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.

Product

SAP S/4HANA 2022
Global Bike

Fiori 3.0

Level

Instructor

Focus

Sales and Distribution

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Version

4.2

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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.

SAP University Alliances

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*.

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.

Instructor account
LEARN-000

Since the development language of the Introduction to S/4HANA with Global Bike curriculum is English, all LEARN-### users have an American localisation. 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".

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.
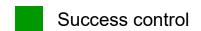
In order to function properly, this case study needs a **Global Bike-Version** that is equal to or higher than the case study version (see cover page). Please check. If you do not know the client version please use the transaction **ZGBIVERSION** within your SAP S/4HANA system or contact your UCC Team.

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 email-address will be ignored. Please keep using the common support channels for your support requests.

Success control

Note With the Global Bike Monitor you can check the master and movement data created by the participants

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.**

☐

Learning Snacks SD

Note With the Learning Snacks SD you can check your learning success in the module SD.
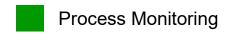
What is Learning Snacks ?

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".

♡ 37   ◎ 17.2k

SD English

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.

The **document flow** offers you the possibility to detect errors and is therefore suitable for finding solutions to problems.
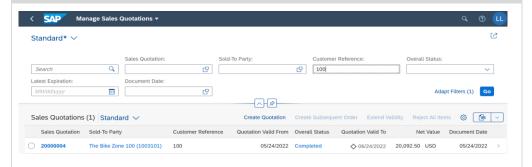
Document flow

The *Manage Sales Quotations* app in *Sales and Distribution* allows you to view all sales orders.
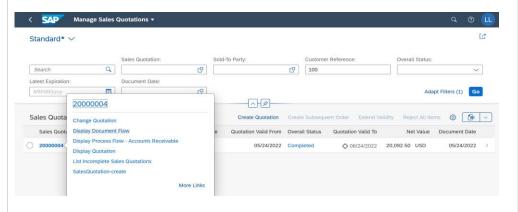
Manage Sales Quotations

> **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.
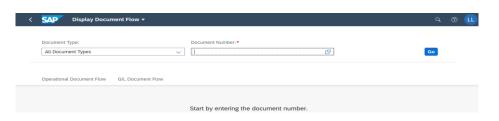
###

Select the customer quotation. In the following window, select *Display Document Flow*.
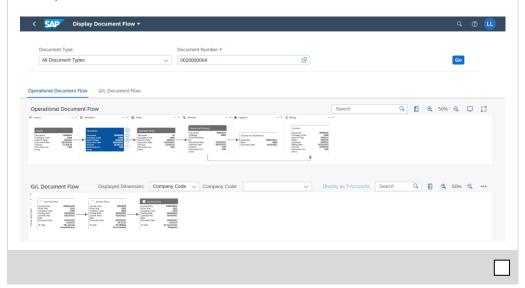
Display Document Flow

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 on Go.

Document Number

After a successful SD case study cycle, the following result is displayed by the SAP system for an individual student's sales order.

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:

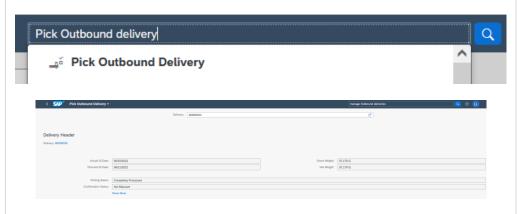1) For a material, no storage location has been specified.

Type	Item	Msg.	Area	MT	Message Text	Material	Description	Dlv.qty	SU	Batch
🔴	10	609	VL	E	Delivery has not yet been put away / picked (completely)	DXTR1001	Deluxe Touring Bike (black)	5,000	EA	
🔴	10	604	VL	E	The storage location is not defined for delivery item 000010	DXTR1001	Deluxe Touring Bike (black)	5,000	EA	
🔴	20	609	VL	E	Delivery has not yet been put away / picked (completely)	PRTR1001	Professional Touring Bike (black)	5,000	EA	

2) For a material, no picking quantity has been entered.
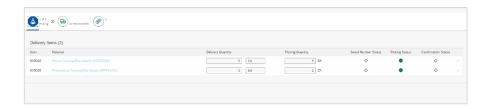

Solution

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 on Save .

FG00

Repeat this step for your **PRTR1###** material. Back in the *Outbound Delivery Picking* screen, please select Save .

Finally, book the goods issue again.

PRTR1###

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###).
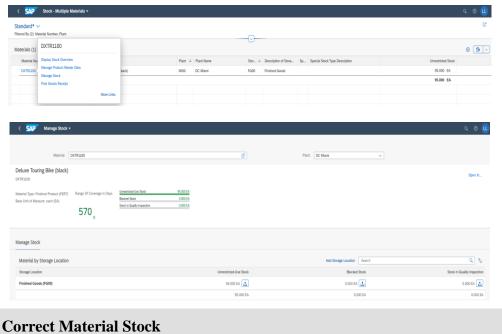
Display Material Stock Level

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

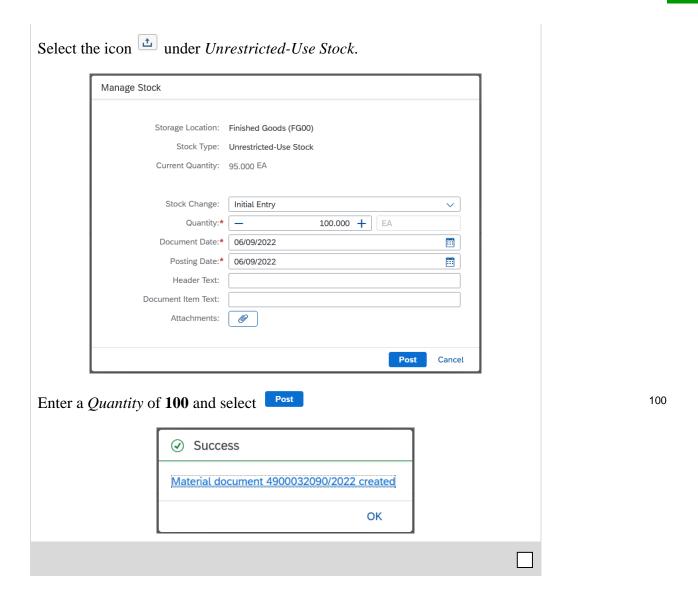Select the material you are looking for and then select *Manage stock*.

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

■ 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.
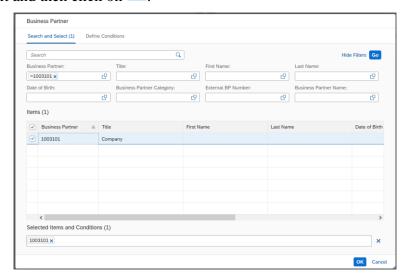
Solution Correct the Customer Master Record.
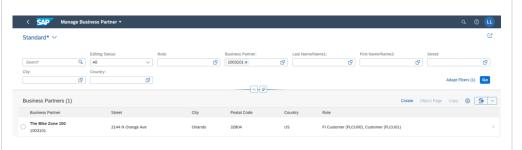
Change Customer Master Record

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*.

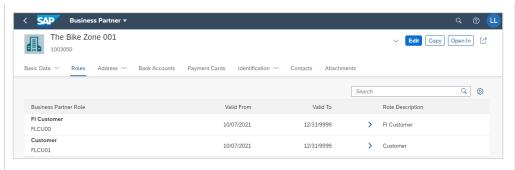*Manage Business Partner Master Data*

Use the F4 help in the *Business Partner* field to find your Student's Debtor. Select it and then click on OK.

The customer you are looking for will be displayed below. Click here › to go to the detailed view.

Under the Roles tab, first switch to edit mode by clicking on Edit, and then select › 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.
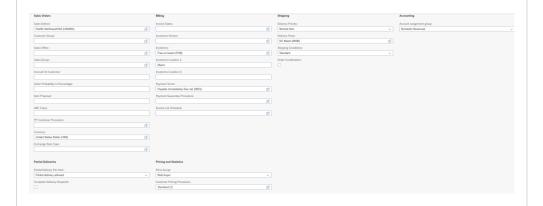

The Business Partner number may differ in your case. For Sales Organization **UE00**, for the Distribution Channel **WH** and for the Division **BI** should already be entered.

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).

USD

FOB
Miami
0001

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**.

Normal item
Standard
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*.
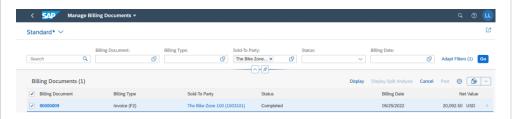
Domestic Revenues
Partial delivery allowed
Bulk Buyer
Standard

For the 3 categories of Sales Area Taxes, enter **0**. Then click on **Apply**, 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.

Mark your Billing Document and select the button Cancel.

Manage Billing
Documents

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.

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.

Pricing error: Mandatory condition PR00 is missing

Message No. V1801

Diagnosis

The obligatory condition PR00 does not exist. The document is therefore considered to be incomplete from the point of view of pricing.

The cause can be, for example, that a condition record does not exist for condition PR00 or that a field overflow has occurred when the condition rate was calculated.

Procedure

Check why the condition could not be found. Use the pricing analysis function on the pricing screen to do this. If necessary, add the missing condition manually to the document.

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. Press ⟩ on the inquiry you want to change and skip any notes.

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.

Press **Save** .

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, in which 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 138000) 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.
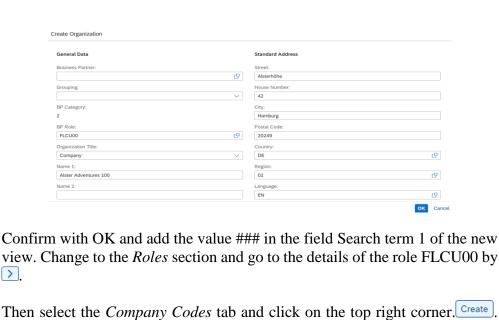
Create Customer

In the *Manage Business Partner Master Data* app, you create your customer Alster Adventure as a new Organization.

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**.

Manage Business
Partner Master Data

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 ⟩.

Then select the *Company Codes* tab and click on the top right corner. Create . 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

Press **Apply** and Apply to complete the settings for the company code.

In the *Address* → *Address Details* tab, click on ⟩ to switch to the details of the entry and use Show More to expand the other fields. Now select **0000000001** Region North as the *Transportation Zone*. Apply the changes with **Apply** .

0000000001

Now switch to the *Roles* section again. Click on Create 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 Create . You will be redirected to a new page.
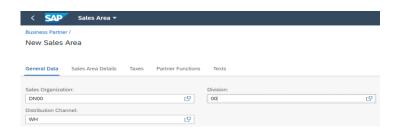
Enter **DN00** as the *Sales Organisation*, **WH** as the *Distribution Channel* and **00** as the *Division*.

DN00
WH
00

Switch to the *Sales Area Details* area. In the column *Sales Orders*, enter **DE0001** as the *Sales District* and the *Currency* **EUR**.

In the *Billing* column, enter **FOB** (Free on board) as *Incoterms* and **Hamburg** as *Incoterms Location 1*. The *Payment Terms* is **0001**.
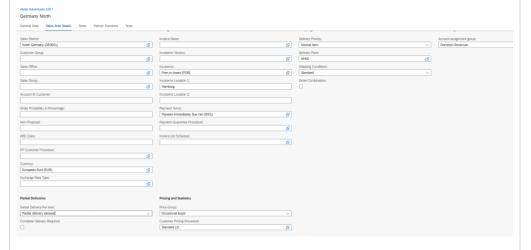
In the *Shipping* column, enter **Normal item** as the *Delivery Priority*, **HH00** as the *Delivery Plant* and **Standard** as the *Shipping conditions*.

The *Account assignment group* **Domestic Revenues** applies for accounting.

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).

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 **Apply** .
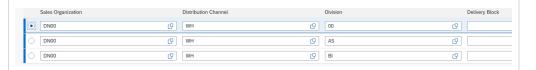
You must also create your customer for the *sales Area* **DN00**, **WH**, **AS** and **DN00**, **WH**, **BI**.

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 with **Copy** duplicate it. Make sure to check all fields again and enter the correct new sales areas at the beginning of the input mask.

Margin notes:
DE0001
EUR

FOB
Hamburg
0001

Normal item
HH00
Standard

Domestic revenues

Partial delivery allowed
Occasional buyer
1

1

DN00, WH, AS
DN00, WH, BI

DN00, WH, 00

Sales Organization	Distribution Channel	Division	Delivery Block
⦿ DN00	WH	00	
○ DN00	WH	AS	
○ DN00	WH	BI	

Once you have created all the sales areas, you can close by [Apply] and then [Create] your customer.

Create Inquiry

In the *Manage Sales Inquiries* app, create a customer inquiry by clicking on [Create Inquiry] for 5 men's mountain bikes (ORMN1###), 5 women's mountain bikes (ORWN1###) and 10 off-road helmets (OHMT1###).

* Inquiry Type: IN   Inquiry

Organizational Data

Sales Organization: DN00   Germany North
Distribution Channel: WH   Wholesale
Division: 00   Cross-Division
Sales Office:
Sales Group:

Please enter the following data: **IN** for *Inquiry Type*, **DN00** for *Sales Organization*, **WH** for *Distribution Channel*, and **00** for *Division*. Then, Click on [Continue].

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

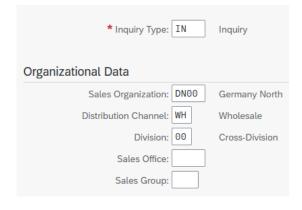| Inquiry:		Net Value:	0.00
Sold-To Party:	1003110		
Ship-To Party:			
Cust. Reference:	100	Cust. Ref. Date:	06/16/2022

Sales   **Item Overview**   Item detail   Ordering party   Procurement   Shipping   Reason for rejection

Valid From: 06/16/2022   Valid To: 07/16/2022
* Req. Deliv.Date: D 06/16/2022   Expect.Ord.Val.: 0.00

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
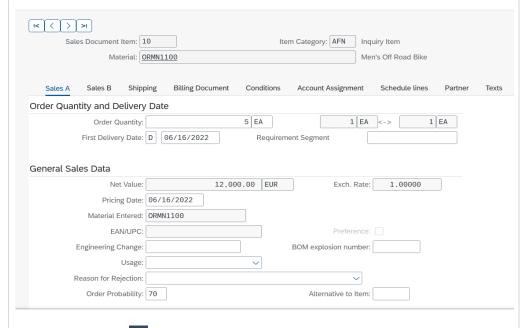
Alster Adventures
ORMN1###
ORWN1###
OHMT1###
5
10

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 on [icon]. Use [>] to go through all the items.

Select Enter and [<] to update the request and note the new expected order value.

Press **Save** to save the inquiry. The SAP system will allocate a unique number to the inquiry.
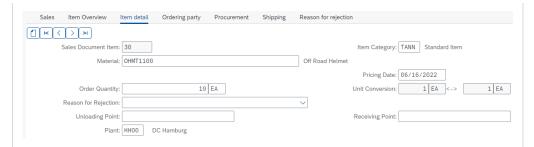
Create Quotation

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.

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.
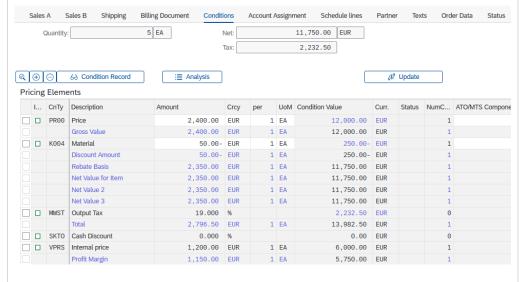
To give the 50 Euro discount per Off Road Bike, select the Men's Off Road Bike line, then click on Item Conditions ⊞ . There you enter **K004** (Material) as *Condition Type* and an *Amount* of **50 EUR**. Then confirm with Enter. Then do the same with the Women Off Road Bike.

K004

50

| I...	CnTy	Description	Amount	Crcy	per	UoM	Condition Value	Curr.	Status	NumC...	ATO/MTS Compone
☐ ☐	PR00	Price	2,400.00	EUR	1	EA	12,000.00	EUR		1	
☐		Gross Value	2,400.00	EUR	1	EA	12,000.00	EUR		1	
☐ ☐	K004	Material	50.00-	EUR	1	EA	250.00-	EUR		1	
☐		Discount Amount	50.00-	EUR	1	EA	250.00-	EUR		1	
☐		Rebate Basis	2,350.00	EUR	1	EA	11,750.00	EUR		1	
☐		Net Value for Item	2,350.00	EUR	1	EA	11,750.00	EUR		1	
☐		Net Value 2	2,350.00	EUR	1	EA	11,750.00	EUR		1	
☐		Net Value 3	2,350.00	EUR	1	EA	11,750.00	EUR		1	
☐ ☐	MWST	Output Tax	19.000	%			2,232.50	EUR		0	
☐		Total	2,796.50	EUR	1	EA	13,982.50	EUR		1	
☐ ☐	SKTO	Cash Discount	0.000	%			0.00	EUR		0	
☐ ☐	VPRS	Internal price	1,200.00	EUR	1	EA	6,000.00	EUR		1	
☐		Profit Margin	1,150.00	EUR	1	EA	5,750.00	EUR		1	

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 on [Activate] .

Click on **Save** to save the new quotation.

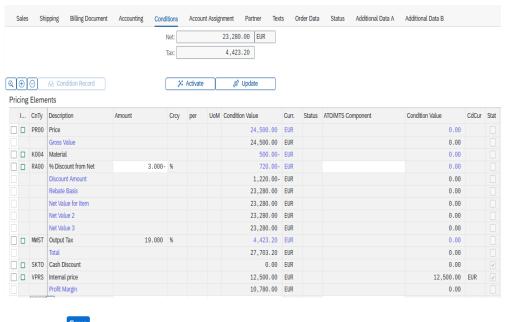## Create Sales Order with Reference to the Quotation

In the *Manage Sales Orders* app, create the sales order with `Create Sales Order - VA01` .

Select the Order Type **OR** and click on `Create with Reference`. Select your offer using the customer reference ###.

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 on **Save** to save the sales order. The SAP system will generate a unique number.

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.

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 **Go** .

Manage Sales Orders

OR

###
Today's date
HH00

Create Outbound
Deliveries –
From Sales Orders

Manage Outbound
Deliveries
Business Partner
Number
HH00
All Open Deliveries

You can see the status of your delivery. Click on the button [Pick] 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 [Apply] .

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 on [Save] 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 on [Post GI] 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.

Select the Open Items with   Clear ≫   .

Click on **Post** to save the Incoming Payment.