How to View Stock-in-Transit in Accounting and Logistics Transactions

Paul Ovigele, Founder - ERPfixers

SAPinside r Las Vegas

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What We'll Cover

- Overview of Stock-in-Transit in SAP
- Stock-in-Transit Scenarios
- Setting up SIT in Logistics
- Setting up SIT in Accounting
- SIT Accounting Postings
- LOG_MM_SIT and Actual Costing
- LOG_MM_SIT and S/4HANA
- Wrap-Up

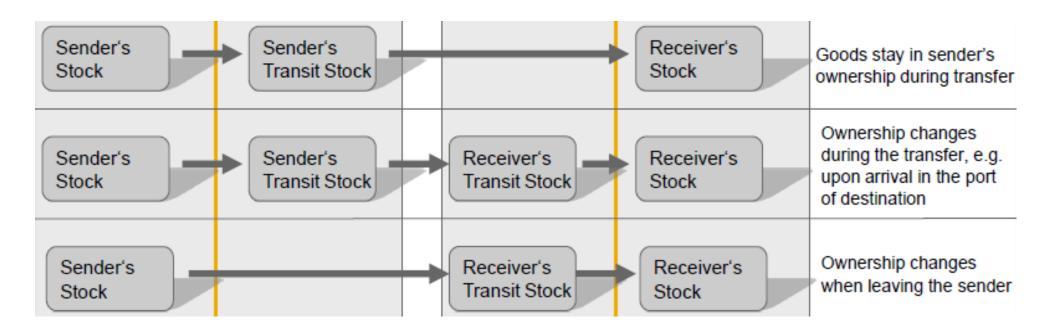


Overview of Stock-in-Transit in SAP



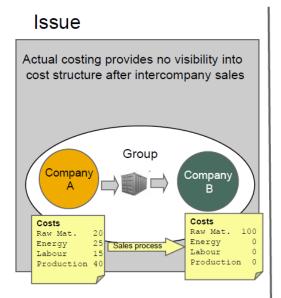
Stock in Transit Overview

- Can be used for Inter-company code or Intra-company code stock transfer process
- Quantity and value of material is retained by the issuing plant from the time it leaves the issuing plant but has not yet reached the receiving plant
- Allows control of goods movements for sales to external customers and for stock transfer between plants belonging to the same or different company codes



Benefits of Stock-in-Transit

- Visibility of stock in transit sent to a customer or another company
- For Intercompany or Intracompany transactions, there is also visibility in the receiving company code or plant
- Enables Actual Costing across company codes (if Material Ledger Actual Costing is active)
- Transfer of Actual Cost Component Split across Companies (if Material Ledger Actual Costing is active)



Requirement

The enhanced Solution shall keep the cost transparency through intracompany sales and add freight costs and cross-company profits to the costs from the selling company code from a group point of view

CoCd A, Pint 1		Invoice 1100,-	CoCd B / F	Pint 2
Total cost	1000		Total cost	1100
Materials	500	Sold to	CC Markup	100
Labor	400		Materials	600
Overhead	100		Labor	400
Freight			Overhead	100
Sh	ipper	Freight invoice 100,-	Freight	100

Benefits of Stock-in-Transit Cont.

- Functionality Supports:
 - Handling Units
 - Batches
 - Sales Order Assignments
 - Standard or Moving Average price
 - Serial Numbers
 - Costing, Cost Objects and Actual Costing
 - SPED Functionality



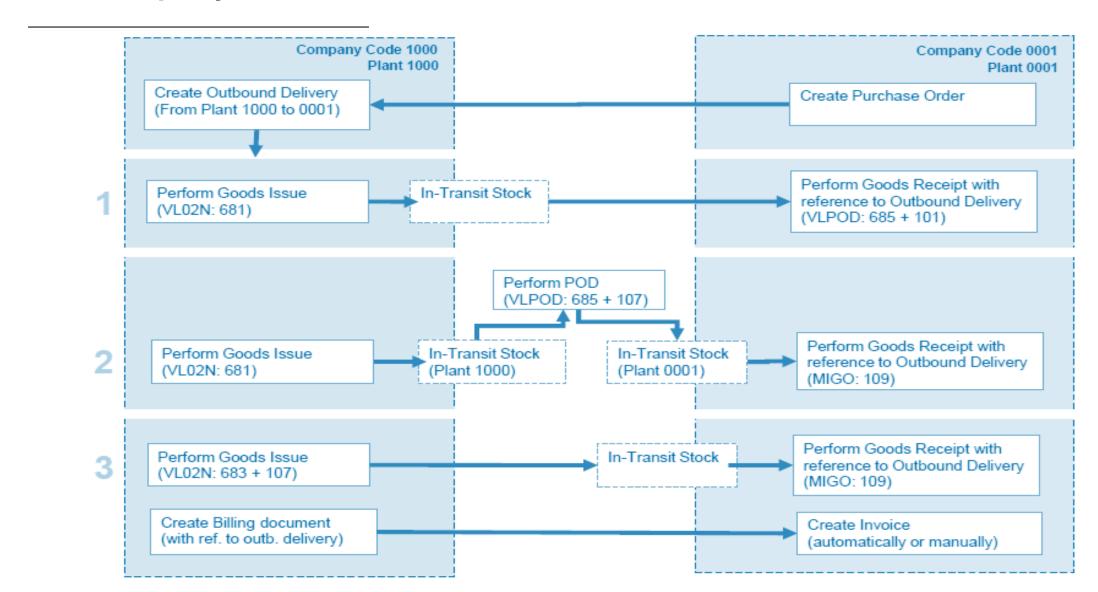
Stock-in-Transit Scenarios



Overview of SIT Scenarios

Intercompany Transfers Intracompany Transfers External Vendor Transfers External Customer Transfers

Intercompany Transfers



Issuing SIT From Sending Plant

This is carried out using Transaction MIGO with Movement 681

Deliv. Qty POD quantity SU Detai Reason QtyDiffinSalesUn

Outbound Side (Posting to issuing SIT): Document Overview for Material Procurement Document Hierarchy Doc. Quantity Unit Status Purchase order 10 3 EA 4500006367 Active ▽ → Delivery 0080001235 10 3 EA Being processed VL02N: Goods Issue WMS transfer order 0000002539 10 3 EA with Myt Type 681 4900003946 3 EA Goods movement Closed Ownership Transfer (with Transaction VLPOD): Proof of Delivery - Iss. SIT - Rec. SIT 80001235 Change: Overview 🎾 📽 📋 🕞 🙎 🚨 🎥 🦻 🖫 Post Goods Issue Outbound deliv. 89991235 Document Date 29.03.2010 Plant 6000 in COCOde 6000 / Mainstr. 16 / 23558 Hamburg verview POD Item Overview | Picking | Loading | Transport | Status Overview | Goods Movement Data 99:00 POD Date 1 Goods Issue Issuing CST 📳 1 Goods Issue Issuing CST to Receiving CST Quantity differences All Items

30 B Batch

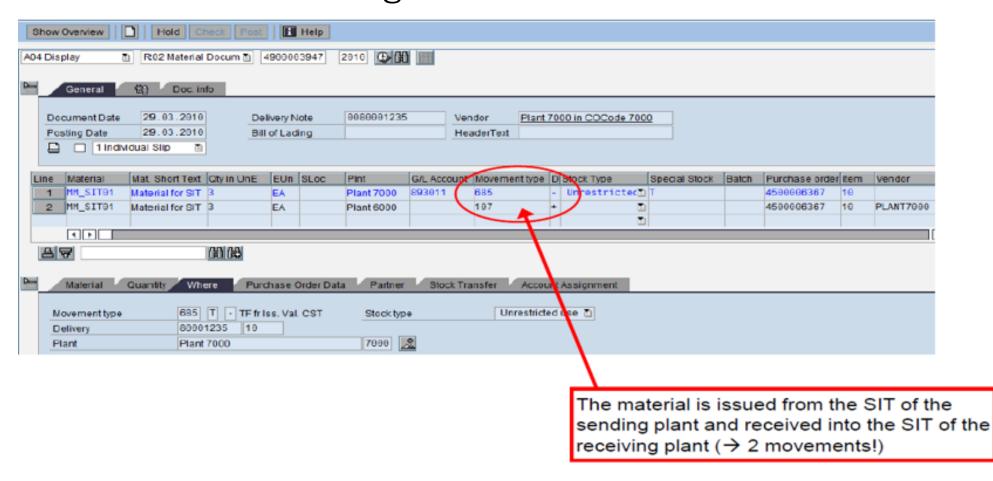
can be maintained

here

EA Material for SIT

Proof of Delivery

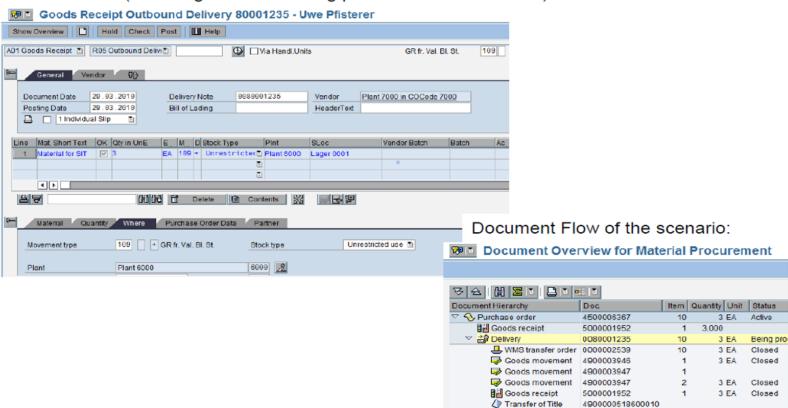
This is carried out using Transaction VLPOD



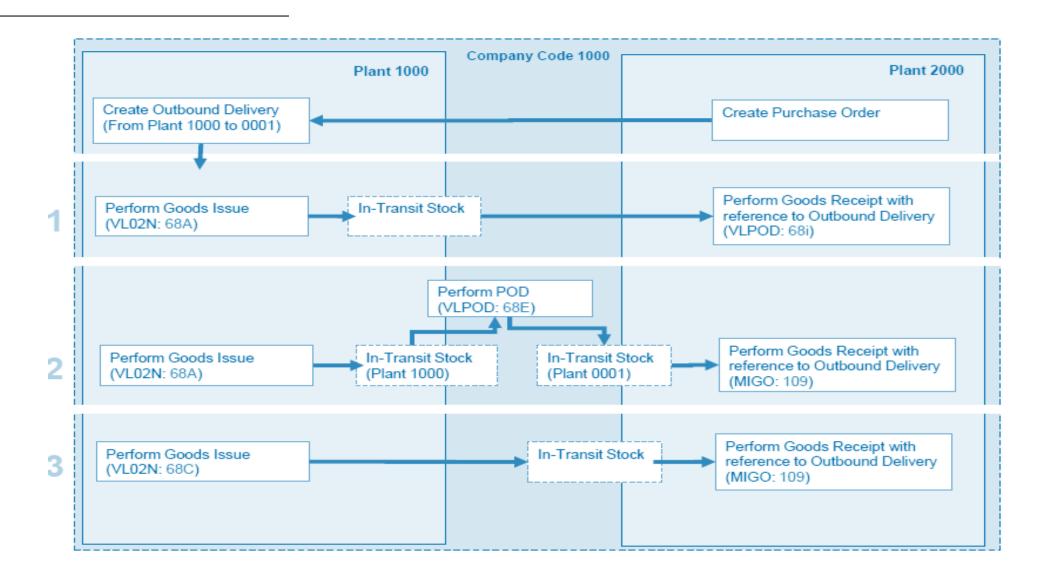
Receiving SIT to Receiving Plant

This is carried out using Transaction MIGO with Movement 109

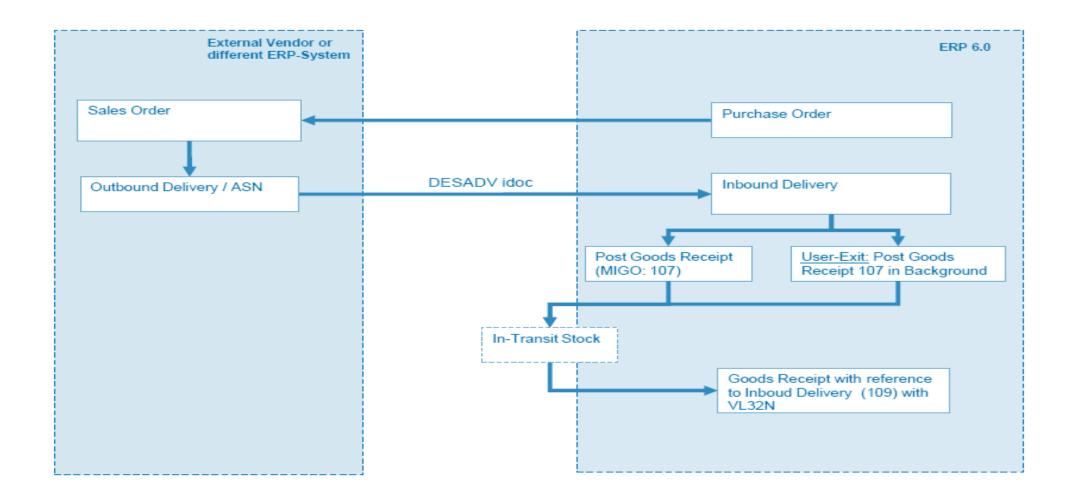
Inbound Side (receiving SIT to receiving plant / transaction MIGO):



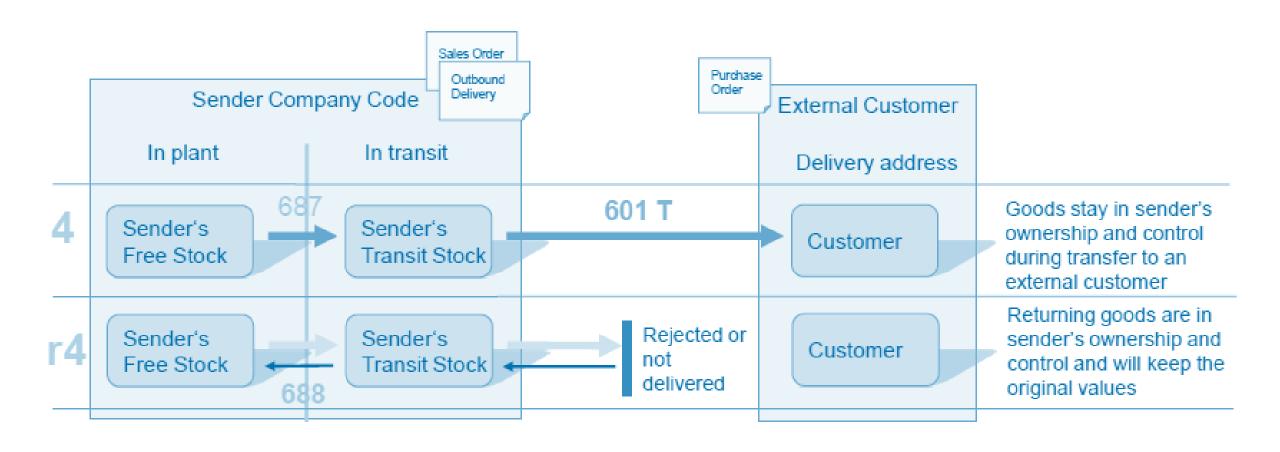
Intracompany Transfers



Vendor Transfer



Customer Transfer



Setting Up SIT in Logostics

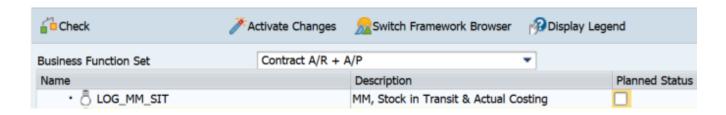


Logistics Configuration

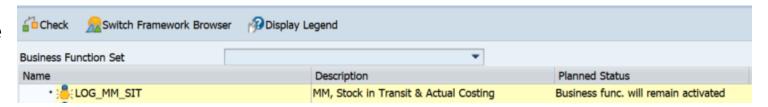
- Activate Business Function LOG_MM_SIT
- Create a new Delivery Type (e.g. NCCU) Issue SIT Outbound delivery.
- Define Delivery item categories (e.g. NCCU)
- Assign Delivery Item category to Delivery Type
- Create Schedule Line category (e.g. NU)
- Assign Delivery Item category to schedule line categories
- Create New Sales Order Type (e.g., by copying Order Type OR)
- Assign the New Delivery Type to the New Sales Order Type.

Activate LOG_MM_SIT

- Activate Business Function LOG_MM_SIT (SFW5)
 - This is typically done by the Basis Team
- This Business Function is initially inactive in ECC

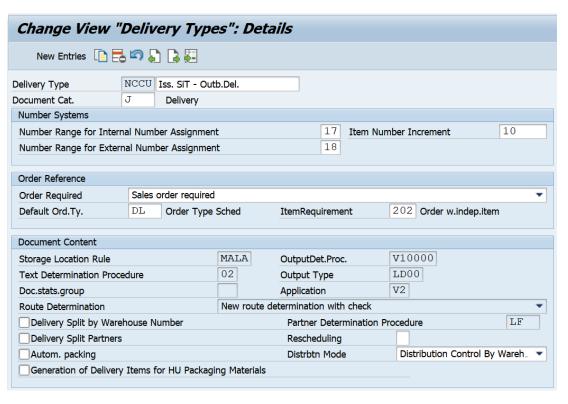


Once Activated it cannot be undone



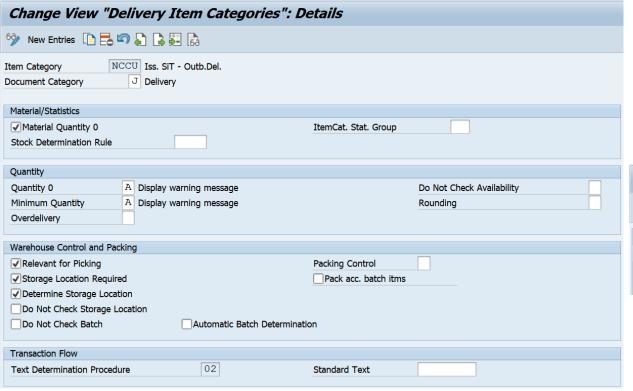
Create Delivery Type

- Create Delivery Type (OVLK)
 - The delivery Type is the connection between the Sales/Purchase Order Type and the Schedule Line Category (which contains the Sit Movement Types)

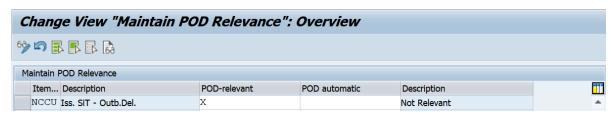


Create Delivery Item Category

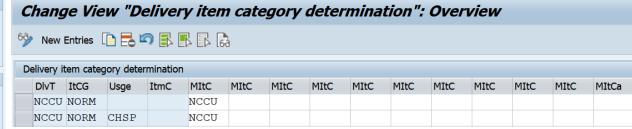
Create Delivery Item Category (OVLP)



Maintain POD Relevance

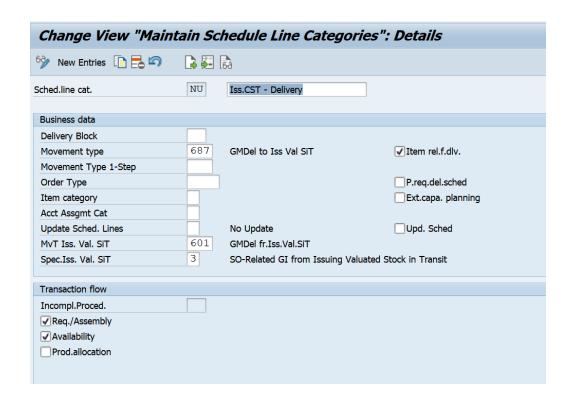


 Assign Delivery Type to Delivery Item Category (0184)

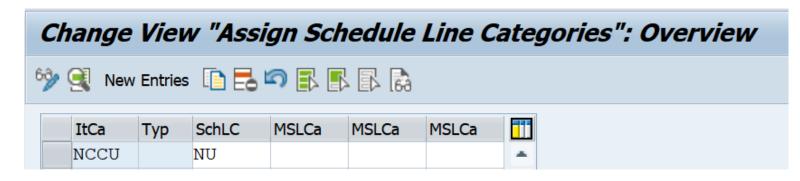


Define Schedule Line Category

- Define Schedule Item category (VOV6)
 - This contains the movement type that is used in the SIT delivery.

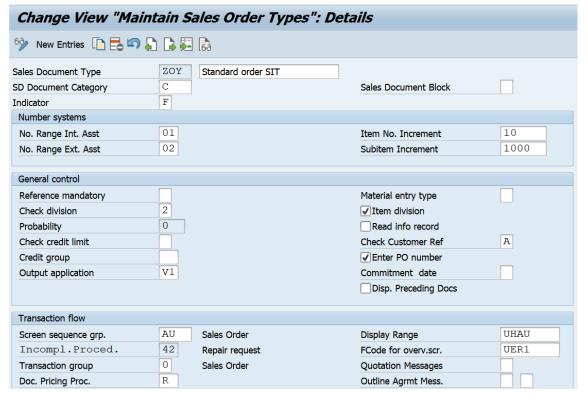


Assign Schedule Item category (VOV5)



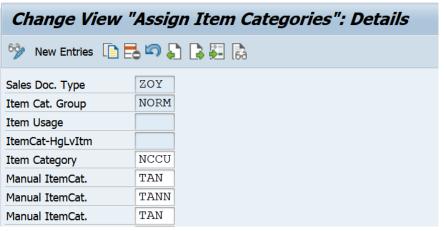
Create Sales Document Type

- Create Sales Document Type (VOV8)
 - This example assumes a delivery to an external customer. For Inbound deliveries or Inter/Intracompany Transfers, a custom Purchase Order Type should be defined



Assign New Item Category to Sales Document Type

(VOV4)



Setting Up SIT in Accounting



Accounting Configuration

- Define Valuation Class for Stock-in-Transit
- Assign Valuation Class to Accounting Reference.
- Create G/L Accounts for Stock-in-Transit
- Assign SIT Accounts to Inventory and COGS Account determination
- Assign SIT Valuation Class to Material Master

Define Valuation Class for SIT

Define Valuation Class (OMSK)

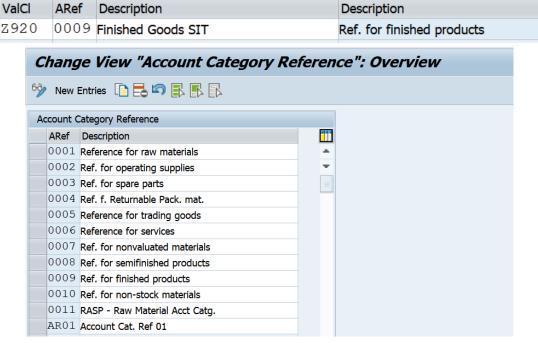
Create an SIT Valuation Class for all relevant material types and assign to appropriate

Valuation Classes

Accounting reference

Account Category
 References for Material

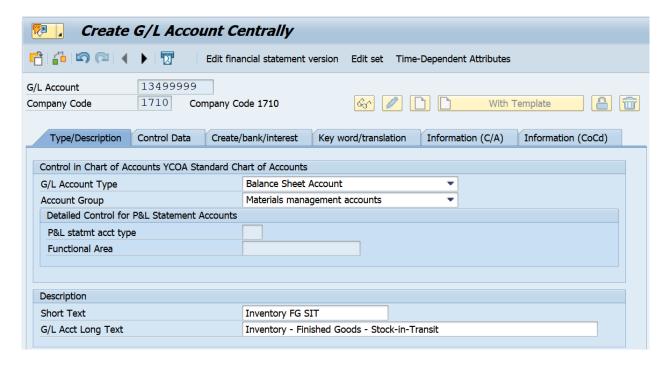
 Types

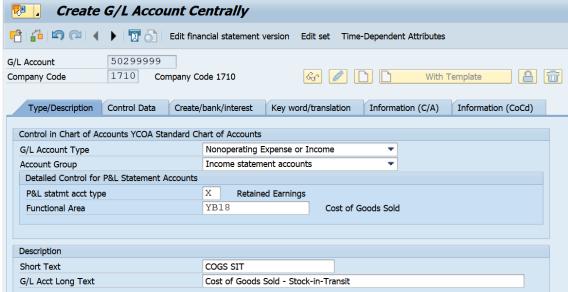


Change View "Valuation Classes": Overview of Selected Set

Create SIT G/L Accounts

 Go to transaction FS00 to create SIT G/L Accounts for Inventory and COGS (if needed).





Configure SIT G/L Accounts

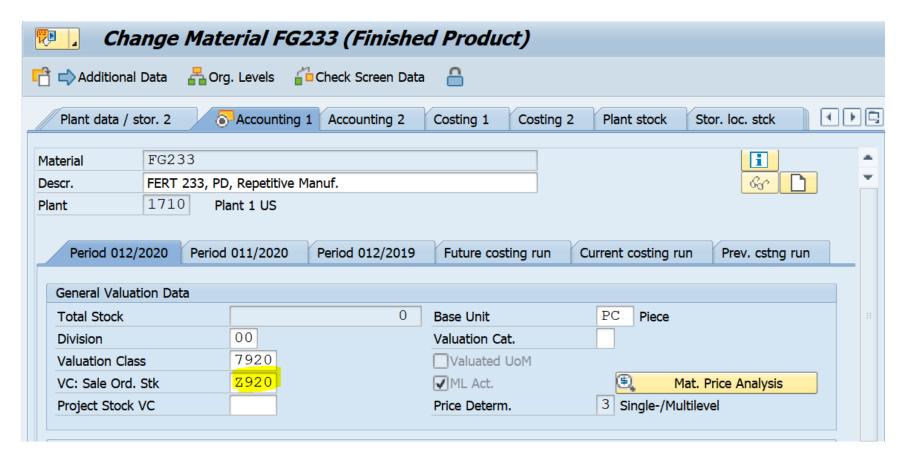
 Go to transaction OBYC and configure Accounts for Inventory and COGS using the new Valuation Class that was set up for SIT





Assign Valuation Class to Material Master

 Go to transaction MM02 and assign the SIT Valuation Class to the "VC: Sale Ord Stk" field in the Accounting 1 view



Examples of SIT Accounting Postings



Intercompany Transfer

Stock Transfer Goods Issue (MvT 681) – Company A

Account	Description	Debit	Credit
13400000	Inventory - Finished Goods		10,000
13499999	Inventory Finished Goods SIT	10,000	

Proof of delivery (VLPOD: MvT 685 + 101) – Company B

Account	Description	Debit	Credit
13499999	Inventory Finished Goods SIT		10,000
13400000	Inventory - Finished Goods	10,000	

Proof of delivery is only posted when Company B confirms Receipt of product

Intracompany Transfer

Stock Transfer Goods Issue (MvT 68A) – Plant A

Account	Description	Debit	Credit
13400000	Inventory - Finished Goods		10,000
13499999	Inventory Finished Goods SIT	10,000	

Proof of delivery (VLPOD: MvT 68i) – Plant B

Account	Description	Debit	Credit
13499999	Inventory Finished Goods SIT		10,000
13400000	Inventory - Finished Goods	10,000	

• Proof of delivery is only posted when Plant B confirms Receipt of product

Receipt From Vendor

• Goods Receipt (MvT 107)

Account	Description	Debit	Credit
21120000	GR/IR Account		10,000
13499999	Inventory Finished Goods SIT	10,000	

Goods Receipt with Inbound Delivery (MvT 109)

Account	Description	Debit	Credit
13499999	Inventory Finished Goods SIT		10,000
13400000	Inventory - Finished Goods	10,000	

Proof of delivery is only posted when Plant confirms receipt of product

Goods Issued to Customer

• Goods Issue (MvT 687)

Account	Description	Debit	Credit
13400000	Inventory - Finished Goods		10,000
13499999	Inventory Finished Goods SIT	10,000	

Proof of Delivery (VLPOD: MvT 601T)

Account	Description	Debit	Credit
13499999	Inventory Finished Goods SIT		10,000
50200000	Cost of Goods Sold	10,000	

• Proof of delivery is only posted when customer confirms receipt of product

LOG_MM_SIT and Actual Costing



Global Supply Chain

- Scenario
- Two legally independent companies A and B supply each other with goods. B sells the material or processes them further.
- A and B belong to the same group
- A and B are modeled as company codes in the group"s ERP system in the same client
- The time to ship the goods from A to B is not negligible

- Issues
- Missing transparency on goods in transit:
- Values vanish during transit times
- Quantities are not accessible for planning purposes
- System representation does not reflect reality
- Values in reversals do not equal original values
- Cost flow is broken at company code borders
- No group view on actual costs
- No transparency on intercompany profits
- No group-wide profitability view

Material ledger and LOG_MM_SIT

- Using LOG_MM_SIT, inventory values are always recorded and tracked, in Material Ledger
- Transfer price or the PO price is used for the legal valuation, the sending company's legal standard cost is used for calculating the markup. The difference between the two is recorded as Delta Profit or Inter-Company Profit.
- For this to occur, Currency Valuation profile (transaction 8KEM) with Group Valuation will need to be enabled
- **➤** Delta Profit equals Transfer Price minus Senders Cost

Cross Company Cost Components

- When Material Ledger's Actual Costing is Activated along with LOG_MM_SIT, actual cost components can be transferred across company codes
- The Legal View will show a rollup in the buying Company Code, while the Group View will show the selling company's Cost Component breakout in the buying company
- Delta Cost Component is shown in the buying company

			Legal			Grou	р
Selling Comp	oany		Buying Com	Company		Buying Company	
Materials	400		Materials	1100		Materials	400
Labor	300		Labor			Labor	300
Overhead	250	10% Markup	Overhead			Overhead	250
Freight	50	Warkup	Freight			Freight	50
Delta CCS	0		Delta CCS	100		Delta CCS	0
Total Cost	1000		Total Cost	1100		Total Cost	1000

Actual Costing Cost Components

- When Actual Costing has been calculated the change in Cost in the Selling Company's cost component is reflected in the buying Company
- In Legal Valuation this change in cost is reflected in the Delta Cost Component Split

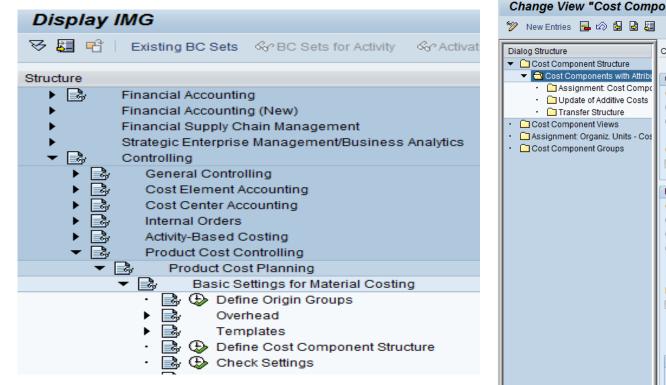
 In Group Valuation the change in cost is reflective in the respective cost component in the buying company

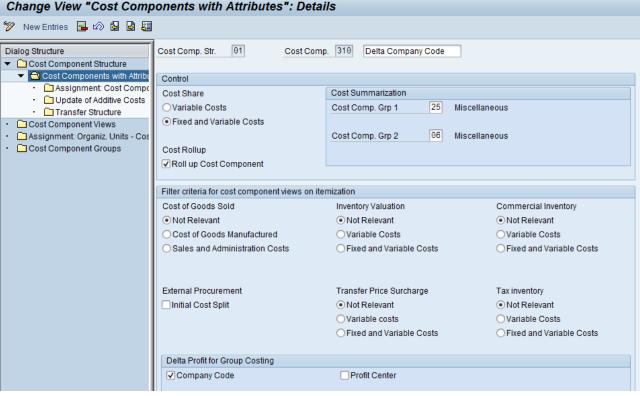
			Legal		Group)	
Selling Comp	any		Buying Company		Buying Con	Buying Company	
Materials	400		Materials	1100	Materials	400	
Labor	310		Labor		Labor	310	
Overhead	^ 260	Markup	Overhead		Overhead	260	
Freight	_ 50		Freight		Freight	50	
Delta CCS	0		Delta CCS	80	Delta CCS	0	
Total Cost	1020		Total Cost	1100	Total Cost	1020	

- Cross-Company Sales Process is a multilevel process. Actual costs will be transmitted at the following events:
 - Goods issue/Goods receipt
 - Invoice receipt (via EDI)
 - Period-end closing

Delta Cost Component Split

- Delta Cost Component Split is set up in transaction OKTZ
- It should be set up as "Not Relevant" for Inventory Valuation and COGS
- The "Company Code" checkbox in the "Delta for Group Costing" should be checked





Legal & Transparent Legal View

Legal View: Materials purchased from affiliate company codes will populate the material cost component and markup

- Total Cost from PO
- Inter-Company Profit is displayed
- Cost Component is collapsed

Transparent Legal View: Preserves the cost component information of affiliate company codes along with the markup information

- Total Cost from PO
- Inter-Company Profit is displayed
- Cost Component from Sender
- Material cost includes markup

Legal Transparent View

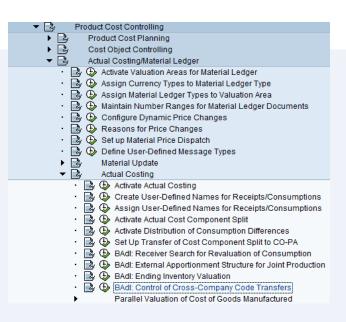
 The Below diagram shows the comparison between the Legal View, the legal Transparent View and the Group View

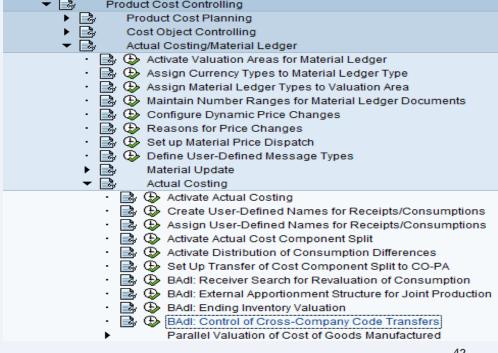
Selling Company					
Materials	400				
Labor	300				
Overhead	250				
Freight	50				
I/Co Markup	0				
Total Cost					

	Lega	al	Legal (Transparent)*		Group	
	Buying Co	mpany	Buying Co	mpany	Buying Co	mpany
	Materials	1100	Materials	500	Materials	400
le.	Labor		Labor	300	Labor	300
7	Overhead		Overhead	250	Overhead	250
	Freight		Freight	50	Freight	50
	I/Co Markup	100	I/Co Markup	100	I/Co Markup	0
	Total Cost	1100	Total Cost	1100	Total Cost	1000

Other BADIs for Cross Company **Transfers**

- ROLLUP_COST_COMP_SPLIT
- Using this method you can control that the cost component split is also transferred cross-company code in the legal view
- REVAL_MARKUP_AT_ACTUAL_COSTS
- Using this method you can control that the intercompany profit is calculated on the plan costs of the sender and not using the actual costs
- DISPLAY_COST_COMPONENTS
- Using this method you can control in *Material Price Analysis* (CKM3) that all cost components not relevant to inventory valuation are displayed (and not just the cost component for the intercompany profit)
- GET_MARKUP_COMPONENT
- Using this method you can control that the intercompany profit is assigned to any cost component not relevant to inventory
- MODIFY MARKUP
- With this method, you can calculate the intercompany profit in accordance with a separate algorithm





Invoice treatment in specific scenarios

Invoices for delivery costs

Delivery costs such as freight or duties can be manually entered with MIRO. They may come
from the selling company or a 3rd party service provider. When the invoice refers to planned
delivery costs with a specific condition type in the price conditions, it can be defined in
account determination and can be assigned to a designated cost component

Invoice for sent materials

- For the legal view an invoice is necessary to process the transaction and create a accounts payable at the receiver. If a parallel group valuation is active the invoice has to be ignored, because the price and the cost components have already been captured during goods receipt
- For technical reasons the cross-company invoice for the sent material cannot be manually entered in MIRO but has to be processed as an IDOC with EDI connection. This makes sure that both the sales price (in legal view) and the transfer price in group view are processed

Trading Partner for Vendor Master

In the "Control" tab of the vendor master the receiving company code has to be maintained in order to mark the vendor as a vendor from the same group. The field is also used for legal consolidation



Configuration and Master Data Setup

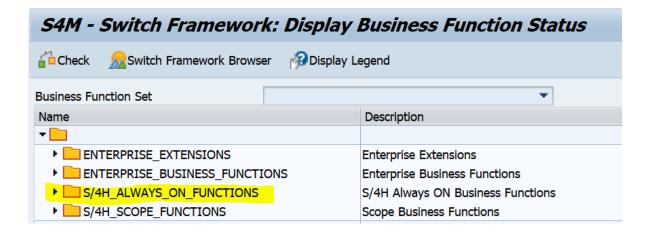
Activity	Transaction Code(s)
Activate Business Functions EA-FIN and LOG_MM_SIT	SFW5
Use BAdI to activate the Transparent Legal View: CKML_CROSS_COMPANY; Method: ROLLUP_COST_COMP_SPLIT	SE19
Configure Group Currency for all company codes	OB22
Activate Valuation Areas for material ledger	OMX1
Assign Currency Types to Material Ledger Type	OMX2
Assign Material Ledger Types to Valuation Area	ОМХЗ
Create the Delta Cost Component Split	ОКТХ
Set up Automatic Account determination for New Movement Types	OMJJ, OMWN, OMWD, OMSK, OBYC
Check Account Assignments for Intercompany Invoice	OBCB, OBCC, OBCD, OBCE
Assign Customer number and trading Partner to intercompany vendors	ХК02
Assign Vendor number and trading Partner to intercompany customers	XD02

LOG_MM_SIT and S/4HANA



LOG_MM_SIT in S/4HANA

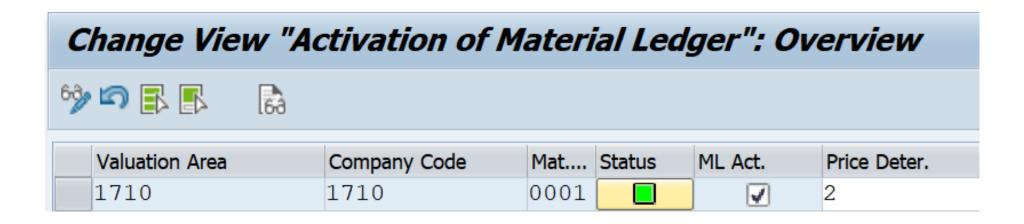
- In S/4HANA the Business Function LOG_MM_SIT is automatically activated
- It is available in the S/4H_ALWAYS_ON_FUNCTIONS set



Name		Description	Planned Status	
	∴ LOG_MM_SIT	MM, Stock in Transit & Actual Costing	Business func. will remain activated	

LOG_MM_SIT in S/4HANA

Material Ledger is mandatory in S/4HANA

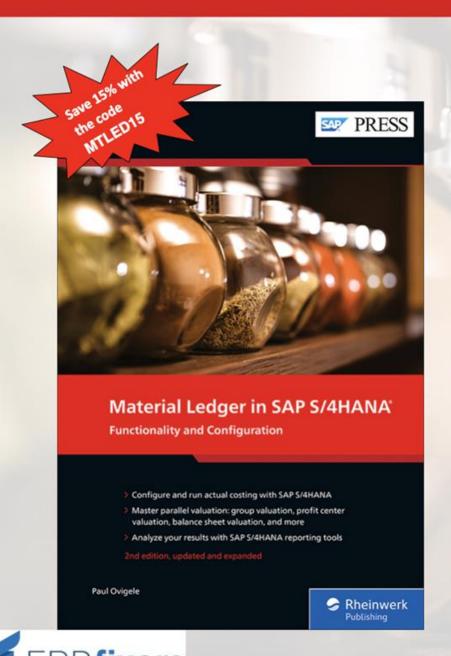


However, all the configuration steps mentioned in this session would still need to be configured to take full advantage of LOG_MM_SIT functionality

Wrap Up







Your comprehensive guide to the Material Ledger in SAP S/4HANA!

- ➤ Configure and run actual costing with SAP S/4HANA
- Master parallel valuation: group valuation, profit center valuation, balance sheet valuation, stock-in-transit, and more
- > Analyze your results with SAP S/4HANA reporting tools

Purchase the print or e-book at sap-press.com/5565 Save 15% with the code MTLED15 at checkout.

Material Ledger in SAP S/4HANA: Functionality and Configuration

Written by: Paul Ovigele

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Where to Find More Information

- https://www.erpfixers.com/blog-series
- ERPfixers Resources Page Various blogs and articles on SAP S/4HANA and other topics
- https://www.erpfixers.com/ask-a-fixer-webcast
- ERPfixers Webcast Page Monthly Webcasts on various SAP topics including Universal Allocation

Key Points to Take Home

- Valuated Stock-in-Transit functionality allows control of goods movements for internal and external inventory transfers.
- It also allows Transfer of Actual Cost Component Split across Companies (if Material Ledger Actual Costing is active)
- Proof of Delivery is carried out using transaction VLPOD.
- There is Logistics and Accounting configuration needed in order to set up the functionality for Valuated Stock-in-Transit.
- In S/4HANA the Business Function LOG_MM_SIT is automatically activated



Thank you! Any Questions?

Paul Ovigele

www.erpfixers.com

Twitter: @erpfixers

info@erpfixers.com

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