



# **VOFM ROUTINES IN SALES & DISTRIBUTION**

## **PART 2: DATA TRANSFER**

### **PRODUCT REQUIREMENTS PLANNING**

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## Table of Contents

1. Introduction .....	3
2. Creating a New VOFM Data Transfer Routine.....	3
3. Orders .....	4
4. Deliveries.....	13
5. Billing Documents .....	16
6. Sales Activities .....	18
7. Shipping Units.....	19
8. Texts .....	20
9. Text Names.....	21
10. Shipments .....	23

# 1. Introduction

Transaction VOFM is a tool that was developed in R/3 to facilitate the definition of both SAP delivered as well as customer defined routines / rules used in the system during various business processes. VOFM routines are ABAP code written in Forms. VOFM provides the user with the benefit of choosing from one of the standard delivered R/3 routines or writing their own. VOFM is intended for the implementation team when configuring the system. It is not intended for the end user.

VOFM is divided up into four main areas. These include copying requirements, data transfer, requirements, and formulas. This paper will focus on data transfer routines that were delivered by SAP to support the Sales & Distribution (SD) and Logistics Execution (LES) applications. At a high level, data transfer routines allow you to fine-tune the copied fields during the transfer process. For example, a data transfer routine can be defined to enable the transfer of the general billing header data from a reference document into the target. Additionally, during the data transfer, the shipping conditions for the target document can be derived based on the standard customizing entries, rather than from the reference document. Data transfer routines are an easy way to move and manipulate fields from document to document.

Section 2 defines how to create a new VOFM routine, in the event that the standard routines do not match the user needs. In the following sections, the SAP standard delivered VOFM routines related to Sales & Distribution and Logistics Execution are documented. Starting with Release 4.6A, this documentation is part of the standard product.

This paper assumes that the reader has a general understanding of the SD and LES modules in R/3.

## 2. Creating a New VOFM Data Transfer Routine

In each area of VOFM, SAP delivers routines using the name space from 1 to 599. SAP customers can create their own VOFM routines using the name space from 600 to 999. To create a new routine, follow these steps:

1. First check to see whether you can use one of the data transfer routines delivered in the standard system.
2. Either overwrite an existing data transfer routine or enter a new number on a new line from the customer name space 600 to 999. Also enter a short description of your data transfer routine.
3. Program your data transfer routine in the ABAP editor.
4. Activate the program.
5. Enter the application if you want to use the data transfer routine in one particular application area. For example, you have defined a new data transfer routine that is only relevant for deliveries.
6. Enter your new data transfer routine in the appropriate area in customizing. For example, a new data transfer routine for the order header is assigned to the relevant sales document type. As another example, a data transfer routine for texts would be assigned to the access sequence for the text type.

New VOFM routines created at a customer site are not overwritten by a software upgrade.

### 3. Orders

Order data transfer routines are used to fine tune fields transferred during the copying process from selected reference documents into the order document. This is done via detailed data transfer routines that transfer specific fields and manipulate the values of others, prior to creating the sales order document. These are divided into several categories:

Sales Document:	Identifies those data transfer routines that transfer data from a reference sales document into a sales order. Routines 1, 2, 51, 101, 102, 105, 106, 151, 152, 154, 201, 202, 251, 301, and 303 are of this type.
Billing Document:	Identifies those data transfer routines that transfer data from a reference billing document into a sales order. Routines 3, 4, 52, 53, 103, 104, 153, and 403 are of this type.
Contract:	Identifies those data transfer routines that transfer data from a reference contract into a sales order. Routines 60, 302, 304, 305, 306, and 307 are of this type.
Billing Plan:	Identifies those data transfer routines that transfer data from a reference billing plan into a sales order. Routines 401 and 402 are of this type.

These data transfer routines are assigned, in customizing, to the data transfer routine field in the copy rules for a sales document type/item category/schedule line category.

When creating an order document with reference to an existing document, the system first checks the copy requirements assigned to the sales document type/item category/schedule line category. If the requirement is met, then the transfer of data begins from the reference document into the order. It is in this second step that the order data transfer routines defined here are called.

When looking at the code for the standard delivered order data transfer routines, or when writing your own, some standard work areas are used. For a list of these work areas refer to the actual code in the examples below.

The following is a description of the data transfer routines delivered in the standard system related to orders.

#### **ORDER DATA TRANSFER 1: PARTNER HEADER**

This routine transfers the partners assigned to the header of the reference document to the target document header. Invalid partners are removed after this routine and missing partners are filled in automatically. This is the standard delivered header partner data transfer routine.

#### **Example:**

When transferring data from a sales order to another sales order, it is necessary to also transfer the partner roles from the reference to the target. In order to enable this functionality, this routine is assigned to the partner data transfer routine in the sales document copying rules for the header.

## **ORDER DATA TRANSFER 2: PARTNER ITEM**

This routine transfers the partners assigned to the item of the reference document to the target document item. Invalid partners are removed after this routine and missing partners are filled in automatically. This is the standard delivered item partner data transfer routine. Additionally, a check is made to insure that there is a sold-to in the target document and that it is identical to the sold-to in the corresponding items. If this check determines that the two are not consistent, data is not transferred.

### **Example:**

When transferring data from a sales order to another sales order, it is necessary to also transfer the partner roles from the reference items to the target items. In order to enable this functionality, this routine is assigned to the partner data transfer routine in the sales document copying rules for the item category.

## **ORDER DATA TRANSFER 3: BILLING HEADER PARTNER**

This routine is used to transfer billing header partner data from the reference billing document to the target sales document. Only the first ship-to in the reference document is copied to insure that the partner roles remain consistent.

### **Example:**

When creating a credit memo request with reference to an invoice, it is necessary to transfer the corresponding partners from the invoice so that the appropriate payer and bill-to are credited for the refund. In order to enable this data transfer, this routine is assigned to the reference billing document partner data transfer routine for the header.

## **ORDER DATA TRANSFER 4: BILLING ITEM PARTNER**

This routine is used to transfer billing item partner data from the reference billing document to the target sales document. A check is performed to insure that there is a sold-to in the header and that it matches the sold-to in the items, so that the two stay consistent.

### **Example:**

When creating a credit memo request with reference to an invoice, it is necessary to transfer the corresponding partners from the invoice items so that the appropriate payer and bill-to are credited for the refund. In order to enable this data transfer, this routine is assigned to the reference billing document partner data transfer routine for the item category.

## **ORDER DATA TRANSFER 51: GENERAL HEADER DATA**

This routine is used to transfer general header data from the reference document to the target document. This is the standard routine for header data transfer.

### **Example:**

In order to enable copying of basic header data such as tax jurisdiction codes from a quote to a sales order, this routine can be assigned to the data transfer routine for VBAK for the document header.

## **ORDER DATA TRANSFER 52: BILLING DOCUMENT HEADER**

This routine is used to transfer general billing header data from the reference document to the target document. This is the standard routine for billing header data transfer. During the data transfer, the shipping conditions for the target document are derived based on the standard customizing entries.

### **Example:**

When enabling the copying process from an invoice to a credit request, this routine must be assigned to the VBAK data transfer routine in the copy rules for the billing document header.

## **ORDER DATA TRANSFER 53: HEADER BILL**

This routine is identical to routine '52' which transfers billing document header data into VBAK. Additionally, this routine copies or redetermines the Nota-Fiscal-Reference for Brazil.

### **Example:**

When implementing copy scenarios for credit requests from an invoice in a Brazilian subsidiary, it is necessary to also be sure that the Nota-Fiscal-Reference is also transferred. In order to insure that this additional data is transferred, assign this routine to the billing document header VBAK data transfer routine.

## **ORDER DATA TRANSFER 60: QUOTATION HEADER FROM CONTRACT**

This routine is used to transfer data into a quote from a contract document header.

### **Example:**

A company has a business process whereby a quantity contract is established for certain customers for a specific validity period and quantity. When a corresponding quote is created to determine the cost of the call off for a ship-to, it is logical that the header data such as the validity dates are copied from the contract into the quote. In order to enable this process, this routine must be assigned to the header VBAK copy rules for the contract.

## **ORDER DATA TRANSFER 101: HEADER BUSINESS DATA**

This routine is used to transfer business data from the header of a reference document into the target. This is the standard routine for transferring header business data. Special fields associated with the purchase order and special financial related data are not transferred.

### **Example:**

When creating a sales document with reference to another, business data such as the sales district and incoterms should be transferred from the reference document into the target. However, specific data related to the purchase order of the customer should not be transferred from document to document. In order to enable the transfer of the business data, this routine can be assigned to the header business data transfer rules for the sales document.

## **ORDER DATA TRANSFER 102: BUSINESS DATA/ITEM COMPLETION**

This routine is used to transfer business data from the items of a reference document into the items of the target. This is the standard routine for transferring item business data. Special fields associated with the purchase order and special financial related data are not transferred.

**Example:**

When creating a sales document with reference to another, business data of the items, such as the sales district and incoterms should be transferred from the reference document items into the target. However, specific data related to the purchase order for the item should not be transferred from the reference document item into the target document item. In order to enable the transfer of the item business data, this routine can be assigned to the item business data transfer rules for the sales document item category.

**ORDER DATA TRANSFER 103: BILLING BUSINESS HEADER DATA**

This routine specifies the header business data to be transferred from a billing document to a sales document. Special fields such as the currency exchange rate date and billing plan data are not copied.

**Example:**

When creating a credit memo request from an invoice, it is necessary to transfer specific business related data such as incoterms and the sales district from the target to the reference document header. To accomplish this, this routine can be used.

**ORDER DATA TRANSFER 104: BILLING BUSINESS ITEM DATA**

This routine specifies the item business data to be transferred from a billing document item to a sales document item. Special checks are performed to be sure that the sold-to party is the same prior to initiating the data transfer of the item related business data.

**Example:**

When creating a credit memo request from an invoice, it is necessary to transfer specific business related item data such as incoterms and the sales district from the target to the reference document items. In order to enable this data transfer, this data transfer routine can be assigned to the billing document item category to sales item business data transfer routine for the item.

**ORDER DATA TRANSFER 105: HEADER BUSINESS CURRENCY**

This routine transfers all of the same data as noted in routine '101'. In addition, the customer master of the sold-to is checked to determine if the SD document currency needs to be changed to support conversion to the EURO. If so, the exchange rate is then redetermined in order to translate the document value into the new currency.

**Example:**

In preparation for the conversion to the single currency (EURO) in Europe, many companies have begun to modify their customer master records to indicate the preference of customers to begin receiving sales documents in EURO. In order to support this during the creation of new documents from old documents, that were created using the local currency of the customers' country, an additional validation check against the customer master record needs to be performed prior to transferring the header data from the reference document to the target. If the customer has changed their SD document currency field to the EURO, the currency of the target document will be altered to reflect this. In order to have the standard header fields transferred in addition to the EURO conversion, this routine can be assigned to the VBAK copy rules for the reference and target document header.

## **ORDER DATA TRANSFER 106: ITEM BUSINESS CURRENCY**

This routine transfers all of the same data as noted in routine '102'. In addition, the customer master of the sold-to is checked to determine if the SD document currency needs to be changed to support conversion to the EURO. If so, the exchange rate is then redetermined in order to translate the document item value into the new currency.

### **Example:**

In preparation for the conversion to the single currency (EURO) in Europe, a determination of the appropriate exchange rate for items to be copied from a local currency sales document into a EURO document must be performed. In order to transfer the standard item data as well as redetermine the exchange rate for EURO lines, an additional determination routine is needed. This routine, which contains this determination routine, can be assigned to the 'reference item to target item' data transfer routine in copy control.

## **ORDER DATA TRANSFER 151: GENERAL ITEM DATA**

This routine is used to transfer general item data from the reference document to the target document. This is the standard routine for item data transfer. Additional fields are also transferred based on special document types, as well as when the sold-to party in the reference and the target items are the same.

NOTE: The following fields cannot be manipulated in this routine, as they are transferred prior to its execution: material number, batch, line item number, higher level BOM, and item category.

### **Example:**

When copying from one document item to another, it is feasible that some fields such as the product hierarchy and material group from the reference item should be transferred to the target item, and not redetermined. In addition, if the sold-to party is the same in both document line items, corresponding sold-to related fields should also be transferred. In order to enable the transfer of these fields into the target item, this data transfer routine can be assigned to the sales document item category copy rule.

## **ORDER DATA TRANSFER 152: PRODUCT PROPOSAL ITEM**

This routine is used to transfer item data with assortment items.

NOTE: This routine is currently unused.

## **ORDER DATA TRANSFER 153: ITEM FROM BILLING DOCUMENT**

This routine is used to transfer item data from a reference billing document item.

NOTE: The following fields cannot be manipulated in this routine, as they are transferred prior to its execution: material number, batch, line item number, higher level BOM, and item category.

### **Example:**

When copying from an invoice to an invoice cancellation request, it is logical that all of the relevant data from the reference billing item be transferred into the target cancellation item. In order to enable the transfer of the item specific data, this routine can be assigned to the data transfer routine for VBAP field in the cancellation document item category configuration for copy rules.



## **ORDER DATA TRANSFER 154: ITEM FROM SERVICE QUOTATION**

This routine is used to transfer general item data from a service quotation to the corresponding repair order. Additional fields are also transferred based on special document types, as well as when the sold-to party in the reference and the target items are the same.

NOTE: The following fields cannot be manipulated in this routine, as they are transferred prior to its execution: material number, batch, line item number, higher level BOM, and item category.

### **Example:**

When copying from a service quotation to a repair order, it is feasible that some fields such as the product hierarchy and material group from the reference item should be transferred to the target item, and not redetermined. In addition, if the sold-to party is the same in both document line items, corresponding sold-to related fields should also be transferred. In order to enable the transfer of these fields into the target item, this data transfer routine can be assigned to the repair sales document item category copy rule.

## **ORDER DATA TRANSFER 201: GENERAL SCHEDULE LINE DATA**

This routine is used to transfer schedule line data from the reference document to the target document. This is the standard routine for schedule line data transfer. Additional fields are also transferred based on special document types, as well as when the sold-to party in the reference and the target items are the same.

NOTE: The following fields cannot be manipulated in this routine, as they are transferred prior to its execution: plant, number, storage location, schedule line date, day type, conversion indicators for quantity, and schedule line category.

### **Example:**

When copying from one document to another, it is feasible that some of the schedule line data fields from the reference item should be transferred to the target schedule line, and not redetermined. For example, fields such as the schedule line quantity and UOM are copied, while the actual schedule line number and dates are redetermined based on the current availability situation at the time of creation. Moreover, if the sold-to party is the same in both document line items, corresponding sold-to related fields should also be transferred. In order to enable the transfer of these fields into the target schedule line, this data transfer routine can be assigned to the sales document item category copy rule for scheduling data.

## **ORDER DATA TRANSFER 202: SCHEDULE LINE QUANTITIES**

This routine is used to transfer schedule line quantity data from the reference document to the target document, without any additional special checks.

NOTE: The following fields cannot be manipulated in this routine, as they are transferred prior to its execution: plant, number, storage location, schedule line date, day type, conversion indicators for quantity, and schedule line category.

### **Example:**

This routine is currently unused.

## **ORDER DATA TRANSFER 251: CONDITIONS**

NOTE: This routine is no longer used.

## **ORDER DATA TRANSFER 301: CONTRACT SD HEADER DATA**

This routine is used to transfer contract specific header information from the reference sales document header into the target.

### **Example:**

When copying from a scheduling agreement into a replenishment delivery document, it is logical that the header contract specific data such as the validity period and date parameters associated with the scheduling agreement should be transferred and validated. In order to enable this data transfer, this routine can be assigned to the VBAK data transfer routine for the replenishment delivery type.

## **ORDER DATA TRANSFER 302: CONTRACT SD ITEM DATA**

This routine is used to transfer contract specific item information from the reference sales document items into the target.

### **Example:**

When copying from a scheduling agreement into a replenishment delivery document, it is logical that the item contract specific data such as the validity period and date parameters associated with the scheduling agreement item should be transferred and validated. In order to enable this data transfer, this routine can be assigned to the VBAP data transfer routine for the replenishment delivery item category.

## **ORDER DATA TRANSFER 303: CONTRACT FROM QUOTATION**

This routine is used to transfer contract specific information from a quotation to a sales document. Contract specific information such as the validity period dates and the cancellation procedure are transferred from the reference document into the target.

### **Example:**

This routine is currently unused.

## **ORDER DATA TRANSFER 304: CONTRACT FROM CONTRACT**

This routine is used to transfer contract header data to a target contract. The following fields are transferred: validity period (and the technical attributes associated with the validity period), cancellation procedure rule, and the action code indicating what should be done at the end of the contract validity period.

NOTE: This same data is transferred to the items via routine '305'.

### **Example:**

In your company, you establish service contracts for your customers with a standard six month validity period. After creating the first contract it is feasible that you would like to create all subsequent contracts with reference to the original and have the header validity date parameters

automatically transferred to the new document. In order to enable this functionality, this routine can be assigned to the VEDA copying requirement field in the contract type.

NOTE: If there are a number of complex rules on what fields should be copied from the reference contract to the target, it is also possible to use the group master contract functionality which permits more flexibility without having to create a new routine.

### **ORDER DATA TRANSFER 305: FOLLOW-UP CONTRACT ITEM**

This routine is used to transfer contract item data to a target contract item. The following fields are transferred: validity period (and the technical attributes associated with the validity period), cancellation procedure rule, and the action code indicating what should be done at the end of the contract validity period.

NOTE: This same data is transferred to the header via routine '304'.

#### **Example:**

In your company, you establish service contracts for your customers with a standard six month validity period. After creating the first contract it is feasible that you would like to create all subsequent contracts with reference to the original and have the validity date parameters automatically transferred to the new document items. In order to enable this functionality, this routine can be assigned to the VEDA copying requirement field in the item category for the contract type.

### **ORDER DATA TRANSFER 306: CONTRACT ITEM COMMERCIAL DATA**

This routine is used to transfer the item business data from the reference contract items into the target items when the sold-to parties are the same.

#### **Example:**

In your company, you establish service contracts for your customers with a standard six month validity period. Every six months, a new contract is created with reference to the old in order to extend the service and maintenance period for another six months. When performing this copy, the customer specific data should be transferred from the reference items to the target items (as the customer is the same in both the reference and the target). In order to enable this functionality, this routine can be assigned to the business data copying requirement field in the item category for the contract type.

### **ORDER DATA TRANSFER 307: CONTRACT BUSINESS DATA HEADER**

This routine is used to transfer the header business data from the reference contract into the target contract. All fields from VBKD (Business data) are transferred except the following: pricing date, billing date for index and the billing plan number.

#### **Example:**

When creating a contract with reference to another, business data of the items, such as the sales district and incoterms should be transferred from the reference contract into the target. However, specific data related to the pricing and billing dates for the contract should not be transferred from the reference contract into the target contract. In order to enable the transfer of the header business data, this routine can be assigned to the business data transfer rules for the contract type.

### **ORDER DATA TRANSFER 401: SUBSEQUENT BILLING PLAN**

This routine is used to transfer billing plan data from a reference contract item into the target contract items. The following standard billing plan fields are transferred: billing plan type, sort field, start date, rules for determining dates (horizon, start, end, deviation) and the calendar used. These remaining fields are redetermined in the target document: end date, and the from and to dates.

#### **Example:**

As a holiday special, your company has established a promotional rental contract for a customer that includes an extended billing plan for the leasing fees. After creating the first contract with the billing plan parameters, you would like to copy this detail into each subsequent rental contract created during the promotion period. In order to enable the copy of the billing plan information, this routine can be assigned to the appropriate item category copy rules for FPLA.

### **ORDER DATA TRANSFER 402: BILLING PLAN**

This routine is used to transfer billing plan data from a reference document item into the target item. The following standard billing plan fields are transferred: billing plan type, sort field, rules for determining dates (horizon, start, end, deviation) and the calendar used. These remaining fields are redetermined in the target document: end date, and the from and to dates.

NOTE: This routine is similar to routine '401', the only difference being that this routine transfers the rule for determining the start date rather than the actual start date from the reference document.

#### **Example:**

Your organization has provided a customer with a quote detailing the costs to repair a product. This quote includes an extended billing plan that splits the payment due for the repair work over several months. Upon creation of the repair order with reference to the repair quotation, this extended payment plan information needs to be carried into the repair sales order in order for the customer to be billed properly. In order to enable this functionality, this routine can be assigned to the appropriate repair order item category copy rule for FPLA.

### **ORDER DATA TRANSFER 403: BILLING PLAN FROM BILLING DOCUMENT**

This routine is used to copy billing plan information such as the actual billing plan dates from a reference billing document into the target document. The following fields are transferred: billing plan type, sort field, calendar, dates of the billing lines, and the rules for determining the next and deviation dates. The following fields are redetermined: begin and end date.

#### **Example:**

If a customer complains that maintenance was not performed as agreed to in their maintenance contract, a credit memo can be created to refund the customer the amount paid for that time period. Since their maintenance contract distributed the installment payments over several months, the billing plan information needs to be copied into the credit request to insure that the correct amount is refunded to the customer. In order to enable this functionality, this routine can be assigned to the FPLA copy rules for the item category from a billing document to a sales document.

## 4. Deliveries

Delivery data transfer routines are used to fine tune fields transferred during the copying process from selected reference documents into the delivery document. This is done via detailed data transfer routines that transfer specific fields and manipulate the values of others prior to creating the delivery document. These data transfer routines are assigned, in customizing, to the data transfer routine field in the copy rules for delivery document type/item category.

When creating a delivery document with reference to existing documents, the system first checks the copy requirement assigned to the document type/item category. If the requirement is met, then the transfer of data begins from the reference documents into the delivery. It is in this second step that the delivery data transfer routines defined here are called.

When looking at the code for the standard delivery data transfer routines, or when writing your own, some standard work areas are used. For a list of these work areas refer to the actual code in the examples below.

The following is a description of the data transfer routines delivered in the standard system related to deliveries.

### **DELIVERY DATA TRANSFER 1: HEADER**

This routine is the standard routine to transfer data from sales documents into the delivery. Most fields are transferred exactly as they appear in the reference document. The field ZUKRL can be used to define combination rules.

#### **Example:**

When creating a delivery with reference to an order, standard fields are transferred exactly as they appear in the reference document into the target document. In order to have these fields transferred, assign this requirement to the delivery document header transfer rules.

### **DELIVERY DATA TRANSFER 2: BUSINESS DATA**

This requirement is the standard business data transfer routine for order data into the delivery item. All listed fields are transferred without additional manipulation.

#### **Example:**

In order to transfer the standard business data fields from the reference sales document, assign this requirement to the appropriate delivery item category business item data copy routine.

### **DELIVERY DATA TRANSFER 3: PARTNERS**

This routine transfers the partner data from the reference document into the delivery.

NOTE: This requirement is assigned but is not performed in the data transfer. All partner manipulations are hardcoded in the generic data transfer routine.

### **DELIVERY DATA TRANSFER 101: ITEM**

This requirement is the standard data transfer routine for the fields to be transferred from the order document into the delivery items. Most fields are transferred exactly as they appear in the reference document.

#### **Example:**

When creating a delivery with reference to an order, standard fields from the item are transferred exactly as they appear in the reference document into the target document. In order to have these fields transferred, assign this requirement to the delivery document item transfer rules.

### **DELIVERY DATA TRANSFER 102: ITEM CORRECTION**

This requirement is identical to the standard item data transfer routine '101' with an additional check for the forecast delivery schedule. Most fields are transferred exactly as they appear in the reference document item.

#### **Example:**

If your organization uses scheduling agreements and correction deliveries to scheduling agreements, this data transfer routine can be assigned to the correction delivery item category to insure that the standard fields as well as the scheduling agreement specific fields are transferred.

### **DELIVERY DATA TRANSFER 110: PRODUCT SELECTION ITEM**

This routine transfers data from the product selection main item into the derived sub-items. Most fields are transferred exactly as they appear in the reference item.

#### **Example:**

When using product selection, assign this requirement to the data transfer routine of the sub-item delivery item categories to insure that the data from the main item is carried into the substitute product lines.

### **DELIVERY DATA TRANSFER 201: HEADER DELIVERY**

This routine is used in conjunction with shipment notifications from inbound deliveries. This routine transfers data from the general delivery interface into the delivery document header. Most fields are transferred exactly as they appear in the reference document.

#### **Example:**

When processing shipment notifications for inbound deliveries, this data transfer routine should be assigned to the appropriate delivery document type. This insures that the normal order related delivery header fields are filled automatically by the data contained in the inbound shipment notification.

### **DELIVERY DATA TRANSFER 202: ITEM DELIVERY**

This routine is used in conjunction with shipment notifications from inbound deliveries. This routine transfers data from the general delivery interface into the delivery document items. Most fields are transferred exactly as they appear in the reference document item.

**Example:**

When processing shipment notifications for inbound deliveries, this data transfer routine should be assigned to the appropriate delivery item category. This insures that the normal order related delivery fields are filled automatically by the data contained in the inbound shipment notification.

**DELIVERY DATA TRANSFER 301: HEADER WITHOUT ORDER**

This routine is used to support the data transfer of header data from deliveries without an order into a subcontracting delivery. Most fields are transferred exactly as they appear in the reference document.

**Example:**

When implementing subcontracting, data transfer programs need to be established to support the transfer of data from the external interface for the delivery without order into the appropriate fields in the subcontracting delivery header. This routine can be assigned to the appropriate data transfer rules for the subcontracting header to permit the data flow.

**DELIVERY DATA TRANSFER 302: ITEM WITHOUT SALES ORDER**

This routine is used to support the data transfer of item data from deliveries without an order into a subcontracting delivery. Most fields are transferred exactly as they appear in the reference document.

**Example:**

When implementing subcontracting, data transfer programs need to be established to support the transfer of data from the external interface for the delivery without order into the appropriate item fields in the subcontracting delivery document. This routine can be assigned to the appropriate data transfer rules for the subcontracting item to permit the data flow.

**DELIVERY DATA TRANSFER 303: CREATE ITEM WAREHOUSE MANAGEMENT SYSTEM**

This routine is used to support the inbound and outbound goods movement used to support an external warehouse management system. Most fields are transferred exactly as they appear in the general delivery interface.

**Example:**

When implementing an external warehouse management system to support goods movement, these routines can be assigned to the delivery without order to transfer data into the inbound/outbound goods movement documents for external warehouse management.

**DELIVERY DATA TRANSFER 500: BATCH SPLIT**

This routine transfers data from the main batch item into the batch split items. All fields are transferred exactly as they appear in the reference item.

NOTE: This routine is hardcoded into the batch split routine and cannot be changed or removed via configuration.

**Example:**

When using batch split functionality, the data of the main batch item is automatically transferred into any subsequent split items.

**DELIVERY DATA TRANSFER 510: SHIPPING UNITS**

This routine is used to transfer weight and volume related data from the delivery items into the packaging material.

**Example:**

If in the delivery process an additional shipping product is added to the delivery to enable packing, weight and volume data needs to be summarized and transferred to the packing material in order to enable pricing on this material. This can be accomplished by assigning this data transfer routine to the packaging material item category data transfer.

## 5. Billing Documents

Billing document data transfer routines are used to fine tune fields transferred during the copying process from selected reference documents into the billing document. This is done via detailed data transfer routines that transfer specific fields and manipulate the values of others prior to creating the billing document. These data transfer routines are assigned, in customizing, to the data transfer routine field in the copy rules for billing document type/item category.

When creating a billing document with reference to existing documents, the system first checks the copy requirement assigned to the billing document type/item category. If the requirement is met, then the transfer of data begins from the reference documents into the billing document. It is in this second step that the billing document data transfer routines defined here are called.

When looking at the code for the standard delivered billing data transfer routines, or when writing your own, some standard work areas are used. For a list of these work areas refer to the actual code in the examples below.

The following is a description of the data transfer routines delivered in the standard system related to billing documents.

**BILLING DOCUMENT DATA TRANSFER 1: INVOICE SPLIT (SAMPLE)**

This requirement is delivered as a sample to show how the user can fill field 'ZUKRI' with those fields that should be used as determination criteria for splitting in billing.

**Example:**

If your company policy dictates that a new invoice should be created for each separate division and distribution channel, assign this requirement to the appropriate billing item category copy rule.

**BILLING DOCUMENT DATA TRANSFER 2: ORDER-RELATED CREDIT MEMO**



This routine is used to determine the total value of the reference document in order to calculate the basis for a subsequent credit. If a line has been rejected, the value of the line is not included in the total value calculation.

**Example:**

When creating a credit with reference to the original order that the customer placed, the total value of the order document should be used as a guideline for the amount to be credited. If, however, a line has been rejected, this line should not be included in the total value of the corresponding billing document. In order to implement this, assign this requirement to the appropriate billing item category.

**BILLING DOCUMENT DATA TRANSFER 3: SINGLE INVOICE**

This requirement is used to insure that for each reference document only one invoice is created.

**Example:**

If your customer has a requirement that there is no combination of multiple orders into one billing document, this requirement can be assigned to the appropriate billing document item category.

**BILLING DOCUMENT DATA TRANSFER 5: INTERCOMPANY BILLING**

This requirement is used to identify that the customer incoterms should be used as split criteria for invoicing, ignoring the document item incoterms and the shipping conditions. This prevents additional, unnecessary splitting during intercompany billing.

**Example:**

When issuing internal invoices, standard split criteria for billing does not apply. In order to identify unique requirements specifically for internal processing of invoicing, this requirement can be assigned to the appropriate billing item category.

**BILLING DOCUMENT DATA TRANSFER 6: INDIVIDUAL INVOICE LIMITED**

This requirement is used to limit the number of line items allowed in any single billing document.

**Example:**

In some countries there are government regulations that state that there is a limit as to the maximum number of lines that can be in any single invoice document. In order to insure that this regulation is adhered to, this requirement can be assigned to the billing item category and the appropriate limits maintained in configuration.

**BILLING DOCUMENT DATA TRANSFER 7: INVOICE SPLIT (REC/DIV)**

This requirement identifies additional split criteria from the delivery that is to be used in determining when to create a new invoice. Specifically, the following fields are used as split criteria: division, distribution channel, department and receiving point.

**Example:**

If your customer has multiple accounting facilities in one office and they would like a separate invoice issued per department, this can be accomplished by assigning this requirement to the appropriate billing item category. Upon change of department a new invoice will be issued.

### **BILLING DOCUMENT DATA TRANSFER 8: TOTAL INVOICE CHINA**

This requirement is specific to the People's Republic of China and indicates that one billing document can only have one reference document and one tax code.

#### **Example:**

It is a legal requirement in the People's Republic of China that invoices be split by tax code and reference document. In order to comply with this regulation, this requirement must be assigned to the appropriate billing document item categories.

### **BILLING DOCUMENT DATA TRANSFER 10: SINGLE INVOICE: BILLING PLAN**

This routine is identical to routine '003', with the exception of the check against the billing plan. This routine permits the creation of only one invoice per reference document, even if a billing plan is involved.

#### **Example:**

If a sales document is created with a billing plan, it still may be desirable to only issue one single invoice to the customer. If this is the case, this routine can be assigned to the appropriate billing plan item category.

## **6. Sales Activities**

Sales activity data transfer routines are used to fine tune fields transferred during the copying process from a selected reference document into a sales activity. This is done via detailed data transfer routines that transfer specific fields and manipulate the values of others prior to creating the sales activity. These data transfer routines are assigned, in customizing, to the data transfer routine field in the copy rules for the sales activity type.

When creating a sales activity with reference to an existing document, the system first checks the copy requirement assigned to the sales activity type. If the requirement is met, then the transfer of data begins from the reference document into the sales activity. It is in this second step that the sales activity data transfer routines defined here are called.

When looking at the code for the standard delivered sales activity data transfer routines, or when writing your own, two standard work areas are used. These include:

VBKA	Reference document activity
*VBKA	Target document activity

The following is a description of the data transfer routines delivered in the standard system related to sales activities.

### **SALES ACTIVITY DATA TRANSFER 1: CREATE FOLLOW-UP ACTIVITY**

This routine is used to transfer data into a follow-up activity that is created with reference to a sales activity. Utilizing this routine transfers basic sales organizational data, descriptions, short text as well as the activity date and time.

**Example:**

When implementing the functionality to create follow-up activities with reference to an existing sales activity, it is helpful to have the basic data from the original document transferred automatically into the new activity. In order to enable this functionality, this routine can be used.

**SALES ACTIVITY DATA TRANSFER 2: COPY SALES CALL**

This routine is used to transfer data into a follow-up activity for a visit to a customer when created with reference to a sales call. Utilizing this routine transfers basic sales organizational data, descriptions, as well as the time for the contact.

**Example:**

When implementing the functionality to create a follow-up activity with reference to a sales call, it is helpful to have the basic data from the original document transferred automatically into the new activity. In order to enable this functionality, this routine can be used.

## **7. Shipping Units**

Shipping unit data transfer routines are used to fine tune shipping unit information transferred during the copying process from a scheduling agreement into the delivery. This is done via detailed data transfer routines that transfer specific fields and manipulate the values of others prior to creating the target document. These data transfer routines are assigned, in customizing, to the data transfer routine for shipping unit field in the copy rules for the delivery type.

When creating a delivery with reference to an existing scheduling agreement, the system first checks the copy requirement assigned to the delivery type. If the requirement is met, then the transfer of data begins from the reference document into the delivery. It is in this second step that the shipping unit data transfer routines defined here are called.

When looking at the code for the standard delivered shipping unit data transfer routines, or when writing your own, a standard work area, VEKP: SD Document: Shipping Unit Header, is used.

The following is a description of the data transfer routines delivered in the standard system related to shipping unit.

**SHIPPING UNIT DATA TRANSFER 1: SCHEDULING AGREEMENT->DELIVERY**

This routine is used to transfer shipping unit information from a scheduling agreement into a delivery document.

**Example:**

If shipping units have already been assigned in the scheduling agreement, it is useful to be able to transfer this information into the subsequent delivery document. In order to have this happen

automatically, this data transfer routine must be assigned to the data transfer copy rules of the corresponding documents.

## 8. Texts

Text data transfer routines are used to fine tune text transferred during the copying process from a selected reference document into the target. This is done via data transfer routines that can transfer and manipulate texts in the copy procedure. These data transfer routines are assigned, in customizing, to the access sequence field for data transfer for the text type.

When creating a new document with reference to an existing document, the system first checks the copy requirement assigned to the access sequence of the text type to determine if the corresponding texts should be automatically transferred. If the requirement is met, then the transfer of data begins from the reference document into the target. It is in this second step that the text data transfer routines defined here are called.

When looking at the code for the standard delivered text data transfer routines, or when writing your own, four standard work areas are used. These include:

FTVCOM - Communications block  
FXTHEAD - Text header  
FXVBPA - Partner  
REFERENZ - Work area for text module

Note that SAP does not deliver any standard manipulations for data transfer of text, but rather delivers two viable user exit template routines for the user. Moreover, neither of the generic routines below are assigned to the delivered text types. As a result, standard delivered texts are automatically transferred from document to document, without changes, if the assigned copy requirement is met.

The following is a description of the templates for data transfer routines delivered in the standard system related to texts.

### **TEXT DATA TRANSFER 1: EXIT SAMPLE**

This requirement is delivered as a sample to detail the possibilities to search for text and manipulate it prior to updating the document. This request is not used in any standard text determination.

#### **Example:**

If your business scenario dictates that texts be stored in a user-defined table and then derived during document creation, this requirement can be copied and the new requirement be modified to read your table to determine the appropriate text. This new requirement is then assigned to the data transfer field in the access sequence for text determination.

### **TEXT DATA TRANSFER 2: EXIT SAMPLE 2**

This requirement is delivered as a sample to detail the possibilities to search for text and manipulate it prior to updating the document. This request is not used in any standard text determination.

**Example:**

If your business scenario dictates that texts be stored in a user-defined table and then derived during document creation, this requirement can be copied and the new requirement be modified to read your table to determine the appropriate text. This new requirement is then assigned to the data transfer field in the access sequence for text determination.

## 9. Text Names

Text name transfer routines are used differently than most standard data transfer routines. Specifically, these routines are hardcoded rules that dictate how texts are stored in the system in order to be retrieved later for printing and display. Moreover, it is in these routines that the pointers from the originating sales document where the text was defined, to the database, are defined. These data transfer routines are not assigned in customizing, but rather are hardcoded in the standard program calls in the R/3 system for text determination.

When looking at the code for the standard delivered sales activity data transfer routines some standard work areas are used. For a list of these work areas refer to the actual code in the examples below.

NOTE: SAP does not recommend that the user create their own text name routines.

The following is a description of the text name data transfer routines delivered in the standard system.

### **TEXT NAMES DATA TRANSFER 1: TEXT NAME HEADER**

This data transfer routine is the standard routine that dictates how header texts are to be stored in the system for later retrieval. In this routine, the texts are stored using the document number as the pointer. (Table STXH)

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed by the user.

### **TEXT NAMES DATA TRANSFER 2: TEXT NAME ITEM**

This data transfer routine is the standard routine that dictates how item texts are to be stored in the system for later retrieval. In this routine, texts are stored using the document number and item number as the pointer. (Table STXL)

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed by the user.

### **TEXT NAMES DATA TRANSFER 3: CUSTOMER-MATERIAL INFO**

This data transfer routine is the standard routine that dictates how customer material information record texts are to be stored in the system for later retrieval. In this routine, the texts are stored using the sales organization, distribution channel, customer and material as a compound key for the pointer.

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed by the user.

#### **TEXT NAMES DATA TRANSFER 4: TRANSPORT (SHIPMENT) HEADER TEXT**

This data transfer routine is the standard routine that dictates how header texts are to be stored in the system for later retrieval. In this routine, the texts are stored using the shipment document number as the pointer.

NOTE: This routine is hardcoded in the text storage procedure and cannot be changed by the user.

#### **TEXT NAMES DATA TRANSFER 5: LETTER OF CREDIT HEADER TEXT**

This data transfer routine is the standard routine that dictates how letter of credit header texts are stored in the system for later retrieval. In this routine, the texts are stored using the letter of credit document number as the pointer.

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed by the user.

#### **TEXT NAMES DATA TRANSFER 6: AUTHORIZATION (LICENSE DOCUMENT) HEADER TEXT**

This data transfer routine is the standard routine that dictates how license document header texts (foreign trade) are to be stored in the system for later retrieval. In this routine, the texts are stored using the license document number as the pointer.

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed by the user.

#### **TEXT NAMES DATA TRANSFER 7: REBATE AGREEMENTS**

This data transfer routine is the standard routine that dictates how rebate agreement texts are to be stored in the system for later retrieval. In this routine, the texts are stored using the rebate agreement document number as the pointer.

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed by the user.

#### **TEXT NAMES DATA TRANSFER 8: CONDITIONS**

This data transfer routine is the standard routine that dictates how condition record texts are to be stored in the system for later retrieval. In this routine, the texts are stored using the condition record number as the pointer.

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed.

#### **TEXT NAMES DATA TRANSFER 9: AGENT HEADER**

This data transfer routine is the standard routine that dictates how agent related sales document header texts are to be stored in the system for later retrieval. In this routine, the texts are stored using the document number as the pointer.

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed by the user.

#### **TEXT NAMES DATA TRANSFER 10: AGENT ITEM**

This data transfer routine is the standard routine that dictates how item texts for agent related item texts are to be stored in the system for later retrieval. In this routine, the texts are stored using the document number and line item as the pointer.

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed by the user.

#### **TEXT NAMES DATA TRANSFER 11:**

This data transfer routine is the standard routine that dictates how sales support document header texts are to be stored in the system for later retrieval. In this routine, the texts are stored using the sales support document number as the pointer.

NOTE: This routine number is hardcoded in the text storage procedure and cannot be changed.

## **10. Shipments**

Shipment data transfer routines are used to fine tune data transferred during the copying process from the deliveries into the shipment. This is done via detailed data transfer routines that transfer specific fields and manipulate the values of others prior to creating the shipment. These data transfer routines are assigned, in customizing, to the copy routine field in the shipment document type.

NOTE: These routines, and the ability to assign them to a shipment document, are available starting with release 4.6A.

When creating a shipment with reference to existing deliveries the transfer of data begins from the reference documents into the shipment. It is in this step that the shipment data transfer routines defined here are called.

When looking at the code for the standard delivered shipment data transfer routines, or when writing your own, some standard work areas are used. For a list of these work areas refer to the actual code in the examples below.

The following is a description of the data transfer routines delivered in the standard system related to the shipment.

#### **SHIPMENT DATA TRANSFER 1: SERVICE AGENT**

This routine transfers the service agent from a delivery into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different service agents in all deliveries, service agent already defined in the shipment document, and if no service agent is specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

**Example:**

In your company, a customer is able to request a preferred service agent (carrier) when placing their order. This service agent is transferred automatically into the corresponding deliveries. Upon creation of shipment documents for this customer, this service agent should be automatically transferred to the shipment document. In case one delivery was created with a special service agent (different than the standard), this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the special service agent (carrier). In order to enable this functionality, assign this routine to the shipment document type.

**SHIPMENT DATA TRANSFER 2: ROUTE**

This routine transfers the route from a delivery into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different routes in all deliveries, route already defined in the shipment document, and if no route is specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

**Example:**

In your company, a customer is able to request a preferred route when placing their order. This route is transferred automatically into the corresponding deliveries. Upon creation of shipment documents for this customer, this route should be automatically transferred to the shipment document. In case one delivery was created with a special route (different than the standard), this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the special route. In order to enable this functionality, assign this routine to the shipment document type.

**SHIPMENT DATA TRANSFER 3: SHIPPING TYPE**

This routine transfers the shipping type from the deliveries into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different shipping types in the deliveries, shipping type being already defined in the shipment document, and if no shipping type is specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

**Example:**

In your company, you specify, in an order, a shipping type. This shipping type is transferred automatically into the corresponding deliveries. Upon creation of shipment documents for a specific customer, this shipping type should be automatically transferred to the shipment document. In case one delivery was created with a different shipping type, this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the special shipping type. In order to enable this functionality, assign this routine to the shipment document type.



#### **SHIPMENT DATA TRANSFER 4: SPECIAL PROCESSING INDICATOR**

This routine transfers the special processing indicator from the deliveries into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different special processing indicators in the deliveries, the special processing indicator being already defined in the shipment document, and if no special processing indicator is specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

**Example:**

In your company, you set the special processing indicator in a sales order. This indicator is transferred automatically into the corresponding deliveries. Upon creation of shipment documents for a specific customer, this special processing indicator should be automatically transferred to the shipment document. In case one delivery was created with a different special processing indicator, this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the different indicator. In order to enable this functionality, assign this routine to the shipment document type.

#### **SHIPMENT DATA TRANSFER 5: TRANSPORTATION CATEGORY**

This routine transfers the transportation category from the deliveries into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different transportation categories in the deliveries, transportation category already defined in the shipment document, and if no transportation category is specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

**Example:**

In your company, you specify in an order the transportation category. This transportation category is transferred automatically into the corresponding deliveries. Upon creation of shipment documents for a specific customer, this transportation category should be automatically transferred to the shipment document. In case one delivery was created with a different transportation category, this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the special transportation category. In order to enable this functionality, assign this routine to the shipment document type.

#### **SHIPMENT DATA TRANSFER 6: MEANS OF TRANSPORT**

This routine transfers the means of transport from the deliveries into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different means of transport in the deliveries, means of transport being already defined in the shipment document, and if no means of transport is specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

**Example:**

In your company, you specify in an order the means of transport. This means of transport is transferred automatically into the corresponding deliveries. Upon creation of shipment documents

for a specific customer, this means of transport should be automatically transferred to the shipment document. In case one delivery was created with a different means of transport this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the special means of transport. In order to enable this functionality, assign this routine to the shipment document type.

### **SHIPMENT DATA TRANSFER 7: SERVICE AGENT/ROUTE**

This routine transfers the service agent and the route from the deliveries into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different service agent/route in the deliveries, service agent/route being already defined in the shipment document, and if no service agent/route is specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

#### **Example:**

In your company, you specify, in an order, the service agent and route. These fields are transferred automatically into the corresponding deliveries. Upon creation of shipment documents for a specific customer, these fields should be automatically transferred to the shipment document. In case one delivery was created with a different service agent/route this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the documents with the differing entries. In order to enable this functionality, assign this routine to the shipment document type.

### **SHIPMENT DATA TRANSFER 8: DEADLINES (SCHEDULING)**

This routine transfers the deadlines from the deliveries into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different deadlines in the deliveries, deadlines being already defined in the shipment document, and if no deadlines are specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

#### **Example:**

In your company, you specify, in an order, the deadlines. These fields are transferred automatically into the corresponding deliveries. Upon creation of shipment documents for a specific customer, these fields should be automatically transferred to the shipment document. In case one delivery was created with different deadlines, then this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the documents with the differing entries. In order to enable this functionality, assign this routine to the shipment document type.

### **SHIPMENT DATA TRANSFER 9: STANDARD (1-6, 8)**

This routine transfers all of the data outlined in routines 1, 2, 3, 4, 5, 6, and 8 from the deliveries into the shipment document. This includes the following fields: service agent, route, shipping type, special processing indicator, transportation category, means of transport, and deadlines. Due to the large number of potential delivery documents that are combined into one shipment, there are also

checks contained in this routine to accommodate for inconsistencies such as: different entries in the specified fields in the selected deliveries, the specified fields being already defined in the shipment document, and if the specified fields are not filled in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

NOTE: This is the standard data transfer routine that is delivered with most shipment document types.

**Example:**

In your company, you specify one or many of the listed fields in an order. These fields are transferred automatically into the corresponding deliveries. Upon creation of shipment documents for a specific customer, these fields should be automatically transferred to the shipment document. In case one delivery was created with any of the specified fields being different than the rest, then this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the documents with the differing entries. In order to enable this functionality, assign this routine to the shipment document type.

**SHIPMENT DATA TRANSFER 10: SERVICE AGENT/DEADLINES (SCHEDULING)**

This routine transfers the service agent and the deadlines from the deliveries into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different service agent/deadlines in the deliveries, service agent/deadlines being already defined in the shipment document, and if no service agent/deadlines are specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

**Example:**

In your company, you specify in an order the service agent and deadlines. These fields are transferred automatically into the corresponding deliveries. Upon creation of shipment documents for a specific customer, these fields should be automatically transferred to the shipment document. In case one delivery was created with different service agent/deadlines, then this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the documents with the differing entries. In order to enable this functionality, assign this routine to the shipment document type.

**SHIPMENT DATA TRANSFER 11: ROUTE/DEADLINES (SCHEDULING)**

This routine transfers the service agent and the deadlines from the deliveries into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different service agent/deadlines in the deliveries, service agent/deadlines being already defined in the shipment document, and if no service agent/deadlines are specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

**Example:**

In your company, you specify in an order the service agent and deadlines. These fields are transferred automatically into the corresponding deliveries. Upon creation of shipment documents for a specific customer, these fields should be automatically transferred to the shipment document. In case one delivery was created with different service agent/deadlines, then these deliveries should not be included in the group shipment document, but a separate shipment should be created to

accommodate the documents with the differing entries. In order to enable this functionality, assign this routine to the shipment document type.

**SHIPMENT DATA TRANSFER 12: SERVICE AGENT/ROUTE/DEADLINES (SCHEDULING)**

This routine transfers the service agent, route and the deadlines from the deliveries into the shipment document. Due to the large number of potential delivery documents that are combined into one shipment, there are also checks contained in this routine to accommodate for inconsistencies such as: different service agent/route/deadlines in the deliveries, service agent/route/deadlines being already defined in the shipment document, and if no service agent/route/deadlines were specified in any of the reference deliveries. In each case, a message will be presented to the user informing them of the problem.

**Example:**

In your company, you specify in an order the service agent, route, and deadlines. These fields are transferred automatically into the corresponding deliveries. Upon creation of shipment documents for a specific customer, these fields should be automatically transferred to the shipment document. In case one delivery was created with different service agent/route/deadlines, then this delivery should not be included in the group shipment document, but a separate shipment should be created to accommodate the documents with the differing entries. In order to enable this functionality, assign this routine to the shipment