



SAP Material Master
LOG-MD-001
Aug 19, 2008

LaGov

Version 2.3
Updated: 08/18/2008

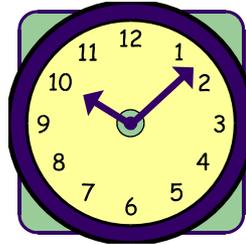


Agenda

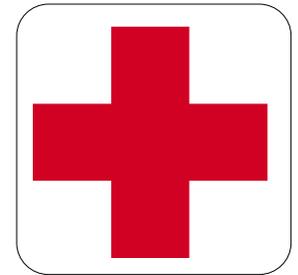
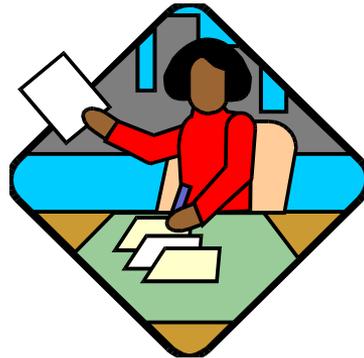
- Logistics, Ground Rules & Introduction
- Workshop Objectives
- Project Overview/Timeline
- Business Process Review
 - SAP terms glossary
 - Process improvement opportunities
 - SAP concepts & functionality
 - Leading practices
 - Enterprise readiness challenges
- Action Items
- Questions



Logistics



Before we get started ...





Ground Rules

- Has everybody signed in?
- Everybody participates – blueprint is not a spectator sport
- Focus is key – please turn off cell phones and close laptops
- Challenge existing processes and mindsets
- Offer suggestions and ideas
- Think ***Enterprise***
- Ask questions at any time
- One person at a time please
- Creativity, cooperation, and compromise





Introductions

■ Roles:

- **Process Analyst and Functional Consultant (Team IBM):** Leads and facilitates the discussions; drives design decisions
- **Documenter (State Employee):** Takes detailed notes to support the formal meeting minutes (to be sent by the Process Analyst to all participants for review and feedback)
- **Team Members (LaGov):** Provides additional support for process discussions; addresses key integration touch points
- **Subject Matter Experts:** Advises team members on the detailed business processes and participates in the decisions required to design the future state business processes

Around the Room Introductions:

1. *Name*
2. *Position*
3. *Agency*



Blueprint Objectives

1. Review and discuss the current or As-Is Business Processes:
 - Which helps to drive out the **business requirements**
 - As well as the **integration points** with other processes
2. Define Master Data:
 - Address key integration points
 - Support organizational requirements
 - Consistent and appropriate use of data fields
3. Define Future or To-Be Business Processes based on:
 - Best Practices inherent in SAP
 - Intellectual capital from other SAP implementations
 - State business requirements



Blueprint Objectives (continued)

4. Identify Development Requirements:
 - Forms
 - Reports
 - Interfaces
 - Conversions
 - Enhancements
 - Workflow
5. Understand and communicate any Organizational Impact / Enterprise Readiness Challenges
6. Gather system Security Authorizations and State-wide Training Requirements



Today's Workshop Objectives

- Review State of Louisiana Material Records
- Glossary
- Overview of Material Master Concepts:
 - Usage
 - Number Ranges
 - Other Attributes (UNSPSC codes)
 - Views
- Material Master Record Screens
- Sample Reports
- Live SAP Material Master screen review
- Special Topics:
 - Units of Measure
 - Texts
- Reach agreement on basic usage and key attributes
- Next Steps



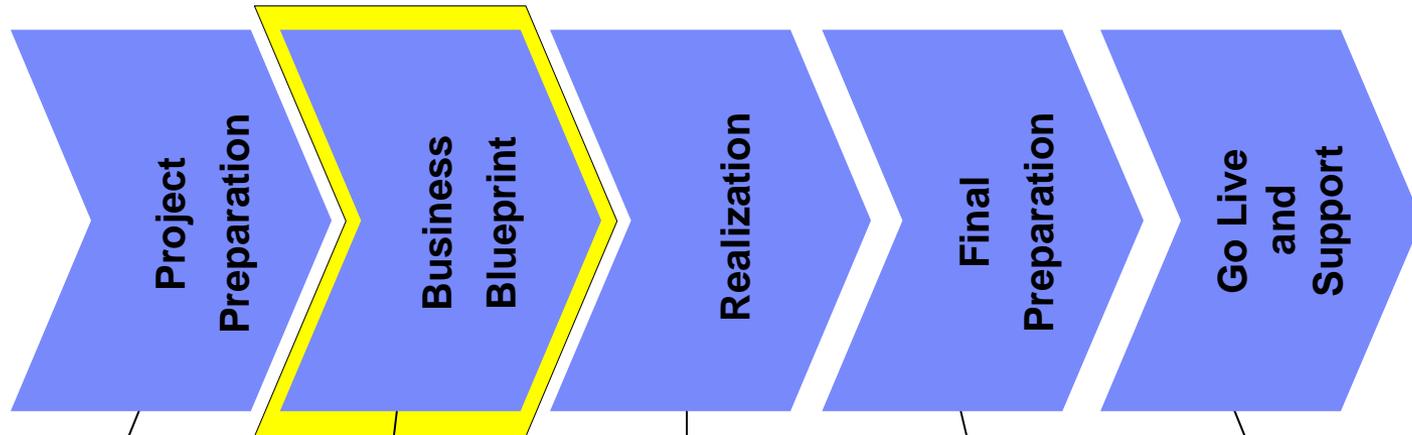
Today's Workshop Key Decisions

- General consensus on:
 - General Use of Material Master Record
 - Numbering of Material Records
 - Use of UNSPSC as Key Material Attribute
 - Use of Units of Measure
 - Format of Text Descriptions
 - Others Key Attributes TBD...



Project Phases

■ Five Key Phases



- Strategy & Approach Defined
- Project Team Training

- Development & Unit Testing
- Integration Testing
- End-User Training Materials

- Go-Live Support
- Performance Tuning

- Business Process Definition
- Development Requirements

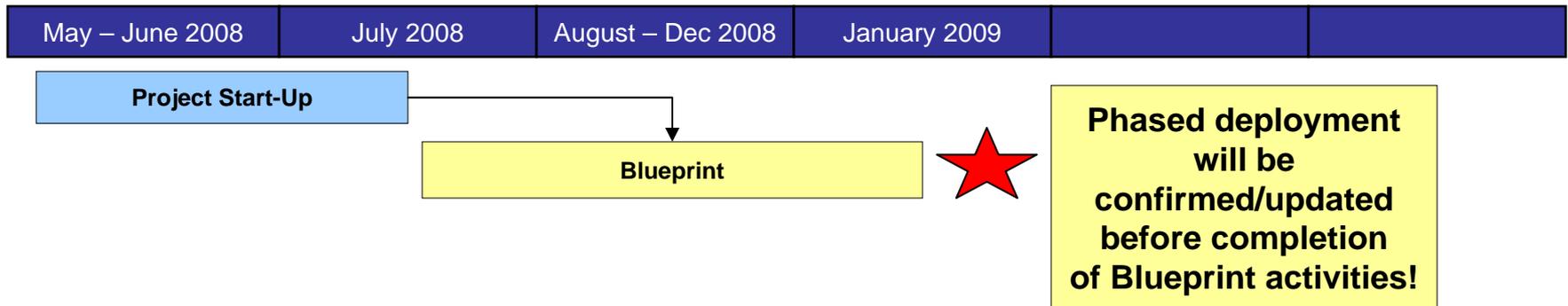
- User Acceptance
- Technical Testing
- End-User Training
- Conversion



Tentative Project Timeline

- Tentative implementation dates are planned as follows:

Functionality	Tentative Implementation Date
Budget Prep	October 2009
DOTD	February 2010
Core Modules All Agencies	July 2010
Additional Modules	January 2011





Blueprint Schedule - Tentative

Near Term Workshops...

Workshop ID	Process Area	Date
LOG-MD-002	Material Master Records – Owners/Creators/Maintainers	8/27 Wed 8/28 Thur
LOG-MM-002	Vendor Master Records	9/9 Tues 9/10 Wed
LOG-SRM-002	Vendor Registration, Qualification, AVL (Approved Vendor List)	9/11 Thur 9/15 Mon 9/16 Tue 9/17 Wed



Project Organization - Functional Teams

Finance Leads

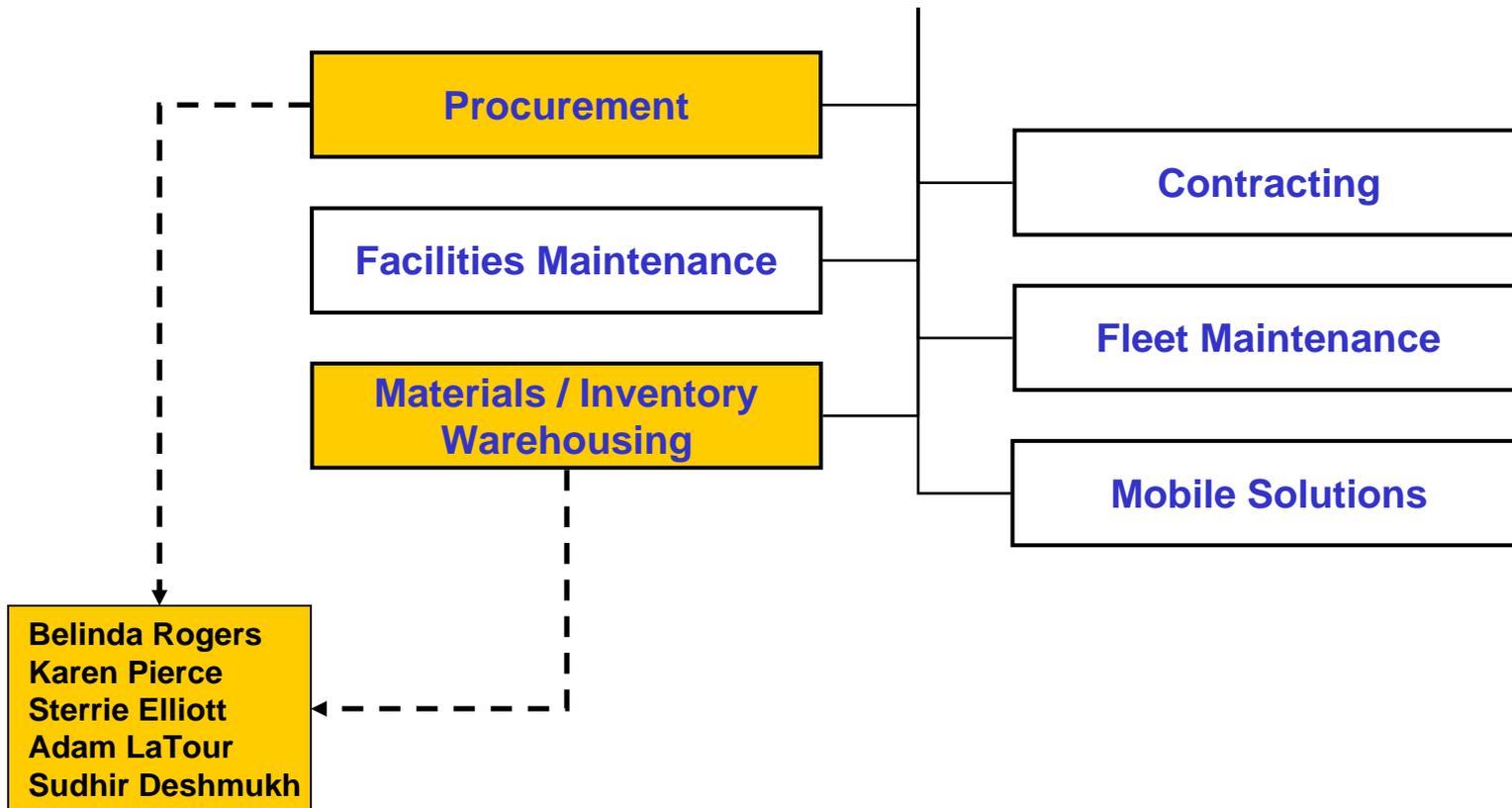
Beverly Hodges – Finance Lead
Drew Thigpen – Finance Lead
Mary Ramsrud – Consulting Lead

Logistics Leads

Belinda Rogers – Logistics Lead
Jack Ladhur – Logistics Lead
Brad Denham – Consulting Lead

Linear Assets Leads

Mark Suarez – Agile Assets Lead
Charles Pilson – Consulting Lead





As-Is Overview



As-Is Discussion of Material Data

- Procurement / Commodity Contract overview:
 - Overview of contract items
 - Types of contract items
 - Contract item attributes
- Stock overview:
 - Overview of current stock
 - Location and types of stored materials
 - Item master records
 - DPS and DOTD overview



As-Is: Current System Alignment

Legacy System	Material Master Information
AGPS	Commodity Tables – Description, Unit of Measure, Last Unit Price, Commodity Type, Usage
Venice	Stock Nos., Description, Min / Max, Aisle / Bin, Re-order Points, Status, Unit of Measure, On-hand Quantities, Price
Faster	Fleet Work Order System - Part Nos., Description, Min / Max, Aisle / Bin, Re-order Points, Status, Unit of Measure, On-hand Quantities, Price



As-Is: Current System Alignment (continued)

Legacy System	Material Master Information
PIMS	Stock Nos., Material Nos., Unit of Measure, Material Group, Unit Price, Min / Max, Descriptions, Specification No., Vendor
Paradox	Stock Nos., Material Nos., Unit of Measure, Min / Max
QuickBooks	Stock Nos., Material Nos.



Current Master Data

- Below is a screen caption from the Department of Public Safety's Venice Inventory System. In SAP Stock Item A0-01-59-012 will be replaced by a material number, which will link the item to the UNSPSC code.

A material number allows for quicker contract lookup, easier reporting, tracking of inventory items, storage of item specific data, etc.

09/13/2008

DEPARTMENT OF PUBLIC SAFETY Inventory Item List

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Site ID	Stock Item	Aisle/Bin	Description	Status	Issue UOM	Min	Max	On Hand	On Order	Back Order
		Allocations	Current Price	Est. Value	Ovhd %	Chg-Out Price	ABC	Alt-ID	Order Method	Order UOM
WHSE	A0-01-57-009	A54	PENCIL SHARPENER, ELECTRIC, CER60999	A	EA	6	60	20	0	0
		0	\$14.69	\$293.800	0	\$14.690			0	EA
WHSE	A0-01-59-001	A56	Pen, fine point, black ink	A	BOX	0	0	0	0	0
		0	\$6.16	\$0.000	0	\$6.157			0	BOX
WHSE	A0-01-59-008	A56	PEN, MED. BALL POINT, BLACK INK	A	BOX	300	900	783	0	0
		0	\$1.34	\$1,050.348	0	\$1.341			0	BOX
WHSE	A0-01-59-012	A56	PEN, BALL POINT, FINE, BLACK INK	A	BOX	300	900	874	0	0
		0	\$3.16	\$2,779.154	0	\$3.180			0	BOX



Current Master Data (continued)

- Below is a screen caption from the Department of Transportation and Development's PIMS Inventory System.

PIMS Catalog Index			
Vol. #	Stock Number Ranges		
Volume #1	<p style="text-align: center;">01-09-0010 Group 1 Fire Righting, Medical and Safety Supplies</p> <p style="text-align: center;">Group 2 General Office Supplies</p>	thru	<p style="text-align: center;">03-50-5020 Books, Publications and Printed Forms</p>
Volume #2	<p style="text-align: center;">04-18-0485 Group 4 Engineering Supplies</p> <p style="text-align: center;">Group 5 Reproduction and Photographic Supplies</p> <p style="text-align: center;">Group 6 Computer, Copying Machine and Microfilm Supplies</p> <p style="text-align: center;">Group 8 Janitorial and Sanitary Supplies</p>	thru	<p style="text-align: center;">10-94-2300 Group 10 Agricultural, Landscaping and Erosion Control Supplies</p>



Current Master Data (continued)

- In PIMS, the Header and Stock # will be replaced by an SAP Material Number and Material Group.

Header	Stock #	Description	UOM
016			
	01-15-4920	CAP LINER, UNIVERSAL SIZE, DOTD SPEC. 091-002, REV. 4/1/2007	38
025			
	01-15-4950	CAP, BASEBALL STYLE, HIGH VISIBILITY, FLUORESCENT, DOTD SPEC. 045-004, REV. 8/04/2008	38
	01-15-4960	CAP, SAFETY, FULL BRIM, OUTBACK STYLE, HIGH VISIBILITY, SIZE REGULAR 7 1/8 IN. – 7 5/8 IN., (DELETE WHEN BALANCE REACHES ZERO)	38
	01-15-4965	CAP, SAFETY, FULL BRIM, OUTBACK STYLE, HIGH VISIBILITY, SIZE REGULAR 7 3/8 IN. – 7 7/8 IN., (DELETE WHEN BALANCE REACHES ZERO)	38



SAP Concepts



SAP Glossary

- **Attribute** – A property or value that describes and defines an object or an entity in detail (blonde hair, blue eyes, 5'2" tall, 120 lbs...are all attributes of a human)
- **Basic Data Text** – A field in the Material Master record used to store longer text description for the item
- **Client** – A grouping or combination of legal, organizational, business and/or administrative units with a common purpose; a self-contained unit in an SAP system with separate master records and its own set of tables ("The State of Louisiana")
- **Company Code** – This level represents an independent accounting unit within a client. Each company code has its own balance sheet and its own profit and loss statement. Example : a subsidiary company, member of a corporate group ("The State")
- **ECC** – Enterprise Central Component (the core SAP system where financials and most logistics transactions are processed)
- **Matchcode** – A search technique which enables a user to locate a particular database record (such as an account number or material master record) by entering information contained in the record (Key word Search)
- **Material Group** – Key that you use to group together several materials with the same attributes, and to assign them to a particular material group
- **Material Number** – An 18-character alphanumeric attribute that uniquely identifies a material

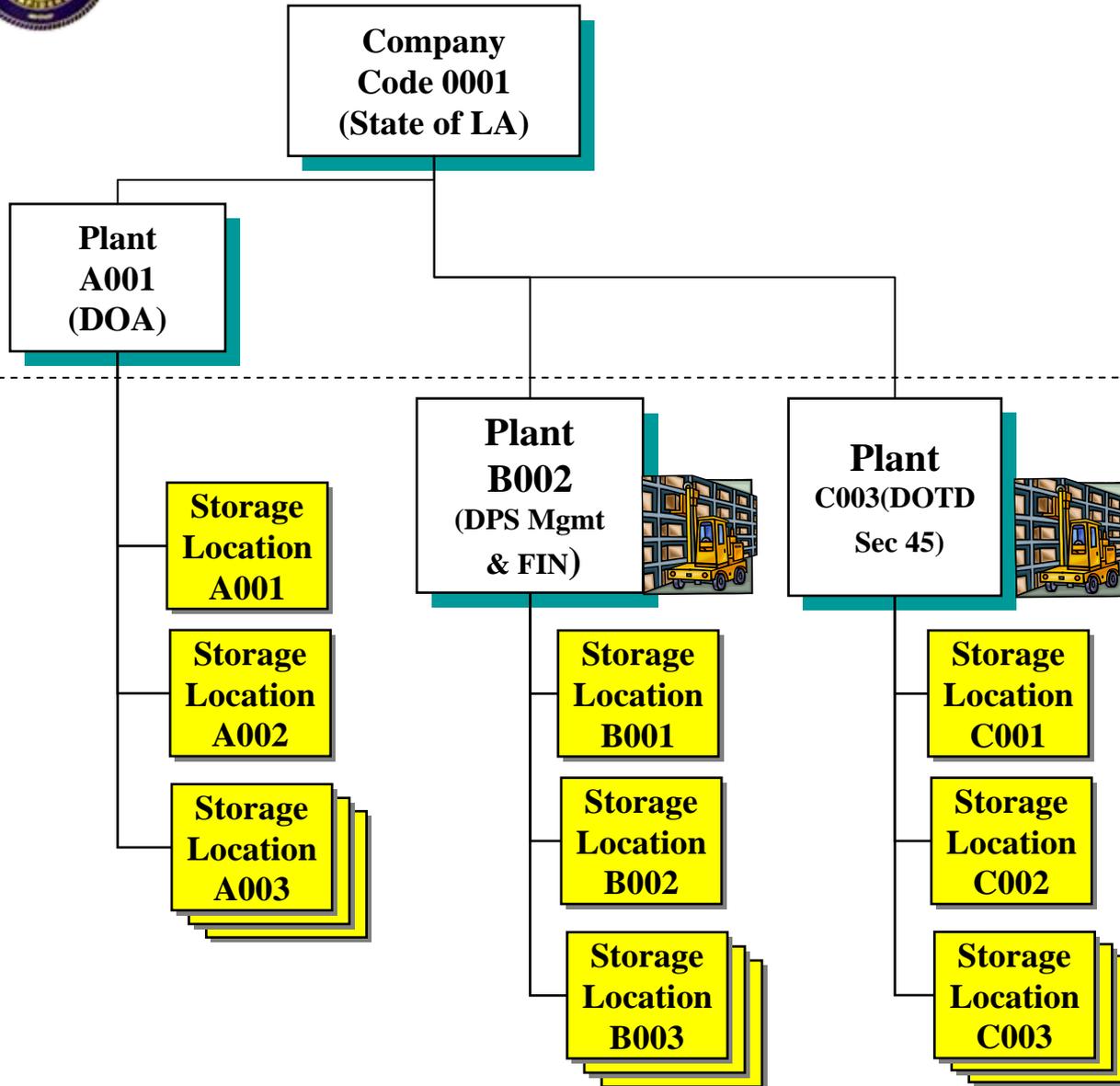


SAP Glossary (continued)

- **Material Type** – Key that assigns the material to a group of materials such as raw materials, operating supplies or trading goods
- **Moving Average Price** – A price that changes in consequence of goods movements and the entry of invoices, and which is used to value a material
- **MRP** – Materials Requirements Planning. MRP will generate requisitions to rectify the deficit in the stock levels.
- **Plant** – Operational unit within a company code; an organizational unit for dividing an enterprise according to production, procurement, maintenance, and materials planning (“DOTD Engineering & Operations”)
- **Price Unit** – The unit of measure to which the price refers
- **SRM** – Supplier Relationship Management; a special procurement module of SAP
- **Standard Price** – A constant price at which a material is valued without taking goods movements and invoices into account.
- **Storage Location** – A division of plants into physical (or logical) locations where the functions are performed (“Materials Laboratory”)
- **UNSPSC** – United Nations Standard Products and Services Code
- **UoM**– Unit of Measure (a primary field in the Material Master Record)
- **Valuation Class** – A code that assigns material to a group of G/L accounts



“Going In” Logistics Structure



Department Level

Agency Level

Guiding Principle: If a given organization maintains inventory AND it wants to track the financial costs of that inventory at a given level, then that organizational level = SAP Plant

Note: Physical inventory taking (conducting an inventory and cycle counting) takes place at the Storage Location level!



Material Master Record

- ...is a data record containing all the basic information required to manage a material in SAP
- “Material Master” can often be related to other terminology used in an organization, such as :
 - Goods
 - SKUs
 - Items
 - Components
 - Spare Parts
 - Assemblies



Material Master (continued)

- The Material master holds important data to support system activities such as
 - Procurement
 - Inventory
 - Planning
- Data/Attributes stored in the Material Master include:
 - Descriptive texts
 - Units of measure
 - Reorder points
 - Accounting information
- Material Master Records only exist once in the system (no duplicates)



Material Master (continued)

- Material Master Records are represented at different organization levels (Purchasing Organization, Plant, Storage Location)
- This is accomplished by the way SAP structures the data and how it is saved in tables in the database. For example:
 - Global Data (Company Code):
 - Material Number
 - Descriptive Texts
 - Material Group
 - Units of Measure
 - Data Valid for one Plant:
 - Purchasing Data
 - MRP parameters
 - Forecasting Data
 - Valuation
 - Data Valid for a Storage Location:
 - Storage Bin
 - Picking area



Material Master (continued)

- **Numbering and Number Ranges:**
 - A material number can have a maximum of 18 characters
 - Output to screen with or without leading zeros
 - A different number range can be assigned to different Material Types (e.g. 000001 to 009999 for office supplies, 010000 to 019999 for spares etc).

- **Number Range Intelligence:**
 - Internally (SAP) Assigned Numbers (no intelligence): In this case, a number within the allowed number range interval is assigned by the SAP system
 - Externally Assigned Numbers (“intelligent” numbers): The user assigns a number within the allowed number range interval
 - Different number ranges for different material types or group of types
 - In standard SAP system one external number range and one internal number range can be defined for each Material Type or a group of Material Types



Material Master (continued)

- SAP recommends using internal number assignment! (since you can use matchcodes to select materials according to any desired criteria, it is not normally necessary to use an intelligent external number)
- Other Material Numbering Attributes:
 - Use of UNSPSC Codes as a material attribute
 - Use of Material Group and/or SAP Classification as an alternative identifier



Material Master Attribute - UNSPSC

- What is the UNSPSC?
 - The United Nations Standard Products and Services Code is a hierarchical convention that is used to classify all products and services.
 - It is the most efficient, accurate and flexible classification system available today for achieving company-wide visibility of spend analysis
 - The UNSPSC was jointly developed by the United Nations Development Program (UNDP) and Dun & Bradstreet Corporation (D & B) in 1998.



Material Master Attribute – UNSPSC (Continued)

- **The United Nations Standard Products and Services Code (UNSPSC) provides an open, global standard for efficient, accurate classification of products and services. The UNSPSC was jointly developed by the United Nations Development Program (UNDP) and Dun & Bradstreet Corporation (D & B).**

- **The UNSPSC offers a single global classification system that can be used for:**
 - **Statewide visibility of spend analysis**
 - **Cost-effective procurement optimization**
 - **Full exploitation of electronic commerce capabilities**



Material Master Attribute – UNSPSC (Continued)

- **What does UNSPSC do for me?** By embedding UNSPSC classification standards into your system - purchase orders, invoices, electronic documents, product catalogues, websites - all parties throughout the extended supply chain benefit.

Below is an example:

Procurement can keep an eye on how much is spent buying what. This information is readily available to you to analyze the specifics in the buying process at the level of detail that most suits the business needs in a timely and precise manner. You can cut in half or less the time it takes to find the products needed by searching by commodity code. You can spot buying patterns across departments or business units to leverage better conditions from suppliers and realize overall savings.



Material Master Attribute – UNSPSC (Continued)

- **How does UNSPSC work?** The UNSPSC is a *hierarchical classification with four* levels. These levels allow analysis by drilling down or rolling up to analyze expenditures. Each level in the hierarchy has its own unique number.

XX Segment

The logical aggregation of families for analytical purposes

XX Family

A commonly recognized group of inter-related commodity categories

XX Class

A group of commodities sharing common characteristics

XX Commodity

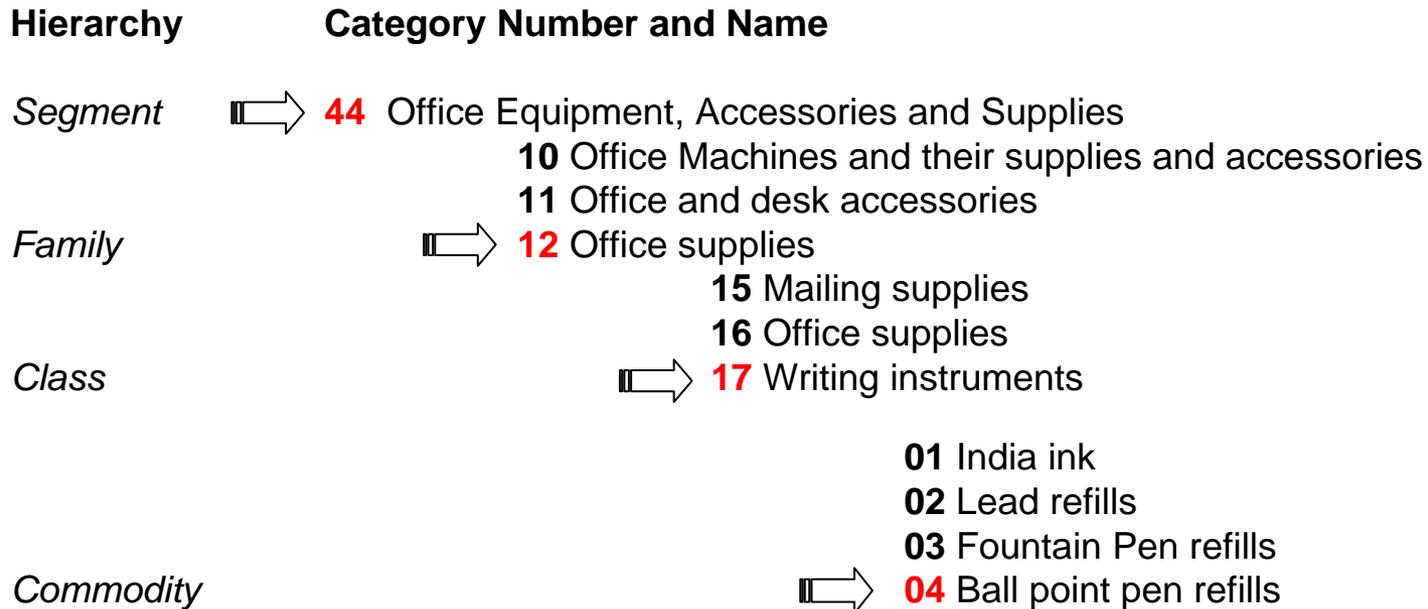
A group of substitutable products or services



Material Master Attribute – UNSPSC (Continued)

- UNSPSC Examples - In the UNSPSC classification, products are placed within logical categories so that you can easily find what you are looking for and evaluate expenditures on commonly grouped items.

For example, the commodity “ball point pen refills” is part of a larger class of products, “Ink and lead refills”, which in turn is part of a family of products, “Office supplies,” which is itself part of a segment of products, “Office equipment, accessories, and supplies.” Each level of the hierarchy has its own unique number.



Using the above Hierarchy, the UNSPSC code for Ball Point Pens would be “44121704”.



Material Master Attribute – UNSPSC (Continued)

Example of the NIGP Commodity Code used in the Advanced Government Purchasing System (AGPS)

Code Structure	Code	Description
3-Digit (Class) Code	620	Office Supplies: Erasers, Inks Leads, Pens, Pencils, etc.
5-Digit (Class(3)-Subclass(2)) Code	620-81	Pens (General Writing Types): Ball Point, Nylon Tip, etc.
11-Digit (Class(3) - Subclass (2) - Item (6)) Code	620-81-003935	Refill for ball point pen, fine point



Current System Master Data

- Currently in AGPS, for a particular commodity code we track the commodity types, date activities, last unit price, last quantity price, etc. for each commodity code.

```

ENTER FUNCTION:  _          TRANS: COM2

                                DATE: 08/15/08
COMMODITY HEADER TABLE #2     TIME: 14:28:56
KEY IS COMMODITY NUMBER       TERM: $D43
COMMODITY NUMBER...: 620 81 003935  ADDING ITEM (Y OR N)?
DESCRIPTION.....: REFILL FOR BALL POINT PEN, FINE POINT
:
STATUS CODE.....: 1          : ACTIVE
STATUS CHANGE DATE.: 02/16/95      STATUS CHANGE ID: SYSSYSM
COMMODITY TYPE.....: 1          : CONSUMABLE SUPPLY
BUYER CODE.....: Z          : CONNIE SPANN
BUYER PHONE.....: 225 - 342 - 8043 -      PC:
MAINTAINING AGENCY.: 107001 : OFFICE OF STATE PURCHASING
INSPECTION TYPE....:          :
FROM TEXT REFERENCE:          STATE USE ITEM.....: N  AGENCY/COMM DPA: A
TO TEXT REFERENCE..:          PRISON ENT IND.....: N  DPA AMT:          0.00
SETUP DATE.....: 02/16/95 MOVABLE PROPERTY...: N  CRO AMT:          0.00
PAY APR REQ.....: N          RECYCLE IND.....: N  ON-HAND:
INVENTORY ITEM.....: N : PRODUCT #:          PAY APR REQ: N
OBJECT CONTROL.....:          SPEC HANDLING ITEM.: N  APR AMT:          0.00
NO OF VENDORS.....: 0      NO OF QUAL VENDORS.: 0      SPEC TYPE: C
APPROVAL CATEGORY..:          USERID LST CHG: BR8Z      DATE LST CHG: 07/31/08

```



Current System Master Data (continued)

- In SAP these and other details will be captured in the material master record.

ENTER FUNCTION: _ TRANS: COM3 DATE: 08/15/08
 COMMODITY HEADER TABLE #3 TIME: 14:36:54
 KEY IS COMMODITY NUMBER TERM: \$D43

COMMODITY NUMBER...: 620 81 003935
 DESCRIPTION.....: REFILL FOR BALL POINT PEN, FINE POINT

DATE LAST PURCHASED: 09/25/98 LAST UNIT PRICE.....: 1.1800
 MOST RECENT VENDOR.: 721179669 01 LAST QUANTITY.....: 1.000
 PREVIOUS VENDOR....: 720403604 00 LAST UNIT OF MEASURE.: EACH
 LAST AWARD NUMBER...: 3133917 LAST AWARD LINE NO...: 00010
 MOST RECENT AGENCY.: 649000 : BD OF SUPRS-COMM & TECH COLLEG
 DATE 1ST PURCHASED.: 04/25/00 FYTD NO OF AWARDS...: 00000
 CUM NO OF PURCHASES: 00030 PRIOR FY NO OF AWDS.: 00015

JAN:	.00	JUL:	.00	MTD.:	.00
FEB:	.00	AUG:	.00	QTD.:	.00
MAR:	.00	SEP:	.00	YTD.:	371.98
APR:	.00	OCT:	.00	FYTD:	.00
MAY:	.00	NOV:	.00	FYTD DELEG AWD:	.00
JUN:	.00	DEC:	.00		



Current System Master Data (continued)

- Currently, the NIGP code is tied to each line on a contract. In the future, the UNSPSC codes tied to the material will default from the material master to the purchasing documents.

```
ENTER FUNCTION:                TRANS: KLI2
CONTRACT LINE NUMBER TABLE #2
KEY IS CONTRACT NUMBER AND LINE NUMBER                DATE: 08/15/08
                                                    TIME: 14:44:42

CONTRACT NUMBER.....: 401120      : STATE USE PROGRAM, EMPLOYMEN TERM: $D43
                                                    DEVELOPMENT SERVICES (EDS)

LINE NUMBER.....: 00303
STATUS CODE.....: 505      :
STATUS CHANGE DATE.: 12/30/04

COMMODITY NUMBER...: 620 81 003935 : PEN,BALLPOINT,FINE, RETRACTABLE,
                                                    REFILLABLE, RUBBERIZED

FROM QUANTITY.....:      1.000      TO QUANTITY.....:      0.000
UNIT OF MEASURE....: DOZ      : DOZEN                SSU:
UNIT PRICE.....:      7.30000      EXTENDED AMOUNT:      7.30
DISCOUNT % OFF CAT.: 0.00      NO COST: N      TAXABLE ITEM.: N
BRAND NAME.....: EDS                MODEL...: 5142
SHIP TO AGENCY....: R0      : STATEWIDE DELIVERY
SHIP TO SUB-AGENCY.:      :
DAYS ARO: 0      WEEKS ARO: 0      DELIVERY TERMS: 0
ORDERING STATUS....: 2      : INACTIVE - OCHG DEC OR PAY
BEGIN-DATE.....:      : END DATE.....:
USERID LAST CHANGED: BR8Z                DATE LAST CHANGED: 07/31/08
```



Review of SAP Concepts

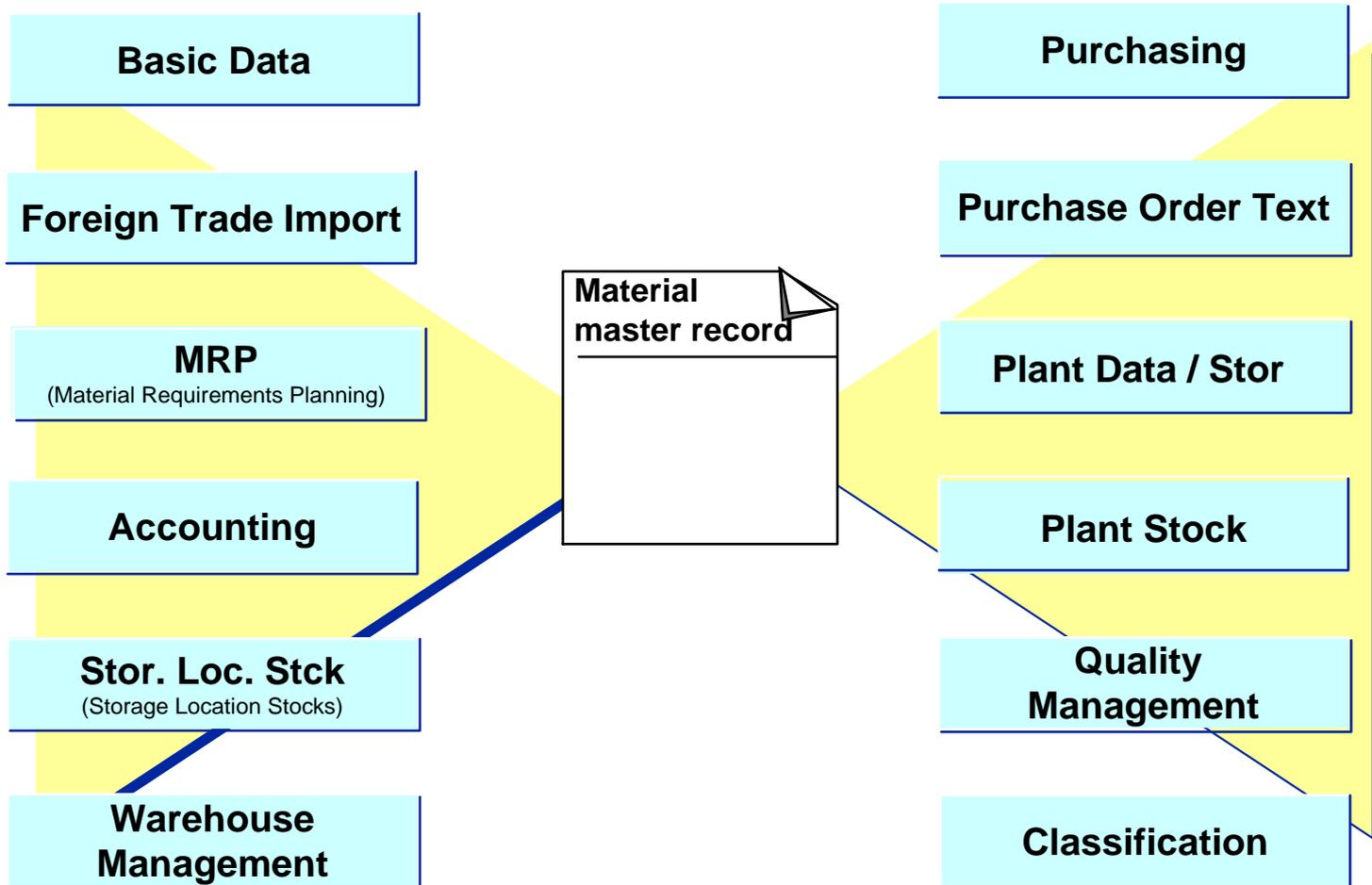


SAP Material Master – Views

- The SAP Material Master Record contains the data and parameters that define each material, broken down into individual screens called “Views”
- The information relevant to a particular organizational unit or group (for a given material) is defined in a separate “view” of that material.
- For example, the **Accounting View** for a material (for a particular plant where valuation takes place,) would define how that material is valued at that plant (there would be another accounting view for the same material at a different plant)



Material Master Views





Material Master – Review of Key Concepts

- The Material Master Record is the central master “record” for logistics
- A Material Master is broken down into views
- Data in the material master is defined at different organizational levels including plant and storage location
- The Material Type attribute controls such things as number assignment and which views are allowed
- Security can be controlled so that Agencies (i.e.. Plants) can not view or update data within another plants.



Material Master - Review of Key Concepts (continued)

- The Base Unit of Measure is the lowest unit in which the stocks of the material are defined
- All quantities which are entered in other units of measure are converted back to the Base Unit (other units of measure include: order unit, unit of issue, sales unit, and delivery unit)
- Data in the material master can be changed immediately or the change can be planned and then activated on a future date
- A material can be displayed in its current status or in its status on a key date



Material Master – Why is This Important?

- SAP Material Master:
 - Is a validated and normalized, non-duplicate record
 - Serves as a key integration link by supporting different processes in SAP – It provides critical or default data into various master documents, e.g.:
 - Requisition
 - Purchase Order
 - Work Order
 - Goods Receipts
 - Invoice Payments
 - Allow different agencies to store different data specific to that agency...even if the same material
 - Facilitates diverse reporting needs by agency or process
 - Is fed to the Supplier Relationship Management (SRM) System (i.e. LaPAC, E-CAT) for use there...



SAP Material Master Record Screens



Create Material Master – Basic Menu

The screenshot displays the SAP Easy Access interface. At the top, the title bar reads "SAP Easy Access" and the SAP logo is visible in the upper right corner. Below the title bar is a toolbar with various icons, including a search icon. The main content area shows a hierarchical menu structure for "Material Master". The "Material" folder is expanded, revealing a "Create (Special)" sub-menu with the following options: Raw Material, Semifinished Product, Finished Product, Operating Supplies, Trading Goods, Non-Valuated Material, Non-Stock Material, Packaging, Empties, Service(s), Configurable Material, Maintenance Assembly, Competitor Product, and Returnable Packaging. Below this, there are folders for "Create (General)", "Change", "Flag for Deletion", "Display", "Mass Maintenance", and "Change Material Type". Other folders include "Profile", "Batch", "Special Stock", "Other", "Environment", "Product Catalog", "Sales and Distribution", and "Logistics Execution". The status bar at the bottom right shows the user ID "SE1 (1) (100)", the system name "doasetci", and the role "OVR".



Create Material Master – Entry Screen

Material Number: For Internal assignment, leave empty; for External assignment, enter the number

Industry Sector: Screen sequence and field selection based on industry sector selection

Material Type: Major category of material (e.g., raw material, spare parts, operating supplies, non stock materials, etc.) Controls screens and order of screens,

The screenshot displays the SAP 'Create Material (Initial Screen)'. The interface includes a menu bar (Material, Edit, Data, Defaults, System, Help) and a toolbar. The main area contains the following fields and options:

- Material:** An empty text input field.
- Industry sector:** A dropdown menu currently showing 'all fields optional'.
- Material Type:** A dropdown menu currently showing 'Operating supplies'.
- Change Number:** An empty text input field.
- Copy from...:** A section with a 'Material' field and a selection icon.

At the bottom right of the screen, there is a status bar showing 'SE1 (1) (100) doasetc OVR'.



Create Material Master – Select Views

The screenshot shows the SAP 'Create Material (Initial Screen)' dialog box. The main window has tabs for 'Select view(s)', 'Organizational levels', and 'Data'. The 'Select view(s)' tab is active, displaying a list of views: Basic Data 1, Basic Data 2, Classification, Purchasing, Foreign Trade: Import Data, Purchase Order Text, MRP 1, MRP 2, MRP 3, MRP 4, Forecasting, General Plant Data / Storage 1, General Plant Data / Storage 2, Warehouse Management 1, Warehouse Management 2, Quality Management, and Accounting 1. Below the list are checkboxes for 'View selection only on request' and 'Create views selected'. The 'Organizational levels' checkbox is checked. The 'Data' tab is also visible. The SAP logo is in the top right corner. The status bar at the bottom shows 'SE1 (1) (100) doase1cl OVR'.

Material “Views”: A dialog box appears allowing the user to select the screens (views) desired for the new master record (typically controlled by Material Type...)



Create Material Master – Organizational Levels

Plant: Assigns material record to a given plant

Storage Location: Assigns material record to a given Storage Location within a given plant

The screenshot shows the SAP 'Create Material (Initial Screen)' interface. A dialog box titled 'Organizational Levels' is open, allowing the user to select organizational data. The dialog box contains the following fields:

Organizational levels	
Plant	<input type="text"/>
Stor. Location	<input type="text"/>
Warehouse No.	<input type="text"/>
Storage Type	<input type="text"/>

Below the dialog box, there are sections for 'Profiles' (MRP profile, Forecast prof.) and a checkbox for 'Org. levels/profiles only on request'. At the bottom of the dialog box, there are buttons for 'Select view(s)', 'Default values', and 'X'.

Organizational Levels: A dialog box appears allowing the user to select the Plant and Storage Location to which they want to assign the Material Master Record



Create Material Master - Basic Data 1

The screenshot displays the SAP 'Create Material 52 (Operating supplies)' interface. The 'Basic data 1' tab is active, showing various input fields for material data. Callouts point to specific fields with the following descriptions:

- Short Text Description:** 40 characters only (points to the description field)
- Material Group:** This field *may* be used for UNSPSC code (points to the Material Group field)
- Base Unit of Measure:** Required entry (points to the Base Unit of Measure field)
- Basic Data Texts:** Used to store longer descriptive texts (points to the Basic Data Texts section)



Create Material Master – Basic Data Text

Display Material 55 (Operating supplies)

Material 55 Dell inspiron 1525 2GHz XP 1GB HD80GB

Basic data text

Language English

Inspiron 1525Intel® Celeron® 550 (2.0GHz, 533MHz, 1M L2 Operating SystemGenuine Windows Vista® SP1 Home Basic Ec LCD PanelGlossy, widescreen 15.4 inch display (1280x800 Combo or DVD+RW DriveCD Writer / DVD player (Combo Drive Memory1GB2 Shared Dual Channel DDR2 at 667MHz Hard Drive80GB3 SATA Hard Drive (5400RPM) Video CardIntel Graphics Media Accelerator X3100 Sound CardHigh Definition Audio 2.0 Wireless Networking CardsDell Wireless 1395 802.11g Mini Battery Options4 cell battery System ColorJet Black Warranty & Service1Yr Ltd Warranty4 and Mail-In Service

Ln 1 - Ln 13 of 13 lines

Basic Data Text:
A field where a longer item description can be maintained. Used when required



Create Material Master – Units of Measure

Base Unit of Measure

Issue Unit

Order Unit

Material 38 Soda

Units of measure grp

X	AUn	Measur	Y	BUn	Measur...	EAN/UPC	Ct	Au	A	Length
1	CAN	can	1	CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
1	DZN		12	CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
1	CAR		144	CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
				CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
				CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
				CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
				CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
				CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
				CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
				CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	
				CAN	can			<input type="checkbox"/>	<input type="checkbox"/>	

Delete line Entry 1 of 1



Create Material Master – Purchasing

Create Material 59 (Operating supplies) SAP

Create Material 59 (Operating supplies)

Classification Purchasing Foreign trade import Purchase order text

Material 59 Dell inspiron 1525 2GHz XP 1GB HD80GB
Plant 0010 PCC plant 0010

General Data

Base Unit of Measure	EA	each	Order Unit	var. OUn
Purchasing Group			Material Group	07
Plant-sp.matl status			Valid from	
Tax ind. f. material			Qual.f.FreeGoodsDis.	
Material freight grp			<input type="checkbox"/> Autom. PO	
<input type="checkbox"/> Batch management				

Purchasing values

Purchasing value key		Shipping Instr.	
1st Rem./Exped.	0 days	Underdel. Tolerance	0.0 percent
2nd Reminder/Exped.	0 days	Overdeliv. Tolerance	0.0 percent
3rd Reminder/Exped.	0 days	Min. Del. Qty in %	0.0 percent
StdValueDelivDateVar	0 days	<input type="checkbox"/> Unltd Overdelivery	<input type="checkbox"/> Acknowledgment Reqd

Other data / manufacturer data

GR Processing Time	days	<input type="checkbox"/> Post to insp. stock	<input type="checkbox"/> Critical Part
Quota arr. usage		<input type="checkbox"/> Source list	JIT Sched. Indicator

Order Unit of Measure

Purchasing Group

SE1 (1) (100) doase1c INS



Create Material Master – Accounting View

The screenshot shows the SAP Material Master Accounting View for Material 55. The interface includes tabs for Purchase order text, Accounting 1, Accounting 2, and Plant stock. The material is identified as 'Dell inspiron 1525 2GHz XP 1GB HD80GB' at plant '0010'. The 'Current valuation' section is highlighted, showing the following data:

Field	Value
Valuation Class	MIS
VC: Sales order stk:	
Price control	S
Moving price	0.00
Total Stock	0
Future price	0.00
Previous price	0.00
Proj. stk val. class	
Price Unit	1
Standard price	899.00
Total Value	0.00
Valid from	
Last price change	

Callouts provide definitions for key fields:

- Valuation Class :** Valuation class for the material setup by finance based on the material type
- Price Unit :** Number of units to which the price refers
- Standard Price :** Enter standard price
- Price Control :** Standard (S) or Moving Average Price (V)



Sample SAP Reports Using Material Master Record



SAP Report ME3C – Purchasing Docs by Material Group

Program Edit Goto System Help

Purchasing Documents for Material Group

Choose...

Material group		to		↕
Purchasing organization		to		↕
Without material number	X			
Scope of List	RAHM			
Selection Parameters		to		↕
Document Type		to		↕
Purchasing Group		to		↕
Plant		to		↕
Item Category		to		↕
Account Assignment Category		to		↕
Delivery Date		to		↕
Validity Key Date				
Range of Coverage to				
Document Number		to		↕
Vendor		to		↕
Supplying Plant		to		↕
Material		to		↕
Document Date		to		↕
Intern. Article No. (EAN/UPC)		to		↕
Vendor's Material Number		to		↕
Vendor Subrange		to		↕
Promotion		to		↕
Season		to		↕
Season Year		to		↕
Short Text				
Vendor Name				

SE1 (1) (100) doase1cl OVR



SAP Report ME3M – Purchasing Docs by Material Master Record

Program Edit Goto System Help

Purchasing Documents for Material

Choose...

Material	38			
Plant		to		
Purchasing Organization		to		
Scope of List	BEST			
Selection Parameters		to		
Document Type		to		
Purchasing Group		to		
Item Category		to		
Account Assignment Category		to		
Delivery Date		to		
Validity Key Date				
Range of Coverage to				
Document Number		to		
Vendor		to		
Supplying Plant		to		
Material Group		to		
Document Date		to		
Intern. Article No. (EANUPC)		to		
Vendor's Material Number		to		
Vendor Subrange		to		
Promotion		to		
Season		to		
Season Year		to		
Short Text				
Vendor Name				

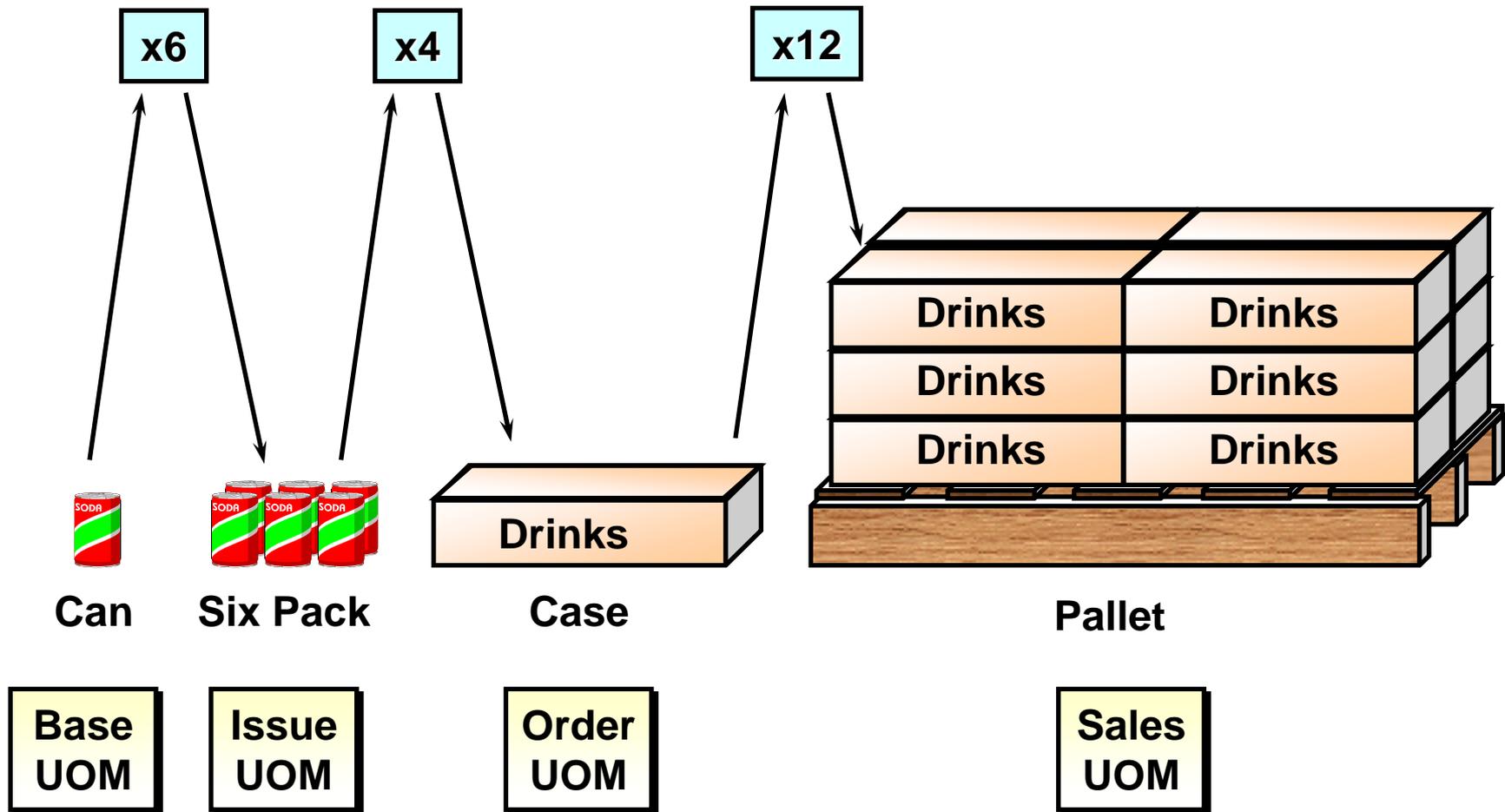
SE1 (1) (100) doase1cl OVR



Special Topics



Material Master Discussion Topic: Units of Measure





Material Master Discussion Topic: Texts

- “Noun Nomenclature” will be used for Short Text and Long Text Fields
- Noun Nomenclature allows:
 - For the efficient naming of material master records in limited space (Short Text Description is limited to 40 characters)
 - Puts the most important information first (left to right) in the Short and the Long Text fields
 - Format: **Noun, OEM Manufacturer, OEM Part Number**, etc...
 - Example:

```
NOUN, MFG NAME, #PARTNO, ADDITIONAL INFO...
```
 - Or...

```
PAINT, KRYLON, #K01614, GLS BLK, HI-HEAT, CAN
```



Material Master Discussion Topic: Texts

- Material Master records can be created for both OEM and generic materials:

SPECTACLES , SAFETY , PLASTIC , LIGHTWEIGHT
SPECTACLES , NORTH , #09S , SAFETY , LTWT , PLAST .

LUBRICANT , ANTI-SEIZE , HI-TEMP , 8 OZ CAN
LUBRICANT , LOCTITE , #34517 , ANTI-SEIZE , 8 OZ

PAPER , TOILET , PREMIUM , 450 SH/RL , 40 RL/PKG
PAPER , GP , #16640 , PREM , 40 RL/PACKAGE , PKG

FUSE , CLASS J , 5 AMP , Z HOLDER , QUICK-ACTING
FUSE , BUSSMANN , #JKS-5 , 5 AMP , CLASS J , Q/A



Material Master Discussion Topic: Texts

- Long Text Descriptions
 - Are printed to the PO (along with the short text description) only when they exist in the Material Master Record
 - Are not required, and only used when the 40-character short description is not suitable to convey the description to the vendor
 - Length is unlimited
 - Are used to spell out all of the other attributes of the material that are pertinent to the Start...and help the vendor ensure that they ship the right item to consignee
- The long text is typically written from “general to specific” (left to right)...

DEHUMIDIFIER , WOODS , #GDC124CSS , INDUSTRIAL , 60
PINTS/HR , 115V , HI-CAP , IPX2-RATED , SINGLE SPEED , ROTARY
COMPRESSOR , STAINLESS STEEL CABINET WITH 20 FT.
HOSE , CSA AND CE CERTIFIED .



Today's Workshop Key Decisions

- General consensus on:
 - General Use of Material Master Record
 - Numbering of Material Records
 - Use of UNSPSC as Key Material Attribute
 - Use of Units of Measure
 - Format of Text Descriptions
 - Others Key Attributes TBD...



Questions?

