Sales and Distribution (SD)

This document is intended to help instructors understand the case study process and manage the learning process in and outside the classroom. The main focus lies on prerequisites and common tasks such as testing and trouble-shooting.

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| Product  SAP S/4HANA 2020  Global Bike  Fiori 3.0  Level  Instructor  Focus  Sales and Distribution  Author  Stefan Weidner  Chris Reich  Version  4.1  Last Update  June 2022 | MOTIVATION  Theoretical lectures explain concepts, principles, and theories through reading and discussion. Therefore, they enable students to acquire knowledge and gain theoretical insights.  In contrast, case studies allow them to develop their abilities to analyze enterprise problems, learn and develop possible solutions, and make sound decisions.  The main objective of the Global Bike case studies in general is for students to understand the concept of integration. These descriptive and explanatory case studies will allow students to understand the importance and the advantages of integrating enterprise areas using an S/4HANA system. |  | The main goal of this document is to help instructors prepare the SAP system for the Sales and Distribution case study process and to support them trouble-shoot problems that might occur during the course.  Beside technical and didactic prerequisites, the lecturer notes list SAP transactions for testing and correcting student results in the SAP system. In addition, this document describes common problems and explains their reason and solution. |



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|  | Prerequisites | |
| **Note** Before using this case study in your classroom, please make sure that all technical (month-end closing, user management etc.) and didactic prerequisites are fulfilled. Such prerequisites are briefly pointed out below. Detailed documentation can be displayed at and downloaded from the *Learning Hub of SAP UA* or the *UCC websites*. | | |
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| **Technical Prerequisites** | |  |
| The Sales and Distribution case study is based on a standard SAP S/4HANA client with the current Global Bike dataset. Before processing the case study on your own or with your students, all general settings should be checked. | |  |
| Note: With the current version of the Global Bike client, a **year-end closing** is not necessary, because it has already been automated or because it is not needed for the process described in the curriculum material. | | ~~Year-end closing~~ |
| **User accounts** in the SAP system need to be created or unlocked. | | User management |
| These student user accounts should end with a three-digit numeric number (e.g. LEARN-001, LEARN-002 etc.). This number will be represented by ### in the case study and helps differentiate customer accounts, products etc. | |  |
| In an SAP S/4HANA Global Bike client, 1000 user accounts from **LEARN-000** to **LEARN-999** already exist. These users need to be unlocked. The initial password for each LEARN-### account is set to **tlestart**. | | LEARN-000  to LEARN-999  tlestart |
| Transaction **ZUSR** was developed in the Global Bike client in order to mass maintain SAP user accounts. For a detailed description of this and SAP standard transactions for user management (**SU01** and **SU10**) please refer to the *lecturer notes* *“User Management“* (see: current Global Bike curriculum 🡪 Chapter 99 – Instructor Tools). | | ZUSR  SU01  SU10 |
| All LEARN-### user accounts have been assigned to the role *Z\_UCC\_GBI\_SCC* and have authorizations to use all applicative transactions in the SAP S/4HANA system. The role allows access to all transactions necessary for Global Bike exercises and case studies. If you need access to system-critical transactions, i.e. for development purposes, you may assign the composite profile *SAP\_ALL* to your student accounts. | |  |
| It is useful for the instructor to have a user account available for testing that has the same authorizations as the student accounts. You may use the predefined instructor account **LEARN-000** for this purpose.  Since the development language of the Introduction to S/4HANA with Global Bike curriculum is English, all LEARN-### users have an American localization. Therefore, before carrying out the case study, please remember to adapt the display formats used (time format, decimal format and date format) to the format used in Germany. Detailed instructions on how to do this can be found in the module "99 Instructor Tools". | | Instructor account  LEARN-000 |
| **Didactic Prerequisites** | |  |
| In order to successfully process this case study, students should be familiar with the **Navigation** in SAP systems, especially the SAP Fiori Launchpad, the SAP transaction concept as well as possible documentation and help options. We highly recommend using the *navigation slides* and the *navigation course* (see: current Global Bike curriculum 🡪 Chapter 2 – Navigation). | | Navigation |
| In addition, it has been proven beneficial that students have a thorough understanding of the **historic background** and the enterprise structure of the Global Bike concern before they start working on the SAP system. For this purpose we recommend the *case study* *„Global Bike Group“* (see: Chapter 3 – Global Bike Story). | | Background |
| Because the case study is not based on the exercises, it is not necessary to have processed the SD exercises before you start with the case study. However, it is recommended. | |  |
| In order to function properly, this case study needs a **Global Bike-Version** that is equal to or higher than the case study version (see cover page). Please check. If you do not know the client version please use the transaction **ZGBIVERSION** within your SAP S/4HANA system or contact your UCC Team. | | Global Bike-Version |
| **Global Feedback** | |  |
| Do you have any suggestions or feedback about Global Bike? Please send it to our email-address **gbi@ucc.ovgu.de** which is used to gather feedback globally. All emails will be evaluated by the persons responsible for the curriculum bi-weekly. This way, your feedback might influence future releases directly. | |  |
| Please note that any support requests send to this address will be ignored. Please keep using the common support channels for your support requests. | |  |
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|  | Success control | |
| **Note** With the Global Bike Monitor you can check the master and movement data created by the participants | | |
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| **Global Bike Monitoring Tool (beta)** | |  |
| There is also a Global Bike Monitor available for the SD case study.  Detailed instructions for the tool can be found in the module "99 Instructor Tools".  Please keep in mind that this transaction is an additional functionality designed by the UCC Magdeburg and still in development.  We would like to ask you to send any feedback or detailed descriptions of any problems you may have encountered with the Global Bike Monitor to the address **gbi@ucc.ovgu.de.** | |  |
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|  | Learning Snacks SD | |
| **Note** With the Learning Snacks SD you can check your learning success in the module SD. | | |
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| **What is Learning Snacks ?** | |  |
| Learning Snacks offers the possibility to check the knowledge gained during the case studies and exercises by means of small single-choice questions. Depending on the selected module, you can play through a Learning Snacks (SD here). Learning Snacks can be used with or without prior registration. By having your own account, you can create snacks yourself, like other snacks and receive some kind of points for each question you answer correctly.  You can find detailed instructions on Learning Snacks in the module "98 Cross-Modules". | |  |
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|  | Process Monitoring | |
| **Note** Documents are created for the transaction data created during the processing of the case study. These are based on master data, some of which was created by participants. | | |
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| The **document flow** offers you the possibility to detect errors and is therefore suitable for finding solutions to problems. | | Document flow |
| The *Manage* *Sales* *Quotations* app in *Sales* *and* *Distribution* allows you to view all sales orders. | | Manage Sales Quotations |
| **Note** If the student and you do not know the customer order number, it can be searched for using the F4 help. Use the three-digit number ### (e.g. 014) of the student in the *Customer Reference* field here. | | ### |
|  | |  |
| Select the customer quotation. In the following window, select *Display Document Flow*. | | Display Document Flow |
|  | |  |
| Select the type of document you are looking for from the *Document* *Type* drop-down menu or keep the default value. In the *Document* *Number* field, enter the document number you are looking for and then click . | | Document Number |
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| After a successful SD case study cycle, the following result is displayed by the SAP system for an individual student’s sales order. | |  |
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|  | Problem: Goods issue cannot be booked | |
| **Symptom** You receive error messages when trying to book the goods issue.  **Reason** A common cause for this error is that either the Storage Location and/or the Picked Quantity are not entered correctly.  **Solution** Please correct the outbound delivery document (Storage Location FG00 and Picked Quantity 5 respectively 2 both the two line items). | | |
|  | | |
| **Error Message** | |  |
| The screenshot below displays two common problems that might occur when posting a goods issue:   1. For a material, no storage location has been specified. | |  |
|  | |  |
| 1. For a material, no picking quantity has been entered. | |  |
| C:\Users\ga24qaw\AppData\Local\Temp\SNAGHTMLf85e36.PNG | |  |
| **Solution** | |  |
| Open the *Pick Outbound Delivery* app (search using the search function), enter the **Delivery** **Number** and confirm with Enter. | | Pick Outbound Delivery  Delivery number |
|  | |  |
|  | |  |
| In the opening page, click on *Picking* and enter the appropriate quantities to the *Picking* *Quantity* field. For your DXTR1### **5**, and for your PRTR1### **2**. | | 5  2 |
|  | |  |
| Select the button in the Deluxe Touring Bike position. In the *Delivery Item 1 of 2* window, for the Storage *Location field*, enter **FG00** for Finished Product and click . | | FG00 |
|  | |  |
| Repeat this step for your **PRTR1###** material. Back in the *Outbound Delivery Picking* screen, please click . | | PRTR1### |
| Finally, book the goods issue again. | |  |
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|  | Problem: Insufficient material stock level | |
| **Symptom** Insufficient material stock in the warehouse can lead to the quantity ordered by the customer not being supplied in full.  **Reason** Missing quantities can occur due to accidental overuse of materials or modification of the input values from the case study.  **Solution** In principle, materials in the Global Bike client have sufficient stock to be able to process the case study more than once. Any shortages can be cleared with transaction MB1C. In this case, use movement type 501, plant MI00, storage location FG00 and the respective material (DXTR1### and/or PRTR1###). | | |
|  | | |
| **Display Material Stock Level** | |  |
| You can display the stock of materials with the app *Stock - multiple materials*. | | Stock - multiple materials |
| In the Manage Stock window, enter the material to be examined (e.g. DXTR-###) and Miami plant (MI00). | | DXTR1###  MI00 |
| Select the material you are looking for and then select *Manage* *stock*. | | Manage  Stock |
|  | |  |
| **Correct Material Stock** | |  |
| You can post the Goods receipt in the app. | |  |
| Select the icon  under *Unrestricted-Use* *Stock*. | |  |
|  | |  |
| Enter a *Quantity* of **100** and select | | 100 |
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|  | Problem: Invoicing error | |
| **Symptom** Posting the incoming payment is not possible.  **Reason** When creating and displaying the invoice document, you will see that the invoice has not yet been transferred to Financial Accounting (FI). This is usually due to missing or incorrect data in the Customer Master Record.  **Solution** Correct the Customer Master Record. | | |
|  | | |
| **Change Customer Master Record** | |  |
| To solve this problem, please open your customer master record and check whether all sales data has been entered correctly. In order to change a customer master record, use the app *Manage* *Business Partner Master Data*. | | Manage Business Partner Master Data |
| Use the F4 help in the *Business* *Partner* field to find your Student's Debtor. Select it and then click on .    The customer you are looking for will be displayed below. Click C:\Users\ga24qaw\AppData\Local\Temp\SNAGHTML122d3aed.PNGto go to the detailed view. | |  |
|  | |  |
| Under the Roles tab, first switch to edit mode by clicking C:\Users\ga24qaw\AppData\Local\Temp\SNAGHTML1233ef4c.PNG , and then click C:\Users\ga24qaw\AppData\Local\Temp\SNAGHTML122d3aed.PNG again to be redirected to the next detail view of the debtor. | |  |
| Under the tab *Sales* *Areas* you can see the Sales Organization UE00 and click again. | |  |
|  | |  |
| The Business Partner number may differ in your case. For Sales Organization **UE00**, for the Distribution Channel **WH** and for the Division **BI** should already be entered. | | UE00 WH BI |
| Ensure that **USD** has been entered for the *Currency* in the first column *Sales Orders*. Then navigate to the second column called *Billing*: *Incoterms* **FOB**, *Incoterms Location 1* **Miami**, *Payment Terms* **0001** (Payable immediately Due net).  In the column *Shipping*, select **Normal** **item** for the *Delivery Priority* from the drop-down menu. For *Shipping Conditions* choose **Standard** and *Delivery Plant* **MI00**.  For the *Account* *Assignment* *Group*, please select **Domestic** **Revenues**, for *Partial* *Deliveries* **Partial** **delivery** **allowed**, and under *Price* *Group* select **Bulk** **Buyer** with **Standard** as *Customer Pricing Procedure*. | | USD  FOB Miami 0001  Normal item Standard MI00    Domestic Revenues Partial delivery allowed Bulk Buyer Standard |
|  | |  |
| For the 3 categories of SalesAreaTaxes, enter **0**. Then click , so that the Business partner master data will be updated. | | 0 |
|  | |  |
| If an invoice has already been created and the error appeared when the student tried to view it, you will need to cancel the old invoice first. To do this, use the *Manage* *Billing Documents* app. | | Manage Billing Documents |
| Mark your Billing Document and click the button . | |  |
|  | |  |
| Now you can create a new invoice. To do this, go to the *Create* *Billing* *Document* *for* *Customer* step in the SD case study and then continue with the following tasks. | |  |
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|  | Problem: Pricing error in inquiry, quotation or order | |
| **Symptom** You receive a pricing error about missing a mandatory condition PR00, while trying to create, change, or save an inquiry, a quotation, or an order.  **Reason** A common reason for this problem is a missing date (Valid from) during the creation of an inquiry. This date will be automatically copied and reused as the pricing date value, which is an important value for pricing.  **Solution** Enter the Valid from date and check if it was transferred to the pricing date value. | | |
|  | | |
| **Error Message** | |  |
| In the following screenshot you can see the detailed text of the appearing error message. | |  |
| ScreenShot00648 | |  |
| **Solution** | |  |
| Since conditions also have validity periods, it is necessary to ensure that the system has a date to refer to when calculating the price and selecting the valid condition. | |  |
| To add the date, open the respective document in change mode. If you have already noticed the error during the completeness check when creating, you can continue to work in this window. In the following, the error will be corrected using an enquiry as an example. | |  |
| Open the *Manage* *Sales* *Inquiries* app and select the enquiry in question. Click  on the inquiry you want to change and skip any notes. | | Manage Sales  Inquiries |
|  | |  |
| Now enter the expected date at *Valid* *from*. | |  |
|  | |  |
| Validate your entry by pressing Enter and select the tab *Item detail* afterwards. Make sure that your value got copied to the field *Pricing date* as well. | |  |
|  | |  |
| Click . | |  |
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|  | Solution: SD Challenge | |
| **Learning Objective** Understand and perform an integrated order-to-cash-process.  **Motivation** Having successfully completed the case study *Sales and Distribution*, you should be able to perform the following task independently.  **Scenario** One of your existing customers has opened an independent offshoot Alster Adventures in Hamburg and would like to benefit from your new promotion with this, where there is a free off-road helmet for each mountain bike ordered. Individual items can be marked as a free item (TANN) in the item details of the appointment order. Make sure that off-road helmets belong to a different division. Create a new customer Alster Adventures using Alster Cycling (customer 14000) as a template. Have your new customer supplied from the factory in Hamburg (HH00) via the sales organisation Germany North (DN00). Remember that the Euro is the common means of payment in Europe. Companies in Germany are subject to tax. Also expand Alster Adventures so that orders can be triggered for the divisions Accessories and Cross Divisions.  Then, as Alster Adventures, order five Off Road Bikes for men and five Off Road Bikes for women. As a long-term customer, Alster Adventures will receive a 50 Euro discount per bike on the order and 3% of the net price on the entire purchase.  **Task Information** Carry out the order-to-cash process including receiving payment from the customer. As this task is based on the sales case study, you can use it as a guide. However, it is recommended that you complete this continuative task without help, so that you can test your acquired knowledge. | |  |
|  | |  |
| **Create Customer** | |  |
| In the *Manage Business Partner Master Data* app, you create your customer Alster Adventure as a new Organization. | | Manage Business Partner Master Data |
| Select the BP role **FLCU00 |** **FI Customer**. Enter **Company** as the Organization Title, **Alster** **Adventures ###** as the Name, **any address** in **20249** **Hamburg**, Country **DE**, Region **02** (Hamburg) and the Language **EN**. | | FLCU00  Company  Alster Adventures ###  any address  20249 Hamburg  DE  02  EN |
|  | |  |
| Confirm with OK and add the value ### in the field Search term 1 of the new view. Change to the *Roles* section and go to the details of the role FLCU00 by clicking . | |  |
| Then select the *Company Codes* tab and click  on the top right corner. In the company code field, please enter **DE00** (Global Bikes Germany GmbH) and confirm with Enter. | | DE00 |
| In the *Finance* area, as the *Reconciliation Account* enter **1200000** and as the *Sort Key* choose **001**. In the field *Payment Terms*, please add **0001**: | | 1200000  001  0001 |
|  | |  |
| Click  and  to complete the settings for the company code. | |  |
| In the *Address* *🡪 Address Details* tab, click  to switch to the details of the entry and use  to expand the other fields. Now select **0000000001** Region North as the *Transportation* *Zone*. Apply the changes with  . | | 0000000001 |
| Now switch to the *Roles* section again. Click and select **Customer** (FLCU01) as the second role. Switch again by pressing  to the detailed view of FLCU01. | |  |
| Next, click on the *Sales* *Areas* tab and select . You will be redirected to a new page. | |  |
| Enter **DN00** as the *Sales* *Organisation*, **WH** as the *Distribution* *Channel* and **00** as the *Division*. | | DN00  WH  00 |
|  | |  |
| Switch to the *Sales* *Area* *Details* area. In the column *Sales* O*rders*, enter **DE0001** as the *Sales* *District* and the *Currency* **EUR**. | | DE0001  EUR |
| In the *Billing* column, enter **FOB** (Free on board) as *Incoterms* and **Hamburg** as *Incoterms* *Location* *1*. The *Payment* *Terms* is **0001**. | | FOB  Hamburg  0001 |
| In the *Shipping* column, enter **Normal** **item** as the *Delivery* *Priority*, **HH00** as the *Delivery* *Plant* and **Standard** as the *Shipping* *conditions*.  The *Account* *assignment* *group* **Domestic** **Revenues** applies for accounting. | | Normal item  HH00  Standard  Domestic revenues |
|  | |  |
| In the *Partial* *Deliveries* section, select **Partial** **delivery** **allowed** for *Partial* *Delivery* *per* *Item*. In the last area, *Pricing* *and* *Statistics*, enter as the *Price* *Group* **Occasional** **buyer** and as *Customer* *Pricing Procedure* **1** (Standard). | | Partial delivery allowed  Occasional buyer  1 |
| If there is still no entry option in the *Sales* *Area* *Taxes* field, press Enter or switch to the Sales Organization field again. The system should now have generated a tax line. Enter the *Tax* *Classification* **1** for VAT.  Confirm your entered data with  . | | 1 |
| You must also create your customer for the *sales* *Area* **DN00**, **WH**, **AS** and **DN00**, **WH**, **BI**.    You can transfer the detailed data from the sales area **DN00**, **WH** and **00**. You can also select the existing sales area for this step and duplicate it with . Make sure to check all fields again and enter the correct new sales areas at the beginning of the input mask. | | DN00, WH, AS DN00, WH, BI  DN00, WH, 00 |
|  | |  |
| Once you have created all the sales areas, you can close by clicking  and then  your customer. | |  |
| **Create Inquiry** | |  |
| In the *Manage* *Sales* *Inquiries* app, create a customer inquiry by clicking  for 5 men's mountain bikes (ORMN1###), 5 women's mountain bikes (ORWN1###) and 10 off-road helmets (OHMT1###). | | Manage Sales inquiries |
|  | |  |
| Please enter the following data: **IN** for *Inquiry Type*, **DN00** for *Sales Organization*, **WH** for *Distribution Channel*, and **00** for *Division*. Then, click  . | | IN  DN00  WH  00 |
| In the following screen *Create Inquiry: Overview*, please enter the **Business Partner Number** to *Sold-To Party*field. Subsequently, please enter your **Group Number ###** as *Cust. Reference*, **Today’s date** as *Cust. Ref. Date* and as *Valid From*, and **One month from today** as *Valid To.* | | Business Partner Number (Customer)  ###  Today’s date  Today’s date  One month from today  One month from today |
|  | |  |
| Alster Adventures would like a quote for three products - the Men's Off Road Bike **(ORMN1###)**, the Women's Off Road Bike **(ORWN1###)** and Off Road Helmets **(OHMT1###)**. Specify as quantities for the two Off Road Bikes **5** pieces each and for the Helmets **10** pieces | | Alster Adventures  ORMN1###  ORWN1###  OHMT1###  5  10 |
|  | |  |
| Change the Order Probabilities for the two Off Road Bikes and the Off Road helmets to **70%** each. To do this, select all the items and click . Use  to go through all the items. | | 70% |
|  | |  |
| Select Enter and  to update the request and note the new expected order value. | |  |
| Press  to save the inquiry. The SAP system will allocate a unique number to the inquiry. | |  |
| **Create Quotation** | |  |
| In the *Manage* *Sales Quotations* app, create the quotation as described in the Case study up to the conditions for the DN00, WH, 00 range. | | Manage Sales  Quotations |
| To mark the Helmets as a free position, select the corresponding item line, then click on the *Item detail* tab. Now select the entry **TANN** (Free of Charge Item) in the field *Item Category* and confirm with Enter. | | TANN |
|  | |  |
| To give the 50 Euro discount per Off Road Bike, select the Men's Off Road Bike line, then click on Item Conditions . There you enter **K004** (Material) as *Condition* *Type* and an *Amount* of **50** **EUR**. Then confirm with Enter. Then do the same with the Women Off Road Bike. | | K004  50 |
| To apply the 3% discount on the complete purchase, please follow the menu path:  More ► Goto ► Header ► Conditions | |  |
| To apply the 3% discount, please enter **RA00** (% Discount from Net) as CnTy and an amount of **3**. Press Enter. Please notice that the discount is not yet included in the price. | | RA00  3 |
| To activate the 3% discount, please click . | |  |
|  | |  |
| Click  to save the new quotation. | |  |
| **Create Sales Order with Reference to the Quotation** | |  |
| In the *Manage* *Sales* *Orders* app, create sales order with . | | Manage Sales Orders |
| Select the Order Type **OR** and click . Select your offer using the customer reference ###. | | OR |
| Enter ### for *Customer* *Reference* and **Today's** **date** for the *Cust.* *Ref.* *Date* as well as the *Delivery* *Plant* **Hamburg** (HH00). Note that the requested delivery date has been copied from the quotation. Click to save the sales order. The SAP system will generate a unique number. | | ###  Today’s date  HH00 |
| **Create Outbound Delivery** | |  |
| Please proceed in the app *Create* *Outbound* *Deliveries* - *From* *Sales* *Orders* as described in the case study. However, use HH00 as the shipping point and Alster Adventures ### as the customer. | | Create Outbound Deliveries –  From Sales Orders |
| **Picking material and outgoing goods** | |  |
| In the *Manage Outbound* *Deliveries* app, enter your **Business Partner** **Number** in the Ship-to party field and **HH00** as the *Shipping Point* and select **All** **Open** **Deliveries** as the *Overall Status*. Then search for a delivery using . | | Manage Outbound Deliveries  Business Partner Number  HH00  All Open Deliveries |
|  | |  |
| You can see the status of your delivery. Click on the button  to go directly to picking. | |  |
| In the screen that appears, click on the button  and then enter **FG00** as the *Storage* *Location* for the two Off Road Bikes, as well as **TG00** as the *Storage* *Location* for the Off-Road Helmets, confirm the respective entries with . | | FG00  TG00 |
|  | |  |
| In addition, enter the corresponding quantities for Picking Quantity (**5** for ORWN1###, **5** for ORMN1### and **10** for OHMT1###). | | 5  5  10 |
|  | |  |
| Then click  to save your entries. You should receive the following message at the bottom of your screen: "Outbound delivery saved". | |  |
| In the lower screen area, click  to post the goods issue. | |  |
| **Create Customer Invoice** | |  |
| In the course of the app *Create**Billing**Documents*, please proceed as described in the case study. | | Create Billing Documents |
| **Post Customer Invoice** | |  |
| In the course of the app *Manage Billing Documents* , please proceed as described in the case study. | | Mange Billing  Documents |
| **Post Incoming Payments** | |  |
| Proceed in the app *Post* *Incoming* *Payments* as described in the case study, but take **EUR** as the Currency, **DE00** as the Company Code and **27**,**703**.**20** as the Amount. | | Post Incoming Payments  EUR  DE00  27,703.20 |
|  | |  |
| Select the Open Items with . | |  |
|  | |  |
| Click  to save the Incoming Payment. | |  |
|  | |  |