Inventory Management

Physical Inventory Management

LafargeHolcim

Training Summary

– **Description:** The purpose of this training is to explain the physical inventory process and give a general overview of the solution and tools.

– **Duration:** 3 hours

– **Target group:** Production manager, Warehouse responsible, Accounting responsible

– **Topics:** Physical Inventory CEM & AGG
Physical Inventory Interface RMX

– **Tools:** SAP Inventory Management
Mobisys

Agenda

Objectives

Organizational Elements used in Inventory Management

Key Process Description

Process Flow

Physical Inventory Interface in RMX

Mobisys introduction (Bar Coding)

Objectives of the Training

At the end of the training, you will be able to:

- Know how the organizational elements and Master Data, used for Inventory Management are defined
- Understand all EBM Inventory Management scenarios in the Physical Inventory process
- Complete the Physical Inventory process in SAP
- Understand the Interface for RMX

Agenda

Objectives

Organizational Elements used in Inventory Management

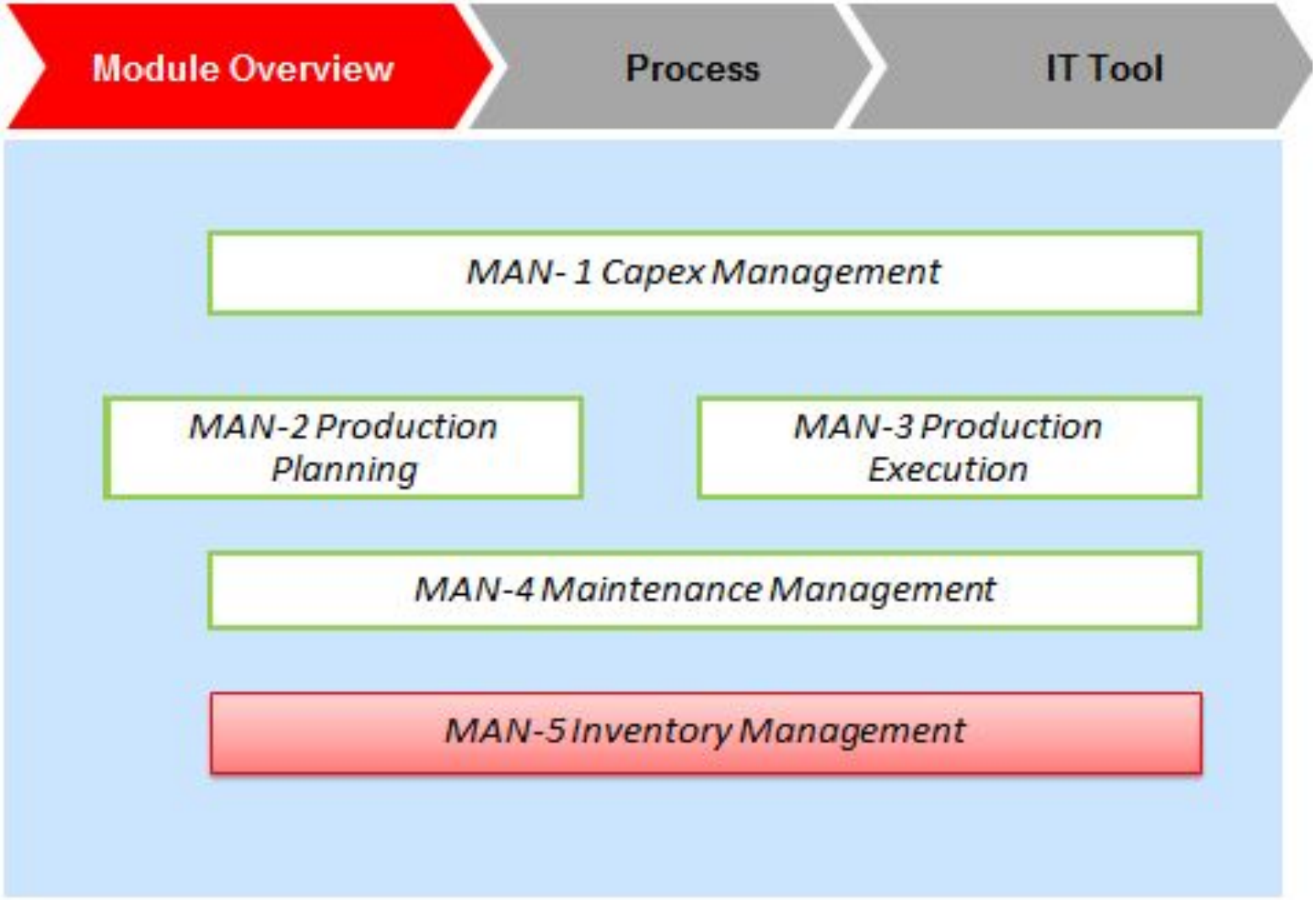
Key Process Description

Process Flow

Physical Inventory Interface in RMX

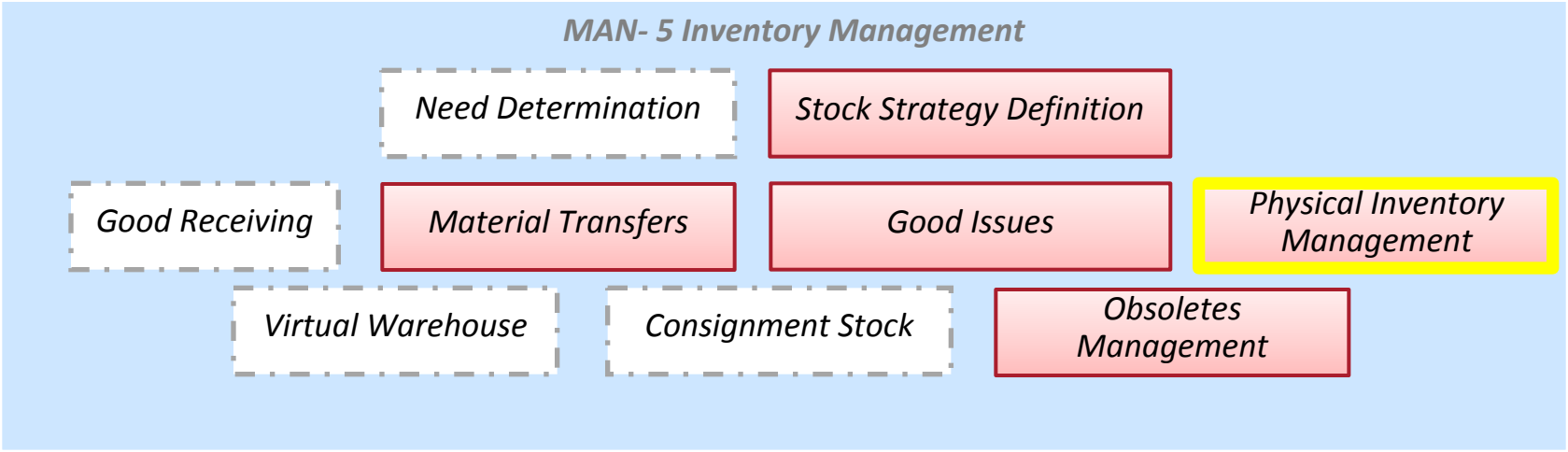
Mobisys introduction (Bar Coding)

1.Manufacturing Process Overview
Manufacturing Scenarios (Level 1)



1.Manufacturing Process Overview
Manufacturing Business Processes (Level 2)

Module Overview | **Process** | **IT Tool**



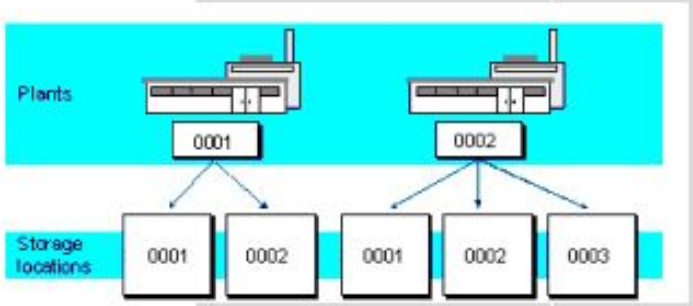
Organizational Elements: Plant

Object	EBM Concept
Plant	The plant represents a physical location within LafargeHolcim where products are manufactured, received or distributed. **In EBM, a plant could be a:** **Manufacturing plant (e.g. cement plant, grinding station, blending station, AFR unit, MIC plant, quarry, pit, RMX plant (fix/mobile), asphalt plant...)** And also: • **Shipping point / terminal / storage location**, when it is not located in the same physical location as the production plant and transportation costs must be added to the cost of products • **Office / head quarters / trading plant**, when they are not located in a production plant • **Third parties (suppliers)**: O2C tech.& legal requirement to create them as virtual plants (just 1 per country) • **Power generation plants**: just if it is not located next to a CEM plant (*) • **Mixed plants**: LHARP rule 11.1 2.2.2.5 to be followed (**) The material stocks will be managed and valuated at plant level.

(*) If the power generation plant is located next to the CEM plant, only 1 plant code will be created in SAP for both CEM and power plant.
(**) If the secondary business is below 20% of cash cost and below 1 Mio. USD, only 1 plant is created, assigned to the main business segment and secondary business is treated as by-product. If the thresholds are achieved, 2 plants should be created and assets properly split.

Organizational Elements: Storage location

Object	EBM Concept	ALL SEGMENT (CEM, AGG, RMX, AFR)
Storage Location	▪ Organizational unit that allows to differentiate between various types of stock within a plant. - Storage locations are created at plant level - Inventory Management is carried out at storage location level (Goods movements) - Stocks are managed only on a quantity basis and not on a value basis at storage location level - Simplification of goods movements (Receipts, issues, transfers,…) management - Physical inventories are carried out at storage location level	



Organizational Elements: Storage location

Object	EBM Concept ALL SEGMENT (CEM, AGG, RMX, AFR)
Storage Location	▪ It has a 4 digit coding, where the first digit identifies the usage of the storage location and the remaining 3 are sequential numbers - F: For finished/semi-finished products - G: For general materials (maintenance materials, production materials – fuels, raw materials, packing,…) - H: Handling Unit Storage Location (packed waste) - V: For virtual/central warehouse

Organizational Elements: Storage location

		Plant segment			
		CEM	**AGG**	**RMX**	**AFR**
Material types	**Finish and semi-finish**	F001 F900 *(stock in transit)* F002 *(quarry with internal transfer)* F00X *(ship / train loadings)*	F00X F900		F001
	Production and Raw	G100 G106 *(Intermediate stock)*	G1XX	G100	G100
	Maintenance	G200 G2XX *(special-legal storages)* G299 *(obsoletes)*	G200 G2XX G299	G200 G2XX G299	G200 G2XX G299
	Virtual	V200	V200		
	Packaged				G101 G161
	Handling				H101 H161

Agenda

Objectives

Organizational Elements used in Inventory Management

Key Process Description

Process Flow

Physical Inventory Interface in RMX

Mobisys introduction (Bar Coding)

Key Process Description – Physical Inventory

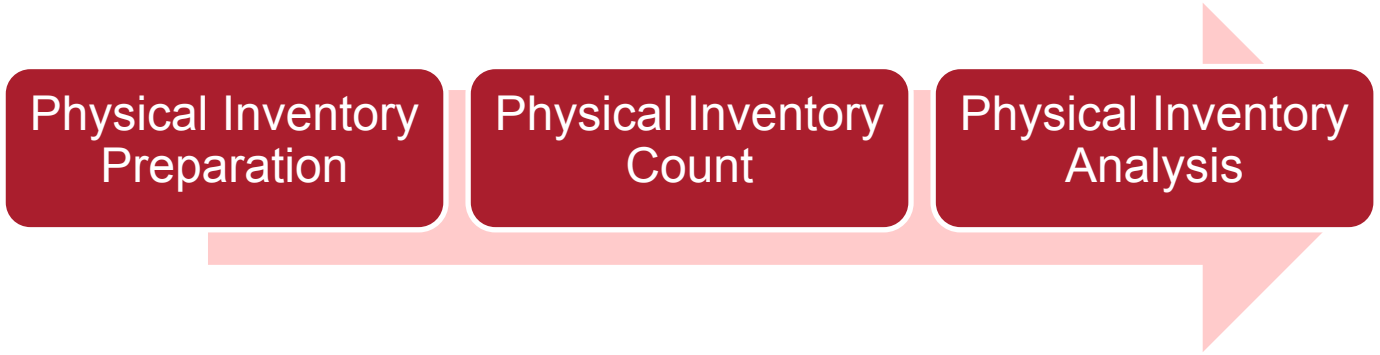
Process Objectives	• According to LafargeHolcim and Legal requirement, the verification of the stock by a physical inventory process is mandatory and has to be performed on a continuous / frequent way. • This process describe the necessary steps to update system data based on physical counting / measuring. • Update the stock figures at Quantity dimension only(*) reflecting the reality into the transactional system.
Key Inputs	• Stocks values from the transactional system (SAP)
Key Outputs	• Stock Updated in the transactional system (SAP) • Differences posted

(*) As AFR materials are defined to be "non-valuated" materials not possible to update stocks with value. Valuation of Stocks is carried out during AFR MEC preparation process.

Main Business Requirements – Physical Inventory

#	Business Requirement	Description
7	Physical Inventory process in place to be compliant with LafargeHolcim and legal controls	• Complete Physical Inventory process definition (Steps, roles & responsibilities,..) split by type of AFR material allowing to carry out a physical inventory to know the stocks of AFR materials available at platforms and cement plants at any time. • Physical inventory takes place at storage location level. A separate physical inventory document is created for every storage location. • Standard system settings in the SAP transactional system • The Inventory document can be created for only some materials or in a mass way utilizing different criteria (per material group, material type, special stock…). • Blocking Materials for Posting (Flag in the P. Inventory document) • Print of standard forms and distribute the physical inventory document • Usage of standard goods movement types and posting inventory differences with the reflect on the financial documents.

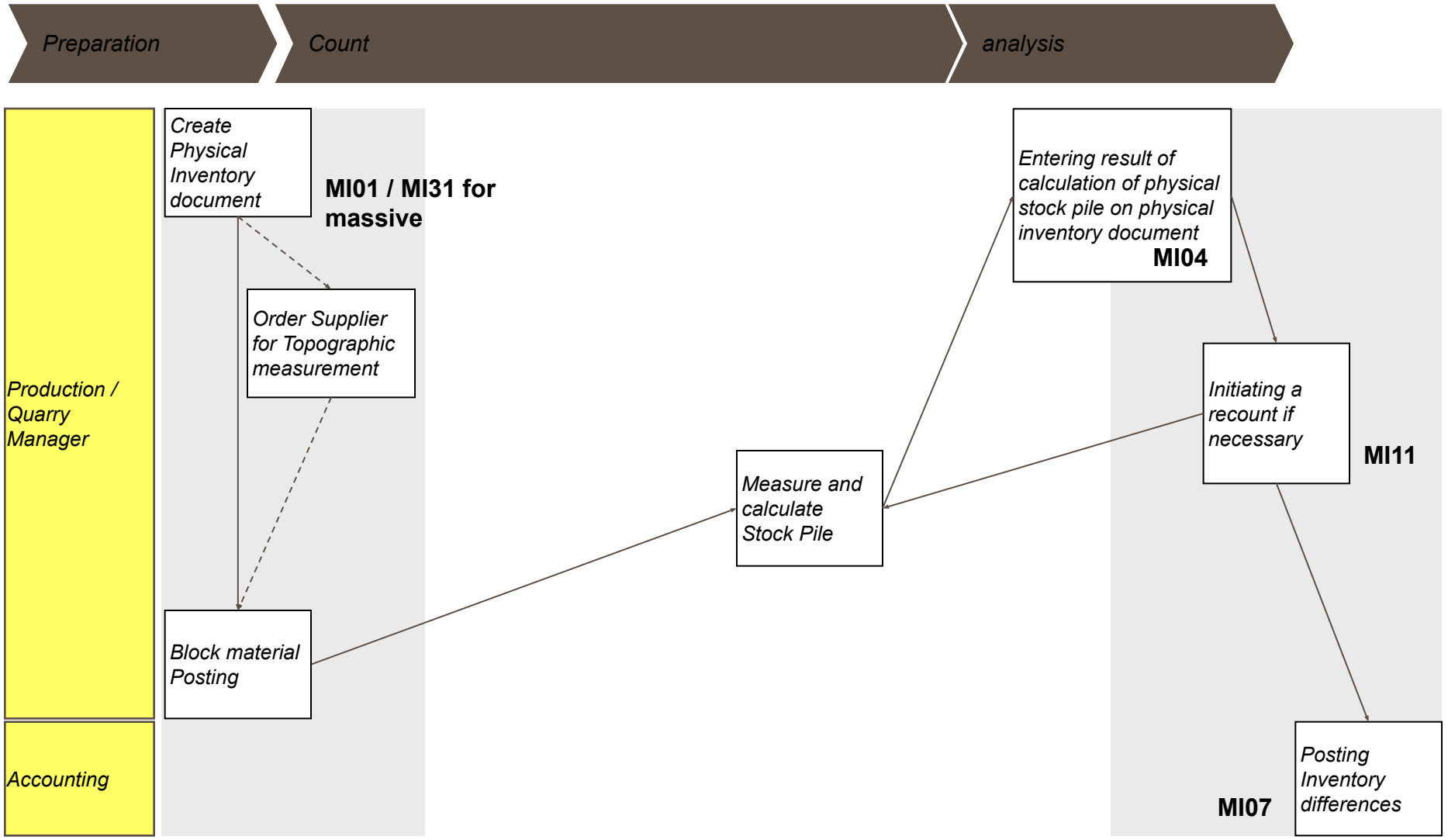
Physical Inventory Process Flow



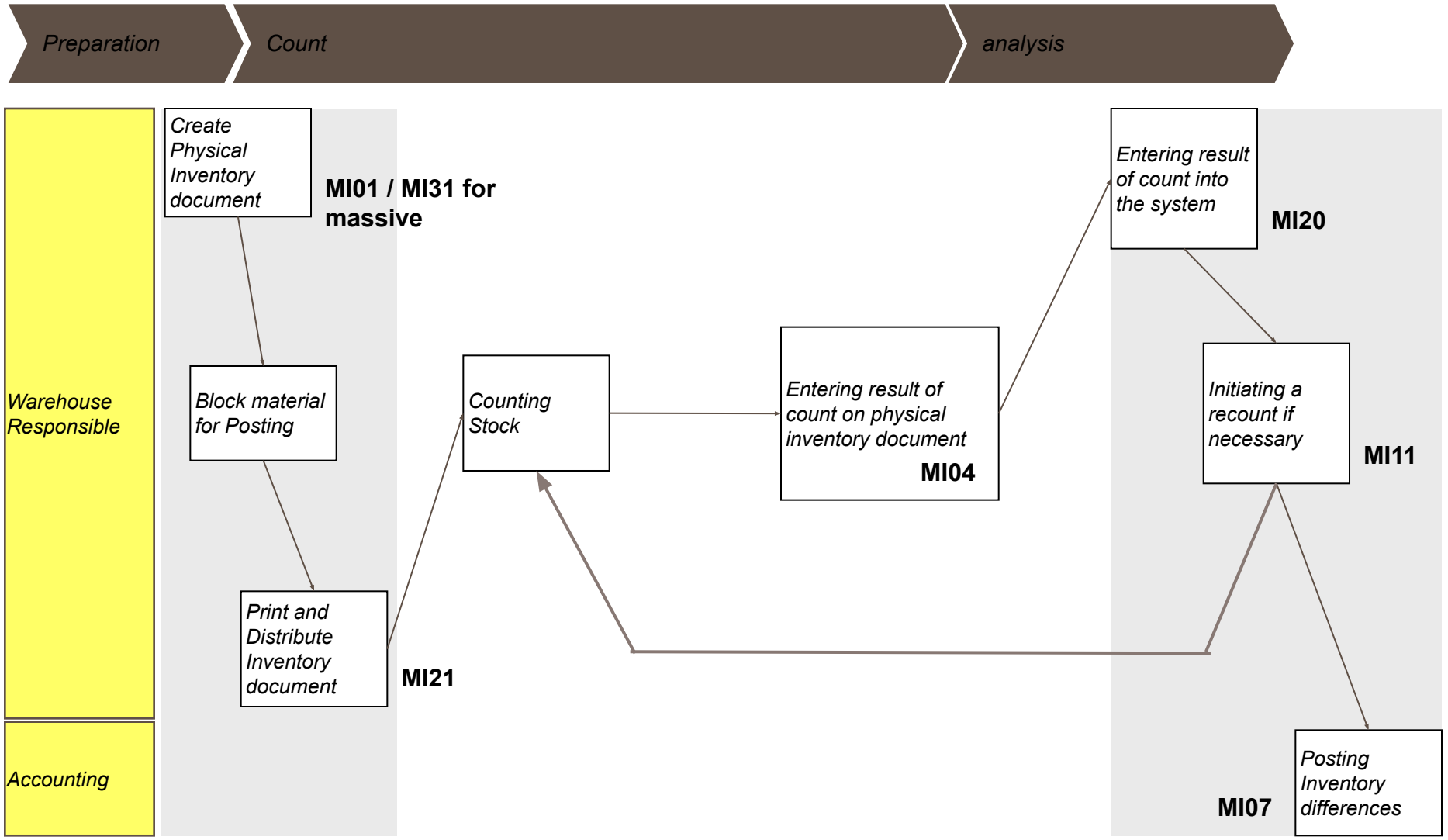
Process Steps

1. Create a physical inventory document
2. Print and distribute the physical inventory document
3. Perform the physical count
4. Entering the result of the count into the system
5. Initiating a recount if necessary
6. Difference Postings

Inventory Management – Physical Inventory
Process Map – Production Material



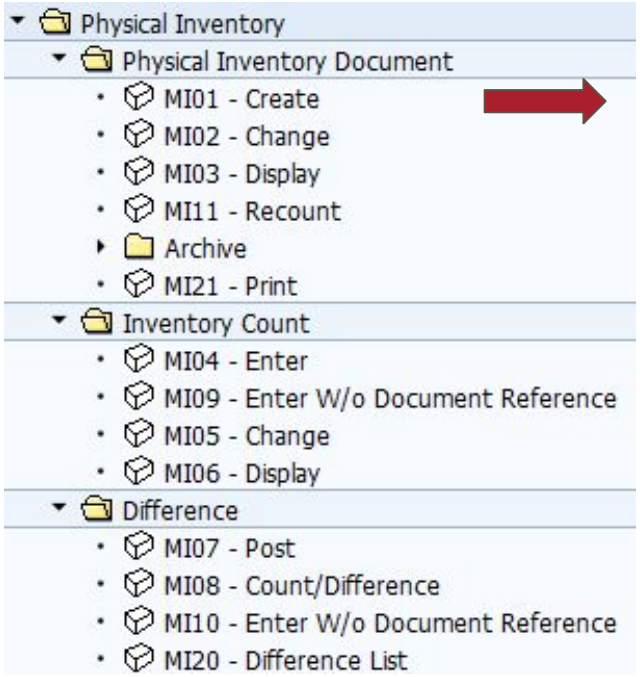
Inventory Management – Physical Inventory
Process Map – Maintenance Materials

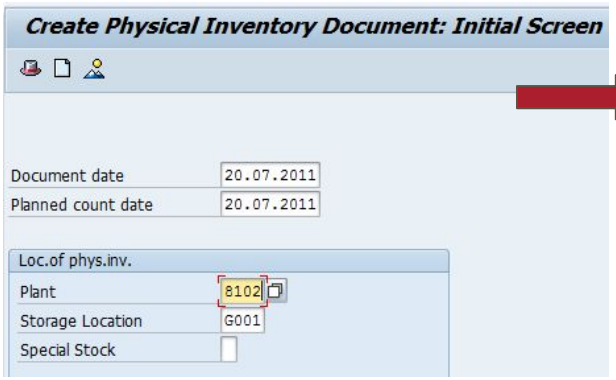


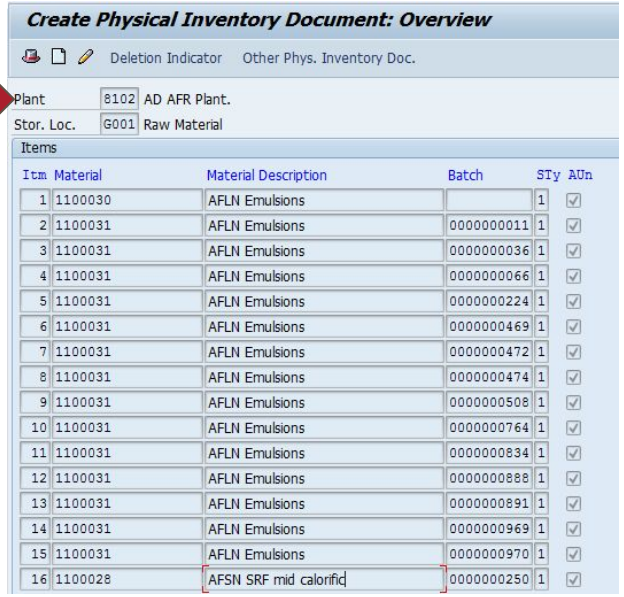
Content of training – IT Tool

Module Overview → **Process** → **IT Tool**

1. SAP MM/IM (Materials Management / Inventory Management)
   - 4 E.g. Standard SAP transactions to support the Physical Inventory Process







Agenda

Objectives

Organizational Elements used in Inventory Management

Key Process Description

Process Flow

Physical Inventory Interface in RMX

Mobisys introduction (Bar Coding)

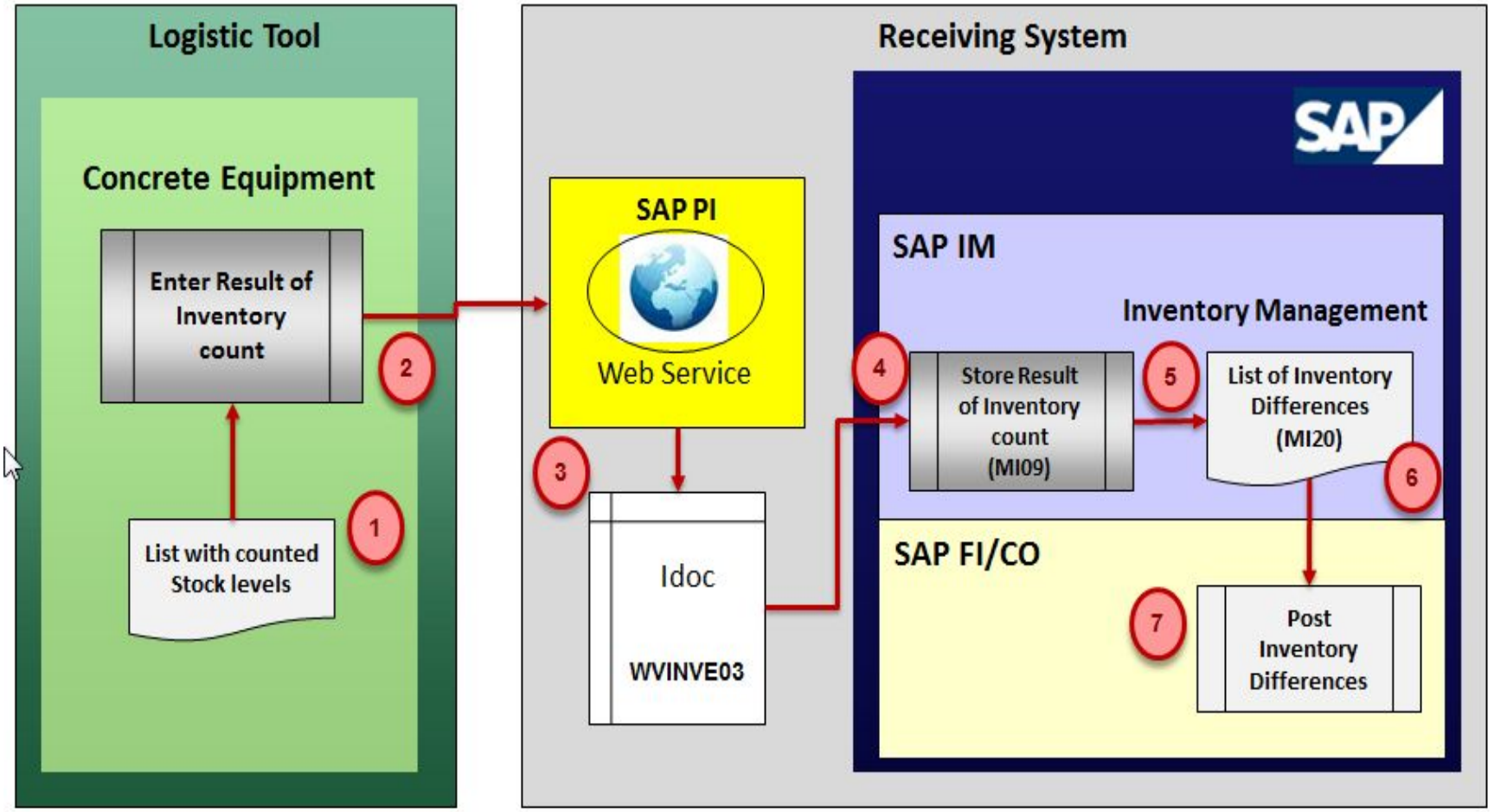
Physical Inventory interface in RMX

- Stocks of RMX are handled in the local RMX Logistics systems
- Physical Inventory counts must be transferred from the local system to SAP through this interface in order to post the stock values in SAP ECC 6.0.

Objectives:

- Update the stock figures (Quantities) in SAP reflecting the reality into the transactional system
- Entering the stock figures in the logistic tool and automatically transfer the data to SAP

Physical Inventory interface in RMX



Physical Inventory interface in RMX

Step Nbr.	Process Step	Resp.	Process Description	System	Period Execution
1	Stock count	Production Manager	Count the stock and write the figures in a from	CEC	Month-end
2	Enter stock levels	Production Manager	Enter the figures per material in the logistic tool (Concrete Equipment	CEC	Month-end
3	Send data to SAP	Automatic batch	Data are sent to SAP PI and an automatic batch via web service generates an IDoc for further processing of the data	CEC	Immediate
4	Check IDoc	Back office	Check and correct the IDoc's with Logistic Cockpit (ZLOG005)	SAP PI	Month-end
5	Process IDoc	Automatic batch	Automatic batch to process the IDoc to enter the stock levels in SAP	SAP IM	Immediate
6	Material Difference List	Production Manager/ Controller	Run Trans. MI20 to check the Inventory Differences	SAP IM	Month end
7	Post Inventory Differences	Controller	Run Trans. Mi20 to control, correct and post the Inventory Differences	SAP CO	Month end

Physical Iventory interface in RMX

Idoc's must be daily checked to ensure that they have been correctly processed, and also to **identify incorrect messages**, analyse the cause of the error, fix the error, and then trigger the processing of the IDoc again if needed.

Logistics Cockpit has been created as a tool to manage the Idoc's:

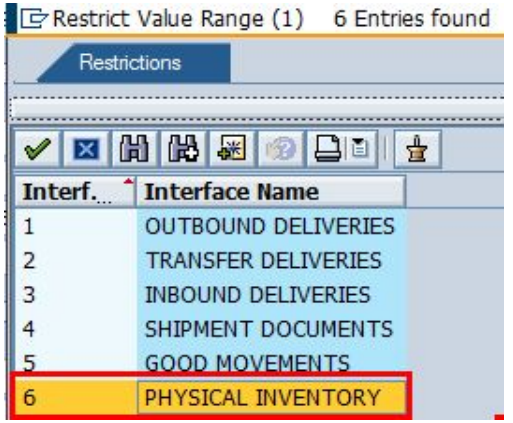
- To guarantee the access of the right user to the right information selection screen according to specific organizational and technical data.
- This tool will be used to speed-up the monitoring and handling of the inbound IDocs received in SAP from external systems.

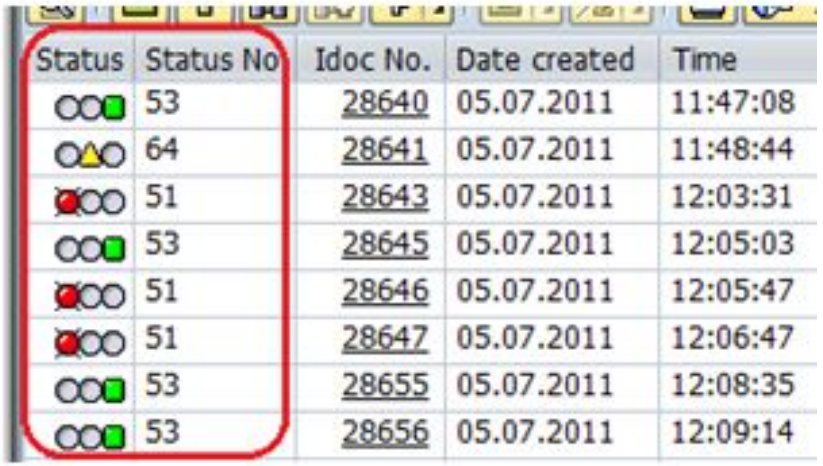
Consumption interface in RMX

Logistic cockpit transaction **zlog005**

Document type: **Physical Inventory**

The status of the IDOCs is displayed with traffic lights





Status	Status No	Idoc No.	Date created	Time
	53	28640	05.07.2011	11:47:08
	64	28641	05.07.2011	11:48:44
	51	28643	05.07.2011	12:03:31
	53	28645	05.07.2011	12:05:03
	51	28646	05.07.2011	12:05:47
	51	28647	05.07.2011	12:06:47
	53	28655	05.07.2011	12:08:35
	53	28656	05.07.2011	12:09:14

Red light:
IDoc in error

Yellow light:
IDoc not processed

Green Light:
IDoc processed successfully
IDoc flag for deletion
IDoc original of a modification

Modification of an IDOC is the last option!

Agenda

Objectives

Organizational Elements used in Inventory Management

Key Process Description

Process Flow

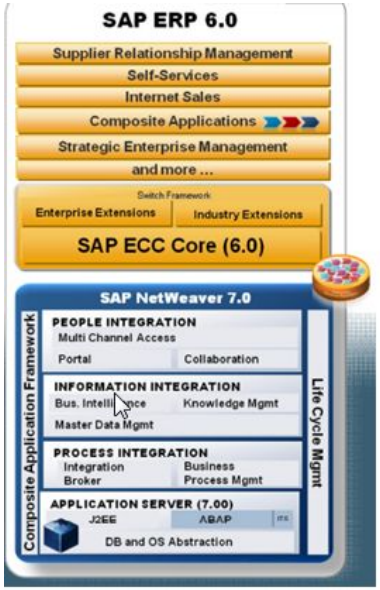
Physical Inventory Interface in RMX

Mobisys introduction (Bar Coding)

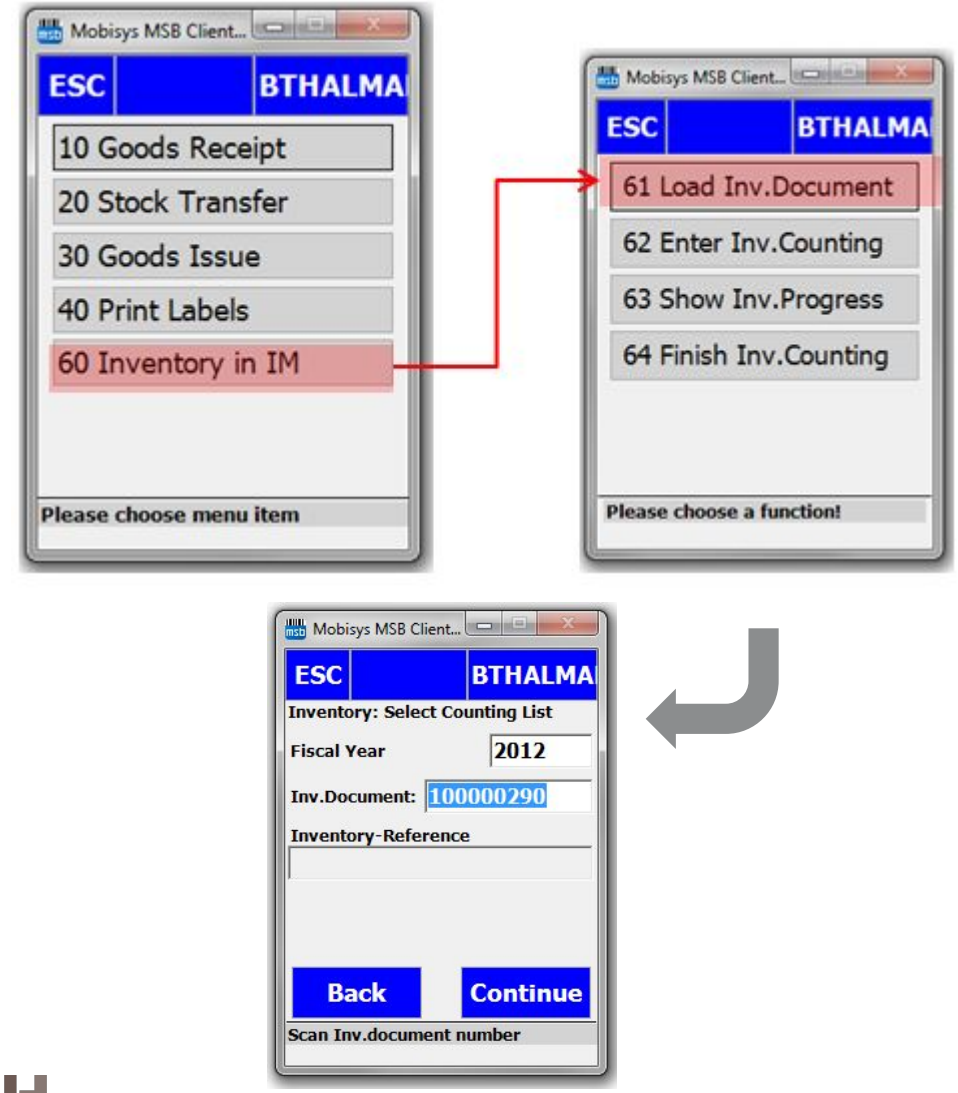
Content of training – IT Tool

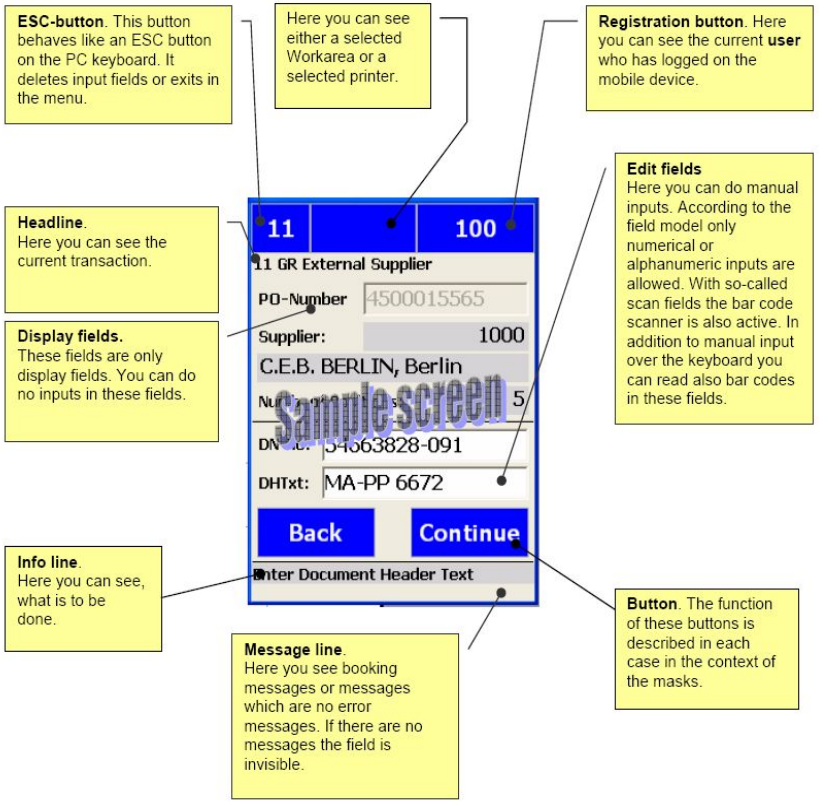
Module Overview | **Process** | **IT Tool**

1. MOBISYS MSB (Bar Coding System)
   - Mobile application to enter the goods movements



IT Tool





Summary

Questions / Doubts

Comments

Summary

CONGRATULATIONS

THANK YOU FOR YOUR ATTENTION

LafargeHolcim