority to any Debtor or Third Party Security Provider; and

(vii) 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 Parent Finance Document in connection with the realization or enforcement of Topco Independent Transaction Security or any guarantees provided by a Parent Guarantor (other than a member of the Group) (the "Parent Recoveries") shall be applied at any time as the Security Agent sees fit, in the following order of priority:

(i) in discharging any Agent Liabilities in respect of the Parent Liabilities (to the extent related to such Parent Recoveries), the Security Agent and any receiver or delegate, on a *pari passu* basis;

(ii) in payment of all costs and expenses incurred by any agent, trustee or Parent 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;

(iii) solely to the extent such proceeds are from the realization or enforcement of the Topco Independent Transaction Security and any guarantees provided by a Parent Guarantor (other than a member of the Group) in respect of any of the Parent Liabilities, for application towards the discharge of:

(A) the Parent Facility Liabilities; and

(B) the Parent Notes Liabilities,

on a *pro rata* basis and ranking *pari passu* between paragraphs (A) and (B) above;

(iv) if none of the Debtors or Third Party Security Providers 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; and

(v) 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 Parent 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 agent or trustee acting on behalf of the affected class shall be required (along with the agreement of Bidco).

Subject to certain exceptions, 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 or the order of priority or subordination under the Intercreditor Agreement shall not be made without the consent of (i) 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 Parent Liabilities, (ii) each Cash Management Facility Lender (or the relevant agent on its behalf, if appointed) (only to the extent that the proposed amendment or waiver would materially adversely affect the rights and obligations of the Cash Management Facility Lenders under the Intercreditor Agreement and would not materially adversely affect the rights and obligations of any other creditor or class of creditors), (iii) each Hedge Counterparty (only to the extent that the proposed amendment or waiver would materially adversely affect the rights and obligations of the Hedge Counterparties under the Intercreditor Agreement and would not materially adversely affect the rights and obligations of any other creditor or class of creditors) and (iv) 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 the subject of such instructions or authorized 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 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 amendment, release, waiver or consent shall be binding on each party to the Intercreditor Agreement and the prior consent of the relevant Secured Parties is required to authorize any amendment, release or waiver of, or consent under, any document creating Transaction Security or Topco Independent Transaction Security which would adversely affect the nature or scope of the assets subject to Transaction Security or, as the case may be, Topco Independent Transaction Security or the manner in which the proceeds of enforcement of the Transaction Security or, as the case may be, Topco Independent Transaction Security are distributed.

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, without limitation, 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 or arranger or, as the case may be, the Security Agent.

The first three paragraphs under "*Required Consents*", 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 Top Independent Transaction Security claim or liabilities or (ii) 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 acting in accordance with the provisions of such provisions or the applicable security document to give effect to the same.

Snooze/Lose

If in relation to a request for a consent, to participate in any other vote of a class of creditors, to approve any other action or to provide any confirmation or notification, in each case, under the Intercreditor Agreement, any creditor fails to respond to the request within ten (10) Business Days (or, in the case of a defaulting lender, five (5) Business Days) (or any other period of time notified by Bidco, with the prior agreement of each of the agents and trustees in the case of a period of less than ten (10) Business Days) or fails to provide details of its credit participation, such creditor will be disregarded or be deemed to have zero participation in respect of the matter or be deemed to have provided the relevant confirmation or notification, as applicable.

Provisions Following an IPO

Following an initial public offering of a member of the Group (or of a holding company thereof 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 (as defined in the Senior Facilities Agreement)) (an "IPO"), Bidco is entitled to give notice that the terms of the Debt Documents will automatically operate so that, amongst other things, (i) the Group (and all related provisions) will now refer to the member of the Group or holding company who will issue shares or whose shares are to be sold pursuant to such IPO (the "IPO Pushdown Entity," and (A) if any Parent Notes are not refinanced in full on or before the date specified in the aforementioned notice, the IPO Pushdown Entity for the purposes of the Group or Parent Liabilities shall be the Parent Borrower selected by Bidco and for the purposes of the Group or Liabilities other than the Parent Liabilities, the IPO Pushdown Entity shall be the direct subsidiary of that Parent Borrower or (B) if the Parent Notes have been refinanced in full on or before the date specified in the aforementioned noticed but the Senior Secured Notes have not been refinanced in full on or before such date, Bidco shall be the IPO Pushdown Entity, (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) 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.

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, as the case may be, Topco Independent Transaction Security) and (unless notified by Bidco) each Subordinated Creditor, Parent Investor and Topco Independent Obligor that is a holding company of the IPO Pushdown Entity and each Third Party Security Provider that no longer provides or is no longer required to provide Transaction Security over any of its assets in accordance with the Agreed Security Principles and/or the Parent Agreed Security Principles shall be irrevocably and unconditionally released from its obligations and restrictions under the Intercreditor Agreement in the appropriate capacity.

Following an IPO, subject to the consent of the Majority Senior Lenders, the Majority Senior Secured Noteholders, the Majority Second Lien Lenders, the Majority Second Lien Noteholders, the Majority Parent Lenders and the Majority Parent Noteholders, the Parent and each subsidiary of the Parent shall also be irrevocably and unconditionally released from all obligations and restrictions 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 to, release of or replacement of any Debt Document required by Bidco and/or take such other action as is required by Bidco in order to facilitate or reflect any such matters, provided that such amendment, replacement or other document or instrument does not impose personal obligations on the Security Agent or affect the rights, duties, liabilities, indemnification or immunity thereof.

Agreement to Override

Unless expressly stated otherwise therein, the Intercreditor Agreement will override anything in any other Debt Documents to the contrary (other than any Transaction Security documents which are governed by German law and need to be notarized (*beurkundet*).

Shareholder Loan

The Issuer has entered into a shareholder loan agreement with CTEC Acquisition S.à r.l. as lender and the Issuer as borrower pursuant to which the lender will lend and the borrower will borrow a portion of the Equity Contribution in connection with the Transaction. The receivables under the subordinated shareholder loan will be part of the Collateral. See "*Capitalization*."

The subordinated shareholder loan matures after the maturity date of the Notes and will be subordinated to the Notes and the Senior Facilities under the Intercreditor Agreement. No cash payments are required to service the Subordinated Shareholder Loan through the maturity date of the Notes. See "*—Intercreditor Agreement*."

DESCRIPTION OF THE NOTES

The following is a description of the €406.0 million in aggregate principal amount of % Senior Notes due 2025 (the "Notes"). The Notes will be issued by CTC BondCo GmbH (the "Issuer"). You will find definitions of certain capitalized terms used in this "*Description of the Notes*" under the heading "*Certain Definitions*" below. For purposes of this "*Description of the Notes*," references to the "*Issuer,*" "*we*," "*our*," and "*us*" refer only to the Issuer and not to any of its Subsidiaries.

The Issuer will issue the Notes under an indenture to be dated on or about , 2017 (the "Indenture"), between, *inter alios*, the Issuer, CTC AcquiCo GmbH (the "Initial Guarantor"), as guarantor, Deutsche Trustee Company Limited, as trustee (in such capacity, the "Trustee") and Deutsche Bank AG, London Branch, as security agent (the "Security Agent") and as paying agent, in a private transaction that is not subject to the registration requirements of the Securities Act. The Indenture will not be qualified under, incorporate by reference or include, or be subject to, any of the provisions of the Trust Indenture Act, including Section 316(b) thereof. Consequently, 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.

The proceeds from the offering of the Notes sold on the Issue Date, together with the amounts borrowed under the Senior Facilities and the Equity Contribution will be used by the Issuer to finance the Acquisition, repay certain existing indebtedness of the Target Group and to pay certain fees and expenses related to the Transactions. See "*Summary—The Transactions*." Pending consummation of the Acquisition and the satisfaction of certain other conditions as described below, the Initial Purchasers will, concurrently with the closing of the offering of the Notes on the Issue Date, deposit the gross proceeds of the offering of the Notes into an escrow account (the "Escrow Account") pursuant to the terms of an escrow deed (the "Escrow Agreement") dated as of the Issue Date among the Issuer, the Trustee and Deutsche Bank AG, London Branch, as escrow agent (the "Escrow Agent"). If the Acquisition is not consummated on or prior to August 10, 2018 (the "Escrow Longstop Date"), or upon the occurrence of certain other events, the Notes will be redeemed at a price equal to 100% of the initial issue price of the Notes plus accrued and unpaid interest and Additional Amounts, if any, from the Issue Date to the Special Mandatory Redemption Date. 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 the Initial Guarantor and will not be guaranteed by the Target or any of its Subsidiaries. Subject to the Agreed Security Principles, the Target and certain of its Subsidiaries organized in Germany and the United States (the "Post-Completion Date Guarantors") are expected to enter into one or more supplemental indentures to become a party to the Indenture and guarantee the Notes on a senior subordinated basis on the earlier of (a) the date on which a Post-Completion Date Guarantor provides a guarantee of the Senior Facilities and (b) on or prior to the date falling 120 days after the Completion Date. Prior to the Completion Date, the Issuer will not control the Target Group, and the Target Group will not be subject to the covenants described in this "*Description of the Notes*". As such, we cannot assure you that prior to the Completion 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 after the Issue Date and prior to the Completion Date.

The Indenture will be unlimited in aggregate principal amount, of which €406.0 million in aggregate principal amount of Notes will be issued in this offering. We may, subject to applicable law and the terms of the Indenture, issue an unlimited principal amount of additional Notes having identical terms and conditions (other than price) as the Notes (any such additional Notes actually issued, the "Additional Notes"); *provided* that if any series of Additional Notes is not fungible for U.S. federal income tax purposes with the Notes, such Additional Notes will be issued with a separate ISIN code or common code from the Notes originally issued. We will only be permitted to issue Additional Notes in compliance with the covenants contained in the Indenture, including the covenants restricting the Incurrence of Indebtedness and the Incurrence of Liens. See "*Certain Covenants—Limitation on Indebtedness*" and "*Certain Covenants—Limitation on Liens*." Except as otherwise provided for in the Indenture, the Notes, and if issued, Additional Notes, will be treated as a single class for all purposes under the Indenture, including, without limitation, with respect to waivers, amendments, redemptions and offers to purchase. Unless the context otherwise requires, in this "*Description of the Notes*," references to the "Notes" include the Notes and any Additional Notes that are actually issued under the Indenture.

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 certain conflicts between the terms of the Indenture 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, 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.

This "*Description of the Notes*" is intended to be an overview of the material provisions of the Notes and the Indenture and refers to the Intercreditor Agreement and the Security Documents. Since this description of the terms of the Notes is only a summary, you should refer to the Notes, the Indenture, the Intercreditor Agreement and the Security Documents for complete descriptions of the obligations of the Issuer and your rights. Copies of such documents will be available from us upon request on and after the Issue Date.

The registered Holder of a Note will be treated as the owner of it for all purposes. Only registered Holders will have rights under the Indenture, including, without limitation, with respect to enforcement and the pursuit of other remedies. The Notes have not been, and will not be, registered under the Securities Act and will be subject to certain transfer restrictions. See "*Notice to Investors*".

General

The Notes

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 obligation of the Issuer and its Subsidiaries that is secured by property or assets that do not secure the Notes or that is secured on a first-priority basis over property and assets that secure the Notes on a second-priority basis (including obligations under the Senior Facilities Agreement and certain Hedging Obligations), to the extent of the value of the property and assets securing such obligation or indebtedness;
- be structurally subordinated to any existing or future indebtedness of the Subsidiaries of the Issuer that are not Guarantors, including obligations to their trade creditors;
- be (i) guaranteed by the Initial Guarantor on a senior subordinated basis on the Issue Date and (ii) subject to the Agreed Security Principles and the occurrence of the Completion Date, on the earlier of (a) the date on which a Post-Completion Date Guarantor provides a guarantee of the Senior Facilities and (b) on or prior to the date falling 120 days after the Completion Date, be guaranteed by such Post-Completion Date Guarantors, in each case, on a senior subordinated basis;
- mature on , 2025; and
- be represented by one or more registered Notes in global form, but in certain circumstances may be represented by Definitive Registered Notes (as defined below). See "*Book-Entry, Delivery and Form.*"

Under the terms of the Intercreditor Agreement, the Holders will receive proceeds from the enforcement of the Collateral (as defined below) on a *pari passu* basis with all indebtedness of the Issuer that is not subordinated in right of payment to the Notes and the Holders will receive proceeds from the enforcement of Collateral only after indebtedness with a prior-ranking Lien on such Collateral is repaid in full, including the Senior Facilities.

The Issuer is a holding company incorporated for the purposes of the Transactions, and following the Completion Date, the Issuer's only material assets will be its indirect interests in the Target Group held through its Subsidiary, the Initial Guarantor. Following the Completion Date, all of the operations of the Issuer will be conducted through its Subsidiaries. Therefore, after the Issue Date, the Issuer will depend on the receipt of funds from its Subsidiaries (whether in the form of dividends, other distributions, return on capital or payments with respect to intercompany obligations) to meet its obligations, including its obligations under the Notes. The Notes will be structurally subordinated in right of payment to all Indebtedness and other liabilities and commitments (including trade payables and lease obligations) of the Issuer's Subsidiaries that are not Guarantors.

As of the Issue Date, the Issuer's sole Subsidiary will be the Initial Guarantor. As of the Issue Date and as of the Completion Date, all of the Issuer's Subsidiaries will be "Restricted Subsidiaries" for the purposes of the Indenture. However, under the circumstances described below under "*Certain Covenants—Designation of Restricted and Unrestricted Subsidiaries*," we will be permitted to designate certain of our Subsidiaries as "Unrestricted Subsidiaries." Our Unrestricted Subsidiaries will not be subject to any of the restrictive covenants in the Indenture and will not guarantee the Notes.

As of September 30, 2017, after giving pro forma effect to the Transactions, the Issuer and its consolidated Subsidiaries would have had € million of Indebtedness outstanding, consisting of € million of borrowings under the Senior Facilities Agreement, which are secured with a first-priority Lien on the Shared Collateral (as defined below) and €406.0 million in aggregate principal amount of the Notes.

The Note Guarantees

On the Issue Date, the Notes will be guaranteed by the Initial Guarantor on a senior subordinated basis. Subject to the Agreed Security Principles and the occurrence of the Completion Date, on the earlier of (a) the date on which a Post-Completion Date Guarantor provides a guarantee of the Senior Facilities and (b) on or prior to the date falling 120 days after the Completion Date, the Notes will be guaranteed on a senior subordinated basis by the Post-Completion Date Guarantors. In addition, if required by the covenant described under "*Certain Covenants—Additional Guarantees*," certain other Restricted Subsidiaries may provide a Note Guarantee (as defined below) in the future.

Once granted, the Note Guarantee of each of the Guarantors will:

- be a general senior subordinated obligation of that Guarantor, secured as set forth under "*Security*";
- be subordinated in right of payment to any existing and future indebtedness of that Guarantor, including its guarantee of the Senior Facilities and certain Hedging Obligations;
- rank *pari passu* in right of payment with any existing and future subordinated indebtedness of that Guarantor that is not subordinated in right of payment to such Note Guarantee of that Guarantor;
- rank senior in right of payment to all existing and future indebtedness of that Guarantor that is subordinated in right of payment to its Note Guarantee;
- be effectively subordinated to any existing or future indebtedness or obligation of that Guarantor and its subsidiaries that is secured by property or assets that do not secure the Notes or the Note Guarantee or that is secured on a first-priority basis over property and assets that secure the Notes or the Note Guarantee on a second-priority basis (including obligations under the Senior Facilities Agreement and certain Hedging Obligations, to the extent of the value of the property and assets securing such indebtedness; and
- be structurally subordinated to any existing or future indebtedness of the Subsidiaries of that Guarantor that do not guarantee the Notes, including their obligations to trade creditors.

The obligations of a Guarantor under its Note Guarantee will be limited as necessary to prevent the relevant Note Guarantee from constituting a fraudulent conveyance or unlawful financial assistance under applicable law, or otherwise to reflect limitations under applicable law. In addition, the Note Guarantees will be further limited as required under the Agreed Security Principles as described below under "*Note Guarantees—General*." 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. See "*Risk Factors—Risks Relating 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 Guarantees and the Security Interests, 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 Guarantees and Security Interests*."

Principal, Maturity and Interest

On the Issue Date, the Issuer will issue €406.0 million in aggregate principal amount of Notes. The Notes will mature on , 2025. The Notes will be issued in minimum denominations of €100,000 and in integral multiples of €1,000 in excess thereof.

The Notes (together with any Additional Notes) will be treated as a single class for all purposes under the Indenture, including in respect of any amendment, waiver or other modification of the Indenture or any other action by the Holders hereunder, except as otherwise provided in the Indenture.

Interest on the Notes

Interest on the Notes will accrue at the rate of % per annum. Interest on the Notes will be payable semi-annually in arrears on and , commencing on , 2018. Interest on the Notes will be payable to the holder of record of such Notes on the Business Day immediately preceding the related interest payment date.

Interest on the Notes will accrue from the date of original issuance or, if interest has already been paid, from the date it was most recently paid. Interest on the aggregate principal outstanding amount of the Notes will be computed on the basis of a 360-day year comprised of twelve 30-day months.

The rights of Holders to receive the payments of interest on the Notes are subject to applicable procedures of Euroclear and Clearstream. 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.

The right of holders of beneficial interests in the Notes to receive the payment on such Notes will be subject to the applicable procedures of Euroclear and Clearstream, as applicable.

Methods of Receiving Payments on the Notes

Principal, interest and premium and Additional Amounts, if any, on the Notes (as defined below) will be made by one or more Paying Agents by wire transfer of immediately available funds to the account specified by the registered Holder thereof (initially being the common depositary or its nominee for Euroclear and Clearstream).

Principal, interest and premium, and Additional Amounts, if any, on any certificated securities ("Definitive Registered Notes") will be payable at the specified office or agency of one or more Paying Agents maintained for such purposes in London, United Kingdom. In addition, interest on the Definitive Registered Notes may be paid, at the option of the Issuer, by check mailed to the address of the Holder entitled thereto as shown on the register of Holders of Notes for the Definitive Registered Notes. See *"Paying Agent and Registrar for the Notes*" below.

Paying Agent and Registrar for the Notes

The Issuer will maintain one or more Paying Agents for the Notes in London, United Kingdom (including the initial Paying Agent). The initial Paying Agent will be Deutsche Bank AG, London Branch (the "Paying Agent").

The Issuer will also maintain a registrar (the "Registrar") and a transfer agent (the "Transfer Agent"). The initial Registrar and the initial Transfer Agent will be Deutsche Bank Luxembourg S.A. 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. A register of the Notes shall be left at the registered office of the Issuer. In case of inconsistency between the register of Notes kept by the Registrar and the one kept by the Issuer at its registered office, the register kept by the Issuer shall prevail.

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. However, for so long as Notes are listed on the Official List of The International Stock Exchange Authority Limited (the "Exchange") and if and to the extent that the rules of the Exchange so require, the Issuer will notify the Exchange 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.

Note Guarantees

General

Upon the initial issuance of the Notes on the Issue Date, the Notes will be guaranteed on a senior subordinated basis by the Initial Guarantor. Subject to the Agreed Security Principles and the occurrence of the Completion Date, the Post-Completion Date Guarantors will guarantee, jointly and severally, on a senior subordinated basis (each (including the Guarantee of the Notes by the Initial Guarantor), a "Note Guarantee" and together (including the Guarantee of the Notes by the Initial Guarantor), the "Note Guarantees") the obligations of the Issuer pursuant to the Notes, including any payment obligation resulting from a Change of Control, on the earlier of (a) the date on which a Post-Completion Date Guarantor provides a guarantee of the Senior Facilities and (b) on or prior to the date falling 120 days after the Completion Date.

The Target and certain of the Subsidiaries of the Target that are organized in Germany and the United States are expected to become Post-Completion Date Guarantors.

In addition, as described under *"Certain Covenants—Additional Guarantees*" and subject to the Intercreditor Agreement and the Agreed Security Principles, certain Subsidiaries of the Issuer that guarantee the Senior Facilities in the future or any Credit Facility or Public Debt, in each case of the Issuer or a Guarantor, shall also enter into a supplemental indenture as a Guarantor and accede to the Intercreditor Agreement.

The Agreed Security Principles apply to the granting of guarantees and security in favor of obligations under the Senior Facilities 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, 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.

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, or as otherwise required under the Agreed Security Principles, to comply with corporate benefit, financial assistance and other laws. By virtue of this limitation, 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. See "*Risk Factors—Risks Relating to the Notes—Corporate benefit, financial assistance laws, capital maintenance and other limitations on the Guarantees and the Collateral may adversely affect the validity and enforceability of the Guarantees and the Collateral*" and *"—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 Guarantees and the Security Interests, including fraudulent conveyance statutes, may adversely affect their validity and enforceability*."

A 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, such as those Subsidiaries organized in China, India, Brazil and Korea. Claims of creditors of non-Guarantor Restricted Subsidiaries, including trade creditors and creditors holding debt and guarantees issued by those Restricted Subsidiaries, and claims of preferred stockholders (if any) of those Restricted Subsidiaries and minority stockholders of Subsidiaries of non-Guarantor Restricted Subsidiaries (if any) generally will have priority with respect to the assets and earnings of those Restricted Subsidiaries 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 stockholders (if any) of the Issuer's Restricted Subsidiaries (other than the Guarantors) and minority stockholders of Subsidiaries of non-Guarantor Restricted Subsidiaries (if any).

As of and for the twelve months ended September 30, 2017, the Post-Completion Date Guarantors (including the Target) accounted for 89.4% of the consolidated total assets, 82.8% of the consolidated revenue and 88.9% of the consolidated EBITDA of the Target Group. Although the Indenture will limit the Incurrence of Indebtedness and the issuance of Disqualified Stock of the Issuer and Preferred Stock of Restricted Subsidiaries, the limitation is subject to a number of significant exceptions. Moreover, the Indenture will not impose any limitation on the Incurrence by Restricted Subsidiaries of liabilities that are not considered Indebtedness, Disqualified Stock or Preferred Stock under the Indenture. See "*Certain Covenants—Limitation on Indebtedness*" and "*Certain Definitions—Indebtedness*."

Notes Guarantee Release

The Note Guarantee of a Guarantor will terminate and be released:

- upon a sale, exchange, transfer or other disposition (including by way of consolidation, merger, or amalgamation) of any Capital Stock of the relevant Guarantor (whether by direct sale or sale of a holding company of such Guarantor) as a result of which such Guarantor would no longer be a Restricted Subsidiary, or the sale or disposition of all or substantially all the assets of the Guarantor (other than to the Issuer or a Restricted Subsidiary), in each case if such sale, exchange, transfer or other disposition does not violate the Indenture, the Intercreditor Agreement or any Additional Intercreditor Agreement;

- upon the designation in accordance with the Indenture of the Guarantor as an Unrestricted Subsidiary;

- upon legal defeasance, covenant defeasance or satisfaction and discharge of the Notes in accordance with the Indenture, as provided in "*Defeasance"* and *"Satisfaction and Discharge*";

- pursuant to the provisions of the Intercreditor Agreement or any Additional Intercreditor Agreement;

- as described under "*Amendments and Waivers*";

- as described in the second paragraph of the covenant described below under "*Certain Covenants—Additional Guarantees*";

- upon payment in full of principal and interest and all other obligations on the Notes; or

- as a result of a transaction permitted by "*Merger and Consolidation*."

The Trustee shall, 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 without the consent of the Holders and will not require any other action or consent on the part of the Trustee.

Security

General

The Notes and the Note Guarantees in respect thereof will be secured on the Issue Date:

- on a first-priority basis by Security Interests in a pledge of the shares in the Issuer, a security assignment of the shareholder loan granted by CTEC Acquisition S.à r.l. to the Issuer, a pledge over the escrow account to which the gross proceeds of the offering of the Notes will be deposited on the Issue Date (the "First-Priority Collateral"); and

- on a second-priority basis by Security Interests in a pledge of the material bank accounts of the Issuer and the blocked account in respect of a profit and loss transfer agreement, a pledge of any intercompany receivables owed by the Initial Guarantor to the Issuer and a pledge of the shares in the Initial Guarantor (the "Shared Collateral").

The Escrowed Property that is deposited in the Escrow Account will not be charged to secure any obligations other than the Issuer's obligations under the Notes. Upon the Escrow Release, the first-priority security interests over the Escrowed Property will be released. See "*—Escrow Proceeds; Special Mandatory Redemption*."

The Shared Collateral, together with the First-Priority Collateral and any and all other assets from time to time in which a Security Interest has been or will be granted pursuant to any Security Document to secure the obligations under the Indenture, the Notes and/or any Note Guarantee are collectively referred to as the "Collateral." The Shared Collateral will also secure the Senior Facilities and certain Hedging Obligations on a first-priority basis.

The Security Interests in the Collateral will be granted to the Security Agent on behalf of and for the benefit of the Holders pursuant to the Security Documents.

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 Collateral 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 pledged pursuant to the Security Documents to the Security Agent on behalf of the Holders and holders of the other secured obligations that are secured by the Collateral. 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 would also constitute "Collateral." 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 Liens on the Collateral 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 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 Notes Guarantees and Security Interests*."

Notwithstanding the foregoing and the provisions of the covenant described below under "*Certain Covenants—Limitation on Liens*," certain property, rights and assets may not be pledged, and any pledge over property, rights and assets may be limited (or the Liens not perfected), in accordance with the Agreed Security Principles. The following is a non-exhaustive summary of certain terms of the Agreed Security Principles, which include, among others:

- that 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 the Issuer and the Restricted Subsidiaries (collectively, 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;

- that a key factor in determining whether or not a guarantee or security will be taken (including 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 taxes, notarial costs and all applicable legal fees) which will not be disproportionate to the benefit accruing to the relevant secured parties of obtaining such guarantee or security;

- the exclusion from any guarantee or security of 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, 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; *provided* that reasonable endeavors (exercised for a specified period of time) to obtain consent to charging any asset (where otherwise prohibited) shall be used by the Group if the Security Agent specifies prior to the date of the security or accession document that the asset is material and the Issuer is satisfied that such endeavors will not involve placing relationships with third parties in jeopardy;

- the agreement that 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 directors 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 director or 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;

- the requirement that, 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 the secured creditors); "*parallel debt*" provisions will be used where necessary (and included in the Intercreditor Agreement and not the individual security documents); and furthermore, the agreement that 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 of the Notes by a Holder;

- the limitation of guarantees and security 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, and the agreement that 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;

- the agreement that 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);

- the express acknowledgement 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;

- the agreement that no security may be provided on terms which are inconsistent with the turnover or sharing provisions in the Intercreditor Agreement and that 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;

- that agreement that 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 Indenture and the Intercreditor Agreement (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 a declared default which is continuing), and the agreement that 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; and

- the agreement that other than a general security agreement and related filing, no perfection, filing or other action will be required with respect to assets of a type not owned by members of the Group or incorporated in

China, India, Brazil and Korea (the "Excluded Jurisdictions") or otherwise over the shares of a member of the Group located in an Excluded Jurisdiction.

As described above, all of the Shared Collateral will also secure, on a first-priority basis, the liabilities under the Senior Facilities as well as certain Hedging Obligations and may also secure certain future Indebtedness. 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 Collateral will be illiquid and may have no readily ascertainable market value. Accordingly, the Collateral may not be able to be sold in a short period of time, or at all. See "*Risk Factors—Risks Relating 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*."

Priority

The relative priority with regard to the security interests in the Collateral that are created by the Security Documents (the "Security Interests" and each, a "Security Interest") as between (a) the lenders under the Senior Facilities, (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 the obligations under the Senior Facilities and certain Hedging Obligations are secured equally and ratably by first-priority Security Interests in the Shared Collateral and the Notes and the Note Guarantees are secured by second-priority Security Interests in the Shared Collateral. See "*Description of Certain Financing Arrangements—Intercreditor Agreement*" and "*Certain Definitions—Permitted Collateral Liens*."

Security Documents

Under the Security Documents, the Issuer and the Guarantors will grant security over the Collateral 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 Security Documents will be entered into by the relevant security provider and the Security Agent as agent for the secured parties. When entering into such 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 of Notes from time to time). Under the Intercreditor Agreement, the Security Agent also acts as an agent of the lenders under the Senior Facilities 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 and other jurisprudence governing the creation and perfection of Security Interests, the relevant 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 law in certain of these jurisdictions. See "*Risk Factors—Risks Relating to the Notes—The security interests in the Collateral will be granted to the Security Agent rather than directly to the holders of the Notes. The ability of the Security Agent to enforce the Collateral may be restricted by local law*."

The Indenture will provide and the Intercreditor Agreement does provide that, to the extent permitted by applicable law, only the Security Agent will have the right to enforce the 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, except through the Trustee under the Indenture, who will (subject to the provisions of the Indenture) provide instructions to the Security Agent for the Collateral (as applicable). In addition, prior to the discharge of obligations under the Senior 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 Security Documents and the Intercreditor Agreement, the Notes and the Indenture, as applicable, will be secured by Security Interests in the Collateral 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 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 Security Documents. See "*Risk Factors—Risks Relating to the Notes—The granting of the 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 will and the Intercreditor Agreement does 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 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 Notes Guarantees and 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 Facilities, the counterparties to Hedging Obligations secured by the Collateral and the Trustee have and, by accepting a Note, 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 provide that each Holder, by accepting such Note, will be deemed (without any further consent of the Holders) to have:

(1) appointed and authorized the Security Agent and the Trustee to give effect to the provisions in the Intercreditor Agreement, any Additional Intercreditor Agreements and the 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 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 Security Documents; and

(3) irrevocably appointed the Security Agent and the Trustee to act on its behalf to enter into and comply with the provisions of the Intercreditor Agreement, any Additional Intercreditor Agreements and the 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).

See the section entitled "*Risk Factors—Risks Relating to the Notes—The security interests in the Collateral will be granted to the Security Agent rather than directly to the holders of the Notes. The ability of the Security Agent 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

Release of the Security Interests in respect of the Collateral will be permitted under any one or more of the following circumstances:

(1) in connection with any sale or other disposition of Collateral 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 clause 1(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 remain subject to, or otherwise become subject to, a Lien in favor of the Notes following such 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, and Capital Stock, of such Guarantor;

(3) as described under "*Amendments and Waivers*";

(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;

(6) upon redemption of all the Notes as provided below under "*Optional Redemption*";

(7) in connection with the granting of Liens on such property or assets, which may include Collateral, or the sale of such property or assets, which may include Collateral, pursuant to a Qualified Securitization Financing or Receivables Facility;

(8) the implementation of a Permitted Reorganization; or

(9) as otherwise permitted in accordance with the Indenture.

In addition, the Security Interests created by the Security Documents will be released (a) in accordance with the Intercreditor Agreement or any Additional Intercreditor Agreement and (b) as may be permitted by the covenant described under "*Certain Covenants—Impairment of Security Interest*."

The Security Agent and the Trustee (but only if required) will take all necessary action reasonably requested by, and at the cost of, the Issuer to effectuate any release of Collateral securing the Notes and the Note Guarantees, in accordance with the provisions of the Indenture, the Intercreditor Agreement or any Additional Intercreditor Agreement and the relevant Security Document (subject in each case to any customary protections and indemnifications set out therein). Each of the releases set forth above shall 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 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.

Transfer and Exchange

The Notes will be issued in the form of several registered notes in global form without interest coupons attached, as follows:

- each series of Notes sold within the United States to qualified institutional buyers pursuant to Rule 144A under the Securities Act will initially be represented by one or more global notes in registered form without interest coupons attached (the "144A Global Notes"). The 144A Global Notes will, on the Issue Date, be deposited with and registered in the name of the nominee of the common depositary for the accounts of Euroclear and Clearstream; and

- each series of Notes sold outside the United States to non-U.S. persons pursuant to 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 144A Global Notes, the "Global Notes"). The Regulation S Global Notes will, on the Issue Date, be deposited with and registered in the name of the nominee of the common depositary for the accounts of Euroclear and Clearstream.

Ownership of interests in the Global Notes ("Book-Entry Interests") will be limited to persons that have accounts with Euroclear and Clearstream or persons that may hold interests through such participants.

Ownership of interests in the Book-Entry Interests and transfers thereof will be subject to the restrictions on transfer and certification requirements summarized below and described more fully under "*Notice to Investors*." In addition, transfers of Book-Entry Interests between participants in Euroclear or participants in Clearstream will be effected by Euroclear and Clearstream pursuant to customary procedures and subject to the applicable rules and procedures established by Euroclear or Clearstream and their respective participants.

Book-Entry Interests in the 144A Global Notes (the "144A Book-Entry Interests") may be transferred to a Person who takes delivery in the form of Book-Entry Interests in the Regulation S Global Notes (the "Regulation S Book-Entry Interests") denominated in the same currency 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 in accordance with Regulation S under the Securities Act.

During the 40-day distribution compliance period (as such term is defined in Rule 902 of Regulation S), Regulation S Book-Entry Interests may be transferred to 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 in a transaction meeting the requirements of Rule 144A or otherwise in accordance with the transfer restrictions described under "*Notice to Investors*" and in accordance with any applicable securities law of any other jurisdiction.

Any Book-Entry Interest that is transferred as described in the immediately preceding paragraphs will, upon transfer, cease to be a Book-Entry Interest in the Global Note from which it was transferred and will become a Book-Entry

Interest in the Global Note to which it was transferred. Accordingly, from and after such transfer, it will become subject to all transfer restrictions, if any, and other procedures applicable to Book-Entry Interests in the Global Note to which it was transferred.

If Definitive Registered Notes are issued, they will be issued only in minimum denominations of €100,000, and integral multiples of €1,000 in excess thereof, upon receipt by the Registrar of instructions relating thereto and any certificates, opinions and other documentation required by the Indenture. It is expected that such instructions will be based upon directions received by Euroclear or Clearstream, as applicable, from the participant which owns the relevant Book-Entry Interests. Definitive Registered Notes issued in exchange for a Book-Entry Interest will, except as set forth in the Indenture or as otherwise determined by the Issuer in compliance with applicable law, be subject to, and will have a legend with respect to, the restrictions on transfer summarized below and described more fully under "*Notice to Investors*."

Subject to the restrictions on transfer referred to above, Notes issued as Definitive Registered Notes may be transferred or exchanged, in whole or in part, in minimum denominations of €100,000 and integral multiples of €1,000 in excess thereof. In connection with any such transfer or exchange, the Indenture will require the transferring or exchanging Holder to, among other things, furnish appropriate endorsements and transfer documents, to furnish information regarding the account of the transferee at Euroclear or Clearstream, where appropriate, to furnish certain certificates and opinions, and to pay any Taxes in connection with such transfer or exchange. Any such transfer or exchange will be made without charge to the Holder, other than any Taxes payable in connection with such transfer.

The Issuer, the Trustee, the Security Agent, the Paying Agents, the Transfer Agent and the Registrar will be entitled to treat the registered Holder of a Note as the owner thereof for all purposes.

Escrow Proceeds; Special Mandatory Redemption

Concurrently with the closing of the offering of the Notes on the Issue Date, the Issuer will enter into the Escrow Agreement with the Trustee and the Escrow Agent, pursuant to which the Initial Purchasers will deposit with the Escrow Agent an amount equal to the gross proceeds of the offering of the Notes sold on the Issue Date into the Escrow Account. The Escrow Account will be pledged on a first-priority basis in favor of the Trustee for the benefit of the Holders of the Notes pursuant to an escrow charge dated the Issue Date between the Issuer, the Trustee and the Escrow Agent (the "Escrow Charge"). 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) are referred to, collectively, as the "Escrowed Property."

In order to cause the Escrow Agent to release the Escrowed Property to the Issuer (the "Escrow Release"), the Escrow Agent and the Trustee shall have received from the Issuer, at a time that is on or before the Escrow Longstop Date, an Officer's Certificate, upon which both the Escrow Agent and the Trustee will be able to rely without further investigation, to the effect that all of the following conditions have been met or will be satisfied on or prior to the Escrow Longstop Date:

- the Transactions will be completed substantially as described in this Offering Memorandum, including with respect to the sections of this Offering Memorandum entitled "*The Transactions*" and "*Use of Proceeds*;"

- the Acquisition will be completed on the terms set forth in the Acquisition Agreement promptly following the Escrow Release, except for any changes, waivers or other modifications that are not, individually or when taken as a whole, materially adverse to the interests of the Holders of the Notes; and

- immediately after consummation of the Acquisition, the Issuer will beneficially own the entire share capital of the Target.

The Escrow Release shall occur following receipt of such Officer's Certificate. Upon the Escrow Release, the Escrow Account shall be reduced to zero, and Escrowed Property shall be paid out in accordance with the Escrow Agreement.

In the event that (a) the Completion Date does not take place on or prior to the Escrow Longstop Date, (b) the Sponsor has announced their intention to abandon the Acquisition or the sellers under the Acquisition Agreement have announced that they have decided to sell the Target Group or any of its direct or indirect parent entities or Significant Subsidiaries to an entity other than the Initial Investors or one or more of their respective Affiliates, (c) or the Issuer notifies the Trustee and the Escrow Agent that in its reasonable judgment the Acquisition will not be completed by the Escrow Longstop Date, (d) the Acquisition Agreement terminates at any time prior to the Escrow Longstop Date, (e) the Sponsor ceases to beneficially own and control a majority of the issued and outstanding Capital Stock of the Issuer and the Initial Guarantor or (f) a Default or Event of Default arises under clause (5) of the first paragraph under the heading titled "*Events of Default*" on or prior to the Escrow Longstop Date (the date of any such event being the "Special Termination Date"), the Issuer will redeem all of the Notes (the "Special Mandatory Redemption") at a price (the "Special Mandatory Redemption Price") equal to 100% of the aggregate issue price of the Notes, plus accrued but unpaid interest and Additional Amounts, if any, from the Issue Date to the Special Mandatory 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.

Written 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, the Paying Agent and the Escrow Agent, and the Escrow Agreement and Indenture will provide that the Notes shall be redeemed on a date that is no later than the fifth 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, on behalf of the Issuer, to the Paying Agent for payment to each Holder of Notes the Special Mandatory Redemption Price for such Holder's Notes and, concurrently with the payment to such Holders, deliver any excess Escrowed Property (if any) to the Issuer.

In the event that the Special Mandatory Redemption Price payable upon such Special Mandatory Redemption exceeds the amount of the Escrowed Property, the Sponsor will be required to fund the Issuer with interest accrued and Additional Amounts, if any, from the Issue Date to the Special Mandatory Redemption Date due on the Notes pursuant to an agreement between the Issuer and such Sponsor (the "Shortfall Agreement"). To secure the payment of the Special Mandatory Redemption Price, the Issuer will grant to the Trustee, for the benefit of the Holders of the Notes, a security interest in the Escrow Account pursuant to the Escrow Charge.

Receipt by the Trustee of either an Officer's Certificate for the Escrow Release or a notice of Special Mandatory Redemption (*provided* that the Escrowed Property and amounts drawn under the Shortfall Agreement are sufficient to fund the Special Mandatory Redemption Price on the Special Mandatory Redemption Date) shall constitute deemed consent by the Trustee for the release of the Escrowed Property from the Escrow Charge.

If at the time of such Special Mandatory Redemption, the Notes are listed on the Exchange and the rules of the Exchange so require, the Issuer will notify the Exchange that the Special Mandatory Redemption has occurred and any relevant details relating to such special mandatory redemption.

Restricted Subsidiaries and Unrestricted Subsidiaries

As of the Issue Date, the Issuer's sole Subsidiary will be the Initial Guarantor. As of the Issue Date and as of the Completion Date, all of the Issuer's Subsidiaries will be 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.

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 prior to , 2020, the Issuer may redeem the Notes, in whole or in part, at its option, 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 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 , 2020, the Issuer may, at its option, redeem Notes, upon notice as described under "*Selection and Notice*," with the Net Cash Proceeds received by the Issuer from any Equity Offering at a redemption price equal to % of the principal amount of the Notes so redeemed, plus accrued and unpaid interest and Additional Amounts, if any, to but excluding the redemption date in an aggregate principal amount for all such redemptions not to exceed 40% of the original aggregate principal amount of the Notes (including any Additional Notes); *provided* that:

(1) in each case the redemption takes place not later than 180 days after the closing of the related Equity Offering; and

(2) not less than 60% of the original aggregate principal amount of the Notes (including Additional Notes) issued under the Indenture remains outstanding immediately thereafter (excluding Notes held by the Issuer or any of the Restricted Subsidiaries).

At any time and from time to time on or after , 2020, the Issuer may 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 of the Notes so redeemed set forth below plus accrued and unpaid interest, if any, on the Notes redeemed, to, but excluding, the applicable redemption date and Additional Amounts, if any, if redeemed during the twelve-month period beginning on , of the year indicated below:

Year	Redemption Price
2020	%
2021	%
2022, and thereafter	100.000%

Other Redemption Terms

Notwithstanding the foregoing, in connection with any tender offer for the Notes, including a Change of Control Offer (as defined below) or Asset Disposition Offer (as defined below), if Holders of Notes 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 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 tender offer expiration date, 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 (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, such redemption date.

Subject to the provisions of the Intercreditor Agreement or any Additional Intercreditor Agreement, we may repurchase the Notes at any time and from time to time in the open market or otherwise.

Notice of redemption will be provided as set forth under "*Selection and Notice*" below.

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

Other than in connection with a 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—Limitation on Sales of Assets and Subsidiary Stock*."

Selection and Notice

If less than all of any series of the Notes are to be redeemed at any time, the Paying Agent or Registrar will select the Notes for redemption in compliance with the requirements of the principal securities exchange, if any, on which the Notes are listed, as certified to the Paying Agent or Registrar by the Issuer, and in compliance with the requirements of Euroclear and Clearstream, or if the Notes are not so listed or such exchange prescribes no method of selection and the Notes are not held through Euroclear and Clearstream or Euroclear and Clearstream prescribe no method of selection, 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 Note of €100,000 in aggregate principal amount or less shall be redeemed in part and only Notes in integral multiples of €1,000 shall be redeemed. 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 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 Euroclear and Clearstream, 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 defeasance of the Notes or a satisfaction and discharge of the Indenture.

Notice of any redemption of the Notes may, at the Issuer's discretion, be given prior to the completion of a transaction (including, but not limited to, an Equity Offering, an Incurrence of Indebtedness, a Change of Control or other transaction) and any redemption notice 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 date may be delayed until such time (but not more than 60 days after the date the notice of redemption was sent) as any or all such conditions shall be satisfied, 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 by the redemption date, or by the redemption date as so delayed. In addition, the Issuer may provide in such notice that payment of the redemption price and performance of the Issuer's obligations with respect to such redemption may be performed by another Person.

If and for so long as any Notes are listed on the Exchange and if and to the extent the rules of the Exchange so require, the Issuer will notify the Exchange of any such notice to the Holders of the relevant Notes and, in connection with any redemption, the Issuer will notify the Exchange 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, in which case a portion of the original Note will be issued in the name of the Holder thereof upon cancellation of the original Note. In the case of a Global Note, an appropriate notation will be made on such Global Note 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.

Redemption for Taxation Reasons

The Issuer may redeem the Notes in whole, but not in part, at any time upon giving not less than 10 nor more than 60 days' prior written 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 or rulings promulgated thereunder) of a Relevant Taxing Jurisdiction (as defined below) affecting taxation; or

(2) any amendment to, or change in an official application, administration or written interpretation of such laws, treaties, regulations or rulings (including by reason of a holding, judgment or order by a court of competent jurisdiction or a change in published administrative practice) (each of the foregoing in clauses (1) and (2), a "Change in Tax Law"),

a Payor (as defined below) is, or on the next interest payment date in respect of the Notes would be, required to pay 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 publicly 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 shall apply (a) to a Guarantor only after such time as such Guarantor is obligated to make at least one payment on the Notes and (b) *mutatis mutandis* to any successor Person, after such successor Person becomes a party to the Indenture, with respect to a Change in Tax Law occurring after the time such successor Person becomes a party to 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 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 Guarantee, as applicable, will be made free and clear of and without withholding or Note Guarantee for, or on account of, any Taxes unless the withholding or deduction of such Taxes is then required by law or by the relevant taxing authority's interpretation or administration thereof. 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 or Note Guarantee is made 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 or on behalf of the Payor or the Paying Agent with respect to any Note or any Note Guarantee, including (without limitation) payments of principal, redemption price, interest or premium, if any, the Payor will pay (together with such payments) such additional amounts (the "Additional Amounts") as may be necessary in order that the net amounts received 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 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 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, 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 reasonable written request of the Payor addressed to the Holder or beneficial owner, after reasonable notice (at least 30 days before any such withholding or deduction 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 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 later of the applicable payment date or the date 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, personal property or similar Taxes;

(6) any Taxes imposed, deducted or withheld pursuant to section 1471(b) of the U.S. Internal Revenue Code or otherwise imposed pursuant to sections 1471 through 1474 of the U.S. Internal Revenue Code, in each case, as of the Issue Date (and any amended or successor version that is substantively comparable), any regulations or agreements thereunder, official interpretations thereof or similar law or regulation implementing an intergovernmental agreement relating thereto; or

(7) any combination of the items (1) through (6) 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 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 other reasonable evidence 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 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 thereafter). The Trustee and the Paying Agent shall be entitled to rely solely 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) redemption prices or purchase prices in connection with a redemption or 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 and reimburse 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 (other than in each case, in connection with a transfer of the Notes after this offering).

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 Person, 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 occurs, unless (i) a third party makes a change of control offer as described herein or (ii) the Issuer has previously or substantially concurrently therewith delivered a redemption notice with respect to all the outstanding Notes as described under "*Optional Redemption*," the Issuer will make an offer to purchase all of the Notes (equal to €100,000 in principal amount or in integral multiples of €1,000 in excess thereof; *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. Within 60 days following any Change of Control, 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 Euroclear and Clearstream 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 Euroclear and Clearstream, describing the transaction or transactions that constitute the Change of Control 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 30 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 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, 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.

The occurrence of events which would constitute a Change of Control may constitute a default under the Senior Facilities Agreement that permits the Senior Facilities lenders to accelerate the maturity of borrowings thereunder. Future Indebtedness of the Issuer or the Restricted 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 itself does not, due to the financial effect of such repurchase on the Issuer.

The Issuer's ability to pay cash to the Holders of Notes following the occurrence of a Change of Control 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 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. The Change of Control purchase feature is a result of negotiations between the initial purchasers of the Notes and us.

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 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 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.

The definition of "Change of Control" includes a disposition of all or substantially all of the assets of the Issuer and its 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 such 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 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 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 Exchange and if and to the extent that the rules of the Exchange so require, the Issuer will notify the Exchange 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 Transactions shall not be prohibited by the covenants below.

Suspension of Covenants on Achievement of Investment Grade Status

Following the first day that:

(a) the Notes have achieved Investment Grade Status; and

(b) no Default or Event of Default has occurred and is continuing under the Indenture,

then, beginning on that day and continuing until the Reversion Date (as defined below), the Issuer and the Restricted Subsidiaries will not be subject to the provisions of the Indenture summarized under the following headings (collectively, the "Suspended Covenants"):

- "*—Limitation on Restricted Payments*";
- "*—Limitation on Indebtedness*";
- "*—Limitation on Restrictions on Distributions from Restricted Subsidiaries*";
- "*—Limitation on Affiliate Transactions*";
- "*—Limitation on Sales of Assets and Subsidiary Stock*";
- "*—Additional Guarantees*"; and
- the provisions of clause (3) of the first paragraph of "*Merger and Consolidation—The Issuer*."

If at any time the Notes cease to have such Investment Grade Status, then the Suspended Covenants will thereafter be reinstated as if such covenants had never been suspended (the "Reversion Date") and will be applicable pursuant to the terms of the Indenture (including in connection with performing any calculation or assessment to determine compliance with the terms of the Indenture), unless and until the Notes subsequently attain Investment Grade Status (in which event the Suspended Covenants shall no longer be in effect for such time that the Notes maintain an Investment Grade Status); *provided*, *however*, that no Default, Event of Default or breach of any kind shall be deemed to exist under the Notes Documents with respect to the Suspended Covenants based on, and none of the Issuer or any of the Restricted Subsidiaries shall bear any liability with respect to such Suspended Covenants for, any actions taken or events occurring during the Suspension Period, or any actions taken at any time pursuant to any contractual obligation arising prior to the Reversion Date, regardless of whether such actions or events would have been permitted if the applicable Suspended Covenants remained in effect during such period. The period of time between the date of suspension of the covenants and the Reversion Date is referred to as the "Suspension Period."

On the Reversion Date, all Indebtedness Incurred during the Suspension Period (other than any Indebtedness Incurred under the Senior Term Loan or the Revolving Credit Facility) will be deemed to have been outstanding on the Issue Date so that it is classified as permitted under clause (4)(c) of the second paragraph of "*—Limitation on Indebtedness*." On and after the Reversion Date, all Liens created during the Suspension Period will be considered Permitted Liens pursuant to clause (11) of such definition. Calculations made after the Reversion Date of the amount available to be made as Restricted Payments (as defined below) under "*—Limitation on Restricted Payments*" will be made as though the covenants described under "*—Limitation on Restricted Payments*" had been in effect since the Issue Date and prior to, but not during, the Suspension Period. Accordingly, Restricted Payments made during the Suspension Period will not reduce the amount available to be made as Restricted Payments under "*—Limitation on Restricted Payments*." On the Reversion Date, the amount of Excess Proceeds (as defined below) shall be reset at zero. Any Affiliate Transaction entered into after the Reversion Date pursuant to an agreement entered into during any Suspension Period will be deemed to have been outstanding on the Issue Date, so that it is classified as permitted under clause (6) of the second paragraph under "*—Limitation on Affiliate Transactions*." Any encumbrance or restriction on the ability of any Restricted Subsidiary to take any action described in clauses (A) through (C) of the first paragraph of "*—Limitation on Restrictions on Distributions from Restricted Subsidiaries*" that becomes effective during the Suspension Period will be deemed to have existed on the Issue Date, so that it is classified as permitted under clause (1) of the second paragraph under "*—Limitation on Restrictions on Distributions from Restricted Subsidiaries*." On and after each Reversion Date, the Issuer and the Restricted Subsidiaries will be permitted to consummate the transactions contemplated by any contract entered into during the Suspension Period, so long as such contract and such consummation would have been permitted during such Suspension Period.

In addition, any future obligation to grant further Note Guarantees shall be released. All such further obligation to grant Note Guarantees shall be reinstated upon the Reversion Date.

There can be no assurance that the Notes will ever achieve or maintain Investment Grade Status.

The Trustee shall have no duty to monitor the ratings of the Notes, shall not be deemed to have any knowledge of the ratings of the Notes and shall have no duty to notify Holders if the Notes achieve Investment Grade Status or upon the occurrence of the Reversion Date. The Issuer shall notify the Trustee that the conditions under this covenant have been satisfied, although such notification shall not be a condition for suspension of the applicable covenants to be effective.

Limitation on Indebtedness

The Issuer will not, and will not permit any of the Restricted Subsidiaries to, Incur any Indebtedness (including Acquired Indebtedness) and the Issuer will not issue Disqualified Stock and will not permit any of the Restricted Subsidiaries to issue Preferred Stock; *provided*, *however*, that the Issuer and any of the Restricted Subsidiaries may Incur Indebtedness (including Acquired Indebtedness) and the Issuer may issue Disqualified Stock and any of the Restricted Subsidiaries may issue Preferred Stock, if on the date of such Incurrence and after giving pro forma effect thereto (including pro forma application of the proceeds thereof), the Fixed Charge Coverage Ratio of the Issuer and the Restricted Subsidiaries is at least 2.00 to 1.00; *provided* that the amount of Indebtedness Incurred and the amount of Disqualified Stock or Preferred Stock issued pursuant to the foregoing shall not cause the Non-Guarantor Debt Cap to be exceeded.

The first paragraph of this covenant will not prohibit the Incurrence of the following Indebtedness (collectively, "Permitted Debt"):

(1) 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 and bankers' acceptances thereunder) in an aggregate principal amount at any time outstanding not to exceed the sum of:

(a) (i) €1,117.0 million; *plus* (ii) €75.0 million; *plus*

(b) an amount equal to the greater of (i) €102.0 million and (ii) 50.0% of LTM EBITDA; *plus;*

(c) an amount equal to the greater of (i) €102.0 million and (ii) 50.0% of LTM EBITDA; *provided* that in the case of either (i) or (ii) of this clause (c) after giving pro forma effect to such Incurrence (including pro forma application of the proceeds thereof), the Consolidated Total Net Leverage Ratio of the Issuer and the Restricted Subsidiaries does not exceed 8.00 to 1.00; *plus*

(d) the maximum amount of Indebtedness such that after giving pro forma effect to such Incurrence (including pro forma application of the proceeds thereof), the Consolidated Total Net Leverage Ratio of the Issuer and the Restricted Subsidiaries does not exceed 7.50 to 1.00 (with any Indebtedness Incurred under clause (b) or (c) above on the date of determination of the Consolidated Total Net Leverage Ratio not being included in the calculation of Consolidated Total Net Leverage Ratio under this clause (d) on such date of determination but not, for the avoidance of doubt, excluded from any such calculation made on any such subsequent date),

provided that any Indebtedness Incurred pursuant to this clause (1) may be refinanced at any time if such refinancing does not exceed the greater of (I) the aggregate principal amount of Indebtedness permitted to be Incurred pursuant to this clause (1) on the date of such refinancing and (II) the aggregate principal amount of the Indebtedness being refinanced at such time (together with an amount necessary to pay accrued and unpaid interest and any fees and expenses, including any premium and defeasance costs, indemnity fees, discounts, premiums and other costs and expenses Incurred in connection with such refinancing) and, in the case of a refinancing of Indebtedness under the Senior Term Loan or the Revolving Credit Facility, such Indebtedness shall be treated for all purposes as Incurred pursuant to subclause (1)(a)(i) and (1)(a)(ii), respectively; *provided further* that the amount of Indebtedness Incurred and Disqualified Stock or Preferred Stock issued pursuant to clauses (1)(b), (1)(c) and (1)(d) shall not cause the Non-Guarantor Debt Cap to be exceeded;

(2) Guarantees by the Issuer or any Restricted Subsidiary of Indebtedness or other obligations of the Issuer or any Restricted Subsidiary so long as the Incurrence of such Indebtedness or other obligations is not prohibited by the terms of the Indenture;

(3) 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;

(4) Indebtedness represented by (a) Indebtedness of the Target Group outstanding as of the Issue Date or Incurred under a facility committed and as in effect as of the Issue Date, in either case, in respect of factoring financings, securitizations, receivables financings or similar arrangements, (b)(i) the Notes (other than any Additional Notes) including any Note Guarantee and (ii) any loans pursuant to which proceeds of any Indebtedness of a Parent Entity that are lent to the Issuer, to the extent that such Indebtedness is Guaranteed by the Issuer or any Restricted Subsidiary or is otherwise considered Indebtedness of the Issuer or any Restricted Subsidiary, and such Guarantees or the Incurrence of such Indebtedness, as the case may be, as are not prohibited by the Indenture, (c) any Indebtedness of the Target Group (other than Indebtedness Incurred pursuant to clauses (1) and (3) above) outstanding on the Issue Date and any Guarantees thereof after giving pro forma effect to the Transactions and the application of the proceeds therefrom (as described under "*Use of Proceeds*" in this Offering Memorandum), (d) Refinancing Indebtedness (including with respect to the Notes and any Guarantee thereof) Incurred in respect of any Indebtedness described in this clause (4) and clause (5)(b) of this paragraph or Incurred pursuant to the first paragraph of this covenant, and (e) other Indebtedness Incurred to finance Management Advances;

(5) Indebtedness (x) of the Issuer or any Restricted Subsidiary Incurred or issued to finance an acquisition (including an acquisition of any assets) ("Acquisition Debt") 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; *provided* that Indebtedness Incurred pursuant to this paragraph (5) is in an aggregate amount not to exceed (a) the greater of (i) €95.0 million and (ii) 47.0% of LTM EBITDA at the time of Incurrence, *plus* (b) unlimited additional Indebtedness to the extent that after giving effect to such acquisition, merger or consolidation and without giving effect to any Indebtedness Incurred or issued pursuant to subclause (5)(a) above on the date of determination, either: (i) the Issuer would be permitted to Incur at least €1.00 of additional Indebtedness pursuant to the first paragraph or clause (1)(d) of the second paragraph of this covenant, or (ii) either the Fixed Charge Coverage Ratio of the Issuer and the Restricted Subsidiaries would not be lower or the Consolidated Total Net Leverage Ratio of the Issuer and the Restricted Subsidiaries would not be higher, in each case, than it was immediately prior to such acquisition, merger, amalgamation or consolidation; *provided* that the amount of Acquisition Debt Incurred pursuant to clause (b) shall not cause the Non-Guarantor Debt Cap to be exceeded;

(6) Hedging Obligations (excluding Hedging Obligations entered into for speculative purposes);

(7) 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, Indebtedness arising from the conversion of the obligations of the Issuer or any Restricted Subsidiary under or pursuant to any "synthetic lease" transactions to on balance sheet Indebtedness of the Issuer or such Restricted Subsidiary and any Indebtedness which refinances, replaces or refunds such Indebtedness in an aggregate outstanding principal amount which, when taken together with the principal amount of all other Indebtedness Incurred pursuant to this clause (7)(a) and then outstanding, does not exceed the greater of (i) €70.0 million and (ii) 35.0% of LTM EBITDA at the time of Incurrence, and any Refinancing Indebtedness in respect thereof (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 180 days thereafter) or (b) arising out of Sale and Leaseback Transactions;

(8) 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, 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 in the ordinary course of business or consistent with past practice; (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 five Business 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 or other similar instruments or obligations issued or relating to liabilities or obligations Incurred in the ordinary course of business or consistent with past practice; (e) the financing of insurance premiums, take-or-pay obligations contained in supply arrangements, any customary treasury, depositary, cash management, automatic clearinghouse arrangements, overdraft protections, credit or debit card, purchase card, electronic funds transfer, cash pooling or netting or setting off arrangements or similar arrangements in the ordinary course of business or consistent with past practice; (f) Indebtedness representing (i) deferred 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 consistent with past practice or (ii) deferred compensation or other similar arrangements in connection with any Investment or acquisition permitted hereby; and (g) Settlement Indebtedness;

(9) 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;

(10) Indebtedness in an aggregate outstanding principal amount which, when taken together with the principal amount of all other Indebtedness Incurred pursuant to this clause (10) 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, any Shareholder Contribution or an Excluded Contribution) of the Issuer, in each case, subsequent to the Issue Date, and any Refinancing Indebtedness in respect thereof; *provided, however*, that (i) 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 in reliance thereon and (ii) any Net Cash Proceeds that are so received or contributed shall be excluded for purposes of Incurring Indebtedness pursuant to this clause to the extent such Net Cash Proceeds or cash have been applied to make Restricted Payments;

(11) (i) Indebtedness of Restricted Subsidiaries that are not Guarantors not to exceed the greater of (a) €70.0 million and (b) 35.0% of LTM EBITDA at any time outstanding, and any Refinancing Indebtedness in respect thereof and (ii) Guarantees by the Issuer or any Restricted Subsidiary of Indebtedness of joint ventures in an aggregate amount not to exceed the greater of (a) €15.0 million and (b) 7.5% of LTM EBITDA at any time outstanding, and any Refinancing Indebtedness in respect thereof; *provided* that the amount of Indebtedness Incurred and Disqualified Stock or Preferred Stock issued pursuant to this clause (11) shall not cause the Non-Guarantor Debt Cap to be exceeded;

(12) Indebtedness consisting of Indebtedness issued by the Issuer or any of the Restricted Subsidiaries to any future, present or former employee, director, 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, contractor or consultant), to finance the purchase or redemption of Capital Stock of the Issuer or any Parent Entity that is permitted by the covenant described below under "*—Limitation on Restricted Payments*";

(13) Indebtedness, Disqualified Stock or Preferred Stock in an aggregate outstanding principal amount which, when taken together with the principal amount of all other Indebtedness Incurred pursuant to this clause (13) and then outstanding, will not exceed the greater of (a) €100.0 million and (b) 50.0% of LTM EBITDA; *provided* that the amount of Indebtedness Incurred and Disqualified Stock or Preferred Stock issued pursuant to this clause (13) shall not cause the Non-Guarantor Debt Cap to be exceeded;

(14) Indebtedness Incurred pursuant to factoring financings, securitizations, receivables financings or similar arrangements, in each case, that are either: (a) not recourse to the Issuer and the Restricted Subsidiaries other than a Securitization Subsidiary (except for Standard Securitization Undertakings); or (b) not in excess of the greater of (x) €40.0 million and (y) 20.0% of LTM EBITDA at any time outstanding;

(15) 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 or consistent with past practice for all or any portion of the amounts payable by such customers to the Person extending such credit;

(16) Indebtedness to a customer to finance the acquisition of any equipment necessary to perform services for such customer; *provided* that the terms of such Indebtedness are consistent with those entered into with respect to similar Indebtedness prior to the Issue Date, including 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;

(17) [Reserved];

(18) Indebtedness of the Issuer or any of the Restricted Subsidiaries arising pursuant to any Permitted Tax Restructuring;

(19) Indebtedness consisting of local lines of credit, 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 (19) and then outstanding, will not exceed the greater of (a) €20.0 million and (b) 10.0% of LTM EBITDA;

(20) Subordinated Liabilities (as defined in the Intercreditor Agreement) in respect of amounts under intercompany loans arising pursuant to clause (b) to the proviso to clause (25) under the second paragraph of the covenant described under "*—Limitation on Restricted Payments*;"

(21) Guarantees Incurred in connection with government subsidies received by the Issuer or any of its Restricted Subsidiaries; *provided* that the aggregate principal amount of Indebtedness guaranteed pursuant to this clause (21) does not at any one time outstanding exceed the greater of (i) €20.0 million and (ii) 10.0% of LTM EBITDA; and

(22) (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 (ii) 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.

For purposes of determining compliance with, and the outstanding principal amount of any particular Indebtedness Incurred pursuant to and in compliance with, this covenant:

(1) subject to clause (3) below, in the event that all or any portion of any item of Indebtedness, Disqualified Stock or Preferred Stock (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 only be required to include, in any manner that complies with this covenant, the amount and type of such Indebtedness, Disqualified Stock or Preferred Stock (or any portion thereof) in the first paragraph above 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;

(2) with respect to clauses (5)(a), (11) and (13) of the second paragraph of this covenant, if at any time that the Issuer would be entitled to have Incurred any then outstanding item of Indebtedness pursuant to the first paragraph of this covenant or pursuant to clause (1)(d) of the second paragraph of this covenant, such item of Indebtedness shall be automatically reclassified into an item of Indebtedness Incurred pursuant to the first paragraph of this covenant or pursuant to clause (1)(d) of the second paragraph of this covenant, as applicable;

(3) all Indebtedness under the Senior Term Loan outstanding on the Completion Date shall be deemed to have been Incurred pursuant to clause (1)(a)(i) of the second paragraph of this covenant, and the Issuer shall not be permitted to reclassify all or any portion of such Indebtedness Incurred;

(4) 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 "cash sweep" or "clean down" provisions or any similar provisions under a Credit Facility that provide that Indebtedness is deemed to be 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;

(5) 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 accrued and unpaid interest and any fees and expenses, including any premium and defeasance costs, indemnity fees, discounts, premiums and other costs and expenses Incurred in connection with such refinancing;

(6) 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;

(7) 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 any clause of the second paragraph above or the first paragraph above and the letters of credit, bankers' acceptances or other similar instruments relate to other Indebtedness, then such other Indebtedness shall not be included;

(8) 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;

(9) 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 (29) of the definition of "Permitted Liens," the Incurrence or issuance thereof for all purposes under the Indenture, including without limitation for purposes of calculating the Fixed Charge Coverage Ratio or the Consolidated Total Net Leverage Ratio, as applicable, or usage of clauses (1) through (21) of the preceding paragraph (if any) for borrowings and re-borrowings thereunder (and including issuance and creation of letters of credit and bankers' acceptances thereunder) will, at the Issuer's option, either (a) be determined on the date of such revolving credit facility or such entry into or increase in commitments (assuming that the full amount thereof has been borrowed as of such date) or other Indebtedness, Disqualified Stock or Preferred Stock, and, if such Fixed Charge Coverage Ratio or the Consolidated Total Net Leverage Ratio, as applicable, test or other provision of the Indenture is satisfied with respect thereto at such time, any borrowing or re-borrowing thereunder (and the issuance and creation of letters of credit and bankers' acceptances thereunder) will be permitted under this covenant irrespective of the Fixed Charge Coverage Ratio or the Consolidated Total Net Leverage Ratio, as applicable, or other provision of the Indenture at the time of any borrowing or re-borrowing (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 (a) shall be the "Reserved Indebtedness Amount" as of such date for purposes of the Fixed Charge Coverage Ratio or the Consolidated Total Net Leverage Ratio, as applicable, and, to the extent of the usage of clauses (1) through (21) of the preceding paragraph (if any), shall be deemed to be Incurred and outstanding under such clauses) or (b) be determined on the date such amount is borrowed pursuant to any such facility or increased commitment, and in each case, the Issuer may revoke such determination at any time and from time to time;

(10) in the event that the Issuer or a Restricted Subsidiary (x) Incurs Indebtedness to finance an acquisition or (y) assumes Indebtedness of Persons that are acquired by the Issuer or any Restricted Subsidiary or merged into the Issuer or a Restricted Subsidiary in accordance with the terms of the Indenture, the date of determination of the Fixed Charge Coverage Ratio or the Consolidated Total Net Leverage Ratio, as applicable, shall, at the option of the Issuer, be (a) the date that a definitive agreement for such acquisition is entered into and the Fixed Charge Coverage Ratio or the Consolidated Total Net Leverage Ratio, as applicable, shall be calculated giving pro forma effect to such acquisition and the other transactions to be entered into in connection therewith (including any Incurrence of Indebtedness and the use of proceeds thereof) consistent with the definition of the Fixed Charge Coverage Ratio or the Consolidated Total Net Leverage Ratio, as applicable, and, for the avoidance of doubt, (A) if any such ratios are exceeded as a result of fluctuations in such ratio (including due to fluctuations in the Consolidated EBITDA of the Issuer or the target company) at or prior to the consummation of the relevant acquisition, such ratios will not be deemed to have been exceeded as a result of such fluctuations solely for purposes of determining whether such acquisition and any related transactions are permitted hereunder and (B) such ratios shall not be tested at the time of consummation of such acquisition or related transactions; *provided* that if the Issuer elects to have such determinations occur at the time of entry into such definitive agreement, (i) any such transaction shall be deemed to have occurred on the date the definitive agreement is entered into and to be outstanding thereafter for purposes of calculating any ratios under the Indenture after the date of such agreement and before the earlier of the date of consummation of such acquisition or the date such agreement is terminated or expires without consummation of such acquisition and (ii) to the extent any covenant baskets were utilized in satisfying any covenants, such baskets shall be deemed utilized until the earlier of the date of consummation of such acquisition or the date such agreement is terminated or expires without consummation of such acquisition, but any calculation of Consolidated EBITDA for purposes of other Incurrences of Indebtedness or Liens or making of Restricted Payments (not related to such acquisition) shall not reflect such acquisition until it has been consummated or (b) the date such Indebtedness is Incurred or assumed;

(11) notwithstanding anything in this covenant to the contrary, in the case of any Indebtedness Incurred to refinance Indebtedness initially Incurred in reliance on a clause of the second paragraph of this covenant measured by reference to a percentage of LTM EBITDA at the time of Incurrence, 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 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 premiums (including tender premiums), defeasance, costs and fees in connection with such refinancing; and

(12) 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 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 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 *"Limitation on Indebtedness*."

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 the covenant described under this "*Limitation on Indebtedness*," the Issuer shall be in default of this covenant).

For purposes of determining compliance with any Euro-denominated restriction on the Incurrence of Indebtedness, the Euro equivalent principal amount of Indebtedness denominated in a foreign currency shall be calculated based on the relevant currency exchange rate in effect on the date such Indebtedness was Incurred, in the case of term debt, or first committed or first Incurred (whichever yields the lower Euro equivalent), in the case of revolving credit debt; provided, that if such Indebtedness is Incurred to refinance other Indebtedness denominated in a foreign currency, and such refinancing would cause the applicable Euro-denominated restriction to be exceeded if calculated at the relevant currency exchange rate in effect on the date of such refinancing, such Euro-denominated restriction shall be deemed not to have been exceeded so long as the principal amount of such Refinancing Indebtedness does not exceed (a) the principal amount of such Indebtedness being refinanced plus (b) the aggregate amount of fees, underwriting discounts, accrued and unpaid interest, premiums (including tender premiums) and other costs and expenses (including original issue discount, upfront fees or similar fees) Incurred 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.

Limitation on Restricted Payments

The Issuer will not, and will not permit any of the Restricted Subsidiaries, directly or indirectly, to:

(1) 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 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 interest payments in respect of Indebtedness of such Parent Entity which is Guaranteed by the Issuer or any Restricted Subsidiary or is otherwise considered Indebtedness of the Issuer or any Restricted Subsidiary (*provided* that (x) any net proceeds from such Indebtedness are contributed to the equity of the Issuer or any Restricted Subsidiary in any form or otherwise received by the Issuer or any Restricted Subsidiary; (y) any net proceeds described in subclause (x) above shall be excluded for purposes of increasing the amount available for distribution pursuant to clause (c) of this paragraph and shall not be Excluded Contributions); and (z) in the case that any net proceeds described in subclause (x) above are contributed to the Issuer or the Restricted Subsidiaries in the form of Indebtedness, there shall be no double-counting of interest paid on 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);

(2) 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;

(3) 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 installment 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 (3) of the second paragraph of the covenant described under "*—Limitation on Indebtedness*");

(4) 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

(5) make any Restricted Investment,

(any such dividend, distribution, purchase, redemption, repurchase, defeasance, other acquisition, retirement or Restricted Investment referred to in clauses (1) through (5) 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 immediately thereafter result therefrom);

(b) the Issuer is not able to Incur an additional €1.00 of Indebtedness pursuant to the first paragraph under the "*—Limitation on Indebtedness*" covenant 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 (as defined below) made pursuant to clauses (1) and (10) of the next succeeding paragraph, but excluding all other Restricted Payments permitted by the next succeeding paragraph) would exceed the sum of (without duplication):

(i) 50% of Consolidated Net Income for the period (treated as one accounting period) from October 1, 2017 to the end of the most recent fiscal quarter ending prior to the date of such Restricted Payment for which internal consolidated financial statements of the Issuer are available (or, in the case such Consolidated Net Income is a deficit, minus 100% of such deficit); *plus*

(ii) 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 subsequent to the Completion Date 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 Completion Date (other than (u) any Shareholder Contribution, (v) Subordinated Shareholder Funding or Capital Stock sold to a Subsidiary of the Issuer, (w) 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, (x) 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 (6) of the next succeeding paragraph and (y) Excluded Contributions); *plus*

(iii) 100% of the aggregate amount of cash, and the fair market value of property or assets or marketable securities, received by the Issuer or any Restricted Subsidiary from the issuance or sale (other than (x) any Shareholder Contribution, (y) Subordinated Shareholder Funding or (z) 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 Issue 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*

(iv) 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 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 Issue 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 Issue 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 (17) of the next succeeding paragraph and will increase the amount available under the applicable clause of the definition of "Permitted Investment" or clause (17) of the next succeeding paragraph, as the case may be); *plus*

(v) in the case of the re-designation 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 after the Issue 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 re-designation 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 (17) of the next succeeding paragraph and will increase the amount available under the applicable clause of the definition of "Permitted Investment" or clause (17) of the next succeeding paragraph, as the case may be; *plus*

(vi) €25.0 million.

The foregoing provisions will not prohibit any of the following (collectively, "Permitted Payments"):

(1) the payment of any dividend or distribution within 60 days after the date of declaration thereof, if at the date of declaration such payment would have complied with the provisions of the Indenture, or the redemption, repurchase or retirement of Indebtedness if, at the date of any redemption notice, such payment would have complied with the provisions of the Indenture as if it were and is deemed at such time to be a Restricted Payment at the time of such notice;

(2) (a) any purchase, repurchase, redemption, defeasance or other acquisition or retirement of Capital Stock ("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, any Shareholder Contribution or through an Excluded 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) of the preceding paragraph and (b) if immediately prior to the retirement of Treasury Capital Stock, the declaration and payment of dividends thereon was permitted under clause (13) of this paragraph, 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;

(3) any purchase, repurchase, redemption, defeasance 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*" above;

(4) any purchase, repurchase, redemption, defeasance 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*" above;

(5) 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) from Net Available Cash to the extent permitted under "—*Limitation on Sales of Assets and Subsidiary Stock*" below, but only if (and to the extent required) the Issuer shall have first complied with the terms described under "—*Limitation on Sales of Assets and Subsidiary Stock*" and purchased all Notes tendered pursuant to any offer to repurchase all the Notes required thereby, prior to purchasing, repurchasing, redeeming, defeasing or otherwise acquiring or retiring such Subordinated Indebtedness, Disqualified Stock or Preferred Stock;

(b) to the extent required by the agreement governing such Subordinated Indebtedness, Disqualified Stock or Preferred Stock, following the occurrence of (i) a Change of Control (or other similar event described therein as a "change of control") or (ii) 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 terms described under "*Change of Control*" or "—*Limitation on Sales of Assets and Subsidiary Stock*," as applicable, and purchased all Notes tendered pursuant to the offer to repurchase all the Notes required thereby, prior to purchasing, repurchasing, redeeming, defeasing or otherwise acquiring or retiring such Subordinated Indebtedness, Disqualified Stock or Preferred Stock; or

(c) consisting of Acquired Indebtedness (other than Indebtedness Incurred (A) 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 (B) otherwise in connection with or contemplation of such acquisition);

(6) a Restricted Payment to pay for the repurchase, 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) of the Issuer or any Parent Entity held by any future, present or former employee, director 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, contractor or consultant) either pursuant to any management equity plan or stock option plan or any other management or employee benefit plan or agreement or upon the termination of such employee, director, contractor or consultant's employment or directorship; *provided*, *however*, that the aggregate Restricted Payments made under this clause (6) do not exceed (x) €15.0 million in any calendar year (with unused amounts in any calendar year being carried forward to the next succeeding calendar year and amounts that will not be used in the subsequent calendar year being carried back to the immediately preceding calendar year) or (y) subsequent to the consummation of an underwritten public Equity Offering of common stock of the Issuer or any Parent Entity, €30.0 million in any calendar year (with unused amounts in any calendar year being carried forward to the next succeeding calendar year and amounts that will not be used in the subsequent calendar year being carried back to the immediately preceding calendar year); *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 Shareholder Contribution or Excluded Contributions) of the Issuer and, to the extent contributed to the capital of the Issuer (other than through the issuance of Disqualified Stock or Designated Preferred Stock, any Shareholder Contribution or an Excluded Contribution), Subordinated Shareholder Funding or Capital Stock of any Parent Entity, in each case to members of management, directors 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 preceding paragraph; *plus*

(b) the cash proceeds of key man life insurance policies received by the Issuer and the Restricted Subsidiaries after the Issue Date,

and *provided yet further* that cancellation of Indebtedness owing to the Issuer or any Restricted Subsidiary from any future, present or former members of management, directors, employees, contractors or consultants of the Issuer or Restricted Subsidiaries or any Parent Entity 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;

(7) 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*" above;

(8) 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;

(9) 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; and

(b) amounts constituting or to be used for purposes of making payments to the extent specified in clauses (2), (3), (5), (11), (12), (17)(a) (but only in respect of the parenthetical thereto) and (17)(c) of the second paragraph 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 paragraph (11)(A) of the second paragraph under "—*Limitation on Affiliate Transactions*" below and made to any Parent Entity pursuant to this clause (9)(b) shall not exceed an aggregate amount equal to €3.0 million per calendar year (with unused amounts in any calendar year being carried forward to the next succeeding calendar year and amounts that will not be used in the subsequent calendar year being carried back to the immediately preceding calendar year);

(10) the declaration or payment of dividends or distributions, or the making of any cash payments, advances, loans or expense reimbursements on 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 in any fiscal year the greater of: (a) 6% of the Net Cash Proceeds received from such Public Offering or subsequent Equity Offering by the Issuer or contributed to the capital of the Issuer by any Parent Entity in any form other than Indebtedness, any Shareholder Contribution or Excluded Contributions; and (b) following an Initial Public Offering, an amount equal to (i) where, after giving pro forma effect to such dividends, distributions, cash payments, loans or expense reimbursements, the Consolidated Total Net Leverage Ratio shall be equal to or less than 5.50 to 1.00, the greater of (x) 5% of the Market Capitalization and (y) 5% of the IPO Market Capitalization; and (ii) where, after giving pro forma effect to such dividends, distributions, cash payments, loans or expense reimbursements, the Consolidated Total Net Leverage Ratio shall be equal to or less than 5.00:1.00, the greater of (x) 7% of the Market Capitalization and (y) 7% of the IPO Market Capitalization;

(11) 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, however*, 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);

(12) Restricted Payments that are made with Excluded Contributions;

(13) the declaration and payment of dividends (i) on Designated Preferred Stock of the Issuer issued after the Issue Date; (ii) 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 (iii) on Refunding Capital Stock that is Preferred Stock; *provided, however*, that, in the case of clauses (i) and (ii) of this clause (13), 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, any Shareholder Contribution or an Excluded Contribution), from the issuance or sale of such Designated Preferred Stock; provided further, in the case of clauses (i), (ii) and (iii) of this clause (13), that for the most recently ended four fiscal quarters for which internal financial statements are available immediately preceding the date of issuance of such Designated Preferred Stock or declaration of such dividends on such Refunding Capital Stock, 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*";

(14) distributions, by dividend or otherwise, or other transfer or disposition of shares of Capital Stock, of equity interests in, or Indebtedness 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 Equivalents) or proceeds thereof;

(15) 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;

(16) any Restricted Payment made in connection with the Transactions, including 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 Transactions (including dividends to any Parent Entity to permit payment by such Parent Entity of such amounts);

(17) so long as no Event of Default has occurred and is continuing (i) Restricted Payments (including loans or advances) in an aggregate amount outstanding at the time made not to exceed the greater of (a) €60.0 million and (b) 30.0% of LTM EBITDA at such time, and (ii) any Restricted Payments, 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, the Consolidated Total Net Leverage Ratio shall be no greater than 6.75 to 1.00;

(18) mandatory redemptions of Disqualified Stock issued as a Restricted Payment or as consideration for a Permitted Investment;

(19) [Reserved];

(20) 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*";

(21) 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 (i) all property acquired (whether assets or Capital Stock) to be contributed to the capital of the Issuer or one of the Restricted Subsidiaries or (ii) 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 "*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) of the preceding paragraph, clauses (2) or (6) above or be deemed to be an Excluded 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 (12) hereof) or pursuant to the definition of "Permitted Investments" (other than pursuant to clause (12) thereof);

(22) [Reserved];

(23) any Restricted Payment made with Net Available Cash from any Asset Disposition and permitted pursuant to clause (3) of the first paragraph under "*—Limitation on Sales of Assets and Subsidiary Stock*";

(24) [Reserved]; and

(25) 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 Parent Entity that is a member of the same fiscal unity (*steuerliche Organschaft*) for German corporate income tax and trade 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 Issuer and the Restricted Subsidiaries, 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 will be converted into an intercompany loan made by such Parent Entity to the Issuer which constitutes Subordinated Liabilities (as defined in the Intercreditor Agreement).

For purposes of determining compliance with this covenant, in the event that a Restricted Payment (or portion thereof) meets the criteria of more than one of the categories of Permitted Payments described in clauses (1) through (25) above, and/or is permitted pursuant to the first paragraph of this covenant and/or 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 date of such Restricted Payment 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 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 or the Company 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 and, in the case of the Company, limited in all respects to those of its assets constituting Collateral), 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 (a) in the case of any property or asset that does not constitute Collateral, (1) Permitted Liens or (2) Liens on property or assets that are not Permitted Liens if the Notes, the Note Guarantees and the Indenture are directly secured equally and rateably with, or prior to, in the case of Liens with respect to Subordinated Indebtedness or equal with, or prior to, in the case of Liens with respect to Pari Passu Indebtedness, the Indebtedness secured by such Initial Lien for so long as such Indebtedness is so secured, and (b) in the case of any property or asset that constitutes Collateral, Permitted Collateral Liens.

Any such Lien created in favor of the Notes, the Note Guarantees and the Indenture under (a)(2) in the preceding paragraph 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 under the Indenture, the Intercreditor Agreement, any Additional Intercreditor Agreement and/or under the relevant 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 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:

(A) 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;

(B) make any loans or advances to the Issuer or any Restricted Subsidiary; or

(C) 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:

(1) any encumbrance or restriction pursuant to (a) any Credit Facility (including the Senior Facilities), (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 the Issue Date;

(2) any encumbrance or restriction pursuant to the Indenture, the Notes, the Security Documents or the Note Guarantees;

(3) any encumbrance or restriction pursuant to applicable law, rule, regulation or order;

(4) 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 Issuer (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 Issuer;

(5) 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 or consistent with past practice; *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;

(6) 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;

(7) 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;

(8) customary provisions in leases, licenses, shareholder agreements, joint venture agreements and other similar agreements, organizational documents and instruments;

(9) encumbrances or restrictions arising or existing by reason of applicable law or any applicable rule, regulation, licensing requirement or order, or required by any regulatory authority;

(10) any encumbrance or restriction on cash or other deposits or net worth imposed by customers under agreements entered into in the ordinary course of business or consistent with past practice;

(11) any encumbrance or restriction pursuant to Hedging Obligations;

(12) 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;

(13) 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 provisions of 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 Facilities together with the security documents associated therewith, and (B) the Intercreditor Agreement, in each case, as in effect on the Issue Date or (ii) as is customary in comparable financings (as determined in good faith by the Issuer) and where, in the case of this sub-clause (ii), either (x) the Issuer determines at the time of entry into such agreement or instrument that such encumbrances or restrictions will not adversely affect, in any material respect, the Issuer's ability to make principal or interest payments on the Notes or (y) such encumbrance or restriction applies only during the continuance of a default relating to such agreement or instrument, or (b) constituting an Additional Intercreditor Agreement;

(14) any encumbrance or restriction existing by reason of any lien permitted under "*—Limitation on Liens*"; or

(15) 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 (1) to (14) of this paragraph or this clause (an "Initial Agreement") or contained in any amendment, supplement or other modification to an agreement referred to in clauses (1) to (14) of this paragraph or this clause (15); *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).

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:

(1) 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);

(2) in any such Asset Disposition, or series of related Asset Dispositions (except to the extent the Asset Disposition is a Permitted Asset Swap), with a purchase price in excess of the greater of (a) €20.0 million and (b) 10.0% of LTM EBITDA, at least 75% of the consideration from such Asset Disposition (including by way of relief from, or by any other Person assuming responsibility for, any liabilities, contingent or otherwise) received by the Issuer or such Restricted Subsidiary, as the case may be, is in the form of cash or Cash Equivalents; and

(3) an amount equal to 100% of the Net Available Cash from such Asset Disposition is applied:

(a) to the extent the Issuer or any Restricted Subsidiary, as the case may be, elects (or is required by the terms of any Indebtedness), within 541 days from the later of (1) the date of such Asset Disposition and (2) the receipt of such Net Available Cash, (A) to prepay, repay or purchase any Indebtedness of a Restricted Subsidiary that is not a Guarantor (in each case, other than Indebtedness owed to the Issuer or any Restricted Subsidiary) or any Senior Indebtedness; *provided, however*, that, in connection with any prepayment, repayment or purchase of Indebtedness pursuant to this clause (a), the Issuer or such Restricted Subsidiary will retire such Indebtedness and will cause the related commitment (if any) to be reduced in an amount equal to the principal amount so prepaid, repaid or purchased, (B) to prepay, repay or purchase any Pari Passu Indebtedness at a price of no more than 100% of the principal amount of such Pari Passu Indebtedness, plus accrued and unpaid interest to the date of such prepayment, repayment or purchase so long as the Issuer or such Restricted Subsidiary also makes an offer to the Holders to redeem or purchase any Notes held by such Holder at a price not less than par, in each case, on a *pro rata* basis with any such other Pari Passu Indebtedness that is prepaid, repaid or purchased or (C) to redeem or purchase Notes; or

(b) to the extent the Issuer or any Restricted Subsidiary elects, 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) within 541 days from the later of (i) the date of such Asset Disposition and (ii) the receipt of such Net Available Cash; *provided*, *however*, that a binding agreement shall be treated as a permitted application of Net Available Cash from the date of such commitment with the good faith expectation that an amount equal to Net Available Cash will be applied to satisfy such commitment within 180 days of such commitment (an "Acceptable Commitment") and, in the event any Acceptable Commitment is later cancelled or terminated for any reason before such amount is applied, then such Net Available Cash shall constitute Excess Proceeds,

provided further that, pending the final application of the amount of any such Net Available Cash in accordance with clause (a) or (b) above, 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.

Notwithstanding the foregoing, 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 (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, the portion of such Net Available Cash so affected will not be required to be applied in compliance with this covenant.

The amount of any 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. On the 542nd day (or such longer period permitted by clause (b) of 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 the Indenture exceeds €50.0 million in a single transaction, the Issuer will within 10 Business Days be required to make an offer ("Asset Disposition Offer") to all Holders of Notes issued under the Indenture and, to the extent the Issuer elects, to all holders of other outstanding Pari Passu Indebtedness, to repay, prepay or purchase the maximum aggregate principal amount of Notes and any such Pari Passu Indebtedness to which the Asset Disposition Offer applies that may be repaid, prepaid or purchased out of the Excess Proceeds, at an offer price in respect of the Notes in an amount equal to 100% of the principal amount of the Notes (and, in the case of any Pari Passu Indebtedness, an offer price of no more than) 100% of the principal amount of such Pari Passu Indebtedness, in each case, plus accrued and unpaid interest, if any, to, but not including, the date of repayment, prepayment or purchase, in accordance with the procedures set forth in the Indenture or the agreements governing the Pari Passu Indebtedness, as applicable, and with respect to the Notes, in minimum denominations of €100,000 and in integral multiples of €1,000 in excess thereof. The Issuer will deliver notice of such Asset Disposition Offer electronically or by first-class mail, with a copy to the Trustee, the Paying Agent and each Holder at the address of such Holder appearing in the security register or otherwise in accordance with the applicable procedures of Euroclear and Clearstream, describing the transaction or transactions that constitute the Asset Disposition 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. 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 all Net Available Cash prior to the expiration of the relevant 541 days (or such longer period provided above) or with respect to any unapplied Excess Proceeds.

To the extent that the aggregate amount of Notes and Pari Passu Indebtedness so validly tendered and not properly withdrawn pursuant to an Asset Disposition Offer is less than the Excess Proceeds, the Issuer may use any remaining Excess Proceeds for any purpose not prohibited by the Indenture. If the aggregate principal amount of the Notes surrendered in any Asset Disposition Offer by Holders and other Pari Passu Indebtedness surrendered by holders or lenders, collectively, exceeds the amount of Excess Proceeds, the Issuer shall allocate the Excess Proceeds among the Notes and Pari Passu Indebtedness to be repaid, prepaid or purchased on a *pro rata* basis on the basis of the aggregate principal amount of tendered Notes and Pari Passu Indebtedness provided that the Issuer shall not be required to select and purchase Notes or other Pari Passu Indebtedness in an unauthorized denomination. Upon completion of any Asset Disposition Offer, the amount of Excess Proceeds shall be reset at zero.

To the extent that any portion of Net Available Cash payable in respect of the Notes is denominated in a currency other than Euros, the amount thereof payable in respect of the Notes shall not exceed the net amount of funds in Euros that is actually received by the Issuer upon converting such portion into Euros.

For the purposes of clause (2) of the first paragraph of this covenant, the following will be deemed to be cash:

(1) the assumption by the transferee of Indebtedness or other liabilities, contingent or otherwise, of the Issuer or a Restricted Subsidiary (other than Subordinated Indebtedness of the Issuer or a Guarantor) and the release of the Issuer or such Restricted Subsidiary from all liability on such Indebtedness or other liability in connection with such Asset Disposition;

(2) securities, notes or other obligations received by the Issuer or any Restricted Subsidiary from the transferee that are converted by the Issuer or such Restricted Subsidiary into cash or Cash Equivalents within 180 days following the closing of such Asset Disposition;

(3) Indebtedness of any Restricted Subsidiary that is no longer a Restricted Subsidiary as a result of such Asset Disposition, to the extent that the Issuer and each other Restricted Subsidiary are released from any Guarantee of payment of such Indebtedness in connection with such Asset Disposition;

(4) consideration consisting of Indebtedness of the Issuer (other than Subordinated Indebtedness) received after the Issue Date from Persons who are not the Issuer or any Restricted Subsidiary; and

(5) any Designated Non-Cash Consideration received by the Issuer or any Restricted Subsidiary in such Asset Dispositions having an aggregate fair market value, taken together with all other Designated Non-Cash Consideration received pursuant to this covenant that is at that time outstanding, not to exceed the greater of (a) €40.0 million and (b) 20.0% of LTM EBITDA (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).

To the extent that the provisions of any securities laws 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, rules and regulations and shall not be deemed to have breached its obligations described in the Indenture by virtue thereof.

Notwithstanding any other provision in the Indenture to the contrary, the provisions of the Indenture relative 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 the Notes then outstanding.

The Senior Facilities may prohibit or limit, and future credit agreements or other agreements to which the Issuer 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 its lenders 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 would constitute a Default 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 (i) €15.0 million and (ii) 7.5% of LTM EBITDA unless:

(1) 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

(2) in the event such Affiliate Transaction involves an aggregate value in excess of the greater of (a) €25.0 million and (b) 12.5% 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.

Any Affiliate Transaction shall be deemed to have satisfied the requirements set forth in clause (2) above 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:

(1) any Restricted Payment permitted to be made pursuant to the covenant described under "—*Limitation on Restricted Payments*," or any Permitted Investment;

(2) 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 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 or consultants approved by the Board of Directors of the Issuer, in each case in the ordinary course of business or consistent with past practice;

(3) any Management Advances and any waiver or transaction with respect thereto;

(4) 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 Equivalents and the Capital Stock of the Issuer and such merger, amalgamation or consolidation is otherwise permitted under the Indenture;

(5) 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, 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, officers, contractors, consultants, distributors or employees);

(6) 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 Issue 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;

(7) any transaction with a Securitization Subsidiary 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;

(8) 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 or consistent with past practice, 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;

(9) 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 (i) 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 (ii) due to the fact that a director of such Person is also a director of the Issuer or any direct or indirect Parent Entity of the Issuer (*provided*, *however*, 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);

(10) 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";

(11) (a) any 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) any 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 acquisitions or divestitures, which are in the case of each of clauses (a) and (b) approved by a majority of the Board of Directors of the Issuer in good faith;

(12) 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;

(13) the Transactions and the payment of all costs and expenses (including all legal, accounting and other professional fees and expenses) related to the Transactions;

(14) 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 such transaction is fair to the Issuer or such Restricted Subsidiary from a financial point of view or meets the requirements of clause (1) of the preceding paragraph;

(15) the existence of, or the performance by the Issuer or any Restricted Subsidiary of its obligations under the terms of, any equityholders agreement (including any registration rights agreement or purchase agreements related thereto) to which it is party as of the Issue Date, and any similar agreement that it may enter into thereafter; *provided*, *however*, that the existence of, or the performance by the Issuer or any Restricted Subsidiary of its obligations under any future amendment to the equityholders' agreement or under any similar agreement entered into after the Issue 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;

(16) 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;

(17) 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 the foregoing clause (17)(a) 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;

(18) 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;

(19) 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, 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, 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;

(20) employment and severance arrangements between the Issuer or the Restricted Subsidiaries and their respective officers, directors, contractors, consultants, distributors and employees in the ordinary course of business or entered into in connection with or as a result of the Transactions;

(21) 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 "*—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;

(22) transactions entered into by an Unrestricted Subsidiary with an Affiliate prior to the day such Unrestricted Subsidiary is re-designated as a Restricted Subsidiary as described under "*—Designation of Restricted and Unrestricted Subsidiaries*" and pledges of Capital Stock of Unrestricted Subsidiaries;

(23) 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;

(24) intellectual property licenses in the ordinary course of business or consistent with past practice;

(25) payments to or from, and transactions with, any joint venture in the ordinary course of business or consistent with past practice (including any cash management activities related thereto);

(26) the payment of costs and expenses related to registration rights and customary indemnities provided to shareholders under any shareholder agreement; and

(27) any Permitted Tax Restructuring.

Designation of Restricted and Unrestricted Subsidiaries

The Issuer may designate any Restricted Subsidiary to be an Unrestricted Subsidiary and any Unrestricted Subsidiary to be a Restricted Subsidiary, in each case, 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 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.

If, at any time, any Unrestricted Subsidiary would fail to meet the preceding requirements as an Unrestricted Subsidiary, it will thereafter cease to be an Unrestricted Subsidiary for purposes of the Indenture and any Indebtedness of such Subsidiary will 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 the covenant described under "—*Limitation on Indebtedness*," the Issuer will be in default of such covenant.

If an Unrestricted Subsidiary is designated as a Restricted Subsidiary, that 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 permitted under the covenant described under "—*Limitation on Indebtedness*" (including pursuant to clause (5) of the second paragraph thereof, treating such designation as an acquisition for the purpose of such clause), calculated on a pro forma basis as if such designation had occurred at the beginning of the applicable reference period; and (2) no Default or Event of Default would be in existence immediately following such designation. Any such designation by the Issuer or the re-designation of an Unrestricted Subsidiary to a Restricted Subsidiary as contemplated hereby shall be evidenced to the Trustee on the date of such designation or re-designation by filing with the Trustee an Officer's Certificate certifying that such designation or re-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 150 days after the end of the Issuer's fiscal year ending December 31, 2017, and within 120 days after the end of the Issuer's fiscal years thereafter, beginning with the fiscal year ending December 31, 2017, 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 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 an 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 clause (2) or (3) below); *provided* that such pro forma financial information will be provided only to the extent available without unreasonable expense, in which case the Issuer will provide, in the case of a material acquisition, acquired company financials; and *provided* that an acquisition or disposition that has occurred fewer than 60 days prior to the last day of the completed fiscal year as to which such annual financial statements relate shall be reported in the next quarterly financial statements provided pursuant to this covenant; and (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; *provided* that the information described in clause (iv) may be provided in the footnotes to the audited financial statements;

(2) within 60 days (or, in the case of the fiscal quarter ended March 31, 2018, 90 days) following the end of each of the first three fiscal quarters in each fiscal year of the Issuer, beginning with the quarter ended March 31, 2017, 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 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 that have occurred since the beginning of the most recently completed fiscal year as to which such quarterly report relates; *provided* that such pro forma financial information will be provided only to the extent available without unreasonable expense, in which case the Issuer will provide, in the case of a material acquisition, acquired company financials; and *provided* that an acquisition or disposition that has occurred fewer than 60 days prior to the last day of the completed fiscal quarter as to which such quarterly financial statements relate shall be reported in the next quarterly financial statements provided pursuant to this covenant; and (iii) an operating and financial review of the unaudited financial statements, including a discussion of the consolidated financial condition, results of operations and material changes in liquidity and capital resources of the Issuer; 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 prepared in accordance 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 not of a type included in this Offering Memorandum. In addition, the reports set forth above will not be required to contain any reconciliation to 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 "*Reports*" 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 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).

Subject to compliance with the next succeeding paragraph, in the event that, and for so long as, the equity securities of the Issuer, the Initial Guarantor 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, the Initial Guarantor 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, the Initial Guarantor 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 the preceding paragraphs.

The Issuer may comply with any requirement to provide reports or financial statements under this covenant by providing any report or financial statements of a direct or indirect Parent Entity of the Issuer so long as such reports (if an annual, half yearly or quarterly report) (a) meet the requirements (including as to content and time of delivery) of this covenant as if references to the Issuer therein were references to such Parent Entity and (b) explains in reasonable detail the differences between the information relating to such Parent Entity, on one hand, and the information relating to the Issuer and the Restricted Subsidiaries on a standalone basis, on the other hand. Upon complying with the foregoing requirement, the Issuer will be deemed to have complied with the provisions contained in the preceding paragraphs.

For any period ending prior to the Completion Date, the reports and financial statements required by this covenant will be provided with respect to the Target Group instead of the Issuer.

Impairment of Security Interest

The Issuer shall not, and shall not permit any Restricted Subsidiary or the Company 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 Collateral (it being understood, subject to the proviso below, that the Incurrence of Permitted Collateral Liens shall under no circumstances be deemed to materially impair the Security Interest with respect to the Collateral) for the benefit of the Trustee and the Holders, and the Issuer shall not, and shall not permit any Restricted Subsidiary or the Company 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 Security Documents and the Intercreditor Agreement or any Additional Intercreditor Agreement, any interest whatsoever in any of the Collateral, *except* that (i) the Issuer, the Company and the Restricted Subsidiaries may amend, extend, renew, restate, supplement, release or otherwise modify or replace any Security Documents for the purposes of Incurring Permitted Collateral Liens, (ii) the Issuer, the Company and the Restricted Subsidiaries may amend, extend, renew, restate, supplement, release or otherwise modify or replace any Security Documents for the purposes of undertaking a Permitted Reorganization, (iii) the Collateral may be discharged and released in accordance with the Indenture, the applicable Security Documents or the Intercreditor Agreement or any Additional Intercreditor Agreement, (iv) the applicable Security Documents may be amended from time to time to cure any ambiguity, mistake, omission, defect, error or inconsistency therein and (v) the Issuer, the Company and the Restricted Subsidiaries may amend the Security Interests in any manner that does not adversely affect Holders in any material respect; *provided*, *however*, that the Security Documents may not be amended, extended, renewed, restated, supplemented, released or otherwise modified or replaced pursuant to clause (i), (ii) or (v) above, unless contemporaneously with any such action, the Issuer delivers to the Trustee, either (1) a solvency opinion, in a form reasonably satisfactory to the Trustee from an Independent Financial Advisor confirming the solvency of the Issuer and its Subsidiaries, taken as a whole (or, in the case of any relevant action with respect to Security Documents to which the Company is party as a security grantor, confirming the solvency of the Company), after giving effect to any transactions related to such amendment, extension, renewal, restatement, supplement, release, modification or replacement, (2) a certificate from the Board of Directors of the relevant Person, in a form satisfactory to the Trustee, which confirms the solvency of the Person granting such Security Interest, after giving effect to any transactions related to such amendment, extension, renewal, restatement, supplement, release, modification or replacement, or (3) an Opinion of Counsel, in a form reasonably satisfactory to the Trustee, confirming that, after giving effect to any transactions related to such amendment, extension, renewal, restatement, supplement, release, modification or replacement, the Lien or Liens created under the Security Documents, so amended, extended, renewed, restated, supplemented, released, modified or replaced are valid 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, release, modification or replacement. In the event that the Issuer, the Company or an applicable Restricted Subsidiary complies with the requirements of this covenant, the Trustee and the Security Agent shall (subject to customary protections and indemnifications consent to any amendment, extension, renewal, restatement, supplement, release or other modification or replacement requested in accordance with this covenant without the need for instructions from any Holder.

Additional Guarantees

Notwithstanding anything to the contrary in this covenant, no Restricted Subsidiary shall Guarantee the Indebtedness outstanding under the Senior Facilities, any Credit Facility or any Public Debt, in each case of the Issuer or a Guarantor unless such Restricted Subsidiary is or becomes a Guarantor on the date on which the Guarantee of such other Indebtedness is Incurred and, if applicable, executes and delivers to the Trustee a supplemental indenture substantially in the form attached to the Indenture pursuant to which such Restricted Subsidiary will provide a Note Guarantee, which Note Guarantee will be subordinated to (in the case such Guarantee of such other Indebtedness constitutes Senior Indebtedness), *pari passu* with (in the case such Guarantee of such other Indebtedness constitutes Pari Passu Indebtedness) or senior to (in the case such Guarantee of such other Indebtedness constitutes Subordinated Indebtedness), as applicable, such Restricted Subsidiary's Guarantee of such other Indebtedness; *provided*, *however*, that such Restricted Subsidiary shall not be obligated to become such a Guarantor to the extent and for so long as the Incurrence of such Note Guarantee is contrary to the Agreed Security Principles or could give rise to or result in: (1) any breach or violation of statutory limitations, corporate benefit, financial assistance, fraudulent preference, thin capitalization rules, capital maintenance rules, guidance and coordination rules or the laws rules or regulations (or analogous restriction) of any applicable jurisdiction; (2) any risk or liability for the officers, directors 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 or shareholders of the partners of such partnership); or (3) 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 those that relate to fraudulent conveyance or transfer, voidable preference, financial assistance, corporate purpose, capital maintenance or similar laws, regulations or defenses affecting the rights of creditors generally) or other considerations under applicable law.

Future Note Guarantees granted pursuant to this provision shall be released as set forth under "*Notes Guarantees—Notes Guarantee Release*." 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 Trustee and the Security Agent shall each take all necessary actions, including the granting of releases or waivers under the Intercreditor Agreement or any Additional Intercreditor Agreement, reasonably requested by, and at the cost of, the Issuer to effectuate any release of a Note Guarantee in accordance with these provisions, subject to customary protections and indemnifications.

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 Relating to the Notes—Corporate benefit, financial assistance laws, capital maintenance and other limitations on the Guarantees and the Collateral may adversely affect the validity and enforceability of the Guarantees and the Collateral*" and "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Guarantees and Security Interests*."

Additional Intercreditor Agreements

The Indenture will provide that, at the request of the Issuer, in connection with the Incurrence by the Issuer, the Company or any Restricted Subsidiary of (x) any Indebtedness secured on Collateral or as otherwise required herein and (y) any Refinancing Indebtedness in respect of Indebtedness referred to in the foregoing clause (x), 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 (1) such Additional Intercreditor Agreement will not impose any personal obligations on the Trustee or Security Agent or, in the opinion of the Trustee or Security Agent, as applicable, adversely affect the rights, duties, liabilities, indemnities or immunities of the Trustee or Security Agent under the Indenture, any Additional Intercreditor Agreement or the Intercreditor Agreement and (2) if more than one such intercreditor agreement is outstanding at any time, the correlative terms of such intercreditor agreements must not conflict.

The Indenture also will 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: (1) cure any ambiguity, omission, defect, manifest error or inconsistency of any such agreement, (2) 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), (3) add Restricted Subsidiaries to the Intercreditor Agreement or an Additional Intercreditor Agreement, (4) further secure the Notes (including Additional Notes), (5) make provision for equal and rateable pledges of the Collateral to secure Additional Notes, (6) implement any Permitted Collateral Liens, (7) amend the Intercreditor Agreement or any Additional Intercreditor Agreement in accordance with the terms thereof or (8) make any other change to any such agreement that does not adversely affect the Holders (taken as a whole) in any material respect. 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 without the consent of the Holders of the majority in aggregate principal amount of the Notes then outstanding, except as otherwise permitted below under "*Amendments and Waivers*," 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 Security Agent or, in the opinion of the Trustee or 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 shall 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 Holders to the payment, repayment, purchase, repurchase, defeasance, acquisition, retirement or redemption of any obligations subordinated to the Notes thereby; *provided*, *however*, that such transaction would comply with the covenant described under "*—Limitation on Restricted Payments*." The Indenture also will 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 and 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. A copy of the Intercreditor Agreement and any Additional Intercreditor Agreement shall be made available for inspection during normal business hours on any Business Day upon prior written request at our offices.

Limitation on Activities of the Issuer

The Issuer shall not carry on any business or own any material assets other than:

(1) the Incurrence, Guarantee, offering, sale, issuance and servicing, listing, purchase, redemption, exchange, refinancing or retirement of Indebtedness (and guarantees thereof) permitted by the terms of the Indenture

or performance of the terms and conditions of such Indebtedness, to the extent such activities are otherwise permissible under the Indenture, and the granting of any Liens permitted pursuant to the covenant described above under the caption "—*Limitation on Liens*";

(2) (i) rights and obligations arising under the Indenture, any Credit Facility, the Intercreditor Agreement (including any Additional Intercreditor Agreement) and the Security Documents or any other agreement of the Issuer and the Restricted Subsidiaries existing on the Issue Date or to which it is or becomes a party or (ii) undertaken with the purpose of, or directly related to, the fulfilling of any other obligations under any Indebtedness permitted by the Indenture;

(3) the ownership of (i) cash and Cash Equivalents, (ii) the Capital Stock and other equity instruments of the Target or any direct or indirect parent company of the Target and intercompany loans made to the Target or any direct or indirect parent company or Subsidiary of the Target and (iii) other property, in each case to the extent contributed substantially concurrently to a Parent Entity to the extent such contribution is not prohibited by the terms of the Indenture;

(4) making Investments in the Notes (including any Additional Notes) or any other Indebtedness to the extent such Investment is not prohibited by the terms of the Indenture;

(5) (i) involving the provision of administrative, managerial, legal, treasury (including those related to overhead costs, paying filing fees and other ordinary course expenses (such as audit fees and Taxes), treasury services and cash pooling arrangements) and accounting services as to itself and as to its Subsidiaries of a type customarily provided by a holding Issuer to its Subsidiaries as to itself and the receipt of any amounts related thereto and (ii) the fulfilment of any periodic reporting requirements;

(6) related or reasonably incidental to the establishment and/or maintenance of its and its Subsidiaries' corporate existence;

(7) the making or receipt (i) of any Restricted Payment, Permitted Payment or Permitted Investment permitted by the terms of the Indenture, (ii) any Asset Disposition permitted by the terms of the Indenture and (iii) an offering, issuance, sale or other disposition of its Capital Stock to a Parent Entity to the extent not otherwise prohibited by the terms of the Indenture;

(8) relating to the lending of proceeds of Indebtedness and Equity Offerings to Restricted Subsidiaries, whether as Subordinated Shareholder Funding or otherwise;

(9) conducting activities in preparation for, directly related to or reasonably incidental to, any Initial Public Offering, Equity Offering, Change of Control or asset disposition, including the maintenance of any listing of equity interests issued by an IPO Entity;

(10) any liabilities or obligations in connection with any employee or participation scheme, including any management equity plan, incentive plan or other similar scheme operated by, for the benefit of, on behalf of or in respect of itself or any Restricted Subsidiary (and/or any current or past employees, directors or members of management thereof and any related corporate entity established for such purpose;

(11) pursuant to or in connection with the Transactions or in the manner specifically contemplated in the Tax Structure Memorandum and any step or action taken (or relating to a step or action taken) by the Issuer in relation thereto prior to the Issue Date or pursuant to or in connection with any Permitted Holdco Transaction or Permitted Reorganization; or

(12) other activities not specifically enumerated above that are ancillary or *de minimis* in nature.

Merger and Consolidation

The Issuer

The Issuer will not consolidate with or merge with or into, or assign, convey, transfer or lease or otherwise dispose of all or substantially all of its assets, in one transaction or a series of related transactions, to any Person, unless:

(1) the resulting, surviving or transferee Person (the "Successor Issuer") will be a Person organized and existing under the laws of any member state of the European Union, or the United States of America, any State of the United States or the District of Columbia, Canada or any province of Canada, Norway or Switzerland and the Successor Issuer (if not the Issuer) will expressly assume, by supplemental indenture, executed and delivered to the Trustee, all the obligations of the Issuer under the Notes and the Indenture and all obligations of the Issuer under the Intercreditor Agreement, any Additional Intercreditor Agreement and the Security Documents, as applicable;

(2) immediately after giving effect to such transaction (and treating any Indebtedness that becomes an obligation of the applicable Successor Issuer or any Subsidiary of the applicable Successor Issuer as a result of such transaction as having been Incurred by the applicable Successor Issuer or such Subsidiary at the time of such transaction), no Default has occurred and is continuing;

(3) immediately after giving effect to such transaction, either (a) the Issuer or the applicable Successor Issuer would be able to Incur at least an additional €1.00 of Indebtedness pursuant to the first paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*" or (b) the Fixed Charge Coverage Ratio of the Issuer and the Restricted Subsidiaries would not be lower than it was immediately prior to giving effect to such transaction; and

(4) the Issuer or the Successor Issuer, as the case may be, shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each to the effect that such consolidation, merger or transfer and such supplemental indenture (in the case of a Successor Issuer) comply with the Indenture and an Opinion of Counsel to the effect that such supplemental indenture (in the case of a Successor Issuer) is a legal and binding agreement enforceable against the Successor Issuer, *provided* that in giving an Opinion of Counsel, counsel may rely on an Officer's Certificate as to any matters of fact, including as to satisfaction of clauses (1), (2) and (3) above.

The Successor Issuer will succeed to, and be substituted for, and may exercise every right and power of, the Issuer under the Notes and the Indenture, but in a case of a lease of all or substantially all of its assets, the predecessor Person will not be released from its obligations under the Indenture or the Notes.

Guarantors

No Guarantor may:

(1) consolidate with or merge with or into any Person; or

(2) 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

(3) 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 such transaction;

(B) either (x) the Issuer or another Guarantor is the continuing Person or (y) the resulting, surviving or transferee Person expressly assumes all of the obligations of the Guarantor under its Note Guarantee and the Indenture, the Intercreditor Agreement, any Additional Intercreditor Agreement and the Security Documents, as applicable and (2) immediately after giving effect to such transaction, no Default has occurred and 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 not prohibited by the Indenture.

The provisions set forth in this "*Merger and Consolidation*" covenant shall not restrict (and shall not apply to): (i) any Restricted Subsidiary that is not 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 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 (A) if the Issuer is not the surviving entity of such merger or consolidation, the relevant Guarantor will assume the obligations of the Issuer under the Notes, the Indenture, the Intercreditor Agreement, any Additional Intercreditor Agreement and the Security Documents and clauses (1) and (4) under the heading "*—The Issuer*" shall apply to such transaction; and (B) to the extent that any Security Interest 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 holding company of the relevant surviving entity shall, subject to the Agreed Security Principles, grant a Security Interest over the shares in the capital of such surviving entity on substantially equivalent terms to any Security Interest granted over the shares in the capital of such predecessor Guarantor immediately prior to such merger or consolidation; or (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, however*, that clauses (1), (2) and (4) under the heading "*—The Issuer*" or clause (3) under this heading "*Guarantors*," as the case may be, shall apply to any such transaction; or (v) any Permitted Holdco Transaction.

The foregoing provisions (other than the requirements of clause (2) of the first paragraph under the heading "—*The Issuer*") shall not apply to the creation of a new Subsidiary as a Restricted Subsidiary. Notwithstanding the foregoing, the Transactions and any Permitted Holdco Transactions will be permitted without compliance with this section.

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.

Events of Default

Each of the following is an Event of Default under the Indenture:

(1) default in any payment of interest on any Note when due and payable, continued for 30 days;

(2) 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;

(3) failure by the Issuer or any Guarantor 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 to comply with any agreement or obligation contained in the Indenture;

(4) 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 group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and the Restricted Subsidiaries) would constitute a Significant Subsidiary) (or the payment of which is Guaranteed by the Issuer or any Significant Subsidiary (or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and the Restricted Subsidiaries or, in respect of the period prior to the availability of audited consolidated financial statements for the Issuer following the Issue Date, as of the latest audited consolidated financial statements for the Target Group) would constitute a Significant Subsidiary)) 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:

    (a) 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 ("payment default"); or

    (b) results in the acceleration of such Indebtedness prior to its stated final maturity (the "cross acceleration provision"),

    and, in each case, the principal amount of any such Indebtedness, together with the principal amount of any other such Indebtedness under which there has been a payment default of principal at its stated final maturity (after giving effect to any applicable grace periods) or the maturity of which has been so accelerated, aggregates €50.0 million or more at any time outstanding;

(5) certain events of bankruptcy, insolvency or court protection of the Issuer or a Significant Subsidiary (or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and the Restricted Subsidiaries) would constitute a Significant Subsidiary) (the "bankruptcy provisions");

(6) failure by the Issuer or a Significant Subsidiary (or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and the Restricted Subsidiaries) would constitute a Significant Subsidiary) to pay final and non-appealable judgments aggregating in excess of €50.0 million 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 as described in the next succeeding paragraph) 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");

(7) any Security Interest under the Security Documents having a fair market value in excess of €10.0 million shall, at any time, cease to be in full force and effect (other than in accordance with the terms of the relevant 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 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 10 days;

(8) except as permitted under the Indenture, the Intercreditor Agreement or any Additional Intercreditor Agreement (including with respect to any limitations), any Note Guarantee of a Guarantor that is a Significant Subsidiary (or any group of Guarantors that, taken together (as of the latest audited consolidated financial statements for the Issuer and the Restricted Subsidiaries) would constitute 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 Guarantor that is a Significant Subsidiary (or any group of Guarantors that, taken together (as of the latest audited consolidated financial statements for the Issuer and the Restricted Subsidiaries) would constitute a Significant Subsidiary), or any Person acting on behalf of any such Guarantor or Guarantors, denies or disaffirms its obligations under its Note Guarantee and such Default continues for 10 days; and

(9) failure of the Issuer to consummate a Special Mandatory Redemption pursuant to the terms of the Escrow Agreement.

However, a Default under clauses (4) or (6) of this paragraph will not constitute an Event of Default until the Trustee or the Holders of at least 30% in aggregate principal amount of the outstanding Notes notify the Issuer of the Default and, with respect to clauses (4) and (6), the Issuer does not cure such Default within 60 days after receipt of such notice.

If an Event of Default (other than an Event of Default described in clause (5) above) occurs and is continuing, the Trustee by written notice to the Issuer or the Holders of at least 30% in aggregate 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, 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 (4) under "*Events of Default*" 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 clause (4) 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.

If an Event of Default described in clause (5) above with respect to the Issuer 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 Security Documents except as provided in such Security Documents and the Intercreditor Agreement or any Additional Intercreditor Agreement.

The Holders of 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 entitled "*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 (prior to acceleration in respect of the relevant breach) 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;

(2) Holders of at least 30% in principal amount of the outstanding Notes have requested in writing the Trustee to pursue the remedy;

(3) such Holders 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, cost 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 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 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 after the end of each fiscal year, an Officer's Certificate indicating whether the signers thereof know of any Default that occurred during the previous year. The Issuer is required to deliver to the Trustee, within 30 days after the occurrence thereof, written notice of any events of which it is aware which would constitute certain Defaults, their status and what action the Issuer is taking or proposes to take in respect thereof.

Amendments and Waivers

Subject to certain exceptions, the Notes Documents may be amended, supplemented or otherwise modified 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) and, subject to certain exceptions, 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). However, without the consent of Holders holding not less than 90% (or, in the case of clause (9) below, 75%) of the then outstanding principal amount of the Notes, 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 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 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 above under "*Optional Redemption*" or "*Redemption for Taxation Reasons*";

(4) make any such Note payable in currency other than that stated in such Note;

(5) impair the right of any Holder 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 provision 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 Collateral (taken as a whole) other than in accordance with the terms of the 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 covenant described under the heading "*Certain Covenants—Impairment of Security Interest*," the release of less than all or substantially all Security Interests granted for the benefit of the Holders in the Collateral (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, subject to certain exceptions, 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 any of 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.

For the avoidance of doubt, no amendment to, or deletion of, or actions taken in compliance with, the covenants described under "*Certain Covenants*" 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.

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 Notes Documents to:

(1) cure any ambiguity, omission, mistake, defect, error or inconsistency;

(2) provide for the assumption by a successor Person of the obligations of the Issuer or a Guarantor under any Notes Document;

(3) add to the covenants or provide for a 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 additional rights or benefits to the Trustee or the Holders or make any change (including changing the ISIN 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 any Restricted Subsidiary to provide a Guarantee in accordance with the covenant described under "*Certain Covenants—Limitation on Indebtedness*" or "*Certain Covenants—Additional Guarantees*," 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 Security Documents, the Intercreditor Agreement or any Additional Intercreditor Agreement;

(7) to conform the text of the Indenture, the 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 verbatim recitation of a provision of the Indenture, the Security Documents or the Notes;

(8) evidence and provide for the acceptance and appointment under the Indenture or the Intercreditor Agreement or any Additional Intercreditor Agreement of a successor Trustee pursuant to the requirements thereof or to provide for the accession by the Trustee to any Notes Document;

(9) in the case of the 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 Facilities, in any property which is required by the Security Documents or the Senior Facilities (as in effect on the Issue Date) 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 Collateral for the benefit of any Person; *provided* that the granting of such Security Interest is not prohibited by the Indenture or the Intercreditor Agreement or any Additional Intercreditor Agreement and the covenant described under "*Certain Covenants—Impairment of Security Interest*" is complied with;

(10) 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;

(11) facilitate any transaction that complies with the covenants described under the headings "*Merger and Consolidation*" and "*Certain Covenants—Limitation on Sales of Assets and Subsidiary Stock*" relating to mergers, consolidations and sales of assets; or

(12) as provided in "*Certain Covenants—Additional Intercreditor Agreements*."

In formulating its decisions on such matters, the Trustee 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 of any Notes Document. It is sufficient if such consent approves the substance of the proposed amendment. A consent to any amendment or waiver under the Indenture by any Holder of Notes given in connection with a tender of such Holder's Notes will not be rendered invalid by such tender. The Indenture will not contain a covenant regulating the offer and/or payment of a consent fee to Holders.

Defeasance

The Issuer at any time may terminate all obligations of the Issuer and the Guarantors under the Notes 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 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 it and the Restricted Subsidiaries under the covenants described under "*Certain Covenants*" (other than clauses (1), (2) and (4) 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 provisions 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 (3) (other than clauses (1), (2) and (4) of "*Merger and Consolidation—The Issuer*"), (4), (5) (with respect only to the Issuer and Significant Subsidiaries (or a group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and the Restricted Subsidiaries) would constitute a Significant Subsidiary) of the Issuer), (6), (7) or (8) under "*Events of Default*" above.

In order to exercise either defeasance option, the Issuer must irrevocably deposit in trust (the "defeasance trust") with the Trustee cash in Euros 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, and 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, in their capacity as Holders, 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 and any Additional Intercreditor Agreement and the 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 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 in the name, and at the expense, of the Issuer; (2) the Issuer has deposited or caused to be deposited with the Trustee, money in Euros or European Government Obligations, or a combination thereof, as applicable, 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 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; (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 "*Satisfaction and Discharge*" 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) and (3)).

No Personal Liability of Directors, Officers, Employees and Shareholders

No director, officer, employee, incorporator or shareholder of the Issuer or any of its respective Subsidiaries or Affiliates, as such, shall have any liability for any obligations of the Issuer or any Guarantor under the Notes 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 received 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.

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 will be permitted to engage in other transactions with the Issuer and its Affiliates and Subsidiaries.

The Indenture sets 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 or acquires a conflict of interest that is not eliminated, (b) fails to meet certain minimum limits regarding the aggregate of its capital and surplus or (c) 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 6 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 or willful misconduct on its part, arising out of or in connection with the acceptance or administration of the Indenture.

Notices

If and for so long as the Notes are listed on the Exchange and if and to the extent that the rules of the Exchange so require, notices of the Issuer with respect to the Notes will be sent to the Exchange.

All notices to Holders 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 Euroclear and Clearstream in accordance with the applicable procedures of Euroclear and Clearstream, 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.

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 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 mailed in the manner provided above, it is duly given, whether or not the addressee receives it. If a notice or communication is given in via Euroclear or Clearstream, it is duly given on the day the notice is given to Euroclear or Clearstream.

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 sole currency of account and payment for all sums payable by the Issuer and the Guarantors under or in connection with the Notes and the Note Guarantees, including damages. Any amount received or recovered in a currency other than Euro, 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 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 Euro amount 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 that Euro amount is less than the Euro amount expressed to be due to the recipient 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 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 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 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 Exchange and for permission to be granted to deal in the Notes on the Exchange. There can be no assurance that the application to list the Notes on 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 substantially all the assets of the Issuer and the Guarantors 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 the Issuer and each Guarantor 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, and the rights and duties of the parties thereunder, and the Note Guarantees 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 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 and the rights and duties of the parties thereunder shall be governed by and construed in accordance with the laws of England. The Security Documents will be governed by the law of the location of the relevant asset that is part of the Collateral.

Certain Definitions

"*Acquired Indebtedness*" means Indebtedness (1) of a Person or any of its Subsidiaries existing at the time such Person becomes a Restricted Subsidiary; (2) 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 (3) of a Person at the time such Person merges with or into or consolidates or otherwise combines with the Issuer or any Restricted Subsidiary. Acquired Indebtedness shall be deemed to have been Incurred, with respect to clause (1) of the preceding sentence, on the date such Person becomes a Restricted Subsidiary, with respect to clause (2) of the preceding sentence, on the date of consummation of such acquisition of assets and, with respect to clause (3) of the preceding sentence, on the date of the relevant merger, consolidation or other combination.

"*Acquisition*" means the acquisition of the Target and its subsidiaries by the Initial Guarantor pursuant to the Acquisition Agreement.

"*Acquisition Agreement*" means the sale, purchase and transfer agreement dated as of October 10, 2017, among, *inter alios*, the Initial Guarantor and the existing shareholders of the Target.

"*Additional Assets*" means:

(1) any property or assets (other than Capital Stock) used or to be used by the Issuer, a Restricted Subsidiary or otherwise useful in a Similar Business (it being understood that capital expenditures on property or assets already 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 (in each case, on or after the Issue Date));

(2) 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

(3) 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.

"*Agreed Security Principles*" means the agreed security principles appended to the Senior Facilities Agreement, as of the Issue Date, as applied *mutatis mutandis* with respect to the Notes in good faith by the Issuer.

"*Applicable Premium*" means the greater of:

(a) 1% of the principal amount of such Note; and

(b) the excess (to the extent positive) of:

(i) the present value at such redemption date of (A) the redemption price of such Note at, , 2020 (such redemption price (expressed in percentage of principal amount) being set forth in the table under "*Optional Redemption*" (excluding accrued and unpaid interest)), plus (B) all required interest payments due on such Note to and including , 2020 (excluding accrued but unpaid interest), computed upon the redemption date using a discount rate equal to the Bund Rate at such redemption date (or, if greater than such Bund Rate, zero) 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 of the Trustee or Paying Agent.

"*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:

(1) a disposition by the Issuer or a Restricted Subsidiary to the Issuer or a Restricted Subsidiary;

(2) a disposition of cash, Cash Equivalents, Temporary Cash Investments or Investment Grade Securities;

(3) a disposition of inventory or other assets (including Settlement Assets) in the ordinary course of business or consistent with past practice or held for sale or no longer used in the ordinary course of business, including any disposition of disposed, abandoned or discontinued operations;

(4) a disposition of obsolete, worn-out, uneconomic, damaged or surplus property, equipment 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);

(5) transactions permitted under "*Merger and Consolidation*" or a transaction that constitutes a Change of Control;

(6) an issuance of Capital Stock by a Restricted Subsidiary to the Issuer or to another Restricted Subsidiary or as part of or pursuant to an equity incentive or compensation plan approved by the Board of Directors of the Issuer;

(7) 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) of less than the greater of (a) €20.0 million and (b) 10.0% of LTM EBITDA;

(8) 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 Permitted Payment or Permitted Investment or, solely for purposes of the third paragraph under "*Certain Covenants—Limitation on Sales of Assets and Subsidiary Stock*," asset sales, the proceeds of which are used within 180 days of receipt of such proceeds to make such Restricted Payments, Permitted Payments or Permitted Investments;

(9) dispositions in connection with Permitted Liens;

(10) dispositions of receivables in connection with the compromise, settlement or collection thereof in the ordinary course of business or consistent with past practice or in bankruptcy or similar proceedings and exclusive of factoring or similar arrangements;

(11) conveyances, sales, transfers, licenses or sublicenses or other dispositions of intellectual property, software or other general intangibles and licenses, sub-licenses, leases or subleases of other property, in each case, in the ordinary course of business or consistent with past practice or 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;

(12) the lease, assignment, license, sublease or sublicense of any real or personal property in the ordinary course of business;

(13) foreclosure, condemnation, taking by eminent domain or any similar action with respect to any property or other assets;

(14) the sale or discount (with or without recourse, and on customary or commercially reasonable terms and for credit management purposes) of accounts receivable or notes receivable arising in the ordinary course of business or consistent with past practice, or the conversion or exchange of accounts receivable for notes receivable;

(15) 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 an Immaterial Subsidiary;

(16) 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;

(17) dispositions of property to the extent (i) that such property is exchanged for credit against the purchase price of similar replacement property that is promptly purchased; (ii) 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 (iii) allowable under Section 1031 of the U.S. Internal Revenue 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;

(18) 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 or consistent with past practice;

(19) any disposition pursuant to a 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 Sale and Leaseback Transactions and asset securitizations, permitted by the Indenture;

(20) 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;

(21) any surrender or waiver of contractual rights or the settlement, release, surrender or waiver of contractual, tort, litigation or other claims of any kind; and

(22) the unwinding of any Cash Management Services or Hedging Obligations.

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 "*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 *"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.

"*Board of Directors*" means (i) with respect to any corporation, the board of directors or managers, as applicable, of the corporation, or any duly authorized committee thereof; (ii) with respect to any partnership, the board of directors or other governing body of the general partner, as applicable, of the partnership or any duly authorized committee thereof; (iii) with respect to a limited liability company, the managing member or members or any duly authorized controlling committee thereof; and (iv) with respect to any other Person, the board or any duly authorized committee of such 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 (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 as a formal board approval). Unless the context requires otherwise, Board of Directors means the Board of Directors of the Issuer.

"*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 , 2020; *provided*, *however*, that if the period from the redemption date to , 2020 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 , 2020 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.

"*Business Day*" means each day that is not a Saturday, Sunday or other day on which banking institutions in (i) Frankfurt, 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 Equivalents*" means:

(1) (a) Euros, Canadian dollars, Swiss Francs, United Kingdom pounds, Japanese Yen, Dollars or any national currency of any member state of the European Union; or (b) any other foreign currency held by the Issuer and the Restricted Subsidiaries in the ordinary course of business;

(2) securities or other direct obligations, issued or directly and fully Guaranteed or insured by the United States of America, Canadian, Japanese, Australian, Swiss, Norwegian or United Kingdom governments, the European Union or any member state of the European Union 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;

(3) 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 (a) whose commercial paper is rated at least "A-1"or the equivalent thereof by S&P 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 (b) (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 €250.0 million;

(4) repurchase obligations for underlying securities of the types described in clauses (2), (3) and (7) entered into with any bank meeting the qualifications specified in clause (3) above;

(5) 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 (3) above;

(6) commercial paper and variable or fixed rate notes issued by a bank meeting the qualifications specified in clause (3) 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 "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;

(7) 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 (1) through (6) above; and

(8) for purposes of clause (2) of the definition of "Asset Disposition," the marketable securities portfolio owned by the Issuer and its Subsidiaries on the Issue Date.

"*Cash Management Services*" means any of the following to the extent not constituting a line of credit (other than an overnight draft facility that is not in default): automated clearing house transactions, treasury, depository, credit or debit card, purchasing card, stored value card, electronic fund transfer services 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 or consistent with past practice.

"*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 (*provided* that any Voting Stock of which any Permitted Holder is the "beneficial owner" (as so defined) shall not be included in any Voting Stock of which any such person or group is the "beneficial owner" (as so defined) unless that person or group is not an Affiliate of a Permitted Holder and has the sole voting power with respect to that Voting Stock) 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;

(2) the Company ceasing to directly own 100% of the total issued share capital (excluding director's qualifying shares) of the Issuer (or any successor entity as a result of a merger of the Issuer and the Target and/or the Initial Guarantor); or

(3) 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 holding company if (A) the direct or indirect holders of the Voting Stock of such 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 cause a party to be a beneficial owner and (c) a Permitted Holdco Transaction shall not constitute a Change of Control.

"*Clearstream*" means Clearstream Banking, *société anonyme*, or any successor thereof.

"*Collateral*" means the First-Priority Collateral and the Shared Collateral and any and all other assets from time to time in which a Security Interest has been or will be granted pursuant to any Security Document to secure the obligations under the Indenture, the Notes and/or any Note Guarantee.

"*Company*" means CTC TopCo GmbH.

"*Completion Date*" means the date of completion of the Acquisition.

"*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 (i) intangibles and non-cash organization costs, (ii) deferred financing fees or costs and (iii) capitalized expenditures, 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 its Subsidiaries that are 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:

(1) increased (without duplication) by:

(a) 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*

(b) Fixed Charges of such Person for such period (including (x) net losses on any Hedging Obligations or other derivative instruments entered into for the purpose of hedging interest rate, currency or commodities risk, (y) bank fees and (z) costs of surety bonds in connection with financing activities, plus amounts excluded from the definition of "Consolidated Interest Expense" pursuant to clauses (s) through (z) in clause (1) thereof), in each case, to the extent the same were deducted (and not added back) in calculating such Consolidated Net Income; *plus*

(c) 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*

(d) any (x) Transaction Expenses and (y) 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), 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 (i) such fees, expenses or charges (including rating agency fees and related expenses) related to the offering of the Notes, the Senior Facilities, any other Credit Facility and any Securitization Fees, and (ii) any amendment, waiver or other modification of the Notes, the Senior Facilities, Receivables Facilities, Securitization Facilities, any other Credit Facility, any other Indebtedness permitted to be Incurred under the Indenture or any Equity Offering, in each case, whether or not consummated, to the extent the same were deducted (and not added back) in computing Consolidated Net Income; *plus*

(e) (i) the amount of any restructuring charge, accrual or reserve (and adjustments to existing reserves), 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 costs 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), systems development and establishment costs, future lease commitments, costs to relocate employees, costs associated with non-ordinary course tax projects/audits and costs related to the opening, closure, relocation and/or consolidation of facilities and to exiting lines of business and consulting fees Incurred with any of the foregoing and (ii) fees, costs and expenses associated with acquisition related litigation and settlements thereof; *plus*

(f) 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*

(g) 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 "*Certain Covenants—Limitation on Affiliate Transactions*"; *plus*

(h) the "run rate" cost savings, operating expense reductions, restructuring charges and expenses and synergies that are expected (in good faith) to be realized as a result of actions taken or expected to be taken within 24 months after the date of any acquisition, disposition, divestiture, restructuring or the implementation of a cost savings or other similar initiative, as applicable (calculated on a *pro forma* basis as though such cost savings, operating expense reductions, restructuring charges and expenses and synergies had been realized from the first day of such period and during the entirety of such period), net of the amount of actual benefits realized during such period from such actions; *provided* that (i) such actions are expected to be taken within 24 months after the consummation of the acquisition, disposition, restructuring or the implementation of an initiative, as applicable, which is expected to result in cost savings, operating expense reductions, restructuring charges and expenses or synergies, and (ii) no cost savings, operating expense reductions, restructuring charges and expenses or synergies shall be added pursuant to this defined term to the extent duplicative of any expenses or charges otherwise added to Consolidated EBITDA, whether through a *pro forma* adjustment or otherwise, for such period (which adjustments, without double counting, may be incremental to *pro forma* adjustments made pursuant to the definition of "Fixed Charge Coverage Ratio" (excluding, for the avoidance of doubt, the further proviso to the first paragraph of such definition)); *plus*

(i) the "run rate" expected cost savings, operating expense reductions including, without limitation, costs and expenses related to information and technology systems establishment, modernization or modification, restructuring charges and expenses and synergies related to the Transactions projected by the Issuer in good faith to result from actions with respect to which substantial steps have been, will be, or are expected to be, taken (in the good faith determination of the Issuer), calculated on a *pro forma* basis as though such cost savings, operating expense reductions, restructuring charges and expenses and synergies had been realized from the first day of such period and during the entirety of such period, net of the amount of actual benefits realized during such period from such actions, and which adjustments, without double counting, may be incremental to *pro forma* adjustments made pursuant to the definition of "Fixed Charge Coverage Ratio" (excluding, for the avoidance of doubt, the further proviso to the first paragraph of such definition); *plus*

(j) 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*

(k) 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 solely to the extent that such Net Cash Proceeds are excluded from the calculation set forth in clause (c) of the first paragraph under "*Certain Covenants—Limitation on Restricted Payments*"; *plus*

(l) 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 (2) below for any previous period and not added back; *plus*

(m) any net loss included in the Consolidated Net Income attributable to non-controlling interests; *plus*

(n) 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 the Restricted Subsidiaries; *plus*

(o) net realized losses from Hedging Obligations or embedded derivatives; *plus*

(p) 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, including any costs and expenses (including all legal, accounting and other professional fees and expenses) related thereto; *plus*

(q) with respect to any joint venture, an amount equal to the proportion of those items described in clauses (a) and (c) 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*

(r) earn-out and contingent consideration obligations (including to the extent accounted for as bonuses or otherwise) and adjustments thereof and purchase price adjustments; *plus*

(s) 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*

(t) the amount of expenses relating to payments made to option holders (or employees holding other rights tied to the equity value of the Issuer or any Parent Entity) of the Issuer or any Parent Entity in connection with, or as a result of, any distribution being made to equityholders of such Person or its Parent Entities, which payments are being made to compensate such option holders as though they were equityholders at the time of, and entitled to share in, such distribution, in each case to the extent permitted under the Indenture; *plus*

(u) to the extent not already otherwise included herein, adjustments and add-backs of the nature made in calculating "Pro Forma Adjusted EBITDA" for the pro forma twelve months ended September 30, 2017, included in the Offering Memorandum; *plus*

(v) 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*

(w) 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; and

(2) decreased (without duplication) by non-cash items 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:

(1) consolidated interest expense of such Person and its Subsidiaries that are 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 (a) amortization of original issue discount or premium resulting from the issuance of Indebtedness at less than par, (b) all commissions, discounts and other fees and charges owed with respect to letters of credit or bankers acceptances, (c) 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), (d) the interest component of Capitalized Lease Obligations, and (e) net payments, if any, pursuant to interest rate Hedging Obligations with respect to Indebtedness, and excluding (s) Securitization Fees, (t) penalties and interest relating to taxes (but excluding, for the avoidance of doubt, any Additional Amounts paid with respect to the Notes or the Note Guarantees, (u) any additional cash interest owing pursuant to any registration rights agreement, (v) accretion or accrual of discounted liabilities other than Indebtedness, (w) any expense resulting from the discounting of any Indebtedness in connection with the application of recapitalization accounting or purchase accounting in connection with the Transactions or any acquisition, (x) 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 Indebtedness borrowed under the Senior Facilities 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, (y) any expensing of bridge, commitment and other financing fees and (z) 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*

(2) consolidated capitalized interest of such Person and its Subsidiaries that are 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*

(3) interest income for such period.

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 after any reduction in respect of Preferred Stock dividends; *provided*, *however*, that there will not be included in such Consolidated Net Income:

(1) 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 Equivalents 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 (subject, in the case of a dividend or other distribution or return on investment to a Restricted Subsidiary, to the limitations contained in clause (2) below); *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";

(2) solely for the purpose of determining the amount available for Restricted Payments under clause (c)(i) of the first paragraph of the covenant described under "*Certain Covenants—Limitation on Restricted Payments*," any net income (loss) of any Restricted Subsidiary (other than the Issuer and the Guarantors) if such Subsidiary is subject to restrictions, directly or indirectly, on the payment of dividends or the making of distributions by such Restricted Subsidiary, directly or indirectly, to the Issuer or a Guarantor by operation of the terms of such Restricted Subsidiary's articles, charter or any agreement, instrument, judgment, decree, order, statute or governmental rule or regulation applicable to such Restricted Subsidiary or its shareholders (other than (a) restrictions that have been waived or otherwise released, (b) restrictions pursuant to the Senior Facilities, the Intercreditor Agreement, any Additional Intercreditor

Agreement, the Notes or the Indenture and (c) restrictions specified in clause (13)(a) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Restrictions on Distributions from Restricted Subsidiaries*") except that the Issuer's equity in the net income of any such Restricted Subsidiary for such period will be included in such Consolidated Net Income up to the aggregate amount of cash or Cash Equivalents actually distributed or that could have been distributed by such Restricted Subsidiary during such period to the Issuer or another Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend to another Restricted Subsidiary, to the limitation contained in this clause);

(3) 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);

(4) any extraordinary, exceptional, 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), 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, costs related to closure/consolidation of facilities, 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), contract terminations and professional and consulting fees Incurred with any of the foregoing;

(5) the cumulative effect of a change in law, regulation or accounting principles, including any impact resulting from an election by the Issuer to apply GAAP at any time following the Issue Date;

(6) 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; (ii) income (loss) attributable to deferred compensation plans or trusts and (iii) costs or expenses realized in connection with or resulting from stock appreciation or similar rights, stock options or other rights existing on the Issue Date of officers, directors and employees, in each case of such Person or any of its Restricted Subsidiaries;

(7) all deferred financing costs written off and premiums paid or other expenses Incurred directly in connection with any early extinguishment of Indebtedness and any net gain (loss) from any write-off or forgiveness of Indebtedness;

(8) any unrealized gains or losses in respect of any Hedging Obligations 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;

(9) any fees 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, disposition of assets or securities, issuance or repayment 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;

(10) any unrealized foreign currency 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 foreign exchange gains or losses relating to translation of assets and liabilities denominated in foreign currencies;

(11) any unrealized or realized gain or loss due solely to fluctuations in currency values and the related tax effects, determined in accordance with IFRS;

(12) any recapitalization accounting or purchase accounting effects, including, but not limited to, 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);

(13) 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;

(14) any effect of income (loss) from the early extinguishment or cancellation of Indebtedness or any Hedging Obligations or other derivative instruments;

(15) accruals and reserves and any gains and losses on the settlement of any pre-existing contractual or non-contractual relationships as a result of the Transactions 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 Transactions in accordance with IFRS, or changes as a result of adoption or modification of accounting policies;

(16) any costs associated with the Transactions;

(17) 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 Transactions, or the release of any valuation allowances related to such item;

(18) 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);

(19) 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;

(20) the impact of capitalized, accrued or accreting or pay-in-kind interest or principal on Subordinated Shareholder Funding;

(21) (a) the non-cash portion of "straight-line" rent expense and (b) any net unrealized gains and losses resulting from fair value accounting required by IAS 39 (including as a result of the mark-to-market of obligations under swap contracts and other derivative instruments); and

(22) any non-cash interest expense and non-cash interest income, in each case to the extent there is no associated cash disbursement or receipt, as the case may be, before the earlier of the maturity date of the Notes and the date on which all the Notes cease to be outstanding, shall be excluded.

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 (i) 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 (A) not denied by the applicable payor in writing within 180 days and (B) 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 (ii) 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 (A) not denied by the applicable carrier in writing within 180 days and (B) 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.

"*Consolidated Total Indebtedness*" means, as of any date of determination, (a) the aggregate principal amount of Indebtedness for borrowed money (excluding Indebtedness with respect to Cash Management Services and intercompany Indebtedness of the Group (including the Target Group) as of such date), plus (b) Capitalized Lease Obligations, Purchase Money Obligations and unreimbursed drawings under letters of credit of the Issuer and the Restricted Subsidiaries outstanding on such date, minus (c) the aggregate amount of cash and Cash Equivalents included in the consolidated balance sheet of the

Issuer and the Restricted Subsidiaries as of the end of the most recent fiscal period for which internal financial statements of the Issuer are available (*provided* that the cash proceeds of any proposed Incurrence of Indebtedness shall not be included in this clause (c) for purposes of calculating the Consolidated Total Net Leverage Ratio), with such pro forma adjustments as are consistent with the pro forma adjustments set forth in the definition of "Fixed Charge Coverage Ratio." For the avoidance of doubt, Consolidated Total Indebtedness shall exclude Indebtedness in respect of any Hedging Obligations, Receivables Facility or Securitization Facility.

"*Consolidated Total Net Leverage Ratio*" means, as of any date of determination, the ratio of (x) the sum of (a) Consolidated Total Indebtedness as of such date and (b) the Reserved Indebtedness Amount as of such date, to (y) LTM EBITDA; *provided*, *however*, that the pro forma calculation shall not give effect to (i) any Indebtedness Incurred on such determination date pursuant to the provisions described in the second paragraph under "*Certain Covenants—Limitation on Indebtedness*" (other than Indebtedness Incurred pursuant to clauses (1)(d) or 5(b) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*"), (ii) any Indebtedness Incurred pursuant to clause (4)(a) 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 the proceeds Incurred pursuant to the provisions described in the second paragraph under "*Certain Covenants—Limitation on Indebtedness*" (other than the discharge of Indebtedness using proceeds of Indebtedness Incurred pursuant to clauses (1)(d) and (5)(b) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*").

"*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:

(1) to purchase any such primary obligation or any property constituting direct or indirect security therefor;

(2) to advance or supply funds:

  (a) for the purchase or payment of any such primary obligation; or

  (b) 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

(3) 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 or other arrangements (including the Senior Facilities or commercial paper facilities and overdraft facilities) with banks, other financial institutions 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 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 (1) changing the maturity of any Indebtedness Incurred thereunder or contemplated thereby, (2) adding Subsidiaries of the Issuer as additional borrowers or guarantors thereunder, (3) increasing the amount of Indebtedness Incurred thereunder or available to be borrowed thereunder or (4) otherwise altering the terms and conditions thereof.

"*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 (as determined in good faith by the Issuer or any Restricted Subsidiary) of non-cash consideration received by the Issuer or any of the Restricted Subsidiaries 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 or Cash Equivalents or Temporary Cash Investments received in connection with a subsequent payment, redemption, retirement, sale or other disposition of 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 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, the Net Cash Proceeds of which are excluded from the calculation set forth in clause (c)(iii) of the first paragraph of the covenant described under "*Certain Covenants—Limitation on Restricted Payments*."

"*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:

(1) matures or is mandatorily redeemable for cash or in exchange for Indebtedness pursuant to a sinking fund obligation or otherwise; or

(2) 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 (a) the Stated Maturity of the Notes or (b) the date on which there are no Notes outstanding; *provided*, *however*, that (i) 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 (ii) 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, however*, 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.

"*Equity Offering*" means (x) 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 (y) 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, any Shareholder Contribution or Excluded Contributions.

"*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. 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 or any successor thereof.

"*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.

"*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 as capital contributions to the equity (other than through the issuance of Disqualified Stock or Designated Preferred Stock) of the Issuer after the Issue Date or from the issuance or sale (other than 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) of Capital Stock (other than Disqualified Stock or Designated Preferred Stock) or Subordinated Shareholder Funding of the Issuer (other than a Shareholder Contribution), in each case, to the extent designated as an Excluded Contribution pursuant to an Officer's Certificate of the Issuer.

"*fair market value*" wherever such term is used in this "*Description of the Notes*" or the Indenture (except as otherwise specifically provided in this "*Description of the Notes*" or 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 such Board of Directors in good faith.

"*First-Priority Collateral*" means has the meaning given to the term "Topco Independent Transaction Security" in the Intercreditor Agreement as in effect on the Issue Date.

"*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, with respect to any Person on any determination date, the ratio of LTM EBITDA to the Fixed Charges of such Person for the most recent four consecutive fiscal quarters ending immediately prior to such determination date for which internal consolidated financial statements are available (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 during such period or issues or redeems Disqualified Stock or Preferred Stock 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 applicable four-quarter period; *provided*, *however*, that the pro forma calculation shall not give effect to: (i) any Fixed Charges attributable to Indebtedness Incurred on the Fixed Charge Coverage Ratio Calculation Date pursuant to the provisions described in the second paragraph under "*Certain Covenants—Limitation on Indebtedness*" (other than Fixed Charges attributable to Indebtedness Incurred pursuant to clauses (1)(d) and (5)(b) thereof), (ii) Fixed Charges attributable to Indebtedness Incurred pursuant to clause (4)(a) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*" or (iii) Fixed Charges attributable to any Indebtedness discharged on such Fixed Charge Coverage Ratio Calculation Date to the extent that such discharge results from the proceeds Incurred pursuant to the provisions described under the second paragraph under "*Certain Covenants—Limitation on Indebtedness*" (other than Fixed Charges attributable to Indebtedness discharged on such Fixed Charge Coverage Ratio Calculation Date using proceeds of Indebtedness Incurred pursuant to clauses (1)(d) and (5)(b) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*").

For purposes of making the computation referred to above, any Investments, acquisitions, dispositions, mergers, amalgamations, consolidations and disposed operations that have been made by the Issuer or any of the Restricted Subsidiaries, during the reference period or subsequent to the reference period and on or prior to or simultaneously with the Fixed Charge Coverage Ratio Calculation Date shall be calculated on a pro forma basis assuming that all such Investments, acquisitions, dispositions, mergers, amalgamations, consolidations and disposed or discontinued operations (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 since the beginning of such period any Person that subsequently became a Restricted Subsidiary or was merged or amalgamated with or into the Issuer or any of the Restricted Subsidiaries since the beginning of such period shall have made any Investment, acquisition, disposition, merger, amalgamation, consolidation or disposed or discontinued operation that would have required adjustment pursuant to this definition, then the Fixed Charge Coverage Ratio shall be calculated giving pro forma effect thereto for such period as if such Investment, acquisition, disposition, merger, amalgamation, consolidation or disposed operation had occurred at the beginning of the reference period.

For purposes of this definition, whenever pro forma effect is to be given to a transaction, the pro forma calculations shall be made in good faith by a responsible financial or chief accounting officer of the Issuer (and may include cost savings and synergies). 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 a responsible financial or accounting 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.

”*Fixed Charges*” means, with respect to any Person for any period, the sum of:

(1) Consolidated Interest Expense of such Person for such period;

(2) 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

(3) all cash dividends or other distributions paid (excluding items eliminated in consolidation) on any series of Disqualified Stock during this period.

For the avoidance of doubt, any payments made by the Issuer or any Restricted Subsidiary under any domination agreement and profit and loss transfer agreement to minority shareholders shall constitute Fixed Charges.

“*GAAP*” means generally accepted accounting principles in Germany.

“*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:

(1) 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

(2) 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, *however*, that the term “Guarantee” will not include (x) endorsements for collection or deposit in the ordinary course of business or consistent with past practice and (y) 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 (i) an amount equal to the stated or determinable amount of the primary obligation in respect of which such Guarantee is made and (ii) 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.

“*Guarantor*” means any Restricted Subsidiary that Guarantees the Notes, 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, commodity cap agreement, commodity collar agreement, foreign exchange contracts, currency swap agreement 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 Euroclear or Clearstream, as applicable.

“*IFRS*” means International Financial Reporting Standards (formerly International Accounting Standards) endorsed from time to time by the European Union or any variation thereof with which the Issuer or the Restricted Subsidiaries are, or may be, required to comply, as in effect on the Issue Date or, with respect to the covenant described under the caption “*Reports*,” as in effect from time to time. 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. 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* that any such election, once made, shall be irrevocable. At any time after the Issue Date, the Issuer may elect to apply GAAP accounting principles in lieu of IFRS and, upon any such election, references herein to IFRS shall thereafter be construed to mean GAAP (except as otherwise provided in the Indenture), including as to the ability of the Issuer to make an election pursuant to the previous sentence; *provided* that any such election, once made, shall be irrevocable; *provided*, *further*, that any calculation or determination in the Indenture that require the application of IFRS for periods that include fiscal quarters ended prior to the Issuer's election to apply GAAP shall remain as previously calculated or determined in accordance with IFRS; *provided*, *further again*, that the Issuer may only make such election if it also elects to report any subsequent financial reports required to be made by the Issuer. The Issuer shall give notice of any such election made in accordance with this definition to the Trustee and the Holders. Notwithstanding any of the foregoing, the impact of IFRS 16 (*Leases*) and any successor standard thereto (or any equivalent measure under GAAP) shall be disregarded with respect to all ratios, calculations and determinations based upon IFRS to be calculated or made, as the case may be, pursuant to the Indenture and (without limitation) any lease, concession or license of property that would be considered an operating lease under IFRS (or, as applicable, GAAP) as of the Issue Date and any guarantee given by the Issuer or any Restricted Subsidiary in the ordinary course of business solely in connection with, and in respect of, the obligations of the Issuer or any Restricted Subsidiary under any such operating lease shall be accounted for in accordance with IFRS (or, as applicable, GAAP) as in effect on the Issue Date.

"*Immaterial Subsidiary*" means, at any date of determination, each Restricted Subsidiary that (i) has not guaranteed any other Indebtedness of the Issuer and (ii) has Total Assets of less than 5.0% of Total Assets, revenues of less than 5.0% of the consolidated revenues of the Issuer and the Restricted Subsidiaries and LTM EBITDA of less than 5.0% of LTM EBITDA of the Issuer and the Restricted Subsidiaries taken as a whole and, together with all other Immaterial Subsidiaries (as determined in accordance with IFRS), has Total Assets of less than 10.0% of Total Assets and revenues of less than 10.0% of total revenues of the Issuer and the Restricted Subsidiaries taken as a whole, in each case, measured at the end of the most recent four-quarter fiscal period for which internal financial statements are available and revenues on a pro forma basis giving effect to any acquisitions or dispositions of companies, division or lines of business since such balance sheet date or the start of such four quarter period, as applicable, and on or prior to the date of acquisition of such Subsidiary.

"*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*, *however*, 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):

(1) the principal of indebtedness of such Person for borrowed money;

(2) the principal of obligations of such Person evidenced by bonds, debentures, notes or other similar instruments;

(3) 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);

(4) 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;

(5) Capitalized Lease Obligations of such Person;

(6) 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);

(7) 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*, *however*, that the amount of such Indebtedness will be the lesser of (a) the fair market value of such asset at such date of determination (as determined in good faith by the Issuer) and (b) the amount of such Indebtedness of such other Persons;

(8) Guarantees by such Person of the principal component of Indebtedness of the type referred to in clauses (1), (2), (3), (4), (5) and (9) of other Persons to the extent Guaranteed by such Person; and

(9) 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 (1), (2), (4) and (5) 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 or consistent with past practice, other than Guarantees or other assumptions of Indebtedness;

(ii) Cash Management Services;

(iii) any lease, concession or license of property (or Guarantee thereof) which would be considered an operating lease under IFRS as in effect on the Issue Date or any prepayments of deposits received from clients or customers in the ordinary course of business or consistent with past practice;

(iv) obligations under any license, permit or other approval (or Guarantees given in respect of such obligations) Incurred prior to the Issue Date or in the ordinary course of business or consistent with past practice;

(v) in connection with the purchase by the Issuer or any Restricted Subsidiary of any business, any post-closing payment adjustments to which the seller 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*, *however*, 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;

(vi) 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;

(vii) obligations under or in respect of Qualified Securitization Financings or Receivables Facilities;

(viii) Indebtedness of any Parent Entity appearing on the balance sheet of the Issuer solely by reason of push down accounting under IFRS;

(ix) Capital Stock (other than Disqualified Stock of the Issuer and Preferred Stock of a Restricted Subsidiary);

(x) 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 covenant described under "Merger and Consolidation"; or (B) minority shareholders in connection with any domination and profit and loss transfer agreement;

(xi) Subordinated Shareholder Funding;

(xii) [Reserved];

(xiii) [Reserved]; or

(xiv) 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 for corporate income tax or value added tax purposes or any analogous arrangement in any other jurisdiction of which the Issuer or a Restricted Subsidiary is or becomes a member.

"*Indenture*" means the indenture dated as of the Issue Date, between, *inter alios*, the Issuer, the Guarantors, the Trustee and the Security Agent.

"*Independent Financial Advisor*" means an investment banking or accounting firm of international standing or any third party appraiser of international standing; *provided*, *however*, that such firm or appraiser is not an Affiliate of the Issuer.

"*Initial Investors*" means (a) individually or collectively, one or more investment funds, co-investment vehicles, limited partnerships and/or other similar vehicles or accounts in each case advised or managed by (i) BC Partners LLP; (ii) Public Sector Pension Investment Board and/or (iii) Ontario Teachers' Pension Plan or any investors in such funds, vehicles or partnerships in connection with the syndication; (b) any of their successors, Affiliates or direct or indirect Subsidiaries (but excluding, in each case, any portfolio company which is an obligor (and any of its Subsidiaries) in respect of any third party financing provided to that portfolio company (or any of its Subsidiaries) in which the parties listed in clause (a) above or such Affiliates, Subsidiaries or investors hold an investment or interest in).

"*Initial Public Offering*" means an Equity Offering of common stock or other common equity interests of the Issuer or any Parent Entity or any successor of the Issuer 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 entered into on or about the Issue Date, by and among, *inter alios*, the Issuer and the Security Agent and to which the Trustee will accede, as amended 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 or consistent with past practice, 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*, *however*, that endorsements of negotiable instruments and documents in the ordinary course of business or consistent with past practice 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 "*Certain Covenants—Limitation on Restricted Payments" and "—Designation of Restricted and Unrestricted Subsidiaries*":

(1) "*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*, *however*, that upon a re-designation 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 (a) the Issuer's "Investment" in such Subsidiary at the time of such re-designation less (b) 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

(2) 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:

(1) securities issued or directly and fully Guaranteed or insured by the United States of America or Canadian government or any agency or instrumentality thereof (other than Cash Equivalents);

(2) securities issued or directly and fully guaranteed or insured by the European Union or a member state of the European Union, Switzerland, Japan, Australia or Norway or any agency or instrumentality thereof (other than Cash Equivalents);

(3) debt securities or debt instruments with a rating of ''A-" or higher from S&P or ''A3" or higher by Moody's or the equivalent of such rating by such rating organization or, if no rating of Moody's 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

(4) Investments in any fund that invests exclusively in investments of the type described in clauses (1), (2) and (3) above which fund may also hold cash and Cash Equivalents 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.

"*Issue Date*" means , 2017.

"*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.

"*LTM EBITDA*" means Consolidated EBITDA of the Issuer measured for the period of the most recent four consecutive fiscal quarters ending prior to the date of such determination for which internal consolidated financial statements of the Issuer are available, in each case with such pro forma adjustments giving effect to such Indebtedness, acquisition or Investment, as applicable, since the start of such four quarter period and as are consistent with the pro forma adjustments set forth in the definition of "Fixed Charge Coverage Ratio" (excluding, for the avoidance of doubt, the further proviso to the first paragraph of such definition).

"*Management Advances*" means loans or advances made to, or Guarantees with respect to loans or advances made to, directors, 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, any of the foregoing:

(1) (a) in respect of travel, entertainment or moving related expenses Incurred in the ordinary course of business or consistent with past practice or (b) for purposes of funding any such person's purchase 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;

(2) in respect of moving related expenses Incurred in connection with any closing or consolidation of any facility or office; or

(3) (a) for the purposes of the covenant described under "*Certain Covenants—Limitation on Indebtedness*", not exceeding the greater of (i) €15.0 million in any calendar year and (ii) following a Public Offering of the Issuer or any Parent Entity, €35.0 million in any calendar year and (b) for the purposes of the covenant described under "*Certain Covenants—Limitation on Affiliate Transactions*" and the definition of "Permitted Investment", not exceeding €7.0 million in any calendar year.

"*Management Stockholders*" means the members of management of the Issuer (or any Parent Entity) or its Subsidiaries who are holders of Capital Stock of the Issuer or of any Parent Entity on the Issue Date or will become holders of such Capital Stock in connection with the Transactions.

"*Market Capitalization*" means an amount equal to (i) the total number of issued and outstanding shares of common stock or common equity interest 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.

"*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:

(1) 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;

(2) 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;

(3) 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;

(4) 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

(5) 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).

"*Non-Guarantor Debt Cap*" means an amount of (i) Indebtedness Incurred and/or Disqualified Stock or Preferred Stock issued pursuant to the first paragraph and clauses (1)(b), (1)(c), (1)(d), (11) and (13) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*" and (ii) Acquisition Debt Incurred pursuant to clause (5)(b) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*," in each case by Restricted Subsidiaries that are not Guarantors, which shall not in aggregate exceed the greater of (x) €90.0 million and (y) 45.0% of LTM EBITDA at any time outstanding.

"*Note Guarantee*" means the joint and several guarantee of the obligations under the Notes and the Indenture on a senior subordinated basis by each Guarantor.

"*Notes*" means % Senior Notes due 2025 issued by the Issuer on the Issue Date (and any Additional Notes issued thereafter).

"*Notes Documents*" means the Notes (including Additional Notes), the Indenture (including the Note Guarantees), the Security Documents, the Intercreditor Agreement, any Additional Intercreditor Agreements and the Escrow 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.

"*Offering Memorandum*" mean this offering memorandum, dated as of , 2017, relating to the offering of the Notes.

"*Officer*" means, with respect to any Person, (1) the Chairman of the Board of Directors, the Chief Executive Officer, the Chief Operating Officer, the President, the Chief Financial Officer, any Vice President, the Treasurer, any Assistant Treasurer, any Managing Director, the Secretary or any Assistant Secretary (a) of such Person or (b) if such Person is owned or managed by a single entity, of such entity, or (2) any other individual designated as an "Officer" for the purposes of the Indenture by the Board of Directors of 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 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.

"*Parent Entity*" means any direct or indirect parent of the Issuer.

"*Parent Entity Expenses*" means:

(1) 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, the Indenture or any other agreement or instrument relating to the Notes, the Note Guarantees or any other Indebtedness of the Issuer or any Restricted Subsidiary, 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;

(2) 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;

(3) 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;

(4) any (x) general corporate overhead expenses, including all legal, accounting and other professional fees and expenses and (y) 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;

(5) 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; and

(6) amounts to finance Investments that would otherwise be permitted to be made pursuant to the covenant described above under "*Certain Covenants—Limitation on Restricted Payments*" if made by the Issuer or a Restricted Subsidiary; *provided* that (A) such Restricted Payment shall be made substantially concurrently with the closing of such Investment, (B) such direct or indirect parent company shall, immediately 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, consolidation or amalgamation of the Person formed or acquired into the Issuer or one of the Restricted Subsidiaries in order to consummate such Investment, (C) such direct or indirect parent company 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 and such consideration or other payment is included as a Restricted Payment under the Indenture, (D) any property received by the Issuer shall not increase amounts available for Restricted Payments pursuant to clause (c) of the first paragraph of the covenant described under *"Certain Covenants—Limitation on Restricted Payments*" or be an Excluded Contribution and (E) such Investment shall be deemed to be made by the Issuer or such Restricted Subsidiary pursuant to a provision of the covenant described under "*Certain Covenants—Limitation on Restricted Payments*" or pursuant to the definition of "Permitted Investment."

"*Pari Passu Indebtedness*" means Indebtedness (a) of the Issuer which ranks equally in right of payment to the Notes or (b) of any Guarantor which ranks equally in right of payment to the Note Guarantee of such Guarantor.

"*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 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 Equivalents between the Issuer or any of the Restricted Subsidiaries and another Person; *provided* that any cash or Cash Equivalents received in excess of the value of any cash or Cash Equivalents sold or exchanged must be applied in accordance with the covenant described under "*Certain Covenants—Limitation on Sales of Assets and Subsidiary Stock*."

"*Permitted Collateral Liens*" means:

(a) Liens on the Collateral that are described in one or more of clauses (3), (4), (5), (6), (7), (8), (15), (17), (18), (24), (26), (34) 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 Collateral;

(b) Liens on the First-Priority Collateral to secure:

(i) the Notes (other than Additional Notes), including any Note Guarantee;

(ii) Indebtedness of the Issuer described under (A) the first paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*" or (B) clauses (1)(a), (1)(b), (1)(c), (1)(d), (2) (to the extent such Guarantee is in respect of Indebtedness otherwise permitted to be secured and specified in this definition of Permitted Collateral Liens), (5), (6), (7) (other than with respect to Capitalized Lease Obligations), (10), (13) or (19) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*" ((A) and (B) together, the "PCL Debt Baskets"), in each case to the extent that such Indebtedness constitutes Pari Passu Indebtedness of the Issuer; *provided that* such Liens rank equal with or 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; and

(vi) any Refinancing Indebtedness in respect of Indebtedness set forth in the foregoing clauses (i) to (v); *provided that* any Lien securing such Refinancing Indebtedness shall have the same priority, relative to the Lien on such First-Priority Collateral securing the Notes, as the Lien securing the original Indebtedness refinanced by such Refinancing Indebtedness;

(c) Liens on the Collateral (other than the First-Priority Collateral) to secure:

(i) the Notes (other than Additional Notes), including any Note Guarantee;

(ii) Indebtedness of the Issuer described under the PCL Debt Baskets; *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 (4)(a) or (4)(c) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*"; *provided that* (x) if such Indebtedness is Senior Indebtedness of such Guarantor, such Liens rank (1) equal with all other Liens on such Collateral securing such Senior Indebtedness (*provided that* up to an amount of Indebtedness equal to the greater of (x) €75.0 million and (y) 36.8% of LTM EBITDA Incurred under a revolving credit facility and certain hedging obligations may have super senior priority status in respect of the proceeds from the enforcement of the Collateral that is not First-Priority Collateral and certain distressed disposals of assets, not materially less favorable to the Holders than that provided for in accordance with the Super Senior Liabilities (as defined in the Intercreditor Agreement as in effect on the Issue Date) or (2) equal with or junior to the Liens on such Collateral securing the Notes or the Note Guarantees; (y) if such Indebtedness is Pari Passu Indebtedness of such Guarantor, such Liens rank equal with or junior to the Liens on such Collateral securing the Notes or the Note Guarantees and (z) 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 of a Restricted Subsidiary that is not a Guarantor; *provided that* such Liens rank (1) equal with all other Liens on such Collateral 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 clauses (i) to (iv); *provided that* any Lien securing such Refinancing Indebtedness shall have the same priority, relative to the Lien on the same Collateral securing the Notes or the Note Guarantees, as the Lien securing the original Indebtedness refinanced by such refinancing Indebtedness;

(d) Liens on the Collateral 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 (i) €10.0 million and (ii) 5.0% of LTM EBITDA at any time outstanding and that (x) are not Incurred in connection with the borrowing of money and (y) 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 (a)(2) of the first paragraph of the covenant described under "*Certain Covenants—Limitation on Liens*,"

provided, that, in the case of clauses (b), (c), (d) and (e) of this definition of "Permitted Collateral Liens," each of the secured parties to any such Indebtedness that exceeds an aggregate amount equal to the greater of (x) €20.0 million and (y) 10.0% of LTM EBITDA (acting directly or through its respective creditor representative) 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 paragraphs (a) through (d) 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 Holdco Transactions*" means any merger (on a solvent basis) of the Initial Guarantor with the Target, with the Initial Guarantor as the surviving entity, and/or any merger (on a solvent basis) of the Initial Guarantor with the Issuer with the Issuer as the surviving entity; *provided* that to the extent that any Security Interests granted over the shares in the capital of a Person or other assets of a Person subject to a Permitted Holdco Transaction constituted a Lien in favor of the Notes immediately prior to a Permitted Holdco Transaction, the direct holding company of the relevant surviving entity of the Permitted Holdco Transaction and/or such surviving entity shall, subject to the Agreed Security Principles, grant Security Interests over the shares in the capital and such other assets of such surviving entity on substantially equivalent terms to any Security Interests granted over the shares in the capital or other assets of such predecessor Person immediately prior to such Permitted Holdco Transaction.

"*Permitted Holders*" means, collectively, (i) the Initial Investors, (ii) 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, (iii) the Management Stockholders, (iv) any Person who is acting solely as an underwriter in connection with a public or private offering of Capital Stock of any Parent Entity or the Issuer, acting in such capacity, and (v) 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, Persons referred to in subclauses (i) through (iv), collectively, have 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.

"*Permitted Investment*" means (in each case, by the Issuer or any of the Restricted Subsidiaries):

(1) Investments in (a) a Restricted Subsidiary (including the Capital Stock of a Restricted Subsidiary) or the Issuer or (b) a Person (including the Capital Stock of any such Person) that will, upon the making of such Investment, become a Restricted Subsidiary;

(2) 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;

(3) Investments in cash, Cash Equivalents, Temporary Cash Investments or Investment Grade Securities;

(4) Investments in receivables owing to the Issuer or any Restricted Subsidiary created or acquired in the ordinary course of business or consistent with past practice;

(5) Investments in payroll, travel, relocation, entertainment 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 or consistent with past practice;

(6) Management Advances;

(7) Investments in Capital Stock, obligations or securities received in settlement of debts created in the ordinary course of business or consistent with past practice 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;

(8) Investments made as a result of the receipt of non-cash consideration from a sale or other disposition of property or assets, including an Asset Disposition;

(9) Investments existing or pursuant to agreements or arrangements in effect on the Issue Date and any modification, replacement, renewal or extension thereof; *provided* that the amount of any such Investment may not be increased except (a) as required by the terms of such Investment as in existence on the Issue Date or (b) as otherwise not prohibited under the Indenture;

(10) Hedging Obligations, which transactions or obligations are Incurred in compliance with "*Certain Covenants—Limitation on Indebtedness*";

(11) 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*";

(12) 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;

(13) 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 (1), (3), (6), (7), (8), (9), (12) and (14) of that paragraph);

(14) 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 or consistent with past practices, and in accordance with the Indenture;

(15) any (a) 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 (b) performance guarantees with respect to obligations that are not prohibited by the Indenture;

(16) 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;

(17) 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;

(18) Investments consisting of licensing or contribution of intellectual property pursuant to joint marketing arrangements with other Persons;

(19) 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;

(20) Investments in joint ventures and similar entities and Unrestricted Subsidiaries having an aggregate fair market value, when taken together with all other Investments made pursuant to this clause that are at the time outstanding, not to exceed the greater of (a) €50.0 million and (b) 25.0% 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 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 in the section entitled "*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, however*, 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 clause (1) or (2) above 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;

(21) additional Investments having an aggregate fair market value, taken together with all other Investments made pursuant to this clause (21) that are at that time outstanding, not to exceed the greater of (a) €70.0 million and (b) 35.0% of LTM EBITDA (with the fair market value of each Investment being measured at the time made and without giving effect to subsequent changes in value), plus 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 in the section entitled "*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, however*, 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 clause (1) or (2) above and shall cease to have been made pursuant for so long as such Person continues to be the Issuer or a Restricted Subsidiary;

(22) any Investment in a Similar Business having an aggregate fair market value, taken together with all other Investments made pursuant to this clause that are at that time outstanding, not to exceed the greater of (a) €50.0 million and (b) 25.0% of LTM EBITDA (with the fair market value of each Investment being measured at the time made and without giving effect to subsequent changes in value), plus 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 in the section entitled "*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, however*, 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 clause (1) or (2) above 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;

(23) Investments (a) arising in connection with a Qualified Securitization Financing or Receivables Facility and (b) 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;

(24) Investments in connection with the Transactions;

(25) Investments (including repurchases) in Indebtedness of the Issuer and the Restricted Subsidiaries;

(26) Investments by an Unrestricted Subsidiary entered into prior to the day such Unrestricted Subsidiary is re-designated as a Restricted Subsidiary as described under "*Certain Covenants—Designation of Restricted and Unrestricted Subsidiaries*";

(27) guaranty and indemnification obligations arising in connection with surety bonds issued in the ordinary course of business;

(28) Investments consisting of purchases and acquisitions of assets or services in the ordinary course of business or consistent with past practice or made in the ordinary course of business or consistent with past practice in connection with obtaining, maintaining or renewing client contacts and loans or advances or extensions of trade credit in the ordinary course of business;

(29) 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 or consistent with past practice;

(30) 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 consistent with past practices; and

(31) transactions entered into in order to consummate a Permitted Tax Restructuring.

"*Permitted Liens*" means, with respect to any Person:

(1) 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;

(2) 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, or insurance related obligations (including pledges or deposits securing liability to insurance carriers under insurance or self-insurance arrangements), 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, 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 rent, or other obligations of like nature, in each case Incurred in the ordinary course of business; or consistent with past practice;

(3) 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;

(4) Liens for Taxes, assessments or governmental charges which are not overdue for a period of more than 30 days 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;

(5) 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;

(6) Liens (a) on assets or property of the Issuer or any Restricted Subsidiary securing Hedging Obligations or Cash Management Services permitted under the Indenture; (b) 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 clause (i) or (ii) below, other bankers' Liens (i) 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, (ii) 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 or (iii) relating to purchase orders and other agreements entered into with customers of the Issuer or any Restricted Subsidiary in the ordinary course of business; (c) on cash accounts securing Indebtedness and other Obligations permitted to be Incurred under clauses (8)(d) or (8)(e) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*" with financial institutions; (d) 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, consistent with past practice and not for speculative purposes; (e) of a collection bank arising under Section 4-210 of the UCC on items in the course of collection; (f) 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 (g) 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;

(7) 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;

(8) Liens securing or otherwise arising out of judgments, decrees, attachments, orders or awards not giving rise to an Event of Default so long as (a) 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, (b) the period within which such proceedings may be initiated has not expired or (c) no more than 60 days have passed after (i) such judgment, decree, order or award has become final or (ii) such period within which such proceedings may be initiated has expired;

(9) Liens (i) on assets or property of the Issuer or any Restricted Subsidiary for the purpose of securing Capitalized Lease Obligations, or Purchase Money Obligations, or securing 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 or consistent with past practice; *provided* that (a) the aggregate principal amount of Indebtedness secured by such Liens is otherwise permitted to be Incurred under the Indenture and (b) 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 to such assets and property and (ii) any interest or title of a lessor under any Capitalized Lease Obligations or operating lease;

(10) 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;

(11) Liens existing on, or provided for or required to be granted under written agreements existing on, the Issue Date, (other than Liens securing the Senior Facilities);

(12) 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, however*, 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;

(13) 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;

(14) Liens securing Refinancing Indebtedness Incurred to refinance Indebtedness that were previously so secured, and permitted to be secured under the Indenture; *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;

(15) Liens constituting (a) 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 (b) any condemnation or eminent domain proceedings affecting any real property;

(16) any encumbrance or restriction (including put and call arrangements) with respect to Capital Stock of any joint venture or similar arrangement pursuant to any joint venture or similar agreement;

(17) 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;

(18) Liens arising out of conditional sale, title retention, hire purchase, consignment or similar arrangements for the sale of goods entered into in the ordinary course of business;

(19) Liens securing Indebtedness and other Obligations under clauses (11) or (19) (provided that, in the case of clause (11), such Liens cover only the assets of such Subsidiary) of the second paragraph of the covenant described under "*Certain Covenants—Limitation on Indebtedness*";

(20) Permitted Collateral Liens (other than pursuant to clause (e) of such definition);

(21) Liens (a) on Capital Stock or other securities or assets of any Unrestricted Subsidiary that secure Indebtedness of such Unrestricted Subsidiary and (b) then existing with respect to assets of an Unrestricted Subsidiary on the day such Unrestricted Subsidiary is re-designated as a Restricted Subsidiary as described under "*Certain Covenants—Designation of Restricted and Unrestricted Subsidiaries*";

(22) any security granted over the marketable securities portfolio described in clause (8) of the definition of "Cash Equivalents" in connection with the disposal thereof to a third party;

(23) Liens on (a) 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 (b) 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;

(24) 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;

(25) 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;

(26) 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;

(27) Liens solely on any cash earnest money deposits made in connection with any letter of intent or purchase agreement permitted under the Indenture;

(28) Liens (a) 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 (b) 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;

(29) Liens securing Indebtedness and other Obligations in an aggregate principal amount not to exceed the greater of (a) €50.0 million and (b) 25.0% of LTM EBITDA at the time Incurred;

(30) 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;

(31) Liens arising in connection with a Qualified Securitization Financing or a Receivables Facility;

(32) Settlement Liens;

(33) 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;

(34) 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;

(35) restrictive covenants affecting the use to which real property may be put;

(36) 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;

(37) Liens arising in connection with any Permitted Tax Restructuring;

(38) 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*);

(39) 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;

(40) Liens arising in connection with 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 for corporate income tax or value added tax purposes or any analogous arrangement in any other jurisdiction of which the Issuer or a Restricted Subsidiary is or becomes a member; and

(41) Liens securing any Senior Indebtedness (*provided that* unless such Lien is a Permitted Collateral Lien, such Lien will rank equally with all other Liens on such property or assets securing such Senior 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 Collateral, substantially equivalent Liens must be granted over such shares or assets of the recipient such that they form part of the Collateral,

provided further that no Permitted Reorganization may override the provisions of the covenant described under "*Merger and Consolidation*."

"*Permitted Tax Distribution*" means:

(a) 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) with any Parent Entity, any dividends or other distributions, intercompany loans or other intercompany balances 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; and

(b) for any taxable year (or portion thereof) ending after the Issue Date for which the Issuer is treated as a disregarded entity, partnership, or other flow-through entity for federal, state, provincial, territorial, and/or local income Tax purposes, the payment of dividends or other distributions to the Issuer's direct owner(s) to fund the income Tax liability of such owner(s) (or, if a direct owner is a pass-through entity, of the indirect owner(s)) for such taxable year (or portion thereof) attributable to the operations and activities of the Issuer and its direct and indirect Subsidiaries,

in an aggregate amount not the exceed the product of (x) the highest combined marginal federal and applicable state, provincial, territorial, and/or local statutory income Tax rate (after taking into account the deductibility of U.S. state and local income Tax for U.S. federal income Tax purposes) and (y) the taxable income of the Issuer for such taxable year (or portion thereof).

"*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 (as determined by the Issuer in good faith).

"*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 and/or (ii) a private placement to institutional and other investors, in each case, that are not Affiliates of the Issuer, 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: (i) 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, (ii) 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 (iii) 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 Issue 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*, *however*, that:

(1) (a) such Refinancing Indebtedness 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 (b) to the extent such Refinancing Indebtedness refinances Subordinated Indebtedness, Disqualified Stock or Preferred Stock, such Refinancing Indebtedness is Subordinated Indebtedness, Disqualified Stock or Preferred Stock, respectively, and, in the case of Subordinated Indebtedness, is subordinated to the Notes and/or the Note Guarantees (as applicable) on terms at least as favorable to the Holders as those contained in the documentation governing the Indebtedness being refinanced;

(2) Refinancing Indebtedness shall not include:

(i) Indebtedness, Disqualified Stock or Preferred Stock of a Restricted Subsidiary that is not a Guarantor that refinances Indebtedness, Disqualified Stock or Preferred Stock of the Issuer or a Guarantor; or

(ii) 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; and

(3) 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 fees and expenses, including premiums, accrued and unpaid interest and defeasance costs) under the Indebtedness being Refinanced.

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.

"*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 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 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 any (i) payment in respect to any of the items for which the Issuer is permitted to make payments to any Parent Entity pursuant to "*Certain Covenants—Limitation on Restricted Payments*" or (ii) Permitted Tax Distribution.

"*Reserved Indebtedness Amount*" has the meaning set forth in the covenant described under "*Certain Covenants—Limitation on Indebtedness.*"

"*Restricted Investment*" means any Investment other than a Permitted Investment.

"*Restricted Subsidiary*" means any Subsidiary of the Issuer other than an Unrestricted Subsidiary.

"*Revolving Credit Facility*" means the €75 million (equivalent) revolving credit facility under the Senior Facilities Agreement.

"*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 Collateral.

"*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.

"*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, 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 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 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 Collateral as contemplated by the Indenture.

"*Senior Facilities*" means the Senior Term Loans and the Revolving Credit Facility.

"*Senior Facilities Agreement*" means the senior facilities agreement entered into on or about the Issue Date, by and among the Issuer, the other borrowers party thereto, the guarantors from time to time party thereto and Deutsche Bank AG, London Branch as agent and security agent, and each lender from time to time party thereto, 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.

"*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 any Restricted Subsidiary, including premia 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:

(1) any Indebtedness Incurred in violation of the Indenture;

(2) any obligation of any Guarantor to any Restricted Subsidiary;

(3) any liability for taxes owed or owing by any Guarantor;

(4) Pari Passu Indebtedness, any Indebtedness expressly junior in right of payment to any other Indebtedness of such Restricted Subsidiary, any Subordinated Shareholder Funding, any Subordinated Indebtedness and any Capital Stock; or

(5) any accounts payable or other liability to trade creditor arising in the ordinary course of business (including guarantees thereof or instruments evidencing such liabilities).

"*Senior Term Loan*" means a loan under a term loan facility made under the Senior Facilities Agreement or the principal amount outstanding of such loan.

"*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.

"*Shared Collateral*" means any Collateral other than First-Priority Collateral.

"*Shareholder Contribution*" means shareholder funding in connection with an Acquisition (whether on or about the Completion Date or thereafter) to be provided by the Initial Investors to the Issuer through wholly owned or majority-owned intermediate holding companies by way of an equity contribution and subordinated shareholder debt; provided that the aggregate amount of such shareholder funding counted as a Shareholder Contribution shall not exceed as of any date of determination the minimum amount of shareholder funding required on the Completion Date under the Senior Facilities Agreement.

"*Significant Subsidiary*" means any Restricted Subsidiary that would be a "significant subsidiary" as defined in Article 1, Rule 1-02 of Regulation S-X, promulgated pursuant to the Securities Act, as such regulation is in effect on the Issue Date.

"*Similar Business*" means (a) any businesses, services or activities engaged in by the Issuer or any of its Subsidiaries or any Associates on the Issue 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.

"*Sponsor*" means (a) individually or collectively, one or more investment funds, co-investment vehicles, limited partnerships and/or other similar vehicles or accounts in each case advised or managed by BC Partners LLP; (b) any of their successors, Affiliates or direct or indirect Subsidiaries (but excluding, in each case, any portfolio company which is an obligor (and any of its Subsidiaries) in respect of any third party financing provided to that portfolio company (or any of its Subsidiaries) in which the parties listed in clause (a) above or such Affiliates, Subsidiaries or investors hold an investment or interest in).

"*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, with respect to any Person, any Indebtedness (whether outstanding on the Issue Date or thereafter Incurred) which is expressly subordinated in right of payment to the Notes or the Note Guarantees pursuant to a written 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*, *however*, that such Subordinated Shareholder Funding:

(1) does not mature or require any amortization, redemption or other repayment of principal or any sinking fund payment prior to the date that is six 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;

(2) 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;

(3) 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;

(4) does not provide for or require any security interest or encumbrance over any asset of the Issuer or any of its Subsidiaries;

(5) 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 Issue Date with respect to the "Subordinated Liabilities"(as defined therein);

(6) is not Guaranteed by any Subsidiary of the Issuer;

(7) contains restrictions on transfer to a Person who is not a Parent Entity, any Affiliate of any Parent Entity, any holder of Capital Stock of a Parent Entity or any Affiliate of a Parent Entity or any Permitted Holder or any Affiliate thereof; *provided* that any transfer of Subordinated Shareholder Funding to any of the foregoing persons shall not be deemed to be materially adverse to the interests of the Holders; and

(8) does not (including upon the happening of any event) restrict the payment of amounts due in respect of the Notes or any Note Guarantee or compliance by the Issuer or any Guarantor with its obligations under the Notes, any Note Guarantee or the Indenture.

"*Subsidiary*" means, with respect to any Person:

(1) any corporation, association, or other business entity (other than a partnership, joint venture, limited liability company or similar entity) of which more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time of determination owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person or a combination thereof; or

(2) any partnership, joint venture, limited liability company or similar entity of which:

(a) more than 50% of the capital accounts, distribution rights, total equity and voting interests or general or limited partnership interests, as applicable, are owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person or a combination thereof whether in the form of membership, general, special or limited partnership interests or otherwise; and

(b) such Person or any Subsidiary of such Person is a controlling general partner or otherwise controls such entity.

"*Target*" means CeramTec Holding GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) incorporated under the laws of the Federal Republic of Germany, having its registered office at CeramTec Platz 1-9, 73207 Plochingen, Federal Republic of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Stuttgart under registration number HRB 746625.

"*Target Group*" means the Target and its subsidiaries.

"*Target Shares*" means the stock representing the issued capital of the Target, but excluding any treasury shares.

"*Taxes*" means all present and future taxes, levies, imposts, deductions, charges, duties and withholdings and any charges of a similar nature (including interest, penalties and other liabilities with respect thereto) that are imposed by any government or other taxing authority.

"*Temporary Cash Investments*" means any of the following:

(1) any Investment in:

(a) direct obligations of, or obligations Guaranteed by, (i) the United States of America or Canada, (ii) any European Union member state, (iii) the United Kingdom, (iv) Japan, Australia, Switzerland or Norway, (v) 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 (vi) any agency or instrumentality of any such country or member state; or

(b) direct obligations of any country recognized by the United States of America rated at least "A" by S&P 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 or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization);

(2) 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:

(a) any lender under the Senior Facilities; or

(b) any institution authorized to operate as a bank in any of the countries or member states referred to in subclause (1)(a) above; or (c) 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 €250.0 million (or the foreign currency equivalent thereof) and whose long-term debt is rated at least "BBB-" by S&P or "Baa3" by Moody's (or, in either case, the equivalent of such rating by such organization or, if no rating of S&P or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization) at the time such Investment is made;

(3) repurchase obligations with a term of not more than 30 days for underlying securities of the types described in clause (1) or (2) above entered into with a Person meeting the qualifications described in clause (2) above;

(4) 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 "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 or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization);

(5) Investments in securities maturing not more than one year after the date of acquisition issued or fully Guaranteed by any state, commonwealth or territory of the United States of America, Canada, any European Union member state, the United Kingdom or Japan, Australia, Switzerland, Norway or by any political subdivision or taxing authority of any such state, commonwealth, territory, country or member state, and rated at least "BBB-" by S&P or "Baa3" by Moody's (or, in either case, the equivalent of such rating by such organization or, if no rating of S&P or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization);

(6) bills of exchange issued in the United States, Canada, a member state of the European Union, the United Kingdom, Switzerland, Norway or Japan eligible for rediscount at the relevant central bank and accepted by a bank (or any dematerialized equivalent);

(7) 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 "A2" by Moody's (or, in either case, the equivalent of such rating by such organization or, if no rating of S&P or Moody's then exists, the equivalent of such rating by any Nationally Recognized Statistical Rating Organization) at the time such Investment is made;

(8) Investment funds investing 95% of their assets in securities of the type described in clauses (1) through (7) above (which funds may also hold reasonable amounts of cash pending investment or distribution); and

(9) investments in money market funds complying with the risk limiting conditions of Rule 2a-7 (or any successor rule) of the SEC under the U.S. Investment Company Act of 1940, as amended.

"*Total Assets*" means, as of any date, the total consolidated assets of the Issuer and the Restricted Subsidiaries on a consolidated basis, as shown on the most recent consolidated balance sheet of the Issuer and the Restricted Subsidiaries prepared in accordance with IFRS, determined on a pro forma basis in a manner consistent with the pro forma basis contained in the definition of Fixed Charge Coverage Ratio (excluding, for the avoidance of doubt, the further proviso to the first paragraph of such definition).

"*Transaction Expenses*" means any fees or expenses Incurred or paid by the Issuer or any Restricted Subsidiary in connection with the Transactions, including any fees, costs and expenses associated with settling any claims or action arising from a dissenting stockholder exercising its appraisal rights.

"*Transactions*" shall have the meaning assigned to such term in this Offering Memorandum.

"*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, however,* 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 Collateral 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:

(1) 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

(2) any Subsidiary of an Unrestricted Subsidiary.

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:

(1) 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

(2) such designation and the Investment, if any, of the Issuer in such Subsidiary complies with "*Certain Covenants—Limitation on Restricted Payments*."

"*U.S. Bankruptcy Code*" means Title 11 of the United States Code, as amended.

"*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.

"*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:

(1) 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

(2) 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

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 "144A Global Notes"). Notes sold outside the United States pursuant to 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 "144A Global Notes," the "Global Notes"). The Global Notes will be deposited, on the Issue Date, with a common depository and registered in the name of the nominee of the common depository for the accounts of Euroclear and Clearstream.

Ownership of interests in the 144A Global Notes ("144A Book-Entry Interests") and ownership of interests in the Regulation S Global Notes (the "Regulation S Book-Entry Interest" 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 Clearstream and their participants. The Book-Entry Interests in Global Notes will be issued only in 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 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 and will not be considered the registered owners or "holder" of Notes under the Indenture for any purpose.

So long as the Notes are held in global form, Euroclear and/or Clearstream (or its respective nominee), will be considered the holder of Global Notes for all purposes under the Indentures. As such, participants must rely on the procedures of Euroclear and/or Clearstream and indirect participants must rely on the procedures of Euroclear and/or Clearstream and the participants through which they own Book-Entry Interests in order to exercise any rights of holders under the Indenture.

None of the Issuer, the Trustee, Paying Agent, Transfer Agent or Registrar under the Indenture nor any of the Issuer's 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 Book-Entry Interests will receive definitive registered Notes in certificated form (the "Definitive Registered Notes"):

- if Euroclear or Clearstream notifies the Issuer that it is unwilling or unable to continue to act as depository and a successor depository is not appointed by the Issuer within 120 days; or

- 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 and enforcement action is being taken in respect thereof under the Indenture.

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 (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 referred to in "*Notice to Investors*," unless that legend is not required by the Indenture or applicable law.

Redemption of 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 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 Clearstream 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; 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

The Issuer will make payments of any amounts owing in respect of the Global Notes (including principal, premium, interest, additional interest and additional amounts) to the Paying Agent. In turn, the Paying Agent will make such payments to the common depositary for Euroclear and Clearstream, 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, Paying Agent, Transfer Agent, and Registrar will treat the registered holder of the Global Notes (i.e., the common depositary for Euroclear or Clearstream (or its nominees)) as the owner thereof for the purpose of receiving payments and for all other purposes. Consequently, none of the Issuer, the Trustee, Paying Agent, Transfer Agent, and Registrar or any of their respective agents has or will have any responsibility or liability for:

- any aspects of the records of Euroclear, Clearstream or any participant or indirect participant relating to or payments made on account of a Book-Entry Interest, for any such for any such payments made by Euroclear, Clearstream or any participant or indirect participant, or for maintaining, supervising or reviewing the records of Euroclear, Clearstream or any participant or indirect participant relating to, or payments made on account of, a Book-Entry Interest; or

- payments made by Euroclear, Clearstream or any participant or indirect participant, or for maintaining, supervising or reviewing the records of Euroclear, Clearstream or any participant or indirect participant relating to or payments made on account of a Book-Entry Interest; or

- Euroclear, Clearstream or any participant or indirect participant.

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."

Currency and 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 interest 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 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 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

The Global Notes will bear a legend to the effect set forth in "*Notice to Investors*." Book-Entry Interests in the Global Notes will be subject to the restrictions on transfer discussed in "*Notice to Investors*."

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 "40-day Period"), beneficial interests in a Regulation S Global Note may be transferred to a person who takes delivery in the form of an interest in the Rule 144A Global Note denominated in the same currency only if such transfer is made pursuant to Rule 144A and the transferor first delivers to the Trustee a certificate (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 in a transaction meeting the requirements of Rule 144A or otherwise in accordance with the transfer restrictions described under "*Notice to Investors*" and in accordance with all applicable securities laws of the states of the United States and other jurisdictions.

After the expiration of the 40-day Period, beneficial interests in a Regulation S Global Note may be transferred to a person who takes delivery in the form of a beneficial interest in the Rule 144A Global Note without compliance with these certification requirements.

Beneficial interests in a Rule 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 under the Securities Act (if available).

Subject to the foregoing, and as set forth in "*Notice to Investors*," 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 that is transferred to a person who takes delivery in the form of a Book-Entry Interest in the other Global Note 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.

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 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 the Notes. See "*Notice to Investors*."

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 Trustee, the Paying Agent, the Transfer Agent, the Registrar or the Initial Purchasers is responsible for those operations or procedures.

Euroclear and Clearstream hold securities for participating organizations. They 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 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 on the Official List of Exchange. The Issuer expects that secondary trading in any certificated Notes will also be settled in immediately available funds.

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 Eurobonds 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.

CERTAIN TAX CONSIDERATIONS

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 applicable in the Federal Republic of Germany and each country of which they are residents or whose tax laws apply to them for other reasons.

Withholding Tax

For German tax residents (e.g., persons whose residence, habitual abode, statutory seat or place of management is located in Germany), interest payments on the Notes are generally subject to withholding tax, provided that the Notes are held in custody with a German custodian, who is required to deduct the withholding tax from such interest payments (the "Disbursing Agent"). Disbursing Agents are German resident credit institutions, financial services institutions (including German permanent establishments of foreign institutions but excluding foreign permanent establishments of German resident institutions), securities trading companies or securities trading banks. The applicable withholding tax rate is 25% (plus 5.5% solidarity surcharge thereon and, if applicable, church tax). For individuals subject to church tax the Disbursing Agent has to collect the church tax by way of withholding unless the investor has filed a blocking notice (*Sperrvermerk*) with the German Federal Central Tax Office (*Bundeszentralamt für Steuern*) in which case the investor will have to file a tax return specifying its investment income and will then be assessed to church tax.

The withholding tax regime should also apply to any gains from the sale, repayment assignment or redemption of the Notes realized by private investors holding the Notes as private (and not as business) assets in custody with a Disbursing Agent. Subject to exceptions, the amount of capital gains on which the withholding tax charge is applied is generally determined by taking the difference between the proceeds received upon the disposition or redemption of the Notes (after the deduction of actual expenses directly related thereto) and the acquisition costs. Where the Notes are acquired and/or sold in a currency other than euro, the sales/redemption price and the acquisition costs have to be converted into euro on the basis of the foreign exchange rates prevailing on the sale, repayment assignment or redemption date and the acquisition date respectively. The separation of interest strips from the Notes is treated as a disposition of the Notes at their fair market value which has to be apportioned to the capital and the interest strips. If capital and interest strips are disposed of or redeemed separately, the sale, repayment assignment or redemption proceeds are subject to withholding tax/income tax. If custody has changed since the acquisition and the acquisition data is not proved or not permitted to be proved to the Disbursing Agent, the tax at a rate of 25% (plus 5.5% solidarity surcharge and, if applicable, church tax) will be imposed on an amount equal to 30% of the proceeds from the sale, repayment assignment or redemption of the Notes. 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, and in case the actual gain is higher than 30% of the disposal proceeds must, also apply for an assessment on the basis of its actual acquisition costs.

Accrued interest (*Stückzinsen*) received by the investor upon disposal of the Notes between two interest payment dates is considered as part of the sales proceeds thus increasing a capital gain or reducing a capital loss from the Notes. Accrued interest paid by the investor upon an acquisition of the Notes after the issue date qualifies as negative investment income either to be deducted from positive investment income generated in the same assessment period or to be carried forward to future assessment periods.

According to a decree issued by the German Federal Ministry of Finance in relation to private investors, a disposal of Notes will be disregarded if the sales proceeds do not exceed the related transaction costs with the consequence that losses resulting from such disposal are treated as non-deductible for German taxation purposes. The same applies where, based on an agreement with the depositary institution, the transaction costs are calculated on the basis of the sale proceeds taking into account a deductible amount. Further, losses resulting from a bad debt loss (*Forderungsausfall*) in the case of an Issuer default or from a waiver of a receivable (*Forderungsverzicht*) in relation to the Notes are not treated as tax-deductible.

The withholding tax is not applied to the extent the total investment income of a private investor is not exceeding the lump sum deduction (*Sparer-Pauschbetrag*) of €801 (€1,602 in case of joint assessment of married couples or registered partners) provided the investor has filed a corresponding withholding tax exemption certificate (*Freistellungsauftrag*) with the Disbursing Agent but only to the extent the annual aggregate investment income does not exceed the lump sum deduction amount stated in the withholding tax exemption certificate. Expenses actually incurred are not deductible. Similarly, no withholding tax is deducted if the investor has submitted to the Disbursing Agent a certificate of non-assessment (*Nichtveranlagungs-Bescheinigung*) issued by the competent local tax office of the investor.

German tax resident corporate investor and, upon application, other German tax resident business investors holding the Notes as assets of a domestic business should in essence not be subject to withholding tax on capital gains from the disposition, sale or redemption of the Notes subject to certain formal requirements (i.e., for these investors only interest payments, but no capital gains from the sale or redemption of the Notes are subject to the withholding tax regime).

The Issuer of the Notes should under German law not be required to deduct withholding tax from the proceeds from the investment in the Notes. The Issuer does not assume any responsibility for the deduction of German withholding tax at the source (including solidarity surcharge and, where applicable, church tax thereon).

Private Investors

For German tax resident private investors the withholding tax is—without prejudice to certain exceptions—definite under a special flat tax regime (*Abgeltungsteuer*). Private investors can apply to have their income from the investment into the Notes assessed in accordance with the general rules on determining an individual's tax bracket if this results in a lower tax burden. Also in this case, expenses actually incurred are not deductible. An assessment is mandatory for income from the investment into the Notes where the Notes are held in custody outside of Germany. Losses resulting from the sale or redemption of the Notes can only be offset against other investment income. In the event that a set-off is not possible in the assessment period in which the losses have been realized, such losses can be carried forward into future assessment periods only and can be offset against investment income generated in future assessment periods.

Business Investors

Interest payments and capital gains from the disposition or redemption of the Notes held as business assets (*Betriebsvermögen*) by German tax resident business investors are generally subject to German income tax or corporate income tax (plus 5.5% solidarity surcharge thereon and, if applicable in the case of an individual holding the Notes as business assets, church tax). Any German withholding tax deducted from interest payments is—subject to certain requirements—creditable. To the extent the amount withheld exceeds the (corporate) income tax liability, the withholding tax is—as a rule—refundable. The interest payments and capital gains are also subject to trade tax if the Notes are attributable to a trade or business. The effective trade tax rate depends on the applicable tax factor (*Gewerbesteuer-Hebesatz*) of the relevant municipality where the business is located. If the Notes are held by an individual, either directly or through a partnership, the trade tax may be partially or fully creditable against its personal income tax depending on the applicable trade tax factor and the individual's particular circumstances.

Foreign Tax Residents

Investors not tax resident in Germany should, in essence, not be taxable in Germany with the proceeds from the investment in the Notes, and no German withholding tax should be withheld from such income, even if the Notes are held in custody with a German credit (or comparable) institution. Exceptions apply, e.g., where the Notes are held as business assets in a German permanent establishment or by a German permanent representative of the investor.

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 of Notes 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 the Notes are attributable to a German trade or business for which a permanent establishment is maintained or for which a permanent representative has been appointed in Germany. Exceptions from this rule apply to certain German citizens who previously maintained a residence in Germany.

Other Taxes

No stamp, issue, registration or similar taxes or duties will be payable in Germany in connection with the issuance, delivery or execution of the Notes. Currently, net wealth tax (*Vermögensteuer*) is not levied in Germany.

Implementation of the EU rules on the automatic exchange of information

On November 10, 2015, the former EU directive on taxation of savings income—i.a. providing for an exchange of information on certain interest payments—was repealed generally with effect as of January 1, 2016, in order to prevent an overlap with the EU Council Directive 2011/16/EU on administrative cooperation in the field of taxation (as amended by EU Council Directive 2014/107/EU dated December 9, 2014; such amended directive referred to as the "Mutual Assistance Directive"). As required by the Mutual Assistance Directive, all EU Member States implemented comprehensive measures for an automatic exchange of information on financial accounts, which are applicable with full effect as from January 1, 2017.

In Germany, the Mutual Assistance Directive has been implemented by the act on the exchange of information on financial accounts (*Finanzkonten-Informationsaustauschgesetz*) of December 21, 2015, providing for an extensive exchange of information on financial accounts, but not providing for a tax at source.

Besides, the decree on the taxation of interest income (*Zinsinformationsverordnung*), which was issued to implement the former EU savings tax directive in Germany, continues to be applicable beyond 2016 with an effect limited to interest payments received from or made to certain non-EU states and dependent or associated territories such as Switzerland, the Principality of Liechtenstein, the Principality of Monaco, Jersey, the Cayman Islands and the Netherlands Antilles.

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.

Payment by a Guarantor

If a Guarantor makes any payments in respect of interest on 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.

Certain U.S. Federal Income Tax Considerations

The following discussion is a summary based on present law of certain U.S. federal income tax considerations relevant to the purchase, ownership and disposition of Notes. This discussion addresses only U.S. Holders (as defined below) who purchase Notes in the original Offering at the original issue price, hold Notes as capital assets and use the U.S. dollar as their functional currency. This discussion is not a complete description of all U.S. federal tax considerations relating to the purchase, ownership and disposition of Notes and is not a substitute for tax advice. It does not address all of the tax consequences that may be relevant in light of a U.S. Holder's particular circumstances, including tax consequences that may be applicable to prospective investors subject to special rules, such as banks and certain other financial institutions, dealers in securities or currencies, traders that elect to mark-to-market, insurance companies, regulated investment companies, real estate investment trusts, investors liable for the alternative minimum tax, U.S. expatriates, tax-exempt entities, pass-through entities (including partnerships and S-corporations), or persons holding Notes as part of a hedge, straddle, conversion, constructive sale or other integrated financial transaction. It also does not address the tax treatment of U.S. Holders that will hold the Notes in connection with a permanent establishment or fixed base outside of the United States. It does not consider U.S. federal taxes other than the income tax (e.g. estate or gift taxes) or U.S. state or local tax or non-U.S. tax considerations. The Notes are debt in form and, if required, the Issuer intends to treat the Notes as debt for all U.S. federal tax purposes. The following discussion assumes that treatment is correct.

EACH PROSPECTIVE PURCHASER SHOULD SEEK ADVICE FROM ITS OWN TAX ADVISORS ABOUT THE TAX CONSEQUENCES UNDER ITS OWN PARTICULAR CIRCUMSTANCES OF INVESTING IN THE NOTES UNDER THE LAWS OF GERMANY, THE UNITED STATES AND ITS CONSTITUENT JURISDICTIONS AND ANY OTHER JURISDICTION WHERE THE PURCHASER MAY BE SUBJECT TO TAXATION.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of a Note that is, for purposes of U.S. federal income taxation, (i) a citizen or individual resident of the United States, (ii) a corporation or other entity taxable as a corporation created or organized under the laws of the United States, any state thereof or the District of Columbia, (iii) a trust subject to the control of a U.S. person and the primary supervision of a U.S. court or (iv) an estate the income of which is subject to U.S. federal income taxation regardless of its source.

The U.S. federal income tax treatment of a partner in an entity or arrangement treated as a partnership for U.S. federal income tax purposes that acquires, holds and disposes of Notes will depend on the status of the partner and the activities of the partnership. Partnerships are urged to consult their own tax advisers regarding the specific tax consequences to their partners of purchasing, owning and disposing of the Notes.

Characterization of the Notes

The Notes provide for contingent payments in certain circumstances (see "*Description of the Notes—Change of Control*" and "*Description of the Notes—Optional Redemption*"). The rules applicable to debt instruments with payment contingencies are unclear. In general, if the amount or timing of any payment on a debt instrument is contingent and the amount or the contingency is neither remote nor incidental, the debt instrument could be subject to special rules that apply to contingent payment debt instruments ("CPDIs"). The Issuer intends to take the position that the occurrence of such events is remote and that, therefore, the possibility of such payments does not result in the Notes being treated as CPDIs for U.S. federal income tax purposes. The Issuer's position is binding on a U.S. Holder unless such holder discloses that it is taking a contrary position on a statement attached to its tax return in the manner required by applicable U.S. Treasury regulations. The Issuer's position is not, however, binding on the U.S. Internal Revenue Service ("IRS"), and if the IRS were successfully to assert, and a court were to sustain, a contrary position, the Notes would be treated as issued with original issue discount ("OID") so that a U.S. Holder may be required to accrue OID on the Notes prior to receipt of or in excess of stated interest and gain realized on a sale or other taxable disposition of the Notes would be treated as ordinary income rather than as capital gain. The remainder of this discussion assumes that the Notes will not be treated as CPDIs. Prospective purchasers of the Notes should consult their own tax advisors regarding the treatment of the Notes as CPDIs.

Interest

Interest on the Notes, including any tax withheld therefrom and Additional Amounts paid in respect of such withholding, if any, will generally be includible in the gross income of a U.S. Holder in accordance with its regular method of tax accounting. The interest on the Notes will generally be ordinary income from sources outside the United States. Subject to applicable limitations, a U.S. Holder may claim a deduction or a foreign tax credit only for tax withheld at the appropriate rate.

If the Notes are issued with more than a statutory de minimis amount of OID, a US Holder must accrue the OID into income on a constant yield to maturity basis whether or not it receives cash payments. Generally, the Notes will have been issued with OID to the extent that their stated redemption price at maturity exceeds their issue price. However, a U.S. Holder will generally not have to accrue the OID if such excess is less than 0.25 per cent. multiplied by the number of complete years to maturity ("de minimis OID"). The issue price of the Notes is the initial price at which a substantial amount of the Notes are first sold to the public (excluding sales to underwriters, placement agents, brokers or similar persons). The stated redemption price at maturity is generally the sum of all payments due on a Note other than payments of stated interest that is unconditionally payable at least annually at a single fixed rate or, subject to certain conditions, one or more qualified floating rates. Any redemption premium that the Issuer is required to offer to pay following a Change of Control Triggering Event is not part of the stated redemption price for this purpose because the Issuer does not believe that a Change of Control Triggering Event is significantly more likely than not to occur. The applicable "make whole" premium or redemption premium, if any, due on an optional redemption of the Notes, in whole or in part, is not treated as part of the stated redemption price for this purpose because under applicable OID rules, an issuer option that would increase a debt instrument's yield to maturity are presumed not to be exercised. OID, if any, will be ordinary income from sources outside of the United States.

A U.S. Holder generally must include in income the sum of the "daily portions" of OID with respect to the Note for each day during the taxable year or portion of the taxable year in which such holder held that Note ("accrued OID"). The daily portion is determined by allocating to each day in any "accrual period" a pro rata portion of the OID allocable to that accrual period. The "accrual period" for a debt instrument issued with OID may be of any length and may vary in length over the term of the debt instrument, provided that each accrual period is no longer than one year and each scheduled payment of principal or interest occurs on the first day or the final day of an accrual period. OID for any accrual period will be determined in Euro and then translated into U.S. dollars in the same manner as other interest income accrued by an accrual method U.S. Holder, as described above.

The amount of OID allocable to any accrual period other than the final accrual period is an amount equal to the excess, if any, of: (i) the product of the Note's "adjusted issue price" at the beginning of the accrual period and its yield to maturity, determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period, over (ii) the aggregate of all qualified stated interest allocable to the accrual period. OID allocable to a final accrual period is the difference between the amount payable at maturity, other than a payment of qualified stated interest, and the adjusted issue price at the beginning of the final accrual period. Special rules will apply for calculating OID for an initial short accrual period. The "adjusted issue price" of a note at the beginning of any accrual period is equal to its issue price increased by the accrued OID for each prior accrual period, and reduced by any payments previously made on the note other than a payment of qualified stated interest. Under these rules, a U.S. Holder will generally have to include in income increasingly greater amounts of OID in successive accrual periods.

A U.S. Holder may elect to include in gross income all yield on a Note (including de minimis OID) using a constant yield method. The constant yield election will generally apply only to the Note with respect to which it is made, and it may not be revoked without the consent of the IRS.

A cash basis U.S. Holder receiving stated interest in Euro must include in income a U.S. dollar amount based on the spot exchange rate on the date of receipt whether or not the payment is converted to U.S. dollars. An accrual basis U.S. Holder (and a cash basis U.S. Holder accruing OID) generally must include in income a U.S. dollar amount based on the average exchange rate during the accrual period (or, for an accrual period that spans two taxable years, the partial accrual period within each taxable year). An accrual basis U.S. Holder (and a cash basis U.S. Holder with respect to OID) may elect to translate accrued interest into U.S. dollars at the spot exchange rate on the last day of the accrual period (or, for an accrual period that spans two taxable years, in the case of the first partial period, the last day of the taxable year) or, with respect to interest received within five business days of the last day of an interest accrual period, the spot exchange rate on the date of receipt. Currency translation elections apply to all debt instruments that the electing U.S. Holder holds or acquires, and they cannot be revoked without the consent of the IRS.

Upon receipt of a payment of stated interest or OID in Euro (including, upon sale of a Note, the receipt of proceeds which include accrued OID and accrued, unpaid interest previously included in income), U.S. Holders that have accrued interest or OID will recognize exchange gain or loss equal to any difference between the U.S. dollar amount accrued and the U.S. dollar value of the payment received at the spot exchange rate on the date of receipt. For these purposes, all receipts on a Note will be treated first, as payment of stated interest payable on the Note; second, as receipt of previously accrued OID (to the extent thereof), with payments considered made for the earliest accrual periods first; and third, as receipt of principal. Exchange gain or loss will be U.S. source ordinary income or loss.

For purposes of this discussion, the "spot exchange rate" generally means a rate that reflects a fair market rate of exchange available to the public for currency under a "spot contract" in a free market and involving representative amounts. A "spot contract" is a contract to buy or sell a currency other than the U.S. dollar on or before two business days following the date of the execution of the contract. If such a spot rate cannot be demonstrated, the IRS has the authority to determine the spot rate. The "average rate" for an accrual period (or partial period) is the average of the spot exchange rates for each business day of such period or other average exchange rate for the period reasonably derived and consistently applied by a U.S. Holder.

Interest, OID and any associated exchange gain will be included in net investment income for purposes of the Medicare tax applicable to certain non-corporate U.S. Holders.

Disposition

A U.S. Holder will generally recognize gain or loss on the sale, retirement, redemption or other taxable disposition of a Note in an amount equal to the difference between the U.S. dollar value of the amount realized (less any accrued but unpaid interest, which will be taxable as ordinary interest income to the extent not previously included in income) and the U.S. Holder's adjusted tax basis in the Note, determined in U.S. dollars. The U.S. dollar amount realized will be the value of the Euro received at the spot exchange rate on the date of disposition (or, if the Notes are traded on an established securities exchange and the holder is a cash basis or an electing accrual basis U.S. Holder, the settlement date). If the Notes are not traded on an established securities exchange or an accrual basis U.S. Holder does not elect to determine the amount realized at the spot rate on the settlement date, the U.S. Holder will recognize foreign currency exchange gain or loss to the extent there is a different spot exchange rate on the disposition date and the settlement date, and such gain or loss will generally be U.S. source ordinary income or loss. A U.S. Holder's adjusted tax basis in a Note will generally be its purchase price as determined at the U.S. dollar value of the Euro used to purchase it at the spot exchange rate on the purchase date (or, if the Notes are traded on an established securities exchange and the holder is a cash basis or an electing accrual basis U.S. Holder, the settlement date), increased by the U.S. dollar amount of OID included in the U.S. Holder's income with respect to the Note, if any, and less the U.S. dollar value of any payments previously received by the holder (other than payments of stated interest).

Gain or loss recognized on a disposition of a Note will generally be U.S. source and will, except to the extent of any foreign currency exchange gain or loss, be capital gain or loss. A U.S. Holder will generally realize exchange gain or loss on a disposition of a Note equal to the difference between the U.S. dollar value of the principal amount of the Note on the date of acquisition and the date of disposition (or, if the Notes are traded on an established securities exchange and the U.S. Holder is a cash basis or an electing accrual basis holder, the settlement date). In addition, upon the sale, redemption or other taxable disposition of a Note, a U.S. Holder may recognize exchange gain or loss attributable to amounts received with respect to accrued and unpaid stated interest and accrued OID, if any, which will be treated as discussed above under "—*Interest*." Exchange gain or loss will be U.S. source ordinary income or loss. However, a U.S. Holder will recognize any foreign currency exchange gain or loss realized (including with respect to accrued stated interest and accrued OID, if any) only to the extent of the overall gain or loss realized on such holder's disposition of the Note. Any capital gain or loss in excess of foreign currency exchange gain or loss will be long-term capital gain or loss if the U.S. Holder has held the Note for more than one year. The long-term capital gains of non-corporate U.S. Holders may be taxed at lower rates. Deductions for capital losses are subject to limitations.

Gain will be included in net investment income for purposes of the Medicare tax applicable to certain non-corporate U.S. Holders.

Foreign currency exchange gain or loss

A U.S. Holder will have a tax basis in Euro received as interest on the Notes equal to the U.S. dollar value of the Euro received translated at the spot exchange rate on the date of receipt. A U.S. Holder will have a tax basis in Euro received on the disposition of a Note equal to the U.S. dollar amount realized determined at the spot exchange rate on the settlement date. Any gain or loss realized by a U.S. Holder on the conversion or other disposition of the Euro will generally be U.S. source ordinary income or loss, and will be included in net investment income for purposes of the Medicare tax applicable to certain non-corporate U.S. Holders.

Reportable Transactions

U.S. Treasury regulations meant to require the reporting of certain tax shelter transactions could be interpreted to cover transactions generally not regarded as tax shelters, including certain foreign currency transactions. Under these U.S. Treasury regulations, certain transactions are required to be reported to the IRS, including, in certain circumstances, a sale, exchange, retirement or other taxable disposition of a debt instrument or foreign currency received in respect of a debt instrument to the extent that such sale, exchange, retirement or other taxable disposition results in a tax loss in excess of $50,000, in the case of an individual holder and certain higher threshold amounts in the case of other holders. Prospective investors should consult their own tax advisors about the possibility of becoming subject to the reportable transactions rules.

Information reporting and backup withholding

Payments of interest, OID and proceeds from the sale, redemption or other taxable disposition of a Note may be reported to the IRS unless the holder is a corporation or otherwise establishes a basis for exemption. Backup withholding tax may apply to amounts subject to reporting if the holder fails to provide an accurate taxpayer identification number or fails to report all interest and dividends required to be shown on its U.S. federal income tax returns. A U.S. Holder can claim a credit against its U.S. federal income tax liability for the amount of any backup withholding tax and a refund of any excess. Prospective investors should consult their tax advisors as to their qualification for exemption from backup withholding and the procedure for establishing an exemption.

Certain non-corporate U.S. Holders are required to report information with respect to their investment in Notes not held through an account with a financial institution to the IRS. Investors who fail to report required information could become subject to substantial penalties. Potential investors are encouraged to consult with their own tax advisors regarding the possible implications of these reporting requirements on their investment in Notes.

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 IS URGED TO CONSULT ITS OWN TAX ADVISOR ABOUT THE TAX CONSEQUENCES TO IT OF AN INVESTMENT IN NOTES IN LIGHT OF THE INVESTOR’S OWN CIRCUMSTANCES.

CERTAIN INSOLVENCY LAW CONSIDERATIONS AND LIMITATIONS ON THE VALIDITY AND ENFORCEABILITY OF THE GUARANTEES AND SECURITY INTERESTS

The validity and enforceability of the Collateral and the Guarantees will be subject to certain limitations on enforcement and may be limited under applicable law or subject to certain defenses that may limit its validity and enforceability. The following is a summary description of certain limitations on the validity and enforceability of the Collateral and the Guarantees, and a summary of certain insolvency law considerations, in the jurisdictions in which the Issuer, the Guarantors and the providers of Collateral are organized. In the event that any one or more of the Issuer, the Guarantors and the providers of Collateral or any other of the Issuer's subsidiaries experienced financial difficulties, it is not possible to know with certainty in which jurisdiction or jurisdictions insolvency or similar proceedings would be commenced or what the outcome of such proceedings would be. Applicable insolvency laws may affect the enforceability of the obligations of the Issuer, the Guarantors and the providers of the Collateral. The descriptions below are only a summary and do not purport to be complete or to discuss all of the limitations or considerations that may affect the validity and enforceability of Collateral.

European Union

The Issuer and certain of the Guarantors are incorporated under the laws of, or applicable in, Member States of the European Union.

Pursuant to Regulation (EU) 2015/848 of the European Parliament and of the Council of 20 May 2015 on insolvency proceedings (recast) (the "Recast EU Insolvency Regulation"), which applies within the European Union (other than Denmark and other than in respect of certain insurance, credit institution and investment undertakings), the courts of the Member State in which a company's "centre of main interests" (as that term is used in Article 3(1) of the Recast EU Insolvency Regulation) is situated have jurisdiction to open main insolvency proceedings. 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.

Article 3(1) of the Recast 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 therefore ascertainable by third parties." Further, Article 3(1) of the Recast EU Insolvency Regulation further provides that "in the case of a company or legal person, the place of the registered office shall be presumed to be the centre of its main interests in the absence of proof to the contrary." This gives rise to a rebuttable presumption that in the case of a company, its centre of main interests is the place of the company's registered office. That presumption shall only apply if the registered office has not been moved to another Member State within the 3-month period prior to the request for the opening of insolvency proceedings. In the case of an individual, the court will normally consider the centre of main interests to be the country where the debtor mainly carries out his trade profession or (self) employment. Where the debtor resides in one country but carries out trade in another, it is the country in which the trade is carried out that is considered to be the centre of main interests. Where the debtor has no trade or profession, the centre of main interests is located in the country in which he habitually resides. This presumption shall only apply if the habitual residence has not been moved to another Member State within the 6-month period prior to the request for the opening of insolvency proceedings The courts have taken into consideration a number of factors in determining whether the presumption ought to be rebutted when considering the centre of main interests of a company, including in particular where board meetings are held, the location where the company conducts the majority of its business or has its head office, where it has its central administration, law governing the main contracts, corporate identity and branding and the location where the majority of the company's creditors are established. It is necessary to consider objective factors that are ascertainable by third parties. A company's centre of main interests may change from time to time but is determined for the purposes of deciding which courts have competent jurisdiction to open main insolvency proceedings at the time that the application to open insolvency proceedings is filed.

The Recast EU Insolvency Regulation applies to insolvency proceedings that are collective insolvency proceedings of the types referred to in Annex A to the Recast EU Insolvency Regulation.

If the centre of main interests of a company is in one Member State (other than Denmark) under Article 3(2) of the Recast EU Insolvency Regulation, the courts of another Member State (other than Denmark) have jurisdiction to open insolvency proceedings against that company only if such company has an "establishment" in the territory of such other Member State (such proceedings being referred to as "territorial insolvency proceedings"). An "establishment" is defined as "any place of operations where a debtor carries out or has carried out in the 3-month period prior to the request to open main insolvency proceedings a non-transitory economic activity with human means and assets." The effects of those proceedings shall be restricted to the assets of the debtor situated in the territory of the latter Member State.

Where main proceedings have been opened in the Member State in which the company has its centre of main interests, any territorial insolvency proceedings opened subsequently in another Member State in which the company has an establishment shall be referred to as "secondary proceedings"). Where main proceedings in the Member State in which the company has its centre of main interests have not yet been opened, territorial insolvency proceedings can be opened in another Member State where the company has an establishment only where either: (a) insolvency proceedings cannot be opened in the

Member State in which the company's centre of main interests is situated because of the conditions laid down by the law of the Member State within the territory of which the centre of the debtor's main interests is situated; or (b) the territorial insolvency proceedings are opened at the request of 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 opening of territorial proceedings is requested or a public authority which, under the law of the Member State within the territory of which the establishment is situated, has the right to request the opening of insolvency proceedings.

The courts of all Member States (other than Denmark) must recognize the judgment of the court opening main proceedings and, subject to any exceptions provided for in the Recast EU Insolvency Regulation, that judgment will be given the same effect in the other Member States so long as no secondary proceedings have been opened there. The insolvency practitioner appointed by a court in a Member State that has jurisdiction to open main proceedings (because the company's centre of main interests is there) may exercise the powers conferred on him by the law of that Member State in another Member State (such as to remove assets of the company from that other Member State), subject to certain limitations, so long as no insolvency proceedings have been opened in that other Member State or any preservation measure taken to the contrary further to a request to open insolvency proceedings in that other Member State where the company has assets.

In the event that the Issuer, the Guarantors or any provider of collateral experiences financial difficulty, it is not possible to predict with certainty in which jurisdiction or jurisdictions insolvency or similar proceedings will be commenced, or the outcome of such proceedings. Applicable insolvency laws may affect the enforceability of the obligations of the Issuer, the Guarantors and the collateral provided by any other company. 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.

Germany

Insolvency

The Issuer and certain Guarantors are organized under the laws of Germany, have their registered offices in Germany and substantially all of their assets are located in Germany. In the event of an insolvency of a Guarantor organized under the laws of Germany and/or having its "centre of main interests" in Germany (any such Guarantor, a "German Guarantor") 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 may also be opened in Germany in accordance with German law over the assets of companies that are not established under German law (for example, if the centre of main interests of such company is within Germany) or, vice versa, insolvency over German Guarantors may be opened in other jurisdictions. See "*Certain Insolvency Law Considerations and Limitations on the Validity and Enforceability of the Guarantees and Security Interests—European Union*."

The insolvency laws of Germany and, in particular, the provisions of the German Insolvency Code (*Insolvenzordnung*), 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, 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 and other insolvency laws.

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 based on a two-year forecast horizon (*überwiegend wahrscheinlich*). 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 any other company not having an individual as personally liable shareholder or partner finds itself in a situation of illiquidity and/or over-indebtedness, the management board or managing director(s) of such company and, in certain circumstances (notably in the absence of the company´s management), its shareholders, are obligated to file for insolvency without delay but not later than three weeks after such illiquidity and/or over-indebtedness incurred or (as the case may be) was established. Non-compliance with these obligations exposes management to both severe damages claims as well as sanctions under criminal law. A debtor is not considered over-indebted when its liabilities exceed the value of its assets if, given the circumstances, it is more likely than not that the debtor's business can survive as a going concern. In addition, only the debtor, but not the creditors, can file for the opening of insolvency proceedings 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, whereas imminent illiquidity does not give rise to an obligation for the management of the debtor to file for insolvency proceedings.

If a company faces imminent illiquidity (*drohende Zahlungsunfähigkeit*) and/or is over-indebted (*Überschuldung*) it may also file for preliminary "debtor in possession" moratorium 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 immoveable 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.

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 (*Insolenzeröffnungsverfahren*). The insolvency court may prohibit or suspend any measures taken to enforce individual claims against the debtor's assets during these preliminary proceedings insofar as these protective measures are reasonable to protect the debtor's assets and/or to ensure the continuation of the debtor's business.

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 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 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. 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) a balance sheet total in excess of €6,000,000 (after deducting an equity shortfall if the debtor is over-indebted);

(b) 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

(c) fifty or more employees on an annualized average basis.

The preliminary creditors' committee will be able to participate in certain important decisions made in the preliminary insolvency proceedings. It will have, for example, the power to influence the following: the selection of a preliminary insolvency administrator (*vorläufiger Insolvenzverwalter*) or an insolvency administrator (*Insolvenzverwalter*); court orders for "debtor in possession" proceedings (*Anordnung der Eigenverwaltung*); and appointments of (preliminary) trustees ((*vorläufiger*) *Sachwalter*). 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 (if the petition has been filed by the debtor), illiquidity and/or over-indebted and (ii) if there are sufficient assets to cover at least the costs 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 status (*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. 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*) will be preferred to any insolvency liabilities created by the debtor.

The insolvency administrator or trustee 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 against any Guarantor's subject to the German insolvency regime would include the following:

(a) unless the court orders debtor-in-possession proceedings (*Eigenverwaltung*), the right to administer and dispose of the Guarantor's assets would generally pass to the (preliminary) insolvency administrator ((*vorläufiger*) *Insolvenzverwalter*) as sole representative of the insolvency estate;

(b) unless the court orders debtor-in-possession proceedings (*Eigenverwaltung*), disposals effected by the Guarantor'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, a creditor in the insolvency proceedings acquires through execution (e.g., attachment) a security interest in part of the 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 any Guarantors 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 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.

Under German insolvency 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 the occurrence of reasons justifying the opening of insolvency proceedings (*insolvenzbezogene Kündigungsrechte oder Lösungsklauseln*) may be invalid if they frustrate the election right of the insolvency administrator whether or not to perform the contract unless they reflect termination rights (*Wahlrecht des Insolvenzverwalters*) 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*) 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 commence). 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, 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 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 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.

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 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*) and would, after deduction of the costs of the insolvency proceedings (e.g., fees for and expenses of the insolvency administrator and the insolvency court as well as the members of the 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 German Guarantor or a subsidiary 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 Notes by the German Guarantors after such secured creditors have been satisfied.

The right of a creditor to preferred satisfaction (*Absonderungsrecht*) may not necessarily prevent the insolvency administrator from using a movable asset that is subject to this right. The insolvency administrator, 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 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. Under German insolvency laws, it is possible to implement a debt-to-equity swap through an insolvency plan. However, it will not be possible to force a creditor into a debt-to-equity conversion if it does not consent to such debt-to-equity swap. Under certain conditions, the debtor may also file for protective shield proceedings (*Schutzschirmverfahren*). In such case and upon request of the debtor, the court will prohibit enforcement measures (other than with respect to immovable assets) and may implement other preliminary measures to protect the debtor from credit enforcement actions for up to three months if an independent expert testifies that the restructuring of the debtor's business is not obviously futile (*offensichtlich aussichtslos*) and that the debtor is not already illiquid. Given the relatively recent enactment of these amendments, these provisions may not have been tested in practice and no judicial precedents are available in such respect.

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 (i.e., there is no group insolvency concept under German insolvency law). 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. As a general principle, the claims arising from a guarantee may be enforced against a German Guarantor outside of the insolvency proceedings over the assets of the Issuer. Any insolvency proceeding over the assets of the Issuer 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 a German Guarantor to subsequently file for insolvency. On April 13, 2017, the German legislator passed an act to facilitate the mastering of group insolvencies (*Gesetz zur Erleichterung der Bewältigung von Konzerninsolvenzen*), which will come into force on April 21, 2018. This act is mainly intended to facilitate the coordination of and cooperation between insolvency proceedings of group companies. This act does 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, but rather stipulates four key amendments of the German Insolvency Code in order to facilitate an efficient administration of group insolvencies: (i) a single court may assume jurisdiction for other group company insolvency proceedings (*Gruppen-Gerichtsstand*); (ii) the appointment of a single person as insolvency administrator for all relevant group companies is facilitated; (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*).

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). 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 German Guarantor, the claims arising from a Guarantee would 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 German Guarantor 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 the claims of regular, unsecured creditors.

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.

Limitations on Enforcement

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., GmbH & Co. KG).

GmbH Limitation Language

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 (i.e., assets minus liabilities and liability reserves) is already less or would fall below the amount of its stated share capital (*Stammkapital*). The granting or enforcement of guarantees or security interests by a GmbH 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, credit agreements, guarantees and security documents to contain "limitation language" in relation to subsidiaries in the legal form of a GmbH or partnership with a GmbH as unlimited liable partner incorporated or established in Germany. 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 partnership with a GmbH as unlimited liable partner, such GmbH's) 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 Guarantee, the Indenture and the Security Documents relating to the Collateral provided by the German Guarantors will contain such limitation language and therefore the enforcement of the Guarantees, the Indenture and the Collateral (i.e., the share pledges and any other security) is limited in the manner described. This could lead to a situation in which the respective guarantee or security granted by the relevant German Guarantor cannot be enforced at all.

Sections 30 and 31 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 or a partnership with a GmbH as unlimited liable partner, which can negatively affect the ability of the German Guarantors to make payments on the Notes or the Guarantees or the enforceability of the Guarantees, the Indenture and the Security Documents relating to the Collateral (i.e. the share pledges and any other security interest) 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*) (i.e., 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 other collateral by the German Guarantors.

General Comments regarding German Limitation Language

Furthermore, the beneficiary of a transaction qualifying as a repayment of the stated share capital of a German GmbH or, in the case of a partnership with a GmbH as unlimited liable partner, of such GmbH (e.g., the enforcement of a guarantee or security granted by such GmbH or partnership) 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 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 claim 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 interests in the Notes from time to time will not be party to the 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." 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. The pledges governed by German law will directly and exclusively (to the extent the Notes are concerned) secure the parallel debt rather than the obligations under the Notes 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 under German law, 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 Relating to the Notes*."

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 (i.e., the right to request the court to impose a stay on proceedings initiated by other creditors).

Hardening Periods and Fraudulent Transfer

Under the German Insolvency Code (*Insolvenzordnung*), an insolvency administrator or in the event that debtor-in-possession status has 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 applicable avoidance 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. On March 29, 2017, the German legislator passed an act for the improvement of legal certainty concerning clawback pursuant to the German Insolvency Code and the German Avoidance Act (*Gesetz zur Verbesserung der Rechtssicherheit bei Anfechtungen nach der Insolvenzordnung und nach dem Anfechtungsgesetz*), which entered into force on April 5, 2017 (subject to certain transitional provisions). The amendments to the German Insolvency Code (*Insolvenzordnung*) and the German Avoidance Act (*Anfechtungsgesetz*) concern, *inter alia*, the provisions on avoidance for intentionally disadvantaging third-party creditors (*Vorsatzanfechtung*), cash transactions (*Bargeschäfte*) and interest accruing on avoidance claims.

In the event of insolvency proceedings with respect to us, which would be 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 or, as the case may be, trustee under the rules of avoidance as set forth in the German Insolvency Code (*Insolvenzordnung*). In case the validity or enforceability of the Notes 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 or the relevant collateral. If payments have already been made under the Notes 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 Notes would only have a general unsecured claim under the Notes 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, as recently amended by the act to improve legal certainty with respect to avoidance claims under the German Insolvency Code and the German Code on Avoidance (*Gesetz zur Verbesserung der Rechtssicherheit bei Anfechtungen nach der Insolvenzordnung und dem Anfechtungsgesetz*) which became effective on April 5, 2017:

(a) 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 (i) 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) at such time, or (ii) after the filing of the petition for the opening of insolvency proceedings, if the creditor knew of the debtor's illiquidity or the filing of such petition (or of circumstances imperatively suggesting such illiquidity or filing);

(b) 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 (i) 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, (ii) such act was taken during the second or third month prior to the filing of the petition and the debtor was illiquid at such time or (iii) 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);

(c) 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 (i) during the three months prior to the filing of the petition of the commencement of insolvency proceedings and the debtor was illiquid at the time of such transaction and the counterparty to such transaction knew of the illiquidity at such time or (ii) 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 or such filing at the time of the transaction;

(d) 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;

(e) any non-gratuitous contract concluded between the debtor and a related party of the debtor that directly causes detriment to creditors, unless such contract was concluded more than two years prior to the filing for the opening of insolvency proceedings or the other party had no knowledge of the debtor's intention to disadvantage its creditors;

(f) any act performed by the debtor (i) 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 and 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 imminent and that the transaction disadvantaged the other creditors (except for acts granting an insolvency creditor, or enabling an insolvency creditor, to obtain security or satisfaction to which such creditor was entitled, in which case such knowledge (solely) being presumed if such creditor knew that the debtor was illiquid and that the transaction disadvantaged the other creditors), (ii) except for 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), which 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;

(g) any non-gratuitous contract (*entgeltlicher Vertrag*) concluded between the debtor and an a related party (*nahestehende Person*) 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; in relation to corporate entities, the term 'related party' 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 that are spouses, relatives or members of the household of any of the foregoing persons;

(h) any act that provides security (including a guarantee) (*Sicherung*) or satisfaction (*Befriedigung*) for a shareholder loan made to the debtor or an economically similar claim if (i) in the case of the provision 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 (ii) 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. It being understood, that the regulation for shareholder loans does not apply (i) to shareholders which own 10% or less of the shares or interest and are not engaged in management and (ii) until the successful restructuring of the debtor in case a creditor for the first time acquires shares during over indebtedness, illiquidity or imminent illiquidity for the purpose of restructuring the debtor; and

(i) any act whereby the debtor grants satisfaction for a loan claim or an economically equivalent claim to a third party if (i) the transaction was effected in the last year prior to the filing of a petition for the commencement of insolvency proceedings or thereafter and (ii) a shareholder of the debtor had granted security or was liable as a guarantor or surety provider (*Garant oder Bürge*) (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 the debtor (e.g., a Guarantor) 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. A person is 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*). If an insolvency creditor concluded a payment agreement (*Zahlungsvereinbarung*) with, or granted other forms of deferred payment terms (*Zahlungserleichterung*) to, the debtor, there is a rebuttable presumption that the insolvency creditor did not have knowledge of the illiquidity of the debtor at the time of such act. With respect to a "related party," there is a general statutory presumption that such party had "knowledge." Any amounts obtained from transactions that have been challenged would have to be repaid to the insolvency estate.

Furthermore, even in the absence of an insolvency proceeding, a third-party creditor who has obtained an enforcement order (*Vollstreckungstitel*) but has failed to obtain satisfaction of its enforceable claims by a levy of execution, under certain circumstances, has the right to void certain transactions, such as the payment of debt and the granting of security pursuant to the German Avoidance Act (*Anfechtungsgesetz*). The conditions for avoidance under the German Avoidance Act differ to a certain extent from the above-described rules under the German Insolvency Code and the avoidance periods are calculated from the date when a creditor exercises its rights of avoidance in the courts.

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.

The German restructuring laws may be subject to further amendments in near future due to the current EU Commission's proposal as of November 22 2016 for a directive of the European Parliament and of the Council on preventive restructuring frameworks, second chance and measures to increase the efficiency of restructuring, insolvency and discharge procedures and amending Directive 2012/30/EU which may, *inter alia*, stipulate that the claims under the Notes can be modified by majority vote and against the voting of a creditor even outside formal insolvency proceedings.

United States

CeramTec Acquisition Corporation and CeramTec North America Corporation (the "U.S. Guarantors") are incorporated under the laws of Delaware, in the United States. In the event of an insolvency of any U.S. Guarantor, insolvency proceedings with respect to it would be likely to be governed by U.S. federal bankruptcy laws.

Guarantee obligations, including any collateral pledged by the U.S. Guarantors to secure such guarantee obligations,, are generally enforceable under United States bankruptcy laws to the same extent they would be enforceable under applicable non-bankruptcy law. However, as described below, enforcement may be prevented or delayed by certain provisions of U.S. bankruptcy law.

Fraudulent Transfer and Preference Risk

Each of the Guarantees, including the Guarantees by the U.S. Guarantors, may be subject to review under the fraudulent transfer and preference provisions of the United States Bankruptcy Code, as well as the fraudulent transfer and conveyance laws of the relevant jurisdiction governing each Guarantee or where each of the Guarantors is incorporated. Under United States federal bankruptcy laws and comparable provisions of state fraudulent transfer laws, the issuance of the Guarantees by the Issuer and the Guarantors could be avoided and recovered by the Guarantors' bankruptcy estate.

The Guarantee obligations may be avoided and recovered if, among other thing, at the time that such U.S. Guarantor issued the related guarantee or gave the security, it (A) intended to hinder, delay or defraud any present or future creditor; or (B)(i) received less than reasonably equivalent value or fair consideration for such guarantee or security and (ii) either:

- was insolvent or rendered insolvent (under the U.S. Bankruptcy Code, the sum of such entity's debts is greater than all of such entity's property, at a fair valuation,) by reason of such guarantee or grant of security;

- was engaged in a business or transaction for which its remaining assets constituted unreasonably small capital; or

- intended to incur or believed that it would incur, debts beyond its ability to pay such debts as they mature.

The bankruptcy court may find that the Guarantor did not receive reasonably equivalent value for the incurrence of the guarantee or the grant of the security if the respective Guarantor did not substantially benefit directly or indirectly form the issuance of the Notes.

In addition, any grant of a security interest in Collateral to secure the Guarantee after the Guarantee obligation is initially incurred might also be avoidable by a Guarantor (as debtor in possession) or by its trustee in bankruptcy as a preferential transfer if certain events or circumstances exist or occur, including, among others, the Guarantor is insolvent at the time of the grant of security, the security interest permits the holders of the Notes to receive a greater recovery than if the bankruptcy case were a case under Chapter 7 of the U.S. Bankruptcy Code and the security had not been given and a bankruptcy case in respect of the Guarantor is commenced within 90 days following the grant of security, or if the beneficiary of the Guarantee is an insider, one year.

If the Guarantor or its bankruptcy trustee can successfully avoid a Guarantee or the security pledge in support of such Guarantee as a fraudulent transfer and/or a preference, the transaction may be unwound and any payments or property returned to the Guarantor or its bankruptcy trustee for payment to the Guarantor's creditors in accordance with the priority set forth in the U.S. Bankruptcy Code. In addition to the state fraudulent transfer or fraudulent conveyance laws mentioned above, certain states also have statutes that permit the avoidance of preferences.

By their terms, some or all of the guarantee documents will limit the liability of each U.S. Guarantor to the maximum amount it can pay without its guarantee being deemed a fraudulent transfer, although there is no assurance that any such limitation on liability will be effective under applicable law to prevent a guarantee from being a fraudulent transfer.

Automatic Stay

The right of a noteholder to enforce rights and remedies under a Guarantee or any security documents relating thereto against any of the Guarantors upon the occurrence of an event of default under the Indenture is likely to be significantly impaired by applicable U.S. bankruptcy law to the extent that such Guarantor becomes subject to a bankruptcy case under the U.S. Bankruptcy Code before such rights and remedies are fully exercised. Upon the commencement of a case under the Bankruptcy Code by a Guarantor, a creditor of Guarantor, such as a noteholder, is prohibited by the automatic stay arising under U.S. bankruptcy law from obtaining possession or exercising control over its collateral, enforcing its security interest or otherwise seeking to collect amounts owed to it against a debtor in a U.S. bankruptcy case without bankruptcy court approval, which may not be given. Moreover, to the extent that the creditor is a secured creditor, the Bankruptcy Code permits the debtor to continue to retain and use collateral even though the debtor is in default under the applicable debt instruments, provided that the secured creditor is given "adequate protection". The meaning of the term "adequate protection" may vary according to circumstances, but it is intended in general to protect the value of the secured creditor's interest in the collateral as of the commencement of the bankruptcy case and may include cash payments or the granting of additional security if and at such times as the bankruptcy court in its discretion determines that the value of the secured creditor's interest in the collateral is declining during the time the bankruptcy case is pending. A U.S. bankruptcy court may determine that a secured creditor may not require additional adequate protection for a diminution in the value of its collateral if the value of the collateral exceeds the amount of the debt that it secures.

In view of the automatic stay, the lack of a precise definition of the term "adequate protection" and the broad discretionary power of a U.S. bankruptcy court, it is impossible to predict:

- how long payments under the Notes could be delayed following commencement of a bankruptcy case;
- whether or when a noteholder could enforce its security interests;
- the value of the collateral at the time of the bankruptcy petition; or
- whether or to what extent noteholders would be compensated for any loss of value of the collateral through the provision of "adequate protection".

Substantive Consolidation

During the course of a U.S. bankruptcy case, the debtor in possession, trustee, creditors' committees and, in some instances, other parties in interest, may investigate whether or not one or more bankruptcy debtors should be substantively consolidated with one another or possibly with an affiliated or otherwise related non-debtor. The doctrine of substantive consolidation refers to the equitable power of a bankruptcy court to order that the assets and liabilities of separate, but related, entities be combined and treated as though held and incurred by a single entity. The consolidation of the Issuer with the Guarantors would have the effect of extinguishing the guarantee. The standard for substantive consolidation differ among the various courts in the United States, and the substantive consolidation analysis will be extremely fact dependent, focusing, *inter alia*, on issues such as: (1) degree of difficulty in segregating assets and liabilities; (2) presence of consolidated financial statements; (3) increased profitability due to consolidation at a single physical location; (4) commingling of assets and business functions; (5) unity of interests and ownership; (6) existence of intercompany guaranties on loans; and (7) transfer of assets without observance of corporate formalities.

NOTICE TO INVESTORS

You are advised to consult legal counsel prior to making any offer, sale, resale, pledge or other transfer of any of the Notes and/or the Guarantees offered hereby.

The Notes and the Guarantees (together, the "Securities") have not been and will not be registered under the Securities Act and may not be offered or sold in the United States or to U.S. persons unless the Securities are registered under the Securities Act, or an exemption from the registration requirements of the Securities Act and the securities laws of any applicable jurisdiction is available. Accordingly, the Securities are being offered and sold only (i) to qualified institutional buyers (as defined in Rule 144A, "QIBs") in reliance on Rule 144A and (ii) outside the United States to non-U.S. persons in an offshore transaction (in each case, as defined in Regulation S) in reliance on Regulation S.

We have not registered and will not register the Securities under the Securities Act and, therefore, the Securities may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. Accordingly, we are offering and selling the Securities to the Initial Purchasers for re-offer and resale only:

- in the United States to QIBs in compliance with Rule 144A; and
- outside the United States to non-U.S. persons in an offshore transaction in accordance with Regulation S.

We use the terms "U.S. person," "offshore transaction" and "United States" with the meanings given to them in Regulation S.

Each purchaser of the Securities hereunder (other than each of the Initial Purchasers) will be deemed to have acknowledged, represented, warranted and agreed with us and the Initial Purchasers as follows (terms used in this paragraph that are defined in Rule 144A and Regulation S are used herein as defined therein):

(1) it understands and acknowledges that (i) the Securities have not been registered under the Securities Act or any other applicable securities laws 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 (ii) the Securities 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 and in each case in compliance with the conditions for transfer set forth in paragraphs (4) and (5) below;

(2) it is either (a) a QIB and is aware that any sale of these Securities to it will be made in reliance on Rule 144A under the Securities Act, and such acquisition will be for its own account or for the account of another QIB, or (b) it is a non-U.S. person and it is purchasing the Securities outside the United States in an offshore transaction in accordance with Regulation S;

(3) it acknowledges that none of the Issuer, the Target Group, the Initial Purchasers, or any person representing any of the foregoing, has made any representation to it with respect to us or the offer or sale of any Securities, other than the information contained in or incorporated by reference 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 has had access to such financial and other information concerning us 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, us and the Initial Purchasers. 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 or the information incorporated by reference herein;

(4) it is purchasing the Securities for its own account, or for an account with respect to which it exercises sole investment discretion and 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 any state or other securities laws, 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 QIB pursuant to Rule 144A or to non-U.S. persons in offshore transactions pursuant to Regulation S;

(5) it 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 QIBs, 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) and, in the case of Securities offered to non-U.S. persons in accordance with Regulation S, 40 days after the later of the original issue date of such Security and the date on which such Security (or any predecessor of such Security) was first offered to persons other than distributors (as defined in Rule 902 of Regulation S) in reliance on Regulation S 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 such 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 to non-U.S. persons 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 right 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 such Security.

(6) it understands that the Securities will bear a legend substantially to the following effect:

THIS SECURITY HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "U.S. 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 U.S. 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 U.S. SECURITIES ACT) ("QIB") OR (B) IT IS A NON U.S. PERSON ACQUIRING THIS SECURITY OUTSIDE THE UNITED STATES IN AN "OFFSHORE TRANSACTION" (AS DEFINED IN REGULATION S UNDER THE U.S. SECURITIES ACT), (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 [IN THE CASE OF SECURITIES SOLD TO QIBs: 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),] [IN THE CASE OF SECURITIES SOLD TO NON-U.S. PERSONS IN ACCORDANCE WITH REGULATION S: 40 DAYS AFTER THE LATER OF THE ORIGINAL ISSUE DATE OF THIS SECURITY AND THE DATE ON WHICH SUCH SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY) WAS FIRST OFFERED TO PERSONS OTHER THAN DISTRIBUTORS (AS DEFINED IN RULE 902 OF REGULATION S) IN RELIANCE ON REGULATION S] 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 TO NON-U.S. PERSONS 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.

Each Note offered hereby that is issued with OID will contain a legend substantially to the following effect:

THE FOLLOWING INFORMATION IS SUPPLIED SOLELY FOR U.S. FEDERAL INCOME TAX PURPOSES. THIS NOTE IS ISSUED WITH ORIGINAL ISSUE DISCOUNT FOR PURPOSES OF SECTION 1271 ET SEQ. OF THE U.S. INTERNAL REVENUE CODE. A HOLDER MAY OBTAIN THE ISSUE PRICE, AMOUNT OF ORIGINAL ISSUE DISCOUNT, ISSUE DATE AND YIELD TO MATURITY FOR SUCH NOTE BY SUBMITTING A WRITTEN REQUEST FOR SUCH INFORMATION TO CTC BONDCO GMBH AT THE FOLLOWING ADDRESS: ALSTERARKADEN 12, 20354 HAMBURG, GERMANY.

If you purchase Securities, you 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) it 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) it 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 us and the Registrar that the restrictions set forth therein have been complied with;

(9) it acknowledges that we, 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 are 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, warranties and agreements on behalf of each such investor account; and

(10) it understands that no action has been taken in any jurisdiction (including the United States) by us 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 "*Notice to U.S. Investors*," "*Notice to Investors"* and "*Plan of Distribution*."

PLAN OF DISTRIBUTION

The Issuer has agreed to sell to Merrill Lynch International (B&D), Morgan Stanley & Co. International plc, Deutsche Bank AG, London Branch, Nomura International plc and UBS Limited (the "Initial Purchasers"), and the Initial Purchasers have agreed to purchase from the Issuer, the entire principal amount of the Notes. Each of the sales 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 respective issue price that appears on the cover of this offering memorandum. 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 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 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 Purchase Agreement provides that the obligations of the Initial Purchasers to pay for and accept delivery of the 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 Sponsor or its affiliates may place a purchase order for and be allocated 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 in respect of the Notes purchased by such persons.

The Purchase Agreement provides that the Issuer, Bidco and each Post-Completion Date Guarantor (as of the date of its accession to the Purchase Agreement) 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 (as of the Completion Date) the Post-Completion Date 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 60 days after the closing of the Offering without the prior written consent of the representatives of the Initial Purchasers.

The Notes and the 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 to non-U.S. persons in offshore transactions in reliance on Regulation S. Until 40 days after the later of (i) the commencement of this offering and (ii) the Issue Date of the Notes, an offer or sale of the Notes initially sold in reliance on Regulation S within the United States by a dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A under the Securities Act. Terms used in this paragraph have the meanings given to them by Regulation S. Resales of the Notes are restricted as described under "*Important Information About This Offering Memorandum*" and "*Notice to Investors*."

Each Initial Purchaser has 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.

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 Investors*."

The Issuer has also agreed that it 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 Notes are a new issue of securities for which there currently is no market. The Issuer will apply, through their listing sponsor, 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 the Securities Act and the U.S. Exchange Act. 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 to the Notes—There may not be an active trading market for the Notes, in which case your ability to sell the Notes will be limited*."

We expect that delivery of the Notes will be made against payment on the Notes on or about the date specified on the cover page of this offering memorandum, which will be business days (as such term is used for purposes of Rule 15c6-1 of the U.S. Exchange Act) following the date of pricing of the Notes (this settlement cycle is being referred to as "T + "). Under Rule 15c6-1 of the U.S. Exchange Act, trades in the secondary market generally are required to settle in two business days unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the Notes on the date of this offering memorandum or the following 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 may engage in over-allotment, stabilizing transactions, covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which creates a short position for the relevant Initial Purchaser. Stabilizing transactions permit the Initial Purchasers to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Covering transactions involve purchases of the Notes in the open market after the distribution has been completed in order to cover short positions. Penalty bids permit the Initial Purchasers to reclaim a selling concession from a broker or dealer when the Notes originally sold by that broker or dealer are purchased in a stabilizing or covering transaction to cover short positions.

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

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 days after the date of issuance of the Notes and 60 days after the date of the allotment of the Notes. These transactions may be effected in the over-the-counter market or otherwise.

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 and may provide in the future investment banking, financial advisory and commercial banking services to us and our affiliates 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, Bank of America, N.A. (London Branch), Bank of America Merrill Lynch International Limited, Deutsche Bank AG, London Branch, Morgan Stanley Bank International Limited, Nomura International plc and UBS Limited or their respective affiliates are arrangers and/or lenders under our Senior Facilities Agreement, have provided certain debt financing commitments to provide financing for the Acquisition in the event the Offering is not consummated and will receive customary fees, commissions and reimbursement of expenses for their services in such capacities. Certain of the Initial Purchasers advised Cinven in relation to the sale of the Target to Bidco. The Initial Purchasers and their respective affiliates may act as counterparties in the hedging arrangements we expect to enter into in connection with the Transactions, and will receive customary fees for their services in such capacities. In addition, Deutsche Bank AG, London Branch will act as agent and security agent under the Senior Facilities Agreement.

The proceeds from the Offering of the Notes may be used to repay some of the indebtedness outstanding under the Existing Senior Facilities Agreement. Certain of the Initial Purchasers or their affiliates are arrangers and/or lenders under the Existing Senior Facilities Agreement and may receive a portion of the proceeds from the Offering of the Notes.

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. 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 clients that they acquire, long and short positions in such securities and instruments.

SERVICE OF PROCESS AND ENFORCEMENT OF CIVIL LIABILITIES

Germany

The Issuer and the German Guarantors are incorporated under the laws of Germany. Our directors and executive officers live outside the United States. Virtually all of our assets and the assets of our directors 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.

We have been advised by our German counsel that there is doubt as to the enforceability in Germany of civil liabilities based on the state securities laws of the United States, either in an original action or in an action to enforce a judgment obtained in U.S. courts. The United States and 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. Consequently, a final judgment for payment given by any court in the United States, whether or not predicated solely upon U.S. securities laws, would not automatically be enforceable in Germany. A final judgment by a U.S. 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. The recognition and enforcement of the U.S. judgment by a German court is conditional upon a number of factors, including the following:

- the judgment being final under U.S. law;
- the U.S. court having had jurisdiction over the original proceeding under German law;
- the defendant having had the chance to defend herself or himself against an unduly or untimely served complaint;
- the judgment of the U.S. court being consistent with the judgment of a German court or a recognized judgment of a foreign court handed down before the judgment of the U.S. court;
- the judgment of the U.S. court being consistent with the procedure of a matter pending before a German court, provided that such matter was pending before a German court before the U.S. court entered its judgment;
- the enforcement of the judgment by the U.S. court being compatible with German public policy, including the fundamental principles of German law, and in particular the civil liberties (*Grundrechte*) guaranteed by virtue of the German Constitution (*Grundgesetz*); and
- generally, the guarantee of reciprocity.

Subject to the foregoing, purchasers of securities may be able to enforce judgments in civil and commercial matters obtained from U.S. courts in Germany. We cannot, however, assure you that attempts to enforce judgments in Germany will be successful.

German courts usually deny the recognition and enforcement of punitive damages. 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.

German civil procedure differs substantially from U.S. civil procedure in a number of respects. In as far as the production of evidence is concerned, U.S. law and the laws of several other jurisdictions based on common law provide for pre-trial discovery, a process by which parties to the proceedings may prior to trial compel the production of documents by adverse or third parties and the deposition of witnesses. Evidence obtained in this manner may be decisive in the outcome of any proceeding. No equivalent pre-trial discovery process exists under German law.

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 fundamental 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 fundamental 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 pre-trial 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 pre-trial discovery process exists under German law.

In addition, it may 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.

LEGAL MATTERS

Certain legal matters in connection with the Offering will be passed upon for us by Freshfields Bruckhaus Deringer 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 German language consolidated financial statements of the Target, CeramTec Holding GmbH, as of and for the financial years ended December 31, 2014, 2015 and 2016 included in this offering memorandum have been audited by Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart branch, which is a member of the German Chamber of Public Accountants (*Wirtschaftsprüferkammer*), as stated in their reports appearing herein. The business address of Deloitte GmbH, Stuttgart branch, is Löffelstraße 42, 70597 Stuttgart.

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 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 relating to the Notes and our most recent consolidated financial statements published by us may be inspected and obtained 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 from the Issuer upon 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 International Stock Exchange Authority Limited 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.

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 sold pursuant to Regulation S and Rule 144A have been accepted for clearance through the facilities of Euroclear and Clearstream. The common codes and international securities identification numbers (the "ISIN Number") for the Notes are set forth below:

	Common Code	ISIN Number
144A Notes		
Regulation S Notes		

Periodic Reporting under the Exchange Act

Neither the Issuer nor the Target is currently subject to the periodic reporting and other information requirements of the Exchange Act.

General Information on 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 registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Hamburg under registration number HRB 148292. The Issuer's registered office is at Alsterarkaden 12, 20354 Hamburg.

General Information on the Guarantors

On the Issue Date, the Notes will be guaranteed solely by Bidco, a wholly owned subsidiary of the Issuer. Subject to the Agreed Security Principles, on the earlier of (a) the date on which a Post-Completion Date Guarantor provides a guarantee of the Senior Facilities and (b) on or prior to a date falling 120 days after the Completion Date, the Notes will additionally be guaranteed on a senior subordinated basis by each Post-Completion Date Guarantor.

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. The organizational documents of the Issuer, along with the Indenture relating to the Notes and the most recent consolidated financial statements published by us may be inspected and obtained at the office of the Paying Agent during normal business hours for a period of 14 days following grant of listing of the Notes. Copies of such documents will also be available from the Issuer upon request on and after the grant of listing of the Notes.

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CeramTec Holding GmbH, Plochingen

Consolidated statement of comprehensive income from 1 January to 31 December 2014

	Notes	1 January to 31 December 2014	15 July to*) 31 December 2013
		EUR k	EUR k
Revenue	3.1	474,832	145,444
Cost of sales	3.2	293,508	116,559
Gross profit		**181,324**	**28,885**
Selling costs	3.3	78,898	24,079
Research and development costs	3.4	24,067	6,887
General administrative costs	3.5	18,860	6,723
Other income / expenses (-), net *)	3.6	2,004	(17,069)
Operating income/(loss)		**61,503**	**(25,873)**
Interest income and other finance income		196	7,249
Interest expenses and other finance costs		94,080	28,993
Financial result	3.7	**(93,884)**	**(21,744)**
Loss before income tax		**(32,381)**	**(47,617)**
Income tax benefit	3.8	1,029	4,162
Net loss for the year		**(31,352)**	**(43,455)**
Items that will not be reclassified subsequently to profit or loss			
Income / expenses (-) from remeasurement of defined benefit plans		(30,253)	1,170
Deferred taxes		8,407	(202)
		(21,846)	**968**
Items that may be reclassified subsequently to profit or loss			
Gain/(losses) on cash flow hedges		4,866	(5,228)
Deferred taxes		(1,386)	1,490
		3,480	**(3,738)**
Exchange differences on translation foreign operations		8,070	(5,067)
Other comprehensive loss, net of income tax		**(10,296)**	**(7,837)**
Total comprehensive loss		**(41,648)**	**(51,292)**

*) Presentation has been changed and the comparative period has been adjusted; for more details see notes 1.2 Basis of preparation

CeramTec Holding GmbH, Plochingen

Consolidated statement of financial position as at 31 December 2014

Assets	Notes	31 December 2014	31 December 2013*)
		EUR k	EUR k
Goodwill	4.1	550,820	547,434
Other intangible assets	4.1	639,828	681,814
Property, plant and equipment	4.2	309,684	306,894
Other financial assets	4.3	29,963	7,082
Other assets	4.4	1,675	1,925
Deferred tax assets	3.8	2,874	2,183
Non-current assets		**1,534,844**	**1,547,332**
Inventories	4.5	67,918	71,354
Trade receivables	4.6	47,517	43,374
Income tax receivables		6,517	199
Other financial assets	4.3	3,265	858
Other assets	4.4	5,219	9,049
Cash and cash equivalents	4.7	62,246	66,963
Current assets		**192,682**	**191,797**
Total assets		**1,727,526**	**1,739,129**

*) Comparative period has been adjusted; for more details see notes 1.2 Basis of Preparation and 1.4 Changes to the Consolidated Group

Equity and liabilities	Notes	31 December 2014	31 December 2013*)
		EUR k	EUR k
Issued capital	4.8	25	25
Capital reserves	4.8	378,148	378,148
Accumulated losses	4.8	(95,696)	(42,498)
Accumulated other comprehensive income/(loss)	4.8	2,745	(8,805)
Equity		**285,222**	**326,870**
Provisions for pension obligations	4.9	91,451	61,131
Other provisions	4.10	3,747	3,486
Financial liabilities to affiliates	4.11	133,549	123,338
Financial liabilities to third parties	4.12	949,399	918,636
Deferred tax liabilities	3.8	173,298	190,783
Non-current liabilities		**1,351,444**	**1,297,374**
Other provisions	4.10	13,967	8,993
Provision for taxes	4.10	66	402
Financial liabilities to third parties	4.12	40,824	61,924
Trade payables		22,424	31,898
Other liabilities	4.13	13,579	11,668
Current liabilities		**90,860**	**114,885**
Total liabilities		**1,442,304**	**1,412,259**
Total equity and liabilities		**1,727,526**	**1,739,129**

*) Comparative period has been adjusted; for more details see notes 1.2 Basis of Preparation and 1.4 Changes to the Consolidated Group

CeramTec Holding GmbH, Plochingen

Consolidated statement of cash flows from 1 January to 31 December 2014

	1 January to 31 December 2014	15 July to*) 31 December 2013
	EUR k	EUR k
Net loss for the year	(31,352)	(43,455)
Income tax benefit	(1,029)	(4,162)
Interest result	79,087	28,738
Amortisation and depreciation of non-current assets	89,249	41,543
Gain (-) / loss on disposal of property, plant and equipment	28	(42)
Increase / decrease (-) in provisions (excluding deferred taxes)	3,168	(17,637)
Income tax payment (-)	(16,426)	(391)
Other non-cash expenses/income (-)	15,481	(9,692)
Increase (-) / decrease in inventories	3,436	17,746
Increase (-) / decrease in trade receivables	(4,143)	5,942
Increase (-) / decrease in other assets and (financial) assets	406	(7,334)
Increase / decrease (-) in trade payables	(9,702)	10,183
Increase / decrease (-) in other (financial) liabilities	1,825	8,928
Cash flow from operating activities	**130,028**	**30,367**
Cash received from disposals of property, plant and equipment	1,256	75
Cash paid (-) for investments in property, plant and equipment	(47,729)	(20,358)
Cash received from grants	6,100	1,025
Cash paid (-) for investments in intangible assets	(1,399)	(449)
Cash paid (-) for the acquisition of entities	(3,500)	(1,359,615)
Cash flow from investing activities	**(45,272)**	**(1,379,322)**
Cash received from contribution to capital reserve	0	378,148
Cash received from issuance of bond	0	299,799
Cash received from syndicated loan/repayment of syndicated loan	(7,522)	625,625
Interest paid (-)	(55,382)	(7,755)
Cash received from shareholder loan	0	120,000
Transfer of profit/loss to former shareholder	(26,922)	0
Cash flow from financing activities	**(89,826)**	**1,415,817**
Decrease/Increase in cash and cash equivalents	(5,070)	66,862
Net foreign exchange difference	353	26
Cash and cash equivalents at the beginning of the period	66,963	75
Cash and cash equivalents at the end of the period	**62,246**	**66,963**

*) Presentation has been changed and the comparative period has been adjusted; for more details see notes 1.2 Basis of preparation and 5. Additional notes to the consolidated financial statement of cash flows.

CeramTec Holding GmbH, Plochingen

Consolidated statement of changes in equity for the year ended 31 December 2014

				Accumulated other comprehensive income/(loss)		
	Issued capital	Capital reserves	Accumulated losses	Cash flow hedge reserve	Difference from currency translation	Equity
Reference to disclosure in notes	(4.8)	(4.8)	(4.8)	(4.8)	(4.8)	(4.8)
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
14 July 2013	**25**	**0**	**(11)**	**0**	**0**	**14**
Net loss for the year	—	—	(43,455)	—	—	(43,455)
Other comprehensive income / loss (-)	—	—	968	(3,738)	(5,067)	(7,837)
Total comprehensive income / loss (-)	—	—	*(42,487)*	*(3,738)*	*(5,067)*	(51,292)
Contribution by owners	—	378,148	—	—	—	378,148
31 December 2013	**25**	**378,148**	**(42,498)**	**(3,738)**	**(5,067)**	**326,870**
Net loss for the year	—	—	(31,352)	—	—	(31,352)
Other comprehensive income / loss (-)	—	—	(21,846)	3,480	8,070	(10,296)
Total comprehensive income / loss (-)	—	—	*(53,198)*	*3,480*	*8,070*	(41,648)
31 December 2014	**25**	**378,148**	**(95,696)**	**(258)**	**3,003**	**285,222**

TRANSLATION—GERMAN VERSION PREVAILS

CeramTec Holding GmbH

Plochingen

Notes to the Consolidated Financial Statements for the year ended 31 December 2014

CeramTec Holding GmbH

Notes to the Consolidated Financial Statements

1 General information

1.1 Corporate information and purpose of the Company

The purpose of CeramTec Holding GmbH (hereinafter "CeramTec Holding") 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, establishes other entities in Germany and abroad, and acquires, invests in and holds these investments and/or manage them as well as enter into and/or issue various of financial instruments.

The subsidiaries of CeramTec Holding are leading global producers of high-performance ceramics and specialised in the development, production and sale of assemblies, components and products made from ceramic materials. The companies are primarily active in the following markets: automotive, electronic applications, energy and environmental applications, equipment and mechanical engineering and medical technology. Their activities focus on developing solutions for increasingly demanding application areas using many different and in part highly-specialised ceramic materials with unique mechanical, electrical, thermal and biochemical properties and property combinations.

CeramTec Holding's registered office is located at CeramTec-Platz 1-9 in 73207 Plochingen, Germany. CeramTec Holding is the parent company of the Group ("CeramTec Holding Group") and the ultimate parent, which prepares exempting consolidated financial statements.

CeramTec Holding was founded on 3 June 2013. The first fiscal year was an abbreviated fiscal year for the period from 3 June 2013 to 14 July 2013. The second fiscal year was also an abbreviated fiscal year for the period from 15 July 2013 to 31 December 2013. This abbreviated fiscal year is referred to in the following as the comparative period. As the acquisition of the operating business did not take place until during the comparative period, the prior-year figures are not comparable. Where no prior-year figures are presented in the following, their value is EUR 0. From fiscal year 2014 onwards, the fiscal year corresponds to the calendar year.

The management of CeramTec Holding approved the consolidated financial statements on 31 March 2015 for submission to the shareholder meeting.

1.2 Basis of preparation

The consolidated financial statements are prepared pursuant to Sec. 315a (3) and (1) HGB ["Handelsgesetzbuch": German Commercial Code] 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 fiscal year and the supplementary requirements of German commercial law.

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 results of operations and financial position of the CeramTec Holding Group.

The 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 individual cases, adding individual values to the total value may therefore lead to differences.

For the purpose of clarity, various items in the statement of consolidated 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 realised or settled within twelve months from the reporting date. The expense recognised 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.

Compared with the consolidated financial statements of the previous year, the presentation in the consolidated statement of comprehensive income was adjusted. The previous line items "Other income" and "Other expenses" are offset and reported under the line item "Other income / (expenses), net". In addition, the results of changing the fair values of derivatives, and foreign currency results, are offset and recognised in the financial result.

In addition, income tax receivable is not included anymore in the item “Other receivables and assets”, and shown in the consoldiated statement of financial position under a separate item instead.

The comparative period was adjusted accordingly.

Compared with the consolidated financial statements of the previous year, presentation of interest paid in the consolidated statement of cash flows for the reporting year and comparative period was adjusted.

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 Holding 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	**31 December 2014**	**31 December 2013**
CeramTec Group GmbH, Plochingen	100.00	100.00
CeramTec Service GmbH, Plochingen	100.00	100.00
CeramTec GmbH, Plochingen	100.00	100.00
Cerasiv GmbH Innovatives Keramik-Engineering, Plochingen	100.00	100.00
CeramTec-ETEC GmbH, Lohmar	100.00	100.00
Emil Müller GmbH, Wilhermsdorf	100.00	100.00
CeramTec Italia s.r.l. in Liquidazione, Milan/Italy	100.00	100.00
CeramTec UK Ltd., Colyton/Great Britain	100.00	100.00
CeramTec Czech Republic s.r.o., Sumperk/Czech Republic	100.00	100.00
CeramTec Ibérica Innovative Ceramic Engineering S.L., Vilassar de Mar/Spain	100.00	100.00
CeramTec Innovative Ceramic Engineering, (M) Sdn. Bhd., Seremban/Malaysia	100.00	100.00
CeramTec Korea Ltd., Suwon-Si/Republic of Korea	100.00	100.00
CeramTec Suzhou Ltd., Suzhou/China	100.00	100.00
PST Press Sintertécnica Brasil Ltda., Nova Odessa/Brazil	100.00	100.00
CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji—Goa/India	99.90	99.80
Press and Sinter Technics de Mexico S.A. de C.V., Puebla/Mexico	100.00	100.00
CeramTec Acquisition Corporation, Laurens/USA	100.00	100.00
CeramTec North America Corporation, Laurens/USA	100.00	100.00
PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Polen (formerly: Faenza Poland Sp. z.o.o., Gorzyce/Poland)	100.00	100.00

CeramTec Holding has a direct shareholding in CeramTec Group GmbH and an indirect shareholding in the other subsidiaries.

On 27 February 2014, CeramTec GmbH increased share in CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji—Goa/India; from 99.80 % to 99.90 %.

As per an agreement dated 19 August 2014, PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland merged with Faenza Poland Sp. z.o.o., Gorzyce/Poland. The company was renamed PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland on the same day. The consolidated financial statements were not impacted.

As of 31 December 2014, DuraWear Corporation, Birmingham/USA was deconsolidated because the company is liquidated.

CeramTec Group GmbH, CeramTec Service 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 fiscal year from 1 January to 31 December 2014 pursuant to Sec. 264 (3) HGB.

1.4 Changes in the consolidated group

Based on the purchase agreement dated 15 June 2013, CeramTec Service GmbH (hereinafter “CeramTec Service”), an indirect subsidiary of CeramTec Holding, purchased, effective as of 31 August 2013, 24:00 hours/1 September 2013, 0:00 hours (midnight transaction), the high-performance ceramics division from entities of the Rockwood Holdings, Inc., Princeton, New Jersey/USA; the following entities are allocated to the division:

- CeramTec GmbH, Plochingen/Germany (CeramTec GmbH)
- Press and Sinter Technics de Mexico S.A. de C.V., Puebla/Mexico (PST Mexico)

- CeramTec North America Corporation, Laurens/USA (CeramTec NA)
- PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland (PST Poland)

Through this acquisition, CeramTec Holding acquired indirect control over these entities and their subsidiaries and has consolidated these since 1 September 2013 pursuant to IAS 27 applicable on this date.

The consideration transferred to obtain control amounts to EUR 1,547,000k and contains the purchase price for the shares of EUR 1,527,838k as well as the purchase price for loan receivables from the acquired entities of EUR 19,162k. The fair value of the acquired assets and liabilities amounts to EUR 996,723k. The acquisition as of 1 September 2013 therefore resulted in goodwill of EUR 550,277k.

As of the reporting date of the comparative period, the business combination was recognised on a preliminary basis as the purchase price allocation and therefore the identification and measurement of the acquired assets and liabilities had not yet been concluded. During the measurement period, the purchase price allocation and, in consequence, the comparative period figures were adjusted.

The following changes were made:

	31 December 2013		
	Preliminary values	Adjustment	Adjusted values
	EUR k	EUR k	EUR k
Assets			
Goodwill	548,872	(1,438)	547,434
Deferred tax assets	2,399	(216)	2,183
Non-current liabilities			
Provisions for pension obligations	62,214	(1,082)	61,131
Other provisions	4,286	(800)	3,486
Deferred tax liabilities	190,555	228	190,783

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 Holding obtains control over them. They are deconsolidated on the date on which CeramTec Holding ceases to have control.

In accordance with IAS 27, 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 recognised for temporary differences arising from consolidation entries.

If less than 100% of equity in a subsidiary is allocable to CeramTec Holding, 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 recognised 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 Holding 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 recognised 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 recognised. 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 recognised amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another IFRS.

If CeramTec Holding 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 recognised through profit or loss and is taken into account when determining the goodwill.

All contingent consideration that must be transferred by the acquirer is recognised at fair value as of the date of acquisition. A contingent consideration classified as an asset or liability, which is recognised as a financial instrument under IAS 39 *Financial Instruments: Recognition and Measurement*, is measured at fair value. Changes in the fair value are recognised either through profit or loss or under other comprehensive income depending on the classification. Should the contingent consideration not fall under IAS 39, 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 impairment losses. Goodwill is tested for impairment at least once a year (in the fourth quarter) and more frequently if 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 Holding, 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.

Where goodwill forms part of 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 disposed of under these circumstances is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit.

The three cash-generating units (CGU) for the purposes of impairment testing identified by CeramTec Holding to which the goodwill was allocated as part of the acquisition of the high-performance ceramics division consists of the following:

CGU CeramTec GmbH, which consists of:

- CeramTec GmbH, Plochingen
- Cerasiv GmbH Innovatives Keramik-Engineering, Plochingen
- CeramTec Italia s.r.l. in Liquidazione, Milan/Italy
- CeramTec UK Ltd., Colyton/Great Britain
- CeramTec Czech Republic s.r.o., Sumperk/Czech Republic
- CeramTec Ibérica Innovative Ceramic Engineering S.L., Vilassar de Mar/Spain
- CeramTec Innovative Ceramic Engineering, (M) Sdn. Bhd., Seremban/Malaysia
- CeramTec Korea Ltd., Suwon-Si/Republic of Korea
- CeramTec Suzhou Ltd., Suzhou/China
- CeramTec North America Corporation, Laurens/USA

- CeramTec Acquisition Corporation, Laurens/USA
- CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji—Goa/India

CGU Emil Müller GmbH, which consists of:

- Emil Müller GmbH, Wilhermsdorf
- PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland
- PST Press Sintertécnica Brasil Ltda., Nova Odessa/Brazil
- Press and Sinter Technics de Mexico S.A. de C.V., Puebla/Mexico

CGU CeramTec-ETEC GmbH, which consists of:

- CeramTec-ETEC GmbH, Lohmar

Foreign currency translation

The consolidated financial statements are prepared in euros, the functional currency of the CeramTec Holding 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.

Differences from the currency translation of assets and liabilities compared to the translation of the prior year as well as exchange differences between the statement of comprehensive income and the statement of financial position are recognised in other comprehensive income and included in equity under accumulated other comprehensive income. These amounts recognised under other comprehensive income are reclassified to the statement of comprehensive income 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:

		31 December 2014		31 December 2013	
		Closing rate	Average rate	Closing rate	Average rate
USD	USA	1.2098	1.3290	1.3743	1.3551
CNY	China	7.5074	8.1889	8.3204	8.2630
GBP	Great Britain	0.7767	0.8064	0.8300	0.8409
PLN	Poland	4.2870	4.1855	4.1545	4.1962
CZK	Czech Republic	27.6594	27.5359	27.3355	26.4694

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 recognised to the extent that it is probable that the economic benefits from the transaction will flow to the CeramTec Holding Group and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable less any trade discounts and volume rebates granted. Revenue and other income are recognised as follows:

Revenue from the sale of goods

Revenue from the sale of goods is recognised upon delivery of goods and transfer of ownership if the following criteria are satisfied:

- The Group has transferred to the buyer the significant risks and rewards of ownership of the goods and merchandise sold

- The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods and merchandise sold
- The amount of revenue can be measured reliably
- It is probable that the economic benefits associated with the transaction will flow to the Group and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

Services

Revenue from services is recognised using the percentage of completion method if

- The amount of revenue can be determined reliably
- It is probable that the economic benefits associated with the transaction will flow to the entity
- The stage of completion of the transaction at the end of the reporting period can be determined reliably and
- The costs incurred for the transaction and the costs to complete the transaction can be determined reliably.

Interest income, royalties, dividend income

Interest income is recognised pro rata temporis using the effective interest method. Income from royalties is recognised in accordance with the terms of the underlying contracts on an accrual and pro rata basis. Dividend income is recognised when the right to receive payment is established.

Research and development costs

Research costs are expensed as incurred. If the requirements for capitalisation are not satisfied, development costs are recognised in profit or loss in the period in which they are incurred.

Intangible assets

Intangible assets are recognised if a future economic benefit is probable and can be measured reliably.

Individually acquired intangible assets are stated 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 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 amortisation and any accumulated impairment losses.

Intangible assets with finite useful lives are amortised on a straight-line basis over their useful life. Intangible assets acquired during the year are amortised pro rata temporis. The useful life and amortisation method are reviewed at least annually at the end of each fiscal year. Changes are treated as changes in accounting estimates. Amortisation is recognised in the cost of sales, general administrative and selling costs. The useful life for technology amounts to 10 to 18 years, for customer relationships 5 to 18 years and for order backlogs 4 months. 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 loss is recognised. 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 unit. 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 fair value less the costs to sell or the value in use of a cash-generating unit. An impairment loss is charged if the carrying amount exceeds the recoverable amount. In the event that the impairment loss is reversed, the amortised cost is written up.

Property, plant and equipment

Property, plant and equipment are recognised 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 impairment losses.

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 150 are expensed immediately. Low-value assets with acquisition cost between EUR 150 and EUR 1,000 are grouped together 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 fair value less the costs to sell or the value in use of a cash-generating unit. An impairment loss is charged if the carrying amount exceeds the recoverable amount. In the event that the impairment loss is reversed, the amortised cost is written up.

Leases

The determination of whether an arrangement contains a lease is based on the substance of the arrangement at inception date and requires an assessment of whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets whether the arrangement conveys a right to use the asset. A reassessment after the inception of the lease is only performed under the conditions set forth in IFRIC 4.

A lease is classified as a finance lease if substantially all risks and rewards incidental to ownership are transferred to the lessee. Each leased asset is recognised under property, plant and equipment at its fair value or, if lower, at the present value of the minimum lease payments. The corresponding liability is disclosed as a finance lease obligation under financial liabilities to third parties. The leased asset is depreciated in subsequent periods over the contractual term or, if shorter, the useful life. Payment to the lessor is divided into interest and repayment components, with the interest components recognised as a constant rate of interest of the remaining lease liability through profit or loss over the term of the lease.

All other leases are classified as operating leases. Rental payments under such lease arrangements are recognised as an expense on a straight-line basis.

Government grants

Government grants are recognised if there is reasonable assurance that they will be received and the Company will comply with the required conditions. Government grants are recognised in profit or loss in the period in which the corresponding expenses are recognised. Government grants for acquisition projects directly reduce the cost of the corresponding items of property, plant and equipment upon initial recognition. Government grants related to income are offset against the corresponding expenses.

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments comprise primary and derivative financial instruments.

Primary financial liabilities are generally measured at fair value upon initial recognition. This includes current and non-current investments as well as granted loans and receivables and financial liabilities.

Derivatives are initially recognised 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 recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which resulting gain or loss is recognized in other comprehensive income and reclassified to profit or loss based on the nature of the hedge relationship.

Financial assets

Financial assets are allocated to the following categories:

- Financial assets at fair value through profit or loss
- Loans and receivables
- Held-to-maturity investments
- Available-for-sale financial assets

Classification depends on the nature and purpose of the financial asset and is designated upon acquisition. Items are reclassified on the reporting date where permitted and necessary.

Financial assets are initially recognised at fair value. Transaction costs directly attributable to the acquisition of financial assets that are not measured at fair value through profit or loss increase the carrying amount of the financial asset initially recognised. Transaction costs directly allocated to financial assets that are recognised at fair value through profit or loss are recognised directly in the statement of comprehensive income.

Purchases or sales of financial instruments that require delivery of assets within a time frame established by regulations or conventions in the marketplace (securities spot transactions) are recognised on the trade date, i.e. the date that the CeramTec Holding Group commits to purchase or sell the asset.

The subsequent measurement of the financial assets depends on their designation according to the above mentioned categories.

Financial assets at fair value through profit or loss encompass financial assets held for trading and financial assets designated upon initial recognition as measured at fair value through profit or loss. Financial assets are classified as held for trading if they were acquired for the purpose of selling or repurchasing in the near term. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39. As of the reporting date, the CeramTec Holding Group has not made use of the option to designate primary financial instruments upon initial recognition as financial assets at fair value through profit or loss. Changes in the fair value of financial assets measured at fair value through profit or loss are presented as finance income or finance costs in the statement of comprehensive income. Within the CeramTec Holding Group, the termination rights agreed in the bond represent embedded derivatives to be separated which are allocated to the held-for-trading category.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. In the case of the CeramTec Holding Group, this relates to cash and cash equivalents, trade receivables and other financial receivables. After initial recognition, financial assets categorised under loans and receivables are accounted for at amortised cost using the effective interest rate method, less any impairment losses. When calculating amortised cost using the effective interest method, premiums and discounts are taken into account as well as fees or costs associated with acquiring the finacial assets. The effective interest rate is recognised in the financial result. If there is any objective evidence of impairment of loans and receivables (e.g., with regard to considerable financial difficulties or significant changes in the environment of the debtor), impairment losses are charged and recognised under other income / expenses (-), net through profit or loss. For trade receivables, impairment losses are charged using an allowance account. Trade receivables are written-off if collection is not expected. The impairment loss/write-off is reversed if the reasons for charging the impairment no longer apply.

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturity which the CeramTec Holding Group intends to hold to maturity and has the ability to do so. After initial recognition, financial assets under this category are accounted for at amortised cost using the effective interest rate method, less any impairment losses. The CeramTec Holding Group does not have any held-to-maturity investments.

Available-for-sale financial assets relate to acquired equity and debt instruments. Equity instruments classified as available for sale are those that are not held for trading or measured at fair value through profit or loss. Debt instruments allocated to this category which are held for an indefinite period of time may be sold in response to changes in market conditions or when liquidity is required. After initial recognition, available-for-sale financial assets are subsequently measured at fair value. Changes in fair value are recognised as unrealised gains and losses under other comprehensive income until the available-for-sale financial assets are derecognised or an impairment loss is charged. At this point in time the gains or losses are reclassified from other comprehensive income to the statement of comprehensive income. The CeramTec Holding Group does not hold any available-for-sale financial assets.

A financial asset is derecognised if the contractual rights to receive cash flows from the financial asset expire if the Group has transferred to a third party its contractual rights to receive the cash flows from the financial asset, or has assumed a contractual obligation to pass those cash flows on without delay to a third party, when the risks and rewards of ownership of the asset, or control of the asset, have been transferred.

Financial liabilities

Financial liabilities are categorised upon initial recognition either as financial liabilities at fair value through profit or loss or as other financial liabilities. Financial liabilities are initially recognised at fair value. Transaction costs directly attributable to the issue of financial liabilities that are not measured at fair value through profit or loss decrease the amount of the financial liability initially recognised. Transaction costs directly attributable to financial liabilities that are recognised at fair value through profit or loss are recognised directly in the statement of comprehensive income. The financial liabilities of the CeramTec Holding Group relate to trade payables, bonds and loans as well as liabilities to banks, finance lease liabilities, derivative financial instruments and other financial liabilities.

The subsequent measurement of financial liabilities depends according to the below mentioned categories:

Financial liabilities at fair value through profit or loss include financial liabilities held for trading as well as financial liabilities categorised upon initial recognition as financial liabilities at fair value through profit or loss. Financial liabilities are classified as held for trading if they are held for the purpose of selling in the near future. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39. Changes in the fair value of financial liabilities recognized through profit or loss are presented as finance income or finance costs in the statement of comprehensive income. Within the CeramTec Holding Group, the interest rate floors contained in the syndicated loan agreement represent separated embedded derivatives which are allocated to the held-for-trading category.

Other financial liabilities are other liabilities that are not measured at fair value through profit or loss. They are measured at amortised cost using the effective interest method. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that from an integral part of the effective interest rate, transaction costs and other premiums or discounts through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition. The effective interest rate is recognised in the financial result. Other financial liabilities of the CeramTec Holding Group include trade payables, bonds, liabilities to banks, finance lease liabilities and other financial liabilities.

A financial liability is derecognised when the obligations named in the agreement are settled, canceled or expired.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

Hedges

Hedge accounting denotes a special form of accounting that modifies the accounting treatment of the hedged item and hedging instrument in a hedging relationship such that the results of measuring the hedged item or hedging instrument are recognised immediately in equity or in profit or loss in the same period. Accordingly, hedge accounting recognises the offsetting effects of changes in the values of the hedging instrument and the hedged item. IAS 39 provides for three types of hedging relationship where the strict requirements for hedge accounting in individual cases are met:

- Fair value hedge, when the risk of changes in the fair value of a recognised asset or liability or an unrecognised contractual obligation is hedged

- Cash flow hedge, when the risk of changes in cash flows is hedged, associated with a recognised receivable or liability or a highly probable forecast transaction, or with a currency risk of an unrecognised contractual obligation

- Hedge of a net investment in a foreign operation.

The CeramTec Holding Group uses currency swaps in order to hedge most of the foreign currency risks resulting from the USD loan. These hedges are recognised as cash flow hedges, with the effective part of the change in fair value of derivatives designated as hedging instruments recorded under other comprehensive income, while the ineffective part of the change in value is immediately recognised in profit or loss. Changes in value recognised in other comprehensive income are reclassified to the statement of profit or loss in the period in which the hedged item affects the profit or loss for the period.

Measurement at fair value

On the reporting date, the CeramTec Holding Group measures derivative financial instruments at fair value. The fair value is also stated in the notes to the consolidated 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 Holding 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 took 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 realisable 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 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 Holding Group are not qualifying assets pursuant to IAS 23.

Inventories are written down to reflect risks from reduced salability. The net realisable value is the selling price during the ordinary course of business less the estimated costs of completion and selling costs. Previously recognised write-downs are reversed if the reasons for the write-downs cease to apply. In this case, the amount of the write-down is reversed and the reversal is limited to the amount of the original write-down.

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 recognised 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 2005 G standard 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 recognised in other comprehensive income. Remeasurements are not reclassified to the statement of comprehensive income 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 recognised 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 recognised 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.

The amount of the provision recognised 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 recognised as an asset if the reimbursement is virtually certain and the amount can be reliably determined. The amount recognised for the reimbursement should not exceed the amount of the provision.

Contingent liabilities and contingent assets

Contingent liabilities are not recognised in the consolidated financial statements. They are disclosed in the notes to the financial statements, unless an outflow of resources embodying economic benefits is very unlikely. Contingent assets are also not shown in the statement of financial position. They are described in the notes to the financial statements provided an inflow of economic benefits is regarded as 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 and tax laws 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 the initial recognition (other than in a business combination) of assets and liabilities in a transaction that effects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognized if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets are generally recognized for all deductible temporary differences 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 tax losses or interest carryforwards in subsequent years if it is probable that there will be future taxable profit against which the deferred tax assets can be utilized.

Deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply 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 tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity, respectively.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

There is a consolidated tax group for income tax purposes between CeramTec Holding (as the parent), CeramTec Group GmbH, CeramTec Service GmbH, CeramTec GmbH, Cerasiv GmbH, CeramTec-ETEC GmbH and Emil Müller GmbH. There is also a consolidated tax group for VAT purposes between CeramTec Service GmbH as the parent company and CeramTec GmbH, Cerasiv GmbH, 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 results of operations and financial position of the CeramTec Holding Group. The underlying assumptions are revised regularly. However, the actual results may vary from those anticipated.

In the process of applying the accounting policies of the CeramTec Holding 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 and expected useful life of the acquired intangible assets and property, plant and equipment as well as the fair value of liabilities assumed.

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 income for the year of the CeramTec Holding Group.

Goodwill of EUR 550,820k (31 December 2013: EUR 547,434k) and other intangible assets of EUR 639,828k (31 December 2013: EUR 681,814k) was recognised 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 recognised 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 recognise impairment losses or to reverse impairment losses in the future.

As of the reporting date of the financial year and the comparative period, no significant impairment loss was identified as necessary for non-financial assets.

Valuation allowances on receivables

The recoverability of trade receivables was assessed based on the estimated likelihood of default. Accordingly, receivables are reduced by appropriate 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). As of the reporting date, an impairment loss of EUR 459k (31 December 2013: EUR 471k) was identified as necessary.

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 91,451k (31 December 2013: EUR 61,131k) were recorded as of the end of the reporting period.

Provisions

Provisions for the expected expenses from warranty obligations in accordance with national sales contract law are recognised 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 estimate 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.

Provisions of EUR 17,780k (31 December 2013: EUR 12,881k) were recorded as of the end of the reporting period.

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 Holding 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 2,874k (31 December 2013: EUR 2,183k) were recognised.

2.4 Adoption of amended and new standards and interpretations: Changes in accounting policies due to first-time adoption of revised and new IFRS and IFRIC

The following amended IFRSs and IFRICs were adopted for the first time in the fiscal year:

Amendments to IAS 36: "Impairment of assets"

The amendment to IAS 36 serves to clarify the disclosure obligations with regard to the measurement of the recoverable amount of impaired assets. The amendments are mandatory with retroactive effect for fiscal years beginning on or after 1 January 2014. This amendment does not have any effect on the CeramTec Holding Group, as it had already taken this into account in its first financial statements.

IFRS 10: "Consolidated Financial Statements"

IFRS 10 establishes a uniform definition for control and thus a uniform basis for determining whether a parent-subsidiary relationship exists. The new standard replaces the previously applicable IAS 27 (2008) Consolidated and Separate Financial Statements and SIC-12 Consolidation—Special Purpose Entities. IFRS 10 is applicable for fiscal years from 1 January 2014. It does not have any effect on the consolidated financial statements of CeramTec Holding.

IFRS 11: "Joint Arrangements"

IFRS 11 governs the accounting treatment of situations where a company exercises joint control over a joint venture or a joint operation. The new standard replaces IAS 31 Interests in Joint Ventures and SIC-13 Jointly Controlled Entities—Non-Monetary Contributions by Venturers, which had previously governed the accounting treatment of joint ventures. The most significant change in IFRS 11 compared with IAS 31 is the removal of proportionate consolidation for joint ventures; in future, joint ventures must always be accounted for using the equity method. IFRS 11 is applicable for fiscal years from 1 January 2014. This amendment does not have any effect on the consolidated financial statements of CeramTec Holding.

IFRS 12: "Disclosure of Interests in Other Entities"

The objective of IFRS 12 is to prescribe disclosures on information that provides the users of financial statements with a basis for assessing the nature of interests in other entities (e.g. subsidiaries, associates) and the related risks and effects of these interests on the Group's net assets, financial position and results of operations. IFRS 12 is applicable for fiscal years from 1 January 2014. This does not result in any effects for the CeramTec Holding Group.

Amendments to IFRS 10, IFRS 11 and IFRS 12: "Consolidated Financial Statements, Joint Arrangements and Disclosure of Interests in Other Entities: Transitional Provisions"

The amendments contain clarifications on certain transitional provisions upon the first-time application of IFRS 10, IFRS 11 and IFRS 12. The date on which these amendments come into force is the same as that for IFRS 10, IFRS 11 and IFRS 12.

Amendments to IFRS 10, IFRS 12 and IAS 27: "Consolidated Financial Statements, Disclosure of Interests in Other Entities and Separate Financial Statements: Investment entities"

An additional amendment, which was published by IASB in October 2012, relates to the definition of investment entities. The amendment stipulates that investment entities be removed from the scope of the consolidation provisions of IFRS 10 and that all investments they control be measured at fair value through profit or loss. The standard is effective for the first time for fiscal years beginning on or after 1 January 2014. It does not have any effect on the consolidated financial statements of CeramTec Holding.

IAS 27: "Separate Financial Statements"

The amendment to IAS 27 was issued in May 2011 and becomes effective for the first time for fiscal years beginning on or after 1 January 2014. As a consequence of the new IFRS 10 and IFRS 12, the scope of IAS 27 is limited to the accounting treatment of subsidiaries, jointly controlled entities, and associates in separate financial statements. It does not have any effect on the consolidated financial statements of CeramTec Holding.

IAS 28: "Investments in Associates"

The amendment to IAS 28 was issued in May 2011 and becomes effective for the first time for fiscal years beginning on or after 1 January 2014. This relates to the follow-up changes from the new IFRS 10, 11 and 12. The scope of IAS 28 has been extended to include the accounting treatment of joint ventures. It does not have any effect on the consolidated financial statements of CeramTec Holding.

Amendments to IAS 32: "Financial Instruments: Presentation"

The amendment specifies the rules on offsetting. In order to satisfy the new offsetting criteria in accordance with IAS 32, the current, legally enforceable right of the reporting entity must not be contingent on any future event and must be applicable in the normal course of business as well as in the event of default or insolvency of a counterparty. In addition, the standard clarifies that a gross settlement mechanism satisfies the criteria for offsetting provided it eliminates or results in insignificant credit and liquidity risks, processes receivables and payables in a single settlement process or cycle and, therefore, ultimately is equivalent to a net settlement. The amendments will become effective for the first time for fiscal years beginning on or after January 1, 2014. The amendments do not have any effect on the consolidated financial statements of CeramTec Holding.

Amendments to IAS 39: "Novation of Derivatives and Continuation of Hedge Accounting"

The amendments to IAS 39 allow hedge accounting to be continued even in those cases where a counterparty to a non-listed hedging instrument changes in order to meet the clearing obligations for the instrument. The instrument must remain otherwise unchanged and the novation must be due to laws or regulatory requirements. The effects on the consolidated financial statements are currently being assessed. The amendments take effect on 1 January 2014, whereby early adoption is permitted. The amendments do not result in any effects for the consolidated financial statements of CeramTec Holding.

IFRIC 21 "Levies"

IFRIC 21 provides guidance on when to recognise a liability for a levy imposed by a government. The interpretation applies both to levies that are recognised pursuant to IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" and to levies for which both the timing and amount are already known. The interpretation governs the accounting treatment of levies which are imposed by governments (including public authorities and similar bodies) on companies within the framework of laws and regulations. IFRIC 21 is effective for accounting periods beginning on or after 1 January 2014. This does not result in any effects for the consolidated financial statements of CeramTec Holding.

Not yet compulsory and newly issued IFRSs and IFRIC

Adoption of the following IFRSs and IFRIC was not yet compulsory in the fiscal year and/or they had not yet been endorsed by the European Commission for adoption in the European Union. In the fiscal year, none of these new or amended standards and interpretations were adopted earlier.

IFRS 9: "Financial Instruments"

The International Accounting Standards Board (IASB) has published the final version of IFRS 9 'Financial Instruments' bringing together the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39 'Financial Instruments: Recognition and Measurement'. This version adds a new expected loss impairment model and limited amendments to classification and measurement for financial assets. The Standard is effective for periods beginning on or after 1 January 2018. The CeramTec Holding Group has not yet concluded its assessment of any potential impact.

IFRS 14: "Accounting for Regulatory Deferral Accounts"

IFRS 14 was published in January 2014 and is effective for the first time for fiscal years beginning on or after 1 January 2016. The standard permits companies to continue to account for regulatory deferral accounts from rate regulation in their first IFRS financial statements in accordance with their previous generally accepted accounting principles when they adopt IFRS. No effects are expected on the consolidated financial statements of CeramTec Holding.

Amendments to IAS 19: "Employee Benefits"

The amendment to IAS 19 was published in November 2013 and is effective for the first time in fiscal years beginning on or after 1 July 2014. The amendment regulates the recognition of contributions by employees or third parties to a pension plan as a reduction in service cost provided that these reflect the service rendered in the reporting period. The amendment is applicable retrospectively. Early adoption is permitted. No effects are expected on the consolidated financial statements of CeramTec Holding.

Annual Improvements Project (2010 – 2012)—December 2013

The amendments encompass corrections and clarification of content and terminology of the standards IFRS 2, 3, 8, 13 and IAS 7, 16/38 and 24. The amendments are effective for the first time for fiscal years beginning on or after 1 February 2015. No effects are expected on the consolidated financial statements of CeramTec Holding.

- *IFRS 2: "Share-based Payment":* Definition of vesting conditions
- *IFRS 3: "Business Combinations":* Classification of contingent consideration
- *IFRS 8 "Operating segments":* Aggregation of operating segments and reconciliation of segment assets to the entity's assets
- *IFRS 13: "Fair Value Measurement":* IFRS 13 was adjusted by subsequent amendments made to IFRS 9 and IAS 39
- *IAS 16/IAS 38: "Property, Plant and Equipment/Intangible Assets":* Treatment of accumulated depreciation using the revaluation method
- *IAS 24: "Related Party Disclosures":* Key management personnel

Annual Improvements Project (2011 – 2013)—December 2013

The amendments encompass corrections and clarification of content and terminology of the standards IFRS 1, 3, 13 and IAS 40. The amendments are effective for the first time for fiscal years beginning on or after 1 January 2015. No effects are expected on the consolidated financial statements of CeramTec Holding.

- *IFRS 1: "First-time Adoption of IFRSs":* Clarification of the relevant version of the standard

- *IFRS 3: "Business Combinations":* Exclusion of the founding of joint ventures from the scope of IFRS 3
- *IFRS 13: "Fair value measurement":* Scope of measurement on a portfolio basis
- *IAS 40: "Investment Property":* Clarification of the mutual relationship of IAS 40 and IFRS 3

Amendments to IFRS 11: "Accounting for Acquisitions of Interests in Joint Operations"

The amendments to IFRS 11 clarify that the acquirer of an interest in a joint operation in which the activity constitutes a business, as defined in IFRS 3, is required to apply all of the principles on business combinations accounting in IFRS 3 and other IFRSs with the exception of those principles that conflict with the guidance in IFRS 11. The amendments are effective for periods beginning on or after 1 January 2016. No effects are expected on the consolidated financial statements of CeramTec Holding.

Amendments to IAS 16 and IAS 38: "Acceptable Methods of Depreciation and Amortisation"

The amendments clarify that a depreciation method that is based on revenue that is generated by an activity that includes the use of an asset is not appropriate. The amendments are effective for periods beginning on or after 1 January 2016. No effects are expected on the consolidated financial statements of CeramTec Holding.

Amendments to IAS 16 and IAS 41: "Agriculture: Bearer Plants"

The amendments bring bearer plants into the scope of IAS 16 so that they are accounted for in the same way as property, plant and equipment. The amendments are effective for periods beginning on or after 1 January 2016, with earlier application being permitted. The amendments do not have any effect on the CeramTec Holding Group.

Amendments to IAS 27: "Equity Method in Separate Financial Statements"

The amendments reinstate the equity method as an accounting option for investments in subsidiaries, joint ventures and associates in an investor's separate financial statements. The amendments are effective for periods beginning on or after 1 January 2016, with earlier application being permitted. No effects are expected on the consolidated financial statements of CeramTec Holding.

Amendments to IFRS 10 and IAS 28: "Sales or Contributions of Assets Between an Investor and its Associate/Joint Venture"

The amendments clarify that in a transaction involving an associate or joint venture the extent of gain or loss recognition depends on whether the assets sold or contributed constitute a business. They are effective for periods beginning on or after 1 January 2016. The amendments do not have any effect on the CeramTec Holding Group.

Annual Improvements Project (2012 – 2014)—September 2013

Four standards are affected by the amendments.

- *IFRS 5: "Non-current Assets Held for Sale and Discontinued Operations":* Changes in methods of disposal
- *IFRS 7: "Financial Instruments: Disclosures":* Servicing contracts
- *IAS 19: "Employee Benefits":* Discount rate: Regional market issue
- *IAS 34: "Interim Financial Reporting":* Disclosure of information "elsewhere in the interim financial report".

The amendments are effective for annual periods beginning on or after 1 January 2016. No material impacts are expected to the consolidated financial statements of CeramTec Holding.

Amendments to IAS 1: "Presentation of Financial Statements"

The amendments clarify that information needs to be disclosed in the notes only if it is not immaterial. Materiality considerations also explicitly apply if an IFRS calls for a list of minimum disclosures. In addition, the amendments include explanations on the aggregation and disaggregation of line items in the statement of financial position and statement of comprehensive income, and clarify how an entity's share of the other comprehensive income of equity-accounted companies is to be presented in the statement of comprehensive income. Finally, the structure of the notes can be designed in a manner relevant for each individual company. The amendments apply to fiscal years beginning on or after 1 January 2016. The CeramTec Holding Group has not yet concluded its assessment of any potential impact.

Amendments to IFRS 10, IFRS 12 and IAS 28: "Investment Entities: Applying the Consolidation Exception"

The amendments address issues that have arisen in the context of applying the consolidation exception for investment entities. The amendments are effective for periods beginning on or after 1 January 2016. The amendments do not have any effects on the CeramTec Holding Group.

IFRS 15: "Revenue from Contracts with Customers"

The standard specifies how and when an IFRS reporter will recognise revenue. IFRS 15 replaces IAS 18 Revenue, IAS 11 Construction Contracts and a number of revenue-related interpretations. The new standard provides a single, principles based five-step model to be applied to all industries and categories of sales transactions. In addition, the standard provides further guidance on specific issues. The new mandatory guidance applies to fiscal years beginning on or after 1 January 2017.

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 January to 31 December 2014	15 July to 31 December 2013
	EUR k	EUR k
Regions		
Europe	202,376	64,260
Germany	134,474	44,066
North America	68,838	16,778
Asia	55,763	16,586
Rest of world	13,381	3,754
Total	**474,832**	**145,444**
Businesses		
Industrial	297,212	90,736
Medical products	177,620	54,708
Total	**474,832**	**145,444**

3.2 Cost of sales

The cost of sales breaks down as follows:

	1 January to 31 December 2014	15 July to 31 December 2013
	EUR k	EUR k
Material and packaging costs	88,735	42,894
Amortisation and depreciation	55,519	30,529
Personnel expenses	101,337	30,120
Other costs of sales	47,917	13,016
Total	**293,508**	**116,559**

Other costs of sales primarily contain energy costs, freight costs and maintenance expenses.

3.3 Selling costs

Selling costs primarily contain amortisation 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 January to 31 December 2014	15 July to 31 December 2013
	EUR k	EUR k
Foreign currency results	1,842	(509)
Income from reversal of provisions	1,825	0
Restructuring costs	(1,669)	0
Write-downs and impairment	(425)	(2)
Adittions to allowance for bad debts	(164)	(471)
Recovery of receivables which had been written off	0	1,566
(Losses)/gains on disposal of property, plant and equipment	(28)	42
Transaction costs	0	(17,787)
Sundry other income	880	263
Sundry other expenses	(257)	(171)
Total	**2,004**	**(17,069)**

Restructuring costs primarily contain personnel expenses.

3.7 Financial result

The financial result breaks down as follows:

	1 January to 31 December 2014	15 July to 31 December 2013
	EUR k	EUR k
Interest income and other finance income		
Gains on derivative valuations	0	3,936
Exchange rate gains	0	3,245
Other interest income	196	68
Total interest income and other finance income	**196**	**7,249**
Interest expenses and other finance costs		
Interest expense from syndicated loan	30,244	10,163
Interest expense from bond	25,303	9,981
Interest expense from effective interest method	11,389	4,579
Interest expense from shareholder loan	10,211	3,338
Losses on derivative valuations	5,752	0
Exchange rate losses	8,983	0
Other interest expenses	3,026	1,187
Less: Borrowing costs capitalised as part of qualifying assets	(828)	(255)
Total interest expenses and other finance costs	**94,080**	**28,993**
Total financial result	**(93,884)**	**(21,744)**

The exchange rate gains and losses result from loans not designated in the functional currency of the group companies. More information on interest income and interest expenses from derivatives can be found in note 4.15.

Borrowing costs of EUR 828k (15 July to 31 December 2013: EUR 255k) were capitalised in property, plant and equipment pursuant to IAS 23.

Other interest expenses of EUR 2,209k (15 July to 31 December 2013: EUR 726k) are due to unwinding the discount on provisions.

3.8 Income tax benefit

There is a consolidated tax group for income tax purposes between CeramTec Holding and its German subsidiaries. This means that German corporate income tax and trade tax is only levied at the level of the parent company, CeramTec Holding. CeramTec Holding also has indirect shareholdings in foreign corporations. The income tax expense of the CeramTec Holding Group therefore includes, 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 32,381k (15 July to 31 December 2013: EUR 47,617k) is allocable to Germany and abroad as follows:

	1 January to 31 December 2014	15 July to 31 December 2013
	EUR k	EUR k
Germany	(36,128)	(47,431)
Abroad	3,747	(186)
Total	**(32,381)**	**(47,617)**

Income tax benefit of EUR 1,029k (15 July to 31 December 2013: EUR 4,162k) breaks down as follows:

	1 January to 31 December 2014	15 July to 31 December 2013
	EUR k	EUR k
Current income tax expense	(9,834)	(680)
Deferred tax credit	10,863	4,842
Income tax benefit	**1,029**	**4,162**

Overall, the Company's weighted tax rate (based to the allocation of profit before tax mainly driven by the German entities) is 28.5 % (15 July to 31 December 2013: 28.5 %), which will be used for the 2014 reconciliation in the following table. The effective tax (i.e. tax expense in relation to earnings before tax) factors in both the current and the deferred tax expense and takes into account all factors, such as non-deductible operating expenses or a change in the assessment base.

	1 January to 31 December 2014		15 July to 31 December 2013	
	EUR k	%	EUR k	%
Loss before tax	**(32,381)**		**47,617**	
Expected tax benefit	9,228	28.5	13,570	28.5
Permanent differences	(2,003)	(6.2)	(3,685)	(7.7)
Non-recognition of deferred taxes on interest carryforwards	(6,959)	(21.5)	(5,767)	(12.1)
Adjustments from prior years	432	1.3	(7)	0.0
Other adjustments	331	1.1	51	0.1
Tax benefit and effective tax rate	**1,029**	3.2	**4,162**	8.7

The permanent differences include mainly effects of expenses that are not deductible in determining profit for trade tax purposes (trade tax add-backs) of EUR 2,048 k (15 July to 31 December 2013: EUR 776 k) and effects of transactions costs that are not deductible in determining taxable profit of EUR 2,847 k (15 July to 31 December 2013: EUR 0 k).

Deferred tax assets / liabilities

Deferred income taxes were calculated using the expected tax rate. The deferred taxes are offset where there is an enforceable legal right to offset current taxes and they are levied by the same tax authority. The deferred tax assets and liabilities stem from the following:

	31 December 2014		31 December 2013	
	Assets	Liabilities	Assets	Liabilities
	EUR k	EUR k	EUR k	EUR k
Tax loss carryforwards	505	0	5,571	0
Property, plant and equipment	439	34,483	268	29,012
Goodwill and other intangible assets	16,182	173,519	19,120	182,793
Inventories, receivables and other assets	2,677	1,455	3,918	4,751
Non-current provisions	21,866	2,953	8,246	555
Current provisions and other liabilities	1,434	1,117	8,134	16,745
Other	0	0	0	1
Total deferred taxes	**43,103**	**213,527**	**45,257**	**233,857**
Offsetting	(40,229)	(40,229)	(43,074)	(43,074)
Deferred tax assets/ (liabilities)	**2,874**	**173,298**	**2,183**	**190,783**

Other comprehensive income contains accumulated deferred tax income on the remeasurement of pension provisions of EUR 8,407k (31 December 2013: deferred tax expenses of EUR 202k) and accumulated deferred tax expenses on gains/losses from cash flow hedges of EUR 1,386k (31 December 2013: deferred tax income of EUR 1,490k).

Unused tax losses

Unused tax losses break down as follows:

	31 December 2014	31 December 2013
	EUR k	EUR k
Interest carryforwards	48,324	22,675
on which no deferred tax assets are recognised	48,324	22,675
Foreign unused tax losses	4,885	3,813
on which no deferred tax assets are recognised	2,318	767
Total unused tax losses	4,885	38,410
on which no deferred tax assets are recognised	2,318	767

Deferred tax assets were recognised on unused tax losses of EUR 2,568k (31 December 2013: EUR 37,643k).

Foreign unused tax losses, for which deferred taxes have been capitalised, mainly result from the earnings of group companies in the Czech Republic EUR 1,595k (31 December 2013: EUR 2,550k) and in Spain EUR 309k (31 December 2013: EUR 292k) as well as the USA EUR 664k (31 December 2013: EUR 0k). The tax loss carryforwards in Spain do not expire; however the tax loss carryforwards in Czech Republic respective USA will expire after 5 years respective 20 years.

Temporary differences in connection with shares in subsidiaries in the amount of EUR 3,301k are not subject to deferred tax liabilities, because CeramTec 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 fiscal year 2014, cost of materials amounted to EUR 113,176k included in cost of sales (15 July to 31 December 2013: EUR 50,481k).

Personnel expenses

Personnel expenses break down as follows:

	1 January to 31 December 2014	15 July to 31 December 2013
	EUR k	EUR k
Wages and salaries	128,775	36,244
Social security contributions incl. pension expenses	28,608	9,112
Total	**157,383**	**45,356**

Personnel expenses are contained in cost of sales, selling costs, research and development costs and general administrative costs as well as other income / (expenses), net.

Employees

On average, the Group employed 3,188 (previous year: 3,196) people in the fiscal year. These break down as follows:

	31 December 2014 Headcount	31 December 2013 Headcount
Salaried employees	1,141	1,101
Wage earners	2,047	2,095
Total	**3,188**	**3,196**

Amortisation and depreciation

Amortisation and depreciation break down as follows:

	1 January to 31 December 2014	15 July to 31 December 2013
	EUR k	EUR k
Amortisation of intangible assets	44,376	25,782
Depreciation of property, plant and equipment	44,447	15,760
Impairment of property, plant and equipment	425	0
Total	**89,249**	**41,542**

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	Order backlog	Other	Total
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Cost							
14 July 2013	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Additions from business combinations	548,839	51,289	236,177	406,384	10,758	3,267	1,256,714
Additions	0	0	0	0	0	449	449
Government grants	0	0	0	0	0	(18)	(18)
Disposals	0	0	0	0	0	0	0
Reclassifications	0	0	0	0	0	0	0
Exchange differences	(1,405)	0	0	(686)	0	(30)	(2,121)
31 December 2013	**547,434**	**51,289**	**236,177**	**405,698**	**10,758**	**3,668**	**1,255,024**
Additions from business combinations	0	0	0	0	0	0	0
Additions	0	0	0	0	0	1,399	1,399
Government grants	0	0	0	0	0	(10)	(10)
Disposals	0	0	0	0	0	(317)	(317)
Reclassifications	0	0	0	0	0	0	0
Exchange differences	3,386	0	0	1,145	0	74	4,605
31 December 2014	**550,820**	**51,289**	**236,177**	**406,843**	**10,758**	**4,814**	**1,260,701**

		Other intangible assets					
	Goodwill	Trademarks	Technology	Customer relationships	Order backlog	Other	Total
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Amortisation/impairment							
14 July 2013	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Additions to amortisation	0	0	4,659	9,530	10,758	835	25,782
Additions to impairment	0	0	0	0	0	0	0
Disposals	0	0	0	0	0	0	0
Reclassifications	0	0	0	0	0	0	0
Exchange differences	0	0	(2)	(1)	0	(3)	(6)
31 December 2013	**0**	**0**	**4,657**	**9,529**	**10,758**	**832**	**25,776**
Additions to amortisation	0	0	13,969	28,620	0	1,786	44,376
Additions to impairment	0	0	0	0	0	0	0
Disposals	0	0	0	0	0	(317)	(317)
Reclassifications	0	0	0	0	0	0	0
Exchange differences	0	0	0	160	0	58	218
31 December 2014	**0**	**0**	**18,626**	**38,309**	**10,758**	**2,359**	**70,054**
Net carrying amounts							
31 December 2014	550,820	51,289	217,551	368,534	0	2,454	1,190,648
31 December 2013	547,434	51,289	231,520	396,169	0	2,836	1,229,248

Goodwill is attributable to the acquisition of the high-performance ceramics division by CeramTec Holding and was allocated to the cash-generating units CeramTec GmbH (EUR 491,617k), Emil Müller GmbH (EUR 39,807k) and CeramTec-ETEC GmbH (EUR 19,396k).

The purchase price allocation involved the trademarks CeramTec, BIOLOX and SPK being identified and recognised. These were recorded at a carrying amount of EUR 51,289k as of 31 December 2014 (31 December 2013: EUR 51,289k). As the recognised trademarks do not represent a product-specific trademark and do not have a limited life, the useful life for the recognised trademarks was classified as indefinite. The trademarks were allocated to the cash-generating unit CeramTec GmbH.

Technology has a carrying amount of EUR 217,551k (31 December 2013: EUR 231,520k) and primarily contains the basic technology underlying high-performance ceramics with an average weighted remaining useful life of 16.1 years (31 December 2013: 17.0 years).

Customer relationships have a carrying amount of EUR 368,534k (31 December 2013: EUR 396,169k) and primarily contain customer relationships from the medical business with an average weighted remaining useful life of 14.8 years (31 December 2013: 15.7 years).

Amortisation of other intangible assets is recognised under cost of sales, selling costs, research and development costs as well as general administrative costs.

For the cash-generating units, the annual impairment test was performed as of 30 November 2014. The recoverable amount was calculated based on an asset's value in use. Value in use is calculated by discounting the future cash flows. The measurement is therefore allocable to level 3 pursuant to IFRS 13. The projected future cash flows are based on the approved earnings, investment and liquidity planning for the years 2015, 2016 and 2017. The financial budget is prepared on the basis of historical experience, and reflects the management's expectations for the next few years. A long-term growth rate of 1 % was determined for the years after 2018. The weighted average cost of capital results from equity costs ranging between 8.07 % – 8.10 %, and borrowing costs (before taxes) of 2.27 %. Equity costs were calculated using a base interest rate of 2.00 % and a market risk premium of 6.50 %.

	Cash-generating units		
	CeramTec GmbH	**Emil Müller GmbH**	**CeramTec-ETEC GmbH**
Weighted average cost of capital	7.51%	7.53%	7.49%
Tax rate	28.50%	26.50%	31.93%
EBITDA margin	34.71%	34.57%	21.73%
Recoverable amount (in EUR k)	1,356,507	58,959	41,181

As value in use of the cash-generating units' assets exceeded each carrying amount, there was no need to recognise impairment losses as of 31 December 2014.

If the weighted average cost of capital were to exceed the following values, or EBITDA margins (Earnings before interest, taxes, depreciation and amortization in relation to revenue) and long-term growth rates were to be below the following values, the recoverable amount of the cash-generating units would fall short of their carrying amount, assuming that the remaining parameters are unchanged:

	Cash-generating units		
	CeramTec GmbH	**Emil Müller GmbH**	**CeramTec-ETEC GmbH**
Weighted average cost of capital	7.80%	7.73%	7.66%
EBITDA margin	33.66%	33.82%	21.23%
Long-term growth rate	0.69%	0.78%	0.78%

4.2 Property, plant and equipment

Property, plant and equipment breaks down as follows:

	Land and buildings	Plant and machinery	Other equipment	Assets under construction	Total
	EUR k	EUR k	EUR k	EUR k	EUR k
Cost					
14 July 2013	**0**	**0**	**0**	**0**	**0**
Additions from business combinations	102,308	169,772	6,383	27,183	305,646
Additions	672	1,692	942	17,052	20,358
Government grants	(37)	(42)	(3)	(925)	(1,007)
Disposals	(4)	(198)	(124)	0	(326)
Reclassifications	542	4,351	146	-5,039	0
Exchange differences	(1,257)	(988)	155	(254)	(2,344)
31 December 2013	**102,224**	**174,587**	**7,499**	**38,017**	**322,327**
Additions from business combinations	0	0	0	0	0
Additions	10,309	17,405	2,918	17,325	47,958
Government grants	(1,027)	(1,272)	(24)	(704)	(3,026)
Disposals	(903)	(908)	(452)	0	(2,263)
Reclassifications	8,361	23,068	648	(32,077)	0
Exchange differences	1,042	3,069	203	608	4,920
31 December 2014	**120,006**	**215,949**	**10,792**	**23,169**	**369,915**
Depreciation/impairment					
14 July 2013	**0**	**0**	**0**	**0**	**0**
Additions to depreciation	2,021	12,533	1,206	0	15,760
Additions to impairment	0	0	0	0	0
Disposals	(3)	(167)	(123)	0	(293)
Reclassifications	0	0	0	0	0
Exchange differences	(7)	(25)	(2)	0	(34)
31 December 2013	**2,011**	**12,341**	**1,081**	**0**	**15,433**
Additions to depreciation	6,273	35,221	2,953	0	44,447
Additions to impairment	0	371	55	0	425
Disposals	(15)	(582)	(379)	0	(976)
Reclassifications	0	53	(53)	0	0
Exchange differences	87	766	49	0	902
31 December 2014	**8,356**	**48,170**	**3,706**	**0**	**60,232**
Net carrying amounts					
31 December 2014	111,650	167,779	7,086	23,169	309,684
31 December 2013	100,213	162,246	6,418	38,017	306,894

Depreciation of property, plant and equipment is recognised under cost of sales, selling, research and development and general administrative costs as well as other expenses.

Borrowing costs capitalised in property, plant and equipment amounted to EUR 828k in the fiscal year (15 July to 31 December 2013: EUR 255k). Capitalised interest is based on an interest rate of 3.95 %.

There were contractual commitments to acquire property, plant and equipment of EUR 12,434k as of the reporting date (31 December 2013: EUR 38,682k).

Property, plant and equipment under finance leases contains rented buildings with a net carrying amount of EUR 1,469k (31 December 2013: EUR 1,398k) and furniture and fixtures with a net carrying amount of EUR 285k (31 December 2013: EUR 567k). The corresponding lease liabilities are explained under finance liabilities to third parties (note 4.12).

4.3 Other financial assets

The following table breaks down other financial assets:

	31 December 2014	31 December 2013
	EUR k	EUR k
Other non-current financial assets		
Derivative financial instruments	22,336	0
Separated termination rights	7,465	6,918
Insurance claims	162	164
Total	**29,963**	**7,082**
Other current financial assets		
Derivative financial instruments	2,265	0
Receivables from energy tax refunds	909	826
Other financial assets	91	32
Total	**3,265**	**858**

The CeramTec Holding 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.

4.4 Other assets

The following table breaks down other assets:

	31 December 2014	31 December 2013
	EUR k	EUR k
Other non-current assets		
Deferred finance costs for the revolving credit line revolving credit line	1,255	1,725
Other assets	420	200
Total	**1,675**	**1,925**
Other current assets		
Sundry assets	4,097	2,524
VAT receivables	1,122	3,516
Investment grants	0	3,009
Total	**5,219**	**9,049**

Sundry current assets primarily contain prepayments as well as the current portion of accrued finance costs for the revolving credit line of EUR 471k.

4.5 Inventories

Inventories break down as follows:

	31 December 2014	31 December 2013
	EUR k	EUR k
Raw materials	19,733	23,849
Work in progress	25,196	24,580
Finished goods	20,052	19,512
Merchandise	1,719	2,050
Other	1,218	1,363
Total	**67,918**	**71,354**

At 31 December 2014 the allowance for write-downs on inventories amount to EUR 10,034k (31 December 2013: EUR 10,921k). The gain resulting from a reduction of EUR 887k in the write-downs is reported under cost of sales.

4.6 Trade receivables

At the end of the reporting date, trade receivables amounted to EUR 47,517k (31 December 2013: EUR 43,374k) after taking into account valuation allowance of EUR 459k (31 December 2013: EUR 471k).

The value and maturity structure of trade receivables before impairment breaks down as follows:

	31 December 2014	31 December 2013
	EUR k	EUR k
Carrying amount before impairment	**47,976**	**43,845**
thereof not yet due on the reporting date	41,771	38,192
thereof past due on the reporting date	6,205	5,653
past due up to 30 days	4,704	4,443
past due up to 60 days	737	596
past due up to 90 days	224	130
past due more than 90 days	540	484

The age structure of the impairment losses recognised through profit or loss as of the reporting date breaks down as follows:

	31 December 2014	31 December 2013
	EUR k	EUR k
past due up to 30 days	0	18
past due up to 60 days	205	48
past due up to 90 days	15	66
past due more than 90 days	239	339
Total	**459**	**471**

The impairment losses are based on the estimated likelihood of default. They primarily relate to specific bad debt allowances on receivables from customers on whose assets insolvency proceedings were initiated or who are experiencing significant financial difficulty.

The age structure of receivables past due which are not impaired breaks down as follows:

	31 December 2014	31 December 2013
	EUR k	EUR k
past due up to 30 days	4,704	4,336
past due up to 60 days	532	546
past due up to 90 days	209	0
past due more than 90 days	13	0
Total	**5,458**	**4,882**

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.

The following table shows the development of allowances on trade receivables during the past reporting period.

	31 December 2014	31 December 2013
	EUR k	EUR k
Allowance as of 31 December 2013	**471**	**0**
Addition	165	471
Reversed	(13)	0
Utilisation	(119)	0
Foreign currency translation and other	(45)	0
Allowance on 31 December 2014	**459**	**471**

4.7 Cash and cash equivalents

Cash and cash equivalents contain bank balances of EUR 62,221k (31 December 2013: EUR 66,938k) and cash in hand of EUR 25k (31 December 2013: EUR 25k).

4.8 Equity

Issued capital

The fully paid in capital stock of the parent company CeramTec Holding amounts to EUR 25k (31 December 2013: EUR 25k).

Capital reserves

Effective as of 31 August 2013/ 1 September 2013, Faenza Luxembourg S.à.r.l, Luxembourg, increased CeramTec Holding's capital reserves by EUR 378,148k. The capital reserves are freely available and not subject to any earmarking.

Accumulated losses

Accumulated losses contain current losses incurred by the CeramTec Holding Group and those incurred in the previous periods. This also includes reserves for the remeasurement of provisions for pension obligations (after taxes) amounting to EUR -20,879k (31 December 2013: EUR 968k).

Accumulated other comprehensive income/(loss)

Accumulated other comprehensive income relates to currency translation adjustments and a reserve for cash flow hedges, taking into account deferred taxes recorded for the reserve and currency translation adjustments.

4.9 Provisions for pension obligations

Within the CeramTec Holding Group, there are defined benefit and 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 generally based on the length of employee 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 which depend on the pay and period of service that are capped. These commitments do not contain any rights to inflation-related pension adjustments. These defined benefit plans were closed for employees that joined after 1 January 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 1 January 2002. For management of the German CeramTec Holding group companies, there are direct commitments in place comprising benefits that depend on pay and length of service and are capped 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 subsidised by the CeramTec Holding Group depending on the achievement of personal targets by employees.

Since the end of 2014, the Company has committed itself to directly providing benefits as compensation to employees who have been enrolled into Höchster Pensionskasse VvaG, which was subject to reorganization of Höchster Pensionskasse VvaG 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 institution managed by employer and employee representatives. The representatives are legally obligated to represent the interests of the entitled employees and are responsible for investment decisions and managing the asset. 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:

	31 December 2014	31 December 2013
	EUR k	EUR k
Germany	83,726	55,599
UK	7,406	5,277
Other	319	256
Total	**91,451**	**61,131**

The following table shows the amount of the obligation and plan assets as well as the provisions disclosed in the consolidated statement of financial position as of 31 December 2014.

	German plans	Foreign plans	Total
	EUR k	EUR k	EUR k
Change in benefit obligations			
Benefit obligations at the beginning of the fiscal year	**55,599**	**10,237**	**65,836**
Service cost	649	34	683
Interest expense	1,893	451	2,344
Remeasurements	28,667	1,502	30,169
from the change in financial assumptions	*23,413*	*1,495*	*24,908*
Experience adjustments	*5,254*	*7*	*5,261*
Foreign currency translation	0	864	864
Benefits paid	(3,082)	(267)	(3,349)
Benefit obligations at the end of the year	**83,726**	**12,821**	**96,547**
Change in plan assets			
Market value of plan assets at the beginning of the fiscal year	**0**	**4,704**	**4,704**
Interest income from plan assets	0	208	208
Expense for managing the plans	0	(144)	(144)
Employer contributions	0	263	263
Remeasurements	0	(33)	(33)
from the change in financial assumptions	*0*	*(33)*	*(33)*
Foreign currency translation	0	358	358
Benefits paid	0	(260)	(260)
Market value of the plan assets at the end of the year	**0**	**5,096**	**5,096**
Net obligation amount/provisions for benefits	**83,726**	**7,725**	**91,451**

The following table shows the amount of the obligation and plan assets as well as the provisions disclosed in the consolidated statement of financial position in the comparative period as of 31 December 2013.

	German plans	Foreign plans	Total
	EUR k	EUR k	EUR k
Change in benefit obligations			
Benefit obligations at the beginning of the fiscal year	**0**	**0**	**0**
Acquisition through business combination	56,344	9,877	66,221
Service cost	470	11	481
Interest expense	634	134	768
Remeasurements	(1,069)	30	(1,039)
from the change in financial assumptions	*(850)*	*29*	*(821)*
Experience adjustments	*(219)*	*1*	*(218)*
Foreign currency translation	0	255	255
Benefits paid	(780)	(99)	(879)
Other changes	0	29	29
Benefit obligations at the end of the year	**55,599**	**10,237**	**65,836**
Change in plan assets			
Market value of plan assets at the beginning of the fiscal year	**0**	**0**	**0**
Acquisition through business combination	0	4,500	4,500
Interest income from plan assets	0	66	66
Expense for managing the plans	0	(67)	(67)
Employer contributions	0	82	82
Remeasurements	0	130	130
from the change in financial assumptions	*0*	*130*	*130*
Foreign currency translation	0	92	92
Benefits paid	0	(99)	(99)
Market value of the plan assets at the end of the year	**0**	**4,704**	**4,704**
Net obligation amount/provisions for benefits	**55,599**	**5,533**	**61,131**

The calculation of the pension obligation was based on the following assumptions as of 31 December 2014:

	Germany	Abroad
Interest rate (in %)	1.90	3.30 – 3.50
Wage and salary trend (in %)	3.00	N/A
Pension increases (in %)	2.00	3.00 – 3.20
Life expectancy	2005 G standard tables	Mortality tables

The calculation of the pension obligation was based on the following assumptions as of 31 December 2013:

	Germany	Abroad
Interest rate (in %)	3.50	4.25
Wage and salary trend (in %)	3.00	N/A
Pension increases (in %)	2.00	3.25
Life expectancy	2005 G standard tables	Mortality tables

The average term of the benefit obligations amounts to 21.0 years in Germany and 16.8 years abroad.

The employer contributions and benefit payments expected to be paid during the next fiscal year amount to EUR 276k and to EUR 2,623k, respectively.

The risk from changes in actuarial assumptions underlying the measurement of defined pension plans is borne by the CeramTec Holding Group. The sensitivity analyses presented in the table below were performed based on reasonably possible changes in assumptions as of the reporting date. The change in key actuarial assumptions would have the following impact (in EUR k) on the present value of pension obligations:

	Change	Effect 31 December 2014
Discount rate	- 0.50 % points	10,441
	+ 0.50 % points	-8,963
Wage and salary trend	- 0.50 % points	-165
	+ 0.50 % points	172
Increase in pensions	- 0.50 % points	-9,259
	+ 0.50 % points	10,896
Life expectancy	+ 1 year	3,577

The change in key actuarial assumptions would have had the following impact (in EUR k) on the present value of pension obligations in the previous year:

	Change	Effect 31 December 2013
Discount rate	- 0.50 % points	5,246
	+ 0.50 % points	-4,669
Wage and salary trend	- 0.25 % points	-57
	+ 0.25 % points	58
Increase in pensions	- 0.25 % points	-2,088
	+ 0.25 % points	2,180
Life expectancy	+ 1 year	1,949

There are no plan assets for German plans. The plan assets of the foreign plans break down into the following assets:

	31 December 2014	31 December 2013
	EUR k	EUR k
Securities/shares	3,606	3,426
Fixed-interest securities	1,069	913
Real estate	421	365
	5,096	**4,704**

The fair value of the securities and shares were determined based on prices quoted on active markets, while the fair value of real estate was not based on prices quoted on active markets. The real estate contained in plan assets does not relate to owner-occupied property in the UK. The investment horizon for plan assets takes into account the expected payout profile.

From 1 January 2002 to 31 December 2014, all new hires at CeramTec GmbH, CeramTec Service GmbH 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 Hoechst-Gruppe VVaG. These pension funds are multi-employer plans which are basically 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 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 Holding Group can under certain circumstances be used to finance another entity's employee benefits.

Dynamit Nobel VVaG is funded for commitments made before 1 December 2007 with income-based contributions by entitled employees as well as variable employer contributions. The employers' contribution must, together with the member contributions and return on plan assets, sufficiently fund the agreed 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 made as of 1 December 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 were 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 by 31 December 2014. Deficits, for example due to the pension fund earning an insufficient return on assets, may result in the CeramTec Holding 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 GmbH or Emil Müller GmbH of 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 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 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 Holding Group for active employees, non-contributory employees and pensioners ranges between around 0.1 % and 0.15 % in each case.

As of 1 December 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 Höchster Pensionskasse VVaG. From 1 January 2015, contributions are not paid anymore to the pension fund Dynamit Nobel VVaG, and the employees become extraordinary members. All new hires become members of Höchster Pensionskasse VVaG. The employees and employer make a fixed, income-based contribution to Höchster 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 defined contribution plan (pension funds) amounted to EUR 2,814k in the fiscal year (15 July to 31 December 2013: EUR 878k).

The expenses are recorded in cost of sales, selling costs, research and development as well general administrative costs. Planned contributions of EUR 871k are expected to be made in 2015.

Expenses for additional defined contribution plans amount to EUR 9,770k (15 July to 31 December 2013: EUR 3,550k).

4.10 Other provisions and provision for taxes

Other provisions and provision for taxes developed as follows in the fiscal year:

	Balance as of 31 December 2013	Additions	Utilisation	Reversal	Unwinding of the discount	Exchange difference	Balance as of 31 December 2014
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Provisions for employee bonuses	2,876	8,454	2,306	438	0	164	8,750
Provisions for warranties	2,382	789	488	576	7	3	2,117
Provisions for environmental risks	644	1	165	0	11	42	533
Provisions for long-service awards	1,083	184	104	0	0	0	1,163
Provisions for litigation risks	1,041	733	204	68	1	1	1,504
Provisions for taxes	402	0	342	0	0	6	66
Other provisions	4,453	3,248	2,816	1,282	1	43	3,647
	12,881	13,409	6,425	2,364	20	259	17,780

Provisions for environmental risks relate to the elimination of residual pollution, renovation measures and water conservation practices. Estimations and, where possible, external expert opinions were used to measure the amount of the provision.

The provision for taxes includes anticipated income tax payments for past assessment periods.

Other provisions primarily comprise provisions for severance pay, legal and consulting fees as well as provisions.

The maturities of the provisions were as follows:

	31 December 2014	31 December 2013
	EUR k	EUR k
Current provisions	14,033	9.395
Non-current provisions	3,747	3.486
	17,780	12,881

The cash outflow of other provisions is expected to be 79% within one year and 21% between more than one and 15 years.

4.11 Financial liabilities to affiliates

Financial liabilities to affiliates are non-current and comprise a loan payable to Faenza Luxembourg S.à.r.l, Luxembourg, of EUR 129,906k (31 December 2013: EUR 120,000k), and the interest expense accrued of EUR 3,643k (31 December 2013: EUR 3,338k). The loan increases every year on 29 August by the amount of incurred expenses for interest.

4.12 Financial liabilities to third parties

The financial liabilities to third parties breaks down as follows:

	31 December 2014 EUR k	31 December 2013 EUR k
Non-current financial liabilities		
Liabilities to banks	636,948	600,195
Liabilities from the bond	296,814	295,765
Derivative financial instruments	13,896	20,815
Finance lease liabilities	1,433	1,371
Purchase price for technology	308	490
Total	**949,399**	**918,636**
Current financial liabilities		
Liabilities to banks	22,329	11,525
Liabilities from the bond	9,489	9,981
Derivative financial instruments	4,846	5,873
Discounts and bonuses	2,731	1,746
Liabilities from finance leases	189	275
Other current financial liabilities	1,240	2,103
Profit or loss transferred to RSGG	0	26,922
Subsequent purchase price payment	0	3,500
Total	**40,824**	**61,924**

Liabilities to banks nominally amount to EUR 291,300k from a tranche in EUR and EUR 382,554k from a tranche in USD. These loans have variable interest rates and mature on 30 August 2020. Transaction costs associated with the loan of EUR 19,733k are spread over the term of the loan using the effective interest method. The tranche in USD of EUR 263,900k is hedged by currency swaps concluded against foreign currency risks. This hedging relationship is recognised as a cash flow hedge.

The bond has a fixed interest rate and a nominal volume of EUR 306,700k. This bond matures on 15 August 2021. The CeramTec Holding Group has a termination option for this bond, which is recognised as a separate financial asset (note 4.3). Associated transaction costs of EUR 13,120k 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.

In the comparative period, current financial liabilities include, among other things, the amount of EUR 26,922k to be distributed to Rockwood Specialties Group, Inc. (RSGG), the former parent company of CeramTec GmbH, in line with the profit and loss transfer agreement as of 31 August 2013 as well as the subsequent purchase price payment for the acquisition of the high-performance ceramics division of EUR 3,500k. In the reporting year, both amounts were settled.

Payment obligations from finance leases break down as follows over future years:

	Total	up to 1 year	1 to 5 years	more than 5 years
Present value of minimum lease payments	1,622	189	262	1,171
Interest effect	1,173	8	388	777
Minimum lease payments	2,795	197	650	1,948

Lease payments of EUR 189k, which are due in 2015, are recognised under current financial liabilities.

Reference is made to note 4.2 as regards the items of property, plant and equipment recognised under finance leases.

All leases include contractually agreed installments. There are no sub-lease arrangements. CeramTec Suzhou has a renewal option for real estate leases.

4.13 Other liabilities

Other liabilities break down as follows:

	31 December 2014	31 December 2013
	EUR k	EUR k
Other current liabilities		
Wages and salaries including taxes	6,004	4,459
Real estate transfer tax	4.120	4,108
Other current liabilities	3,455	3,101
Total	**13,579**	**11,668**

Other current liabilities are mainly attributable to liabilities to employees, liabilities from social security contributions, liabilities to pension funds as well as deferred income.

4.14 Rental and lease obligations

Operating lease commitments mainly relate to land and buildings as well as technical equipment and machinery.

The corresponding payment obligations over future fiscal years break down as follows:

	31 December 2014	31 December 2013
	EUR k	EUR k
up to 1 year	1,637	1,742
1 to 5 years	1,389	1,504
more than 5 years	518	518
Total	**3,544**	**3,764**

In the fiscal year, expenses from rental and lease agreements amounted to EUR 3,293k (15 July to 31 December 2013: EUR 1,107k).

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 IAS 39:

	31 December 2014		
	Measurement category of IAS 39[1]	Carrying amount	Fair value
		EUR k	EUR k
Financial assets			
Trade receivables	LaR	47,517	47,517
Other financial assets	LaR	1,162	1,162
Cash and cash equivalents	LaR	62,246	62,246
Separated termination rights—HfT	FVtPL	7,465	7,465
Currency swaps in effective hedges	Hedge	24,601	24,601
Total		**142,991**	**142,991**
Financial liabilities			
Bond liabilities	FLAC	306,303	329,242
Liabilities to banks	FLAC	659,277	674,339
Trade payables	FLAC	22,424	22,424
Finance lease liabilities	FLAC	1,622	1,622
Other financial liabilities	FLAC	4,279	4,272
Liabilities to affiliates	FLAC	133,549	139,740
Separated interest rate floors—HfT	FVtPL	17,277	17,277
Interest rate cap—HfT	FVtPL	1,465	1,465
Total		**1,146,196**	**1,190,381**

1 HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortised cost; hedge: hedge accounting

	31 December 2013		
	Measurement category of IAS 39[1]	Carrying amount	Fair value
		EUR k	EUR k
Financial assets			
Trade receivables	LaR	43,374	43,374
Other financial assets	LaR	1,022	1,022
Cash and cash equivalents	LaR	66,963	66,963
Separated termination rights—HfT	FVtPL	6,918	6,918
Total		**118,277**	**118,277**
Financial liabilities			
Bond liabilities	FLAC	305,745	335,837
Liabilities to banks	FLAC	611,719	635,579
Trade payables	FLAC	31,898	31,898
Finance lease liabilities	FLAC	1,646	1,646
Other financial liabilities	FLAC	34,761	34,712
Liabilities to affiliates	FLAC	123,338	131,510
Separated interest rate floors—HfT	FVtPL	12,571	12,571
Currency swaps in effective hedges	Hedge	14,117	14,117
Total		**1,135,795**	**1,197,870**

[1] HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortised cost; hedge: hedge accounting

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:** Quoted (unadjusted) prices in markets for identical assets or liabilities that the entity can access at the measurement date

- **Level 2:** Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly

- **Level 3:** Non-observable measurement parameters for the asset or liability

The following table shows the fair value hierarchy for derivative financial instruments that are recognised at fair value in the consolidated financial statements:

	31 December 2014		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Separated termination rights—HfT	0	7,465	0
Currency swaps in effective hedges	0	24,601	0
Financial liabilities			
Separated interest rate floors—HfT	0	17,277	0
Interest rate caps—HfT	0	1,465	0

	31 December 2013		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Separated termination rights—HfT	0	6,918	0
Currency swaps in effective hedges	0	0	0
Financial liabilities			
Separated interest rate floors—HfT	0	12,571	0
Currency swaps in effective hedges	0	14,117	0

The following table shows the fair value hierarchy for the financial instruments that are not recognised at fair value in the consolidated financial statements; however, their fair value is provided in the notes to the consolidated financial statements. The Group does not disclose the fair value of financial instruments when the carrying amount is a reasonable approximation of fair value, such as short-term trade receivables and payables.

	31 December 2014		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial liabilities			
Bond liabilities	329,242	0	0
Liabilities to banks	0	674,339	0
Finance lease liabilities	0	1,622	0
Liabilities to affiliates	0	139,740	0

	31 December 2013		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial liabilities			
Bond liabilities	335,837	0	0
Liabilities to banks	0	635,579	0
Finance lease liabilities	0	1,646	0
Liabilities to affiliates	0	131,510	0

The fair value of the publicly listed bond corresponds to the nominal value multiplied by the market value at the reporting date. 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 in 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 (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.

Currency swaps are measured on the basis of a discounted cash flow method, which takes into account the observable mean closing rates, yield curves and currency spreads between currencies. All currency swaps had a positive market value as of the end of the reporting period. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement of the currency swaps 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 (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 liability, 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 recognised at fair value in the consolidated financial statements on a recurring basis, the CeramTec Holding 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 IAS 39.

	31 December 2014			
	Change in fair value	Currency translation	Impairment loss	Total
	EUR k	EUR k	EUR k	EUR k
Loans and receivables (LaR)	0	662	(164)	**498**
Cash and cash equivalents	0	1,180	0	**1,180**
Separated termination rights/ interest rate floors—HfT (FVtPL)	(5,800)	0	0	**(5,800)**
Financial liabilities at amortised cost (FLAC)	0	(8,096)	0	**(8,096)**
Intercompany loans	0	(887)	0	**(887)**
Total	**(5,800)**	**(7,141)**	**(164)**	**(13,105)**

	31 December 2013			
	Change in fair value	Currency translation	Impairment loss	Total
	EUR k	EUR k	EUR k	EUR k
Loans and receivables (LaR)	0	(398)	(471)	**(869)**
Cash and cash equivalents	0	(111)	0	**(111)**
Separated termination rights/interest rate floors—HfT (FVtPL)	3,952	0	0	**3,952**
Financial liabilities at amortised cost (FLAC)	0	1,907	0	**1,907**
Intercompany loans	0	1,338	0	**1,338**
Total	**3,952**	**2,736**	**-471**	**6,217**

Net losses (in the previous year, net gains) from the changes in 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 amortised cost using the effective interest method.

	31 December 2014	31 December 2013
	EUR k	EUR k
Total interest expense	76,942	28,015
Total interest income	195	68

Furthermore, finance charges of EUR 110k, which are not part of the effective interest method, were recognised in profit or loss during the reporting period.

Derivative financial instruments and hedge accounting

The following table shows the fair value and nominal value of derivative financial instruments as of 31 December 2014 and 31 December 2013:

	31 December 2014	
	Nominal value	Fair value
	EUR k	EUR k
Derivatives with a positive fair value		
Separated termination rights—HfT	306,700	7,465
Currency swaps in effective hedges	263,900	24,601
Derivatives with a negative fair value		
Separated interest rate floor—HfT	674,339	(17,276)
Interest rate cap—HfT	433,440	(1,465)
Total	**1,678,379**	**13,325**

	31 December 2013	
	Nominal value	Fair value
	EUR k	EUR k
Derivatives with a positive fair value		
Separated termination rights—HfT	306,700	6,918
Derivatives with a negative fair value		
Separated interest rate floor—HfT	635,111	(12,571)
Currency swaps in effective hedges	269,500	(14,117)
Total	**1,211,311**	**(19,770)**

Embedded derivatives

As described in note 4.12, the CeramTec Holding Group took out a syndicated loan with several USD and EUR tranches with different banks in August 2013. The loans include embedded interest rate floors, which obliges the CeramTec Holding Group to pay a minimum interest rate that exceeds the variable interest rate. Furthermore, the bond issued in August 2013 contains various agreements that entitle the CeramTec Holding 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 IAS 39 and recognised as stand-alone derivatives at fair value through profit or loss.

Cash flow hedges

The currency swaps were designated as hedging instruments in cash flow hedges in order to hedge a portion of the foreign currency risk resulting from the loans in USD. The ongoing interest and principal repayments from the loans and the currency swaps are made at the same time each quarter and will have an impact on profit or loss until the swaps mature in 2018. There were no ineffective cash flow hedges recognised in the reporting period.

The following table shows the amount for the reporting period recognised in other comprehensive income and reclassified from there to profit or loss:

	31 December 2014	31 December 2013
	EUR k	EUR k
Currency swaps in effective hedges		
Net gains/losses recognised in other comprehensive income	38,718	(14,117)
Reclassification from other comprehensive income to profit or loss	(33,852)	8,889
Total other comprehensive income at the end of the period	**4,866**	**(5,228)**

The amounts reclassified from other comprehensive income to profit or loss were recognised in the financial result, so as to offset the effects from foreign currency translation of the secured portion of the loans in USD.

5 Notes to the consolidated statement of cash flows

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. 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. There bank balances are not subject to drawing restrictions.

In the comparative period, the cash flow from investing activities includes the purchase price payment of EUR 1,359,615k for the acquisition of the high-performance ceramics division. Cash and cash equivalents of EUR 183,886k were acquired. It was not until the reporting year that the additionally agreed purchase price of EUR 3,500k affected cash and cash equivalents.

Other non-cash income and expenses primarily contain changes in the market value of financial instruments and accrued interest.

During the financial year, the Group invested EUR 229k in property, plant and equipment, from which cash outflows have not resulted yet, and which are hence not included in cash flow from investing activities.

Compared with the consolidated financial statements of the previous year, presentation of interest paid in the consolidated statement of cash flows for the reporting year and comparative period was adjusted. Because interest paid arises mainly from financing activities, it is reported in cash flow from financing activities now. As a result of the change, in the reporting year cash flow from financing activities was EUR 55,382k lower (in the previous year, EUR 7,756k lower), and cash flow from operating activities was EUR 55,382k higher (in the previous year, EUR 7,756k higher).

6 Other notes

6.1 Management of financial risks

The CeramTec Holding Group is exposed to credit risks and various market risks. Credit risk is 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 Holding Group is exposed to liquidity risks, which mainly result from the loans in EUR and USD taken out in August 2013 as well as the bond also issued in August 2013.

The CeramTec Holding Group operates on the basis of an appropriate framework to manage financial risks, which is an integral part of ongoing business operations and financing activities. Taking these risk management objectives into consideration, risks are identified, assessed and managed on an ongoing basis. The CeramTec Holding Group may enter 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 risks comprise exchange rate risks, interest rate risks 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 Holding Group is exposed to foreign currency risks from changes in the USD/EUR exchange rate.

The CeramTec Holding Group has secured 81.4 % of the nominal volume of the loans in USD against risks from fluctuations in the USD/EUR exchange rate by entering into USD/EUR currency swaps (further information on hedging cash flow risks can be found in note 4.15).

The following sensitivity analysis in terms of the currency risk was prepared taking into account the hedges in place on 31 December 2014 and on the basis that the portion of financial instruments in foreign currency will remain constant. The table shows the effects on net income and equity for the period taking into account a hypothetical change of +/- 10 % to the closing rate and forward rate as of the reporting date for the CeramTec Holding Group’s main foreign currency items.

	31 December 2014						
EUR k	**Change in the spot rate %**	**Change in the forward rate %**	**USD**	**GBP**	**CZK**	**PLN**	**Total**
Earnings effect before tax	+10%		4,754	(226)	(727)	(3,181)	**620**
	-10%		(5,810)	277	888	3,888	**(757)**
Effect on equity		+10%	(3,989)	0	0	0	**(3,989)**
		-10%	5,949	0	0	0	**5,949**

The effects on the net income for the period are attributable to the hypothetical change in the carrying amount of non-derivative assets and liabilities in the respective foreign currency. The effect on equity stems from the hypothetical change in the market value of the USD/EUR currency swaps, which are recognised in other comprehensive income as a result of the designation as a hedging instrument.

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 Holding 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 income or equity for the period, as the bond is carried at amortised cost and changes in fair value are not recognised.

In the reporting year, the CeramTec Holding Group entered into an agreement governing an interest rate cap of EUR 441,040k linked to 3-month EURIBOR. The interest rate cap limits the maximum variable interest rate to 2 %.

The following table shows the effects on the interest result assuming a hypothetical change of +/- 100 basis points to the variable USD and EUR interest rates.

	31 December 2014	
	Increase/decrease in basis points	Effect on interest expense
		EUR k
EURO	+100	460
	-100	0
US Dollar	+100	202
	-100	0

A decline in the interest rate has no effect on the interest expense as a result of the interest rate floor of 1 % agreed in the syndicated loan agreement.

Credit risk

Credit risk is the risk that a counterparty will not meet its obligations from financial instruments, leading to a financial loss for the creditor. At the CeramTec Holding Group, the credit risk is primarily due to trade receivables, cash and cash equivalents and other receivables.

Trade receivables are attributable to numerous customers in various sectors and regions. Default risks in 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 is approximately 56 % 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 Holding Group is exposed to losses from credit risks if counterparties do not meet their obligations. The resulting risk position is managed by diversifying its counterparties. For example, cash and cash equivalents are only invested at banks with excellent credit ratings. There are no cash and cash equivalents past due or impaired as of the reporting date. The maximum credit risk for cash and cash equivalents corresponds to the carrying amount.

The credit risk position from other financial assets corresponds to the carrying amount of these instruments. The CeramTec Holding Group considers this credit risk to be immaterial as of the reporting date.

The termination option separated from the bond 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 a more favorable opportunity to refinance for the CeramTec Holding Group; as such, there is no actual cash receivable from the banks.

Liquidity risk

Liquidity risk is the risk that the CeramTec Holding Group will not be able to fulfill its financial obligations when they fall due. The CeramTec Holding Group's objective is to minimise the liquidity risk as far as possible by ensuring sufficient financing and credit lines from banks. In light of this, the CeramTec Holding Group had an undrawn and confirmed credit line of EUR 100,000k as of the reporting date. Furthermore, the CeramTec Holding Group had cash and cash equivalents of EUR 62,246k as of the reporting date.

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 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 (in the previous year: for the EUR payer leg of the currency swaps).

	31 December 2014						
	Carrying amount	2015	2016	2017	2018	2019	> 2019
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Trade payables	22,424	22,424	0	0	0	0	0
Liabilities to banks	659,277	33,653	32,959	33,401	34,694	35,209	672,914
Bond liabilities	306,303	25,303	25,303	25,303	25,303	25,303	357,306
Liabilities to affiliates	133,549	0	0	0	0	0	262,133
Finance lease liabilities	1,622	197	187	170	146	146	1,947
Other financial liabilities	4,279	4,074	103	103	0	0	0
Derivatives with a negative fair value							
Interest rate caps	1,465	448	448	448	336	0	0

	31 December 2013						
	Carrying amount	2014	2015	2016	2017	2018	> 2018
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Trade payables	31,898	31,898	0	0	0	0	0
Liabilities to banks	611,719	30,692	31,031	34,320	39,314	43,413	669,753
Bond liabilities	305,745	25,795	25,303	25,303	25,303	25,303	382,609
Liabilities to affiliates	123,338	0	0	0	0	0	265,441
Finance lease liabilities	1,646	290	171	175	155	132	1,879
Other financial liabilities	34,761	34,271	114	97	94	93	93
Derivatives with a negative fair value							
Currency swaps in effective hedges	14,117	14,666	23,332	32,968	39,216	193,395	0

In the previous year, the cash inflow of EUR 320,885k from the USD receiver leg of the currency swaps until maturity in 2018 was not included in the above table.

Offsetting financial assets against financial liabilities

The USD/EUR currency swaps were entered into on the basis of ISDA Master Agreements, which includes conditional claims to offset financial assets and financial liabilities. These offsetting rights are only legally effective if future events (e.g. insolvency, payment arrears) should occur. As the currency swaps only had positive market values as of the reporting date, derivative assets were not matched with any corresponding liabilities that would have enabled potential offsetting.

Collateral

In connection with the syndicated loan, the assets of the German and American companies were provided as collateral to the extent that the syndicated loan is drawn. CeramTec Service GmbH, CeramTec Acquisition Corporation and CeramTec GmbH are the borrowers of the syndicated loan. In the USA, shares in CeramTec Acquisition Corporation and in CeramTec North America Corporation, all additional assets of CeramTec Acquisition and CeramTec North America Corporation as well as CeramTec GmbH's intellectual property registered in the USA were provided as collateral. In Germany, shares in CeramTec Service GmbH, CeramTec GmbH, CeramTec-ETEC GmbH, Cerasiv GmbH Innovatives Keramik Engineering and Emil Müller GmbH, all intercompany receivables and bank accounts of CeramTec Group GmbH and CeramTec Service GmbH, all intercompany receivables, insurance receivables and trade receivables as well as bank accounts of CeramTec GmbH, CeramTec-ETEC GmbH, Emil Müller GmbH and Cerasiv GmbH Innovatives Keramik Engineering were provided as collateral. Furthermore, the intellectual property and land of CeramTec GmbH, CeramTec-ETEC GmbH, Emil Müller GmbH and Cerasiv GmbH Innovatives Keramik Engineering were provided as collateral for the syndicated loan, or encumbered.

Risk from compliance with financial covenants

Compliance with a financial covenant was also agreed to in connection with obtaining the syndicated loan. CeramTec Holding Group if the revolving credit line for EUR 100m is drawn by an amount set in the loan agreement.

Capital management

The CeramTec Holding Group's objective of capital management is securing liquidity to make investments that increase the value of the organisation. Therefore, the focus is on optimising the operating cash flows as well as repaying liabilities on schedule. Recognised equity of EUR 285,222k (31 December 2013: EUR 326,870k) and liabilities of EUR 1,442,304k (31 December 2013: EUR 1,412,260k) were recognised as of the reporting date. The equity ratio stands at 16.51 % (31 December 2013: 18.78 %).

6.2 Contingent liabilities

There were no significant contingent liabilities as of 31 December 2014. 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 reliably measured. Where claims and obligations arising are not considered probable nor remote, such contingent liabilities are disclosed separately in the consolidated financial statements.

6.3 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 Holding Group. This comprises the management of CeramTec Holding and the supervisory board of CeramTec GmbH.

In the fiscal year, the **general managers** of CeramTec Holding were:

Dr. Ulf-D. Zimmermann
Chief Executive Officer / HR director

Rolf-Michael Müller (until 23 September 2014)
Chief Financial Officer

Dominique Janbon (from 1 October 2014)
Chief Financial Officer

Sigurd Adler
Chief Technology Officer

The members of management received total remuneration (fixed and variable amounts) in the form of short-term employee benefits amounting to EUR 2,191k (15 July to 31 December 2013: EUR 747k) in the fiscal year. The payments for post-employment benefits amount to EUR 286k (15 July to 31 December 2013: EUR 175k). This amount comprises the service cost for pension obligations and contributions to defined contribution plans. As of 31 December 2014, former general managers are also granted with termination benefits of EUR 1,379k (31 December 2013: EUR 0k). Additionally, pension obligations amounted to EUR 3,099k (31 December 2013: EUR 5,059k) for general managers and EUR 2,599k (31 December 2013: EUR 0k) for former managers.

As part of a management participation program (MPP), the general managers were offered the option to indirectly acquire shares in parent company Faenza Holding S.à.r.l. via Faenza MEP GmbH & Co. KG. These indirect shares were acquired at fair value, which is calculated based on the purchase price for the acquisition of the high-performance ceramics division by the ultimate parent company. The shares primarily enable them to participate in earnings if certain events occur. The Company has no obligations from the management participation program. The MPP is therefore accounted for as equity-settled share-based payments in these consolidated financial statements in accordance with IFRS 2. As the shares were acquired at fair value, no benefits were granted to the general managers. This means that no personnel expenses are incurred if or before the defined events occur.

CeramTec GmbH has a **supervisory board** in accordance with the articles of incorporation.

The total remuneration of the supervisory board in the fiscal year 2014 amounted to EUR 63k (15 July to 31 December 2013: EUR 14k). In addition, in the fiscal year consultancy fees of EUR 37k (15 July to 31 December 2013: EUR 0k) were paid to members of the supervisory board.

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 133,549k (31 December 2013: EUR 123,338k), including interest, with a fixed interest rate of 8.255 % p.a. has been obtained from CeramTec Holding's controlling shareholder, Faenza Luxembourg S.à.r.l., Luxembourg. Interest expenses of EUR 10,211k (15 July to 31 December 2013: EUR 3,338k) were incurred in the fiscal year 2014. These were not paid to the shareholder; instead, the loan will be increased with effect from 29 August 2015. The loan is not secured.

In the fiscal year, Faenza Luxembourg S.à.r.l. charged the CeramTec Holding Group EUR 601k (15 July to 31 December 2013: EUR 0k) for consultancy services and out-of-pocket expenses.

6.4 Auditor's fees

Overall, CeramTec Holding's auditor's fees for the fiscal year break down as follows:

	1 January to 31 December 2014	15 July to 31 December 2013
	EUR k	EUR k
Audit services	368	411
Audit-related services	137	113
Total	**467**	**524**

6.5 Subsequent events

There were no significant events after the end of the reporting period.

7 Reconciliation to CeramTec Group GmbH

If the consolidated statement of comprehensive income of CeramTec Group had been prepared instead of the consolidated statement of comprehensive income of CeramTec Holding, which is presented in these consolidated financial statements, this would have resulted in the following changes for the fiscal year:

- Lower general administrative expenses of EUR 170k (15 July to 31 December 2013: EUR 1,065k)
- Lower interest expenses of EUR 10,211k (15 July to 31 December 2013: EUR 3,338k)
- Higher interest income of EUR 2,170k (15 July to 31 December 2013: EUR 0k)
- Lower other expense of EUR 0k (15 July to 31 December 2013: EUR 3k)
- Higher tax expenses of EUR 36k (15 July to 31 December 2013: EUR 346k)
- Higher expenses for profit and loss transfers EUR 2,211k (15 July to 31 December 2013: higher income for profit and loss transfers of EUR 37,804k)

The total comprehensive income of CeramTec Group would therefore have been EUR 10,304k (15 July to 31 December 2013: EUR 41,864k) higher compared to the total comprehensive income recognised in these financial statements.

If the consolidated statement of financial position of CeramTec Group had been prepared instead of the consolidated statement of financial position of CeramTec Holding, which is presented in these financial statements, this would have resulted in the following changes as of 31 December 2014:

- Lower tax receivable of 382k EUR (31 December 2013: EUR 0k)
- Higher receivables of EUR 39,617k (31 December 2013: EUR 37,894k)
- Lower trade payables of EUR 68k (31 December 2013: EUR 403k)
- Lower provisions of EUR 34k (31 December 2013: EUR 575k)
- Lower financial liabilities to affiliates of EUR 132,807k (31 December 2013: EUR 123,338k)
- Lower cash and cash equivalents of EUR 0k (31 December 2013: EUR 24k)
- Lower deferred tax assets of EUR 0k (31 December 2013: EUR 346k)

This would have resulted in a EUR 172,144k (31 December 2013: EUR 161,840k) higher level of group equity for the CeramTec Group compared to the group equity recognised in these financial statements.

There would have been no impact on the consolidated statement of cash flows if the consolidated statement of cash flows of CeramTec Group had been prepared instead of the consolidated statement of cash flows presented in these financial statements.

Plochingen, 31 March 2015

CeramTec Holding GmbH

The management

Dr. Zimmermann Janbon Adler

The following independent auditors' report (Bestätigungsvermerk) has been issued in accordance with Section 322 German Commercial Code (Handelsgesetzbuch) in German language on the German version of the consolidated financial statements of CeramTec Holding GmbH, Plochingen, for the year from 1 January to 31 December 2014 and the group management report. The group management report is not included in this Offering Memorandum.

Independent Auditors' Report

We have audited the consolidated financial statements prepared by CeramTec Holding GmbH, Plochingen—comprising the consolidated statement of financial position, the consolidated statement of comprehensive income, the consolidated statement of cash flows, the consolidated statement of changes in equity and the notes to the consolidated financial statements—and the group management report for the year from 1 January to 31 December 2014. The preparation of the consolidated financial statements and the group management report in accordance with IFRS, as adopted by the European Union (EU), and the additional requirements of German commercial law pursuant to § 315a (1) German Commercial Code (HGB) are the responsibility of the parent company's management. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with Section 317 German Commercial Code (HGB) and German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a sample basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements of CeramTec Holding GmbH, Plochingen, comply with the IFRS, as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315a (1) German Commercial Code (HGB) and give a true and fair view of the net assets, financial position and results of operations of the group in accordance with these requirements. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the group's position and suitably presents the opportunities and risks of future development.

Stuttgart/Germany, 31 March 2015

Deloitte & Touche GmbH
Wirtschaftsprüfungsgesellschaft

(Gillar)	(Röscheisen)
Wirtschaftsprüferin	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

CeramTec Holding GmbH

Audited Consolidated
Financial Statements of CeramTec Holding GmbH
as of and for the year ended December 31, 2015

CeramTec Holding GmbH

Audited Consolidated Financial Statements of CeramTec Holding GmbH as of and for the year ended December 31, 2015

CONTENTS

CeramTec Holding GmbH, Plochingen

Consolidated statement of comprehensive income from 1 January to 31 December 2015

	Notes	1 January to 31 December 2015	1 January to 31 December 2014
		EUR k	EUR k
Revenue	3.1	501,331	474,832
Cost of sales	3.2	299,956	293,508
Gross profit		**201,375**	**181,324**
Selling costs	3.3	86,801	78,898
Research and development costs	3.4	24,241	24,067
General administrative costs	3.5	21,105	18,860
Other income / expenses (-), net	3.6	448	2,004
Operating income		**69,676**	**61,503**
Interest income and other finance income		5,408	196
Interest expenses and other finance costs		81,699	94,080
Financial result	3.7	**-76,291**	**-93,884**
Loss before income tax		**-6,615**	**-32,381**
Income tax benefit / expense (-)	3.8	-7,694	1,029
Net loss for the period		**-14,309**	**-31,352**
Items that will not be reclassified through profit or loss			
Income / expenses (-) from the remeasurement of defined benefit plans		9,596	-30,253
Deferred taxes		-2,762	8,407
		6,834	**-21,846**
Items that may be reclassified subsequently to profit or loss			
Gains on cash flow hedges		2,645	4,866
Deferred taxes		-758	-1,386
		1,887	**3,480**
Exchange differences on translation of foreign operations, net of tax		4,796	8,070
Other comprehensive income / loss (-), net of income tax		**13,517**	**-10,296**
Total comprehensive loss		**-792**	**-41,648**

CeramTec Holding GmbH, Plochingen

Consolidated statement of financial position as at 31 December 2015

Assets	Notes	31 December 2015	31 December 2014
		EUR k	EUR k
Goodwill	4.1	557,567	550,820
Other intangible assets	4.1	603,922	639,828
Property, plant and equipment	4.2	300,199	309,684
Other financial assets	4.3	56,444	29,963
Other assets	4.4	1,188	1,675
Deferred tax assets	3.8	1,085	2,874
Non-current assets		**1,520,405**	**1,534,844**
Inventories	4.5	75,137	67,918
Trade receivables	4.6	53,178	47,517
Financial receivables from affiliates		1,022	0
Income tax receivables		1,665	6,517
Other financial assets	4.3	8,515	3,265
Other receivables and assets	4.4	5,207	5,219
Cash and cash equivalents	4.7	86,476	62,246
Assets held for sale	4.8	11	0
Current assets		**231,211**	**192,682**
Total assets		**1,751,616**	**1,727,526**

Equity and liabilities	Notes	31 December 2015	31 December 2014
		EUR k	EUR k
Issued capital	4.9	25	25
Capital reserves	4.9	378,148	378,148
Accumulated losses	4.9	-103,171	-95,696
Accumulated other comprehensive income	4.9	9,428	2,745
Equity		**284,430**	**285,222**
Provisions for pension obligations	4.10	86,071	91,451
Other provisions	4.11	3,653	3,747
Financial liabilities to affiliates	4.12	144,574	133,549
Financial liabilities to third parties	4.13	956,856	949,399
Deferred tax liabilities	3.8	167,346	173,298
Non-current liabilities		**1,358,500**	**1,351,444**
Other provisions	4.11	13,081	13,967
Provision for taxes	4.11	2,364	66
Financial liabilities to third parties	4.13	55,029	40,824
Trade payables		24,354	22,424
Other liabilities	4.14	13,858	13,579
Current liabilities		**108,686**	**90,860**
Total liabilities		**1,467,186**	**1,442,304**
Total equity and liabilities		**1,751,616**	**1,727,526**

CeramTec Holding GmbH, Plochingen

Consolidated statement of cash flows from 1 January to 31 December 2015

	2015	2014
	EUR k	EUR k
Net loss for the period	-14,309	-31,352
Income tax expense / benefit (-)	7,694	-1,029
Interest result	74,655	79,087
Amortisation, depreciation and impairment of non-current assets	84,619	89,249
Gain on disposal of property, plant and equity and intangible assets	99	28
Increase / decrease (-) in provisions (excluding deferred taxes)	1,170	3,168
Income payment	-11,330	-16,426
Other non-cash income (-) / expenses, net	-1,732	15,481
Increase (-) / decrease in inventories	-6,303	3,436
Increase (-) / decrease in trade receivables	-5,100	-4,143
Increase (-) / decrease in other receivables and (financial) assets	614	406
Increase / decrease (-) in trade payables	1,866	-9,702
Increase / decrease (-) in other (financial) liabilities	111	1,825
Cash flow from operating activities	**135,518**	**130,028**
Cash received from disposals of property, plant and equipment	324	1,257
Cash paid (-) for investments in property, plant and equipment	-26,891	-47,729
Cash received from grants	1,059	6,100
Cash paid (-) for investments in intangible assets	-1,093	-1,399
Cash paid (-) for the acquisition of entities	-10,934	-3,500
Cash flow from investing activities	**-37,535**	**-45,270**
Repayment of syndicated loan	-18,733[1]	-7,522
Interest paid (-)	-55,263	-55,382
Transfer of profit / loss to former shareholder	0	-26,922
Cash flow from financing activities	**-73,996**	**-89,827**
Change in cash and cash equivalents	23,987	-5,070
Net foreign exchange difference	243	353
Cash and cash equivalents at the beginning of the period	62,246	66,963
Cash and cash equivalents at the end of the period	**86,476**	**62,246**

[1] Includes Transaction Cost for Repricing EUR-Term Loan: EUR 469k

CeramTec Holding GmbH, Plochingen

Consolidated statement of changes in equity for the year ended 31 December 2015

				Accumulated other comprehensive income/(loss)		
	Issued capital	Capital reserves	Accumulated losses	Cash flow hedge reserve	Difference from currency translation	Equity
Reference to disclosure in notes	(4.9)	(4.9)	(4.9)	(4.9)	(4.9)	(4.9)
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
1 January 2014	**25**	**378,148**	**-42,498**	**-3,738**	**-5,067**	**326,870**
Net loss for the period	—	—	-31,352	0	—	-31,352
Other comprehensive income / loss (-)	—	—	-21,846	3,480	8,070	-10,296
Total comprehensive income / loss (-)	*—*	*—*	*-53,198*	*3,480*	*8,070*	-41,648
31 December 2014	**25**	**378,148**	**-95,696**	**-258**	**3,003**	**285,222**
Net loss for the period	—	—	-14,309	—	—	-14,309
Other comprehensive income / loss (-)	—	—	6,834	1,887	4,796	13,517
Total comprehensive income / loss (-)	*—*	*—*	*-7,475*	*1,887*	*4,796*	-792
31 December 2015	**25**	**378,148**	**-103,171**	**1,629**	**7,799**	**284,430**

TRANSLATION—GERMAN VERSION PREVAILS

CeramTec Holding GmbH

Plochingen

Notes to the Consolidated Financial Statements
for the year ended 31 December 2015

CeramTec Holding GmbH

Notes to the Consolidated Financial Statements

1 General

1.1 Corporate information and purpose of the Company

The purpose of CeramTec Holding GmbH (hereinafter "CeramTec Holding") 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 enter into and/or issue various of financial instruments.

The subsidiaries of CeramTec Holding are leading global producers of high-performance ceramics and specialized in the development, production and sale of assemblies, components and products made from ceramic materials. The companies are primarily active in the following markets: automotive, electronic applications, energy and environmental applications, equipment and mechanical engineering and medical technology. Their activities focus on developing solutions for increasingly demanding application areas using many different and in part highly-specialized ceramic materials with unique mechanical, electrical, thermal and biochemical properties and property combinations.

CeramTec Holding's registered office is located at CeramTec-Platz 1-9 in 73207 Plochingen, Germany. CeramTec Holding is the parent company of the Group ("CeramTec Holding Group" or "Group") and the ultimate parent, which prepares exempting consolidated financial statements.

Where no prior-year figures are presented in the following, their value is EUR 0k.

The management of CeramTec Holding approved the consolidated financial statements on 11 March 2016 for submission to the shareholder meeting.

1.2 Basis of preparation

The consolidated financial statements are prepared pursuant to Sec. 315a (3) and (1) HGB ["Handelsgesetzbuch": German Commercial Code] 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 fiscal year and the supplementary requirements of German commercial law.

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 results of operations and financial position of the CeramTec Holding Group.

The 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 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 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 Holding has a direct or indirect shareholding are included in the consolidated financial statements for the fiscal year:

Name of the entity	Share of capital in % 31 December 2015	Share of capital in % 31 December 2014	CGU
CeramTec Group GmbH, Plochingen	100.00	100.00	1
CeramTec FinCo GmbH, Plochingen	100.00	0.00	1
CeramTec Service 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	2
CeramTec-ETEC GmbH, Lohmar	100.00	100.00	4
Emil Müller GmbH, Wilhermsdorf	100.00	100.00	3
CeramTec Italia s.r.l. in Liquidazione, Milan/Italy	100.00	100.00	2
CeramTec UK Ltd., Colyton/Great Britain	100.00	100.00	2
CeramTec Czech Republic s.r.o., Sumperk/Czech Republic	100.00	100.00	2
CeramTec Ibérica Innovative Ceramic Engineering S.L., Vilassar de Mar/Spain	100.00	100.00	2
CeramTec Innovative Ceramic Engineering, (M) Sdn. Bhd., Seremban/Malaysia	100.00	100.00	2
CeramTec Korea Ltd., Suwon-Si/Republic of Korea	100.00	100.00	2
CeramTec Suzhou Ltd., Suzhou/China	100.00	100.00	2
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	2
Press and Sinter Technics de Mexico S.A. de C.V., Puebla/Mexico	100.00	100.00	3
CeramTec Acquisition Corporation, Laurens/USA	100.00	100.00	2
CeramTec North America Corporation, Laurens/USA	100.00	100.00	2
DAI Ceramics, Inc., Willoughby/USA	100.00	0.00	2
PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland	100.00	100.00	3

1 These entities perform the functions of a holding company.
2 Entities have been allocated to the CeramTec cash-generating unit (CGU).
3 Entities have been allocated to the Emil Müller cash-generating unit.
4 Entities have been allocated to the CeramTec-ETEC cash-generating unit.

CeramTec Holding has a direct shareholding in CeramTec Group GmbH and CeramTec FinCo GmbH, and an indirect shareholding in the other subsidiaries.

On 29 May 2015, CeramTec Acquisition Corporation, Laurens/USA acquired 100 % of the shares in DAI Ceramics, Inc., Willoughby/USA, which became effective on the same day.

As per articles of incorporation dated 19 October 2015, CeramTec Holding founded CeramTec FinCo GmbH, and is its sole shareholder.

CeramTec Group GmbH, CeramTec FinCo GmbH, CeramTec Service 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 fiscal year 2015 pursuant to Sec. 264 (3) HGB.

1.4 Changes to the consolidated group

As per articles of incorporation dated 19 October 2015, CeramTec Holding GmbH established CeramTec FinCo GmbH, provided the share capital of CeramTec FinCo GmbH, amounting to EUR 25k, and became the sole shareholder.

Based on the purchase agreement dated 29 May 2015, CeramTec Acquisition Corporation, Laurens/USA, an indirect subsidiary of CeramTec Holding, purchased 100 % of the outstanding shares in DAI Ceramics, Inc., Willoughby/USA.

The purchased company is primarily engaged in the business of manufacturing ceramic cores used in investment casting of high-performance aerospace components and medical devices. The acquisition of DAI Ceramics, Inc. is intended to enlarge the product range and to drive growth of CeramTec Holding Group.

Through this acquisition, CeramTec Holding acquired indirect control over this entity and has consolidated it since 29 May 2015 pursuant to IFRS 10 applicable on this date. The cash consideration transferred to obtain control amounts was EUR 10,939k. The fair value of the acquired assets and liabilities amounts to EUR 7,286k resulting in goodwill of EUR 3,653k.

The following table shows an allocation of the paid purchase price for the assets and liabilities included in the transaction:

	Fair value EUR k
Other intangible assets	7,183
Property, plant and equipment	2,252
Inventories	916
Trade receivables	566
Cash and cash equivalents	4
Assets	**10,921**
Provisions	232
Trade payables	147
Deferred tax assets	3,251
Other liabilities	5
Liabilities	**3,635**
Total net assets at fair value	7,286
Total consideration transferred	10,939
Goodwill from takeover	**3,653**

The fair value of purchased receivables equals the gross amount of contractual receivables as it is assumed that the receivables can be fully recovered.

Deferred tax assets are determined based on a local tax rate of 34 %.

In a purchase price allocation, other intangible assets identified include customer relationships (EUR 5,469k), trademarks (EUR 930k) and other (EUR 784k).

Goodwill reflects the value of the future earnings to be realized over the next few years. In addition, the consideration paid for the aforementioned business, included amounts in relation to benefit or expected synergies, revenue growth and future market developments. These benefits are not recognised separately from goodwill because they do not meet the recognition criteria of identifiable intangible assets. This goodwill is not expected to be deductible for tax purposes.

Costs associated with the business combination amount to EUR 582k and were recognized immediately in the line item "other income/expenses (-), net".

The results of DAI Ceramics, Inc., have been included in our consolidated statement of comprehensive income from the acquisition and contributed revenue and earnings after taxes of EUR 3,852k and EUR 131k, respectively. Assuming the Company had been included in the consolidated group as of 1 January 2015, the consolidated group's revenue would have been increased by EUR 2,664k and earnings after taxes would have been reduced by EUR 312k.

As part of the purchase agreement with the previous owner of DAI Ceramics, Inc., a contingent purchase price which is based on future revenues has been agreed. As of the balance sheet date, the fair value of contingent purchase price payment is measured at EUR 0k.

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 Holding obtains control over them. They are deconsolidated on the date on which CeramTec Holding 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 tax liabilities are recognized for temporary differences arising from consolidation entries.

If less than 100 % of equity in a subsidiary is allocable to CeramTec Holding, 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 Holding 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 recognised amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another IFRS.

If a company which is part of the CeramTec Holding 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 the goodwill.

All contingent consideration that must be transferred by the acquirer is recognized at fair value as of the date of acquisition. A contingent consideration classified as an asset or liability, which is recognized as a financial instrument under IAS 39 *Financial Instruments: Recognition and Measurement*, is measured at fair value. Changes in the fair value are recognized either through profit or loss or under other comprehensive income depending on the classification. Should the contingent consideration not fall under IAS 39, 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 impairment losses. Goodwill is tested for impairment at least once a year (in the fourth quarter) and more frequently if 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 Holding, 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.

Where goodwill forms part of 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 disposed of under these circumstances is measured based on the relative values of the operation disposed of 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 Holding 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 the prior year as well as exchange differences between the statement of comprehensive income and the statement of financial position are recognized in other comprehensive income and retained in equity under accumulated other comprehensive income. These amounts recognized under other comprehensive income are reclassified to the statement of comprehensive income 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 is as follows:

		31 December 2015		31 December 2014	
		Closing rate	**Average rate**	**Closing rate**	**Average rate**
USD	USA	1.0887	1.1097	1.2098	1.3290
CNY	China	7.0608	6.9734	7.5074	8.1889
GBP	Great Britain	0.7340	0.7260	0.7767	0.8064
PLN	Poland	4.2639	4.1829	4.2870	4.1855
CZK	Czech Republic	27.0230	27.2856	27.6594	27.5359

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 to the extent that it is probable that the economic benefits from the transaction will flow to the CeramTec Holding Group and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable less any trade discounts and volume rebates granted. Revenue and other income are recognized as follows:

Revenue from the sale of goods

Revenue from the sale of goods is recognized upon delivery of goods and transfer of ownership if the following criteria is satisfied:

- The Group has transferred to the buyer the significant risks and rewards of ownership of the goods and merchandise sold
- The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods and merchandise sold
- The amount of revenue can be measured reliably
- It is probable that the economic benefits associated with the transaction will flow to the Group and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

Services

Revenue from services is recognized using the percentage of completion method if

- The amount of revenue can be determined reliably
- It is probable that the economic benefits associated with the transaction will flow to the entity
- The stage of completion of the transaction at the end of the reporting period can be determined reliably and
- The costs incurred for the transaction and the costs to complete the transaction can be determined reliably.

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 expensed as 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 stated 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 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 impairment losses.

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 fiscal year. Changes are treated as changes in accounting estimates. Amortization is recognized in the cost of sales, general administrative and selling costs. The useful life for technology amounts to 10 to 18 years and for customer relationships 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 loss is recognized.. Trademarks are assigned an indefinite useful life based on expectations of future use, except for the trademark purchased within the aquisiton of DAI Ceramics, Inc. with an useful life of 10 years.

Impairment is assessed by comparing the carrying amount of the intangible assets with its recoverable amount at the level of the cash-generating unit. 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 fair value less the cost to sell or the value in use of a cash-generating unit. An impairment loss is charged if the carrying amount exceeds the recoverable amount. In the event that the impairment loss is 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 impairment losses.

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 150.00 are expensed immediately. Low-value assets with a cost between EUR 150 and EUR 1,000 are recognized in a compound 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 fair value less the costs to sell or the value in use of a cash-generating unit. An impairment loss is charged if the carrying amount exceeds the recoverable amount. In the event that the impairment loss is reversed, the amortized cost is written up.

Leases

The determination of whether an arrangement contains a lease is based on the substance of the arrangement at inception date and requires an assessment of whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets and whether the arrangement conveys a right to use the asset. A reassessment after the inception of the lease is only performed under the conditions set forth in IFRIC 4.

A lease is classified as a finance lease if substantially all risks and rewards incidental to ownership are transferred to the lessee. Each leased asset is recognized under property, plant and equipment at its fair value or, if lower, at the present value of the minimum lease payments. The corresponding liability is disclosed as a finance lease obligation under financial liabilities to third parties. The leased asset is depreciated in subsequent periods over the contractual term or, if shorter, the useful life. Payment to the lessor is divided into interest and repayment components, with the interest components recognized as a constant rate of interest of the remaining lease liability through profit or loss over the term of the lease.

All other leases are classified as operating leases. Rental payments under such lease arrangements are recognized as an expense on a straight-line basis.

Government grants

Government grants are recognized if there is reasonable assurance that they will be received and the Company will comply with the required conditions. Government grants are recognized in profit or loss in the period in which the corresponding expenses are recognized. Government grants for acquisition projects directly reduce the cost of the corresponding items of property, plant and equipment upon initial recognition. Government grants related to income are offset against the corresponding expenses.

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments comprise primary and derivative financial instruments.

Primary financial instruments are generally measured at fair value upon initial recognition. This includes current and non-current investments as well as granted loans and receivables and financial liabilities.

Derivatives are initially recognised 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 recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which resulting gain or loss is recognized in other comprehensive income and reclassified to profit or loss based on the nature of the hedge relationship.

Financial assets

Financial assets are allocated to the following categories:

- Financial assets at fair value through profit or loss
- Loans and receivables
- Held-to-maturity investments
- Available-for-sale financial assets

Classification depends on the nature and purpose of the financial asset and is designated upon acquisition. Items are reclassified on the reporting date where permitted and necessary.

Financial assets are initially recognized at fair value. Transaction costs directly attributable to the acquisition of financial assets that are not measured at fair value through profit or loss increase the carrying amount of the financial asset initially recognized. Transaction costs directly allocated to financial assets that are recognized at fair value through profit or loss are recognized directly in the statement of comprehensive income.

Purchases or sales of financial instruments that require delivery of assets within a time frame established by regulations or conventions in the marketplace (securities spot transactions) are recognized on the trade date, i.e. the date that the group companies commit to purchase or sell the asset.

The subsequent measurement of the financial assets depends on their designation according to the below mentioned categories.

Financial assets at fair value through profit or loss encompass financial assets held for trading and financial assets designated upon initial recognition as measured at fair value through profit or loss. Financial assets are classified as held for trading if they were acquired for the purpose of selling or repurchasing in the near term. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39. As of the reporting date, the CeramTec Holding Group has not made use of the option to designate primary financial instruments upon initial recognition as financial assets at fair value through profit or loss. Changes in the fair value of financial assets measured at fair value through profit or loss are presented as finance income or finance costs in the statement of comprehensive income. Within the CeramTec Holding Group, the termination rights agreed in the bond represent embedded derivatives to be separated which are allocated to the “held-for-trading” category.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. In the case of the CeramTec Holding Group, this relates to cash and cash equivalents, trade receivables and other financial receivables. After initial recognition, financial assets categorised under loans and receivables are accounted for at amortised cost using the effective interest rate method, less any impairment losses. When calculating amortised cost using the effective interest method, premiums or discounts are taken into account as well as fees or costs associated with acquiring the financial assets. The effective interest rate is recognised in the financial result. If there is any objective evidence of impairment of loans and receivables (e.g., with regard to considerable financial difficulties or significant changes in the environment of the debtor), impairment losses are charged and recognised under other income/expense (-), net through profit or loss. For trade receivables, impairment losses are charged using an allowance account. Trade receivables are written-off if collection is not expected. The impairment loss/write-off is reversed if the reasons for charging the impairment no longer apply.

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturity which the CeramTec Holding Group intends to hold to maturity and has the ability to do so. After initial recognition, financial assets under this category are accounted for at amortized cost using the effective interest rate method, less any impairment losses. The CeramTec Holding Group does not have any held-to-maturity investments.

Available-for-sale financial assets relate to acquired equity and debt instruments. Equity instruments classified as available for sale are those that are not held for trading or measured at fair value through profit or loss. Debt instruments allocated to this category which are held for an indefinite period of time may be sold in response to changes in market conditions or when liquidity is required. After initial recognition, available-for-sale financial assets are subsequently measured at fair value. Changes in fair value are recognized as unrealized gains and losses under other comprehensive income until the available-for-sale financial assets are derecognized or an impairment loss is charged. At this point in time the gains or losses are reclassified from other comprehensive income to the statement of comprehensive income. The CeramTec Holding Group does not hold any available-for-sale financial assets.

A financial asset is derecognized if the contractual rights to receive cash flows from the financial asset expire if the Group has transferred to a third party its contractual rights to receive the cash flows from the financial asset, or has assumed a contractual obligation to pass those cash flows on without delay to a third party, when the risks and rewards of ownership of the asset, or control of the asset, have been transferred.

Financial liabilities

Financial liabilities are categorized upon initial recognition either as financial liabilities at fair value through profit or loss or as other financial liabilities. Financial liabilities are initially recognized at fair value. Transaction costs directly attributable to the issue of financial liabilities that are not measured at fair value through profit or loss decrease the amount of the financial liability initially recognized. Transaction costs directly attributable to financial liabilities that are recognized at fair value through profit or loss are recognized directly in the statement of comprehensive income. The financial liabilities of the CeramTec Holding Group relate to trade payables, bonds and loans as well as liabilities to banks, finance lease liabilities, derivative financial instruments and other financial liabilities.

The subsequent measurement of financial liabilities depends according to the below mentioned categories:

Financial liabilities at fair value through profit or loss include financial liabilities held for trading as well as financial liabilities categorized upon initial recognition as financial liabilities at fair value through profit or loss. Financial liabilities are classified as held for trading if they are held for the purpose of selling in the near future. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39. Changes in the fair value of financial liabilities recognized through profit or loss are presented as finance income or finance costs in the statement of comprehensive income. Within the CeramTec Holding Group, the interest rate floors contained in the syndicated loan agreement represent separated embedded derivatives which are allocated to the held-for-trading category.

Other financial liabilities are other liabilities that are not measured at fair value through profit or loss. They are measured at amortized cost using the effective interest method. The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that from an integral part of the effective interest rate, transaction costs and other premiums or discounts through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition. The effective interest rate is recognized in the financial result. Other financial liabilities of the CeramTec Holding Group include trade payables, bonds, liabilities to banks, finance lease liabilities and other financial liabilities.

A financial liability is derecognized when the obligations named in the agreement are settled, canceled or expired.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position if there is a currently enforceable legal 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.

Hedges

Hedge accounting denotes a special form of accounting that modifies the accounting treatment of the hedged item and hedging instrument in a hedging relationship such that the results of measuring the hedged item or hedging instrument are recognized immediately in equity or in profit or loss. Accordingly, hedge accounting recognizes the offsetting effects of changes in the values of the hedging instrument and the hedged item. IAS 39 provides for three types of hedging relationship where the strict requirements for hedge accounting in individual cases are met:

- Fair value hedge, when the risk of changes in the fair value of a recognized receivable or liability or an unrecognized contractual obligation is hedged
- Cash flow hedge, when the risk of changes in cash flows is hedged, associated with a recognized receivable or liability or a highly probable forecast transaction, or with a currency risk of an unrecognized contractual obligation
- Hedge of a net investment in a foreign operation.

The CeramTec Holding Group uses currency swaps in order to hedge most of the foreign currency risks resulting from the USD loans. These hedges are recognized as cash flow hedges, with the effective part of the change in fair value of derivatives designated as hedging instruments recorded under other comprehensive income, while the ineffective part of the change in value is immediately recognized in profit or loss. Changes in value recognized in other comprehensive income are reclassified to the profit or loss in the period in which the hedged item affects the profit or loss for the period.

Measurement at fair value

On the reporting date, the CeramTec Holding Group measures derivative financial instruments at fair value. The fair value is also stated in the notes to the consolidated 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 Holding 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 took 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 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 Holding 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 reversal is limited to the amount of the original write-down.

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 2005G standard 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 statement of comprehensive income 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. They are disclosed in the notes to the consolidated financial statements, unless an outflow of resources embodying economic benefits is very unlikely. Contingent assets are also not shown in the statement of financial position. They are described in the notes to the consolidated financial statements provided an inflow of economic benefits is regarded as 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 and tax laws 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 the initial recognition (other than in a business combination) of assets and liabilities in a transaction that effects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognized if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets are generally recognized for all deductible temporary differences 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 tax losses or interest carryforwards in subsequent years if it is probable that there will be future taxable profit against which the deferred tax assets can be utilized.

Deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply 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 tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity, respectively.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income 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 Holding (as the parent), CeramTec Group GmbH, CeramTec FinCo GmbH, CeramTec Service GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH. There is 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.

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 results of operations and financial position of the CeramTec Holding Group. The underlying assumptions are revised regularly. However, the actual results may vary from those anticipated.

In the process of applying the accounting policies of the CeramTec Holding 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 and expected useful life of the acquired intangible assets and property, plant and equipment as well as the fair value of liabilities assumed.

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 income of the CeramTec Holding Group.

Goodwill of EUR 557,567k (31 December 2014: EUR 550,820k) and other intangible assets of EUR 603,922k (31 December 2014: EUR 639,828k) 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 fiscal year and comparative period can be found in notes 4.1 Intangible Assets and 4.2 Property, Plant and Equipment.

Valuation allowances on receivables

The recoverability of trade receivables was assessed based on the estimated likelihood of default. Accordingly, receivables are reduced by appropriate 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). As of the reporting date, an impairment loss of EUR 644k (31 December 2014: EUR 459k) was identified as necessary.

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 86,071k (31 December 2014: EUR 91,451k) were recorded as of the end of the reporting period.

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.

Provisions of EUR 19,098k (31 December 2014: EUR 17,780k) were recorded as of the end of the reporting period.

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 Holding 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 1,085k (31 December 2014: EUR 2,874k) were recognized.

2.4 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

The following amended IFRSs and IFRICs were adopted for the first time in the fiscal year:

Standards and interpretations	Date of first-time adoption
Annual Improvements Project (2011 – 2013)—December 2013	1 January 2015

The amendment did not have a material impact to the consolidated financial statements of CeramTec Holding.

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 fiscal year and/or they had not yet been endorsed by the European Commission for adoption in the European Union. In the fiscal year, these new or amended standards and interpretations were not adopted earlier.

Standards and interpretations	Date of first-time adoption
Amendments to IAS 19: "Employee Benefits"	1 February 2015
Annual Improvements Project (2010 – 2012)—December 2013	1 February 2015
IFRS 14: "Accounting for Regulatory Deferral Accounts"	1 January 2016
Amendments to IFRS 11: "Accounting for Acquisitions of Interests in Joint Operations"	1 January 2016
Amendments to IAS 16 and IAS 38: "Acceptable Methods of Depreciation and Amortisation"	1 January 2016
Amendments to IAS 16 and IAS 41: "Agriculture: Bearer Plants"	1 January 2016
Amendments to IAS 27: "Equity Method in Separate Financial Statements"	1 January 2016
Amendments to IFRS 10 and IAS 28: "Sales or Contributions of Assets Between an Investor and its Associate/Joint Venture"	deferred indefinitely
Annual Improvements Project (2012 – 2014)—September 2013	1 January 2016
Amendments to IAS 1: "Presentation of Financial Statements"	1 January 2016
Amendments to IFRS 10, IFRS 12 and IAS 28: "Investment Entities: Applying the Consolidation Exception"	1 January 2016
IFRS 15: "Revenue from Contracts with Customers"	1 January 2018
IFRS 9: "Financial Instruments"	1 January 2018

No material impact is expected on the consolidated financial statements of CeramTec Holding as a result of implementation. An assessment of the impact of IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from Contracts with Customers" has not been concluded.

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:

	2015	2014
	EUR k	EUR k
Regions		
Europe	209,314	202,376
Germany	130,235	134,474
North America	83,549	68,838
Asia	62,739	55,763
Rest of world	15,494	13,381
Total	**501,331**	**474,832**
Businesses		
Industrial	318,612	297,212
Medical products	182,719	177,620
Total	**501,331**	**474,832**

3.2 Cost of sales

The cost of sales breaks down as follows:

	2015	2014
	EUR k	EUR k
Material and packaging costs	94,800	88,735
Amortization and depreciation	50,414	55,519
Personnel expenses	108,477	101,337
Other costs of sales	46,265	47,917
Total	**299,956**	**293,508**

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:

	2015	2014
	EUR k	EUR k
Foreign currency results	1,990	1,842
Income from reversal of provisions	400	1,825
Restructuring costs	-735	-1,669
Write-downs and impairment	-778	-425
Additions to allowance for bad debts	-186	-164
Income from recovery of receivables which had been written off	12	0
Losses on disposal of property, plant and equipment	-99	-28
Sundry other income	649	880
Sundry other expenses	-805	-257
Total	**448**	**2,004**

Restructuring costs primarily contain personnel expenses. Sundry other expenses include costs associated with purchasing the shares in DAI Ceramics, Inc.

3.7 Financial result

The financial result breaks down as follows:

	2015 EUR k	2014 EUR k
Interest income and other finance income		
Gains on derivative valuations	5,308	0
Other interest income	100	196
Total	**5,408**	**196**
Interest expenses and other finance costs		
Interest expense from syndicated loan	28,760	30,244
Interest expense from bond	25,303	25,303
Interest expense from effective interest method	7,152	11,389
Interest expense from shareholder loan	11,024	10,211
Losses on derivative valuations	0	5,752
Exchange rate losses	6,933	8,983
Other interest expenses	2,732	3,026
Less: Borrowing costs capitalized as part of qualifying assets	-205	-828
Total	**81,699**	**94,080**
Total financial result	**-76,291**	**-93,884**

The exchange rate losses result from loans not designated in the functional currency of the group companies. More information on interest income and interest expenses from derivatives can be found in note 4.16.

See note 4.2 Property, Plant and Equipment for details of capitalized borrowing costs.

Other interest expenses of EUR 1,839k (previous year: EUR 2,209k) are due to unwinding the discount on provisions.

3.8 Income tax

There is a consolidated tax group for income tax purposes between CeramTec Holding and its German subsidiaries. This means that German corporate income tax and trade tax is only levied at the level of the parent company, CeramTec Holding. CeramTec Holding also has indirect shareholdings in foreign corporations. The current income taxes of the CeramTec Holding 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.

A loss for the period before income tax of EUR 6,615k (previous year: EUR 32,381k) is allocable to Germany and abroad as follows:

	2015 EUR k	2014 EUR k
Germany	-15,168	-36,128
Abroad	8,553	3,747
Total	**-6,615**	**-32,381**

Tax expense of EUR 7,694k (previous year: income tax of EUR 1,029k) breaks down as follows:

	2015 EUR k	2014 EUR k
Current income tax expense	-18,474	-9,834
Deferred tax income	10,780	10,863
Income tax expense (-) / benefit (+)	**-7,694**	**1,029**

Overall, the Company's weighted tax rate (based to the allocation of profit before tax mainly driven by the German entities) is 28.5 % (previous year: 28.5 %), which will be used for the 2015 and 2014 reconciliation in the following table. The effective tax rate (i.e. tax expense in relation to profit or loss before income tax) factors in both the current and the deferred tax expense and takes into account all factors, such as non-deductible operating expenses or a change in the assessment base.

	2015		2014	
	EUR k	%	EUR k	%
Loss before income tax	**-6,615**		**-32,381**	
Expected income tax	1,886	28.5	9,228	28.5
Permanent differences	-2,058	-31.1	-2,003	-6.2
Non-recognition of deferred tax assets on interest carryforwards	-6,277	-94.9	-6,959	-21.5
Tax expense for previous years	-373	-5.6	432	1.3
Unrecognized deferred tax assets	-798	-12.1	0	0.0
Other adjustments	-74	-1.1	331	1.1
Income tax expense (-) / Income tax benefit (+) and effective tax rate	**-7,694**	**-116.3**	**1,029**	**3.2**

The effects of permanent differences result mainly from add-backs of expenses of EUR 2,121k (EUR 2,048k) to operating profit which are subject to German trade tax, other non-deductible operating expenses of EUR 160k (previous year: EUR 184k), and tax-free income of EUR -223k (previous year: EUR -229k).

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 they are levied by the same tax authority. The deferred tax assets and liabilities stem from the following:

	31 December 2015		31 December 2014	
	Assets	Liabilities	Assets	Liabilities
	EUR k	EUR k	EUR k	EUR k
Tax loss carryforwards	445	0	505	0
Property, plant and equipment	185	24,244	439	34,483
Goodwill and other intangible assets	12,872	166,389	16,182	173,519
Inventories, receivables and other assets	1,114	18,823	2,677	1,455
Non-current provisions and liabilities	25,018	2,509	21,866	2,953
Current provisions and other liabilities	6,537	467	1,434	1,117
Total deferred taxes	**46,171**	**212,432**	**43,103**	**213,527**
Offsetting	-45,086	-45,086	-40,229	-40,229
Deferred tax assets / liabilities	**1,085**	**167,346**	**2,874**	**173,298**

Other comprehensive income contains deferred tax expenses on the remeasurement of pension provisions of EUR 2,762k (31 December 2014: deferred tax income of EUR 8,407k) and deferred tax expense on gains from cash flow hedges of EUR 758k (31 December 2014: EUR 1,386k). Within the DAI Ceramics, Inc, acquisition (refer to 1.4), deferred tax assets of EUR 3,251 have been purchased.

Unused tax losses

Unused tax losses break down as follows:

	31 December 2015	31 December 2014
	EUR k	EUR k
Interest carryforwards	72,989	48,324
on which no deferred tax assets are recognized	72,989	48,324
Foreign unused tax losses	5,181	4,885
on which no deferred tax assets are recognized	3,011	2,318
Total unused tax losses	5,181	4,885
on which no deferred tax assets are recognized	3,011	2,318

Deferred tax assets were recognized on unused tax losses of EUR 2,170k (31 December 2014: EUR 2,568k).

Foreign unused tax losses, for which deferred tax assets have been capitalized, mainly result from the earnings of group companies in the Czech Republic EUR 1,254k (31 December 2014: EUR 1,595k), in Spain EUR 315k (31 December 2014: EUR 309k), in Poland EUR 513k (31 December 2014: EUR 0k), and in the previous year the USA (31 December 2014: EUR 664k). The tax loss carryforwards in Spain do not expire; however the tax loss carryforwards in Czech Republic and Poland respective USA will expire after 5 years respective 20 years.

The interest carryforwards for German trade tax purposes will not expire. Temporary differences in connection with shares in subsidiaries in the amount of EUR 2,690k are not subject to deferred tax liabilities, because CeramTec 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 fiscal year 2015, cost of materials amounted to EUR 113,631k (previous year: EUR 113,176k).

Personnel expenses

Personnel expenses break down as follows:

	2015	2014
	EUR k	EUR k
Wages and salaries	133,046	128,775
Social security contributions incl. pension expenses	34,688	28,608
Total	**167,734**	**157,383**

Personnel expenses are contained in cost of sales, selling, research and development, as well as general administration costs.

Employees

On average, the Group employed 3,301 (previous year: 3,188) people in the fiscal year. Thes break down as follows:

	2015 Headcount	2014 Headcount
Salaried employees	1,185	1,141
Wage earners	2,116	2,047
Total	**3,301**	**3,188**

Amortization and depreciation

Amortization and depreciation break down as follows:

	2015	2014
	EUR k	EUR k
Amortization of intangible assets	44,746	44,376
Depreciation of property, plant and equipment	39,094	44,447
Impairment of intangible assets	511	0
Impairment of property, plant and equipment	268	425
Total	**84,619**	**89,249**

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	Order backlog	Other	Total
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Cost							
1 January 2014	**547,434**	**51,289**	**236,177**	**405,698**	**10,758**	**3,668**	**1,255,024**
Additions	0	0	0	0	0	1,399	1,399
Government grants	0	0	0	0	0	-10	-10
Disposals	0	0	0	0	0	-317	-317
Exchange differences	3,386	0	0	1,145	0	74	4,605
31 December 2014	**550,820**	**51,289**	**236,177**	**406,843**	**10,758**	**4,814**	**1,260,701**
Additions from business combinations	3,653	930	0	5,469	0	784	10,836
Additions	0	0	0	0	0	1,093	1,093
Government grants	0	0	0	0	0	-18	-18
Disposals	0	0	0	0	-10,758	0	-10,758
Reclassifications	0	0	0	0	0	94	94
Exchange differences	3,094	7	0	1,204	0	78	4,383
31 December 2015	**557,567**	**52,226**	**236,177**	**413,516**	**0**	**6,845**	**1,266,331**
Amortization/ impairment							
1 January 2014	**0**	**0**	**4,657**	**9,529**	**10,758**	**832**	**25,776**
Additions to amortization	0	0	13,969	28,620	0	1,786	44,376
Disposals	0	0	0	0	0	-317	-317
Exchange differences	0	0	0	160	0	58	218
31 December 2014	**0**	**0**	**18,626**	**38,309**	**10,758**	**2,359**	**70,054**
Additions to amortization	0	54	13,968	29,199	0	1,525	44,746
Additions to impairment	0	0	511	0	0	0	511
Disposals	0	0	0	0	-10,758	0	-10,758
Exchange differences	0	1	0	218	0	71	290
31 December 2015	**0**	**55**	**33,105**	**67,726**	**0**	**3,956**	**104,842**
Net carrying amounts							
31 December 2015	557,567	52,171	203,072	345,790	0	2,889	1,161,489
31 December 2014	550,820	51,289	217,551	368,534	0	2,454	1,190,648

The increase in Goodwill is attributable to the acquisition of DAI Ceramics, Inc. in 2015 (see note 1.4 Changes to the Consolidated Group). The goodwill was allocated to the cash-generating units (CGUs) CeramTec (EUR 498,364k), Emil Müller (EUR 39,807k) and CeramTec-ETEC (EUR 19,396k).

The CGU CeramTec includes all business activities designed to develop, manufacture and sell technical high-performance ceramics products used for medical technology, in the electronics and automotive industries, and for mechanical engineering.

The CGU Emil Müller is predominantly engaged in developing, manufacturing and selling salt cores which are used in foundry technology to manufacture casting components in the automotive industry.

The CGU CeramTec-ETEC includes mainly business activities concerned with ceramic products which are used in ballistic applications, and protect against wear and corrosion.

The purchase price allocation involved, as of 1 September 2013, the trademarks CeramTec, BIOLOX and SPK being identified and recognized, and, as of 29 May 2015, the trademark DAI Ceramics. These recorded a carrying amount of EUR 52,171k as of 31 December 2015 (31 December 2014: EUR 51,289k). As the recognized trademarks CeramTec, BIOLOX and SPK do not represent a product-specific trademark and do not have a limited life, the useful life for the recognized trademarks was classified as indefinite. The trademark DAI has a remaining useful life of 9.4 years as of the balance sheet date. The trademarks were allocated to the cash-generating unit CeramTec GmbH.

Technology has a carrying amount of EUR 203,072k (31 December 2014: EUR 217,551k) and primarily contains the basic technology underlying high-performance ceramics with an average weighted remaining useful life of 15.1 years (31 December 2014: 16.1 years).

Customer relationships have a carrying amount of EUR 345,790k (31 December 2014: EUR 368,534k) and primarily contain customer relationships from medical applications with an average weighted remaining useful life of 14.0 years (31 December 2014: 14.8 years).

Amortization of other intangible assets is recognized under cost of, selling, research and development costs as well as general administration costs.

For the cash-generating units, the annual impairment test was performed as of 30 November 2015. The recoverable amount was calculated based on an asset's value in use. Value in use is calculated by discounting the future cash flows. The measurement is therefore allocable to level 3 pursuant to IFRS 13. The projected future cash inflows are based on the approved budget which is undertaken by the CeramTec Group and, as a rule, has a three-year planning horizon. For this purpose, assumptions are made mainly about future selling prices, quantities and costs. The planning period for the CeramTec-ETEC cash-generating unit is different, and covers the time until 2020.

The financial budgets are prepared on the basis of historical experience, and reflects the management's expectations for the next three or five years, respectively.

A long-term growth rate of 1 % was determined for the years beginning in 2019 or 2021. The weighted average cost of capital results from equity costs ranging between 7.65 % – 7.69 %, borrowing costs (before taxes) of 2.52 %, and a tax rate between 26.5 % and 32.8 %. Equity costs were calculated using a base interest rate of 1.50 % and a market risk premium of 6.50 %.

The weighted average cost of capital for the CGUs CeramTec, Emil Müller, and CeramTec-ETEC amounts to 7.19 %, 7.20 % and 7.15 %, respectively.

As value in use of the cash-generating units' assets exceeded each carrying amount, there was no need to recognize impairment losses as of 31 December 2015.

We believe that changes, which are thought possible, in significant basic assumptions (weighted average cost of capital, EBITDA margin, long-term growth rate) underlying the determination of value in use would not result in an excess of the carrying amount of the cash-generating units in question over their value in use.

4.2 Property, plant and equipment

Property, plant and equipment breaks down as follows:

	Land and buildings	Plant and machinery	Other equipment	Assets under construction	Total
	EUR k	EUR k	EUR k	EUR k	EUR k
Cost					
1 January 2014	**102,224**	**174,587**	**7,499**	**38,017**	**322,327**
Additions	10,309	17,405	2,918	17,325	47,958
Government grants	-1,027	-1,272	-24	-704	-3,026
Disposals	-903	-908	-452	0	-2,263
Reclassifications	8,361	23,068	648	-32,077	0
Exchange differences	1,042	3,069	203	608	4,920
31 December 2014	**120,006**	**215,949**	**10,792**	**23,169**	**369,915**
Additions from business combinations	0	2,223	28	0	2,251
Additions	3,912	14,209	2,022	6,575	26,718
Government grants	-239	-1,043	-22	-3	-1,307
Disposals	-200	-5,354	-694	0	-6,248
Reclassifications	4,605	17,451	660	-22,810	-94
Exchange differences	811	2,673	-61	595	4,018
31 December 2015	**128,894**	**246,107**	**12,726**	**7,526**	**395,253**
Depreciation/impairment					
1 January 2014	**2,011**	**12,341**	**1,081**	**0**	**15,433**
Additions to depreciation	6,273	35,221	2,953	0	44,447
Additions to impairment	0	371	55	0	425
Disposals	-15	-582	-379	0	-976
Reclassifications	0	53	-53	0	0
Exchange differences	87	766	49	0	902
31 December 2014	**8,356**	**48,170**	**3,706**	**0**	**60,232**
Additions to depreciation	7,340	28,651	3,103	0	39,094
Additions to impairment	20	248	0	0	268
Disposals	-98	-4,722	-623	0	-5,443
Exchange differences	97	851	-44	0	903
31 December 2015	**15,715**	**73,198**	**6,142**	**0**	**95,054**
Net carrying amounts					
31 December 2015	113,179	172,912	6,582	7,526	300,199
31 December 2014	111,650	167,779	7,086	23,169	309,684

Depreciation of property, plant and equipment is recognized under cost of sales, selling, research and development and general administration costs, and impairment losses are reported as other expense.

Borrowing costs capitalized in property, plant and equipment amounted to EUR 205k in the fiscal year (previous year: EUR 828k). Capitalized interest is based on an interest rate of 3.95 % through September 2015, and of 5.80 % from October 2015.

There were contractual commitments to acquire property, plant and equipment of EUR 1,615k as of the reporting date (31 December 2014: EUR 12,434k).

Property, plant and equipment under finance leases contains rented buildings with a net carrying amount of EUR 1,512k (31 December 2014: EUR 1,469k) and furniture and fixtures with a net carrying amount of EUR 645k (31 December 2014: EUR 285k). The corresponding lease liabilities are explained under finance liabilities to third parties (note 4.13).

4.3 Other financial assets

The following table breaks down other financial assets:

	31 December 2015	31 December 2014
	EUR k	EUR k
Other non-current financial assets		
Derivative financial instruments	47,348	22,336
Separated termination rights	8,946	7,465
Insurance claims	150	162
Total	**56,444**	**29,963**
Other current financial assets		
Derivative financial instruments	8,474	2,265
Receivables from energy tax refunds	0	909
Other financial assets	41	91
Total	**8,515**	**3,265**

The CeramTec Holding 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 4.16.

4.4 Other assets

The following table breaks down other assets:

	31 December 2015	31 December 2014
	EUR k	EUR k
Other non-current assets		
Deferred finance costs for the revolving credit line	784	1,255
Sundry assets	404	420
Total	**1,188**	**1,675**
Other current assets		
VAT receivables	1,494	1,122
Receivables from energy tax refunds	825	0
Deferred finance costs for the revolving credit line	471	471
Investment grants	212	0
Sundry assets	2,205	3,626
Total	**5,207**	**5,219**

Sundry current assets primarily contain prepayments, e.g. for insurances and for trade fairs

4.5 Inventories

Inventories break down as follows:

	31 December 2015	31 December 2014
	EUR k	EUR k
Raw materials	24,054	19,733
Work in progress	24,994	25,196
Finished goods	22,885	20,052
Merchandise	1,923	1,719
Other	1,281	1,218
Total	**75,137**	**67,918**

Other inventories include packaging materials and spare parts for machinery.

At the reporting date the allowance for write-downs on inventories amount to EUR 8,991k (31 December 2014: EUR 10,034k). The gain resulting from a reduction of EUR 1,043k in the write-downs is reported under cost of sales.

4.6 Trade receivables

At the end of the reporting period, trade receivables amounted to EUR 53,178k (31 December 2014: EUR 47,517k) a after taking into account valuation allowance of EUR 644k (31 December 2014: EUR 459k).

The value and maturity structure of trade receivables before impairment breaks down as follows:

	31 December 2015	31 December 2014
	EUR k	EUR k
Carrying amount before impairment	**53,822**	**47,976**
thereof not yet due on the reporting date	44,380	41,771
thereof past due on the reporting date	9,442	6,205
past due up to 30 days	7,235	4,704
past due up to 60 days	1,285	737
past due up to 90 days	163	224
past due more than 90 days	759	540

The age structure of the impairment losses recognized through profit or loss as of the reporting date breaks down as follows:

	31 December 2015	31 December 2014
	EUR k	EUR k
past due up to 30 days	15	0
past due up to 60 days	109	0
past due up to 90 days	37	205
past due more than 90 days	95	15
	388	239
Total	**644**	**459**

The impairment losses are based on the estimated likelihood of default. They primarily relate to specific bad debt allowances on receivables from customers on whose assets insolvency proceedings were initiated or who are experiencing significant financial difficulty.

The age structure of receivables past due which are not impaired breaks down as follows:

	31 December 2015	31 December 2014
	EUR k	EUR k
past due up to 30 days	7,073	4,704
past due up to 60 days	1,230	532
past due up to 90 days	23	209
past due more than 90 days	185	13
Total	**8,511**	**5,458**

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.

The following table shows the development of allowances on trade receivables during the past reporting period.

	31 December 2015	31 December 2014
	EUR k	EUR k
Allowance at the beginning of the fiscal year	**459**	**471**
Addition	214	165
Reversed	-34	-13
Utilization	-19	-119
Foreign currency translation and other	24	-45
Allowance on 31 December	**644**	**459**

4.7 Cash and cash equivalents

Cash and cash equivalents contain bank balances of EUR 86,450k (31 December 2014: EUR 62,221k) and cash in hand of EUR 26k (31 December 2014: EUR 25k).

4.8 Non-current assets held for sale

In 2014, the Company announced that manufacturing operations were ceased in Colyton, UK, where CeramTec UK Ltd. is located, were to be discontinued. Accordingly, in May 2015 the assets previously reported as property, plant and equipment were reclassified to assets held for sale. A portion of the assets were subsequently sold by the end of fiscal year 2015.

4.9 Equity

Issued capital

The fully paid in capital stock of the parent company CeramTec Holding amounts to EUR 25k (31 December 2014: EUR 25k).

Capital reserves

Effective as of 31 August 2013/ 1 September 2013, Faenza Luxembourg S.à.r.l, Luxembourg (parent company of CeramTec Holding GmbH), increased CeramTec Holding's capital reserves by EUR 378,148k. The capital reserves are freely available and not subject to any earmarking.

Accumulated losses

The line item "Accumulated losses" contains current losses incurred by the CeramTec Holding Group and those incurred in the comparative period. This also includes reserves for the remeasurement of pension obligations (after taxes) amounting to EUR -14,046k (31 December 2014: EUR -20,879k).

Other comprehensive income

Accumulated other comprehensive income relates to foreign currency translation adjustments and a reserve for changes in the fair value of hedging instruments, net of taxes.

4.10 Provisions for pension obligations

Within the CeramTec Holding Group, there are defined benefit and 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 generally based on the length of employee 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 which depend on the pay and period of service that are capped. These commitments do not contain any rights to inflation-related pension adjustments. These defined benefit plans were closed for employees that joined after 1 January 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 1 January 2002. For management of the German CeramTec Holding group companies, there are direct commitments in place comprising benefits that depend on pay and length of service and are capped 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 CeramTec Holding Group depending on the achievement of personal targets by employees.

Since the end of 2014, the Company has committed itself to directly providing benefits as compensation to employees who have been enrolled into Höchster Pensionskasse VVaG, which was subject to reorganization of Höchster Pensionskasse VVaG 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 institution managed by employer and employee representatives. The representatives are legally obligated to represent the interests of the entitled employees and are responsible for investment decisions and managing the asset. 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:

	31 December 2015	31 December 2014
	EUR k	EUR k
Germany	78,554	83,726
UK	7,320	7,406
Other	197	319
Total	**86,071**	**91,451**

The following table shows the amount of the obligation and plan assets as well as the provisions and other assets disclosed in the consolidated statement of financial position as of 31 December 2015.

	German plans	Foreign plans	Total
	EUR k	EUR k	EUR k
Change in benefit obligations			
Benefit obligations at the beginning of the fiscal year	**83,726**	**12,821**	**96,547**
Service cost	4,334	36	4,370
Interest expense	1,569	443	2,012
Remeasurements	-8,871	-872	-9,743
from the change in financial assumptions	*-8,522*	*-850*	*-9,372*
Experience adjustments	*-349*	*-22*	*-371*
Foreign currency translation	0	780	780
Benefits paid	-2,204	-443	-2,647
Benefit obligations at the end of the year	**78,554**	**12,765**	**91,319**
Change in plan assets			
Market value of plan assets at the beginning of the fiscal year	**0**	**5,096**	**5,096**
Interest income from plan assets	0	178	178
Expense for managing the plans	0	-306	-306
Employer contributions	0	456	456
Remeasurements	0	-52	-52
from the change in financial assumptions	*0*	*-52*	*-52*
Foreign currency translation	0	332	332
Benefits paid	0	-425	-425
Market value of the plan assets at the end of the year	**0**	**5,279**	**5,279**
Net obligation amount for benefits	**78,554**	**7,486**	**86,040**
thereof provisions for pension obligations	78,554	7,517	86,071
thereof other assets	0	31	31

The following table shows the amount of the obligation and plan assets as well as the provisions disclosed in the consolidated statement of financial position in the comparative period as of 31 December 2014.

	German plans	Foreign plans	Total
	EUR k	EUR k	EUR k
Change in benefit obligations			
Benefit obligations at the beginning of the fiscal year	**55,599**	**10,237**	**65,836**
Service cost	649	34	683
Interest expense	1,893	451	2,344
Remeasurements	28,667	1,502	30,169
from the change in financial assumptions	*23,413*	*1,495*	*24,908*
Experience adjustments	*5,254*	*7*	*5,261*
Foreign currency translation	0	864	864
Benefits paid	-3,082	-267	-3,349
Benefit obligations at the end of the year	**83,726**	**12,821**	**96,547**
Change in plan assets			
Market value of plan assets at the beginning of the fiscal year	**0**	**4,704**	**4,704**
Interest income from plan assets	0	208	208
Expense for managing the plans	0	-144	-144
Employer contributions	0	263	263
Remeasurements	0	-33	-33
from the change in financial assumptions	*0*	*-33*	*-33*
Foreign currency translation	0	358	358
Benefits paid	0	-260	-260
Market value of the plan assets at the end of the year	**0**	**5,096**	**5,096**
Net obligation amount/provisions for benefits	**83,726**	**7,725**	**91,451**

The calculation of the pension obligation was based on the following assumptions as of 31 December 2015:

	Germany	Abroad
Interest rate (in %)	2.40	3.70 – 3.80
Wage and salary trend (in %)	2.50	N/A
Pension increases (in %)	2.00	3.00 – 3.20
Life expectancy	2005G standard tables	Mortality tables

The calculation of the pension obligation was based on the following assumptions as of 31 December 2014:

	Germany	Abroad
Interest rate (in %)	1.90	3.30 – 3.50
Wage and salary trend (in %)	3.00	N/A
Pension increases (in %)	2.00	3.00 – 3.20
Life expectancy	2005G standard tables	Mortality tables

The average term of the benefit obligations amounts to 20.1 years in Germany and 17.0 years abroad.

The employer contributions and benefit payments expected to be paid during the next fiscal year amount to EUR 498k and EUR 2,669k, respectively.

The risk from changes in actuarial assumptions underlying the measurement of defined pension plans is borne by the CeramTec Holding Group. The sensitivity analyses presented in the table below were performed based on reasonably possible changes in assumptions as of the reporting date. The change in key actuarial assumptions would have the following impact (in EUR k) on the present value of pension obligations:

	Change	Effect 31 December 2015
Discount rate	- 0.50 % points	9,376
	+ 0.50 % points	-8,104
Wage and salary trend	- 0.50 % points	-171
	+ 0.50 % points	175
Increase in pensions	- 0.50 % points	-8,522
	+ 0.50 % points	9,387
Life expectancy	+ 1 year	3,727

The change in key actuarial assumptions would have had the following impact (in EUR k) on the present value of pension obligations in the previous year:

	Change	Effect 31 December 2014
Discount rate	- 0.50 % points	10,441
	+ 0.50 % points	-8,963
Wage and salary trend	- 0.50 % points	-165
	+ 0.50 % points	172
Increase in pensions	- 0.50 % points	-9,259
	+ 0.50 % points	10,896
Life expectancy	+ 1 year	3,577

There are no plan assets for German plans. The plan assets of the foreign plans break down into the following assets:

	31 December 2015	31 December 2014
	EUR k	EUR k
Securities/shares	3,687	3,606
Fixed-interest securities	1,108	1,069
Real estate	484	421
	5,279	**5,096**

The fair value of the securities and shares were determined based on prices quoted on active markets, while the fair value of real estate was not based on prices quoted on active markets. The real estate contained in plan assets does not relate to owner-occupied property in the UK. The investment horizon for plan assets takes into account the expected payout profile.

From 1 January 2002 to 31 December 2014, all new hires at CeramTec GmbH, CeramTec Service GmbH 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 Hoechst-Gruppe VVaG. These pension funds are multi-employer plans which are 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 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 Holding Group can under certain circumstances be used to finance another entity's employee benefits.

Dynamit Nobel VVaG is funded for commitments made before 1 December 2007 with income-based contributions by entitled employees as well as variable employer contributions. The employers' contribution must, together with the member contributions and return on plan assets, sufficiently fund the agreed 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 made as of 1 December 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 were 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 by 31 December 2014. Deficits, for example due to the pension fund earning an insufficient return on assets, may result in the CeramTec Holding 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 GmbH or Emil Müller GmbH of 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 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 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 Holding Group for active employees, non-contributory employees and pensioners ranges between around 0.1 % and 0.15 % in each case.

As of 1 December 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 Höchster Pensionskasse VVaG. Since 1 January 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 Höchster Pensionskasse VVaG. The employees and employer make a fixed, income-based contribution to Höchster 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 fund amounted to EUR 2,101k in the fiscal year (previous year: EUR 2,814k).

The expenses are recorded in cost of sales, selling costs, research and development as well as general administrative costs. Planned contributions of EUR 1,190k are expected to be made in 2016.

Expenses for additional defined contribution plans amount to EUR 10,710k (previous year: EUR 9,770k).

4.11 Other provisions and provision for taxes

Provisions developed as follows in the fiscal year:

	Balance as of 31 December 2014	Addition because of business expansion	Additions	Utilization	Reversal	Unwinding of the discount	Exchange difference	Balance as of 31 December 2015
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Provisions for employee bonuses	8,750	23	8,736	7,986	646	0	143	9,020
Provisions for warranties	2,117	0	897	152	337	0	3	2,528
Provisions for environmental risks	533	0	2	51	11	4	22	499
Provisions for long—service awards	1,163	0	0	60	24	0	0	1,079
Provisions for litigation risks	1,504	0	949	684	111	0	4	1,662
Provisions for taxes	66	0	2,384	66	0	0	-20	2,364
Other provisions	3,647	209	516	2,053	551	1	177	1,946
	17,780	232	13,484	11,052	1,680	5	329	19,098

Provisions for environmental risks relate to the elimination of residual pollution, renovation measures and water conservation practices. Estimations and, where possible, external expert opinions were used to measure the amount of the provision.

The provision for taxes includes anticipated income tax payments for past assessment periods.

Other 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:

	31 December 2015	31 December 2014
	EUR k	EUR k
Current provisions	15,445	14.033
Non-current provisions	3,653	3.747
	19.098	17,780

The cash outflow of other provisions is expected to be 81 % within one year and 19 % between more than one and 15 years.

4.12 Financial liabilities to affiliates

Financial liabilities to affiliates are non-current and comprise a loan payable to Faenza Luxembourg S.à.r.l, Luxembourg, of EUR 140,630k (31 December 2014: EUR 129,906k), and the interest expense accrued of EUR 3,944k (31 December 2014: EUR 3,643k). The loan increases every year on 29 August by the amount of incurred expenses for interest.

4.13 Financial liabilities to third parties

The financial liabilities to third parties are broken down as follows:

	31 December 2015	31 December 2014
	EUR k	EUR k
Non-current financial liabilities		
Liabilities to banks	647,027	636,948
Liabilities from the bond	297,961	296,814
Derivative financial instruments	10,122	13,896
Finance lease liabilities	1,528	1,433
Purchase price for technology	218	308
Total	**956,856**	**949,399**
Current financial liabilities		
Liabilities to banks	37,202	22,329
Liabilities from the bond	9,489	9,489
Derivative financial instruments	4,437	4,846
Discounts and bonuses	1,861	2,731
Finance lease liabilities	504	189
Other current financial liabilities	1,536	1,240
Total	**55,029**	**40,824**

Liabilities to banks nominally amount to EUR 291,300k from a tranche in EUR and EUR 403,676k from a tranche in USD. These loans have variable interest rates and mature on 30 August 2020. Transaction costs associated with the loan of EUR 19,733k are spread over the term of the loan using the effective interest method. The tranche in USD is secured by currency swaps of EUR 249,700k concluded against foreign currency risks. This hedging relationship is recognized as a cash flow hedge.

The bond has a fixed interest rate and a nominal volume of EUR 306,700k. This bond matures on 15 August 2021. The CeramTec Holding Group has a termination option for this bond, which is recognized as a separate financial asset (note 4.3). Associated transaction costs of EUR 13,120k 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 4.16.

Payment obligations from finance leases break down as follows over future years:

	Total	up to 1 year	1 to 5 years	more than 5 years
Present value of minimum lease payments	2,032	504	254	1,274
Interest effect	1,151	129	394	629
Minimum lease payments	3,183	633	648	1,903

Lease payments of EUR 504k, which are due in 2016, are recognized under current financial liabilities.

Reference is made to note 4.2 as regards the items of property, plant and equipment recognized under finance leases.

All leases include contractually agreed installments. There are no sub-lease arrangements. CeramTec Suzhou has a renewal option for real estate leases.

4.14 Other liabilities

Other liabilities break down as follows:

	31 December 2015	31 December 2014
	EUR k	EUR k
Other current liabilities		
Wages and salaries including taxes	6,433	6,004
Real estate transfer tax	4,136	4,120
Other current liabilities	3,289	3,455
Total	**13,858**	**13,579**

Other current liabilities are mainly attributable to liabilities to employees, liabilities from social security contributions, liabilities to pension funds as well as deferred income.

4.15 Rental and lease obligations

Operating lease commitments mainly relate to land and buildings as well as technical equipment and machinery.

The corresponding payment obligations break down as follows over future fiscal years:

	31 December 2015	31 December 2014
	EUR k	EUR k
up to 1 year	2,001	1,637
1 to 5 years	1,533	1,389
more than 5 years	0	518
Total	**3,534**	**3,544**

In the fiscal year, expenses from rental and lease agreements amounted to EUR 3,035k (previous year: EUR 3,293k).

4.16 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 IAS 39.

	31 December 2015		
	Measurement category of IAS 39[1]	Carrying amount	Fair value
		EUR k	EUR k
Financial assets			
Trade receivables	LaR	53,178	53,178
Other financial assets	LaR	191	191
Receivables from affiliates	LaR	1,022	1,022
Cash and cash equivalents	LaR	86,476	86,476
Separated termination rights—HfT	FVtPL	8,946	8,946
Currency swaps in effective hedges	Hedge	55,822	55,822
Total		**205,635**	**205,635**
Financial liabilities			
Bond liabilities	FLAC	307,449	327,556
Liabilities to banks	FLAC	684,229	695,440
Trade payables	FLAC	24,354	24,354
Finance lease liabilities	FLAC	2,032	2,032
Other financial liabilities	FLAC	3,615	3,613
Liabilities to affiliates	FLAC	144,574	150,056
Separated interest rate floors—HfT	FVtPL	13,419	13,419
Interest rate cap—HfT	FVtPL	1,141	1,141
Total		**1,180,813**	**1,217,611**

[1] HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortized cost; hedge: hedge accounting

	31 December 2014		
	Measurement category of IAS 39[1]	Carrying amount	Fair value
		EUR k	EUR k
Financial assets			
Trade receivables	LaR	47,517	47,517
Other financial assets	LaR	1,162	1,162
Cash and cash equivalents	LaR	62,246	62,246
Separated termination rights—HfT	FVtPL	7,465	7,465
Currency swaps in effective hedges	Hedge	24,601	24,601
Total		**142,991**	**142,991**
Financial liabilities			
Bond liabilities	FLAC	306,303	329,242
Liabilities to banks	FLAC	659,277	674,339
Trade payables	FLAC	22,424	22,424
Finance lease liabilities	FLAC	1,622	1,622
Other financial liabilities	FLAC	4,279	4,272
Liabilities to affiliates	FLAC	133,549	139,740
Separated interest rate floors—HfT	FVtPL	17,277	17,277
Interest rate cap—HfT	FVtPL	1,465	1,465
Total		**1,146,196**	**1,190,381**

[1] HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortized cost; hedge: hedge accounting

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:** Quoted (unadjusted) prices in markets for identical assets or liabilities that the entity can access at the measurement date

- **Level 2:** Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly

- **Level 3:** Non-observable 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:

	31 December 2015		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Separated termination rights—HfT	0	8,946	0
Currency swaps in effective hedges	0	55,822	0
Financial liabilities			
Separated interest rate floors—HfT	0	13,419	0
Interest rate caps—HfT	0	1,141	0

	31 December 2014		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Separated termination rights—HfT	0	7,465	0
Currency swaps in effective hedges	0	24,601	0
Financial liabilities			
Separated interest rate floors—HfT	0	17,277	0
Currency swaps in effective hedges	0	1,465	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 consolidated financial statements. The Group does not disclose the fair value of financial instruments when the carrying amount is a reasonable approximation of fair value, such as short-term trade receivables and payables.

	31 December 2015		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial liabilities			
Bond liabilities	327,556	0	0
Liabilities to banks	0	695,440	0
Finance lease liabilities	0	2,032	0
Liabilities to affiliates	0	150,056	0

	31 December 2014		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial liabilities			
Bond liabilities	329,242	0	0
Liabilities to banks	0	674,339	0
Finance lease liabilities	0	1,622	0
Liabilities to affiliates	0	139,740	0

The fair value of the publicly listed bond corresponds to the nominal value multiplied by the market value at the reporting date. 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 in 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 (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.

Currency swaps are measured on the basis of a discounted cash flow method, which takes into account the observable mean closing rates, yield curves and currency spreads between currencies. All currency swaps had a positive market value as of the end of the reporting period. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement of the currency swaps 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 (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 can be directly or indirectly observed on 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 in the consolidated financial statements on a recurring basis, the CeramTec Holding 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 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 IAS 39.

	31 December 2015			
	Change in fair value	**Currency translation**	**Impairment loss**	**Total**
	EUR k	**EUR k**	**EUR k**	**EUR k**
Loans and receivables (LaR)	0	-427	-174	**-601**
Cash and cash equivalents	0	2,416	0	**2,416**
Separated termination rights/ interest rate floors—HfT (FVtPL)	5,273	0	0	**5,273**
Financial liabilities at amortized cost (FLAC)	0	-7,167	0	**-7,167**
Intercompany loans	0	234	0	**234**
Total	**5,273**	**-4,944**	**-174**	**155**

	31 December 2014			
	Change in fair value	**Currency translation**	**Impairment loss**	**Total**
	EUR k	**EUR k**	**EUR k**	**EUR k**
Loans and receivables (LaR)	0	662	-164	**498**
Cash and cash equivalents	0	1,180	0	**1,180**
Separated termination rights/ interest rate floors—HfT (FVtPL)	-5,800	0	0	**-5,800**
Financial liabilities at amortized cost (FLAC)	0	-8,096	0	**-8,096**
Intercompany loans	0	-887	0	**-887**
Total	**-5,800**	**-7,141**	**-164**	**-13,105**

Net gains (in the previous year, net losses) from the changes in 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.

	31 December 2015	**31 December 2014**
	EUR k	**EUR k**
Total interest expense	72,674	76,942
Total interest income	100	195

Furthermore, finance fees of EUR 131k, which are not part of the effective interest method, were recognized in profit or loss during the reporting period.

Derivative financial instruments and hedge accounting

The following table shows the fair value and nominal value of derivative financial instruments as of 31 December 2015 and 31 December 2014:

	31 December 2015	
	Nominal value	**Fair value**
	EUR k	**EUR k**
Derivatives with a positive fair value		
Separated termination rights—HfT	306,700	8,946
Currency swaps in effective hedges	249,700	55,822
Derivatives with a negative fair value		
Separated interest rate floor—HfT	695,440	-13,419
Interest rate cap—HfT	403,440	-1,141
Total	**1,655,280**	**50,208**

	31 December 2014	
	Nominal value	Fair value
	EUR k	EUR k
Derivatives with a positive fair value		
Separated termination rights—HfT	306,700	7,465
Currency swaps in effective hedges	263,900	24,601
Derivatives with a negative fair value		
Separated interest rate floor—HfT	674,339	-17,276
Interest rate cap—HfT	433,440	-1,465
Total	**1,678,379**	**13,325**

Embedded derivatives

As described in note 4.13, the CeramTec Holding Group took out a syndicated loan with several USD and EUR tranches with different banks in August 2013. The loans include embedded interest rate floors, which obliges the CeramTec Holding Group to pay a minimum interest rate that exceeds the variable interest rate. Furthermore, the bond issued in August 2013 contains various agreements that entitle the CeramTec Holding 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 IAS 39 and recognized as stand-alone derivatives at fair value through profit or loss.

Cash flow hedges

The currency swaps were designated as hedging instruments in cash flow hedges in order to hedge a portion of the foreign currency risk resulting from the loans in USD. The ongoing interest and principal repayments from the loans and the currency swaps are made at the same time each quarter and will have an impact on profit or loss until the swaps mature in 2018. There were no ineffective cash flow hedges recognized in the reporting period.

The following table shows the amount for the reporting period recognized in other comprehensive income and reclassified from there to profit or loss:

	2015	2014
	EUR k	EUR k
Currency swaps in effective hedges		
Net gains/losses recognized in other comprehensive income	31,221	38,718
Reclassification from other comprehensive income to profit or loss	-28,576	-33,852
Total other comprehensive income at the end of the period	**2,645**	**4,866**

The amounts reclassified from other comprehensive income to profit or loss were recognized in the financial result, so as to offset the effects from foreign currency translation of the secured portion of the loans in USD.

5 Notes to the consolidated statement of cash flows

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. 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. There bank balances are not subject to drawing restrictions.

In the reporting period, the cash flow from investing activities includes the purchase price payment of EUR 10,934k for the acquisition of the shares in DAI Ceramics, Inc., Willoughby/USA. Cash and cash equivalents of EUR 5k were acquired.

Other non-cash income and expenses primarily contain changes in the market value of financial instruments and accrued interest.

During the fiscal year, the Group paid cash of EUR 173k to purchase property, plant and equipment previously purchased on account.

The provision of subsidies of EUR 266k recorded by the Group, which resulted in a decrease in acquisition cost, does not yet affect cash.

6 Other notes

6.1 Management of financial risks

The CeramTec Holding Group is exposed to credit risks and various market risks. Credit risk is 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 Holding Group is exposed to liquidity risks, which mainly result from the loans in EUR and USD taken out in August 2013 as well as the bond also issued in August 2013.

The CeramTec Holding Group operates on the basis of an appropriate framework to manage financial risks, which is an integral part of ongoing business operations and financing activities. Taking these risk management objectives into consideration, risks are identified, assessed and managed on an ongoing basis. The CeramTec Holding Group may enter 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 risks comprise exchange rate risks, interest rate risks 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 Holding Group is exposed to foreign currency risks from changes in the USD/EUR exchange rate.

The CeramTec Holding Group has secured 81.38 % of the nominal volume of the loans in USD against risks from fluctuations in the USD/EUR exchange rate by entering into USD/EUR currency swaps (further information on hedging cash flow risks can be found in note 4.16).

The following sensitivity analysis in terms of the currency risk was prepared taking into account the hedges in place on 31 December 2015 and on the basis that the portion of financial instruments in foreign currency will remain constant. The table shows the effects on net income and equity for the period taking into account a hypothetical change of +/- 10 % to the closing rate and forward rate as of the reporting date for the CeramTec Holding Group's main foreign currency items.

			31 December 2015					
	Change in the spot rate %	**Change in the forward rate %**	**USD**	**GBP**	**CZK**	**PLN**	**CNY**	**Total**
Earnings effect before tax in EUR k	+10 %		4,094	-62	21	-440	-517	**3,096**
	-10%		-5,004	75	-26	538	578	**-3,838**
Effect on equity in EUR k		+10 %	-2,822	0	0	0	0	**-2,822**
		-10%	4,098	0	0	0	0	**4,098**

The effect on the net income for the period are attributable to the hypothetical change in the carrying amount of non-derivative assets and liabilities in the respective foreign currency. The effect on equity stems from the hypothetical change in the market value of the USD/EUR currency swaps, which are recognized in other comprehensive income as a result of the designation as a hedging instrument.

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 Holding 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 income or equity for the period, as the bond is carried at amortized cost and changes in fair value are not recognized.

In 2014, the CeramTec Holding Group entered into an agreement governing an interest rate cap of EUR 441,040k linked to 3-month EURIBOR. The interest rate cap limits the maximum variable interest rate to 2 %.

The following table shows the effects on the interest result assuming a hypothetical change of +/- 100 basis points to the variable USD and EUR interest rates.

	31 December 2015	
	Increase/decrease in basis points	Effect on interest expense
		EUR k
EUR	+100	0
	-100	0
USD	+100	406
	-100	0

A decline in the interest rate has no effect on the interest expense as a result of the interest rate floor of 1 % agreed in the syndicated loan agreement. A rise of 100 basis points in EURO has no effect as a result of the negative EUR interest rate and interest rate floor of 1 %.

Credit risk

Credit risk is the risk that a counterparty will not meet its obligations from financial instruments, leading to a financial loss for the creditor. At the CeramTec Holding Group, the credit risk is primarily due to trade receivables, cash and cash equivalents and other receivables.

Trade receivables are attributable to numerous customers in various sectors and regions. Default risks in 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 is approximately 55 % 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 Holding Group is exposed to losses from credit risks if counterparties do not meet their obligations. The resulting risk position is managed by diversifying its counterparties. For example, cash and cash equivalents are only invested at banks with excellent credit ratings. There are no cash and cash equivalents past due or impaired as of the reporting date. The maximum credit risk for cash and cash equivalents corresponds to the carrying amount.

The credit risk position from other financial assets corresponds to the carrying amount of these instruments. The CeramTec Holding Group considers this credit risk to be immaterial as of the reporting date.

The termination option separated from the bond 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 a more favorable opportunity to refinance for the CeramTec Holding Group; as such, there is no actual cash receivable from the banks.

Liquidity risk

Liquidity risk is the risk that the CeramTec Holding Group will not be able to fulfill its financial obligations when they fall due. The CeramTec Holding Group's objective 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 Holding Group had an undrawn and confirmed credit line of EUR 100,000k as of the reporting date. Furthermore, the CeramTec Holding Group had cash and cash equivalents of EUR 86,476k as of the reporting date.

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 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.

	31 December 2015						
	Carrying amount	2016	2017	2018	2019	2020	> 2020
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Trade payables	24,354	24,354	0	0	0	0	0
Liabilities to banks	684,229	31,404	30,913	31,023	31,646	687,451	0
Bond liabilities	307,449	25,303	25,303	25,303	25,303	25,303	332,003
Liabilities to affiliates	144,574	0	0	0	0	0	262,452
Finance lease liabilities	2,032	633	180	155	155	158	1,903
Other financial liabilities	3,615	3,320	109	276	0	0	0
Derivatives with a negative fair value							
Interest rate caps	1,141	448	448	336	0	0	0

	31 December 2014						
	Carrying amount	2015	2016	2017	2018	2019	> 2019
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Trade payables	22,424	22,424	0	0	0	0	0
Liabilities to banks	659,277	33,653	32,959	33,401	34,694	35,209	672,914
Bond liabilities	306,303	25,303	25,303	25,303	25,303	25,303	357,306
Liabilities to affiliates	133,549	0	0	0	0	0	262,133
Finance lease liabilities	1,622	197	187	170	146	146	1,947
Other financial liabilities	4,279	4,074	103	103	0	0	0
Derivatives with a negative fair value							
Interest rate caps	1,465	448	448	448	336	0	0

Offsetting financial assets against financial liabilities

The USD/EUR currency swaps were entered into on the basis of ISDA Master Agreements, which includes conditional claims to offset financial assets and financial liabilities. These offsetting rights are only legally effective if future events (e.g. insolvency, payment arrears) should occur. As the currency swaps only had positive market values as of the reporting date, derivative assets were not matched with any corresponding liabilities that would have enabled potential offsetting.

Collateral

In connection with the syndicated loan, the assets of the German and American companies were provided as collateral to the extent that the syndicated loan is drawn. CeramTec Service GmbH, CeramTec Acquisition Corporation and CeramTec GmbH are the borrowers of the syndicated loan. In the USA, shares in CeramTec Acquisition Corporation and in CeramTec North America Corporation, all additional assets of CeramTec Acquisition and CeramTec North America Corporation as well as CeramTec GmbH’s intellectual property registered in the USA were provided as collateral. In Germany, shares in CeramTec Service GmbH, CeramTec GmbH, CeramTec-ETEC GmbH, Cerasiv GmbH Innovatives Keramik-Engineering and Emil Müller GmbH, all intercompany receivables and bank accounts of CeramTec Group GmbH and CeramTec Service GmbH, all intercompany receivables, insurance receivables and trade receivables as well as bank accounts of CeramTec GmbH, CeramTec-ETEC GmbH, Emil Müller GmbH and Cerasiv GmbH Innovatives Keramik-Engineering were provided as collateral. Furthermore, the intellectual property and land of CeramTec GmbH, CeramTec-ETEC GmbH, Emil Müller GmbH and Cerasiv GmbH Innovatives Keramik-Engineering were provided as collateral for the syndicated loan, or encumbered.

Risk from compliance with financial covenants

Compliance with a financial covenant was also agreed to in connection with obtaining the syndicated loan. CeramTec Holding Group must comply with the convenant if the revolving credit line for EUR 100m is drawn by an amount set in the loan agreement.

Capital management

The CeramTec Holding Group’s objective of capital management is securing liquidity to make investments that increase the value of the organization. Therefore, the focus is on optimizing the operating cash flows as well as repaying liabilities on schedule. Recognized equity of EUR 284,430k (31 December 2014: EUR 285,222k) and liabilities of EUR 1,467,186k (31 December 2014: EUR 1,442,304k) were recognized as of the reporting date. The equity ratio stands at 16.24 % (31 December 2014: 16.51 %).

6.2 Contingent liabilities

There were no significant contingent liabilities as of 31 December 2015. 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 reliably measured. Where claims and obligations arising are not considered probable nor remote, such contingent liabilities are disclosed separately in the consolidated financial statements.

6.3 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 Holding Group. This comprises the management of CeramTec Holding and the supervisory board of CeramTec GmbH.

In the fiscal year, the **general managers** of CeramTec Holding were:

Dr. Ulf-D. Zimmermann
Chief Executive Officer / HR director

Dominique Janbon
Chief Financial Officer

Sigurd Adler (until 29 September 2015)
Chief Operating Officer

Dr. Hadi Saleh (from 1 July 2015)
Chief Operating Officer

The members of management received total remuneration (fixed and variable amounts) in the form of short-term employee benefits amounting to EUR 2,246k (previous year: EUR 2,191k) in the fiscal year. The payments for post-employment benefits amount to EUR 260k (previous year: EUR 286k). This amount comprises the service cost for pension obligations and contributions to defined contribution plans. In the fiscal year, former general managers were also granted with termination benefits of EUR 370k (31 December 2014: EUR 1,379k). Additionally, pension obligations amounted to EUR 2,907k (31 December 2014: EUR 3,099k) for general managers and EUR 2,635k (31 December 2014: EUR 2,599k) for former managers.

As part of a management participation program (MPP), the general managers were offered the option to indirectly acquire shares in parent company Faenza Holding S.à.r.l. via Faenza MEP GmbH & Co. KG. These indirect shares were acquired at fair value, which is calculated based on the purchase price for the acquisition of the high-performance ceramics division by the ultimate parent company. The shares primarily enable them to participate in earnings if certain events occur. The Company has no obligations from the management participation program. The MPP is therefore accounted for as equity-settled share-based payments in these consolidated financial statements in accordance with IFRS 2. As the shares were acquired at fair value, no benefits were granted to the general managers. This means that no personnel expenses are incurred if or before the defined events occur.

CeramTec GmbH has a **supervisory board** in accordance with the articles of incorporation.

The total remuneration of the supervisory board in the fiscal year 2015 amounted to EUR 76k (previous year: EUR 63k). In addition, in the fiscal year consultancy fees of EUR 114k (previous year: EUR 37k) were paid to members of the supervisory board.

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 144,574k (31 December 2014: EUR 133,549k), including interest, with a fixed interest rate of 8.255 % p.a. has been obtained from CeramTec Holding's controlling shareholder, Faenza Luxembourg S.à.r.l., Luxembourg. Interest expenses of EUR 11,024k (previous year: EUR 10,211k) were incurred in the fiscal year 2015. These were not paid to the shareholder; instead, the loan increased with effect from 29 August 2015. The loan is not secured.

In the fiscal year, Faenza Luxembourg S.à.r.l. charged the CeramTec Holding Group EUR 541k (previous year: EUR 601k) for consultancy services and out-of-pocket expenses. In addition, the CeramTec Holding Group charged Faenza Luxembourg S.à.r.l. for incurred transaction costs of EUR 1,022k (previous year: EUR 0k), resulting in receivables from affiliates as of 31 December 2015 of EUR 1,022k (31 December 2014: EUR 0k).

6.4 Auditor's fees

Overall, CeramTec Holding's auditor's fees for the fiscal year break down as follows:

	2015	2014
	EUR k	EUR k
Audit services	471	368
Audit-related services	725	137
Other professional services	69	0
Total	**1,265**	**505**

6.5 Subsequent events

There were no significant events after the end of the reporting period.

7 Reconciliation to CeramTec Group GmbH

If the consolidated statement of comprehensive income of CeramTec Group had been prepared instead of the consolidated statement of comprehensive income of CeramTec Holding, which is presented in these financial statements, this would have resulted in the following changes for the fiscal year:

- Lower general administrative expenses of EUR 296k (previous year: EUR 170k)
- Lower interest expenses of EUR 11,024k (previous year: EUR 10,211k)
- Higher interest income of EUR 3,019k (previous year: EUR 2,170k)
- Higher tax expenses of EUR 59k (previous year: EUR 36k)
- Higher income from profit/loss transfers of EUR 103,053k (previous year: higher expenses of EUR 2,211k)

The total comprehensive income of CeramTec Group would therefore have been EUR 117,333k (previous year: EUR 10,304k) higher compared to the total comprehensive income recognized in these financial statements.

If the consolidated statement of financial position of CeramTec Group had been prepared instead of the consolidated statement of financial position of CeramTec Holding, which is presented in these financial statements, this would have resulted in the following changes as of 31 December 2015:

- Higher receivables from affiliates of EUR 144,764k (31 December 2014: EUR 39,617k)
- Lower cash of EUR 25k (31 December 2014: EUR 0k)
- Lower trade payables of EUR 298k (31 December 2014: EUR 68k)
- Lower provisions of EUR 226k (31 December 2014: EUR 0k)
- Lower financial liabilities to affiliates of EUR 144,574k (31 December 2014: EUR 132,807k)
- Lower financial liabilities to third parties of EUR 81k (31 December 2014: EUR 34k)
- Higher tax payable of EUR 441k (31 December 2014: lower tax receivable EUR 382k)

This would have resulted in a EUR 289,477k (31 December 2014: EUR 172,144k) higher level of group equity for the CeramTec Group compared to the group equity recognized in these financial statements.

There would have been no impact on the consolidated statement of cash flows if the consolidated statement of cash flows of CeramTec Group had been prepared instead of the consolidated statement of cash flows presented in these financial statements.

Plochingen, 11 March 2016

CeramTec Holding GmbH

The management

Dr. Ulf-D. Zimmermann　　Dominique Janbon　　Dr. Hadi Saleh

The following independent auditors' report (Bestätigungsvermerk) has been issued in accordance with § 322 German Commercial Code (Handelsgesetzbuch) in German language on the German version of the consolidated financial statements of CeramTec Holding GmbH, Plochingen, for the year ended 31 December 2015 and the group management report. The group management report is not included in the version of the consolidated financial statements to be submitted to the administrative agent.

Independent Auditors' Report

We have audited the consolidated financial statements prepared by CeramTec Holding GmbH, Plochingen—comprising the balance sheet, the statement of comprehensive income, the cash flow statement, the statement of changes in equity and the notes to the consolidated financial statements—and the group management report for the for the year ended 31 December 2015. The preparation of the consolidated financial statements and the group management report in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315a (1) HGB ("German Commercial Code") is the responsibility of the parent company's management. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with § 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer. Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the results of our audit, the consolidated financial statements of CeramTec Holding GmbH, Plochingen, comply with the IFRS, as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315a (1) HGB and give a true and fair view of the net assets, financial position and results of operations of the group in accordance with these regulations. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the group's position and suitably presents the opportunities and risks of future development.

Stuttgart/Germany, 11 March 2016

Deloitte & Touche GmbH
Wirtschaftsprüfungsgesellschaft

Signed: Gillar Wirtschaftsprüferin (German Public Auditor)	Signed: Röscheisen Wirtschaftsprüfer (German Public Auditor)

CeramTec Holding GmbH

Audited Consolidated
Financial Statements of CeramTec Holding GmbH
as of and for the year ended December 31, 2016

CeramTec Holding GmbH

Audited Consolidated Financial Statements of CeramTec Holding GmbH as of and for the year ended December 31, 2016

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CeramTec Holding GmbH, Plochingen

Consolidated statement of comprehensive income from 1 January to 31 December 2016

	Notes	1 January to 31 December 2016	1 January to 31 December 2015
		EUR k	EUR k
Revenue	3.1	493,313	501,331
Cost of sales	3.2	294,929	299,956
Gross profit		**198,384**	**201,375**
Selling costs	3.3	91,478	86,801
Research and development costs	3.4	22,798	24,241
General administrative costs	3.5	22,189	21,105
Other income / expenses (-), net	3.6	-2,221	448
Operating income		**59,698**	**69,676**
Interest income and other finance income		18,734	5,408
Interest expenses and other finance costs		73,596	81,699
Financial result	3.7	**-54,862**	**-76,291**
Profit / loss (-) before income tax		**4,836**	**-6,615**
Income tax expenses	3.8	-10,010	-7,694
Net loss for the year		**-5,174**	**-14,309**
Items that will not be reclassified subsequently to profit or loss			
Income / expense (-) from remeasurement of defined benefit plans		-15,023	9,596
Deferred taxes		3,976	-2,762
		-11,047	**6,834**
Items that may be reclassified subsequently to profit			
Gain on cash flow hedges		237	2,645
Deferred taxes		-68	-758
		169	**1,887**
Exchange differences on translation foreign operations		1,049	4,796
Other comprehensive income / loss (-), net of income tax		**-9,829**	**13,517**
Total comprehensive income / loss (-)		**-15,003**	**-792**

CeramTec Holding GmbH, Plochingen

Consolidated statement of financial position as at 31 December 2016

Assets	Notes	31 December 2016	31 December 2015
		EUR k	EUR k
Goodwill	4.1	557,961	557,567
Other intangible assets	4.1	557,421	603,922
Property, plant and equipment	4.2	275,532	300,199
Other financial assets	4.3	72,484	56,444
Other assets	4.4	711	1,188
Deferred tax assets	3.8	851	1,085
Non-current assets		**1,464,960**	**1,520,405**
Inventories	4.5	76,904	75,137
Trade receivables	4.6	53,553	53,178
Financial receivables from affiliates		0	1,022
Income tax receivables		1,281	1,665
Other financial assets	4.3	12,390	8,515
Other assets	4.4	4,268	5,207
Cash and cash equivalents	4.7	124,585	86,476
Non-current assets held for sale	4.8	0	11
Current assets		**272,981**	**231,211**
Total assets		**1,737,941**	**1,751,616**

Equity and liabilities	Notes	31 December 2016	31 December 2015
		EUR k	EUR k
Issued capital	4.9	25	25
Capital reserves	4.9	378,148	378,148
Accumulated losses	4.9	-119,392	-103,171
Accumulated other comprehensive income	4.9	10,646	9,428
Equity		**269,427**	**284,430**
Provisions for pension obligations	4.10	102,410	86,071
Other provisions	4.11	10,636	3,653
Financial liabilities to affiliates	4.12	98,021	144,574
Financial liabilities to third parties	4.13	927,004	956,856
Deferred tax liabilities	3.8	156,258	167,346
Non-current liabilities		**1,294,329**	**1,358,500**
Other provisions	4.11	16,425	13,081
Provision for taxes	4.11	2,790	2,364
Financial liabilities to affiliates	4.12	56,402	0
Financial liabilities to third parties	4.13	62,529	55,029
Trade payables		22,376	24,354
Liabilities to affiliates		205	0
Other liabilities	4.14	13,458	13,858
Current liabilities		**174,185**	**108,686**
Total liabilities		**1,468,514**	**1,467,186**
Total equity and liabilities		**1,737,941**	**1,751,616**

CeramTec Holding GmbH, Plochingen

Consolidated statement of cash flows from 1 January to 31 December 2016

	2016	2015
	EUR k	EUR k
Net loss for the year	-5,174	-14,309
Income tax	10,010	7,694
Interest result	71,200	74,655
Amortisation, depreciation and impairment of non-current assets	85,956	84,619
Loss on disposal of property, plant and equipment and intangible assets	54	99
Increase in provisions (excluding deferred taxes)	9,416	1,170
Income tax payment (-)	-16,228	-11,330
Other non-cash income (-)	-15,089	-1,732
Increase (-) in inventories	-1,767	-6,303
Increase (-) in trade receivables	-375	-5,100
Decrease in other receivables and (financial) assets	1,660	614
Increase / decrease (-) in trade payables	-949	1,866
Increase / decrease (-) in other (financial) liabilities	-734	111
Cash flow from operating activities	**137,980**	**135,518**
Cash received from disposals of property, plant and equipment	305	324
Cash paid (-) for investments in property, plant and equipment	-15,002	-26,891
Cash received from grants	139	1,059
Cash paid (-) for investments in intangible assets	-656	-1,093
Cash paid (-) for the acquisition of entities	0	-10,934
Cash flow from investing activities	**-15,214**	**-37,535**
Repayment of syndicated loan	-30,068	-18,733
Interest paid (-)	-54,145	-55,263
Cash flow from financing activities	**-84,213**	**-73,996**
Increase in cash and cash equivalents	38,553	23,987
Net foreign exchange difference	-444	243
Cash and cash equivalents at the beginning of the period	86,476	62,246
Cash and cash equivalents at the end of the period	**124,585**	**86,476**

CeramTec Holding GmbH, Plochingen

Consolidated statement of changes in equity for the year ended 31 December 2016

				Accumulated other comprehensive income		
	Issued capital	Capital reserves	Accumulated losses	Cash flow hedge reserve	Difference from currency translation	Equity
Reference to disclosure in notes	(4.9)	(4.9)	(4.9)	(4.9)	(4.9)	(4.9)
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
1 January 2015	**25**	**378,148**	**-95,696**	**-258**	**3,003**	**285,222**
Net loss for the year	—	—	-14,309	0	—	-14,305
Other comprehensive income	—	—	6,834	1,887	4,796	13,517
Total comprehensive income / loss (-)	*—*	*—*	*-7,475*	*1,887*	*4,796*	*-792*
31 December 2015	**25**	**378,148**	**-103,171**	**1,629**	**7,799**	**284,430**
1 January 2016	**25**	**378,148**	**-103,171**	**1,629**	**7,799**	**284,430**
Net loss for the year	—	—	-5,174	—	—	-5,174
Other comprehensive income / loss (-)	—	—	-11,047	169	1,049	-9,829
Total comprehensive income / loss (-)	*—*	*—*	*-16,221*	*169*	*1,049*	*-15,003*
31 December 2016	**25**	**378,148**	**-119,392**	**1,798**	**8,848**	**269,427**

TRANSLATION—GERMAN VERSION PREVAILS

CeramTec Holding GmbH

Plochingen

Notes to the Consolidated Financial Statements for the year ended 31 December 2016

CeramTec Holding GmbH

Notes to the Consolidated Financial Statements

1 General

1.1 Corporate information and purpose of the Company

The purpose of CeramTec Holding GmbH (hereinafter "CeramTec Holding") 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 thatvare 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.

The subsidiaries of CeramTec Holding are leading global producers of high-performance ceramics and specialized in the development, production and sale of assemblies, components and products made from ceramic materials. The companies are primarily active in the following markets: automotive, electronic applications, energy and environmental applications, equipment and mechanical engineering and medical technology. Their activities focus on developing solutions for increasingly demanding application areas using many different and in part highly-specialized ceramic materials with unique mechanical, electrical, thermal and biochemical properties and property combinations.

CeramTec Holding's registered office is located at CeramTec-Platz 1-9 in 73207 Plochingen, Germany. CeramTec Holding is the parent company of the Group ("CeramTec Holding Group" or "Group") and the ultimate parent, which prepares exempting consolidated financial statements.

Where no prior-year figures are presented in the following, their value is EUR 0k.

The management of CeramTec Holding approved the consolidated financial statements on 15 March 2017 for submission to the shareholder meeting.

1.2 Basis of preparation

The consolidated financial statements are prepared pursuant to Sec. 315a (3) and (1) HGB ["Handelsgesetzbuch": German Commercial Code] 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 fiscal year and the supplementary requirements of German commercial law.

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 results of operations and financial position of the CeramTec Holding Group.

The 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 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 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 Holding has a direct or indirect shareholding are included in the consolidated financial statements for the fiscal year:

Name of the entity	Share of capital in % 31 December 2016	Share of capital in % 31 December 2015	CGU
CeramTec Group GmbH, Plochingen	100.00	100.00	1
CeramTec FinCo GmbH, Plochingen	100.00	100.00	1
CeramTec Service 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	3
CeramTec-ETEC GmbH, Lohmar	100.00	100.00	5
Emil Müller GmbH, Wilhermsdorf	100.00	100.00	4
CeramTec Italia s.r.l. in Liquidazione, Milan/Italy	100.00	100.00	3
CeramTec UK Ltd., Colyton/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	3
CeramTec Innovative Ceramic Engineering, (M) Sdn. Bhd., Seremban/Malaysia	100.00	100.00	3
CeramTec Korea Ltd., Suwon-Si/Republic of 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	4
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	4
CeramTec Acquisition Corporation, Laurens/USA	100.00	100.00	3
CeramTec North America Corporation, 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	4

1 Entities perform the functions of a holding company.
2 Entity has been allocated ratably to Medical and Industrial cash-generating units (CGU).
3 Entities have been allocated to the Industrial CGU.
4 Entities have been allocated to the Emil Müller CGU.
5 Entities have been allocated to the CeramTec-ETEC CGU.

CeramTec Holding has a direct shareholding in CeramTec Group GmbH and CeramTec FinCo GmbH, and an indirect shareholding in the other subsidiaries.

CeramTec Group GmbH, CeramTec FinCo GmbH, CeramTec Service 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 fiscal year 2016 pursuant to Sec. 264 (3) HGB.

1.4 Changes to the consolidated group

There were no changes in the scope of consolidation in the fiscal year.

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 Holding obtains control over them. They are deconsolidated on the date on which CeramTec Holding 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 tax liabilities are recognized for temporary differences arising from consolidation entries.

If less than 100 % of equity in a subsidiary is allocable to CeramTec Holding, 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 Holding 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 recognised amounts of the acquiree’s identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another IFRS.

If a company which is part of the CeramTec Holding 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 the goodwill.

All contingent consideration that must be transferred by the acquirer is recognized at fair value as of the date of acquisition. A contingent consideration classified as an asset or liability, which is recognized as a financial instrument under IAS 39 *Financial Instruments: Recognition and Measurement*, is measured at fair value. Changes in the fair value are recognized either through profit or loss or under other comprehensive income depending on the classification. Should the contingent consideration not fall under IAS 39, 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 impairment losses. Goodwill is tested for impairment at least once a year (in the fourth quarter) and more frequently if 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 Holding, 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.

Where goodwill forms part of 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 Holding 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 the prior year 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:

		31 December 2016		31 December 2015	
		Closing rate	Average rate	Closing rate	Average rate
USD	USA	1.0541	1.1066	1.0887	1.1097
CNY	China	7.3202	7.3496	7.0608	6.9734
GBP	Great Britain	0.8562	0.8189	0.7340	0.7260
PLN	Poland	4.4103	4.3636	4.2639	4.1829
CZK	Czech Republic	27.0210	27.0343	27.0230	27.2856

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 to the extent that it is probable that the economic benefits from the transaction will flow to the CeramTec Holding Group and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable less any trade discounts and volume rebates granted. Revenue and other income are recognized as follows:

Revenue from the sale of goods

Revenue from the sale of goods is recognized upon delivery of goods and transfer of ownership if the following criteria is satisfied:

- The Group has transferred to the buyer the significant risks and rewards of ownership of the goods and merchandise sold
- The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods and merchandise sold
- The amount of revenue can be measured reliably
- It is probable that the economic benefits associated with the transaction will flow to the consolidated group and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

Services

Revenue from services is recognized using the percentage of completion method if

- The amount of revenue can be determined reliably
- It is probable that the economic benefits associated with the transaction will flow to the consolidated group
- The stage of completion of the transaction at the end of the reporting period can be determined reliably and
- The costs incurred for the transaction and the costs to complete the transaction can be determined reliably.

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 expensed as 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 stated 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 impairment losses.

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 fiscal 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 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 loss is recognized. Trademarks are assigned an indefinite useful life based on expectations of future use, except for one trademark purchased in 2015 with an useful life of 10 years.

Impairment is assessed by comparing the carrying amount of the intangible assets with its recoverable amount at the level of the cash-generating unit. 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 fair value less the cost to sell or the value in use of a cash-generating unit. An impairment loss is charged if the carrying amount exceeds the recoverable amount. In the event that the impairment loss is 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 impairment losses.

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 150 are expensed immediately Low-value assets with a cost of between EUR 150 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 fair value less the cost to sell or the value in use of a cash-generating unit. An impairment loss is charged if the carrying amount exceeds the recoverable amount. In the event that the impairment loss is reversed, the amortized cost is written up.

Leases

The determination of whether an arrangement contains a lease is based on the substance of the arrangement at inception date and requires an assessment of whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets and whether the arrangement conveys a right to use the asset. A reassessment after the inception of the lease is only performed under the conditions set forth in IFRIC 4.

A lease is classified as a finance lease if substantially all risks and rewards incidental to ownership are transferred to the lessee. Each leased asset is recognized under property, plant and equipment at its fair value or, if lower, at the present value of the minimum lease payments. The corresponding liability is disclosed as a finance lease obligation under financial liabilities to third parties. The leased asset is depreciated in subsequent periods over the contractual term or, if shorter, the useful life. Payment to the lessor is divided into interest and repayment components, with the interest component recognized as a constant rate of interest of the remaining lease liability through profit or loss over the term of the lease.

All other leases are classified as operating leases. Rental payments under such lease arrangements are recognized as an expense on a straight-line basis.

Government grants

Government grants are recognized if there is reasonable assurance that they will be received and the Company will comply with the required conditions. Government grants are recognized in profit or loss in the period in which the corresponding expenses are recognized. Government grants for acquisition projects directly reduce the cost of the corresponding items of property, plant and equipment upon initial recognition. Government grants related to income are offset against the corresponding expenses.

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments comprise primary and derivative financial instruments.

Primary financial instruments are generally measured at fair value upon initial recognition. This includes current and non-current investments as well as granted loans and receivables and financial liabilities.

Derivatives are initially recognised 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 recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which case resulting gain or loss is recognized in other comprehensive income and reclassified to profit or loss based on the nature of the hedge relationship.

Financial assets

Financial assets are allocated to the following categories:

- Financial assets at fair value through profit or loss
- Loans and receivables
- Held-to-maturity investments
- Available-for-sale financial assets

Classification depends on the nature and purpose of the financial asset and is designated upon acquisition. Items are reclassified on the reporting date where permitted and necessary.

Financial assets are initially recognized at fair value. Transaction costs directly attributable to the acquisition of financial assets that are not measured at fair value through profit or loss increase the carrying amount of the financial asset initially recognized. Transaction costs directly allocated to financial assets that are recognized at fair value through profit or loss are recognized directly in the income statement.

Purchases or sales of financial instruments that require delivery of assets within a time frame established by regulations or conventions in the marketplace (securities spot transactions) are recognized on the trade date, i.e. the date that the group companies commit to purchase or sell the asset.

The subsequent measurement of the financial assets depends on their designation according to the below mentioned categories.

Financial assets at fair value through profit or loss encompass financial assets held for trading and financial assets designated upon initial recognition as measured at fair value through profit or loss. Financial assets are classified as held for trading if they were acquired for the purpose of selling or repurchasing in the near term. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39. As of the reporting date, the CeramTec Holding Group has not made use of the option to designate primary financial instruments upon initial recognition as financial assets at fair value through profit or loss. Changes in the fair value of financial assets measured at fair value through profit or loss are presented as finance income or finance costs in the income statement. Within the CeramTec Holding Group, the termination rights agreed in the bond represent embedded derivatives to be separated which are allocated to the "held-for-trading" category.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. In the case of the CeramTec Holding Group, this relates to cash and cash equivalents, trade receivables and other financial receivables. After initial recognition, financial assets categorised under loans and receivables are accounted for at amortised cost using the effective interest rate method, less any impairment losses. When calculating amortised cost using the effective interest method, premiums or discounts are taken into account as well as fees or costs associated with acquiring the financial assets. The effective interest expense is recognised in the financial result. If there is any objective evidence of impairment of loans and receivables (e.g., with regard to considerable financial difficulties or significant changes in the environment of the debtor), impairment losses are charged and recognised under „other income / expenses (-), net" through profit or loss. For trade receivables, impairment losses are charged using an allowance account. Trade receivables are written-off if collection is not expected. The impairment loss/write off is reversed if the reasons for charging recognition no longer apply.

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturity which the CeramTec Holding Group intends to hold to maturity and has the ability to do so. After initial recognition, financial assets under this category are accounted for at amortized cost using the effective interest rate method, less any impairment losses. The CeramTec Holding Group does not have any held-to-maturity investments.

Available-for-sale financial assets relate to acquired equity and debt instruments. Equity instruments classified as available for sale are those that are not held for trading or measured at fair value through profit or loss. Debt instruments allocated to this category which are held for an indefinite period of time may be sold in response to changes in market conditions or when liquidity is required. After initial recognition, available-for-sale financial assets are subsequently measured at fair value. Changes in fair value are recognized as unrealized gains and losses under other comprehensive income until the available-for-sale financial assets are derecognized or an impairment loss is charged. At this point in time the gains or losses are reclassified from other comprehensive income to profit or loss. The CeramTec Holding Group does not hold any available-for-sale financial assets.

A financial asset is derecognized if the contractual rights to receive cash flows from the financial asset expires, if the Group has transferred to a third party its contractual rights to receive the cash flows from the financial asset, or has assumed a contractual obligation to pass those cash flows on without delay to a third party when the risks and rewards of ownership of the asset, or control of the asset, have been transferred.

Financial liabilities

Financial liabilities are categorized upon initial recognition either as financial liabilities at fair value through profit or loss or as other financial liabilities. Financial liabilities are initially recognized at fair value. Transaction costs directly attributable to the issue of financial liabilities that are not measured at fair value through profit or loss decrease the amount of the financial liability initially recognized. Transaction costs directly attributable to financial liabilities that are recognized at fair value through profit or loss are recognized directly in the income statement. The financial liabilities of the CeramTec Holding Group relate to trade payables, bonds and loans as well as liabilities to banks, finance lease liabilities, derivative financial instruments and other financial liabilities.

The subsequent measurement of financial liabilities depends on their designation according to the below mentioned categories:

Financial liabilities at fair value through profit or loss include financial liabilities held for trading as well as financial liabilities categorized upon initial recognition as financial liabilities at fair value through profit or loss. Financial liabilities are classified as held for trading if they are held for the purpose of selling in the near future. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39. Changes in the fair value of financial liabilities recognized through profit or loss are presented as finance income or finance costs in the income statement. Within the CeramTec Holding Group, the interest rate floors contained in the syndicated loan agreement represent separated embedded derivatives which are allocated to the held-for-trading category.

Other financial liabilities are other liabilities that are not measured at fair value through profit or loss. They are measured at amortized cost using the effective interest method. The effective interest method is a method of calculating the amortised 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 (where appropriate) a shorter period) to the net carrying amount on initial recognition. The effective interest rate is recognized in the financial result. Other financial liabilities of the CeramTec Holding Group include trade payables, bonds, liabilities to banks, finance lease liabilities and other financial liabilities.

A financial liability is derecognized when the obligations named in the agreement are settled, canceled or expired.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position if there is a currently enforceable legal 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.

Hedges

Hedge accounting denotes a special form of accounting that modifies the accounting treatment of the hedged item and hedging instrument in a hedging relationship such that the results of measuring the hedged item or hedging instrument are recognized in the same period directly in equity or in profit or loss. Accordingly, hedge accounting recognizes the offsetting effects of changes in the values of the hedging instrument and the hedged item. IAS 39 provides for three types of hedging relationship where the strict requirements for hedge accounting in individual cases are met:

- Fair value hedge, when the risk of changes in the fair value of a recognized receivable or liability or an unrecognized contractual obligation is hedged

- Cash flow hedge, when the risk of changes in cash flows is hedged, associated with a recognized receivable or liability or a highly probable forecast transaction, or with a currency risk of an unrecognized contractual obligation

- Hedge of a net investment in a foreign operation.

The CeramTec Holding Group uses currency swaps in order to hedge most of the foreign currency risks resulting from the USD loans. These hedges are recognized as cash flow hedges, with the effective part of the change in fair value of derivatives designated as hedging instruments recorded under other comprehensive income, while the ineffective part of the change in value is immediately recognized in profit or loss. Changes in value recognized in other comprehensive income are reclassified to the profit or loss in the period in which the hedged item affects the profit or loss for the period.

Measurement at fair value

On the reporting date, the CeramTec Holding 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 Holding 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 took 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 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 Holding 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 reversal is limited to the amount of the original write-down.

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 2005G standard 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 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 Estimation Uncertainties and Exercise of Judgment.

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 recognised if the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that effects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differenes can be utilised. Deferred tax assets also include tax refund claims that result from the expected utilization of existing unused tax losses or interest carryforwards in subsequent years if it is probable that there will be future taxable profit against which the deferred tax assets can be utilised.

Deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply 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 tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which event the current and deferred tax are also recognised in other comprehensive income or directly in equity, respectively.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income 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 Holding (as the parent), CeramTec Group GmbH, CeramTec FinCo GmbH, CeramTec Service GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH. There is 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.

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 results of operations and financial position of the CeramTec Holding Group. The underlying assumptions are revised regularly. However, the actual results may vary from those anticipated.

In the process of applying the accounting policies of the CeramTec Holding 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 and expected useful lives of the acquired intangible assets and property, plant and equipment as well as the fair value of liabilities assumed.

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 income of the CeramTec Holding Group.

Goodwill of EUR 557,961k (31 December 2015: EUR 557,567k) and other intangible assets of EUR 557,421k (31 December 2015: EUR 603,922k) 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 fiscal year and comparative period can be found in notes 4.1 Intangible Assets and 4.2 Property, Plant and Equipment.

Valuation allowances on receivables

The recoverability of trade receivables was assessed based on the estimated likelihood of default. Accordingly, receivables are reduced by appropriate 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). As of the reporting date, an impairment loss of EUR 535k (31 December 2015: EUR 644k) was identified as necessary.

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 102,410k (31 December 2015: EUR 86,071k) were recorded as of the end of the reporting period.

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.

Provisions of EUR 29,851k (31 December 2015: EUR 19,098k) were recorded as of the end of the reporting period.

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 Holding 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 851k (31 December 2015: EUR 1,085k) were recognized.

2.4 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

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 fiscal year and/or they had not yet been endorsed by the European Commission for adoption in the European Union. In the fiscal year, these new or amended standards and interpretations were not adopted earlier.

Standards and interpretations	Date of first-time adoption
IFRS 14: "Accounting for Regulatory Deferral Accounts"	1 January 2016
Amendments to IFRS 11: "Accounting for Acquisitions of Interests in Joint Operations"	1 January 2016
Amendments to IAS 16 and IAS 38: "Acceptable Methods of Depreciation and Amortisation"	1 January 2016
Amendments to IAS 16 and IAS 41: "Agriculture: Bearer Plants"	1 January 2016
Amendments to IAS 27: "Equity Method in Separate Financial Statements"	1 January 2016
Amendments to IFRS 10 and IAS 28: "Sales or Contributions of Assets Between an Investor and its Associate/Joint Venture"	deferred indefinitely
Annual Improvements Project (2012 – 2014)—September 2013	1 January 2016
Amendments to IAS 1: "Presentation of Financial Statements"	1 January 2016
Amendments to IFRS 10, IFRS 12 and IAS 28: "Investment Entities: Applying the Consolidation Exception"	1 January 2016
Amendments to IAS 12: "Recognition of Deferred Tax Assets for Unrealised Losses"	1 January 2017
Amendments to IAS 7: "Disclosure of Changes in Liabilities Arising from Financing Activities"	1 January 2017
Annual Improvements Project (2014 – 2016) for IFRS 12	1 January 2017
IFRS 15: "Revenue from Contracts with Customers"	1 January 2018
IFRS 9: "Financial Instruments"	1 January 2018
Amendments to IFRS 2: "Accounting for Cash-settled Share-based Payment Transactions"	1 January 2018
Amendments to IFRS 4: "Effects of the Different Initial Application Dates of IFRS 9 and the Standard Superseding IFRS 4"	1 January 2018
Annual Improvements Project (2014 – 2016) for IFRS 1 and IAS 28	1 January 2018
IFRIC 22: "Accounting for Transactions that Include Consideration in a Foreign Currency"	1 January 2018
Amendments to IAS 40: "Transfers to or from Investment Property Classification"	1 January 2018
IFRS 16: "Accounting for Leases"	1 January 2019

No material impact is expected on the consolidated financial statements and related disclosures of CeramTec Holding. However, assessment of IFRS 16 is not yet finalized

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:

	2016	2015
	EUR k	EUR k
Regions		
Europe	210,773	209,314
Germany	133,068	130,235
North America	72,979	83,549
Asia	61,393	62,739
Rest of world	15,100	15,494
Total	**493,313**	**501,331**
Businesses		
Industrial	307,763	318,612
Medical products	185,550	182,719
Total	**493,313**	**501,331**

3.2 Cost of sales

The cost of sales breaks down as follows:

	2016	2015
	EUR k	EUR k
Material and packaging costs	88,687	94,800
Amortization and depreciation	49,890	50,414
Personnel expenses	113,504	108,477
Other costs of sales	42,848	46,265
Total	**294,929**	**299,956**

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:

	2016	2015
	EUR k	EUR k
Foreign currency results	3	1,990
Income from reversal of provisions	79	400
Restructuring costs	-61	-735
Write-downs and impairment	-2,498	-778
Allowance for bad debts	-118	-186
Income from recovery of receivables which had been written off	58	12
Losses on disposal of property, plant and equipment	-64	-99
Sundry other income	611	649
Sundry other expenses	-231	-805
Total	**-2,221**	**448**

Restructuring costs primarily contain personnel expenses.

Write-downs and impairment mainly related to the write-off of two capitalized technologies (other intangible assets).

3.7 Financial result

The financial result breaks down as follows:

	2016 EUR k	2015 EUR k
Interest income and other finance income		
Gains on derivative valuations	18,637	5,308
Exchange rate gains	1	0
Other interest income	96	100
Total	**18,734**	**5,408**
Interest expenses and other finance costs		
Interest expense from syndicated loan	25,430	28,760
Interest expense from bond	25,303	25,303
Interest expense from effective interest method	5,731	7,152
Interest expense from shareholder loan	11,895	11,024
Exchange rate losses	2,296	6,933
Other interest expenses	2,941	2,732
Less: Borrowing costs capitalized as part of qualifying assets	0	-205
Total	**73,596**	**81,699**
Total financial result	**-54,862**	**-76,291**

The exchange rate losses result from loans not designated in the functional currency of the group companies. More information on interest income and interest expenses from derivatives can be found in note 4.16.

The other interest expenses includes an amount of EUR 2,102k (previous year: EUR 1,839k), which are due to unwinding the discount on provisions.

3.8 Income tax

There is a consolidated tax group for income tax purposes between CeramTec Holding and its German subsidiaries. This means that German corporate income tax and trade tax is only levied at the level of the parent company, CeramTec Holding. CeramTec Holding also has indirect shareholdings in foreign corporations. The current income taxes of the CeramTec Holding 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.

A profit or loss for the period before income tax of EUR 4,836k (previous year: EUR -6,615k) is allocable to Germany and abroad as follows:

	2016 EUR k	2015 EUR k
Germany	-5,874	-15,168
Abroad	10,710	8,553
Total	**4,836**	**-6,615**

Tax expense of EUR 10,010k (previous year: EUR 7,694k) breaks down as follows:

	2016 EUR k	2015 EUR k
Current income tax expense	-17,132	-18,474
Deferred tax income	7,122	10,780
Income tax expense (-) / benefit (+)	**-10,010**	**-7,694**

Overall, the Company's weighted tax rate (based to the allocation of profit before tax and mainly driven by the German entities) is 28.5 % (previous year: 28.5 %), which will be used for the 2016 and 2015 reconciliation in the following table. . . The effective tax rate (i.e., tax expense in relation to profit or loss before income tax) factors in both the current and the deferred tax expense and takes into account all factors, such as non-deductible operating expenses or a change in the assessment base.

	2016		2015	
	EUR k	%	EUR k	%
Profit or loss before income tax	**4,836**		**-6,615**	
Expected income tax benefit (+) / Income tax expense (-)	-1,378	28.5	1,886	28.5
Permanent differences	-2,142	44.3	-2,058	-31.1
Non-recognition of deferred tax assets on interest carryforwards	-6,606	136.6	-6,277	-94.9
Tax expense (-) / tax benefit (+) for previous years	191	-4.0	-373	-5.6
Unrecognized deferred tax assets	-119	2.5	-798	-12.1
Other adjustments	44	-0.9	-74	-1.1
Income tax expense (-) / income tax benefit (+) and effective tax rate	**-10,010**	**207.0**	**-7,694**	**-116.3**

The effects of permanent differences result mainly from add-backs of expenses of EUR 2,106k (EUR 2,121k) to operating profit which are subject to German trade tax, other non-deductible operating expenses of EUR 215k (previous year: EUR 160k), and tax-free income of EUR -179k (previous year: EUR -223k).

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 they are levied by the same tax authority. The deferred tax assets and liabilities stem from the following:

	31 December 2016		31 December 2015	
	Assets	Liabilities	Assets	Liabilities
	EUR k	EUR k	EUR k	EUR k
Tax loss carryforwards	89	0	445	0
Property, plant and equipment	196	23,092	185	24,244
Goodwill and other intangible assets	9,622	156,040	12,872	166,389
Inventories, receivables and other assets	1,487	24,861	1,114	18,823
Non-current provisions and liabilities	31,945	2,152	25,018	2,509
Current provisions and other liabilities	7,795	396	6,537	467
Total deferred taxes	**51,134**	**206,541**	**46,171**	**212,432**
Offsetting	-50,283	-50,283	-45,086	-45,086
Deferred tax assets / liabilities	**851**	**156,258**	**1,085**	**167,346**

Other comprehensive income contains deferred tax income on the remeasurement of defined benefit plans of EUR 3,976k (2015: deferred tax expenses of EUR 2,762k) and deferred tax expense on gains from cash flow hedges of EUR 68k (2015: EUR 758k).

Unused tax losses and interest carryforwards

Unused tax losses and interest carryforwards break down as follows:

	31 December 2016	31 December 2015
	EUR k	EUR k
Interest carryforwards	97,905	72,989
on which no deferred tax assets are recognized	97,905	72,989
Foreign unused tax losses	3,385	5,181
on which no deferred tax assets are recognized	3,052	3,011
Total unused tax losses	3,385	5,181
on which no deferred tax assets are recognized	3,052	3,011

Deferred tax assets were recognized on unused tax losses of EUR 333k (31 December 2015: EUR 2,170k).

Foreign unused tax losses, for which deferred tax assets have been capitalized, mainly result from unused tax losses made by group companies in Spain of EUR 252k (31 December 2015: EUR 315k), and in India of EUR 81k (31 December 2015: EUR 0k), and in the previous year the Czech Republic (EUR 1,254k), and Poland (EUR 513k). The tax loss carryforwards in Spain do not expire ; however the tax loss carryforwards in India will expire after 8 years and in Czech Republic and Poland after 5 years.

Temporary differences in connection with shares in subsidiaries in the amount of EUR 2,620k are not subject to deferred tax liabilities, because CeramTec 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 fiscal year 2016, cost of materials amounted to EUR 104,868k (previous year: EUR 113,631k).

Personnel expenses

Personnel expenses break down as follows:

	2016 EUR k	2015 EUR k
Wages and salaries	137,488	133,046
Social security contributions incl. pension expenses	38,811	34,688
Total	**176,299**	**167,734**

Personnel expenses are contained in cost of sales, selling, research and development, as well as general administration costs.

Employees

On average, the Group employed 3,229 (previous year: 3,301) people in the fiscal year. The break down as follows:

	2016 Headcount	2015 Headcount
Salaried employees	1,170	1,185
Wage earners	2,059	2,116
Total	**3,229**	**3,301**

Amortization and depreciation

Amortization and depreciation break down as follows:

	2016 EUR k	2015 EUR k
Amortization of intangible assets	44,901	44,746
Depreciation of property, plant and equipment	38,558	39,094
Impairment of intangible assets	2,471	511
Impairment of property, plant and equipment	26	268
Total	**85,956**	**84,619**

4 Notes to the consolidated statement of financial position

4.1 Goodwill and intangible assets

Goodwil and intangible assets break down as follows:

		Other intangible assets					
	Goodwill	Trademarks	Technology	Customer relationships	Order backlog	Other	Total
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Cost							
1 January 2015	**550,820**	**51,289**	**236,177**	**406,843**	**10,758**	**4,814**	**1,260,701**
Additions from business combinations	3,653	930	0	5,469	0	784	10,836
Additions	0	0	0	0	0	1,093	1,093
Government grants	0	0	0	0	0	-18	-18
Disposals	0	0	0	0	-10,758	0	-10,758
Reclassifications	0	0	0	0	0	94	94
Exchange differences	3,094	7	0	1,204	0	78	4,383
31 December 2015	**557,567**	**52,226**	**236,177**	**413,516**	**0**	**6,845**	**1,266,331**
Additions	0	0	0	0	0	656	656
Disposals	0	0	0	0	0	-1	-1
Exchange differences	394	31	0	315	0	46	786
31 December 2016	**557,961**	**52,257**	**236,177**	**413,831**	**0**	**7,546**	**1,267,772**
Amortization/impairment							
1 January 2015	**0**	**0**	**18,626**	**38,309**	**10,758**	**2,359**	**70,054**
Additions to amortization	0	54	13,968	29,199	0	1,525	44,746
Additions to impairment	0	0	511	0	0	0	511
Disposals	0	0	0	0	-10,758	0	-10,758
Exchange differences	0	1	0	218	0	71	290
31 December 2015	**0**	**55**	**33,105**	**67,726**	**0**	**3,956**	**104,842**
Additions to amortization	0	92	13,902	29,428	0	1,479	44,901
Additions to impairment	0	0	2,471	0	0	0	2,471
Disposals	0	0	0	0	0	-1	-1
Exchange differences	0	6	0	131	0	39	176
31 December 2016	**0**	**153**	**49,478**	**97,285**	**0**	**5,473**	**152,390**
Net carrying amounts							
31 December 2016	557,961	52,104	186,699	316,546	0	2,073	1,115,382
31 December 2015	557,567	52,171	203,072	345,790	0	2,889	1,161,489

Goodwill results from the acquisiton of the high-performance ceramics division in 2013 and from the acqusition of DAI Ceramics, Inc in 2015. . It was allocated to the cash-generating units (CGUs) CeramTec (EUR 498,758k), Emil Müller (EUR 39,807k) and CeramTec-ETEC (EUR 19,396k). In 2016, the CeramTec Group's organizational reporting structure was divided in accordance with IAS 36.78 into the Medical and Industrial divisions. Accordingly, the CGU CeramTec was divided as of 31 December 2016 into the CGUs Medical and Industrial. Consequently, goodwill within the CeramTec CGU was allocated to the CGUs Medical (EUR 312,721k) and Industrial (EUR 186,037k).

The CGU CeramTec included all business activities designed to develop, manufacture and sell technical high-performance ceramics products used for medical technology, in the electronics and automotive industries, and for mechanical engineering until the end of fiscal year 2015. In 2016, the business activities designed to develop, manufacture and sell technical high-performance ceramics products used for medical technology were allocated to the CGU Medical. 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, were allocated to the CGU Industrial.

The CGU Emil Müller is predominantly engaged in developing, manufacturing and selling salt cores, which are used in foundry technology to manufacture casting components in the automotive industry, as in the previous year.

The CGU CeramTec-ETEC continues to include mainly business activities concerned with ceramic products which are used in ballistic applications, and protect against wear and corrosion.

As of 1 September 2013, the trademarks CeramTec, BIOLOX and SPK were identified and recognized in the purchase price allocation relating to the acquisition of high-performance ceramics division. As of 29 May 2015, the trademark

DAI Ceramics were also identified and recognized in the purchase price allocation relating to the acquisition of DAI Ceramics Inc.. The recorded carrying amount of these intangible assets amounted to EUR 52,104k as of 31 December 2016 (31 December 2015: EUR 52,171k). As the recognized trademarks CeramTec, BIOLOX and SPK do not represent a product-specific trademark and do not have a finite life, the useful life for the recognized trademarks was classified as indefinite. The trademark DAI has a remaining useful life of 8.4 years as of the reporting date (31 December 2015: 9.4 years). The trademarks were allocated to the cash-generating unit CeramTec.

Technology has a carrying amount of EUR 186,699k (31 December 2015: EUR 203,072k) and primarily contains the basic technology underlying high-performance ceramics. This has an average weighted remaining useful life of 14.1 years (31 December 2015: 15.1 years).

Customer relationships have a carrying amount of EUR 316,546k (31 December 2015: EUR 345,790k) and primarily contain customer relationships from medical applications. This has an average weighted remaining useful life of 13.0 years (31 December 2015: 14.0 years).

Amortization of other intangible assets is recognized under cost of sales, selling, research and development and general administration costs, and impairment losses are recognised under other operating expenses.

For the cash-generating units, the annual impairment test performed as of 30 November 2016 was based on the CGUs' previous reporting structure, and the annual impairment test performed as of 31 December 2016 was based on the CGUs' new reporting structure. The recoverable amount was calculated based on an asset's value in use. Value in use is calculated by discounting the future cash flows. 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 Group and, as a rule, has a three-year planning horizon. For this purpose, assumptions are made mainly about future selling prices, quantities and costs. The planning period for the CeramTec-ETEC cash-generating unit is different, and covers the time until 2021.

The financial budgets are prepared on the basis of historical experience, and reflects the management's expectations for the next three or five years, respectively.

A long-term growth rate of 1 % was determined for the years beginning in 2020 or 2022. The weighted average cost of capital results from equity costs ranging between 8.00 % – 8.04 %, borrowing costs (before taxes) of 1.65 %, and a tax rate between 26.4 % and 32.8 %. Equity costs were calculated using a base interest rate of 0.60 % and a market risk premium of 6.75 %.

The weighted average cost of capital for the CGUs Medical and Industrial amounts to 7.57 %, and the weighted average cost of capital for the CGUs Emil Müller and CeramTec-ETEC amounts to 7.58 % and 7.54 %, respectively.

As value in use of the cash-generating units' assets exceeded each carrying amount, there was no need to recognize impairment losses as of 31 December 2016.

We believe that reasonably possible changes in significant basic assumptions (weighted average cost of capital, EBITDA margin, long-term growth rate) underlying the determination of value in use would not result in an excess of the carrying amount of the cash-generating units in question over their value in use -.

4.2 Property, plant and equipment

Property, plant and equipment breaks down as follows:

	Land and buildings	Plant and machinery	Other equipment	Assets under construction	Total
	EUR k	EUR k	EUR k	EUR k	EUR k
Cost					
1 January 2015	**120,006**	**215,949**	**10,792**	**23,169**	**369,915**
Additions from business combinations	0	2,223	28	0	2,251
Additions	3,912	14,209	2,022	6,575	26,718
Government grants	-239	-1,043	-22	-3	-1,307
Disposals	-200	-5,354	-694	0	-6,248
Reclassifications	4,605	17,451	660	-22,810	-94
Exchange differences	811	2,673	-61	595	4,018
31 December 2015	**128,894**	**246,107**	**12,726**	**7,526**	**395,253**
Additions	302	3,795	2,200	7,563	13,860
Government grants	70	3	0	0	73
Disposals	-177	-1,910	-1,005	-1	-3,093
Reclassifications	1,373	7,867	830	-10,070	0
Exchange differences	243	3,667	178	-66	4,022
31 December 2016	**130,705**	**259,529**	**14,929**	**4,952**	**410,115**
Amortization/impairment					
1 January 2015	**8,356**	**48,170**	**3,706**	**0**	**60,232**
Additions to amortization	7,340	28,651	3,103	0	39,094
Additions to impairment	20	248	0	0	268
Disposals	-98	-4,722	-623	0	-5,443
Exchange differences	97	851	-44	0	903
31 December 2015	**15,715**	**73,198**	**6,142**	**0**	**95,054**
Additions to amortization	7,520	27,977	3,061	0	38,558
Additions to impairment	0	26	0	0	26
Disposals	-175	-1,620	-938	0	-2,733
Exchange differences	209	3,275	194	0	3,678
31 December 2016	**23,269**	**102,856**	**8,459**	**0**	**134,583**
Net carrying amounts					
31 December 2016	107,436	156,673	6,470	4,952	275,532
31 December 2015	113,179	172,912	6,582	7,526	300,199

Depreciation of property, plant and equipment is recognized under cost of sales, selling, research and development and general administration costs, and impairment losses are reported as other expense.

No borrowing costs were capitalized in property, plant and equipment in the fiscal year (previous year: EUR 205k).

There were contractual commitments to acquire property, plant and equipment of EUR 2,702k as of the reporting date (31 December 2015: EUR 1,615k).

Property, plant and equipment under finance leases contains rented buildings with a net carrying amount of EUR 1,412k (31 December 2015: EUR 1,512k) and furniture and fixtures with a net carrying amount of EUR 16k (31 December 2015: EUR 645k). The corresponding lease liabilities are explained under finance liabilities to third parties (note 4.13).

4.3 Other financial assets

The following table breaks down other financial assets as follows:

	31 December 2016	31 December 2015
	EUR k	EUR k
Other non-current financial assets		
Derivative financial instruments	47,907	47,348
Separated termination rights	24,459	8,946
Insurance claims	118	150
Total	**72,484**	**56,444**
Other current financial assets		
Derivative financial instruments	12,212	8,474
Other financial assets	178	41
Total	**12,390**	**8,515**

The CeramTec Holding 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 4.16.

4.4 Other assets

The following table breaks down other assets as follows:

	31 December 2016	31 December 2015
	EUR k	EUR k
Other non-current assets		
Deferred finance costs for the revolving credit line	312	784
Sundry assets	399	404
Total	**711**	**1,188**
Other current assets		
VAT receivables	992	1,494
Receivables from energy tax refunds	866	825
Deferred finance costs for the revolving credit line	471	471
Investment grants	0	212
Sundry assets	1,939	2,205
Total	**4,268**	**5,207**

Sundry current assets primarily contain prepayments, e.g. for insurances and for trade fairs

4.5 Inventories

Inventories break down as follows:

	31 December 2016	31 December 2015
	EUR k	EUR k
Raw materials	25,652	24,054
Work in progress	25,989	24,994
Finished goods	21,992	22,885
Merchandise	1,810	1,923
Other	1,461	1,281
Total	**76,904**	**75,137**

Other inventories include packaging materials and spare parts for machinery.

At the reporting date the allowance for write-downs on inventories amount to EUR 10,117k (31 December 2015: EUR 8,991k). The expense resulting from increasing the write-downs by EUR 1,126k is reported under cost of sales.

4.6 Trade receivables

At the end of the reporting period, trade receivables amounted to EUR 53,553k (31 December 2015: EUR 53,178k) after taking into account valuation allowance of EUR 535k (31 December 2015: EUR 644k).

The value and maturity structure of trade receivables before impairment breaks down as follows:

	31 December 2016	31 December 2015
	EUR k	EUR k
Carrying amount before impairment	**54,088**	**53,822**
thereof not yet due on the reporting date	43,878	44,380
thereof past due on the reporting date	10,210	9,442
past due up to 30 days	8,062	7,235
past due up to 60 days	1,313	1,285
past due up to 90 days	126	163
past due more than 90 days	709	759

The age structure of the impairment losses recognized through profit or loss as of the reporting date breaks down as follows:

	31 December 2016	31 December 2015
	EUR k	EUR k
not yet due	20	15
past due up to 30 days	49	109
past due up to 60 days	44	37
past due up to 90 days	45	95
past due more than 90 days	377	388
Total	**535**	**644**

The impairment losses are based on the estimated likelihood of default. They primarily relate to specific bad debt allowances on receivables from customers on whose assets insolvency proceedings were initiated or who are experiencing significant financial difficulty.

The age structure of receivables past due which are not impaired breaks down as follows:

	31 December 2016	31 December 2015
	EUR k	EUR k
past due up to 30 days	7,991	7,073
past due up to 60 days	1,250	1,230
past due up to 90 days	61	23
past due more than 90 days	163	185
Total	**9,465**	**8,511**

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.

The following table shows the development of allowances on trade receivables during the past reporting period.

	31 December 2016	31 December 2015
	EUR k	EUR k
Allowance at the beginning of the fiscal year	**644**	**459**
Addition	87	214
Reversed	-27	-34
Utilization	-176	-19
Foreign currency translation and other	7	24
Allowance on 31 December	**535**	**644**

4.7 Cash and cash equivalents

Cash and cash equivalents contain bank balances of EUR 124,557k (31 December 2015: EUR 86,450k) and cash in hand of EUR 28k (31 December 2015: EUR 26k).

4.8 Non-current assets held for sale

In 2014 the Company announced that manufacturing operations in Colyton, UK, where CeramTec UK Ltd. is located, were to be discontinued. Accordingly, in May 2015 the assets previously included in property, plant and equipment were reclassified to assets held for sale. The assets were subsequently sold in years 2015 and 2016.

4.9 Equity

Issued capital

The fully paid in capital stock of the parent company CeramTec Holding amounts to EUR 25k (31 December 2015: EUR 25k).

Capital reserves

Effective as of 31 August 2013/1 September 2013, Faenza Luxembourg S.à.r.l, Luxembourg (parent company of CeramTec Holding GmbH), increased CeramTec Holding's capital reserves by EUR 378,148k. The capital reserves are freely available and not subject to any earmarking.

Accumulated losses

The line item "Retained earnings" contains current losses incurred by the CeramTec Holding Group and those incurred in previous years. This also includes reserves for the remeasurement of pension obligations (after taxes) amounting to EUR -25,093k (31 December 2015: EUR -14,046k).

Other comprehensive income

Accumulated other comprehensive income relates to foreign currency translation adjustments and a reserve for changes in the fair value of hedging instruments, net of taxes.

4.10 Provisions for pension obligations

Within the CeramTec Holding Group, there are defined benefit and 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 generally based on the length of employee 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 which depend on the pay and period of service that are capped. These commitments do not contain any rights to inflation-related pension adjustments. These defined benefit plans were closed for employees that joined after 1 January 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 1 January 2002. For management of the German CeramTec Holding group companies, there are direct commitments in place comprising benefits that depend on pay and length of service and are capped 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.

Since the end of 2014, the Company has committed itself to directly providing benefits as compensation to employees who have been enrolled into Höchster Pensionskasse VVaG, which was subject to reorganisation of Höchster Pensionskasse VVaG 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 institution managed by employer and employee representatives. The representatives are legally obligated to represent the interests of the entitled employees and are responsible for investment decisions and managing the asset. 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:

	31 December 2016	31 December 2015
	EUR k	EUR k
Germany	94,359	78,554
UK	7,855	7,320
Other	196	197
Total	**102,410**	**86,071**

The following table shows the amount of the obligation and plan assets as well as the provisions and other assets disclosed in the consolidated statement of financial position as of 31 December 2016.

	German plans	Foreign plans	Total
	EUR k	EUR k	EUR k
Change in benefit obligations			
Benefit obligations at the beginning of the fiscal year	**78,554**	**12,765**	**91,319**
Service cost	2,714	30	2,744
Interest expense	1,858	413	2,271
Remeasurements	13,549	2,145	15,694
from the change in financial assumptions	*14,240*	*2,171*	*16,411*
Experience adjustments	*-691*	*-26*	*-717*
Foreign currency translation	0	-1,800	-1,800
Benefits paid	-2,316	-1,083	-3,399
Benefit obligations at the end of the year	**94,359**	**12,470**	**106,829**
Change in plan assets			
Market value of plan assets at the beginning of the fiscal year	0	5,279	5,279
Interest income from plan assets	0	177	177
Expense for managing the plans	0	-286	-286
Employer contributions	0	474	474
Remeasurements	0	491	491
from the change in financial assumptions	*0*	*491*	*491*
Foreign currency translation	0	-685	-685
Benefits paid	0	-1,031	-1,031
Market value of the plan assets at the end of the year	0	4,419	4,419
Net obligation amount for benefits	**94,359**	**8,051**	**102,410**
thereof provisions for pension obligations	94,359	8,051	102,410
thereof other assets	0	0	0

The following table shows the amount of the obligation and plan assets as well as the provisions disclosed in the consolidated statement of financial position in the comparative period as of 31 December 2015.

	German plans	Foreign plans	Total
	EUR k	EUR k	EUR k
Change in benefit obligations			
Benefit obligations at the beginning of the fiscal year	**83,726**	**12,821**	**96,547**
Service cost	4,334	36	4,370
Interest expense	1,569	443	2,012
Remeasurements	-8,871	-872	-9,743
from the change in financial assumptions	*-8,522*	*-850*	*-9,372*
Experience adjustments	*-349*	*-22*	*-371*
Foreign currency translation	0	780	780
Benefits paid	-2,204	-443	-2,647
Benefit obligations at the end of the year	**78,554**	**12,765**	**91,319**
Change in plan assets			
Market value of plan assets at the beginning of the fiscal year	**0**	**5,096**	**5,096**
Interest income from plan assets	0	178	178
Expense for managing the plans	0	-306	-306
Employer contributions	0	456	456
Remeasurements	0	-52	-52
from the change in financial assumptions	*0*	*-52*	*-52*
Foreign currency translation	0	332	332
Benefits paid	0	-425	-425
Market value of the plan assets at the end of the year	**0**	**5,279**	**5,279**
Net obligation amount/provisions for benefits	**78,554**	**7,486**	**86,040**
thereof provisions for pension obligations	78,554	7,517	86,071
thereof other assets	0	31	31

The calculation of the pension obligation was based on the following assumptions as of 31 December 2016:

	Germany	Abroad
Interest rate (in %) p.a.	1.60	2.70
Wage and salary trend (in %) p.a.	2.50	N/A
Pension increases (in %) p.a.	2.00	3.00 – 3.40
Life expectancy	2005G standard tables	Mortality tables

The calculation of the pension obligation was based on the following assumptions as of 31 December 2015:

	Germany	Abroad
Interest rate (in %) p.a.	2.40	3.70 – 3.80
Wage and salary trend (in %) p.a.	2.50	N/A
Pension increases (in %) p.a.	2.00	3.00 – 3.20
Life expectancy	2005G standard tables	Mortality tables

The average term of the benefit obligations amounts to 21.7 years in Germany and 18.0 years abroad.

The employer contributions and benefit payments expected to be paid during the next fiscal year amount to EUR 343k and EUR 2,633k, respectively.

The risk from changes in actuarial assumptions underlying the measurement of 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 assumptions as of the reporting date. The change in key actuarial assumptions would have the following impact (in EUR k) on the present value of pension obligations:

	Change	Effect 31 December 2016
Discount rate	- 0.50 % points	12,043
	+ 0.50 % points	-10,312
Wage and salary trend	- 0.50 % points	-237
	+ 0.50 % points	247
Increase in pensions	- 0.50 % points	-10,981
	+ 0.50 % points	12,143
Life expectancy	+ 1 year	4,754

The change in key actuarial assumptions would have had the following impact (in EUR k) on the present value of pension obligations in the previous year:

	Change	Effect 31 December 2015
Discount rate	- 0.50 % points	9,376
	+ 0.50 % points	-8,104
Wage and salary trend	- 0.50 % points	-171
	+ 0.50 % points	175
Increase in pensions	- 0.50 % points	-8,522
	+ 0.50 % points	9,387
Life expectancy	+ 1 year	3,727

There are no plan assets for German plans. The plan assets of the foreign plans break down into the following assets:

	31 December 2016	31 December 2015
	EUR k	EUR k
Securities/shares	3,549	3,687
Fixed-interest securities	466	1,108
Real estate	404	484
	4,419	**5,279**

The fair value of the securities and shares were determined based on prices quoted on active markets, while the fair value of real estate was 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 1 January 2002 to 31 December 2014, all new hires at CeramTec GmbH, CeramTec Service GmbH 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 Hoechst-Gruppe VVaG. These pension funds are multi-employer plans which are 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 Holding 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 Holding Group can under certain circumstances be used to finance another entity's employee benefits.

Dynamit Nobel VVaG is funded for commitments made before 1 December 2007 with income-based contributions by entitled employees as well as variable employer contributions. The employers' contribution must, together with the member contributions and return on plan assets, sufficiently fund the agreed 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 made as of 1 December 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 were 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. Deficits, for example due to the pension fund earning an insufficient return on assets, may result in the CeramTec Holding 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 GmbH or Emil Müller GmbH of 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 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 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 Holding Group for active employees, non-contributory employees and pensioners ranges between around 0.1 % and 0.15 % in each case.

As of 1 December 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 Höchster Pensionskasse VVaG. Since 1 January 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 Höchster Pensionskasse VVaG. The employees and employer make a fixed, income-based contribution to Höchster 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 fund amounted to EUR 2,514k in the fiscal year (previous year: EUR 2,101k). The expenses are recorded in cost of sales, selling costs, research and development as well as general administrative costs. Planned contributions of EUR 1,225k are expected to be made in 2017.

Expenses for additional defined contribution plans amount to EUR 10,288k (previous year: EUR 10,710k).

4.11 Other provisions and provision for taxes

Provisions developed as follows in the fiscal year:

	Balance as of 31 December 2015	Additions	Utilization	Reversal	Unwinding of the discount	Exchange difference	Balance as of 31 December 2016
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Provisions for employee bonuses	9,020	9,226	7,742	881	0	-32	9,591
Provisions for warranties	2,528	793	111	305	0	-6	2,899
Provisions for environmental risks	499	0	43	43	3	6	421
Provisions for long-service awards	1,079	4,017	50	0	0	0	5,047
Provision for solvency requirements	0	5,266	0	0	0	0	5,266
Provisions for litigation risks	1,662	1,583	932	106	0	3	2,209
Provisions for taxes	2,364	2,787	2,364	0	0	4	2,790
Other provisions	1,946	495	656	156	3	-5	1,627
	19,098	24,167	11,897	1,491	6	-31	29,851

Provisions for environmental risks relate to the elimination of residual pollution, renovation measures and water conservation practices. Estimations and, where possible, external expert opinions were used to measure the amount of the provisions.

The valuation of the provisions for long-service awards considered new arrangements agreed with the Company's works council in the year 2016.

A provision was recognized for a solvency plan for the closed pension fund Höchster Pensionskasse 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.

Other 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:

	31 December 2016	31 December 2015
	EUR k	EUR k
Current provisions	19,215	15,445
Non-current provisions	10,636	3,653
Total	29,851	19,098

The cash outflow of provisions is expected to be 64 % within one year and 36 % between more than one and 15 years.

4.12 Financial liabilities to affiliates

Financial liabilities to affiliates comprise a loan payable to Faenza Luxembourg S.à.r.l, Luxembourg, of EUR of 154,423k (31 December 2015: EUR 144,574k), and the following table breaks down the non-current and current portions of the loan by their maturity:

	31 December 2016	31 December 2015
	EUR k	EUR k
Non-current financial liabilities		
Loan payable	98,021	140,630
Accrued interest	0	3,944
	98,021	**144,574**
Current financial liabilities		
Loan payable	52,830	0
Accrued interest	3,572	0
	56,402	**0**
Total	154,423	144,574

On 4 January 2017, the portion reported as a non-current liability was paid.

The loan increases every year on 29 August by the amount of incurred expenses for interest which is unpaid.

4.13 Financial liabilities to third parties

The financial liabilities to third parties are broken down as follows:

	31 December 2016	31 December 2015
	EUR k	EUR k
Non-current financial liabilities		
Liabilities to banks	618,791	647,027
Liabilities from the bond	299,214	297,961
Derivative financial instruments	7,490	10,122
Finance lease liabilities	1,404	1,528
Purchase price for technology	105	218
Total	**927,004**	**956,856**
Current financial liabilities		
Liabilities to banks	46,016	37,202
Liabilities from the bond	9,489	9,489
Derivative financial instruments	3,540	4,437
Discounts and bonuses	1,855	1,861
Finance lease liabilities	26	504
Other current financial liabilities	1,603	1,536
Total	**62,529**	**55,029**

Liabilities to banks nominally amount to EUR 291,300k from a tranche in EUR and EUR 381,511k from a tranche in USD. These loans have variable interest rates and mature on 30 August 2020. Transaction costs associated with the loan of EUR 19,733k are spread over the term of the loan using the effective interest method. The tranche in USD is secured by currency swaps of EUR 226,900k concluded against foreign currency risks. This hedging relationship is recognized as a cash flow hedge.

The bond has a fixed interest rate and a nominal volume of EUR 306,700k. This bond matures on 15 August 2021. The CeramTec Holding Group has a termination option for this bond, which is recognized as a separate financial asset (note 4.3). Associated transaction costs of EUR 13,120k 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 4.16.

Payment obligations from finance leases break down as follows over future years:

	Total	up to 1 year	1 to 5 years	more than 5 years
Present value of minimum lease payments	1,430	26	240	1,164
Interest effect	986	101	363	522
Minimum lease payments	2,416	127	603	1,686

Lease payments of EUR 26k, which are due in 2017, are recognized under current financial liabilities.

Reference is made to note 4.2 as regards the items of property, plant and equipment recognized under finance leases.

All leases include contractually agreed installments. There are no sub-lease arrangements. CeramTec Suzhou has a renewal option for real estate leases.

4.14 Other liabilities

Other liabilities break down as follows:

	31 December 2016 EUR k	31 December 2015 EUR k
Other current liabilities		
Wages and salaries including taxes	6,261	6,433
Real estate transfer tax	4,151	4,136
Other current liabilities	3,046	3,289
Total	**13,458**	**13,858**

Other current liabilities are mainly attributable to liabilities to employees, liabilities from social security contributions, liabilities to pension funds as well as deferred income.

4.15 Rental and lease obligations

Operating lease commitments mainly relate to land and buildings as well as technical equipment and machinery.

The corresponding payment obligations break down as follows over future fiscal years:

	31 December 2016 EUR k	31 December 2015 EUR k
up to 1 year	1,689	2,001
1 to 5 years	933	1,533
Total	**2,622**	**3,534**

In the fiscal year, expenses from rental and lease agreements amounted to EUR 3,185k (previous year: EUR 3,035k).

4.16 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 IAS 39.

	31 December 2016		
	Measurement category of IAS 39[1]	Carrying amount	Fair value
		EUR k	EUR k
Financial assets			
Cash and cash equivalents	LaR	124,585	124,585
Trade receivables	LaR	53,553	53,553
Other financial assets	LaR	296	296
Separated termination rights—HfT	FVtPL	24,459	24,459
Currency swaps in effective hedges	Hedge	60,119	60,119
Total		**263,012**	**263,012**
Financial liabilities			
Bond liabilities	FLAC	308,702	325,746
Liabilities to banks	FLAC	664,807	672,864
Trade payables	FLAC	22,376	22,376
Finance lease liabilities	FLAC	1,430	1,430
Trade payables owed to affiliates	FLAC	205	205
Other financial liabilities	FLAC	3,564	3,563
Liabilities to affiliates	FLAC	154,423	157,377
Separated interest rate floors—HfT	FVtPL	10,275	10,275
Interest rate cap—HfT	FVtPL	755	755
Total		**1,166,536**	**1,194,591**

[1] HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortized cost; hedge: hedge accounting

	31 December 2015		
	Measurement category of IAS 39[1]	Carrying amount	Fair value
		EUR k	EUR k
Financial assets			
Cash and cash equivalents	LaR	86,476	86,476
Trade receivables	LaR	53,178	53,178
Receivables from affiliates	LaR	1,022	1,022
Other financial assets	LaR	191	191
Separated termination rights—HfT	FVtPL	8,946	8,946
Currency swaps in effective hedges	Hedge	55,822	55,822
Total		**205,635**	**205,635**
Financial liabilities			
Bond liabilities	FLAC	307,449	327,556
Liabilities to banks	FLAC	684,229	695,440
Trade payables	FLAC	24,354	24,354
Finance lease liabilities	FLAC	2,032	2,032
Other financial liabilities	FLAC	3,615	3,613
Liabilities to affiliates	FLAC	144,574	150,056
Separated interest rate floors—HfT	FVtPL	13,419	13,419
Interest rate cap—HfT	FVtPL	1,141	1,141
Total		**1,180,813**	**1,217,611**

[1] HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortized cost; hedge: hedge accounting

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:** Quoted (unadjusted) prices in markets for identical assets or liabilities that the entity can access at the measurement date
- **Level 2:** Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly
- **Level 3:** Non-observable 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:

	31 December 2016		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Separated termination rights—HfT	0	24,459	0
Currency swaps in effective hedges	0	60,119	0
Financial liabilities			
Separated interest rate floors—HfT	0	10,275	0
Interest rate caps—HfT	0	755	0

	31 December 2015		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Separated termination rights—HfT	0	8,946	0
Currency swaps in effective hedges	0	55,822	0
Financial liabilities			
Separated interest rate floors—HfT	0	13,419	0
Interest rate caps—HfT	0	1,141	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 value of financial instruments when the carrying amount is a reasonable approximation of fair value, such as short-term trade receivables and payables.

	31 December 2016		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial liabilities			
Bond liabilities	325,746	0	0
Liabilities to banks	0	672,864	0
Finance lease liabilities	0	1,430	0
Liabilities to affiliates	0	157,377	0

	31 December 2015		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial liabilities			
Bond liabilities	327,556	0	0
Liabilities to banks	0	695,440	0
Finance lease liabilities	0	2,032	0
Liabilities to affiliates	0	150,056	0

The fair value of the publicly listed bond corresponds to the nominal value multiplied by the market value at the reporting date. 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 in 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 (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.

Currency swaps are measured on the basis of a discounted cash flow method, which takes into account the observable mean closing rates, yield curves and currency spreads between currencies. All currency swaps had a positive market value as of the end of the reporting period. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement of the currency swaps 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 (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 can be directly or indirectly observed on 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 in the consolidated financial statements on a recurring basis, the CeramTec Holding 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 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 IAS 39.

	31 December 2016			
	Change in fair value	Currency translation	Impairment loss	Total
	EUR k	EUR k	EUR k	EUR k
Loans and receivables (LaR)	0	-258	-60	-318
Cash and cash equivalents	0	260		260
Separated termination rights/ interest rate floors—HfT (FVtPL)	18,636	0	0	18,636
Financial liabilities at amortized cost (FLAC)	0	-2,115	0	-2,115
Intercompany loans	0	-180	0	-180
Total	**18,636**	**-2,293**	**-60**	**16,283**

	31 December 2015			
	Change in fair value	Currency translation	Impairment loss	Total
	EUR k	EUR k	EUR k	EUR k
Loans and receivables (LaR)	0	-427	-174	-601
Cash and cash equivalents	0	2,416	0	2,416
Separated termination rights/ interest rate floors—HfT (FVtPL)	5,273	0	0	5,273
Financial liabilities at amortized cost (FLAC)	0	-7,167	0	-7,167
Intercompany loans	0	234	0	234
Total	**5,273**	**-4,944**	**-174**	**155**

Net gains from the changes in 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.

	31 December 2016	31 December 2015
	EUR k	EUR k
Total interest expense	68,981	72,674
Total interest income	96	100

Furthermore, finance fees of EUR 132k, which are not part of the effective interest method, were recognized in profit or loss during the reporting period.

Derivative financial instruments and hedge accounting

The following table shows the fair value and nominal value of derivative financial instruments as of 31 December 2016 and 31 December 2015:

	31 December 2016	
	Nominal value	Fair value
	EUR k	EUR k
Derivatives with a positive fair value		
Separated termination rights—HfT	306,700	24,459
Currency swaps in effective hedges	226,900	60,119
Derivatives with a negative fair value		
Separated interest rate floor—HfT	672,864	-10,275
Interest rate cap—HfT	364,720	-755
Total	**1,571,184**	**73,548**

	31 December 2015	
	Nominal value	Fair value
	EUR k	EUR k
Derivatives with a positive fair value		
Separated termination rights—HfT	306,700	8,946
Currency swaps in effective hedges	249,700	55,822
Derivatives with a negative fair value		
Separated interest rate floor—HfT	695,440	-13,419
Interest rate cap—HfT	403,440	-1,141
Total	**1,655,280**	**50,208**

Embedded derivatives

As described in note 4.13, the CeramTec Holding Group took out a syndicated loan with several USD and EUR tranches with various banks in August 2013. The loans include embedded interest rate floors, which obliges the CeramTec Holding Group to pay a minimum interest rate that exceeds the variable interest rate. Furthermore, the bond issued in August 2013 contains various agreements that entitle the CeramTec Holding 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 IAS 39 and recognized as stand-alone derivatives at fair value through profit or loss.

Cash flow hedges

The currency swaps were designated as hedging instruments in cash flow hedges in order to hedge a portion of the foreign currency risk resulting from the loans in USD. The ongoing interest and principal repayments from the loans and the currency swaps are made at the same time each quarter and will have an impact on profit or loss until the swaps mature in 2018. There were no ineffective cash flow hedges recognized in the reporting period.

The following table shows the amount for the reporting period recognized in other comprehensive income and reclassified from there to profit or loss:

	2016	2015
	EUR k	EUR k
Currency swaps in effective hedges		
Net gains/losses recognized in other comprehensive income	4,297	31,221
Reclassification from other comprehensive income to profit or loss	-4,060	-28,576
Total other comprehensive income at the end of the period	**237**	**2,645**

The amounts reclassified from other comprehensive income to profit or loss were recognized in the financial result, so as to offset the effects from foreign currency translation of the secured portion of the loans in USD.

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..

In the previous year, the cash flow from investing activities included the purchase price payment of EUR 10,934k for the acquisition of the shares in DAI Ceramics, Inc., Willoughby/USA. Cash and cash equivalents of EUR 5k were taken over.

Other non-cash income and expenses primarily contain changes in the fair value of financial instruments and accrued interest.

During the fiscal year, the Group paid cash of EUR 1,142k to purchase property, plant and equipment previously purchased on account.

Subsidies of EUR 212k which were recorded in previous years and resulted in a decrease in acquisition cost, subsidies of EUR 139k affected the consolidated group’s cash account in the fiscal year and subsidies of EUR 73k were not utilized.

6 Other notes

6.1 Management of financial risks

The CeramTec Holding 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 Holding Group is exposed to liquidity risks, which mainly results from the loans in EUR and USD taken out in August 2013 as well as the bond also issued in August 2013.

The CeramTec Holding Group operates on the basis of an appropriate framework to manage financial risks, which is an integral part of ongoing business operations and financing activities. Taking these risk management objectives into consideration, risks are identified, assessed and managed on an ongoing basis. The CeramTec Holding Group may enter 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 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 Holding Group is exposed to foreign currency risks from changes in the USD/EUR exchange rate.

The CeramTec Holding Group has secured 81.38 % of the nominal volume of the loans in USD against risk from fluctuations in the USD/EUR exchange rate by entering into USD/EUR currency swaps (further information on hedging cash flow risks can be found in note 4.16).

The following sensitivity analysis in terms of the foreign currency risk was prepared taking into account the hedges in place on 31 December 2016 and on the basis that the portion of financial instruments in foreign currency will remain constant. The table shows the effects on net income and equity for the period taking into account a hypothetical change of +/- 10 % to the closing rate and forward rate as of the reporting date for the CeramTec group companies' main foreign currency items.

			31 December 2016					
	Change in the spot rate %	Change in the forward rate %	USD	GBP	CZK	PLN	CNY	Total
Earnings effect before tax in EUR k	+10%		5,031	-142	30	-1,824	-524	**2,571**
	-10%		-6,149	174	-36	2,229	1,179	**-2,603**
Effect on equity in EUR k		+10%	-1,902	0	0	0	0	**-1,902**
		-10%	2,769	0	0	0	0	**2,769**

The effect on the net income for the period are attributable to the hypothetical change in the carrying amount of non-derivative assets and liabilities in the respective foreign currency. The effect on equity stems from the hypothetical change in the market value of the USD/EUR currency swaps, which are recognized in other comprehensive income as a result of the designation as a hedging instrument.

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 Holding 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 income or equity for the period, as the bond is carried at amortized cost and changes in fair value are not recognized.

In 2014, a CeramTec group company entered into an agreement governing an interest rate cap of EUR 441,040k linked to 3-month EURIBOR. The interest rate cap limits the maximum variable interest rate to 2 %.

The following table shows the effects on the interest result assuming a hypothetical change of +/- 100 basis points to the variable USD and EUR interest rates.

	31 December 2016	
	Increase/decrease in basis points	Effect on interest expense
		EUR k
EUR	+100	0
	-100	0
USD	+100	380
	-100	0

A decline in the interest rate has no effect on the interest expense as a result of the interest rate floor of 1 % agreed in the syndicated loan agreement. A rise of 100 basis points in EURO has no effect as a result of the negative EUR interest rate and interest rate floor of 1 %.

Credit risk

Credit risk is the risk that a counterparty will not meet its obligations from financial instruments, leading to a financial loss for the creditor. At the CeramTec Holding Group, the credit risk is primarily due to trade receivables, cash and cash equivalents and other receivables.

Trade receivables are attributable to numerous customers in various sectors and regions. Default risks in 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 is approximately 49 % 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 group companies are exposed to losses from credit risks if counterparties do not meet their obligations. The resulting risk position is managed by diversifying their counterparties. For example, cash and cash equivalents are only invested at banks with excellent credit ratings. There are no cash and cash equivalents past due or impaired as of the reporting date. The maximum credit risk for cash and cash equivalents corresponds to the carrying amount.

The credit risk position from other financial assets corresponds to the carrying amount of these instruments. The CeramTec Holding Group considers this credit risk to be immaterial as of the reporting date.

The termination option separated from the bond 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 a more favorable opportunity to refinance for the CeramTec Holding Group; as such, there is no actual cash receivable from the banks.

Liquidity risk

Liquidity risk is the risk that the CeramTec group companies will not be able to fulfill their financial obligations when they fall due. The objective of the management of the CeramTec Holding 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 group companies had an undrawn and confirmed credit line of EUR 100,000k as of the reporting date. Furthermore, the CeramTec group companies had cash and cash equivalents of EUR 124,585k of which EUR 56,402k was subsequently used after the reporting date to make early debt service payments on a shareholder loan (see note 4.12).

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 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.

	31 December 2016						
	Carrying amount	2017	2018	2019	2020	2021	> 2021
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Trade payables	22,376	22,376	0	0	0	0	0
Trade payables owed to affiliates	205	205	0	0	0	0	0
Liabilities to banks	664,807	28,373	29,322	27,416	668,157	0	0
Bond liabilities	308,702	25,303	25,303	25,303	25,303	332,003	0
Liabilities to affiliates	154,423	56,538	0	0	0	0	166,255
Finance lease liabilities	1,430	127	199	150	150	150	1,686
Other financial liabilities	3,564	3,564	0	0	0	0	0
Derivatives with a negative fair value							
Interest rate caps	755	448	336	0	0	0	0

	31 December 2015						
	Carrying amount	2016	2017	2018	2019	2020	> 2020
	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR
Trade payables	24,354	24,354	0	0	0	0	0
Liabilities to banks	684,229	31,404	30,913	31,023	31,646	687,451	0
Bond liabilities	307,449	25,303	25,303	25,303	25,303	25,303	332,003
Liabilities to affiliates	144,574	0	0	0	0	0	262,452
Finance lease liabilities	2,032	633	180	155	155	158	1,903
Other financial liabilities	3,615	3,320	109	276	0	0	0
Derivatives with a negative fair value							
Interest rate caps	1,141	448	448	336	0	0	0

Offsetting financial assets against financial liabilities

The USD/EUR currency swaps were entered into on the basis of ISDA Master Agreements, which includes conditional claims to offset financial assets and financial liabilities. These offsetting rights are only legally effective if future events (e.g. insolvency, payment arrears) should occur. As the currency swaps only had positive market values as of the reporting date, derivative assets were not matched with any corresponding liabilities that would have enabled potential offsetting.

Collateral

In connection with the syndicated loan, the assets of the German and American companies were provided as collateral to the extent that the syndicated loan is drawn. CeramTec Service GmbH, CeramTec Acquisition Corporation and CeramTec GmbH are the borrowers of the syndicated loan. In the USA, shares in CeramTec Acquisition Corporation and in CeramTec North America Corporation, all additional assets of CeramTec Acquisition and CeramTec North America Corporation as well as CeramTec GmbH's intellectual property registered in the USA were provided as collateral. In Germany, shares in CeramTec Service GmbH, CeramTec GmbH, CeramTec-ETEC GmbH, Cerasiv GmbH Innovatives Keramik-Engineering and Emil Müller GmbH, all intercompany receivables and bank accounts of CeramTec Group GmbH and CeramTec Service GmbH, all intercompany receivables, insurance receivables and trade receivables as well as bank accounts of CeramTec GmbH, CeramTec-ETEC GmbH, Emil Müller GmbH and Cerasiv GmbH Innovatives Keramik-Engineering were provided as collateral. Furthermore, the intellectual property and land of CeramTec GmbH, CeramTec-ETEC GmbH, Emil Müller GmbH and Cerasiv GmbH Innovatives Keramik-Engineering were provided as collateral for the syndicated loan, or encumbered. The land and building of CeramTec UK Ltd. with a carrying amount of EUR 265k was pledged as collateral for the obligations of the pension plan which was subsequently closed.

Risk from compliance with financial covenants

Compliance with a financial covenant was also agreed to in connection with obtaining the syndicated loan. CeramTec Holding Group must comply with the covenant if the revolving credit line for EUR 100m is drawn by an amount set in the loan agreement.

Capital management

The objective of capital management in the consolidated group is securing liquidity to make investments that increase the value of the organization. Thereifer, the focus is on optimizing cash flows from operating activities as well as repaying liabilities on schedule. Recognized equity of EUR 269,427k (31 December 2015: EUR 284,430k) and liabilities of EUR 1,468,514k (31 December 2015: EUR 1,467,186k) were recognized as of the reporting date. The equity ratio stands at 15.50 % (31 December 2015: 16.24 %).

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 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 consolidated financial statements.

6.3 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 Holding Group. This comprises the management of CeramTec Holding and the supervisory board of CeramTec GmbH.

In the fiscal year, the **general managers** of CeramTec Holding were:

Dr. Ulf-D. Zimmermann (until 14 March 2016)
Chief Executive Officer / HR director

Henri Steinmetz (since 14 March 2016)
Chief Executive Officer / HR director

Dominique Janbon
Chief Financial Officer

Dr. Hadi Saleh
Chief Operating Officer

The members of management received total remuneration (fixed and variable amounts) in the form of short-term employee benefits amounting to EUR 2,250k (previous year: EUR 2,246k) in the fiscal year. The payments for post-employment benefits amount to EUR 206k (previous year: EUR 260k). This amount comprises the service cost for pension obligations and contributions to defined contribution plans. In the fiscal year, former general managers were also granted with termination benefits of EUR 971k (31 December 2015: EUR 370k). Additionally, pension obligations amounted to EUR 460k (31 December 2015: EUR 2,907k) as well as EUR 3,153k (31 December 2015: EUR 2,635k) for former managers.

As part of a management participation program (MPP), the general managers were offered the option to indirectly acquire shares in parent company Faenza Holding S.à.r.l. via Faenza MEP GmbH & Co. KG. These indirect shares were acquired at fair value, which is calculated based on the purchase price for the acquisition of the high-performance ceramics division by the ultimate parent company. The shares primarily enable them to participate in earnings if certain events occur. The Company has no obligations from the management participation program. The MPP is therefore accounted for as equity-settled share-based payments in these consolidated financial statements in accordance with IFRS 2. As the shares were acquired at fair value, no benefits were granted to the general managers. This means that no personnel expenses are incurred if or before the defined events occur.

CeramTec GmbH has a **supervisory board** in accordance with the articles of incorporation.

The total remuneration of the supervisory board in the fiscal year 2016 amounted to EUR 116k (previous year: EUR 76k). In addition, in the fiscal year consultancy fees of EUR 44k (previous year: EUR 114k) were paid to members of the supervisory board.

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 154,423k (31 December 2015: EUR 144,574k), including interest, with a fixed interest rate of 8.255 % p.a. has been obtained from CeramTec Holding’s controlling shareholder, Faenza Luxembourg S.à.r.l., Luxembourg. Interest expenses of EUR 11,894k (previous year: EUR 11,024k) were incurred in the fiscal year 2016. Unpaid interest is added annually to the Company‘s loan balance on 29 August. Interests amounting to EUR 1,399k and EUR 646k were paid in February 2016 and in September 2016. The loan is not secured.

In the fiscal year, Faenza Luxembourg S.à.r.l. charged the CeramTec Holding Group EUR 545k (previous year: EUR 541k) for consultancy services and out-of-pocket expenses, resulting in liabilities to affiliates as of 31 December 2016 of EUR 205k (31 December 2015: receivables from affiliates of EUR 1,022k due to incurred transaction costs charged to Faenza Luxembourg S.à.r.l.).

6.4 Auditor’s fees

Overall, CeramTec Holding’s auditor’s fees for the fiscal years break down as follows:

	2016	2015
	EUR k	EUR k
Audit services	464	471
Audit-related services	108	725
Other professional services	34	69
Total	**606**	**1,265**

6.5 Subsequent events

On 4 January 2017, prorated debt service payments of EUR 56,538k were made to Faenza Luxembourg S.à.r.l., Luxembourg, on a shareholder loan which had been granted, and comprises a non-current liability of EUR 56,402k as of 31 December 2016 (see note 4.12) plus interest of EUR 136k which accrued in 2017.

On 21 February 2017, CeramTec UK Ltd., Colyton, UK, acquired assets, net of liabilities, of the UK electro-ceramics business, comprising two manufacturing sites, from Morgan Advanced Materials plc.

No further events occurred which must be reported.

7 Reconciliation to CeramTec Group GmbH

If the consolidated statement of comprehensive income of CeramTec Group had been prepared instead of the consolidated statement of comprehensive income of CeramTec Holding, which is presented in these financial statements, this would have resulted in the following changes for the fiscal year:

- Lower general administrative expenses of EUR 185k (previous year: EUR 296k)
- Lower interest expenses of EUR 11,891k (previous year: EUR 11,024k)
- Higher interest income of EUR 9,162k (previous year: EUR 3,019k)
- Higher tax expenses of EUR 35k (previous year: EUR 59k)
- Higher expenses for profit/loss transfers of EUR 137,385k (previous year: income of EUR 103,053k)

The total comprehensive income of CeramTec Group would therefore have been EUR 116,182k lower (previous year: EUR 117,333k higher) compared to the total comprehensive income recognized in these financial statements.

If the consolidated statement of financial position of CeramTec Group had been prepared instead of the consolidated statement of financial position of CeramTec Holding, which is presented in these financial statements, this would have resulted in the following changes as of 31 December 2016:

- Higher receivables from affiliates of EUR 19,272k (31 December 2015: EUR 144,764k)
- Lower cash of EUR 0k (31 December 2015: EUR 25k)
- Lower trade payables of EUR 53k (31 December 2015: EUR 298k)
- Lower financial liabilities to affiliates of EUR 154,423k (31 December 2015: EUR 144,574k)
- Higher tax payable of EUR 476k (31 December 2015: EUR 441k)

This would have resulted in a EUR 173,294k (31 December 2015: EUR 289,477k) higher level of group equity for the CeramTec Group compared to the group equity recognized in these financial statements.

There would have been no impact on the consolidated statement of cash flows if the consolidated statement of cash flows of CeramTec Group had been prepared instead of the consolidated statement of cash flows presented in these financial statements.

Plochingen, 15 March 2017

CeramTec Holding GmbH

The management

Henri Steinmetz Dominique Janbon Dr. Hadi Saleh

The following independent auditors' report (Bestätigungsvermerk) has been issued in accordance with § 322 German Commercial Code (Handelsgesetzbuch) in German language on the German version of the consolidated financial statements of CeramTec Holding GmbH, Plochingen, for the year ended 31 December 2016 and the group management report. The group management report is not included in the version of the consolidated financial statements to be submitted to the administrative agent.

Independent Auditors' Report

We have audited the consolidated financial statements prepared by CeramTec Holding GmbH, Plochingen/ Germany—comprising the balance sheet, the statement of comprehensive income, the cash flow statement, the statement of changes in equity, and the notes to the consolidated financial statements—and the group management report for the year ended 31 December 2016. The preparation of the consolidated financial statements and the group management report in accordance with International Financial Reporting Standards (IFRS), as applicable in the EU, and German commercial law as complementarily applicable under Section 315a (1) German Commercial Code (HGB) is the responsibility of the Company's management. Our responsibility is to express an opinion on the consolidated financial statements and the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with Section 317 German Commercial Code (HGB) and German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with applicable accounting rules and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the consolidated group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a sample basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the management, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements of CeramTec Holding GmbH, Plochingen/Germany, comply with IFRS, as applicable in the EU, and German commercial law as complementarily applicable under Section 315a (1) German Commercial Code (HGB) and give a true and fair view of the net assets, financial position and results of operations of the consolidated group in accordance with these regulations. The group management report is consistent with the consolidated financial statements, complies with the legal requirements and as a whole provides a suitable view of the consolidated group's position and suitably presents the opportunities and risks of future development.

Stuttgart/Germany, 15 March 2017

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Signed: (Gillar) Wirtschaftsprüferin German Public Auditor	Signed: (Röscheisen) Wirtschaftsprüfer German Public Auditor

CeramTec Holding GmbH

Unaudited Interim Condensed Consolidated Financial Statements of CeramTec Holding GmbH as of and for the nine months ended September 30, 2017

CeramTec Holding GmbH

Unaudited Interim Condensed Consolidated Financial Statements of CeramTec Holding GmbH as of and for the nine months ended September 30, 2017

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CeramTec Holding GmbH, Plochingen

Interim condensed consolidated statement of comprehensive income from 1 January to 30 September 2017

	Notes	1 January to 30 September 2017	1 January to 30 September 2016
		EUR k	EUR k
Revenue	3.1	419,735	376,374
Cost of sales	3.2	236,676	224,655
Gross profit		**183,059**	**151,719**
Selling costs	3.3	60,946	70,431
Research and development costs	3.4	15,375	17,797
General administrative costs	3.5	16,670	16,331
Other income and expenses (-), net	3.6	1,796	-26
Operating income		**91,864**	**47,134**
Interest income and other finance income		4,390	5,211
Interest expenses and other finance costs		57,933	53,794
Financial result	3.7	**-53,543**	**-48,583**
Profit / loss (-) before income tax		**38,321**	**-1,449**
Income tax expense (-)		-13,946	-6,012
Net profit / net loss (-) for the period		**24,375**	**-7,461**
Items that will not be reclassified through profit or loss			
Income / expenses (-) from the remeasurement of defined benefit plans		2,949	-19,342
Deferred taxes		-582	5,543
		2,367	**-13,799**
Items that may be reclassified subsequently to profit or loss			
Losses (-) / gains on cash flow hedges		-1,497	-915
Deferred taxes		408	262
		-1,089	**-653**
Exchange differences on translation of foreign operations		-7,902	-1,868
Other comprehensive loss, net of income tax		**-6,624**	**-16,320**
Total comprehensive income / loss (-)		**17,751**	**-23,781**

CeramTec Holding GmbH, Plochingen

Interim condensed consolidated statement of financial position as at 30 September 2017

Assets	Notes	30 September 2017	31 December 2016
		EUR k	EUR k
Goodwill		570,057	557,961
Other intangible assets	4.1	550,528	557,421
Property, plant and equipment	4.2	263,715	275,532
Other financial assets	4.3	11,436	72,484
Other assets	4.4	678	711
Deferred tax assets		1,232	851
Non-current assets		**1,397,646**	**1,464,960**
Inventories		86,777	76,904
Trade receivables	4.5	61,293	53,553
Income tax receivables		1,909	1,281
Other financial assets	4.3	27,436	12,390
Other assets	4.4	5,079	4,268
Cash and cash equivalents	4.6	17,037	124,585
Current assets		**199,531**	**272,981**
Total Assets		**1,597,177**	**1,737,941**

Equity and Liabilities	Notes	30 September 2017	31 December 2016
		EUR k	EUR k
Issued capital		25	25
Capital reserves		378,148	378,148
Accumulated losses		-92,650	-119,392
Accumulated other comprehensive income		1,655	10,646
Equity		**287,178**	**269,427**
Provisions for pension obligations		97,811	102,410
Other provisions		6,224	10,636
Financial liabilities to affiliates	4.7	54,234	98,021
Financial liabilities to third parties	4.8	663,569	927,004
Other liabilities		30	0
Deferred tax liabilities		146,898	156,258
Non-current liabilities		**968,766**	**1,294,329**
Other provisions		19,472	16,425
Provision for taxes		10,105	2,790
Financial liabilities to affiliates	4.7	0	56,402
Financial liabilities to third parties	4.8	274,370	62,529
Trade payables		23,588	22,376
Trade payables to affiliates		125	205
Other liabilities	4.9	13,573	13,458
Current liabilities		**341,233**	**174,185**
Total liabilities		**1,309,999**	**1,468,514**
Total equity and liabilities		**1,597,177**	**1,737,941**

CeramTec Holding GmbH, Plochingen

Interim condensed consolidated statement of cash flows for the period ended 30 September 2017

	1 January to 30 September 2017	1 January to 30 September 2016
	EUR k	EUR k
Net profit / net loss (-) for the period	24,375	-7,461
Income tax expense	13,946	6,012
Interest result	46,636	53,741
Amortisation, depreciation and impairment charges of non-current assets	62,716	62,823
Gain on disposal of property, plant and equipment	-3,180	-15
Increase / decrease (-) in provisions (excluding deferred taxes)	-4,314	8,092
Income tax refund / payment (-)	-17,024	-10,868
Other non-cash income (-) / expenses, net	2,968	-5,232
Increase (-) / decrease in inventories	-6,790	738
Increase (-) / decrease in trade receivables	-4,627	-8,698
Increase (-) / decrease in other receivables and (financial) assets	-2,545	1,514
Increase / decrease (-) in trade payables	-17	-2,601
Increase / decrease (-) in other (financial) liabilities	1,644	3,652
Cash flow from operating activities	**113,788**	**101,697**
Cash received from disposals of property, plant and equipment	3,402	287
Cash paid (-) for investments in property, plant and equipment	-14,580	-10,736
Cash received from grants	0	139
Cash paid (-) for investments in intangible assets	-467	-343
Cash paid (-) for the acquisition of production sites	-55,485	0
Cash flow from investing activities	**-67,130**	**-10,653**
Repayment (-) of syndicated loan	-27,775	-21,652
Interest paid (-)	-49,874	-47,110
Cash received from drawing of revolver loan	22,000	0
Repayment of shareholder loan	-97,620	0
Cash flow from financing activities	**-153,269**	**-68,762**
Change in cash and cash equivalents	-106,611	22,282
Net foreign exchange difference	-937	-471
Cash and cash equivalents at the beginning of the period	124,585	86,476
Cash and cash equivalents at the end of the period	**17,037**	**108,287**

CeramTec Holding GmbH, Plochingen

Interim condensed consolidated statement of changes in equity for the period ended 30 September 2017

	Issued capital	Capital reserves	Accumulated losses	Accumulated other comprehensive income: Difference from currency translation	Accumulated other comprehensive income: Difference from currency translation	Equity
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
31 December 2015	**25**	**378,148**	**-103,171**	**1,629**	**7,799**	**284,430**
Net loss for the period	0	0	-7,461	0	0	-7,461
Other comprehensive loss	0	0	-13,799	-653	-1,868	-16,320
Total comprehensive loss	*0*	*0*	*-21,260*	*-653*	*-1,868*	-23,781
30 September 2016	**25**	**378,148**	**-124,431**	**976**	**5,931**	**260,649**
31 December 2016	**25**	**378,148**	**-119,392**	**1,798**	**8,848**	**269,427**
Net income for the period	0	0	24,375	0	0	24,375
Other comprehensive income / loss (-)	0	0	2,367	-1,089	-7,902	-6,624
Total comprehensive income / loss (-)	*0*	*0*	*26,742*	*-1,089*	*-7,902*	17,751
30 September 2017	**25**	**378,148**	**-92,650**	**709**	**946**	**287,178**

CeramTec Holding GmbH

Plochingen

Selected explanatory notes to the Interim Condensed Consolidated Financial Statements for the period ended 30 September 2017

CeramTec Holding GmbH

Selected explanatory notes to the Interim Condensed Consolidated Financial Statements

1 General

1.1 Corporate information and purpose of the Company

The purpose of CeramTec Holding GmbH (hereinafter “CeramTec Holding”) 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.

The subsidiaries of CeramTec Holding are global leaders in the development, production and sale of assemblies, components and parts made from high performance ceramic materials. The Companies’ work closely with customers to develop and supply high performance ceramics products, efficiently, at scale, in compliance with all relevant industry standards. High performance ceramics are highly specialized materials that offer superior mechanical, electrical, thermal and biochemical properties compared to alternatives such as metals or organic polymers. Due to their unique material properties, high performance ceramics products are used in mission-critical applications across all areas of human activity and across technology sectors, including orthopedic implants, medical equipment, automotive, aerospace and defence, electronics, industrial machinery and other.

CeramTec Holding’s registered office is located at CeramTec-Platz 1-9 in 73207 Plochingen, Germany. CeramTec Holding is the parent company of the Group (“CeramTec Holding Group”) and at the same time the ultimate parent.

The management of CeramTec Holding approved the interim condensed consolidated financial statements for the period ended 30 September 2017 on 10 November 2017.

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 Holding GmbH’s annual consolidated financial statements as of 31 December 2016.

The interim condensed consolidated financial statements give a true and fair view of the the results of operations and financial position of the CeramTec Holding 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.

For the purpose of clarity, various items in the statement of financial position and statement of comprehensive income were combined and explained accordingly in the selected explanatory notes to the 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 or settled within twelve months from the reporting date. The expense recognized in profit or loss is presented according to 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

In accordance with the purchase agreement signed on 21 February 2017 CeramTec UK Ltd., Colyton, UK, acquired assets, net of liabilities, of the UK electro-ceramics business from Morgan Advanced Materials plc., Stourport-on-Severn, UK effective on 3 April 2017 (transfer of ownership). We paid a total cash consideration of EUR 55,485k in April and June 2017. The business acquisition was accounted for using the acquisition method.

The UK electro-ceramics business, comprising two manufacturing sites, is a manufacturer of highly specialised piezoelectric and dielectric components that enhance the reliability and performance of customers’ products in the most technically challenging applications. The business is focused on the Lead Zirconate Titanate and dielectric market and has the widest range of products available for polycrystalline piezo and dielectric applications across core target markets.

The combined and complementary piezo-ceramic businesses of UK electro-ceramics business and CeramTec creates a new international leader in piezo and electrical ceramics with an even stronger and more resilient business for the future.

The preliminary fair values of the acquired assets, net of liabilities were as follows:

	Fair Value
	EUR k
Patents and other intellectual property	18,020
Customer relationships	10,329
Other intangible assets	735
Intangible Assets	**29,084**
Buildings and improvements	829
Machinery and equipment	5,815
Property, plant & equipment	**6,644**
Inventories	3,084
Trade receivables	3,113
Other assets	5
Assets	**41,930**
Deferred tax liability	59
Other provisions and liabilities	558
Trade payables	1,926
Liabilities	**2,543**
Total net	39,387
Total consideration transferred	55,485
Goodwill from the acquisition	**16,098**

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 UK electro-ceramics business, included amounts in relation to benefit or expected synergies, revenue growth and future market developments. These benefits are not recognised separately from goodwill because they do not meet the recognition criteria of identifiable intangible assets.

The costs associated with the acquisition amounted to EUR 1,328k. These are recognized in the consolidated statement of comprehensive income under the item "other income and expenses (-), net".

Included in the revenue and net profit for the period are EUR 14,304k and EUR 1,911k, net of acquisition costs. Had this acquisition been effective at 1 January 2017, the revenue and net profit for the year would have been increased by EUR 20,712k, and EUR 2,774k, respectively.

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.

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 2016.

Foreign currency translation

The exchange rates of significant currencies used for the currency translation to the euro are as follows:

		30 Sep 2017 Period-end exchange rate	1 Jan to 30 Sep 2017 Average exchange rate	31 Dec 2016 Period-end exchange rate	1 Jan to 30 Sep 2016 Average exchange rate
USD	USA	1.1806	1.1132	1.0541	1.1158
CNY	China	7.8534	7.5721	7.3202	7.3432
GBP	UK	0.8818	0.8725	0.8562	0.8022
PLN	Poland	4.3042	4.2648	4.4103	4.3588
CZK	Czech Republic	25.9810	26.5530	27.0210	27.0361

Adoption of amended and new standards and interpretations: Changes in accounting policies due to first-time adoption of revised and new IFRS and IFRIC

The following amended IFRSs was adopted for the first time in the fiscal year:

Standards and Interpretations	Effective date
Annual Improvements Project (2014 – 2016) for IFRS 12	1 January 2017

These amendments did not have a material impact on the interim condensed consolidated financial statements.

Not yet compulsory and newly issued IFRSs and IFRIC

Adoption of the following 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. These new or amended standards and interpretations noted below were not adopted early during the period ended 30 September 2017.

Standards and Interpretations	Effective date
Amendments to IFRS 10 and IAS 28: "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"	date not yet determined
IFRS 14: "Accounting for Regulatory Deferral Accounts"	1 January 2016
Amendments to IAS 7: "Disclosure Initiative"	1 January 2017
Amendments to IAS 12: "Recognition of Deferred Tax Assets for Unrealised Losses"	1 January 2017
IFRS 9: "Financial Instruments"	1 January 2018
IFRS 15: "Revenue from Contracts with Customers"	1 January 2018
Amendments to IFRS 2: "Classification and Measurement of Share-based Payment Transactions"	1 January 2018
Amendments to IFRS 4: "Applying IFRS 9 with IFRS 4"	1 January 2018
IFRIC 22: "Foreign Currency Transactions and Advance Consideration"	1 January 2018
Amendments to IAS 40: "Transfers of Investment Property"	1 January 2018
Annual Improvements Project (2014 – 2016) for IFRS 1 and IAS 28	1 January 2018
IFRS 16:" Leases"	1 January 2019
IFRIC 23: "Recognition of Deferred Tax Assets for Unrealised Losses"	1 January 2019
IFRS 17: "Insurance Contracts"	1 January 2021

No material impact is expected on the consolidated financial statements and related disclosure due to these amendments. However, our assessment of IFRS 16 is not finalized.

3 Notes to the interim condensed consolidated statement of comprehensive income

3.1 Revenue

Revenue results primarily from the sale of goods and merchandise. Revenue breaks down into regions according to invoice address and businesses as follows:

	1 January to 30 September 2017	1 January to 30 September 2016
	EUR k	EUR k
Regions		
Europe	187,171	162,702
Germany	102,479	102,539
North America	62,799	54,323
Asia	54,171	45,031
Rest of world	13,115	11,779
Total	**419,735**	**376,374**
Businesses		
Industrial	264,524	234,555
Medical products	155,211	141,819
Total	**419,735**	**376,374**

3.2 Cost of sales

The cost of sales break down as follows:

	1 January to 30 September 2017	1 January to 30 September 2016
	EUR k	EUR k
Material and packaging costs	79,774	67,369
Amortization and depreciation	37,272	37,772
Personnel expenses	87,718	85,073
Other cost of sales	31,912	34,441
Total	**236,676**	**224,655**

Other cost 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 primarily contain personnel expenses.

3.5 General administrative costs

General administrative costs primarily contain personnel expenses.

3.6 Other income and expenses (-), net

Other income and expenses (-), net break down as follows:

	1 January to 30 September 2017	1 January to 30 September 2016
	EUR k	EUR k
Foreign currency results	66	-303
Additions to allowance for bad debts	-112	-28
Income from the reversal of allowances for bad debt	12	56
Gains / losses (-) on disposal of property, plant and equipment	16	15
Gains / losses (-) on disposal of assets held for sale	3,164	0
Acquisition costs	-1,328	0
Sundry other income	238	437
Sundry other expenses	-260	-203
Total	**1,796**	**-26**

The property of CeramTec UK Ltd. located in Colyton was reclassified to assets held for sale with a book value of EUR 258k as at 31 March 2017. It was subsequently sold in June 2017 resulting in a gain on disposal of EUR 3,164k

The acquisition costs occurred within the purchase process of assets, net of liabilities, of the UK electro-ceramics business, comprising two manufacturing sites, from Morgan Advanced Materials plc., Stourport-on-Severn, UK (please refer to 1.3).

3.7 Financial result

The financial result breaks down as follows:

	1 January to 30 September 2017	1 January to 30 September 2016
	EUR k	EUR k
Interest income and other finance income		
Gains on derivative valuations	0	4,006
Exchange rate gains	4,266	1,159
Other interest income	124	46
Total interest income and other finance income	**4,390**	**5,211**
Interest expenses and other finance costs		
Interest expense from syndicated loan	16,003	19,546
Interest expense from revolving credit line	656	381
Interest expense from bond	18,977	18,977
Interest expense from effective interest method	4,374	4,304
Interest expense from shareholder loans	5,263	8,765
Losses on derivative valuations	11,123	0
Other interest expenses	1,537	1,821
Total interest expenses and other finance costs	**57,933**	**53,794**
Total financial result	**-53,543**	**-48,583**

4 Notes to the interim condensed consolidated statement of financial position

4.1 Other intangible assets

During the reporting period, CeramTec Holding Group recognized amortization expenses in the amount of EUR 34,131k (1 January to 30 September 2016: EUR 33,730k), which arise mainly from customer relationships and technology.

CeramTec Holding Group purchased intangible assets at cost of EUR 467k (1 January to 30 September 2016: EUR 343k).

4.2 Property, plant and equipment

During the reporting period, CeramTec Holding Group purchased assets at cost of EUR 13,779k (1 January to 30 September 2016: EUR 8,238k), from which no subsidies are deducted.

The recognized depreciation expenses amount to EUR 28,585k (1 January to 30 September 2016: EUR 29,093k).

There were contractual commitments to acquire property, plant and equipment of EUR 11,155k as of the reporting date (31 December 2016: EUR 2,702k).

4.3 Other financial assets

The following table breaks down other financial assets as follows:

	30 September 2017	31 December 2016
	EUR k	EUR k
Other financial assets (non-current)		
Derivative financial instruments	0	47,907
Separated termination rights	11,320	24,459
Insurance claims	116	118
Total	**11,436**	**72,484**
Other financial assets (current)		
Derivative financial instruments	25,578	12,212
Other financial assets	1,858	178
Total	**27,436**	**12,390**

4.4 Other assets/other receivables and assets

The following table breaks down other assets / other receivables and assets as follows:

	30 September 2017	31 December 2016
	EUR k	EUR k
Other non-current assets		
Accrued finance costs for the revolving credit line	0	312
Other assets	678	399
Total	**678**	**711**
Other current assets		
VAT receivables	444	992
Receivables from energy tax refunds	1,367	866
Deferred finance costs for the revolving credit line	431	471
Sundry assets	2,837	1,939
Total	**5,079**	**4,268**

Sundry current assets primarily contain prepayments, e.g. for insurances and for trade fairs.

4.5 Trade receivables

At the end for the reporting period, trade receivables amounted to EUR 61,293k (31 December 2016: EUR 53,553k) after taking into account impairment losses of EUR 605k (31 December 2016: EUR 535k).

The amount of trade receivables increased due to higher sales volumes during the reporting period compared with the end of the previous year, which is a result of seasonality.

The value of trade receivables before impairment breaks down as follows:

	30 September 2017	31 December 2016
	EUR k	EUR k
Gross amount (before impairment)	**61,898**	**54,088**
thereof not yet due on the reporting date	52,616	43,878
thereof past due on the reporting date	9,282	10,210

The gross amount of receivable of EUR 11,688k was sold to PB Factoring GmbH according to the factoring agreement signed end of June 2017.

4.6 Cash and cash equivalents

Cash and cash equivalents contain bank balances of EUR 17,009k (31 December 2016: EUR 124,557k and cash on hand of EUR 28k (31 December 2016: EUR 28k).

4.7 Financial liabilities to affiliates

Financial liabilities to affiliates was comprised of a loan payable to Faenza Luxembourg S.à.r.l, Luxembourg, of EUR 54,234k (31 December 2016: EUR 154,423k), and the following table breaks down the non-current and current portions of the loan by their maturity:

	30 September 2017	31 December 2016
	EUR k	EUR k
Non-current financial liabilities		
Loan payable	53,844	98,021
Accrued interest	390	0
	54,234	**98,021**
Current financial liabilities		
Loan payable	0	52,830
Accrued interest	0	3,572
	0	**56,402**
Total	**54,234**	**154,423**

The loan increases every year on 29 August by the amount of incurred expenses for interest which is unpaid.

4.8 Financial liabilities to third parties

The financial liabilities to third parties are broken down as follows:

	30 September 2017	31 December 2016
	EUR k	EUR k
Non-current financial liabilities		
Liabilities to banks	356,793	618,791
Liabilities from the bond	300,229	299,214
Derivative financial instruments	5,274	7,490
Finance lease liabilities	1,273	1,404
Purchase price for technology	0	105
Total	**663,569**	**927,004**
Current financial liabilities		
Liabilities to banks	262,029	46,016
Liabilities from the bond	3,163	9,489
Derivative financial instruments	3,447	3,540
Discounts and bonuses	3,549	1,855
Finance lease liabilities	10	26
Other current financial liabilities	2,172	1,603
Total	**274,370**	**62,529**

4.9 Other liabilities

Other liabilities break down as follows:

	30 September 2017	31 December 2016
	EUR k	EUR k
Other current liabilities		
Wages and salaries including taxes	8,117	6,261
Real estate transfer tax	2,087	4,151
Other current liabilities	3,369	3,046
Total	**13,573**	**13,458**

4.10 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 IAS 39.

	30 September 2017		
	Measurement category of IAS 39[1]	Carrying amount	Fair value
		EUR k	EUR k
Financial assets			
Cash and cash equivalents	LaR	17,037	17,037
Trade receivables	LaR	61,293	61,293
Other financial assets	LaR	1,974	1,974
Separated termination rights—HfT	FVtPL	11,320	11,320
Currency swaps in effective hedges	Hedge	25,578	25,578
Total		**117,202**	**117,202**
Financial liabilities			
Bond liabilities	FLAC	303,392	322,096
Liabilities to banks	FLAC	618,822	623,834
Trade payables	FLAC	23,588	23,588
Finance lease liabilities	FLAC	1,283	1,283
Trade payables owed to affiliates	FLAC	125	125
Other financial liabilities	FLAC	5,721	5,721
Liabilities to affiliates	FLAC	54,234	55,433
Separated interest rate floors—HfT	FVtPL	8,258	8,258
Interest rate cap—HfT	FVtPL	438	438
Currency swaps in effective hedges	Hedge	25	25
Total		**1,015,886**	**1,040,801**

[1] HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortized cost; hedge: hedge accounting

	31 December 2016		
	Measurement category of IAS 39[1]	Carrying amount	Fair value
		EUR k	EUR k
Financial assets			
Cash and cash equivalents	LaR	124,585	124,585
Trade receivables	LaR	53,553	53,553
Other financial assets	LaR	296	296
Separated termination rights—HfT	FVtPL	24,459	24,459
Currency swaps in effective hedges	Hedge	60,119	60,119
Total		**263,012**	**263,012**
Financial liabilities			
Bond liabilities	FLAC	308,702	325,746
Liabilities to banks	FLAC	664,807	672,864
Trade payables	FLAC	22,376	22,376
Finance lease liabilities	FLAC	1,430	1,430
Trade payables owed to affiliates	FLAC	205	205
Other financial liabilities	FLAC	3,564	3,563
Financial liabilities to affiliates	FLAC	154,423	157,377
Separated interest rate floors—HfT	FVtPL	10,275	10,275
Interest rate cap—HfT	FVtPL	755	755
Total		**1,166,537**	**1,194,591**

[1] HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortized cost; hedge: hedge accounting

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:** Quoted (unadjusted) market prices in active markets for identical assets or liabilities for the Company on the measurement date

- **Level 2:** Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly

- **Level 3:** Non-observable 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 2017		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Currency swaps in effective hedges	0	25,578	0
Separated termination rights—HfT	0	11,320	0
Financial liabilities			
Separated interest rate floors—HfT	0	8,258	0
Interest rate caps—HfT	0	438	0
Currency swaps in effective hedges	0	25	0

	31 December 2016		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Currency swaps in effective hedges	0	60,119	0
Separated termination rights—HfT	0	24,459	0
Financial liabilities			
Separated interest rate floors—HfT	0	10,275	0
Interest rate cap—HfT	0	755	0

The following table shows the fair value hierarchy for the financial instruments that are not recognized at fair value in the interim condensed consolidated financial statements. It does not include the fair values for financial instruments such as short-term trade receivables and other financial assets as well as trade payables and other financial liabilities as their carrying amounts are a reasonable approximation of fair values:

	30 September 2017		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial liabilities			
Bond liabilities	322,096	0	0
Liabilities to banks	0	623,834	0
Financial liabilities to affiliates	0	55,433	0
Finance lease liabilities	0	1,283	0

	31 December 2016		
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial liabilities			
Bond liabilities	325,746	0	0
Liabilities to banks	0	672,864	0
Financial liabilities to affiliates	0	157,377	0
Finance lease liabilities	0	1,430	0

The fair value of the publicly listed bond corresponds to the nominal value multiplied by the market value at the reporting date. 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 in 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 (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.

Currency swaps are measured on the basis of a discounted cash flow method, which takes into account the observable mid closing rates, yield curves and currency spreads between currencies. All currency swaps had a positive market value as of the end of the reporting period. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement of the currency swaps 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 (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 in the interim condensed consolidated financial statements on a recurring basis, the CeramTec Holding 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 consolidated 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.

An amount of EUR 11,688k of trade receivable was sold to PB Factoring GmbH according to the factoring agreement signed end of June 2017. The receipt of the proceeds from the factor was treated as an operating cash flow.

The cash flow from investing activities includes the purchase price payment of EUR 55,485k for assets, net of liabilities, of the UK electro-ceramics business (please refer to 1.3). No cash and cash equivalents were taken over.

During the period 1 January to 30 September 2017, CeramTec Holding Group purchased property, plant and equipment valued at EUR 1,201k (1 January to 30 September 2016: EUR 646k) on account; therefor, are not included in cash flows from investing activities.

During the period 1 January to 30 September 2017, CeramTec Holding Group paid EUR 2,003k (1 January to 30 September 2016: EUR 3,145k) 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.

During the reporting period no government grants were recognized.

6 Other notes

6.1 Contingent liabilities

Consistent with comparative period, there were no material contingent liabilities as of 30 September 2017. The entities within the consolidated group are involved as parties in a number of lawsuits. These proceedings are linked to business activities and mainly relate to commercial, product liability and environmental litigations. 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 consolidated financial statements.

6.2 Related Party disclosures

Key management personnel

Henri Steinmetz
Chief Executive Officer / HR director

Dominique Janbon
Chief Financial Officer

Dr. Hadi Saleh
Chief Operating Officer / Medical Products

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 54,234k (31 December 2016: EUR 154,423k), including interest, with a fixed interest rate of 8.255% has been obtained from CeramTec Holding's controlling shareholder, Faenza Luxembourg S.à.r.l., Luxembourg. On 4 January 2017 and 10 July 2017, partial payments of EUR 105,452k (thereof loan repayment of EUR 97,620k and interest payments of EUR 7,832k) were made. The loan is not secured.

Interest expenses of EUR 5,263k was accrued in the reporting period ended 30 September 2017 (1 January to 30 September 2016: EUR 8,765k). Unpaid interest is added annually to the Company's loan balance as of 29 August.

CeramTec Service GmbH closed a Service Agreement with Faenza Luxembourg S.à.r.l., Luxembourg on 10 March 2014. Expenses for services of EUR 395k were booked during the reporting period ended 30 September 2017 (1 January to 30 September 2016: EUR 382k). The unpaid amount of EUR 125k (31 December 2016: EUR 205k) is shown as trade payables to affiliates.

In the fiscal year, no transaction costs were charged by CeramTec Holding Group to Faenza Luxembourg S.à.r.l. (1 January to 30 September 2016: EUR 48k). There were no payments made by Faenza Luxembourg S.à.r.l in the reporting period (1 January to 30 September 2016: EUR 796k).

6.3 Subsequent events

On 11 October 2017 CeramTec announced that a consortium led by funds advised by leading private equity firm BC Partner, had reached an agreement to acquire CeramTec Group from its current owner Cinven. The Public Sector Pension Investment Board and Ontario Teachers' Pension Plan both hold a stake in the consortium. The acquisition is subject to approval by anti-trust and foreign investment authorities.

7 Reconciliation to CeramTec Group GmbH

If the interim condensed consolidated statement of comprehensive income of CeramTec Group GmbH had been prepared instead of the interim condensed consolidated statement of comprehensive income of CeramTec Holding, 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 191k (1 January to 30 September 2016: EUR 175k)
- higher interest income and other finance income of EUR 7,324k (1 January to 30 September 2016: EUR 6,748k)
- lower interest expenses and other finance costs of EUR 4,531k (1 January to 30 September 2016: EUR 8,762k)
- higher tax expenses of EUR 39k (1 January to 30 September 2016: EUR 36k)

The total comprehensive income of CeramTec Group GmbH would therefore have been EUR 12,007k higher (1 January to 30 September 2016: EUR 15,649k higher) compared to the total comprehensive income recognized in these financial statements.

If the interim condensed consolidated statement of financial position of CeramTec Group GmbH had been prepared instead of the interim condensed consolidated statement of financial position of CeramTec Holding, which is presented in these financial statements, this would have resulted in the following changes as of 30 September 2017 (31 December 2016):

- higher financial receivables to affiliates of EUR 131,482k (31 December 2016: EUR 19,273k)
- lower financial liabilities to affiliates of EUR 54,234k (31 December 2016: EUR 154,423k)
- lower financial liabilities to third parties of EUR 101k (31 December 2016: EUR 22k)
- lower trade payables of EUR 0k (31 December 2016: EUR 53k)
- higher income tax payables of EUR 515k (31 December 2016: EUR 476k)

This would have resulted in a EUR 185,302k (31 December 2016: EUR 173,295k) 4group equity for the CeramTec Group GmbH compared to the group equity recognized in these financial statements.

There would have been no significant impact on the interim condensed consolidated statement of cash flows if the interim condensed consolidated statement of cash flows of CeramTec Group GmbH had been prepared instead of the interim condensed consolidated statement of cash flows of CeramTec Holding presented in these financial statements.

Plochingen, 10 November 2017

CeramTec Holding GmbH

The management

Henri Steinmetz Dominique Janbon Dr. Hadi Saleh

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PRELIMINARY OFFERING MEMORANDUM

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€406,000,000 % Senior Notes due 2025

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