**BP315 Business Sub-Process Design Document**

**Intra-company Stock Transfer Order**

Cross Industry / Sourcing & Procurement

**SAP - MM**

Table of Contents

[1 Overview 3](#_Toc36718864)

[2 Document History 3](#_Toc36718865)

[2.1 Change History 3](#_Toc36718866)

[2.2 RASCI 3](#_Toc36718867)

[2.3 Approval Detail 3](#_Toc36718868)

[2.4 Other Related Documents 3](#_Toc36718869)

[3 Business Process Overview 3](#_Toc36718870)

[3.1 High level requirements 5](#_Toc36718871)

[3.2 Key Value Drivers for the Business Process 5](#_Toc36718872)

[3.3 Leading Practice Inputs 6](#_Toc36718873)

[4 Business Sub-Process Description 6](#_Toc36718874)

[4.1 Business Sub-Process diagram 8](#_Toc36718875)

[5 Sub Process Activities 8](#_Toc36718876)

[5.1 Activity List 8](#_Toc36718877)

[5.2 Inbound Communication 9](#_Toc36718878)

[5.3 Outbound Communication 9](#_Toc36718879)

[5.4 Test Conditions 9](#_Toc36718880)

[6 SUB-PROCESS VARIATION 10](#_Toc36718881)

[6.1 Business Unit Led 10](#_Toc36718882)

[6.2 Geography/Legal Entity Led 10](#_Toc36718883)

[7 role definition & Organizational impact 10](#_Toc36718884)

[7.1 Role/Skill Class Inventory 10](#_Toc36718885)

[7.2 Role Summary 10](#_Toc36718886)

[7.3 Organizational Impact 10](#_Toc36718887)

[8 Process Fitness & Gap Analysis 11](#_Toc36718888)

[8.1 Process Fitness 11](#_Toc36718889)

[8.2 Gap Analysis 11](#_Toc36718890)

[9 RICEFW 11](#_Toc36718891)

[9.1 Reports-Fiori Analytical Apps 11](#_Toc36718892)

[9.2 Interfaces (Inbound / Outbound) 11](#_Toc36718893)

[9.3 Conversions 12](#_Toc36718894)

[9.4 Enhancements 12](#_Toc36718895)

[9.5 Forms 12](#_Toc36718896)

[9.6 Workflows 12](#_Toc36718897)

[10 Integration Points 12](#_Toc36718898)

[10.1 Integration Issues 12](#_Toc36718899)

[10.2 Other issues 13](#_Toc36718900)

[10.3 Revision History 13](#_Toc36718901)

# Overview

Stock transport order can be defined as a Purchase Order used to transport material from one plant to another within the same corporate enterprise or company code. For example, you would use the Stock Transfer Order (STO) for transferring materials between two plants or between the enterprise.

# Document History

## Change History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ver.** | **Date** | **Summary of Changes** | **Author** | **Transfer Number** |
| V1.0 | 10/22/2019 | Initial Draft | Guhan Senthil | N/A |
| V2.0 | 02/24/2020 | Changes in Cover page, Document naming convention , Technical changes | Guhan Senthil | N/A |

## RASCI

|  |  |  |  |
| --- | --- | --- | --- |
| RASCI | Role | Name | Phone |
| N/A | N/A | N/A | N/A |

R: Responsible; A: Accountable; S: Support; C: Contribute; I: Information

## Approval Detail

|  |  |  |  |
| --- | --- | --- | --- |
| **Review #** | **Date** | **Name & Position of Approver** | **Signature** |
| **1.0** | 10/23/2019 | Snehal Kutumbale | Snehal K |
| **2.0** | 02/26/2020 | Nadimpalli Venkat | Venkat N |

## Other Related Documents

|  |  |
| --- | --- |
| Related Document | Comment |
| BP310 | Business Process Flow |
| TE586 | Test Script |
| AP322 | Configuration Details |

# Business Process Overview

Stock transfer order may be used if a company has two or more plants. These plants may be production facilities or warehouses. Stock transfer orders are either One-step or Two-step methods of stock transfers, because users are able to operate Sales & Distribution (SD) functions such as scheduling, delivery, picking, packing, shipping and goods issue.

**Characteristics of a Stock Transfer Order**

The quantity posted from stock is first of all managed as stock in transit of the receiving plant. Only once the goods receipt has been posted is the quantity posted to the unrestricted-use stock of the receiving plant.

This enables the quantity "on the road" to be monitored.

* Delivery costs can be entered in the stock transfer order.
* The transfer posting is valuated at the valuation price of the material in the issuing plant.

**Process Flow of Stock Transfer Order without Delivery:**

1. Creating a stock transfer order in the receiving plant

* Plant A would like to order materials from plant B. Plant A enters a stock transfer order. The stock transfer is used to plan the movement.

1. Posting a goods issue in the issuing plant

* Plant B supplies the goods to plant A. Plant B enters the goods issue for the stock transfer order. The goods are then posted to the stock in transit of the receiving plant.

1. Posting a goods receipt in the receiving plant

* Once the goods arrive in the receiving plant, the plant posts the goods receipt. The stock in transit is therefore reduced and the unrestricted-use stock increased.
* The goods receipt is entered with reference to the purchase order.

**Stock Transfer Order with Delivery via Shipping:**

The following components are involved in this type of stock transfer:

* Purchasing is creating a purchase order
* Shipping in making the delivery from the issuing plant
* Inventory Management at goods receipt in the receiving plant

**Process Flow for Stock Transfer Order with Delivery :**

1. Creating a stock transfer order in the receiving plant

Plant A would like to order materials from plant B. Plant A enters a stock transfer order. The stock transfer is used to plan the movement.

1. Posting a delivery in the issuing plant

Plant B supplies the goods to plant A. Plant B enters a replenishment delivery in Shipping. The goods are then posted to the stock in transit of the receiving plant.

1. Posting a goods receipt in the receiving plant

Once the goods arrive in the receiving plant, the plant posts a goods receipt for the delivery. The stock in transit is therefore reduced and the unrestricted-use stock increased.

**Stock Transfer Order with Delivery:**

With this type of stock transfer, the transfer posting is not valuated at the valuation price of the material in the issuing plant, but is defined in both the issuing and receiving plants using conditions.

The following applications are involved in this type of stock transfer:

* Purchasing in entering the order
* Shipping in making the delivery from the issuing plant
* Billing in creating the billing document for the delivery
* Inventory Management at goods receipt in the receiving plant
* Invoice Verification at invoice receipt in the receiving plant

**Pre Requisites for Intra company Stock Transfer order with delivery:**

* Plant Vendor Assignment: The intercompany vendor (which represents the supplying plant and thus called plant vendor) should be assigned with the plant in the vendor master (in the purchasing view extras)
* Customer Plant assignment: The intercompany customer (which represents the receiving plant) should be assigned with the receiving plant in customizing settings.
* Establishing the linkage between the Purchasing document type (intra-company purchase order) and the delivery document (outbound delivery) in customizing.
* Establishing the linkage between the supplying plant, receiving plant and the purchasing document type in customizing.

## High level requirements

The master data needed to be maintained for the process are listed below,

|  |  |
| --- | --- |
| **Master Data** | **Code** |
| Material | S4HRM2019 |
| Supplying Plant | 1201 |
| Receiving Plant | 1211 |

## Key Value Drivers for the Business Process

There are multiple ways to create different business scenarios,

* Create Stock Transfer Order manually
* Create Stock Transfer Order through MRP run
* Create Stock Transfer Scheduling Agreement
* Create Return Stock Transfer Order

## Leading Practice Inputs

STO process adds the following business values,

* A goods receipt can be generated at the receiving plant.
* A transport vendor and delivery costs can be specified in the STO.
* The purchase requisitions created in the MRP can be changed to an STO, because the STO is part of the MRP.
* The goods issued can be specified by using a delivery through Shipping or Inventory Management.
* The goods receipt can be posted directly to consumption.
* The PO history can be used to monitor the entire process of stock transfer

# Business Sub-Process Description

There are 3 sub processes involved in Manage Stock Transport Orders:

* Create Stock Transport Order in Receiving Plant
* Post a Delivery in the Issuing Plant
* Post a Goods Receipt in the Receiving Plant

**Create Stock Transport Order in Receiving Plant :**

The receiving plant orders the material and plans the delivery costs such as packaging, freight, transport insurance, customs duty, and unloading. These planned costs are recorded for the specific item within the order.

Supply data, purchasing organization, and purchasing group must be specified during the STO creation.

Once the stock transport order is created the goods issue can take place. The goods issue can be posted in MM-IM (Material Management - Inventory Management) or in SD Shipping depending how the system is configured.

If the goods issue is posted in Inventory Management, the goods receipt is entered with reference to the stock transport order.

***Inputs to Sub process*** :

Purchase Requisitions, Supplying Plant, Purchase Organization, Material and Purchase Group

***Outputs to the Sub process***:

Stock Transport Order

**Post a Delivery in the Issuing Plant :**

A stock transport order including SD delivery is commenced within the Materials Management module.

The second step of this procedure involves posting a delivery at the issuing point by using SD delivery functions. The shipping point assigned to the delivering plant creates a delivery for the stock transport order.

This delivery is processed within the delivery due list. When picking has been carried out the goods issue is posted and stock in transit is created.

Delivery paperwork can be printed to follow the actual inventory movement.

To enable processing of a stock transport order, customizing must be done prior to the goods issue within SD.

**Post a Goods Receipt in the Receiving Plant :**

Throughout the stock transport order process, the stock is valuated at the issuing plant, while the quantity of stock transferred between the plants is managed neither in the issuing nor the receiving plant until the goods receipt is posted in the receiving plant.

Until goods receipt, the quantity of transferred stock is managed as stock in transit at the receiving plant.

When the goods arrive a goods receipt is posted. This goods receipt is created in reference to the STO. The goods receipt may also refer to the delivery note. In this way, documents are linked and can be searched using multiple methods, such as a delivery note.

This transaction reduces the quantity and value of the stock in transit account and the value of the stock transport order still open at the receiving plant. In addition, if the transport occurs between plants in different company codes, SD billing could be used to ensure more enhanced invoicing options.

The shipping plant creates an invoice and the receiving plant pays it. Invoice verification may then take place.

***Inputs to Sub process*** :

Stock Transport Order, Delivery, Goods Issue

***Outputs to the Sub process*** :

Goods Receipt, Material Document, Accounting Document and Billing Document.

**Stock Transfer Order versus Stock transfer Scheduling Agreement**

**Stock Transfer Order:**   
A standard STO is a single document for a single transaction, just like a single purchase order to a supplier. Every time the need to transfer stock arises, a new STO needs to be created.

**Stock transfer Scheduling Agreement:**  
A Stock Transfer Scheduling Agreement allows multiple stock transfer releases against it, like a contract. This type of agreement is useful for frequent stock transfer requests with a supplying plant/company. Once set up, the system can create schedule lines against the agreement, requiring minimum human intervention.

**ATP process for confirming STO:**

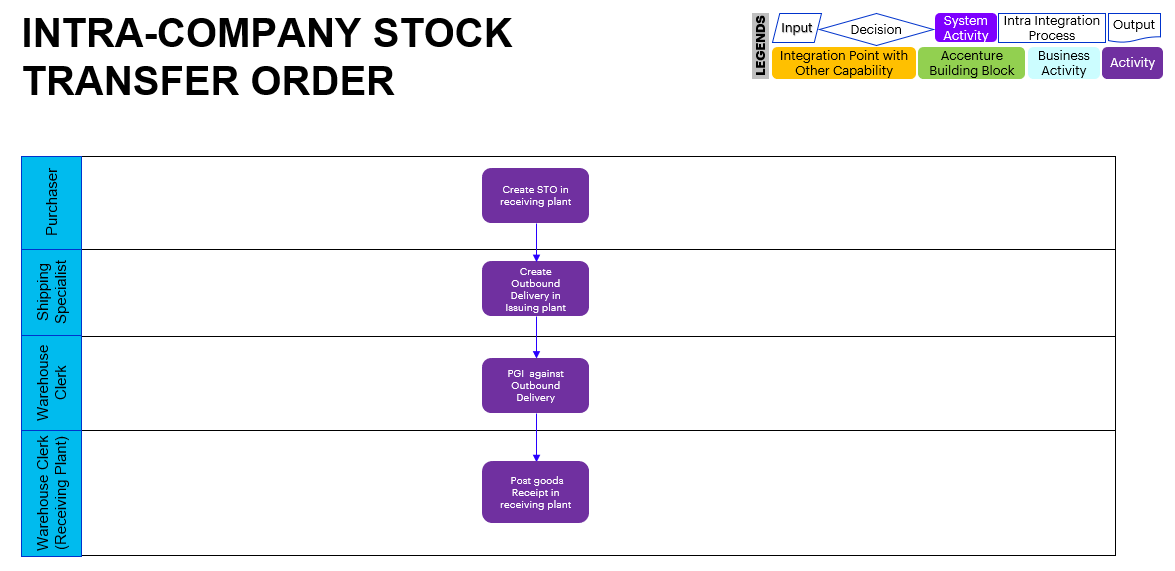
Available to promise (ATP): is a process of checking the available quantities of a material. Availability check is an integral part of the business process that determines if the required delivery quantity can be met on a required delivery date. For this purpose the system takes into account pre-delivery activities such as scheduling for picking or packing times and the time taken to produce or obtain the material. It also performs several background functions such as Backorder processing, rescheduling and ATP quantities.

When we create a stock transport order, the system performs an availability check and commits the requirement quantities and the delivery dates according to the results of the check. We can fix the delivery dates for the document item proposed by ATP by selecting the fix date and quantity checkbox in the stock transport order.

**Return item in STO:**

Generally, Stock movement happens between storage location to storage location, plant to plant or company code to company code. Stock shipped out of receiving plant to customer /retailer may receive back to the receiving plant as a return. Again, this return product has to be sent back to supply plant for any rectification, because customer shipping plant can’t rectify the product.

## Business Sub-Process diagram



# Sub Process Activities

## Activity List

Activity definition document if applicable for the project & also has references in the process/sub process diagram.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Description | Transaction Code/ Fiori App Name | Roles involved | Regulatory /Other Controls |
| **Create STO** | Creating a stock transport order in the receiving plant | ME21N/ Create Purchase Order Advanced | Purchaser | N/A |
| **Post Delivery** | Posting a delivery in the issuing plant | VL10B/ My Purchase Orders Due for Delivery | Shipping Specialist | N/A |
| **Post GI** | Posting a goods issue for the delivery document | VL02N / Change Outbound delivery | Warehouse Clerk / Inventory Manager | N/A |
| **Post GR** | Posting a goods receipt in the receiving plant | MIGO / Post Goods Movement | Warehouse Clerk | N/A |

## Inbound Communication

The Inbound Communication needs to be specifically documented for the client specific situation, like interfacing with external systems, workflow, form & Medium of communication.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Activity | Type (email, form, handoff, etc.) | Automatic/Manual | Source | Description |
| Purchase Order | Print, fax, email, EDI | Automatic/Manual | Vendor | Purchase Order Inbound.  *Technical name: API\_PURCHASEORDER\_PROCESS\_SRV*  *SOAP call: PurchaseOrderRequest\_In* |
| Shipping Notification | Print, fax, email, EDI | Automatic/Manual | Vendor | Shipping Notification.  Best Practice. |

## Outbound Communication

The Outbound Communication needs to be specifically documented for the client specific situation, like interfacing with external systems, workflow, form & Medium of communication.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Activity | Type (email, form, handoff, etc.) | Automatic/Manual | Source | Description |
| Output PO | Print, fax, email, EDI | Automatic/Manual | SAP | PO sent to Vendor network-Technical name: PurchaseOrderStatusNotification\_Out |

## Test Conditions

This section captures Test conditions for this sub process for the any specific client requirements. Generic test conditions for this sub process will be within the test scripts.

|  |  |  |
| --- | --- | --- |
| Number | Test Condition – Action | Expected Result |
| **1** | Creating a stock transport order in the receiving plant | STO PO gets created |
| **2** | Posting a delivery in the issuing plant | Delivery document created against the PO |
| **3** | Posting a goods issue for the delivery document | Posting of goods issue done at the issuing plant |
| **4** | Posting a goods receipt in the receiving plant | Goods receipts should be posted at receiving plant and quantity should be increased at SL |

# SUB-PROCESS VARIATION

## Business Unit Led

N/A

## Geography/Legal Entity Led

N/A

# Role definition & Organizational impact

The content in this section will serve as input for the training and performance support team’s deliverables.

## Role/Skill Class Inventory

|  |  |  |
| --- | --- | --- |
| Role | Skills | Knowledge |
| Purchaser | Responsible for creating STO, Return STO, Transport Scheduling Agreement, delivery schedule | Purchase related activities |
| Shipping Specialist | Responsible for creating delivery doc and posting goods issue | Delivery related activities |
| Warehouse Clerk | Responsible for posting GR and posting return delivery | GR related activities |

## Role Summary

|  |  |  |
| --- | --- | --- |
| Role | List of Steps | SAP Transaction / Fiori App Name |
| Purchaser | Create STO | Create Purchase Order Advanced |
| Shipping Specialist | Post Delivery | My Purchase Orders Due for Delivery |
| Shipping Specialist | Post GI | Change Outbound delivery |
| Warehouse Clerk | Post GR | Post Goods Movement |

## Organizational Impact

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reference # | Impact Description | Impact (H/M/L) | Impact Type | Impacted Groups |
| N/A | N/A | N/A | N/A | N/A |

# Process Fitness & Gap Analysis

## Process Fitness

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Req ID | Short Description | Long Description | Req. Type | Accenture Reusable Assets |
| 1 | Configuration for Stock Transfer Order setup | Standarad settings for Stock Transfer Order process settings in Business Partner, Material master | Configuration | From myConcerto |

## Gap Analysis

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Country/ Region/ Business Impacted | Gap Description | Legal Req. (Y/N) | Magnitude of Impact  (L/M/H) | Solution Type | RICEFW No. | Ref. to Req. id. |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A |

# RICEFW

## Reports-Fiori Analytical Apps

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Client XYZ  RICEFW # | Report Description | Complexity  (H/M/L) | Comments | Use from  (New / Rework/ Rep) | Ref # from RICEFW inventory |
| myConcerto 1 | My Purchase Orders Due for Delivery / VL10B | M | SAP GUI enabled Fiori App | New | 1 |
| myConcerto 2 | My Outbound Delivery Monitor / VL06O | M | SAP GUI enabled Fiori App | New | 2 |

## Interfaces (Inbound / Outbound)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Client XYZ  RICEFW # | Interface Description | Complexity  (H/M/L) | Comments | Use from  (New / Rework/ Rep) | Ref # from RICEFW inventory |
| N/A | N/A | N/A | N/A | N/A | N/A |

## Conversions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Client XYZ  RICEFW # | Conversion Description | Complexity  (H/M/L) | Comments | Use from  (New / Rework/ Rep) | Ref # from RICEFW inventory |
| N/A | N/A | N/A | N/A | N/A | N/A |

## Enhancements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Client XYZ  RICEFW # | Enhancement Description | Complexity  (H/M/L) | Comments | Use from (New / Rework/ Rep) | Ref # from RICEFW inventory |
| N/A | N/A | N/A | N/A | N/A | N/A |

## Forms

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Client XYZ  RICEFW # | Form Description | Complexity  (H/M/L) | Comments | Use from (New / Rework/ Rep) | Ref # from RICEFW inventory |
| N/A | N/A | N/A | N/A | N/A | N/A |

## Workflows

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Client XYZ  RICEFW # | Workflow Description | Complexity  (H/M/L) | Comments | Use from  (New / Rework/ Rep) | Ref # from RICEFW inventory |
| N/A | N/A | N/A | N/A | N/A | N/A |

# Integration Points

Generic Integration touch points have been highlighted in this section. It covers dependencies or prerequisites arising from other processes or sub processes. This information should lead to cross functional discussions between different work streams to sort out the interdependencies.

## Integration Issues

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Issue # | Issue Description | Impact | Status | Resolution |
| Sales | Sales views in material master & shipping tab in PO | Low | Closed | From SD to MM  For Mainting STO configuration. |
| Inventory Management | Goods Receipt and Goods Issue | Low | Closed | From MM to IM  Goods receipt,Goods Issue, Stock In Transit |
| Finance activity | Closing | Low | Closed | Period end closing (general ledger) settings |

## Other issues

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Issue # | Issue Description | Impact | Status | Resolution |
| N/A | N/A | N/A | N/A | N/A |

## Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version | Description | Author |
| 10/23/2019 | 1 | Content Review | Snehal Kutumbale |
| 02/26/2020 | 2 | Review on UI changes , Content | Nadimpalli Venkat , Srinivasappa Nagesh |