Transportation Overview

Integration

On the goods issue side (SD, Sales & Distribution) as well as on the goods receipt side (MM, Materials Management), goods must be shipped. As illustrated in the following graphic, you can use the SAP transportation functions to plan and process:

- Incoming shipments in Materials Management based on purchase orders and shipping notifications.
- Outbound shipments in Sales and Distribution based on sales orders and deliveries. The SAP Transport module constitutes transporter software.

The shipment can be used for the goods issue side as well as for the goods receipt side, outbound deliveries or inbound deliveries can be the basis of the shipment.

Overview

These transactions in the real world can be modeled using shipments in the SAP System. The shipment, in which the "what, when, how, from/to where" to be shipped can be defined.

This document serves different purposes in the "life cycle" of a shipment:

- Planning of shipments: The first part, when the person organize the shipments plans, he combine what is shipped that could be done together. He fixes deadlines, etc.
- Processing of shipments: You can imagine the truck entering in the plant, is registered, then loaded the goods, finally completed, etc.
- Monitoring of shipments: In this part of the process, you will question: How far has this shipment progressed up till now? Is it already completed, is it still being loaded, where is it at the moment?
- Basis for the calculation and settlement of shipments: The carrier must receive payment for his activities; this is passed to the customer's account, etc.

As the last point particularly indicates, the SAP system transport module is considered especially suitable for these so-called shippers. This means:

The company using the SAP system manufactures goods in (or trades/re-tails them) in some way and organized the shipment itself (possibly with its own fleet of vehicles) or engages one or several carriers.

Example:
- A customer calls and orders a certain product. The sales clerk enters a sales order in the SAP system.
- In due course, one or several deliveries are created for this sales order (depending on what is available where and when).
- One or more deliveries (if possible, to different customers) are collected into shipments.

This differs fundamentally from the carrier scenario: The carrier receives shipment orders in which any departure points and destinations appear (i.e., not shipping point and customer).

Inbound and Outbound Deliveries

These transportation functions can handle planning and processing for both inbound and outbound shipments. You can control and monitor the entire transportation process from the planning stage to:
• goods issue at your shipping point (for outbound shipments) or
• vendor location (for inbound shipments), through to goods receipt at the customer location or your plant.

Currently, it is not possible in the SAP Standard system to have inbound and outbound deliveries in the same shipment.

The structure of the shipment document is analogous to other SD or MM documents:
Every shipment document refers to a Shipment type which essentially identifies control characteristics for document processing.

The shipment document itself is comprised of a header, items (deliveries or delivery notifications) and other data (e.g., shipment stages, etc.).
In customizing, for the Shipment type (transaction OVTK, table TVTK), one can set whether outgoing or incoming shipments are to be processed.

The controlling indicator in the shipment type is the field TVTK-ABFER.
As a consequence, actions relating to deliveries (e.g., branching into the processing of a delivery or of a delivery notification within the transaction VT01N) are derived from the indicator of the shipment header and not from the attributes of the deliver itself.

Related Notes

Important consulting notes:
SAP Note 748971: Conditions and scales
SAP Note 746549: Shipment costs, general

List of Components

Here you can find the list of LE-TRA components

List of LE-TRA BAPI's

ERP LE-TRA Scenarios