SAP IS – AFS Overview

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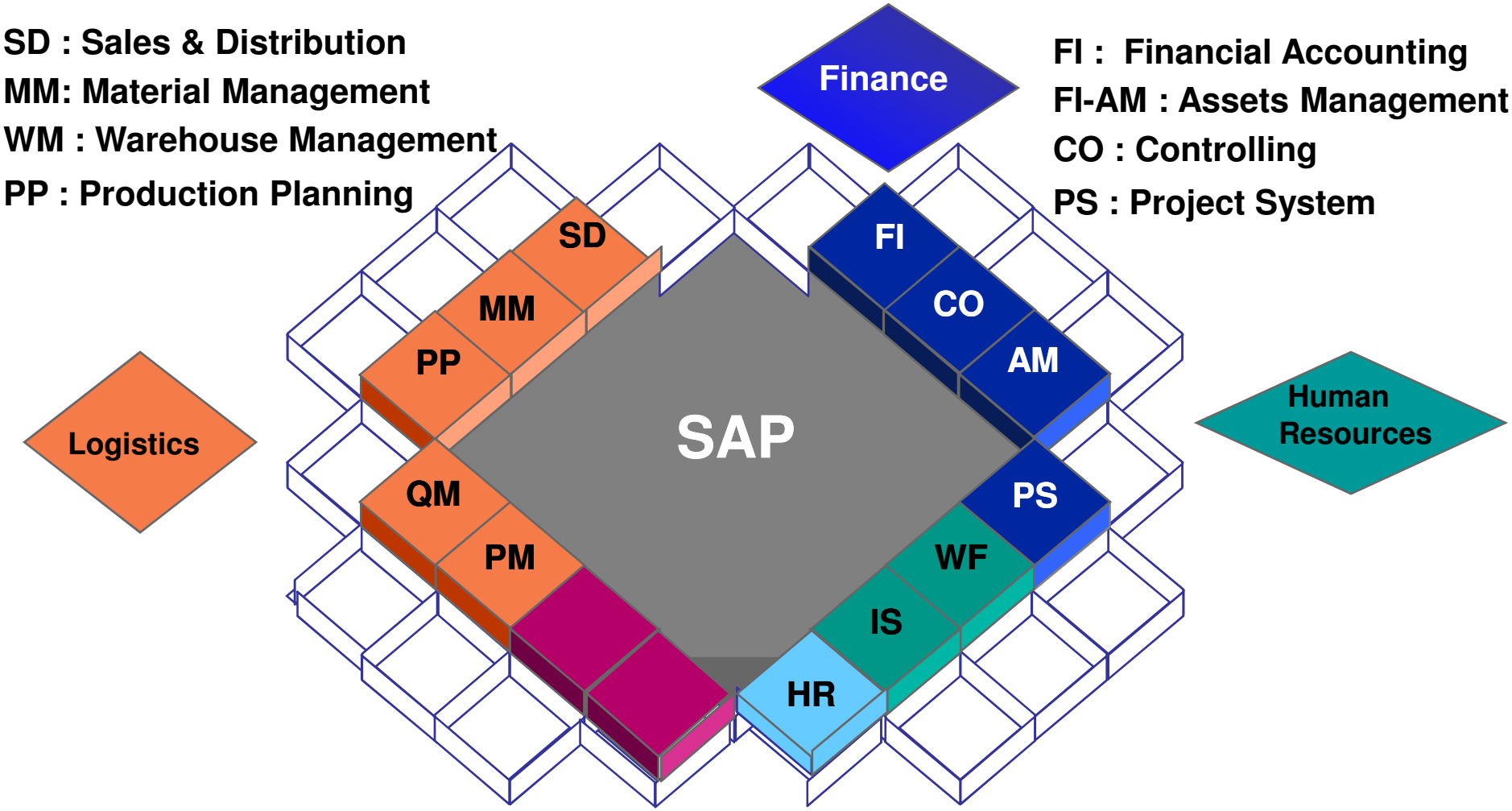
SAP Modules

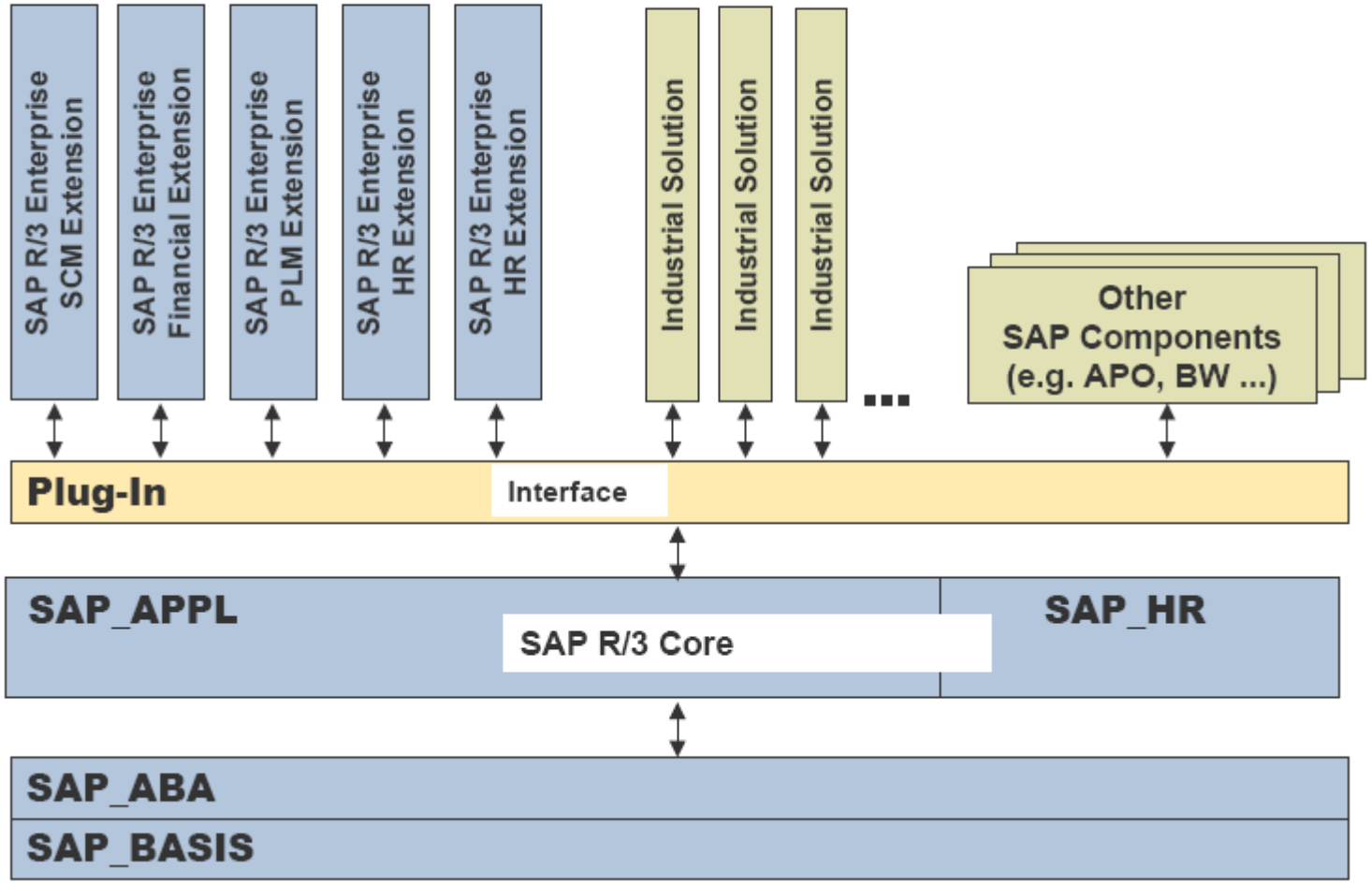
SD : Sales & Distribution
MM: Material Management
WM : Warehouse Management
PP : Production Planning



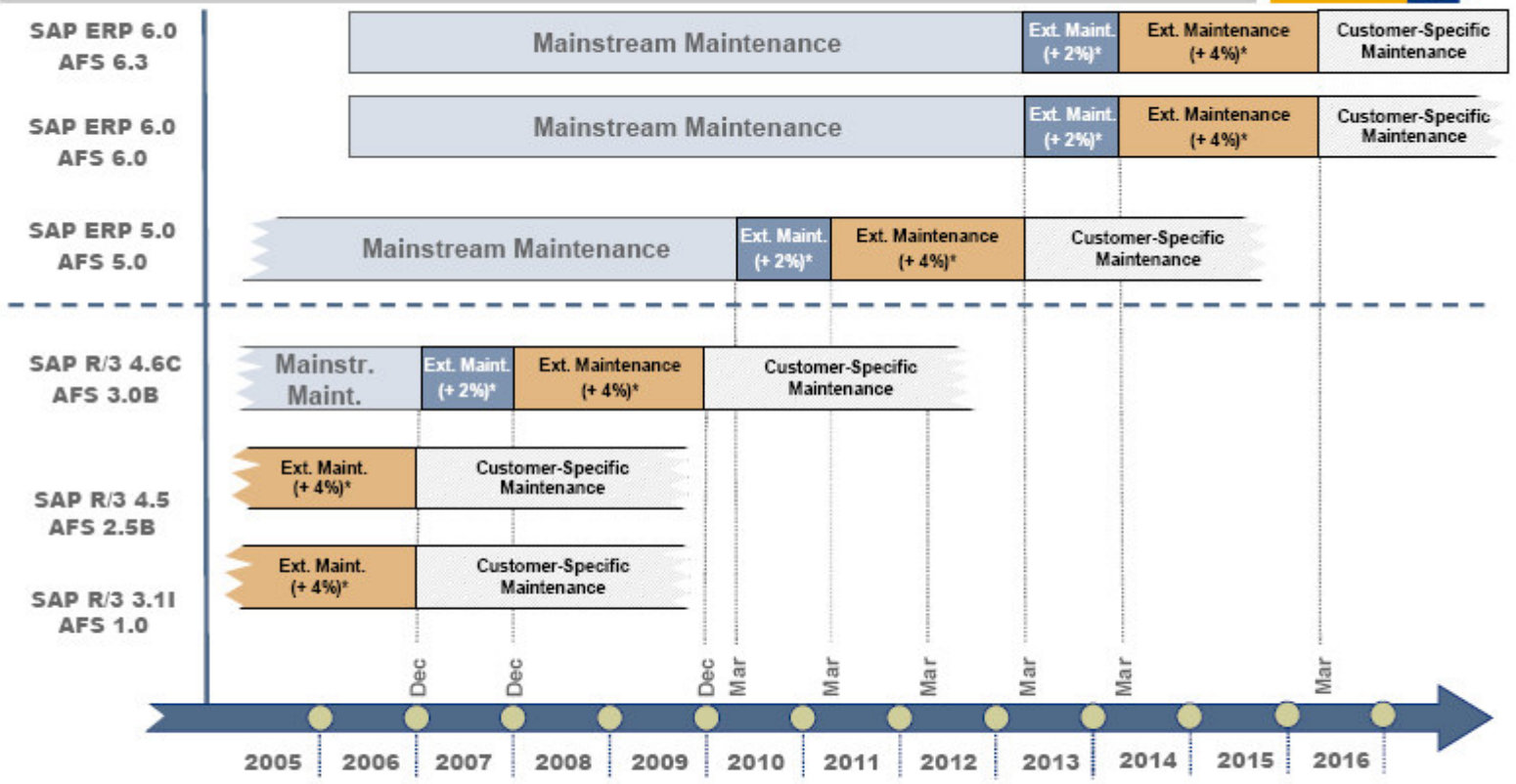
FI : Financial Accounting
FI-AM : Assets Management
CO : Controlling
PS : Project System

QM : Quality Management
PM : Plant Maintenance

Software Layers



SAP AFS Release and Maintenance Strategy



This strategy is also valid for all **SAP enhancement packages for ERP** based on the releases above.

* Overall payment is SAP Standard Support / SAP Premium Support fee plus additional fee of 2% or 4% of the maintenance base per year.

Roadmap:
SAP Apparel and Footwear based on SAP ERP

- Optimized SKU Product Handling (e.g. Style, Color, Size)
- AFS Categories (e.g. for Quality Grades)
- Optimized Transaction Handling thru Grid based Entry Screen all over the Logistic Cycle
- Allocation of Stock
- AFS special Value Added Services
- AFS Multi-Store Sales Orders

- Invoice Verification on SKU level
- Stock Transfer for allocated Stock
- Enabled Subsequent Adjustment during Subcontracting
- Warehouse Management Functions on SKU level
- SKU Horizon during Availability Check (ATP)
- Transfer of Purchase Order with SD Account Assignment
- AFS Multi-Store Sales Orders II
- BW AFS Business Content

- Several Allocation Enhancements
- Simultaneous Contract call off
- AFS Order Report
- AFS Purchase Order Confirmation via Internet
- Back Order Processing
- Category Management Enhancements
- Component ATP for Purchase Order
- Over-Delivery Handling MTO / PTO
- Season-Driven Delivery Dates in the Sales Order
- External Operations in Production Orders
- WM Staging in Production Orders
- Customer Interaction Center

- ISA 3.1 R/3 Edition
- APO Demand Planning
- AFS Reseller Portal

- ISA 4.0 R/3 Edition
- Document Management System

- Allocation against Future Receipts
- ARun Optimizer
- Parallel posting in Parallel ARun
- Simplification of Contract Call Off Handling
- MM-PUR-BAPIS enhanced for AFS
- Purchase Order Split
- Material Substitution
- Advanced Size Optimization
- Mass Document Change in SD (Addition of New Line Items)
- Parallel sales order rescheduling
- cProjects
  cFolders
- Supply Chain Event Management

- Seasonal Demand Planning
- APO Supply Network Planning
- SCM Store Replenishment
- Internet Sales CRM Edition
- Field Sales

- SD Process for Partial Quantity Reductions
- Sales Order Create/ Change IDOC Revision
- Mass Document Change (change single characteristics)
- Planned Independent Requirement (TPO,MTO,PTO)
- Extension of Seasonality Concept (Batches)
- Goods Movements with SKU Info
- QM Enablement for AFS
- Production Order and Planned Order BAPI
- Enhance SAP AFS PP to WM interface
- Combined Order Optimization
- SAP AFS – SAP GTS Integration
- Round off SAP AFS - SAP Retail Integration
- Accessibility Compliancy - Legal requirements

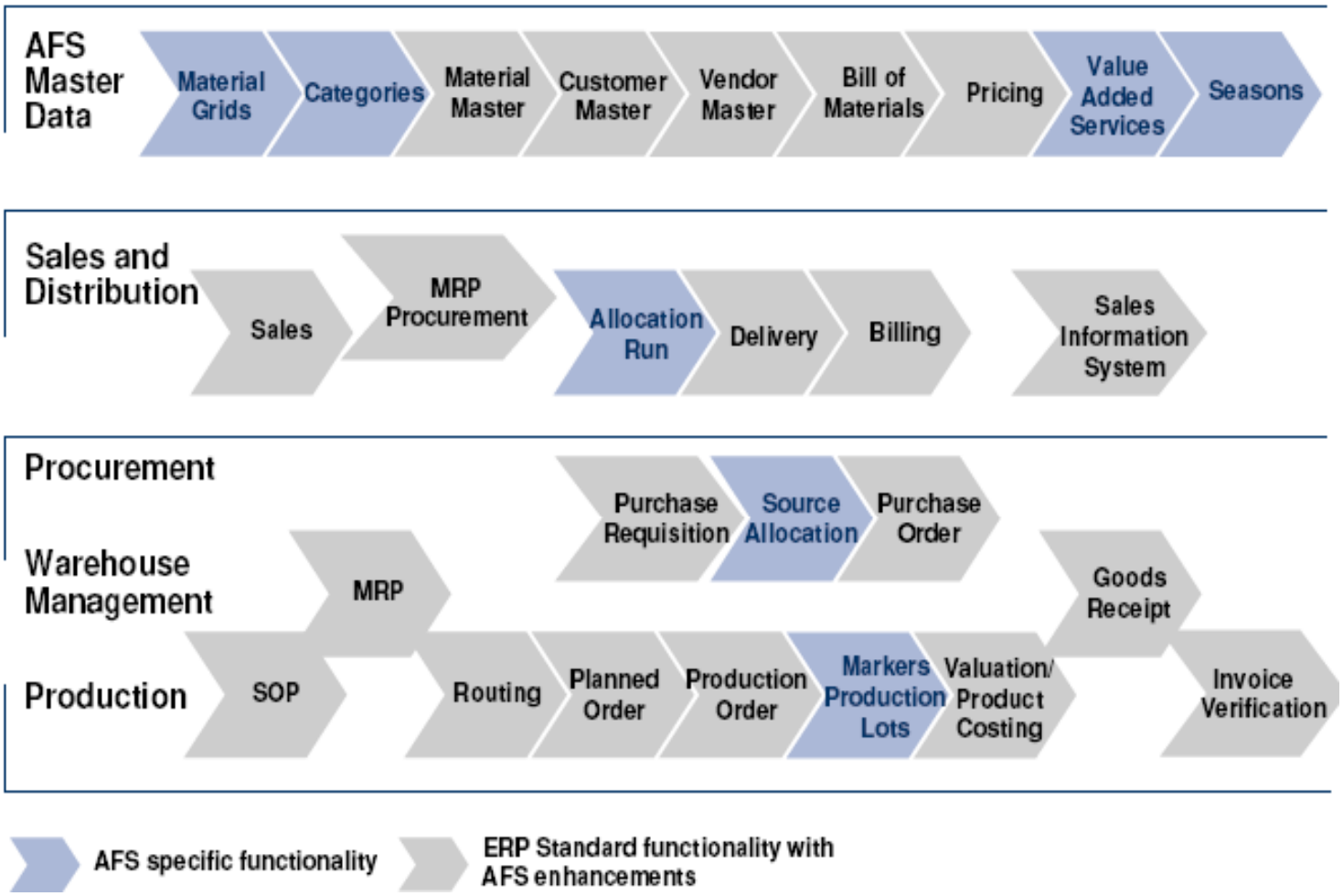
Master Data in IS-AFS

- Vendor Master
- Vendor Evaluation
- Info Record Master
- Conditions
- Service Conditions
- Source List
- Material Master
- Quota Allocation
- Vendor Capacities
- Material Grids
- Seasons
- Characteristics
- Pricing-AFS(J3AP, J3AX,J3AD)
- EAN/UPC Numbering
- Political Restriction Master
- Vendor Capacity Planning

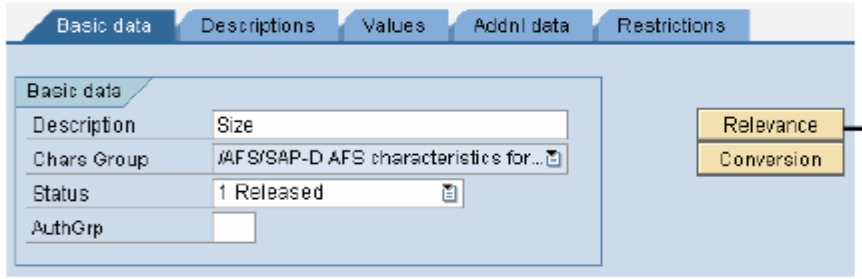
- Partner Master
- Customer Hierarchy
- Customer Material Information
- Pricing Conditions
- Rebate agreements
- Assortment
- Material Master
- Value Added Services information
- Pre-pack
- Packing instruction
- Seasons
- Characteristics
- Pricing-AFS(J3AP, J3AX,J3AD)
- EAN/UPC Numbering
- Delivery program (Season/collection/Theme)
- Material grid
- AFS Factor price
- AFS two-date pricing
- NRF Codification
- Transportation zone
- Credit management master data

- AFS Grids
- AFS Category Structure and Coverage Strategy
- Material Master - MRP data
- Bill of Materials (BOM)
- Routing
- Work Centers
- Capacity
- Scheduling Data
- Distribution Profiles for Presizing
- AFS Discontinuation

- G/L Accounts
- Profit Centers
- Customer Master
- Vendor Master
- Bank Master
- Fixed Assets
- Cost Centers
- Cost Elements
- Activity Types
- Statistical Key Figures
- Internal Orders
- CO-PA Master data
- Consolidation Units


AFS Master Data
Material Grids
Categories
Material Master
Customer Master
Vendor Master
Bill of Materials
Pricing
Value Added Services
Seasons
Sales and Distribution
Sales
MRP Procurement
Allocation Run
Delivery
Billing
Sales Information System
Procurement
Purchase Requisition
Source Allocation
Purchase Order
Warehouse Management
MRP
Goods Receipt
Production
SOP
Routing
Planned Order
Production Order
Markers Production Lots
Valuation/ Product Costing
Invoice Verification
AFS specific functionality
ERP Standard functionality with AFS enhancements

AFS Dimension Value Maintenance



Relevance is described on the next slide

Allowed Values

Char. Value	Description
4	Size 4
6	Size 6
8	Size 8
10	Size 10
12	Size 12
14	Size 14
16	Size 16

Order will be used in Grid Display

	1: (SIZE)Size						
	4	6	8	10	12	14	16
WHT	☑	☑	☑	☑	☑	☑	☑
BLK	☑	☑	☑	☑	☑	☑	☑

(1) Dimensions are defined as characteristics, with characteristics group /AFS/SAP-D

(2) Characteristic values are maintained in the same transaction (CT04).

(3) You can define 'Relevancy' of each characteristic for various applications that allows data maintenance for each of this applications

(4) It is mandatory to maintain the characteristic values to be used in a grid.

(5) National Retail Federation (NRF) size and color codes may be assigned to the dimension in customizing from the particular grid.

AFS Material Grid Types: 1, 2 and 3 Dimensions

1 Dimension: Shoes

Size	8	9	10	11	12
	☑	☑	☑	☑	☑

2 Dimensions: Jacket

Color \ Size	6	8	10	12	14
BLU	☐	☑	☑	☑	☐
RED	☑	☐	☑	☑	☑

3 Dimensions: Jeans

Color	BLUE				BLK			
Inseam \ Waist	28	30	32	34	28	30	32	34
28	☐	☑	☑	☑				
29	☑	☐	☑	☑				
30	☑	☑	☑	☑				
31	☑	☐	☑	☑				

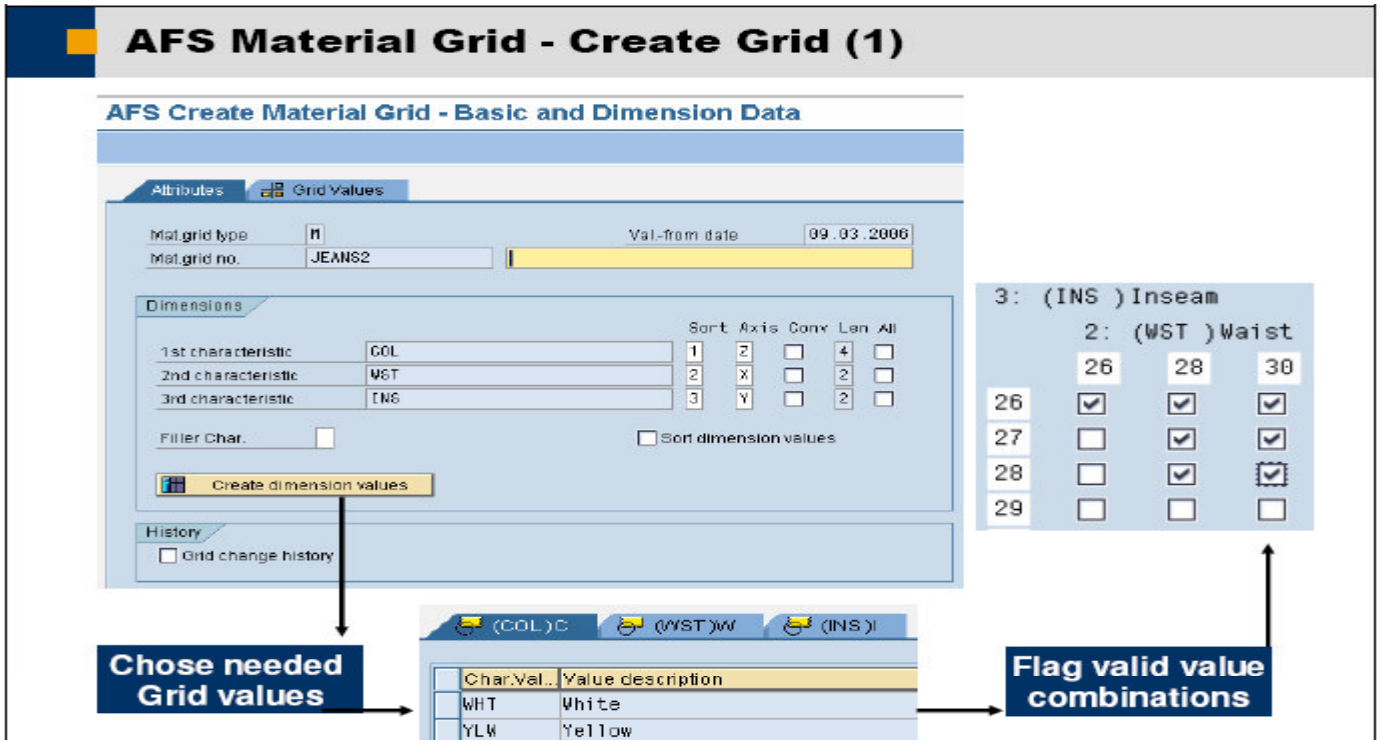
(1) A material grid is a data construct that allows us to enter dimension information for materials

(2) Dimensions within the grids are used to represent attributes of products, for example, color, size, style.

(3) Up to three dimensions are possible, for example, color, waist, inseam.

(4) Dimensions can be up to eight characters long (for up to three dimensions combined).

(5) Dimensions can be numeric or alphanumeric.



There are three types of material grids:
(1) Master grid:
Part of the material master
(2) Purchase grid:
An application grid that is a subset of a master grid
(3) Sales grid:
An application grid that is a subset of a master grid
The order of dimensions may be sorted for use in the applications.
Grid dimensions may be converted, for example, for use in a different country.

AFS Material Grid - Create Grid (2)

3 Dimensional
Master Grid: Jeans

MASTER GRID

1: Color | BLK | BLU | WHT

3:Inseam	2:Waist 31	32	33	34	35
30	☑	☑	☑	☑	☑
31	☑	☑	☑	☑	☑
32	☑	☑	☑	☑	☑
33	☑	☑	☑	☑	☑
34	☑	☑	☑	☑	☑
35	☑	☑	☑	☑	☑

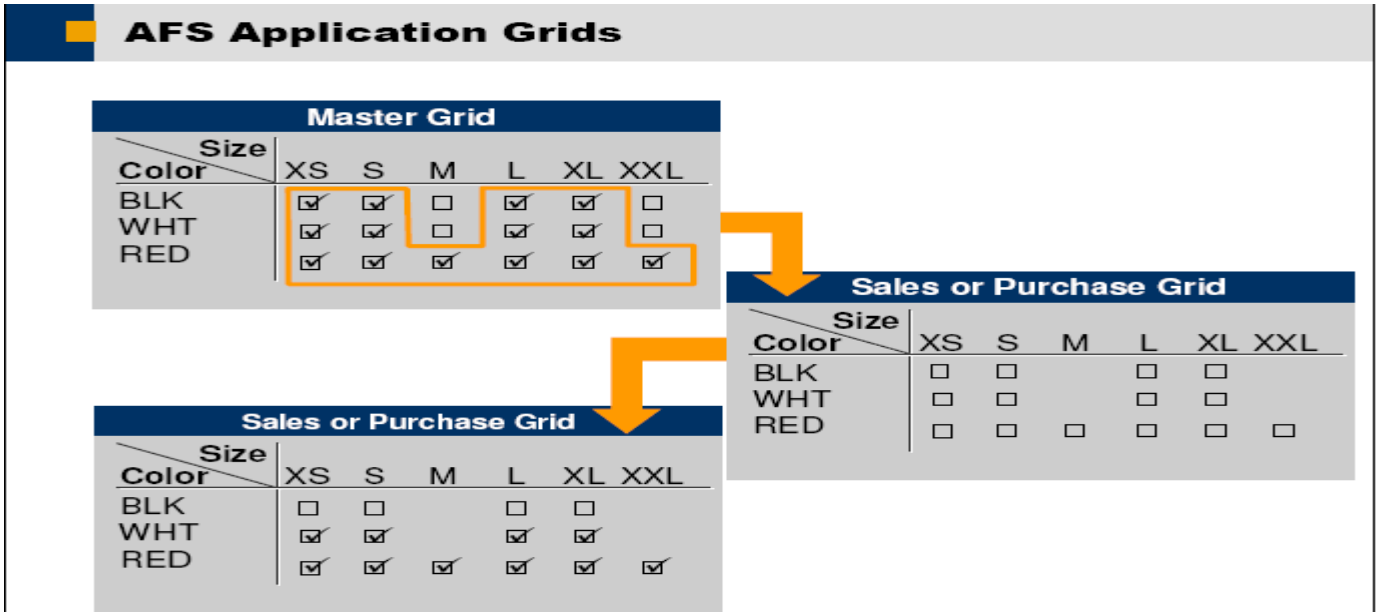
3 Dimensional
Master Grid: Shoes

MASTER GRID

1: Color | BLK | BRN | BRG | TAN

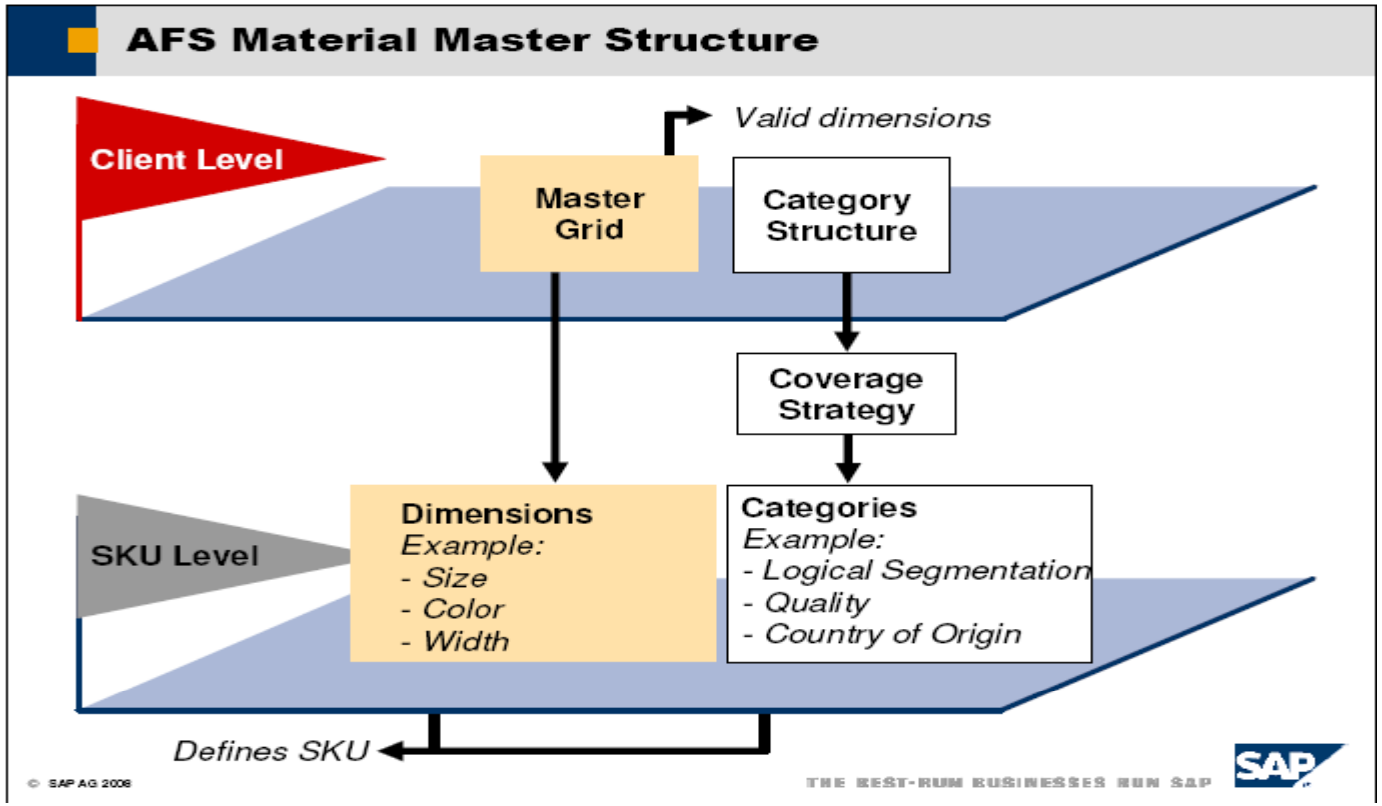
3:Width	2:Size 6	6.5	7	7.5	8
N	☑	☑	☑	☑	☑
M	☑	☑	☑	☑	☑
W	☑	☑	☑	☑	☑

(1) Your products may have several attributes, so careful planning must go into the decision regarding how you will set up your dimensions in the master grid.
(2) You need to decide how many dimensions to assign to your material grids.
(3) You must also decide which dimensions you will represent in your product.
(4) If you create three-dimensional grids, one of them must be represented by a button. The examples displayed above have “Color” represented as the 3rd dimension.
(5) You can create one grid and then use it for several materials.
(6) You can create an initial grid and use it as a reference grid for creating new grids. The relationship between the grids is maintained.
(7) Once a master grid has been saved it is possible to add more dimension values at any time. You can only delete matrix values if the grid has not been used in any material. It is not possible to delete dimension values once entered.
(8) Grids no longer used in any material may be deleted.

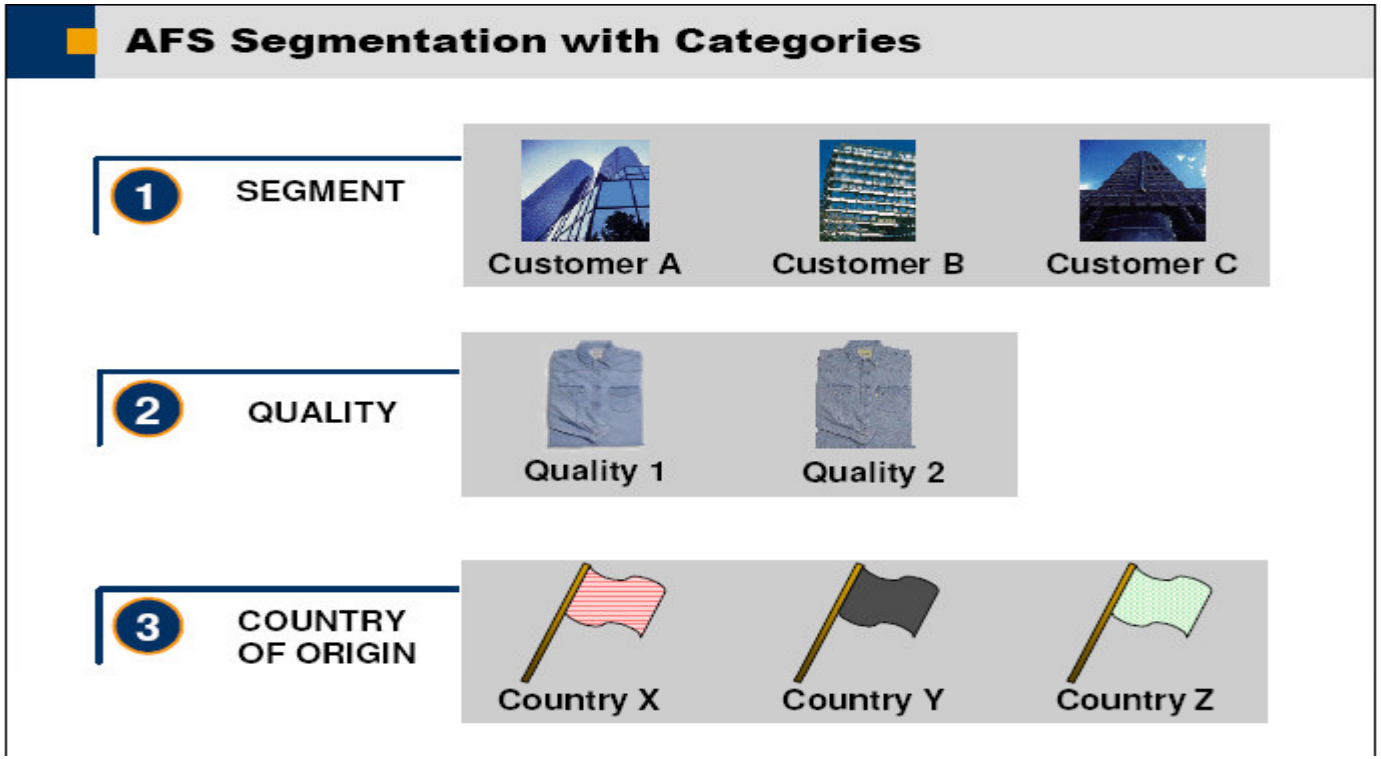


Purchase and sales grids complement master grids in that a relationship among customers, materials, vendor and users can be established for explicit control via the condition technique.

Example: If a vendor can only provide a limited range of sizes or colors, a purchase grid can be created specifically for that vendor excluding those particular sizes or colors. In purchase order entry, these sizes/colors will not be displayed as valid for purchasing purposes. However, it is important to keep the following constraints in mind: Purchase and sales grids are always a subset of a master grid. It is not possible to add or delete existing dimensions from a purchase / sales grid. If cells are deactivated in the related master grid, they are deactivated in the associated purchase/ sales grid.



The decision of whether to define material characteristics as grid dimensions or categories requires careful planning. AFS provides information in addition to the material master. The master grid allows the addition of multiple dimensions. It is not necessary to have a separate material master number for each individual characteristic. Coverage strategy allows you to include stock and requirement categories. It also allows you to define strategies for PIR consumption, Stock to Requirements mapping in MRP/ATP/ARun functionalities at the category level.

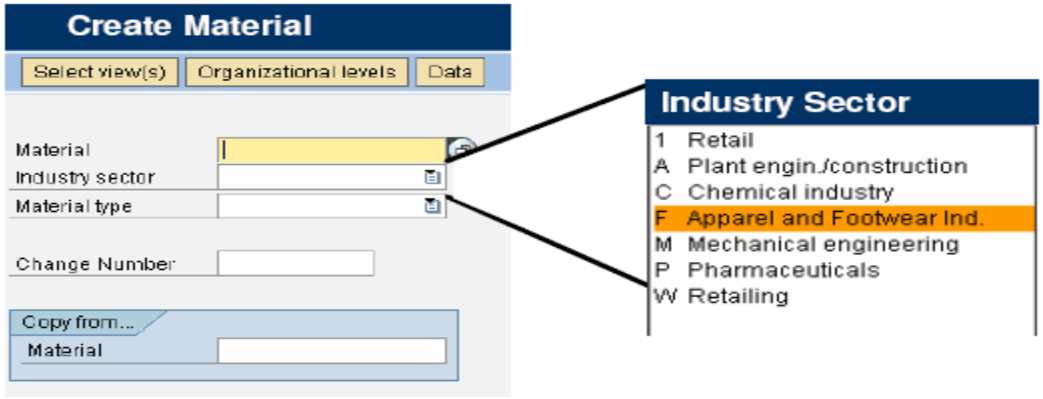


• Categories provide an additional layer of detail that allows you to further specify or characterize your product.
• You can create categories to segregate customer segments, levels of quality, country of origin, etc.

For example, one of your categories might be Quality which might be defined at two levels. Quality 1 would be your first grade goods, Quality 2 would be your second.

The structure of categories can be freely defined by customer. The definition of categories is optional. Categories are linked to the material master via assignment of the coverage structure and strategy. Multiple category field structures, dynamic category content and application relevance are available.

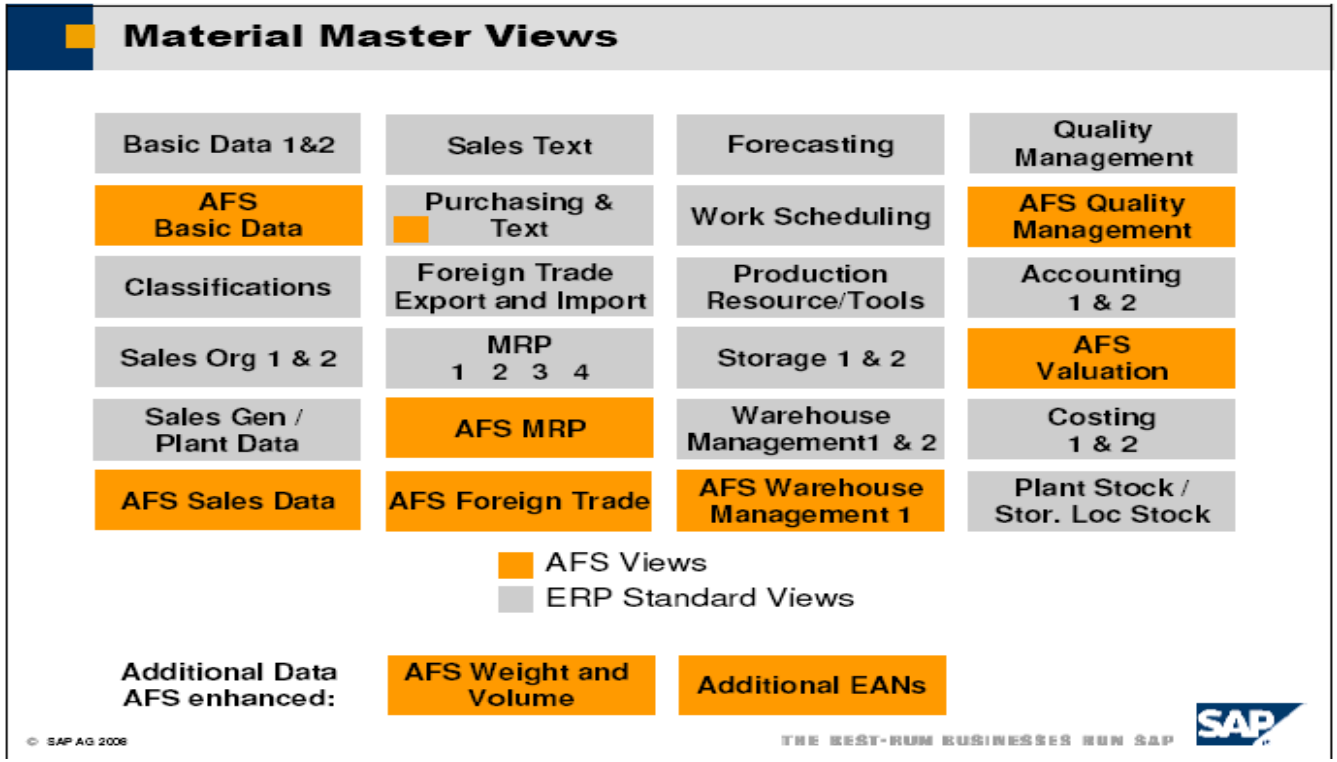
Material Master Setup



The industry sector determines to which industry the material applies.
This attribute decides:

- Which views are displayed and in which order
- What industry-specific data is displayed.

The material master is the foundation for all logistics functions of the SAP ERP System. One material master record is created for each material in the system.



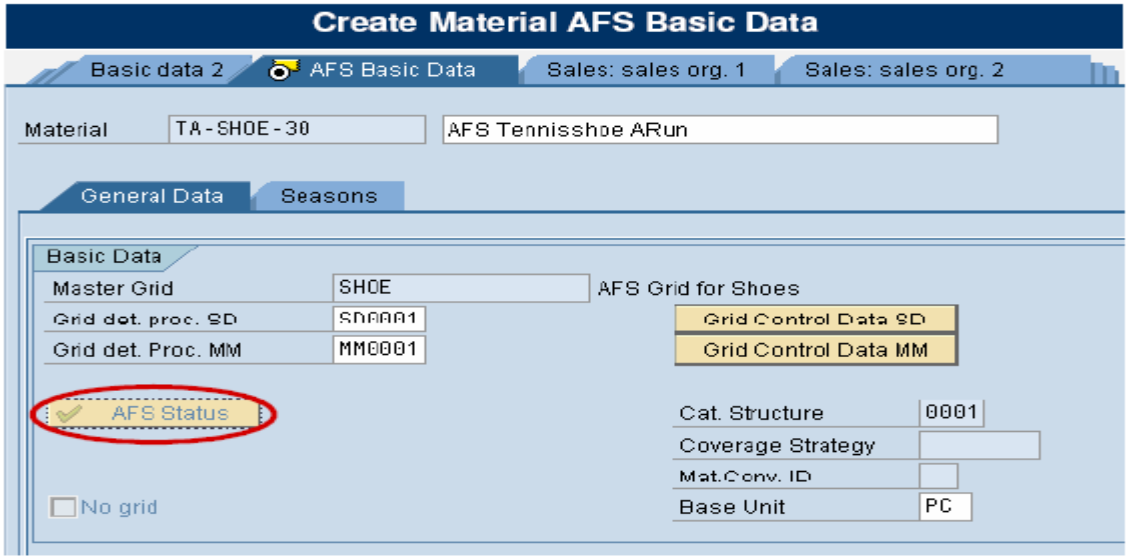
Specific AFS views:

1. AFS Basic Data
2. AFS Sales Data
3. AFS MRP
4. AFS Warehouse Management 1
5. AFS Quality Management
6. AFS Valuation

Some Standard ERP views have been changed, e.g.,:

1. Basic Data 2
2. Purchasing
3. Accounting 1

Material Master - AFS Basic Data View



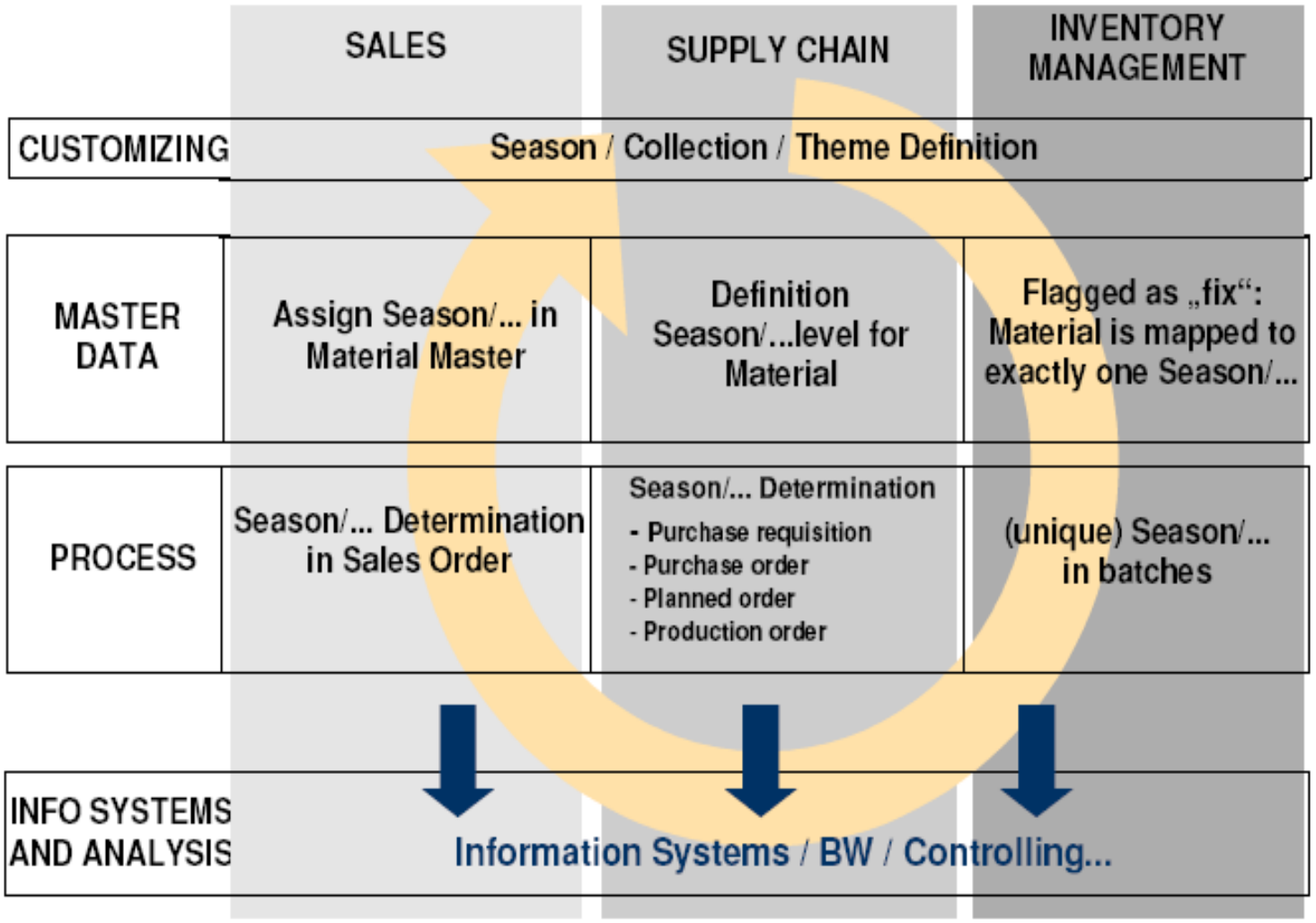
Once this status has been flagged, the master grid cannot be replaced

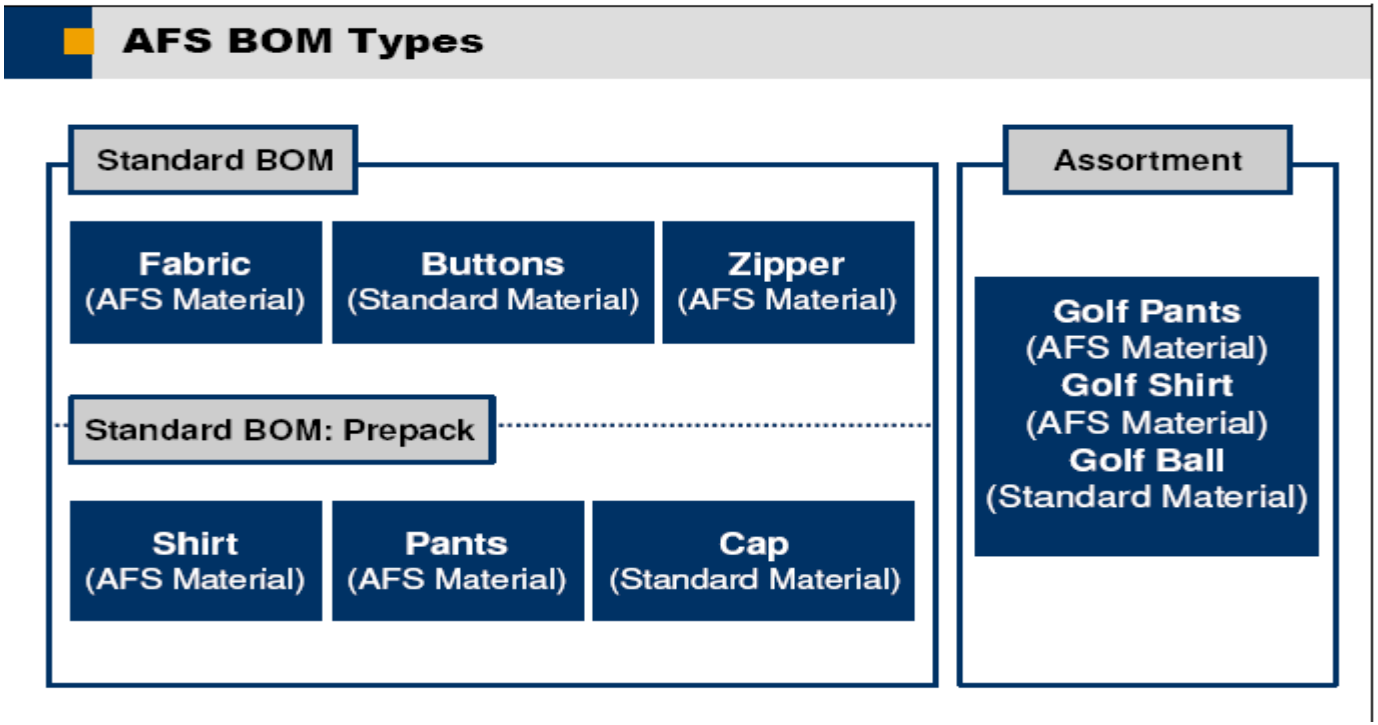
- Master Grid: The master grid is used to define dimensions for a material. A separate material master for each size is not necessary
- Grid Determination Procedure: Grid determination procedure defines how a grid in SD or MM is selected for the specific material (condition technique)
- Assign the category structure and coverage strategy for the AFS material

Material Master - AFS Seasons

• The seasons of business (spring/summer, fall/winter, back-to-school, Christmas etc.) requires that certain products be available for their corresponding season, with special needs to “mark down” or “move” inventory that will soon be out of season.
• Seasons are supported in AFS Sales and Distribution. Seasons are supported in AFS Materials Management and Production from AFS 5.0 onwards.
• The season control function enable a full control in the sales order process of the ordering opened dates and the delivery opened dates.

Material Master - AFS Seasonality in MM/PP

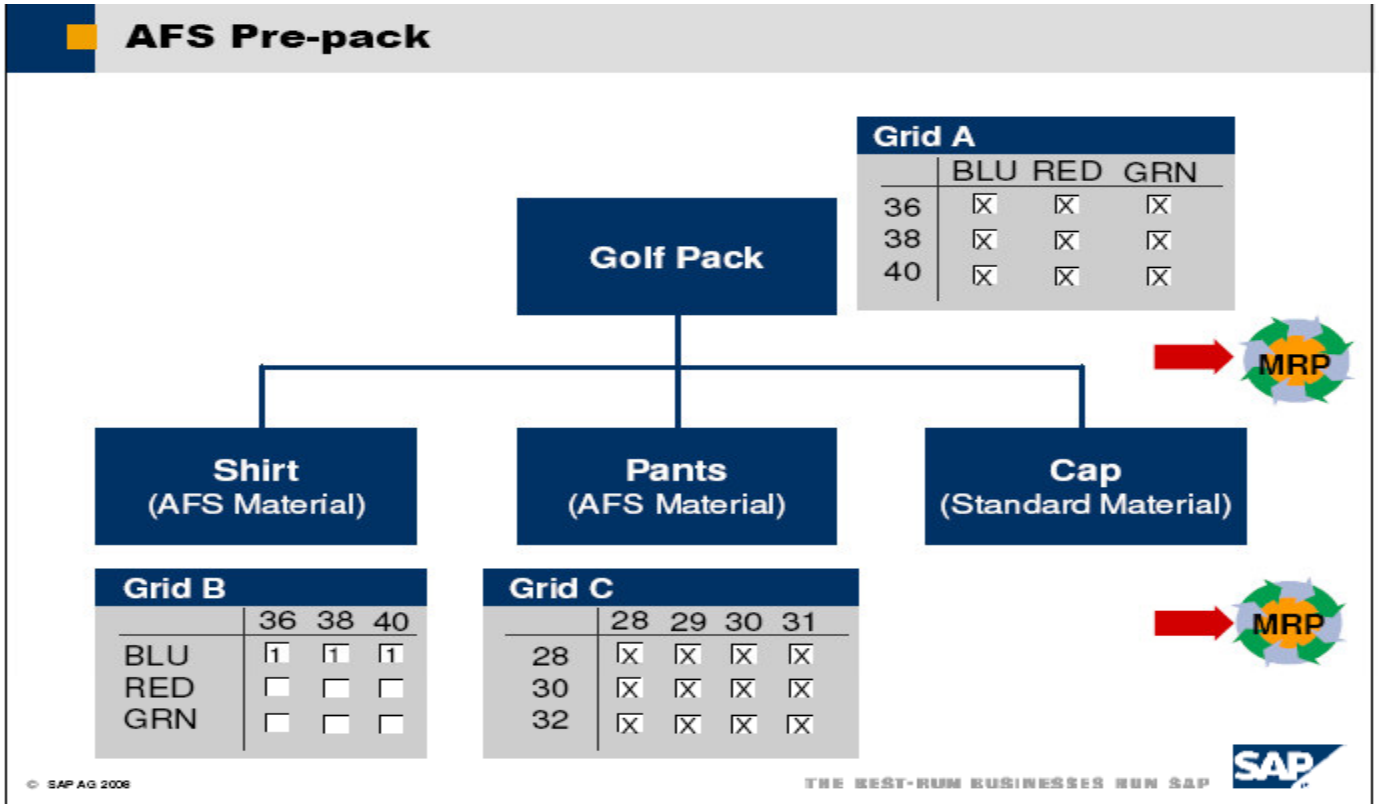




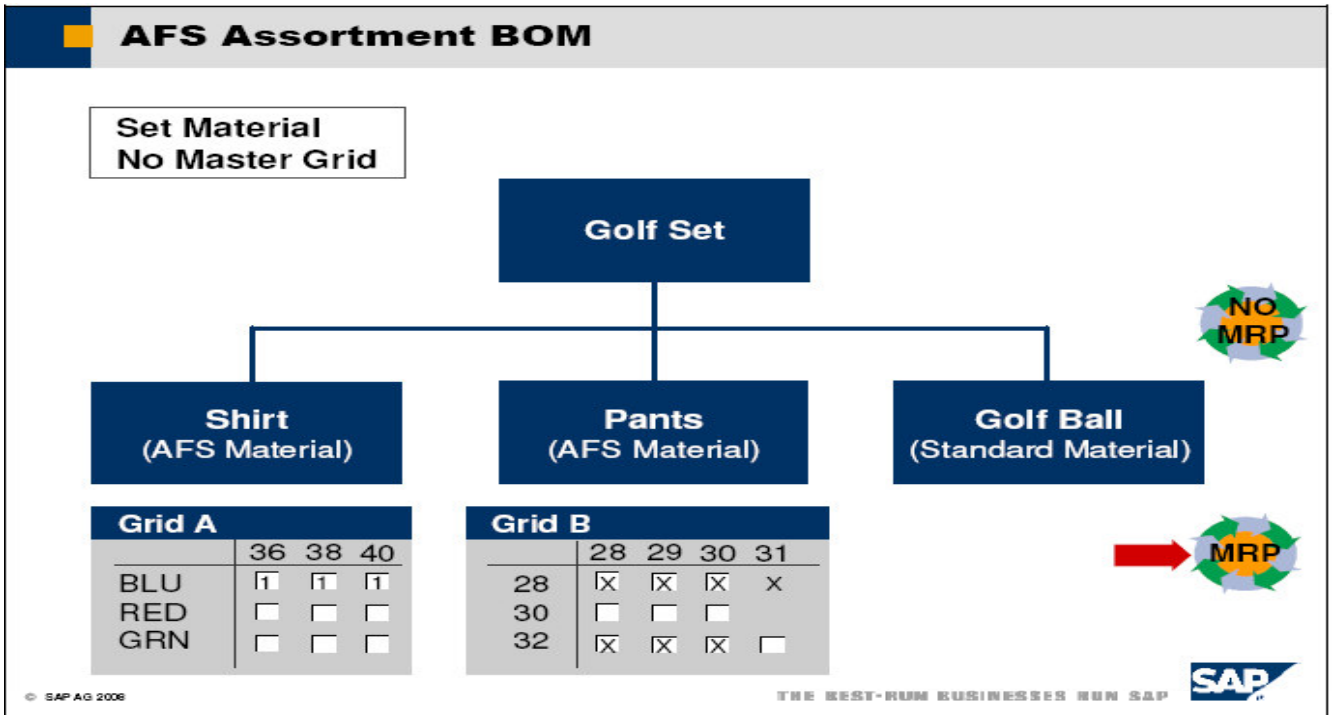
In AFS there are two types of BOMs:

1. AFS Standard BOM
2. AFS Assortments
3. AFS Pre-packs are part of the standard BOM.

Pre-pack and assortment BOMs are used in SD only.

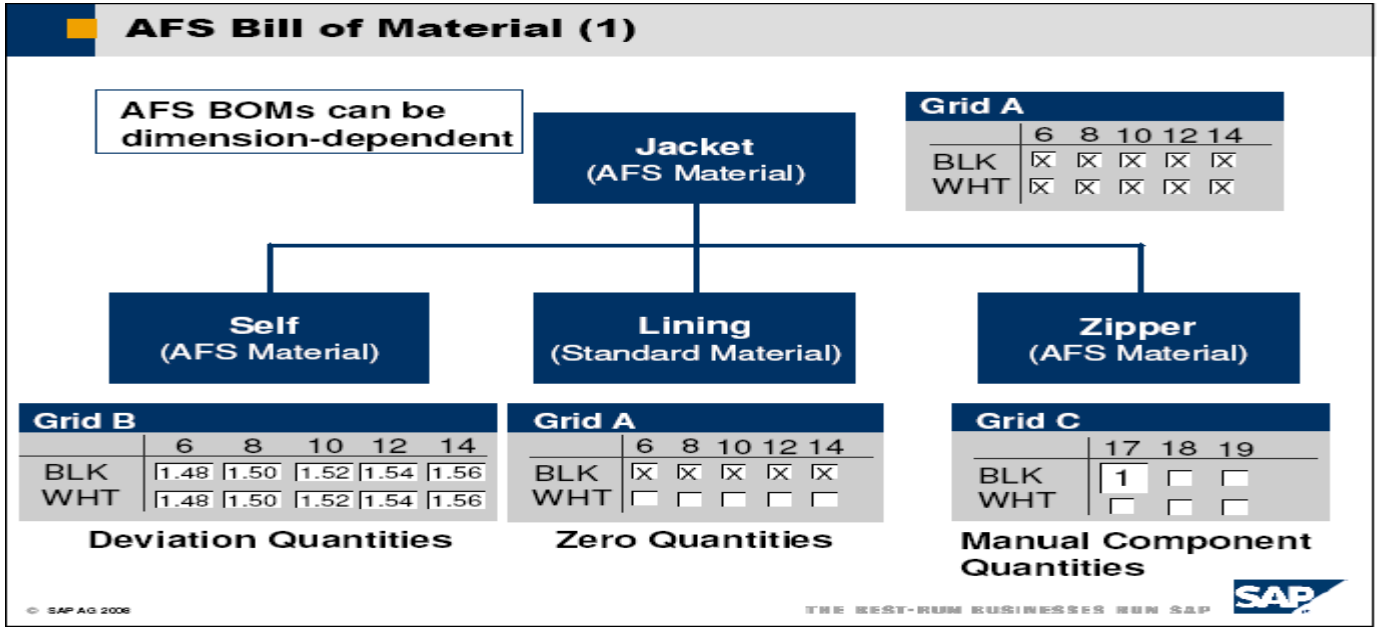


A pre-pack is a set of predefined combinations of quantities and sizes in the BOM structure. The header material may contain a master grid that is different from the grids of the components. All items, independent of their levels in the BOM, are MRP relevant.
If a material is used as header material in a pre-pack, it needs to be defined as a regular AFS material.
For example, a golf pack will always consist of a shirt, pants and cap in the sizes relating to a size of the header material.



An assortment is usually put together at the request of the customer whereby the quantity and sizes of the set may vary but not the items within the BOM structure. A set material BOM is the same concept as a phantom assembly in the standard system, in that the header material is merely a grouping of two or more finished products. The header material contains no master grid but may have categories. The components may have differing master grids. The sizes and quantities are allocated when the BOM is exploded after a sales order has been entered. The components are stock keeping items.

If a material is a header material used in a sales BOM for an assortment, you must activate the Set material field in the material master record. The material grids are defined in the material master of its components.
For example, a customer may want to have an assortment consisting of a golf shirt, golf pants, and golf balls. The header material has no grid. The golf shirt and pants have a grid but the golf balls are a standard material. You enter the requirements at SKU level when entering the sales order.

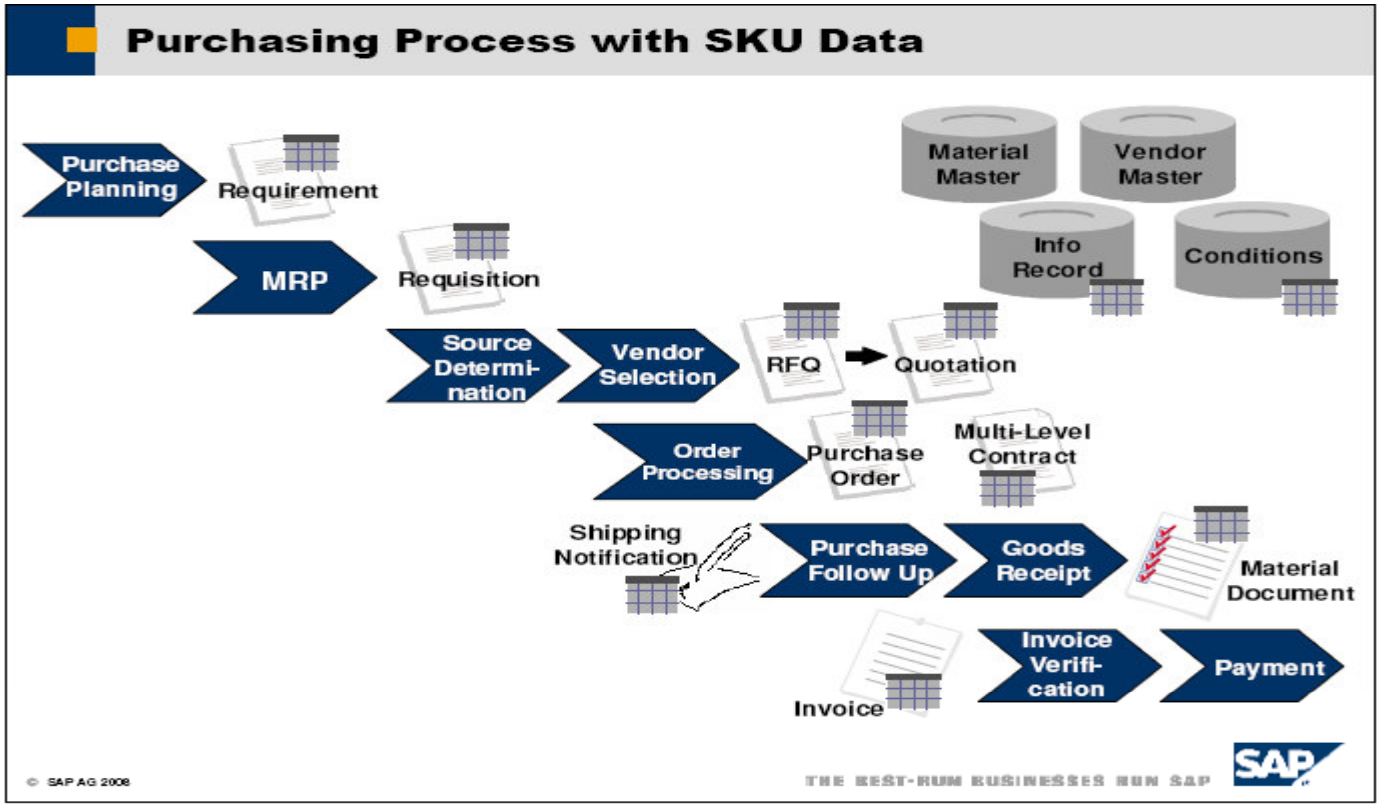


The AFS BOM includes the grid information for all components. Components may be either AFS materials or standard materials. You can view the master grid of the header material when working with any component, even if the component is a non-AFS material. Some features of AFS BOMs are:

- Dimension dependent consumption, e.g., the use of self for the jacket differs slightly for the various sizes.
- Dimension dependent components, e.g., lining is only needed for the white jacket.
- Dimension dependent dimensions , e.g., a black size 6 jacket will use a black 17 inch zipper. A black size 8 jacket may use the same zipper, but a size 10 may need a 18 inch zipper.

Furthermore AFS supports different reports for BOM explosion.

1. Display a BOM level by level (TC:CS11) - This BOM reporting function shows which components make up the individual assemblies across multi-level.
2. Multi-level BOM (TC: CS12) -This reporting function determines all components (assemblies and individual parts) in a product and displays them in their structural context for production.
3. Summarized BOM (TC: CS13)



The typical procurement cycle for a service or material consists of the following phases:

1. Determination of Requirements
2. Source Determination
3. Vendor Selection and Comparison of Quotations
4. Purchase Order Processing
5. Purchase Order Follow-Up
6. Goods Receipt and Inventory Management
7. Invoice Verification

The purchasing documents are supported for AFS materials. You can maintain the grid values and categories in these documents.

Material Master - AFS Views

Basic Data

AFS Basic Data

Materials Planning (MRP)

AFS MRP

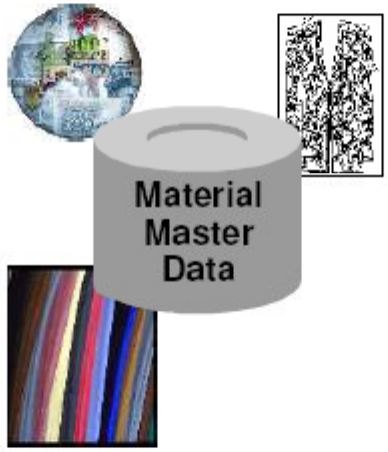
Stock Quantities

Accounting

Storage

Warehouse Management

AFS Warehouse Management



AFS Views

ERP Standard Views

Purchasing

Sales

AFS Sales Data

Work Scheduling

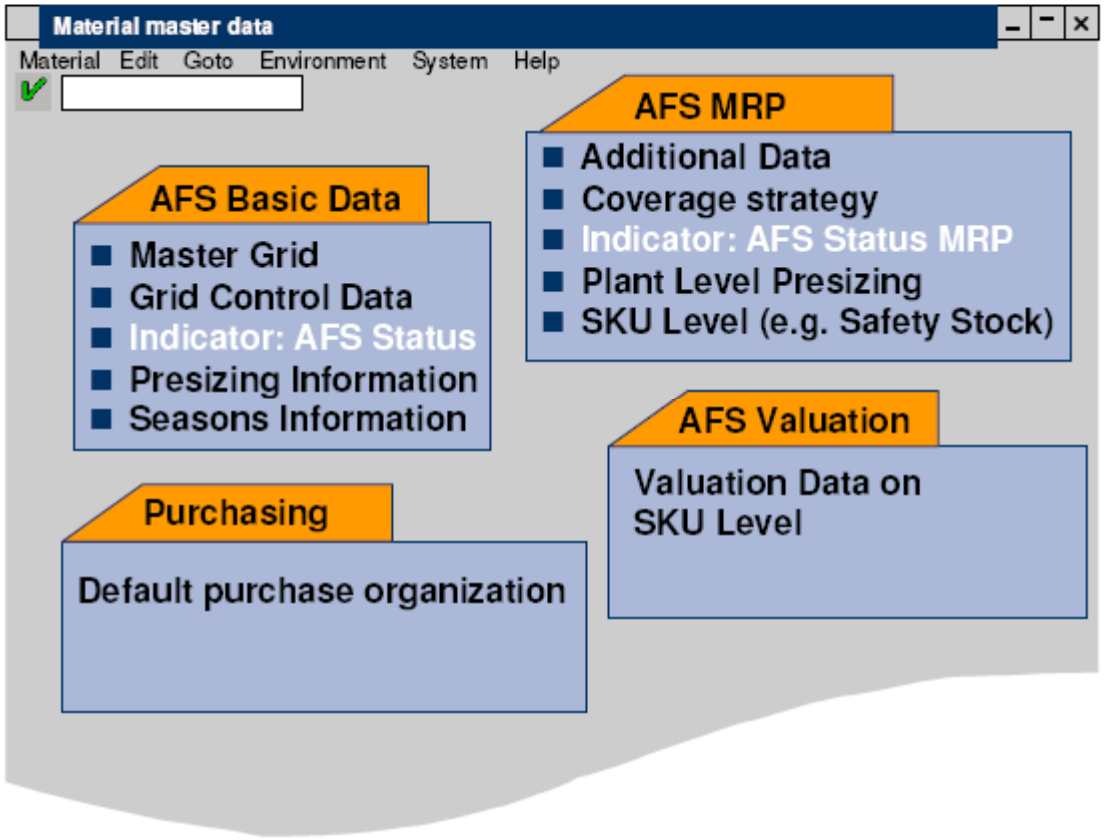
Quality Management

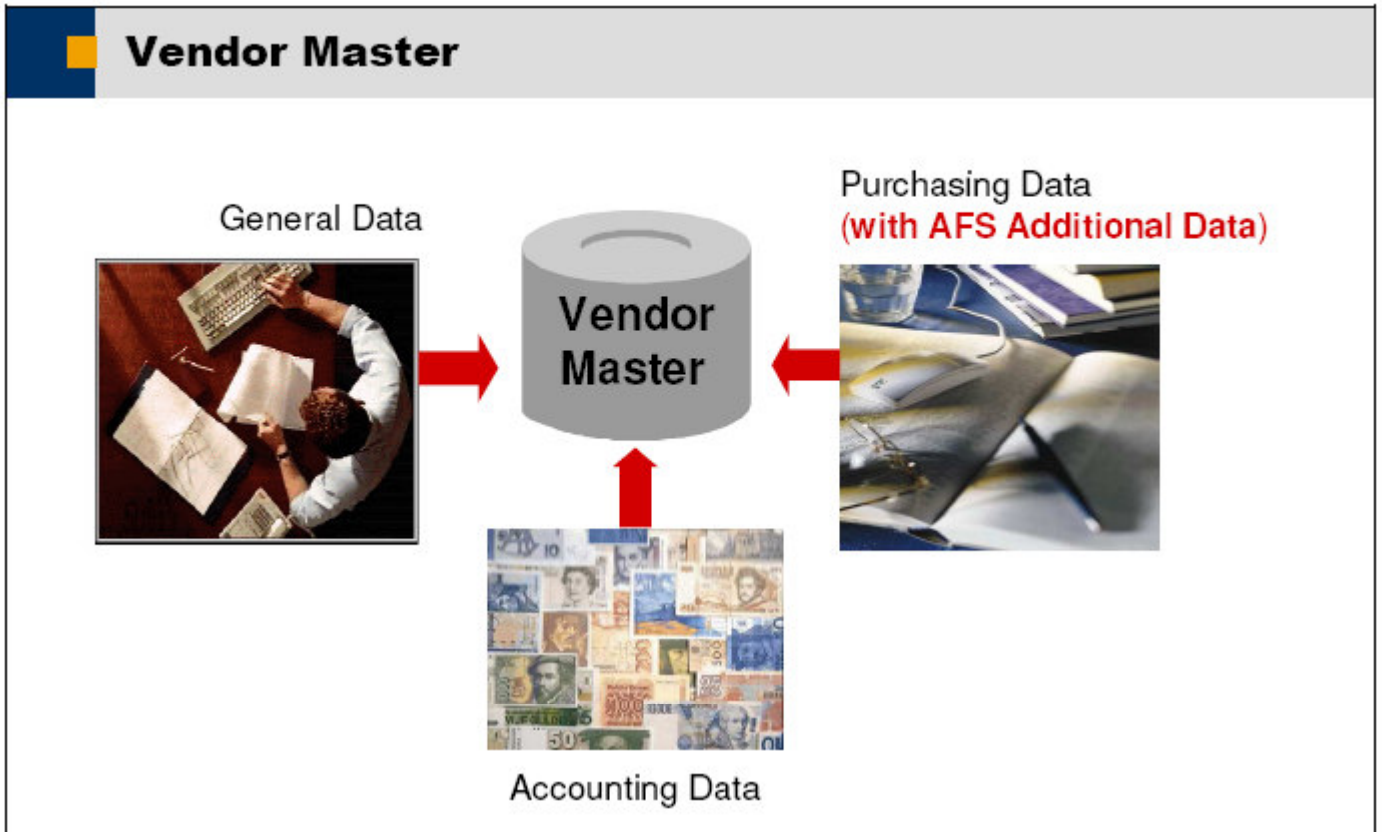
Forecasting

Classifications

AFS Valuation

Material Master - AFS Enhancements





The vendor master includes all data necessary for processing business transactions and corresponding with vendors.

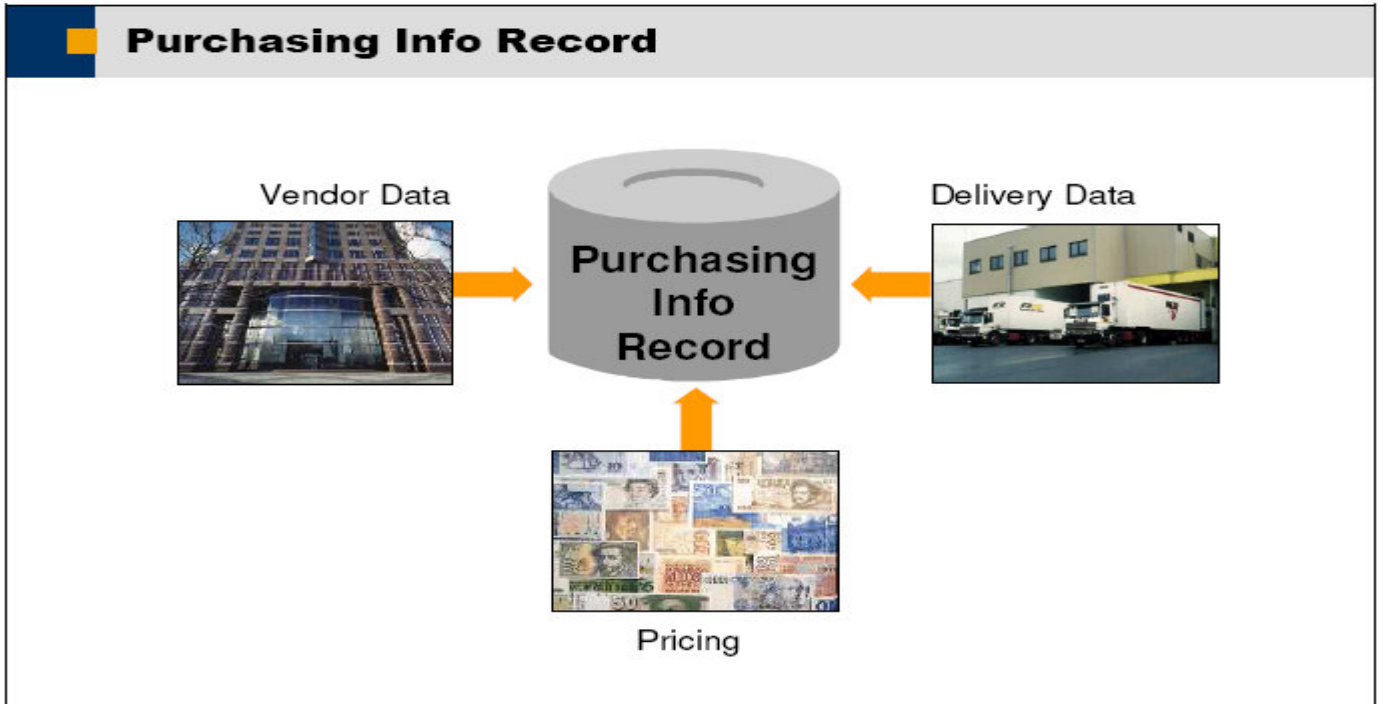
Information is shared between the accounting and purchasing departments.

Data is grouped into three categories:

1. General data
2. Accounting data
3. Purchasing data (with AFS additional data)

Vendor master records must be created before procurement can begin.

For AFS vendors the Schema Group Vendor used is **J1** (used to determine the AFS - specific price calculation scheme *J_ 3A00*)

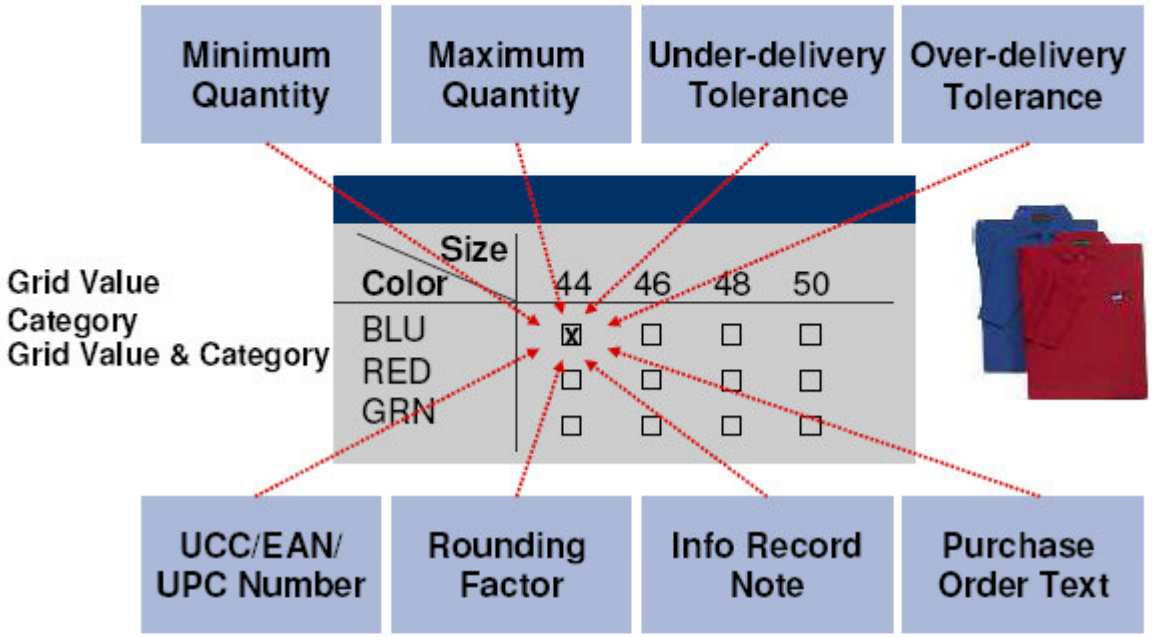


Purchasing information records describe the supply relationship of a material and a vendor.
The purchasing info record is a part of the master data for purchasing. It holds information for a specific material and vendor combination.
Information records allow the definition and maintenance of:

1. Current and future prices and pricing conditions (for example, freight, discounts).
2. Delivery data (for example, delivery lead time, tolerance limits)
3. Information from the last purchase order and quotation
4. Vendor data

Data maintained in the information records appears as default values during the creation of purchasing documents (for example, purchase orders, contracts). The information record can be updated automatically from a purchase order, request for quotation or quote, provided that the information update indicator in these documents is activated. Information records can be displayed individually, by vendor, by material, or by material group.

Purchasing Info Record - AFS Additional Data (1)



Planned Delivery Lead Times:

- Replenishment Lead Time
- Manufacturing Lead Time
- Packing Lead Time
- Transportation Lead Time
- Capacity Offset Lead Time

Round Convert:

- ○ round not
- ◉ round up
- ○ round down
- ○ round nearest

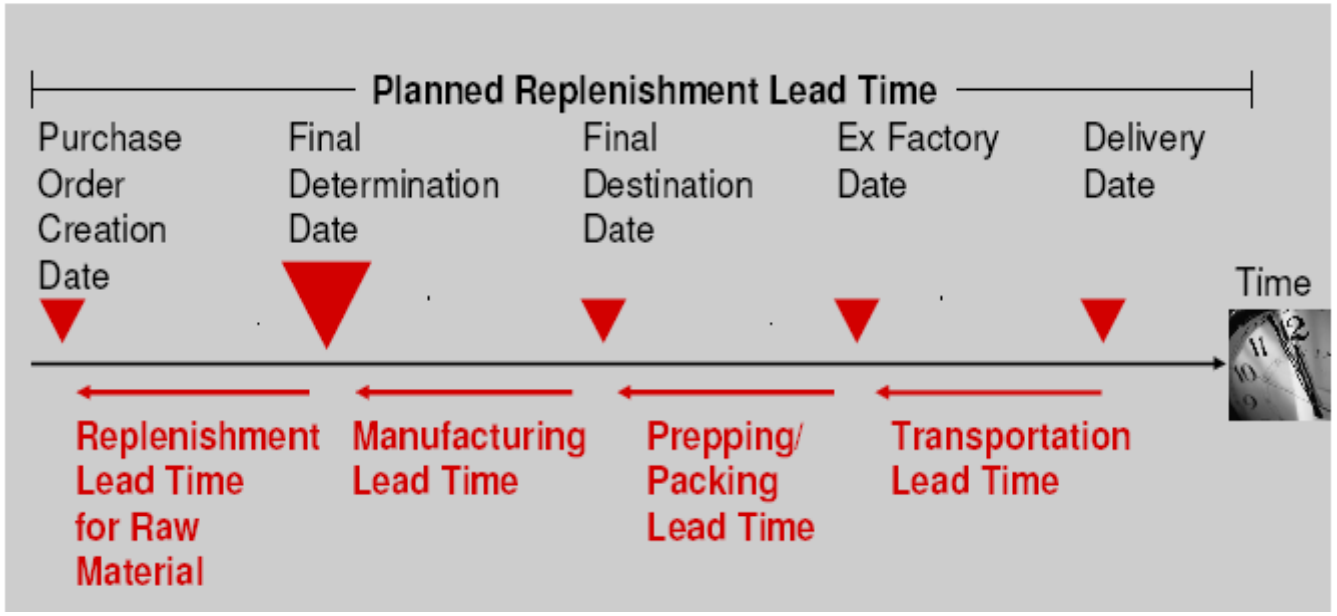
Subcontracting:

- Subcontracting Indicator

Route Determination:

- Transport Zone
- Transport Group
- Transport Condition

Purchasing Info Record - AFS Additional Data (3) Planned Delivery Lead Times



1. The replenishment lead times specify the lead time of the vendor to procure the raw material.
2. The manufacturing lead time specifies the production time of the vendor.
3. The packing lead time specifies the lead time needed by the vendor to prepare the material for transshipment.
4. The transportation lead time specifies the lead time to transport the material from your vendor to your plant.

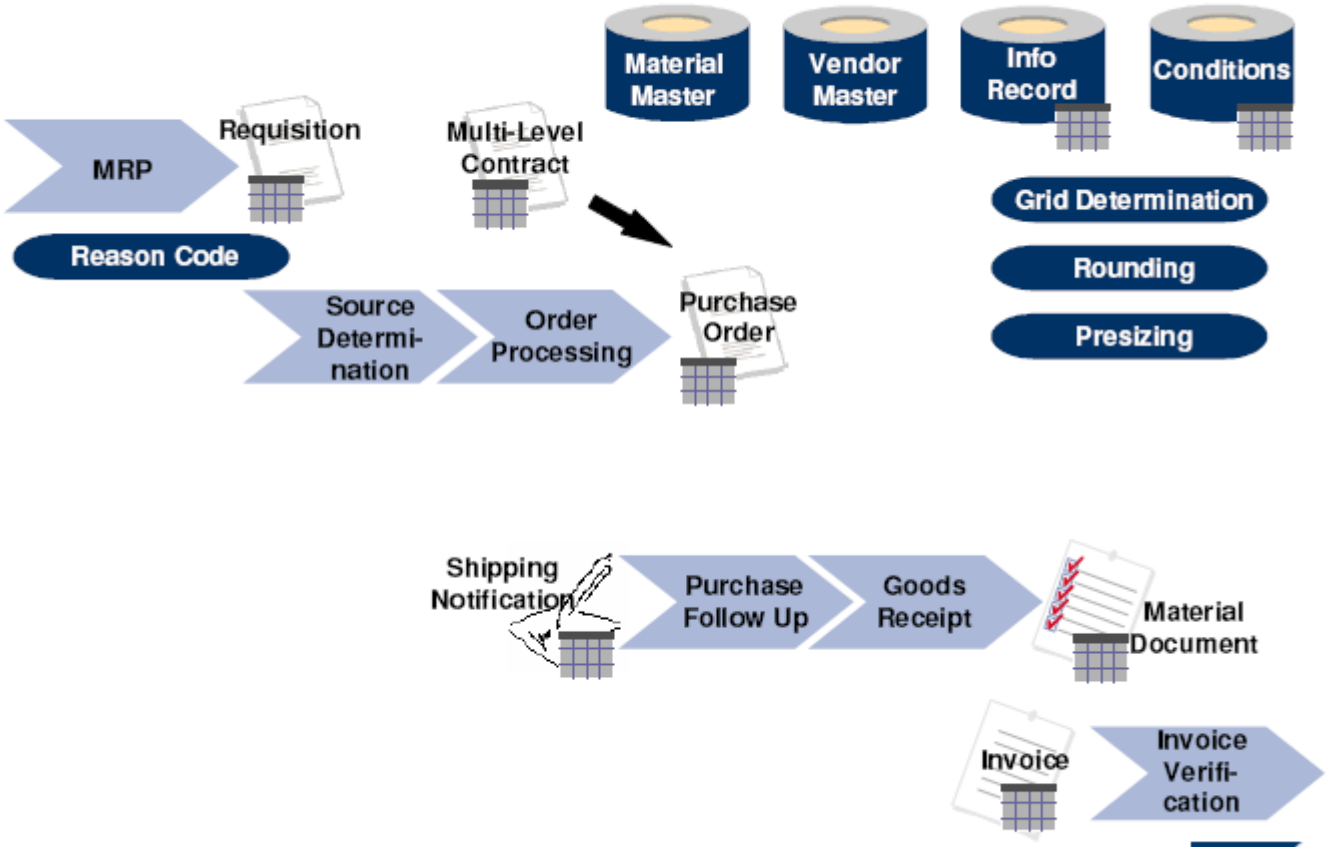
Condition Technique

Possible Levels:
- Grid Value
- Grid Value and Category
- Price Groups
- Category

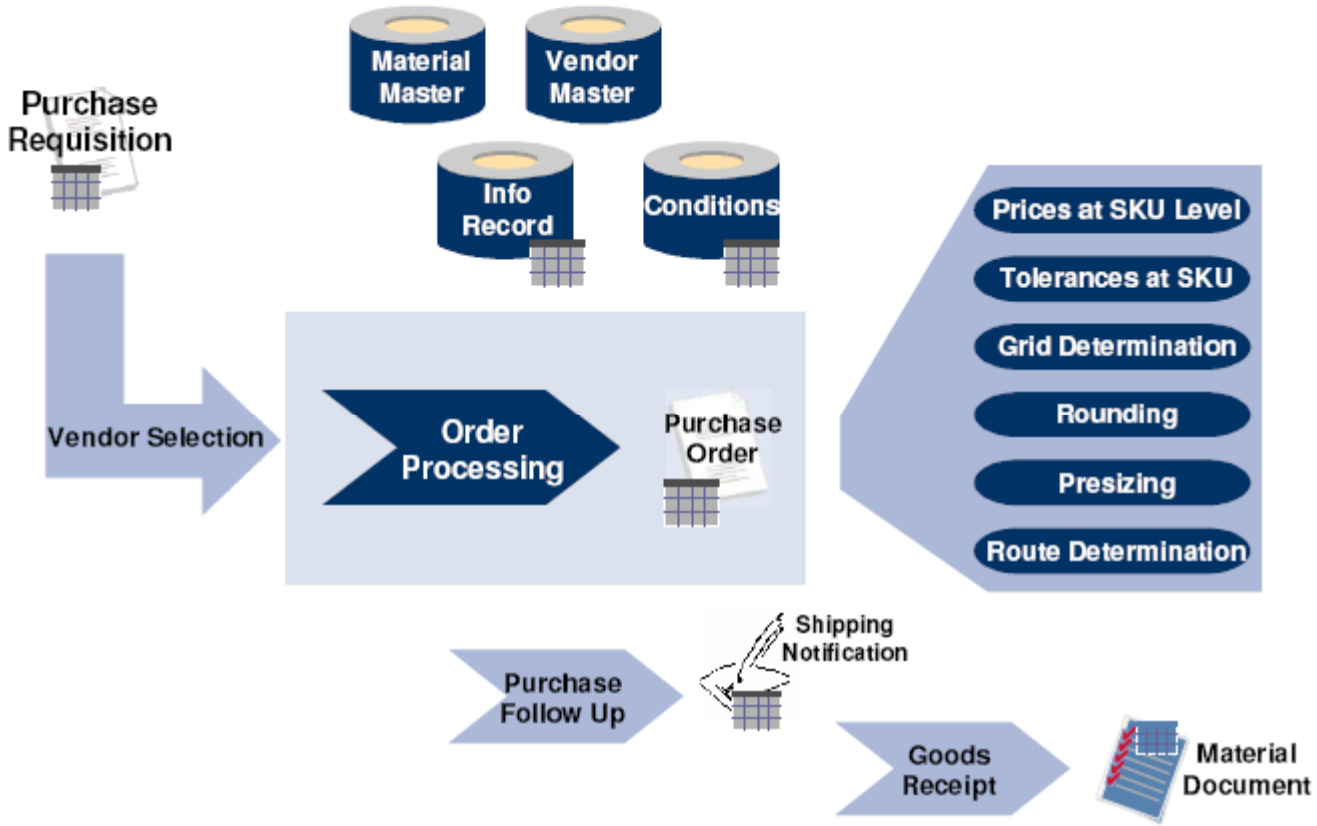
With the condition technique, you can create pricing conditions at SKU level.
The conditions at SKU level are not maintained in the info record itself, but are created using *Master data -> Conditions -> Other.*
You can maintain pricing conditions at different levels. For example:

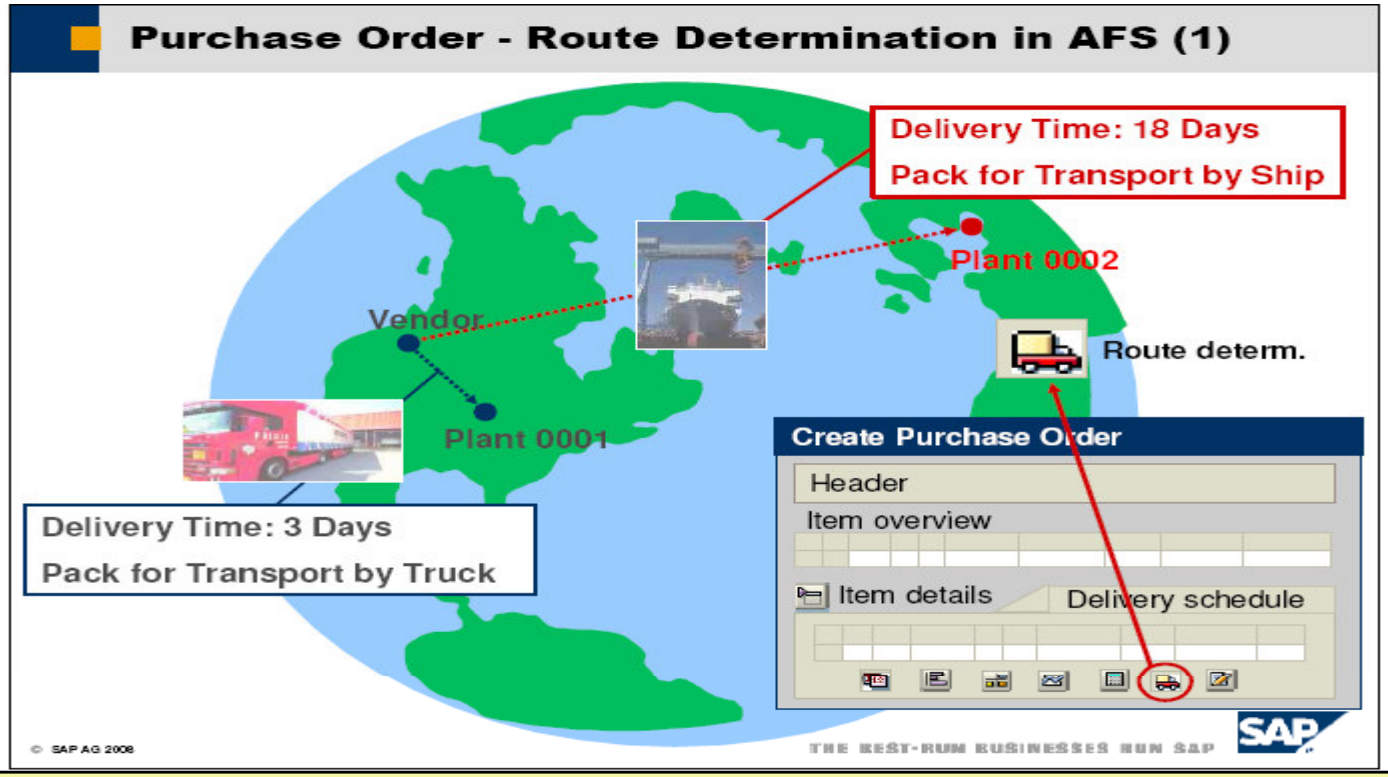
1. Material info record with grid value & category (plant-specific)
2. Material info record with grid value & category
3. Material info record with grid value
4. Material info record with price group
5. Material info record with category (plant-specific)
6. Material info record with category

Purchasing Process



Purchase Order - Overview





The transportation lead time for a route from your vendor to your plant can be determined in route determination. This function uses parts of ERP Standard route determination in sales and distribution, which determines the route from your plant to your customer. For the determination of the route, the zones of your vendor and your plant, shipping condition and transport group are taken into account.

The transportation lead time for a route is determined and can be recalculated according to different shipping conditions. For example, when the goods are normally transported, it is done by truck, but when the goods are urgently needed, the goods can be transported by plane. For these shipping conditions another route and transportation time is determined.

The (re)determination of the route can de done by forward and backward calculation. By forward calculation the delivery date is recalculated. By backward calculation the delivery date is fixed and the production date, packing date and ex factory date are recalculated.

Purchase Order - Route Determination in AFS (2)

Country of Origin: US

Vendor XYZ

Inforecord
Vendor: XYZ
Plant: ABC
Material: Ladies Shoes ‚Cynthia'
Transport Zone: 001 East Coast
Transport Group:001 on pallets
Transport Cond: 001 standard

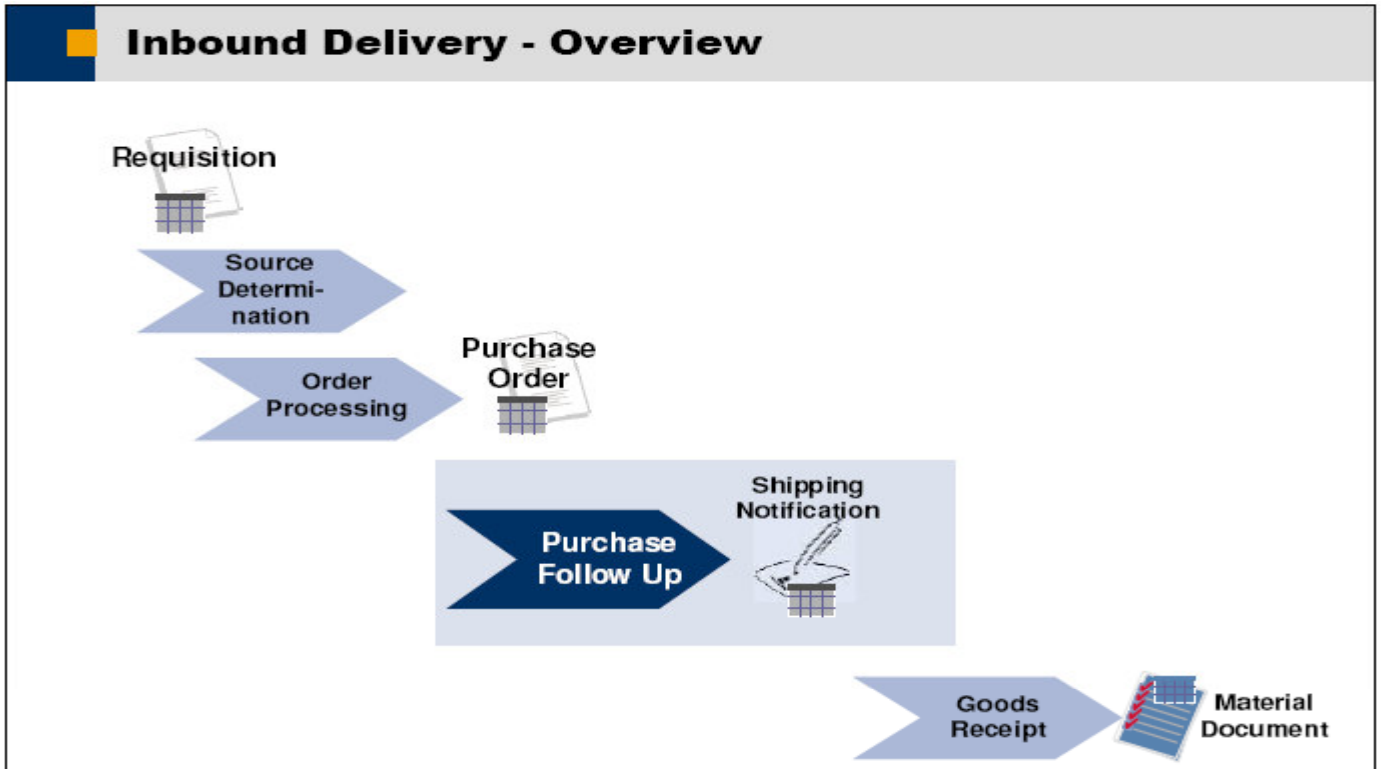
Route: 007
Transatlantic Shipment
Transit Time: 5 Days
Transportation Time: 20 Days

Plant: ABC

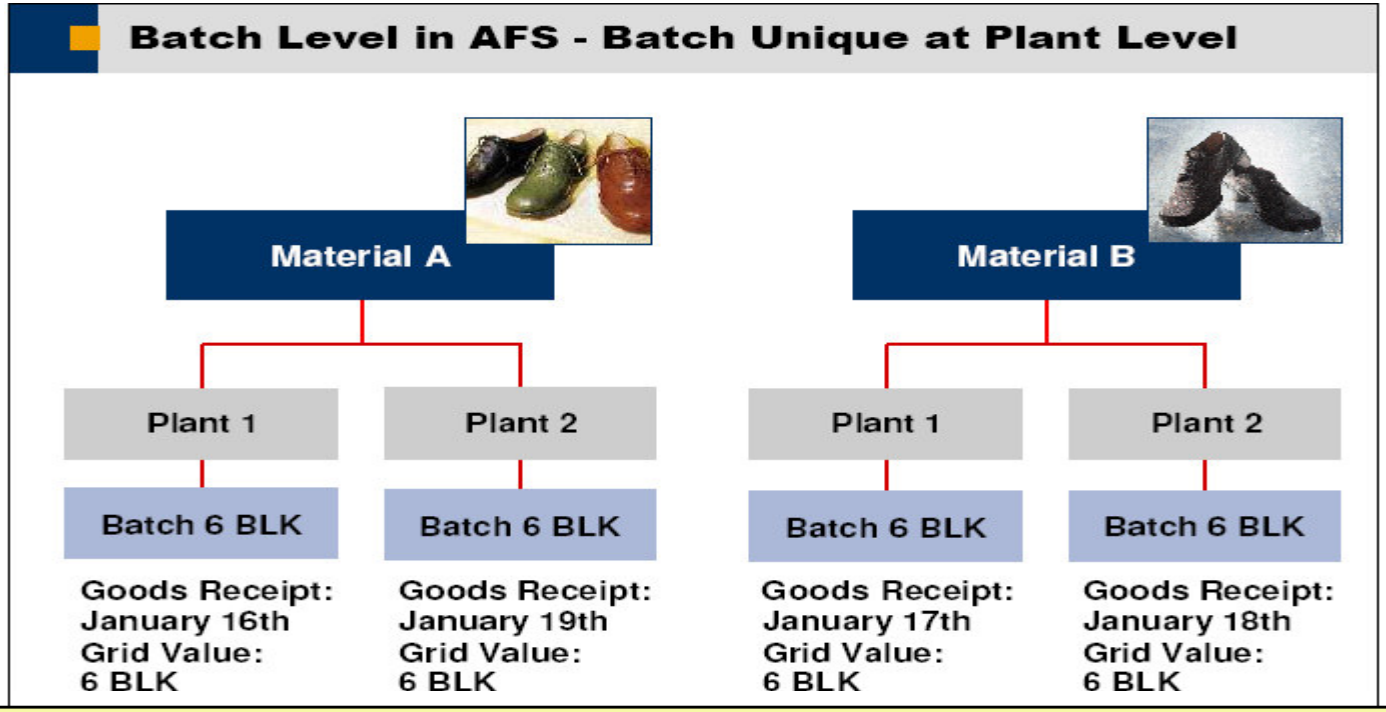
Country of Destination: DE
Transportation
Goods Receipt Zone: 0002

You can carry out AFS MM route determination for a purchase order. It determines the itinerary and mode of transport from the country of origin to the destination country.

This means that planned delivery lead time is dependent upon the determined route, and can lead to a new delivery date being calculated.



Inbound deliveries are order fulfillment confirmations for purchase orders.
Inbound deliveries allow the customer to plan ahead more precisely, since during the period between purchase order date and the desired delivery date, the vendor provides increasingly reliable data on the anticipated delivery.
If you have an EDI arrangement with your vendor, incoming shipping notifications can be received via EDI and entered as inbound deliveries in your system automatically.



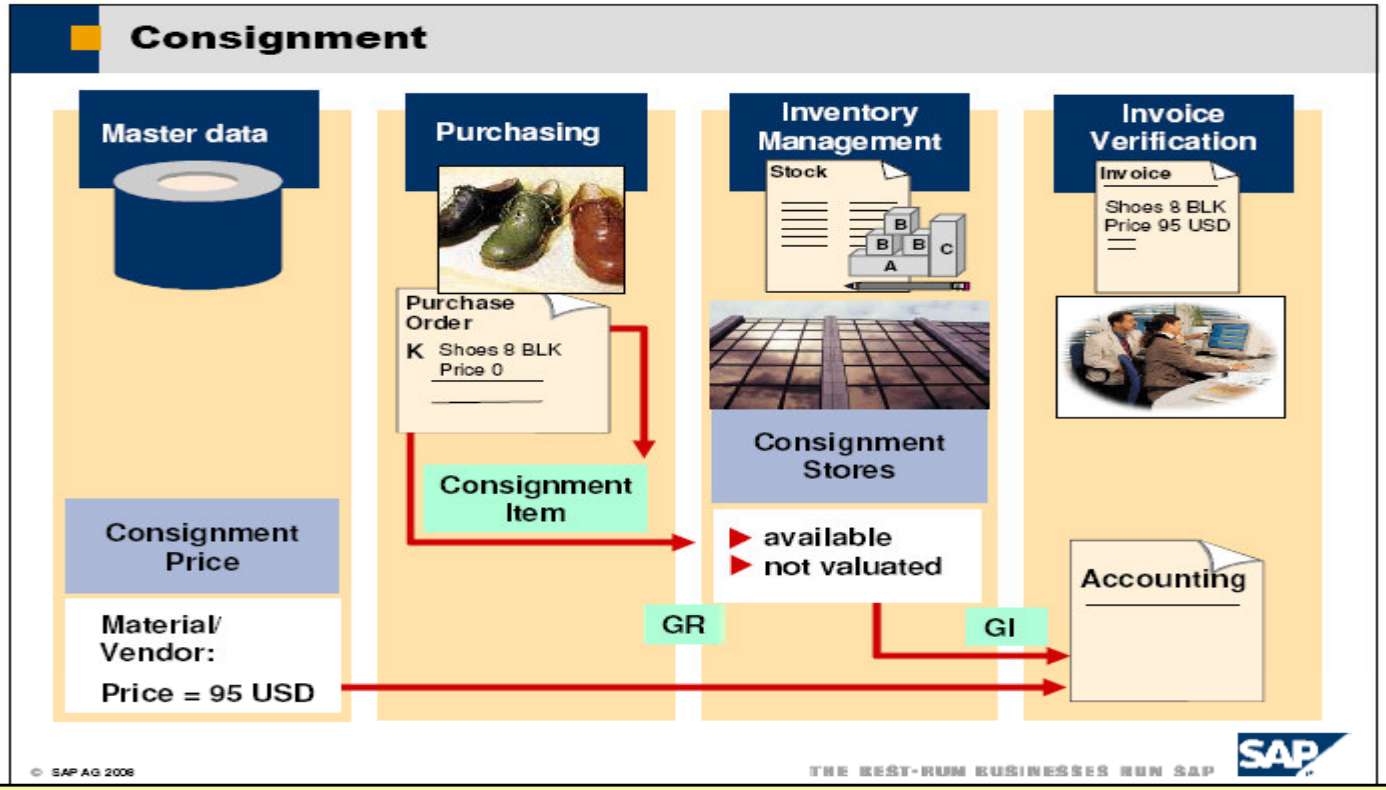
AFS Materials require batch management. The batch is used to map the level of grid and category values.

In the standard ERP System the following batch levels are available:

1. Batch unique at plant level
2. Batch unique at material level
3. Batch unique at client level

***AFS supports* Batch unique at plant level.**

The "Batch unique at plant level" indicator signifies that batches are unique at material/plant level. That means that with regard to identical constituents, the batch is dependent upon the plant. The same batch number can also be assigned to other material/plant combinations.



AFS supports consignment processing at SKU level.

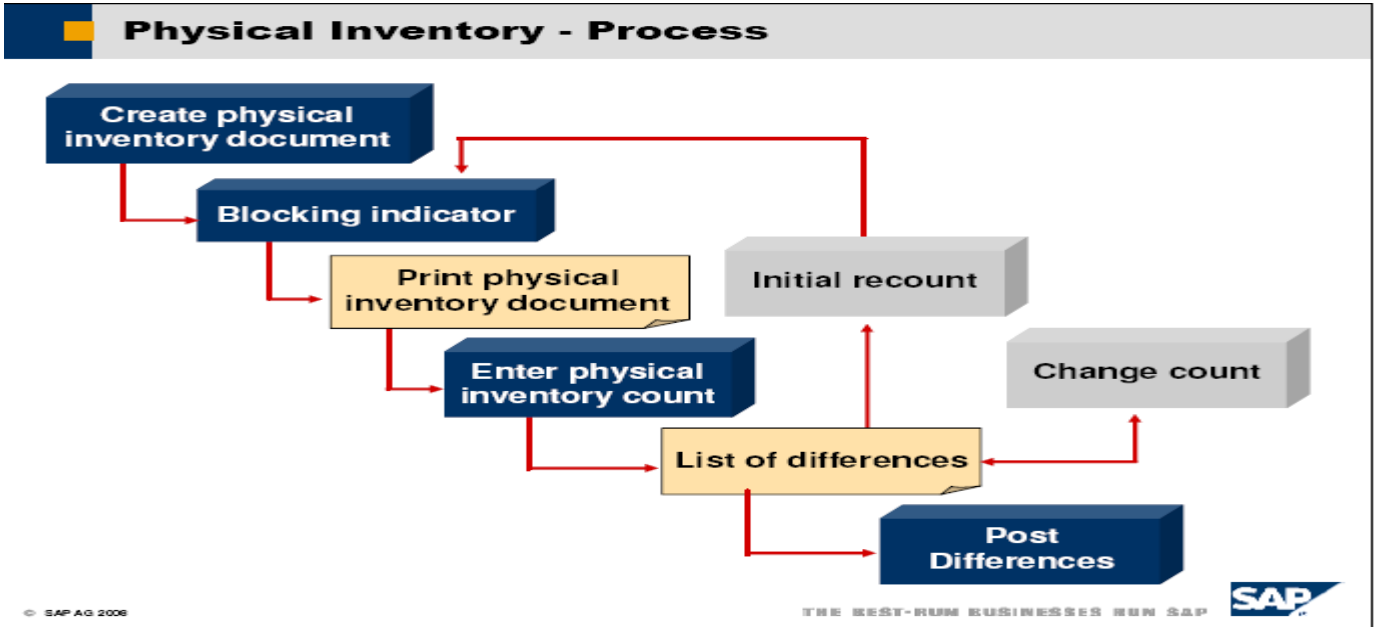
The vendor provides goods that are stored in consignment stores. The vendor remains owner of the material until you withdraw materials from the consignment stores. You can define consignment prices at SKU level.

Purchasing: The procedure for creating consignment purchase requisitions and consignment purchase orders is the same as for regular purchase orders. Enter K for the consignment item. Do not enter a net price.

Goods Receipt: After a goods receipt for consignment material has been posted, the consignment stock of the material increases. However, the material's valuated stock does not increase since the consignment stock still belongs to the vendor.

Goods Issue: When withdrawing a material from the consignment stores for an account assignment object, the vendor is required so that you can determine the relevant consignment pricing data.

Invoice Verification: After the goods issue, the vendor is due the net value of the goods issue. The invoice is due at set periods of time, for example, monthly.



Independent of the physical inventory procedure, the physical inventory process can be divided into three phases.

1. Physical inventory preparation

This includes creating a physical inventory document, blocking materials for posting, as well as printing and distributing the physical inventory document.

2. Physical inventory count

The stocks in the warehouse are counted and the count results are entered in the count list. These are then transferred from the count list to the system in the step “enter physical inventory count”.

3. Physical inventory check

Using the list of inventory differences, you can check variances in the stock. You should check whether the transferred count result is correct (change count) or whether you want to initiate a recount. If the difference is accepted, it is posted and stock is corrected.

Sub-Contracting Process In IS-AFS

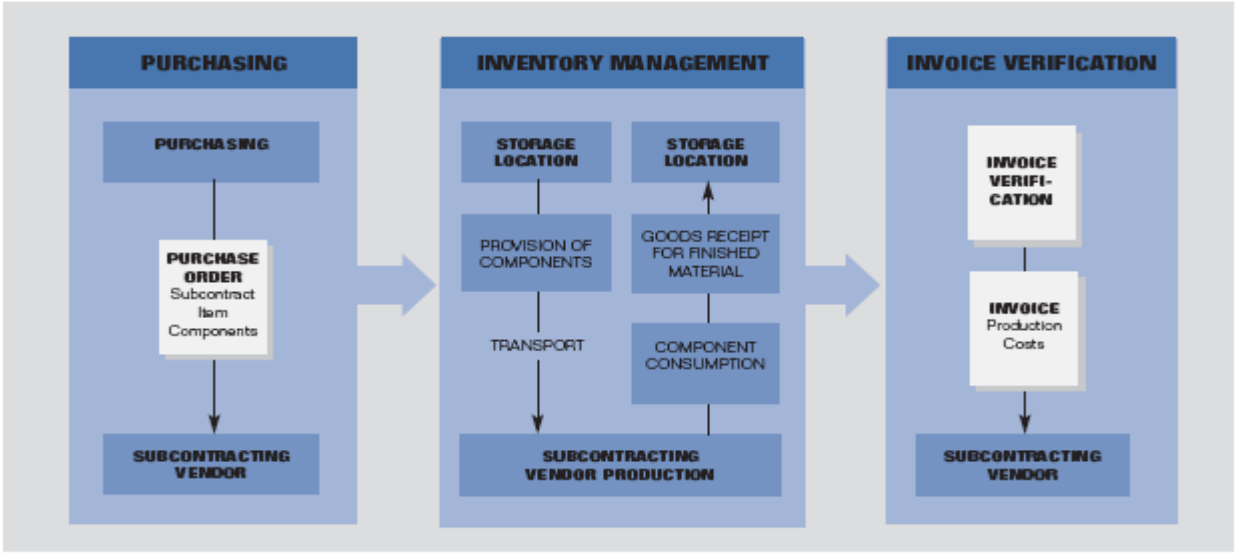
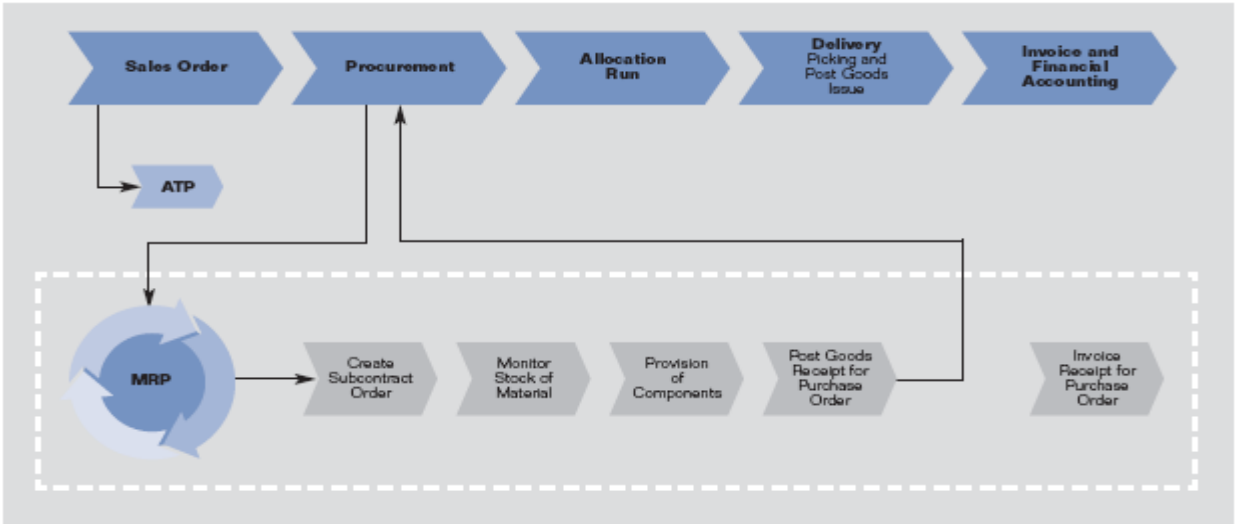


Figure 22: Subcontracting Overview



Sub Contracting Process

Material procurement through subcontracting is processed in SAP AFS using subcontracting orders. The following functions are available:

- Order of material or service with a vendor
- Provision of material components for production or embellishment
- Available-to-promise check for components to be provided
- Material withdrawal from company's own stock or delivery by third-party vendor
- Monitoring of subcontracting stock at SKU level
- Creation of delivery notes for components to be provided
- Post product as consumption using goods receipt posting and handling of consumption deviations
- Post finished product as goods receipt
- Outsourcing certain operations of an in-house production process. Subcontracting order is then generated including the provided components Stock of provided materials stored at the subcontractor site is treated as special stock of the respective vendor. This is because it is neither available nor does it exist in the total stock of the production site, although it is your company's property.

Third Party Ordering Process

Another important business process in the apparel and footwear industry is third-party order processing, also known as direct shipment. Here, your company does not carry out the delivery of products to the customer. Rather, the goods are commissioned to an external vendor, who sends them directly to the customer and invoices you accordingly. You can choose how to handle certain items. For example, if a large quantity of a product you would normally deliver yourself is ordered, you can decide to handle it as a third-party item. Furthermore you can determine that certain products, such as accessories procured from a private label manufacturer, are always handled through third-party order. This process is supported throughout the system at the SKU level. This means that all relevant information is available at the SKU level, from sales order creation to the automatic generation of a purchase requisition and the conversion to a purchase order. In addition, the process is fully transparent in the purchasing and sales departments, and in the planning department (MRP).

AFS Quota (IS-AFS-MM)

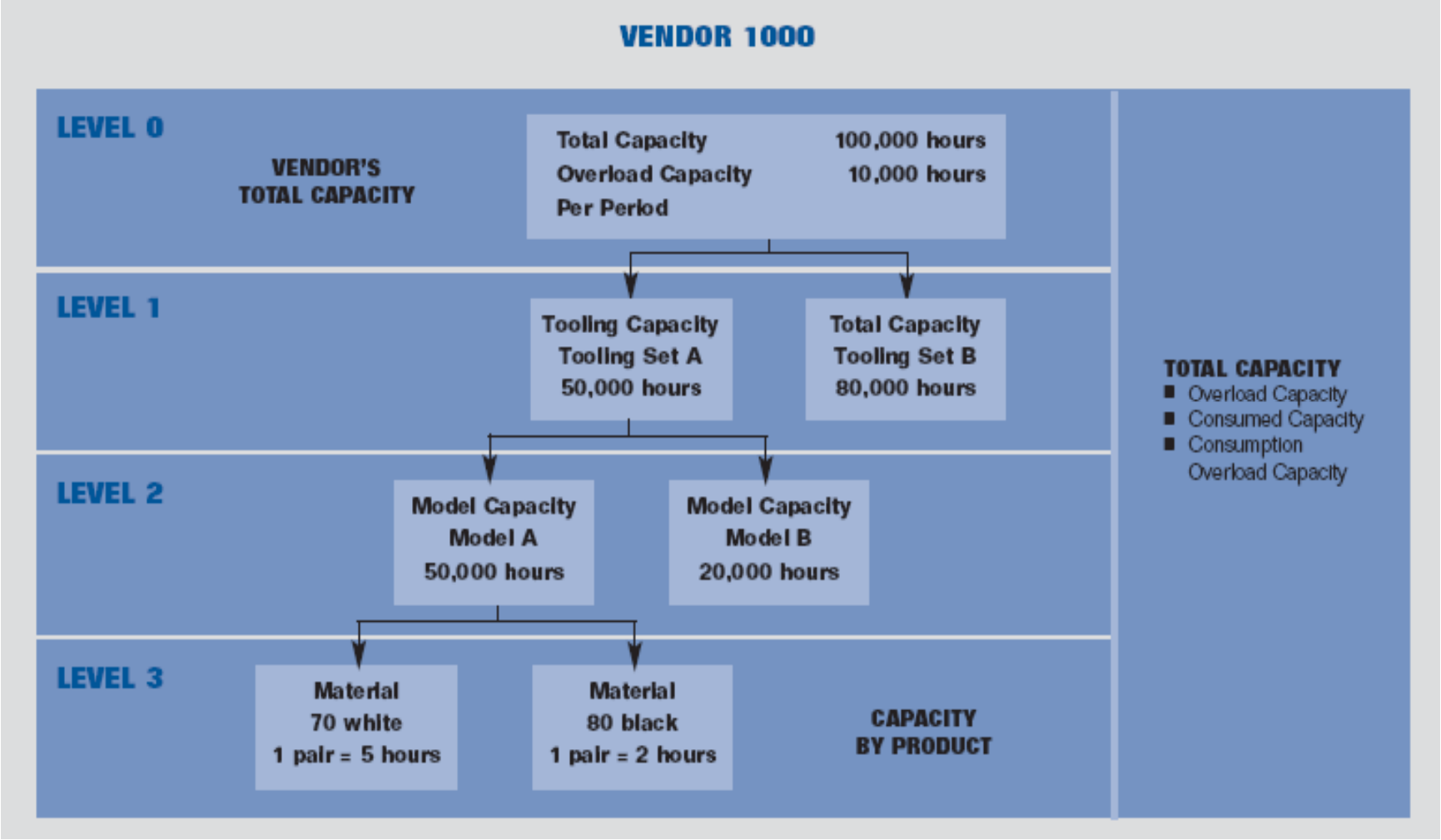
Definition of a restriction of the import of certain products from a third country.
The assignment of quota is material-specific. If the quota check is activated, the requirement quantities of purchase requisitions, purchase orders and the source allocation are checked against quotas. This can possibly lead to a restriction of the vendor selection.
AFS Quota Allocation : Political restrictions on foreign trade play a special role in the apparel and footwear industry. During vendor selection, SAP AFS takes the import restrictions stipulated by the government or by your company's policies into consideration. You can choose to completely exclude certain countries and companies from your possible vendors or regulate the delivery quantity of certain vendor countries by setting a quota arrangement. If you restrict the import quantity of certain products or product groups, vendors from the specified countries will no longer be considered by the system if their delivery quantities surpass your limit. In order that two production sites within one company do not exhaust the quota at the same time, only a portion of the total quota for a particular product or product group is allocated to each site. The total quota and the portion consumed by the order are displayed in a list.

AFS - Vendor Capacities

In business practice, you may source the same product from several vendors. You agree with each vendor on the quantity that they are able to supply. Vendor capacities can be determined in different ways, such as according to vendor and material or material group. The capacity is defined as basic capacity, overload capacity, and maximum capacity. If a vendor has reached the maximum capacity for a particular material or material group, the user is informed accordingly. Thus the user can optimize capacity distribution for internal and external production across all vendors. Further user-defined criteria for source allocation are:

- Vendor rating: The user can specify and weight the main criteria for evaluating.
- Factory status: User-defined partner status for a vendor
- Complexity factor: Evaluation criterion for the quality of production that indicates how well the vendor is able to produce a product with complex production phases.
- Amortization costs for tools: For equipment supported by the company.
- Smallest FOB (free on board): Costs excluding dispatch costs.
- Smallest landed costs: Costs including dispatch costs.
- Estimated time of arrival (ETA): Quickest possible delivery.

Vendor capacities



Customer master data

General Data

Address
Control data
Marketing
Unloading points
Contact person
AFS Additional Data

Valid for both
accounting and sales

Sales Area Data

Sales
Shipping
Output
Partner functions
AFS Additional Data

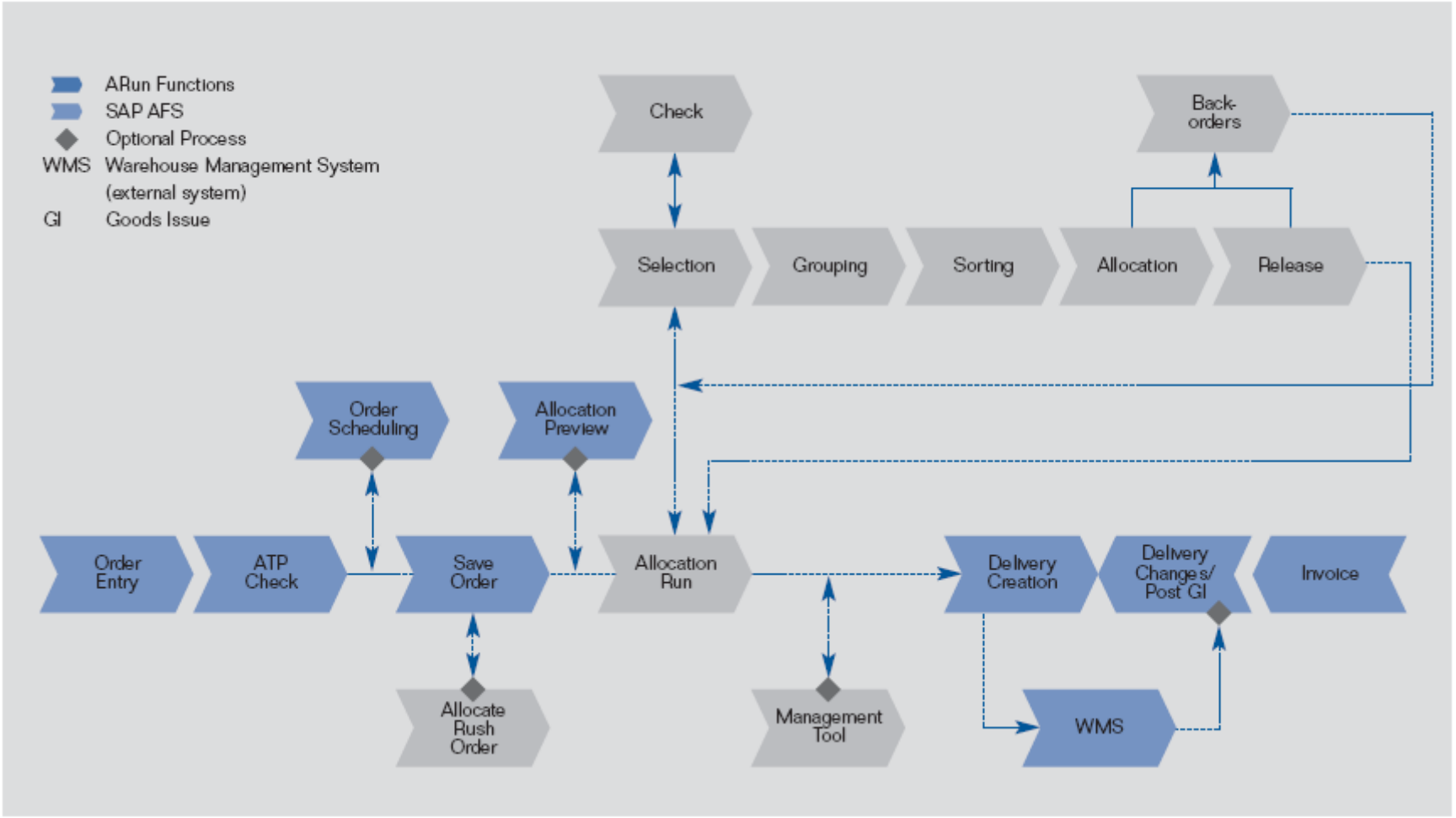
Dependent on:
- Sales organization
- Distribution Channel
- Division

Company Code Data

Account Management
Payment transactions
Correspondence
Insurance

Valid for accounting
Also referred to as central
views on the customer master

Sales order process flow



AFS Sales order structure

ORDER HEADER

Sold to
Ship-to **PO Number** ***CustIDPart DCNo***
Name
Quantity ***Delivery Plant***
Requested delivery date, Cancel date

ORDER ITEMS

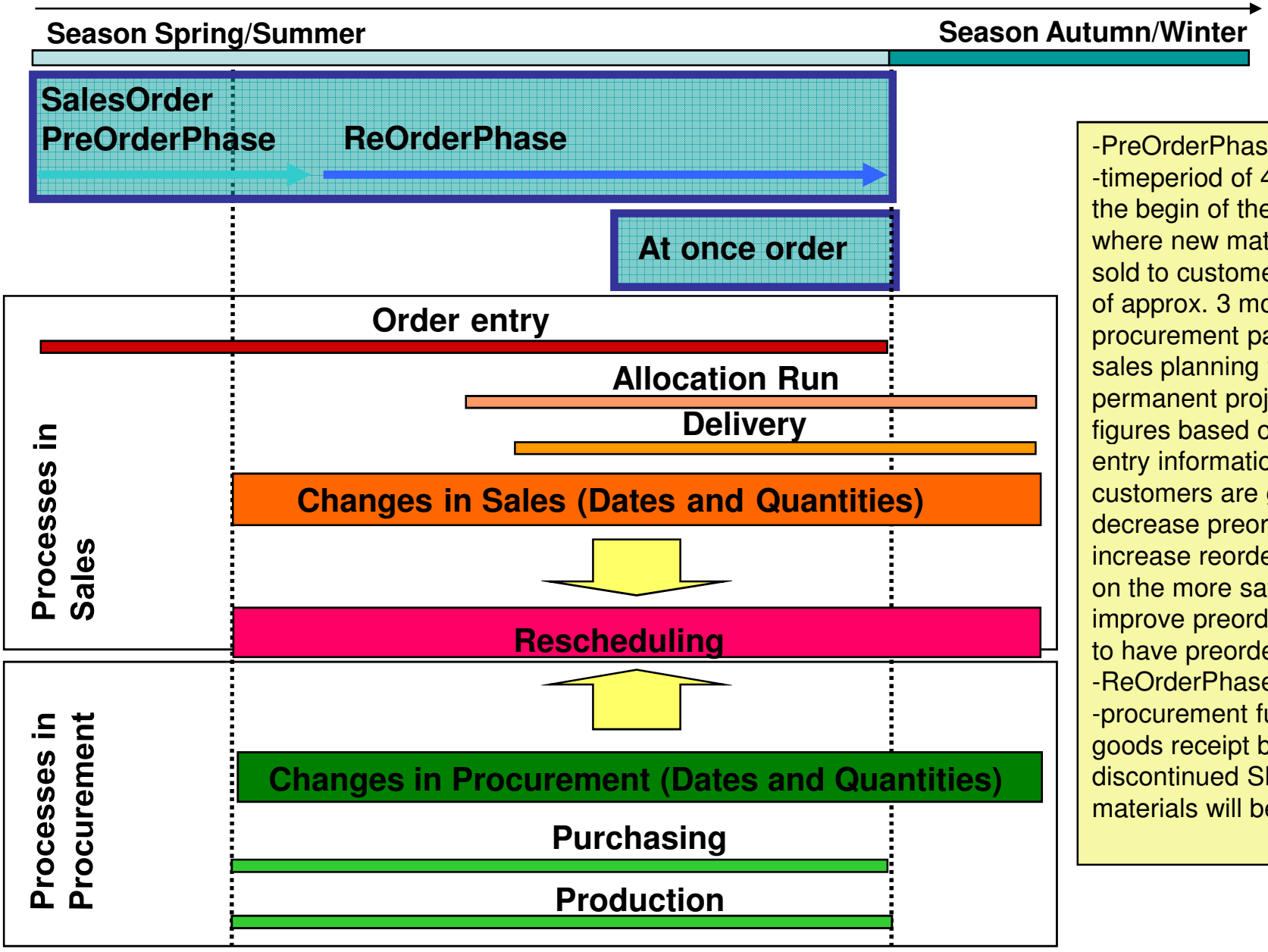
Material Plant Quantity Delivery Group
Requested delivery date ***Department Season Indicator***
Allocation Strategy Cancel date

SCHEDULE LINES

Quantity
Dlv. Date
Rejection
Reqmt. category
Grid value

Grid value and category data is included within the sales order structure for an AFS material.
In AFS, the order structure consists of a standard order header, order item and schedule lines with extensions for grid values, for example, sizes and categories. They are stored at schedule line level in the sales order.
The ordered, confirmed and delivered quantity fields for the grid value appear on the schedule line. If the ATP check proposes different scheduled delivery dates, a new schedule line is automatically created.

AFS Season Sales Scenarios



-PreOrderPhase
-timeperiod of 4-6 weeks at the begin of the season, where new materials are sold to customers; leadtime of approx. 3 months; procurement partly started; sales planning finished and permanent projection of the figures based on order entry information; customers are going to decrease preordering and increase reordering to be on the more safer side. To improve preorder it is usual to have preorder discounts.
-ReOrderPhase
-procurement fully started; goods receipt beginning; discontinued SKUs or materials will be marked;

AFS Pricing determination (1/2)

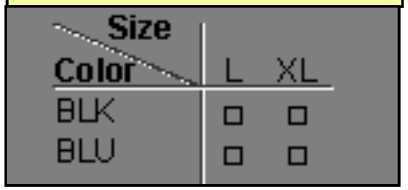
Customer master
Customer pricing procedure J
Pricing procedure J_3A01

AFS material master
Price determination indicator

AFS pricing
In sales

Condition type
AFS Standard price J3AP
Date dependant price J3A2
Factor Price J3AF

Grid control data



AFS Pricing determination (2/2)

In SAP AFS, the pricing determination can be made in different way:
- Seasonal pricing
- Pricing at different level (Color, style, size….)
- Two date pricing
- AFS price factor
- Associated taxes by size where a material is priced by size (i.e. Children Tax exemption…)
- Royalty agreements
- ….

Value Added Services (VAS)

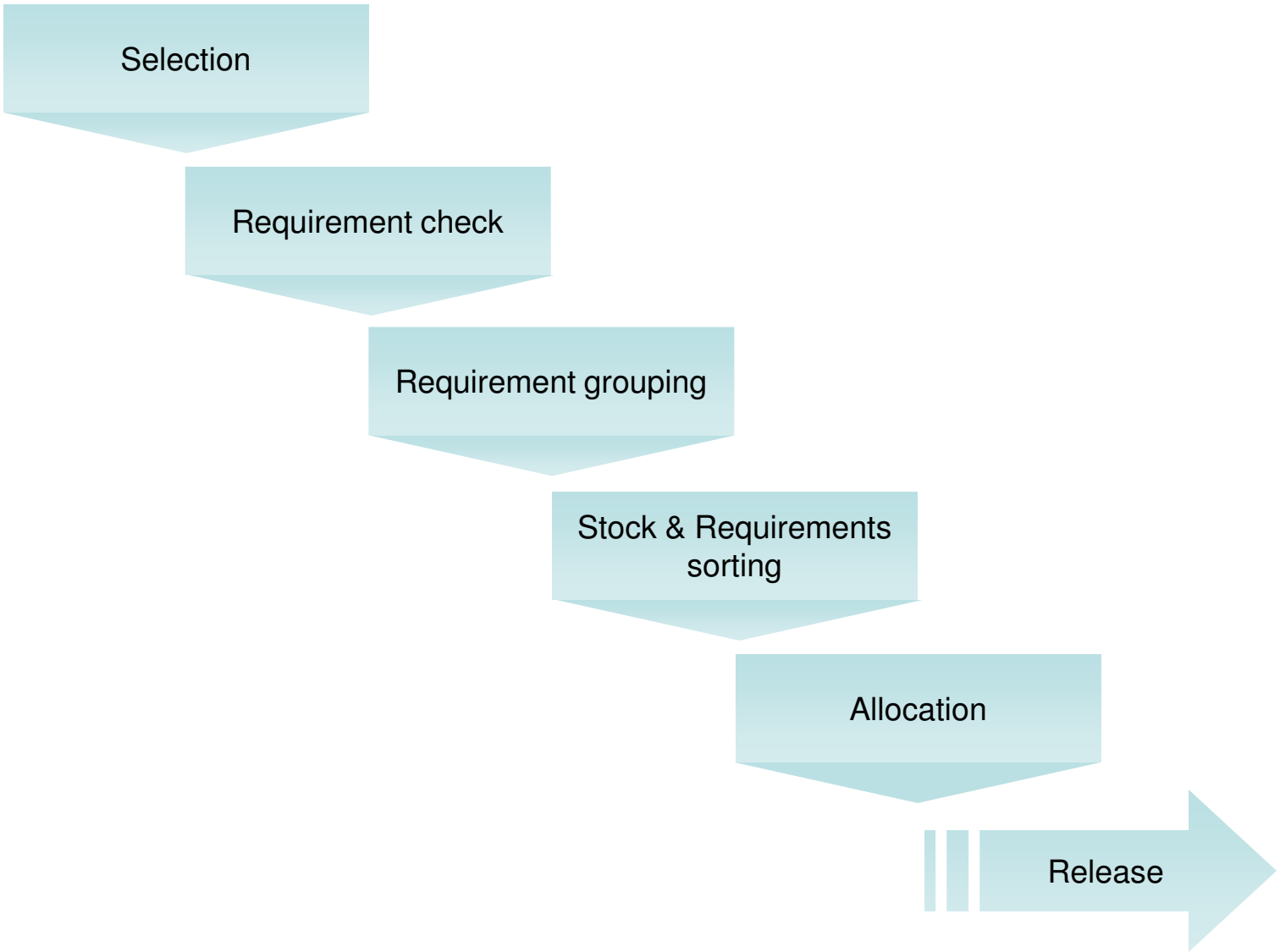
There are three classifications of VAS:

- Packing
- Ticketing/Labeling (T/L)
- Special Service (i.e. Hanging, Hemming….)

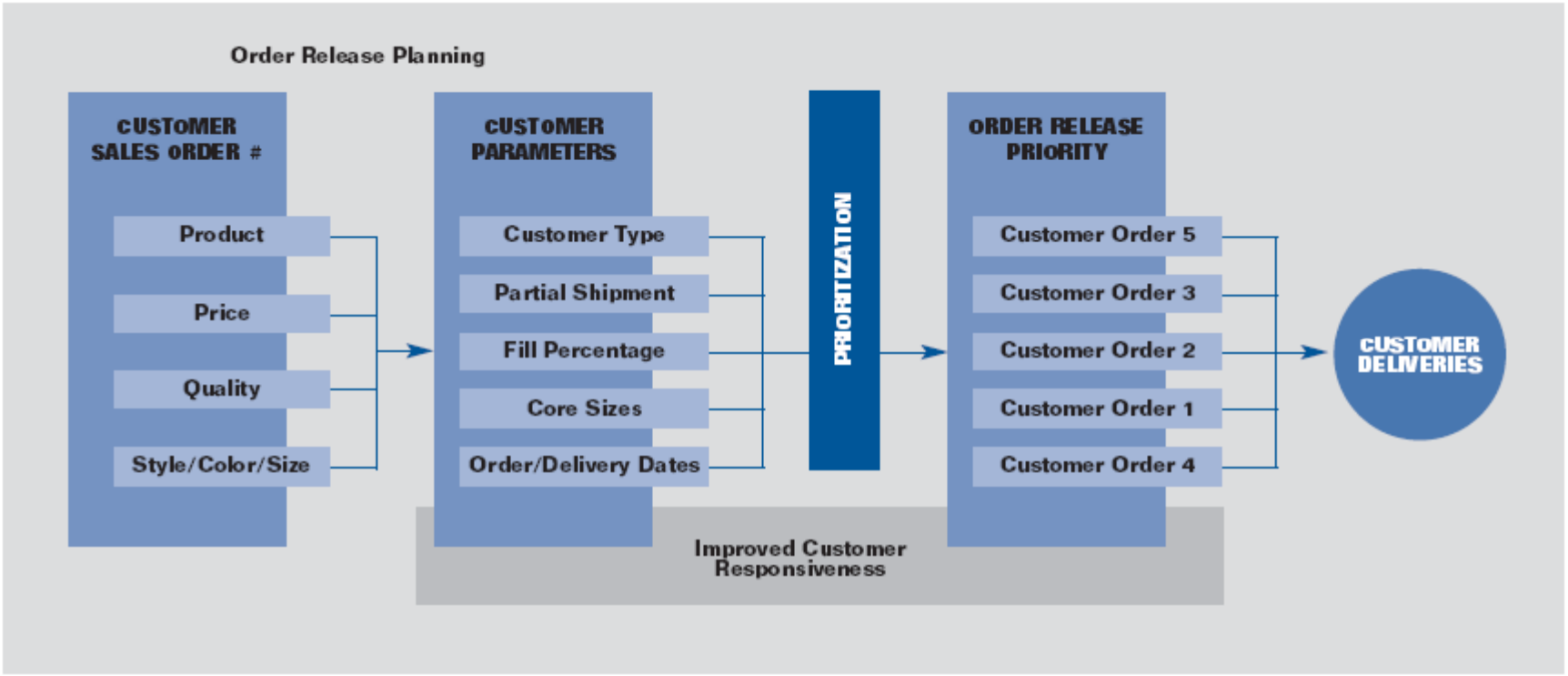
The purpose of each of them is to capture specific customer information to ensure that goods can be put on display immediately upon arrival.

The VAS condition can also trigger specific pricing condition in order to bill the customer for the added services provided by the company.

Allocation Run basic principles in AFS



Allocation Run



AFS Multi Store Order

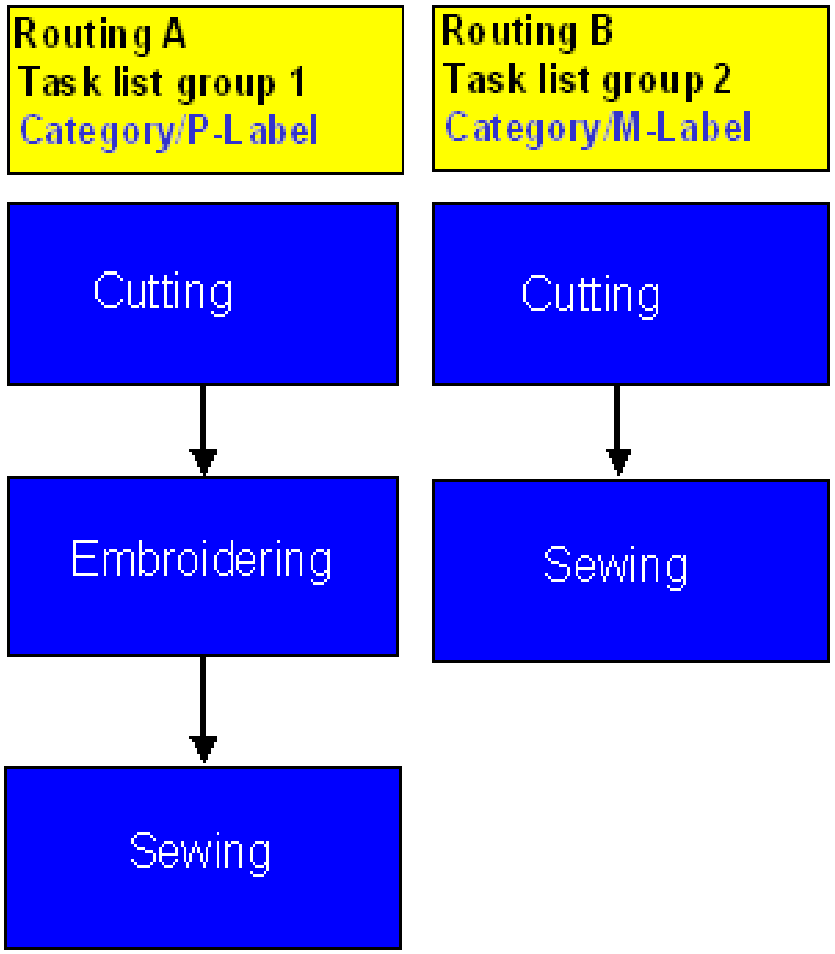
This method of sales order processing allows a company to accept sales orders for multiple locations but treat them as a single logical component. Many stores transmit articles, delivery quantities and dates for many stores simultaneously.
Sales order maintenance can be carried out either for each individual store or the whole group of store together. Delivery can be made directly to the stores or a customer distribution center. SAP AFS then proposes which stores delivery should be made to on the basis of a predefined customer store hierarchy. A critical marker indicates stores with high delivery
Priority.
In case of stock shortage, the system can determine during the allocation process the quantities to be distributed to the individual stores by means of distribution rules (FIFO, equal)
A specific partner hierarchy will have to be maintained in order to execute the MSO process.

AFS Bulk Order sales process

Another important business process in the apparel and footwear industry is the bulk order processing method, or the customer's "promise to buy" quantity. In SAP AFS this requirement is handle through a sales contract document, where the ship-to locations are unknown, also as the delivery dates and the delivery quantities as the final location.
Then when the customer is ready to ship its stores, some release orders are created with the associated quantities and the final ship-to location.
At the point of view of allocation, it happens at the Bulk order level where the quantities are Reserved globally for the whole document. Then when the release order is recorded, the quantities are automatically released and ready for shipment.
For a Bulk order document, it is possible to reserve quantities based on future receipts, to ensure the customer delivery even if the goods are not physically received in the warehouse.

Routings in AFS

- Routing defines the ***process*** of manufacturing a product in a shop-floor
- It defines the set of operations required to manufacture a product in a plant
- There could be multiple sequences defined within a particular routing
- Each operation is carried out in a work-center and routing defines the time taken for an operation in a work center
- You also control the component consumption by assigning various BOM components to the operations
- Routings has been enhanced for AFS to allow multiple routings based on different valid category values



Work Centers & Capacities

Work Centers defines a machines or groups of machines where various manufacturing operations are carried out. You can also create work center hierarchies to logically group multiple manufacturing capacities. Some data points at the work center level are:

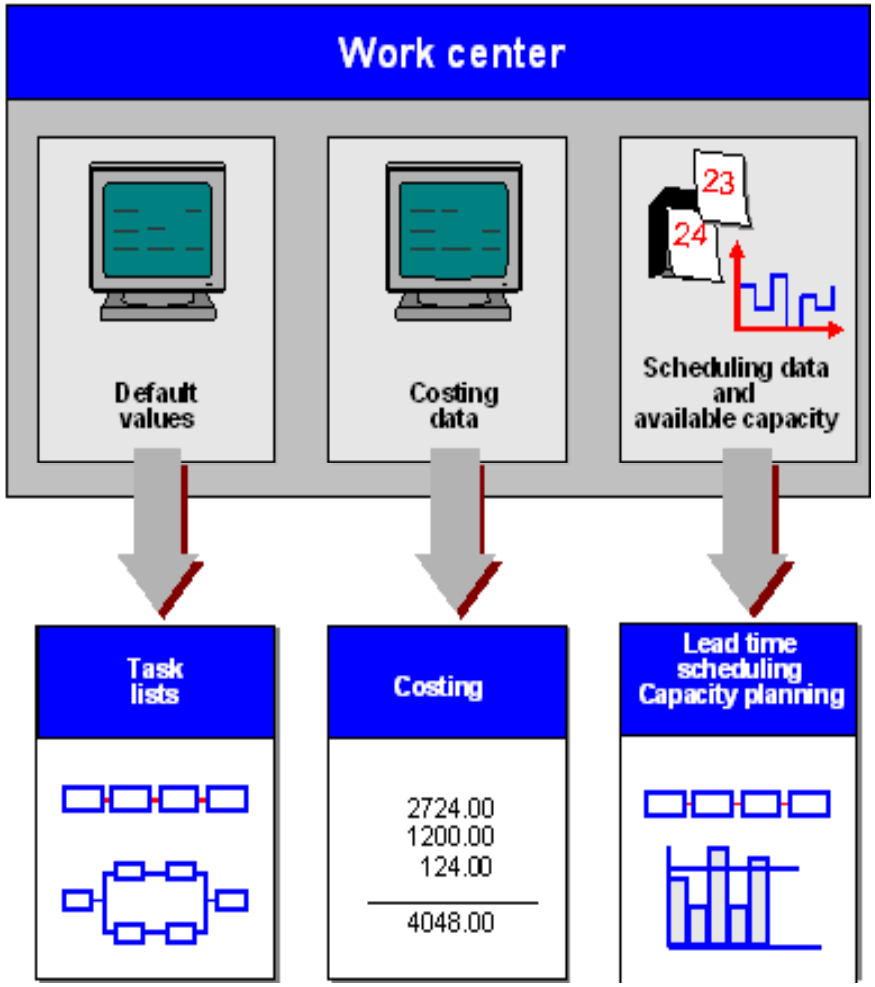
• Scheduling - Operating times and formulas are entered in the work centre, so that the duration of an operation can be calculated.

• Costing - Formulas are entered in the work centre, so that the costs of an operation can be calculated. A work centre is also assigned to a cost centre.

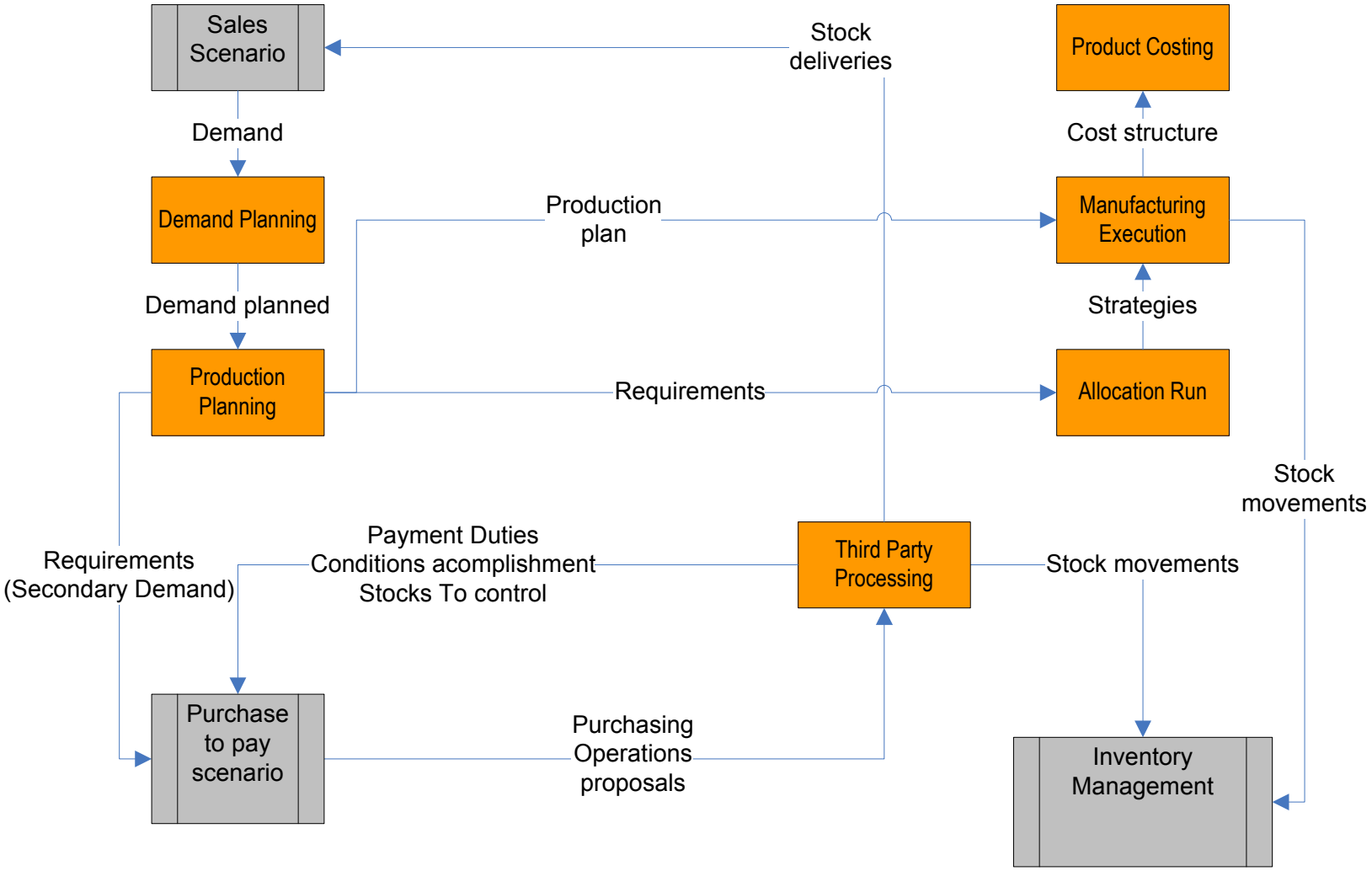
• Capacity Planning - The available capacity and formulas for calculating capacity requirements are entered in the work centre.

• Simplifying operation maintenance - Various default values for operations can be entered in the work centre.

You can also define capacity utilization, overload for a given capacity and backflushing of components at the work center.



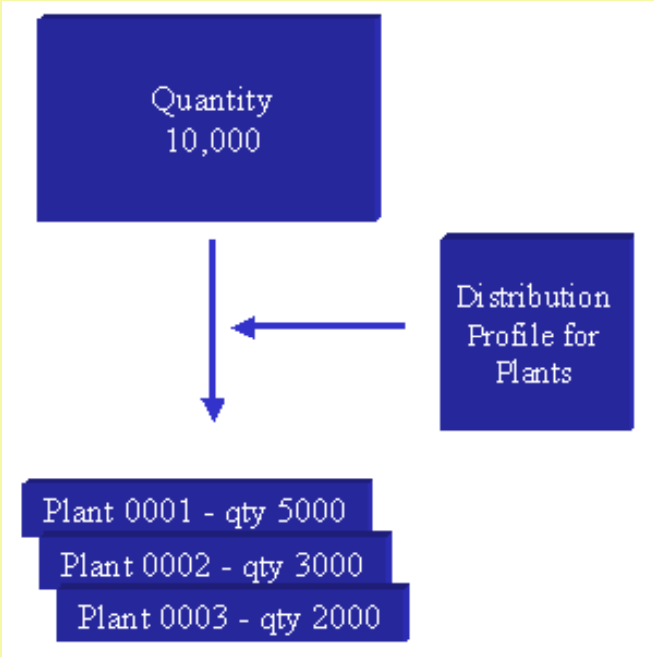
Planning Scenario in AFS



Presizing & Distribution Profiles

Distribution Profiles are one of the key data constructs in AFS that is used to disaggregate material level data to AFS SKU level data. You can maintain these profiles either at material level (highest priority) or at client level. There are 4 kind of profiles:

- Plant
- Categories
- Grids
- Periods



This profile can also be generated using the Standard Sales Information Structure (SIS) that has been enhanced for AFS.

Presizing is the function of using the distribution profiles in multiple areas, including – Forecast, Sales Orders, Purchasing documents, Planned Orders, etc.
For example – you can disaggregate the material (style)-level forecast coming from your forecasting tool to AFS SKU level which is necessary in AFS for further execution in your supply chain.

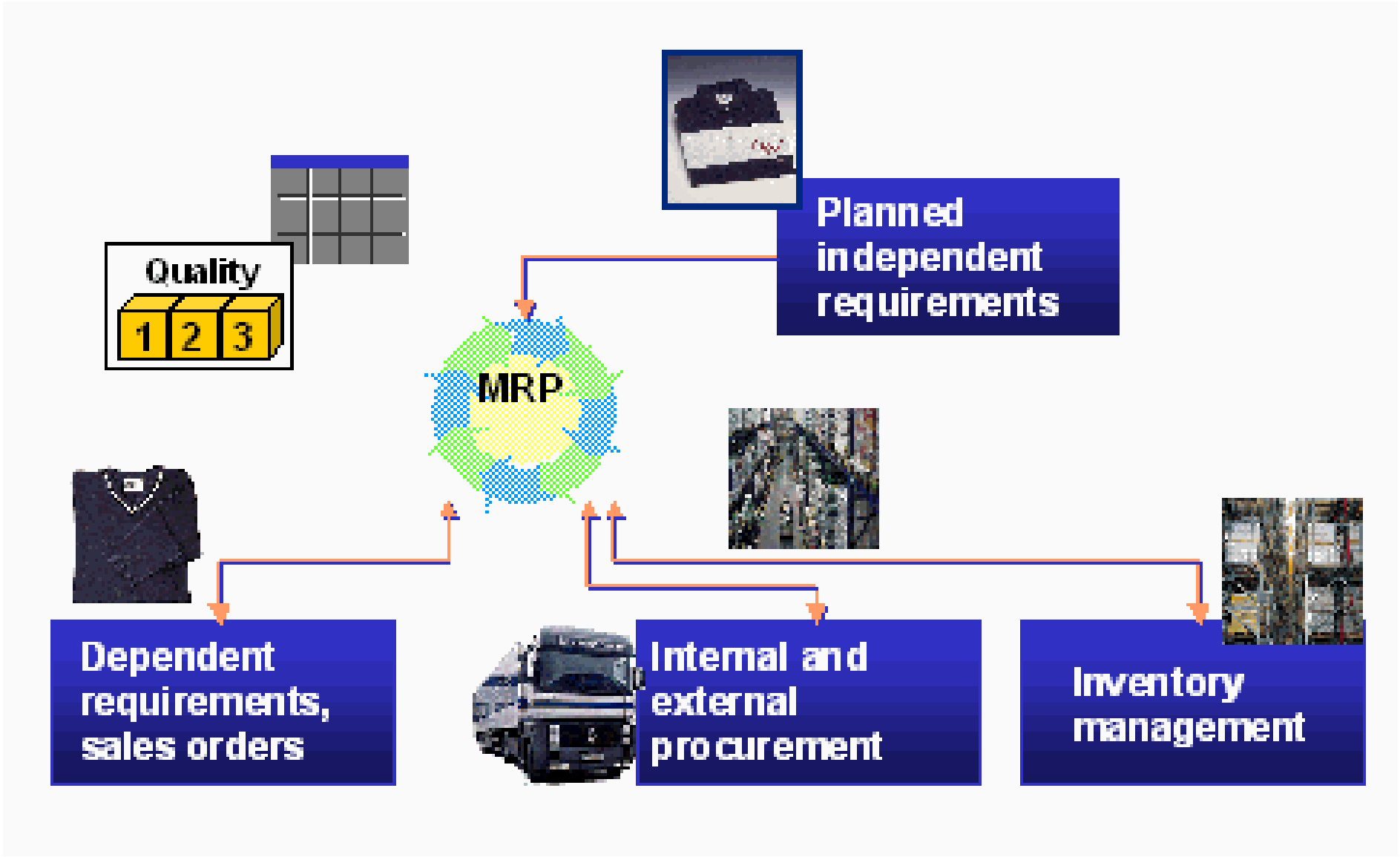
Planned Independent Requirements

Planned Independent Requirements (PIRs) is the forecast for a material at the plant level. AFS has enhanced this standard function to enable AFS SKU level forecast. AFS MRP only considers PIRs at the SKU level for material requirements planning.
PIRs can be maintained by category, version and Requirements plan number. Various versions help in organizing the forecast and also support special consumption multiple scenarios, e.g., Make to Order, Third Party Order, Purchase to Order, etc. Material level forecast can be broken down to the SKU through the presizing functionality. Only the active PIRs are considered in all subsequent processes.

Consumption of PIRs:

- AFS allows multiple consumption strategies to consume the forecast as sales orders are created in the system.
- Overall consumption logic is based upon multiple factors, including the planning strategy (MTS, MTO, Planning with final assembly, etc.), consumption mode (backward, forward), Consumption period, AFS Coverage Strategy, etc.
- Consumption of forecast reduces the open forecast quantity and increases the withdrawal quantity.

AFS Materials Requirements Planning I



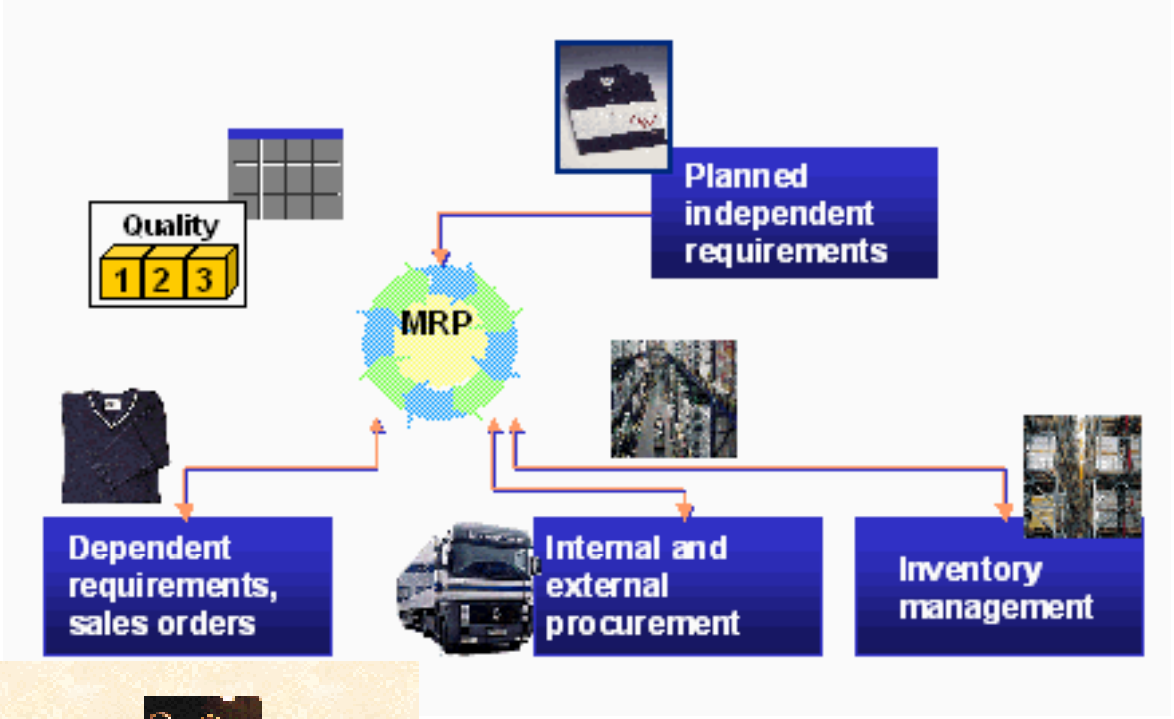
AFS Materials Requirements Planning II

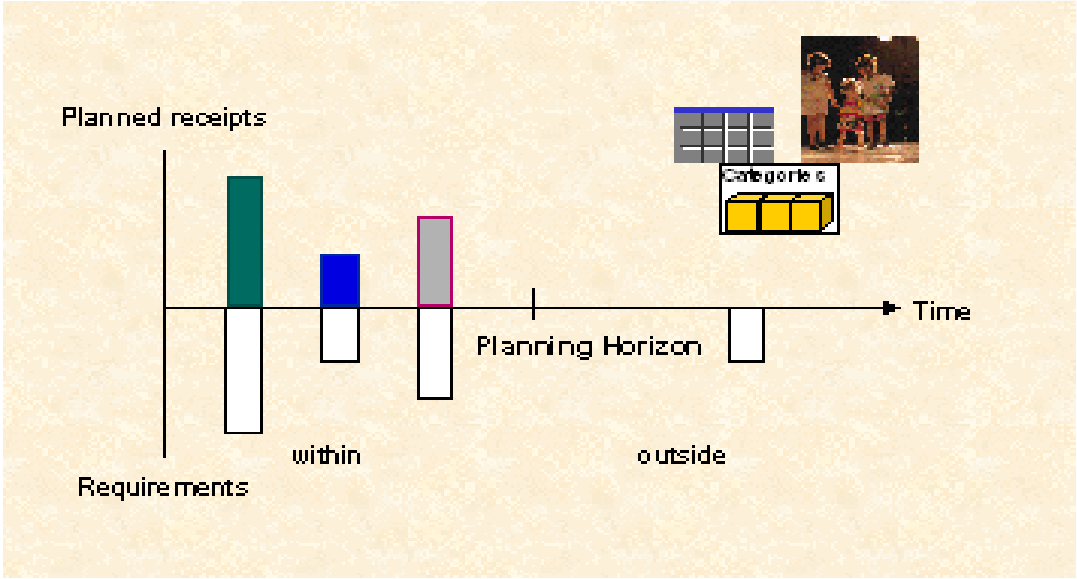
AFS MRP has been enhanced from the standard MRP in SAP ERP to carry out capacity-unconstrained materials requirements planning at the AFS SKU level.

- AFS allows you to maintain various MRP relevant master data for a material at the SKU level and uses it to run the planning function, some examples are – safety stock, rounding values, min./max. lot size, RLT, service levels, SKU discontinuation with follow-up SKU, etc
- AFS MRP also provides certain enhanced features within the core MRP functions, including SKU level horizon methods, SKU groups, special SKU group-based lot sizing procedures, two-level rounding, etc.
- The discrete steps performed in AFS MRP are - assigning existing stock elements to requirement elements at AFS SKU level, performing net requirements calculation, generating order proposals for production or procurement taking into account lot-sizing procedure, rounding profiles, planning time fence, etc. for the MRP material and generating dependent requirements for BOM components after AFS BOM explosion at SKU level
- MRP can be carried out online, scheduled batch job or transaction-oriented.
- SAP AFS gives the option of carrying out MRP for one material – Single-Item Planning or for all items in one or more plants - Total Planning

AFS Materials Requirements Planning III

Logistical Processing in AFS MRP run ⟶





⟵ Effect of Planning horizon on AFS MRP

AFS Evaluations – Few Key Ones

AFS Stock Requirements list is a one-stop view of the complete planning both production and procurement for any material. Each 'tab' in the display depicts a particular planning situation based on MRP statuses. It is enhanced in AFS 6.0 to dynamically update the list based on real time changes in the system. It has powerful navigation, sorting and filtering functionalities even at the SKU level.

AFS Pegged Requirements is a provides the pegging function through which you can find out which requirement element (sales orders, dependent requirements, PIRs, etc) have caused a certain stock element (planned order, purchase order, etc.) to be pegged. This helps the planner to keep an overview on not only the correlation of stock elements to requirements but also across all BOM levels.

AFS Missing parts list gives a detailed view of all the missing parts (components) at the SKU level for a single or several orders that are not available for the given delivery date.

AFS Planned Orders

AFS Planned Orders are ‘fluid’ stock elements for in-house production that are created either by MRP run or manually to satisfying open requirements. Some key elements:

- It is enhanced to show the grid and category values, AFS planned cannot be created without the SKU information
- The scheduling information is available alongwith the master data information on BOM and Routing
- You can covert a planned order to either a purchase requisition or a production order
- You can maintain ‘marker’ data at the planned order level which is converted to the bundle information in the production order during conversion
- You can ‘firm’ the planned order if you do not want MRP to delete it if it resides outside the planning time fence
- It allows you to view the components and quantities required at the SKU level
- It carries the account assignment information as well for certain planning strategies, e.g., MTO.

AFS Production Orders

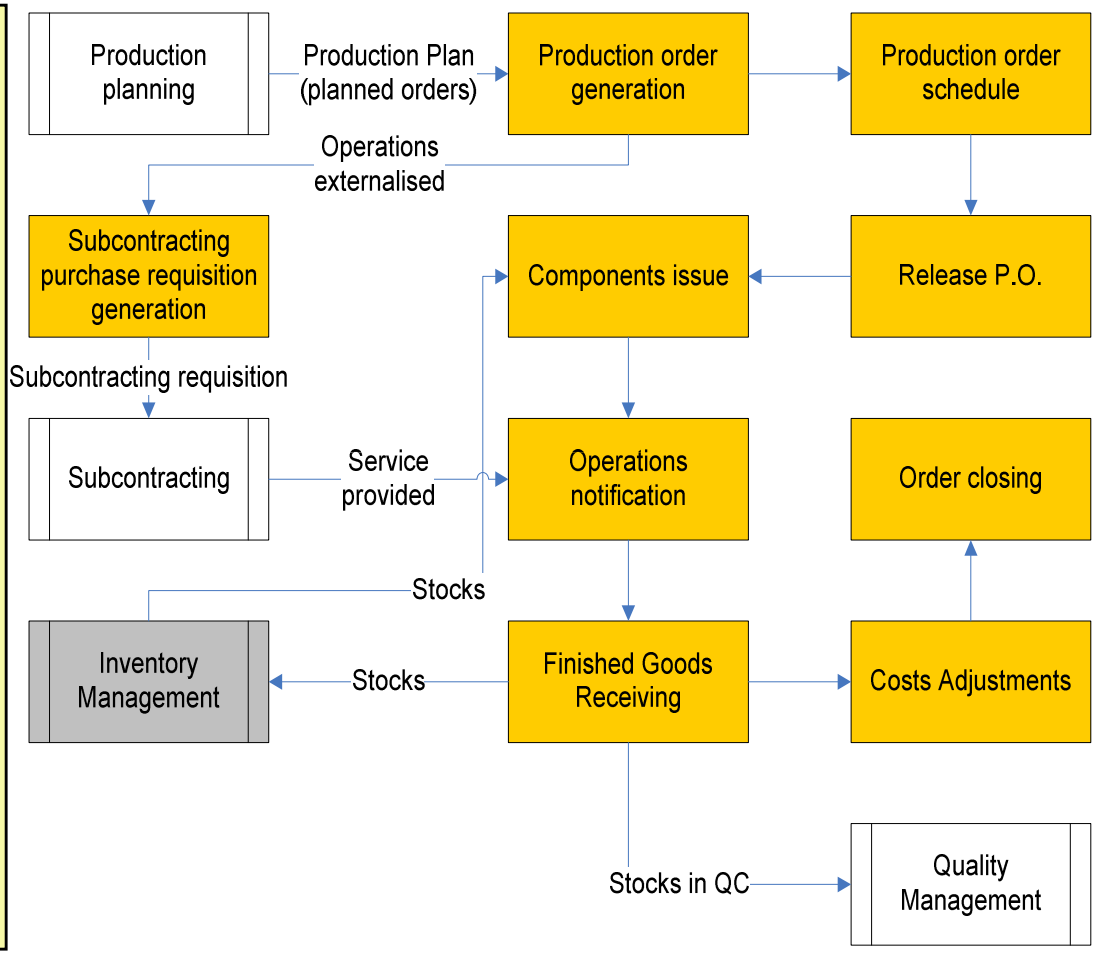
AFS Production Orders are ‘firmed’ stock elements for in-house production that are created either by converting from a planned order or manually to satisfying open requirements. Some key elements:

- AFS production orders has all the information needed to manufacture a material – BOM, Routing, AFS SKU information, tolerance levels for final production confirmation, scheduling, capacity requirements on work centers, etc
- One AFS production order can only contain one AFS stock category
- It allows you to carry out production using bundles – a standard practice in the apparel world, especially used to optimize usage of expensive fabric and maintain consistency of the color shades in individual finished products.
- It supports more than one marker per production order. Bundles are all the pattern pieces in a marker that will be sewn together to form a garment in a certain size, multiplied by the number of fabric plies in a stack
- You can carry out component availability check and capacity availability check for production orders
- You can use the ‘fixed batch assignment’ functionality to control homogeneity
- Allows milestone confirmations
- Production order is well integrated with product costing function

Production Execution

SAP AFS allows you to control and execute in-house production processes in various aspects, including

- Order Scheduling
- Components availability
- Components consumption
- Components issue
- Operations timing
- Finished goods receiving
- Cost Controlling
- Quality management
- Order pegging
- Batch traceability



Capacity leveling

Capacity levelling is the process of ensuring that the available capacities in work centres are optimally utilized by the open production orders.

• Available capacity for each capacity at a work center is defined by hours of operation along with utilization and overload
• Capacity requirements are generated by production orders at the work centres as defined in the chosen routing

Typical function of a capacity planner includes:

• Execute various evaluations in the capacity evaluation online or collectively after a background job.
• Reviewing the load situation of selected work centres and resolving any over-loads/under-loads situation
• Achieving optimum commitment of machines and production lines

The system allows you to have multiple views on capacity situation – by material, by orders or group of orders, by work center, etc.

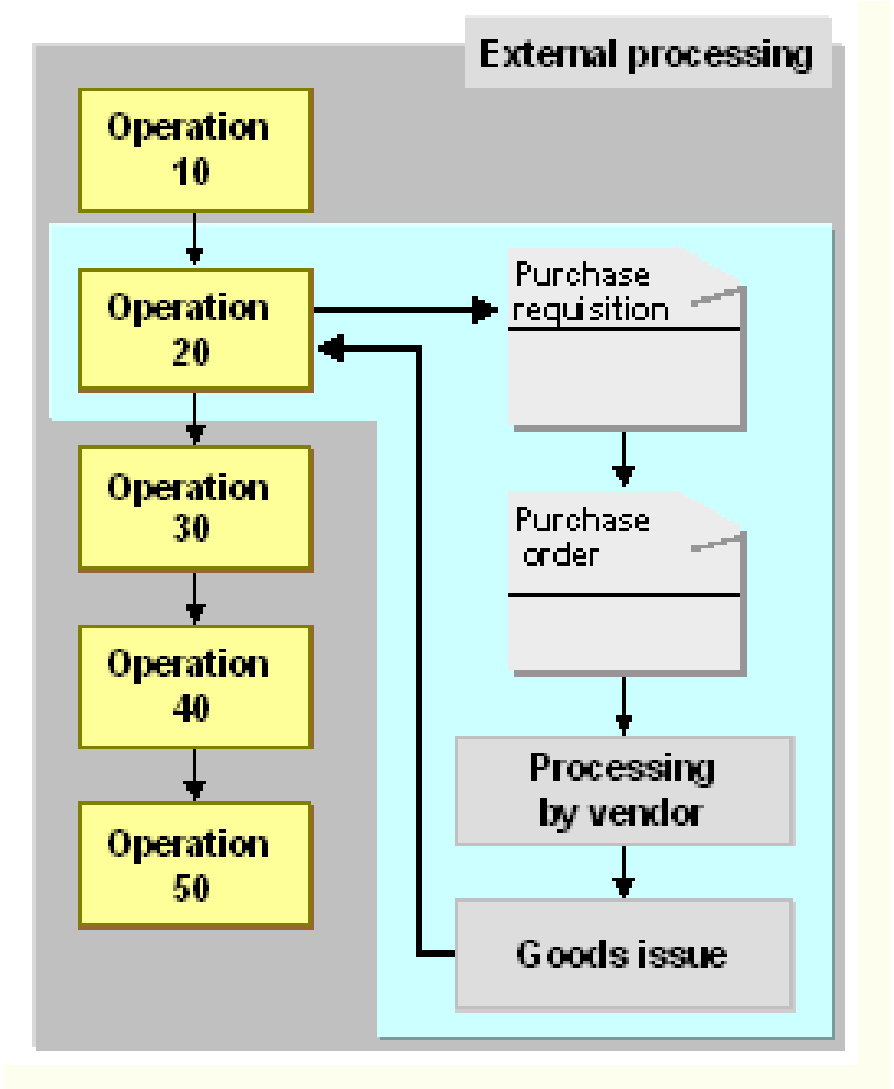
AFS Combined Orders

AFS Combined Orders are special constructs in the SAP AFS solution to combine multiple production orders for easy execution. The combined orders can have same components or have the same operation in the routing. This function helps to maximize the utilization of the cutting work-centers.

- The individual orders that have been combined are still maintained in the system and can be worked on directly
- All the production execution function – release of orders, operation confirmations, issue of components, assigning scrap to the orders, etc. can be performed at the combined order level
- The orders can be combined using a robust set of selection criterion
- Supports fixing batches at the combined order level or allows MRP to temporarily assign batches

External Processing Step in PP

- This functionality enables the subcontracting scenario within manufacturing for specific operations/services that needs to be performed outside the production plant at a vendor site.
- This business process in production has seamless integration with the purchasing function.
- Components are issued to the Purchase Requisition (PR) that is created, however, no AFS specific information is contained in the PR.
- During conversion of the PR to Purchase order, all component information is carried over from the production order to the purchase order



AFS and QM

- As of SAP AFS 6.0, it is possible to activate the inspection type at material level and control the inspection lot creation at SKU level during goods receipt process.

- Also during posting of quality inspection stocks, it is possible to post stock of one SKU into unrestricted stock of another SKU.

- Goods receipt in Inventory Management covers the following processes:
  - Goods receipt for purchase order
  - Goods receipt for production order
  - Other / Misc. goods receipts
  - Stock Transfer and Transfer postings

- Supported processes in AFS QM are:
  - Inspection lot creation
  - Usage decision
  - Results recording