SAP Info Record, Source List, Quota Arrangement and Pricing Conditions
LOG-MM-003
Sep 04, 2008

LaGov

Version 1.0
Updated: 09/04/2008
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
Project Phases

Five Key Phases

- Project Preparation
  - Strategy & Approach Defined
  - Project Team Training

- Business Blueprint
  - Business Process Definition
  - Development Requirements

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

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

- Go Live and Support
  - Go-Live Support
  - Performance Tuning
Tentative Project Timeline

- Tentative implementation dates are planned as follows:

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Tentative Implementation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Prep</td>
<td>October 2009</td>
</tr>
<tr>
<td>DOTD</td>
<td>February 2010</td>
</tr>
<tr>
<td>Core Modules All Agencies</td>
<td>July 2010</td>
</tr>
<tr>
<td>Additional Modules</td>
<td>January 2011</td>
</tr>
</tbody>
</table>


Project Start-Up  Blueprint

Phased deployment will be confirmed/updated before completion of Blueprint activities!
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 Ladhir – Logistics Lead
- Brad Denham – Consulting Lead

**Linear Assets Leads**
- Mark Suarez – Agile Assets Lead
- Charles Pilson – Consulting Lead

**Functional Teams**
- **Procurement**
  - Belinda Rogers
  - Karen Pierce
  - Sterrie Elliott
  - Adam LaTour
  - Sudhir Deshmukh

- **Facilities Maintenance**
- **Materials / Inventory Warehousing**

- **Contracting**
- **Fleet Maintenance**
- **Mobile Solutions**
## Blueprint Schedule - Tentative

<table>
<thead>
<tr>
<th>Workshop ID</th>
<th>Process Area</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG-SRM-002</td>
<td>Vendor Registration, Qualification, AVL (Approved Vendor List)</td>
<td>9/11 Thur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9/15 Mon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9/16 Tue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9/17 Wed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are these dates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>correct based</td>
</tr>
<tr>
<td></td>
<td></td>
<td>on new schedule?</td>
</tr>
</tbody>
</table>

Are these dates correct based on new schedule?
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 – Info Record, Source List, Quota Arrangement, Condition Records:
   • Address key integration points
   • Support organizational requirements
   • Consistent and appropriate use of data fields
Blueprint Objectives

3. Define **Future** or **To-Be Business Processes** based on:
   - Best Practices inherent in SAP
   - Intellectual capital from other SAP implementations
   - State business requirements

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 As-Is Glossary
- Overview of SAP Info Record, Source List, Quota Arrangement & Pricing Conditions
- Concepts of SAP info Record, Source List, Quota Arrangement and Pricing Conditions:
  - Creation of Info Record, Source List, Quota Arrangement, Condition Record
  - Change Info Record, Source List, Quota Arrangement, Condition Record
  - Flag for Deletion Info Record, Condition Record
Today’s Workshop Objectives

- Live SAP Info Record, Source List, Quota Arrangement, Condition Record
- Key Decisions
  - Number Ranges
  - Updates of Info Records
- Next Steps
As-Is Overview
Related As-Is Topics

- **Currently in Use**
  - Pricing Validity Date Limits, Future Pricing Validity Dates
  - Pricing Scales (i.e. 1-99 qty = $5 ea, 100-199 qty = $4 ea)
  - Minimum Quantity Restrictions
  - Under/Over Tolerances
  - No Cost Goods
  - Preconfigured Discounts

- **Not Currently in Use**
  - Quotas – percentages of orders for an item directed to multiple vendors
  - Consignment Items
  - Pipeline Items
  - Preconfigured Surcharges
AGPS Screenshots

ENTER FUNCTION: _ TRANS: KONT

CONTRACT HEADER TABLE #1
KEY IS CONTRACT NUMBER

DATE: 09/10/08
TIME: 16:05:33
TERM: $DSP

CONTRACT NUMBER....: 407149 : UNIFORM MANAGEMENT PROGRAM-LA
DEPT. OF AG & FORESTRY

STATUS CODE.......: 548 : CONTRACT ACTIVE

STATUS CHANGE DATE: 05/01/08 AWARD DATE..: 06/26/07 FISCAL YR: 08

VENDOR NUMBER......: 111385670 01 : SUPERIOR UNIFORM GROUP INC

DOCUMENT TYPE.....: TC : AGENCY TERM CONTRACT

REPROCUREMENT:

TYPE CONTRACT......: REPROCUREMENT:

PURCHASING AGENCY.: 107001 : OFFICE OF STATE PURCHASING

REPROC SETUP.: REPROCUREMENT:

BUYER-CODE........: M : LELIA ACHEE

AGENCY NUMBER.....: 160234 : AGRICULTURE & FORESTRY

PCARD ENABLED: N

T-NUMBER...........: AGF02 : UNIFORMS - LDAF

METH OF OPER.: 1

AGENCY NUMBER.....: 160234 : AGRICULTURE & FORESTRY

REPROC SETUP.: REPROCUREMENT:

SOLICITATION CODE.: I : INVITATION TO BID

BRAND RPT IND.: 0

AWARD CODE........: T : AGENCY TERM CONTRACT

ACTIVE - ORDERS & PAY AUTH

ITEM RPT IND.: 1

E-CATALOG CONTRACT: N E-CAT USERID REQUIRED: N

NOA ISSUE ACT NOA

BEG CON BEG ORDR END ORDR END CON
ORIGINAL: 07 01 07 07 01 07 06 30 08 06 30 08
REVISED.: 06/30/09 06/30/09

Indicates if distributor vendors can be used
AUTHORIZED AGENCIES

INCOTERMS

AGPS Screenshots

ENTER FUNCTION: _ TRANS: KON2

CONTRACT HEADER TABLE #2

DATE: 09/10/08

KEY IS CONTRACT NUMBER

TIME: 16:06:19

TERM: $DSP

CONTRACT NUMBER.........: 407149 : UNIFORM MANAGEMENT PROGRAM-LA

STATUS CODE............: 548 : CONTRACT ACTIVE

STATUS CHANGE DATE.....: 05/01/08 MASTER CLASS/SUB..: 200 84

PROMPT PAYMENT DISC...: NONE DISCOUNT PERCENT..: 0.00 %

DISCOUNT PERIOD........: 0 NET PERIOD........: 0

DELIVERY TERMS..........: AS SPECIFIED ALT DELIVERY SCh...: Y

DELIVERY DAYS ARO....: 0 DELIVERY WEEKS ARO: 0

MASTER SHIP TO AGENCY.: 160234 : AGRICULTURE & FORESTRY

MASTER SHIP TO SUB-AGY: SDS5 : MGT. & FINANCE-CENTRAL RECEIVING

VENDOR FOB.............: DESTINATION

REtainage PERCENT....: 0 % COOP PROCUREMENT.: N

PERF BOND REQD........: N PCT..: 0 % AMT: 0.00

DATE REQUIRED..........: RECEIVED EXP: RTN:

TYPE BOND CODE.........: : BOND NO:

BOND COMPANY...........:

NO LINES ON CONTRACT.: 28 AGCY REQ NUMBER.....:

REQ/OBLIG NUMBER.......: 1299796 SOLICITATION NUMBER.: 2215783
AGPS Screenshots

ENTER FUNCTION: _ TRANS: KLI2

CONTRACT LINE NUMBER TABLE #2
KEY IS CONTRACT NUMBER AND LINE NUMBER DATE: 09/10/08
TIME: 16:06:09

CONTRACT NUMBER....: 407149 : UNIFORM MANAGEMENT PROGRAM-L TERM: $DSP
DEPT. OF AG & FORESTRY
LINE NUMBER........: 00001
STATUS CODE........: 505 : READY FOR FURTHER PROCESSING
STATUS CHANGE DATE.: 06/26/07
COMMODITY NUMBER...: 200 81 093065 : ESTABLISH UNIFORM MANAGEMENT PROGRAM FOR
THE LOUISIANA DEPARTMENT OF AGRICULTURE

FROM QUANTITY......: 50,000 TO QUANTITY.....: 0.000
UNIT OF MEASURE....: EACH : EACH SSU:
UNIT PRICE.........: 11.88000 EXTENDED AMOUNT: 594.00
DISCOUNT % OFF CAT.: 0.00 NO COST: N TAXABLE ITEM.: N
BRAND NAME........: MARTIN'S MODEL....: #30540
SHIP TO AGENCY....: 160234 : AGRICULTURE & FORESTRY
SHIP TO SUB-AGENCY.: SDS5 : MGT. & FINANCE-CENTRAL RECEIVING
DAYS ARO: 0 WEEKS ARO: 0 DELIVERY TERMS:
ORDERING STATUS....: 1 : ACTIVE - ORDERS & PAY AUTH
BEGIN-DATE..........: END DATE.......:
USERID LAST CHANGED: BR8Z DATE LAST CHANGED: 08/29/08
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)
- **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)
- **Info Record** – Also known as Purchasing Info Record (PIR)
- **Source** – In MM procurement External supplier or an outline agreement
- **Source List** – The source list contains the allowed, preferred and/or blocked sources of supply for a material in a plant that are valid within a certain period. Each source is defined in the source list by a source list record
- **Conditions** – Stipulations agreed with vendors concerning prices, discounts, surcharges etc. In this presentation it is also referred as Pricing Conditions.
- **Purchasing Organization** – An organizational unit in Logistics, subdividing an enterprise according to the requirements of Purchasing
Outline Agreement — It is a long term agreement with a vendor concerning the supply of a materials or performance of services according to a predetermined conditions. Outline agreement can be contract or scheduling agreement

Quota Arrangement - It indicates the percentages of a total requirement that are to be procured from each of the various sources over a period

Schema – Structure that defines the processing steps/calculations must be executed

Pricing Procedure – A rule type for pricing. Also referred simply as Pricing

Condition Technique – determination process for defining output values based on predefined input values via condition records

Condition Type - Identification that defines characteristics, attributes, and business meaning of a condition. Every condition type has its own access sequences, condition tables, and condition records

Access Sequence - Order in which the system should work through the condition tables when searching for particular condition records

Condition Record - Data record with input and output values for a task

Scale - Schema which determines a particular price, surcharge or discount or another condition depending on values, quantities, volumes, weight or points
Going In” Logistics Structure

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!
Master Data --
Master data is the backbone for each transaction. Without master data transactions can not be performed. Transaction data is such as Purchase Requisitions, Purchase Orders etc.

Examples of Master Data in Procurement --
- Material master
- Vendor master
- Purchasing info records (also known as Info record)
- Purchasing Groups
- Source list
- Quota arrangement
- Condition records
Master Data in the Procurement Process

Purchase Order
Header
Items
10 ----------
20----------

Material Master record

Vendor Master record

Info record
Master Data in the Procurement Process (contd)

- Master data contains data records that are stored in the database for a long period of time. These are stored centrally and used in ECC. This prevents redundancy of data.
- The material master records and vendor master records are the most important master data in the procurement process.
- During purchasing document creation, ECC facilitates data entry by copying the data from existing master records as default values into the purchasing documents. It also copies units of measure and material short text from the material master. From the vendor master it also copies addresses and payment data. Particular data for a material from a vendor such as delivery time and purchase price can also be stored in info records.
Info Record

- It is created for the combination of material, vendor and purchase organization or
- It is created for the combination of material, vendor and purchase organization/plant combination.
- It can also be created with material group instead of material master record.
- It can be created manually or automatically during the maintenance of a quotation, a purchase order or an outline agreement.
- There are four info record categories: Standard, Subcontracting, Pipeline and Consignment.
Categories of Info Records

- **Standard**
  - A standard info record contains information for standard purchase orders. The info records can be created for materials and services with and without master records.

- **Subcontracting**
  - A subcontractor info record contains ordering information for subcontract orders. For example, if you subcontract the assembly of a component, the subcontractor info record would include the vendor's (subcontractor's) price for assembling the component.

- **Pipeline**
  - A pipeline info record contains information on a vendor's commodity that is supplied through a pipeline or pipes (oil or water) or by similar means (electricity through the mains). The info record contains the vendor's price for the consumption of such commodities by the buyer ("pipeline withdrawals"). You can store withdrawal/usage prices for different validity periods.

- **Consignment**
  - A consignment info record contains information on a material that vendors keep available at their own cost on the orderer's premises. The info record contains the vendor's price for withdrawals by the orderer from consignment stock. As in the case of the pipeline info record, you can store prices for different validity periods.
SAP recommends the following number ranges:

- for stock material
  - internal from 5300000000 to 5399999999
  - external from 5400000000 to 5499999999

- for non-stock material
  - internal from 5500000000 to 5599999999
  - external from 5600000000 to 5699999999

At LaGov, we may choose only internal number ranges.
# Structure of Info Record

## General Data
- Vendor data (reminder data, vendor’s material number etc)
- Material data
- Order unit (conversion …)
- Administrative data

## Purchasing organization data
- Control (delivery time, minimum quantity etc)
- Prices & conditions (gross price, discount, freight etc)
- Statistics (price history, PO statistics etc)
- Texts (purchase order text etc)

## Purchasing organization / Plant data
- Control (delivery time, minimum quantity etc)
- Prices & conditions (gross price, discount, freight etc)
- Statistics (price history, PO statistics etc)
- Texts (purchase order text etc)
A Info Record contains general data that is valid for every purchasing organization or every plant.

It also contains data (e.g. prices and conditions) that is only valid for the relevant purchasing organization or relevant plant. We configure whether conditions are permitted at a plant level.

When we create a purchase order, the system searches for an info record for the purchasing organization/plant combination. If there is no such info record, the system searches for the purchasing organization only.
In the standard system, the following type of texts are set in the info record:

- Internal info memo record – this is an internal comment that is copied to the purchase order item. This text is not printed out.

- PO text in the info record – this is used to describe the PO item. It is copied to the purchase order item and printed out.
### Structure of Info Record (contd)

**Info Record**

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>1</td>
</tr>
<tr>
<td>Purch. Org</td>
<td>1000</td>
</tr>
<tr>
<td>Price</td>
<td>5.00</td>
</tr>
</tbody>
</table>

**Purch. Order**

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purch org.</td>
<td>1000</td>
</tr>
<tr>
<td>Plant</td>
<td>2000</td>
</tr>
<tr>
<td>Material</td>
<td>1</td>
</tr>
<tr>
<td>Price</td>
<td>5.00</td>
</tr>
</tbody>
</table>

---

**Info Record**

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>1</td>
</tr>
<tr>
<td>Purch. Org</td>
<td>1000</td>
</tr>
<tr>
<td>Plant</td>
<td>4000</td>
</tr>
<tr>
<td>Price</td>
<td>6.00</td>
</tr>
</tbody>
</table>

**Purch. Order**

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purch org.</td>
<td>1000</td>
</tr>
<tr>
<td>Plant</td>
<td>4000</td>
</tr>
<tr>
<td>Material</td>
<td>1</td>
</tr>
<tr>
<td>Price</td>
<td>6.00</td>
</tr>
</tbody>
</table>
Info Record update

Updating an Info Record Automatically – (by selecting info update indicator on purchase order, quotation, scheduling agreements in item details)

<table>
<thead>
<tr>
<th>Quotation</th>
<th>Info Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 60000001</td>
<td>Vendor 9999</td>
</tr>
<tr>
<td>1 EA U01 = 25 USD</td>
<td>Material U01</td>
</tr>
<tr>
<td>Discount 3%</td>
<td>Pur. Org. 1000</td>
</tr>
<tr>
<td>Info update</td>
<td>Plant</td>
</tr>
<tr>
<td></td>
<td>Conditions</td>
</tr>
<tr>
<td></td>
<td>Price/UoM 25 USD</td>
</tr>
<tr>
<td></td>
<td>Discount 3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purch. order</th>
<th>Last purchase order</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 4500000001</td>
<td>45000000001</td>
</tr>
<tr>
<td>1 EA U01 = 25 USD</td>
<td></td>
</tr>
<tr>
<td>Discount 3%</td>
<td></td>
</tr>
<tr>
<td>Info update</td>
<td></td>
</tr>
</tbody>
</table>
Info Record update (contd)

- When we create or change quotations and purchase orders, we can use the info update indicator to define that the info record is to be created or updated.
- The system copies the conditions from the quotations (or purchase orders and outline agreements) to the info record.
- The document number from a purchase order or contract release order is updated as the last purchasing document.
- If no info record exists for the combination of vendor, material and organizational level when we create or change a contract, the system creates an info record with the conditions from the contract.
Info Records and Prices

- Info records determine the prices suggested in purchasing documents in two ways:
  - Conditions: Conditions are included if they have been maintained for an info record manually or from a quotation.
  - Last purchase order: If an info record does not contain any conditions, the system reads
    - the number of the last purchasing document in the info record and then suggests the price from this document.
    - In the default values for buyers (customizing), we define how the system handles conditions from the last purchase order.
Info Records and Pricing Conditions

We can define that the conditions from the last purchase order

- Are always copied
- Are not copied when the price is entered manually
- Are never copied
Info record without material master record (e.g. material for direct consumption).
This represents the relationship between a material group (without a material master record) and a vendor.
Source Determination

- In SAP, a source of supply can be a vendor or an outline agreement.
- Sources are administered using source lists and quota arrangements.
- With the source list, we define the preferred or allowed sources of material.
- With the quota arrangement, we specify the share of total requirements over a period to be procured from each source.
- The purpose of source determination is to make it possible for a purchase requisition to be assigned to a source automatically.
Priorities in Source Determination

1. Quota arrangement?
   - 60%
   - 40%
   - Source List

2. Source List
   - Purchase requisition
   - Agreement item
   - Fixed vendor

3. Outline agreement?
   - Purchase requisition
   - Agreement item

4. Info Rec
   - Purchase requisition
   - Fixed vendor
   - 1 piece %
   - Condition $
Master Data for Source Determination

- Material
  - Plant
  - Vendor A
    - Info rec
  - Vendor B
  - Vendor C
    - Outline Agmt

Source list:
- Permissible source
- Permissible Source

Quota Arr:
- 10% of requirement
- 90% of requirement
Source List

Material 001
Plant 2000
---------------
01/01/08 – 12/31/08
Vendor 111 allowed
Vendor 222 allowed
Vendor 333 blocked

Material 002
Plant 2000
---------------
01/01/08 – 05/31/08
Vendor 444 fixed
06/01/08 – 12/31/08
Vendor 555 fixed

Plant 2000
Source list reqt

Material 001
Source list reqt
Source List (contd)

Contract
------------------------
Item    Short      Mat  
cat     text       grp   
M        Office     OFFICE

Maintain Source list

Contract XXX
Item zz
Mat     OFFICE
Grp     
Plant   2000
01/01/08—12/31/08

Exclusion of Materials
Mat     005
Mat     009
Mat     011
Source List (contd)
Source List (contd)

Source list and Quota arr. Usage Indicators on Purchasing view of a material master record
Source List (contd)

Maintenance screen for Source List (ME01)
Source List (contd)

- The source list contains the allowed, preferred and/or blocked sources of supply for a material in a plant that are valid within a certain period.
- Source list records enables us to determine and check sources.
- Fixed sources are always preferred over other sources in the relevant validity period.
- Buyers are not allowed to procure from blocked sources. Blocked sources are not taken into account in source determination.
The MRP indicator in the source list stipulates how the source defined in a source list record is taken into account in material planning.

If the source list requirement exists, a material may not be procured from sources other than those included in the source list. A source list requirement can be specified either for an individual material (in the material master), or for all the materials of a plant (using a customization parameter).
Source List (contd)

- Source list records can be created manually, either directly or from within outline agreement or info record maintenance.
- If we maintain the source list from within a state agreed (central) contract, we can create source lists for several plants in a single process.
- We can create the source list for a material by referencing another material.
Source List (contd)

- Within the contract maintenance function, we can create source list records for a material group for contract items with the category M (material unknown) or W (material group).
- Source list records for material groups define which materials can be released against a contract item with item category M or W.
Material 001
Plant 3000

Period 01/01/2008 -- 12/31/2008

To date:

Vendor 111  60%  300
Vendor 222  40%  200
Quota Arrangement (contd)

Manual maintenance

Updating from Purch docs & planned orders

Quota file
- Validity period
- Procurement type
- Special Proc type
- Vendor
- Procurement Plnt
- Quota
- Quota base qty
- Quota-allocated qty

Defaults in Req via Source Determination function
### Quota Arrangement (contd)

#### Calculation of the Quota Rating

The source with the lowest quota rating represents the effective source.

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Quota</th>
<th>Quota-Alloc qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDD</td>
<td>8</td>
<td>2000</td>
</tr>
<tr>
<td>EEE</td>
<td>2</td>
<td>200</td>
</tr>
</tbody>
</table>

Quota rating = Quota-Alloc qty/Quota
Quota Arrangement (contd)

Usage

The purchasing functions that can be Assigned to a quota arrangement Usage key

Change View "Quota Arrangement Usage": Details

Detailed information
- Purchase order
- BA Schedule Line
- Planned order
- Purchase requisition
- MRP
- Production order
Quota Arrangement (contd)

- If a certain material is to be procured alternately from different sources of supply, these individual sources can be assigned quotas. The quotas indicate the percentages of a total requirements that are to be procured from each of the various sources over a period.

- A quota arrangement is set up for a specific timeframe. A quota arrangement item is created for each source of supply within the period. Only consecutive validity periods can be specified for a material.

- SAP recommended standard internal number range for quota arrangement is between 8000000001 to 8999999999.
Quota Arrangement (contd)

- For a quota arrangement to be applied to a material, the ‘quota arrangement usage’ indicator must be set in the material master record. This indicator specifies quota arrangement application as well as the quota allocated quantity to be updated progressively.
- With quotas, the system calculates which source is next in line with respect to certain requirement.
- A quota arrangement item is no longer suggested as the source if the quota-allocated quantity is equal to or greater than the maximum quantity.
The condition technique is used not only in pricing in the MM purchasing application, it is also used in message determination and batch determination.

In this presentation “Conditions” refers to “pricing conditions” only.
Pricing Conditions

- Pricing describes the price and cost
- Pricing is controlled with condition technique
- Condition technique is used to determine the total cost of purchase in MM

Following are the important components:
- Schema
- Condition Type
- Access sequence
- Condition Table/Condition Record
Price Determination Process (contd)

- **Schema**
  - In the MM area, a calculation schema - a framework of steps used to calculate or determine something - is used among other things to calculate costs, prices, period-end rebates, and taxes.
  - In the calculation schema (pricing procedure), you specify which condition types are to be taken into account in which sequence. In the price (or cost) determination process, the SAP System automatically determines which calculation schema is valid for a business transaction and takes into account, one after another, the condition types it contains.
Price Determination Process (contd)

- **Condition Type**
  The individual conditions are described by means of condition types. There are condition types for the gross price, various discounts and surcharges, freight charges, fixed costs and so on.
  Condition type is a four letter key that controls
  - Calculation type
  - Type of changes allowed
  - Scale basis
  Condition type contains access sequence

- **Access Sequence**
  - There can be more than one table used to define different field combination
  - It is required to search more than one table to fetch a record
  - Defining the sequence in which these tables are to be accessed is known as access sequence
Price Determination Process (contd)

- **Condition Table/Condition Record**
  - Condition table specifies the fields combination
  - System searches through predefined tables in a sequence
  - It is defined in the configuration
  - Condition records is a master data
  - Maintaining values for the condition table is known as condition record
Create Quota Arrangement
Transaction Code MEQ1

Enter material
And plant
Click continue
Create Quota Arrangement (contd)

Add valid to date and click continue. Select the line item and click on Item button.
Create Quota Arrangement (contd)

Maintain Quota Arrangement: Overview of Quota Arr. Items

Enter Procure Type
F – for external Vendor, Quota qty in %
Maximum quantity
Quota base quantity
click continue
Create Quota Arrangement (contd)

Click Save
Change/Delete Quota Arrangement

- Quota arrangement is changed using transaction code MEQ1
- Deletion of Quota Arrangement record is achieved by using MEQ1 and deleting each item in item details by selecting the item and clicking on trash can
- All the changes made can be viewed using MEQ4 Changes to Quota Arrangement
Create Source List
Transaction Code ME01

Enter material and plant
Click to continue
Create Source List (contd)

Enter Valid from and to Dates, Purch Org and order unit and save
Create Source List (contd)

<table>
<thead>
<tr>
<th>Material</th>
<th>53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant</td>
<td>0810</td>
</tr>
</tbody>
</table>

Source list changed
Message appears
Change/Delete Source List (contd)

- Changes to source list are made using transaction code ME01.
- Deletion of source list record is achieved by using ME01 and deleting each item by selecting the item and clicking on trash can.
- All the changes made can be viewed using ME04 Changes to Source List.
Conditions

- **Conditions**
  - As used in the SAP system, the term “conditions” relates to prices, surcharges, and discounts. The condition technique is a flexible pricing instrument for purchasing, allowing the processing of both simple price structures and more complex interrelationships.
  - Conditions can be defined at a variety of levels. The levels most commonly encountered are pre-defined in the standard version of MM for determining prices, discounts, and surcharges.
  - Conditions can be stored for one or all the materials supplied by a vendor.
The pricing conditions pre-defined in the standard system covers discounts and surcharges (percentage or absolute amount), delivery costs, cash (prompt payment) discount, and taxes.

However, the standard version can be extended to support specific requirements for determining pricing automatically.
Conditions and Price Determination

This component enables you to store pricing stipulations agreed with the vendor (such as applicable discounts or surcharges, or stipulations regarding the payment of freight costs) in the system. You can enter these conditions in quotations, outline purchase agreements, and info records. You also have the option of entering general conditions at vendor level, for example. The system then applies the conditions in determining the price in purchase orders (POs). You can enter further conditions in the PO itself.

There are three kinds of prices in Purchasing:

- **Gross price**: Price without taking any possible discounts and surcharges into account.
- **Net price**: Price taking any applicable discounts and surcharges into account.
- **Effective price**: Net price after deduction of cash discount, with allowance for any miscellaneous provisions, delivery costs, and non-deductible taxes.
Conditions (contd)

- **Time-Dependent and Time-Independent Conditions**
  - A distinction is made between conditions that are valid for a certain period and conditions for which no special validity period can be specified. In the latter case, the validity period corresponds to that of the purchasing document. Whether time-dependent or time-independent conditions are created is determined via the document type.
  - If you enter a percentage vendor discount in a PO, this is a time independent condition. However, if you enter this discount in a contract, the condition is time-dependent.

- **Conditions Requiring Subsequent (End-of-Period) Settlement**
  - You can also store conditions that do not take effect immediately, but only at the end of a certain period. Settlement with regard to such conditions takes place subsequent to the settlement of vendor invoices relating to individual purchase orders.
Conditions in Info Records use

- **Conditions Per Order Unit**
  - You can enter separate conditions for each order unit in the info record. During the source determination process, the system will then suggest the order unit for which prices have been maintained.
  - If an info record contains prices for the order units "crate" and "pallet", for example, you can only order from this vendor in these units.
  - If no conditions have been maintained for the order unit, you can order in the units maintained in the info record or in the material master record.
Conditions (contd)

- **Info Record Price Versus PO Price**
  - The net price in the info record and the net price in the purchase order are two different prices.
  - The net price of an item in the info record is based on the conditions stipulated in the info record. If you change the conditions, the net price in the info record is recalculated and the pricing date adjusted accordingly.
  - In contrast, the price in the purchase order may reflect the deduction of a quantity discount according to a price/quantity scale.
  - As a rule, the conditions from the info record are adopted in the PO. However, if a price/quantity scale has been defined, the price for the relevant order quantity is taken.
Variant Conditions

- You can maintain variant conditions for configurable materials. Using variant conditions, you can define discounts and surcharges for different material finishes for instance
- The vendor charges an extra $20 for bicycle frames with a silver metallic finish. This surcharge can be added to the price by means of a variant condition
Conditions (contd)

- **Master Conditions**
  - Master conditions are conditions that are of prime significance for purchase orders. The process of price determination is carried out using master conditions.
  - The conditions set out in info records are master conditions that apply to all Pos for a material issued to a vendor. Master conditions are also stored in contracts.
  - However, master conditions can also depend on combinations of different criteria, such as:
    - Purchasing organization
    - Vendor or invoicing party (if the invoicing party differs from the actual supplier of the goods)
Conditions (contd)

- Item-specific criteria such as material, material group, plant, or material type
- A specific contract item

- **Validity Period Conditions**
  - Validity Period Conditions are valid for a certain period. For example, a vendor’s conditions can be defined for a specific year
Central Maintenance of Master Conditions

- Purchasing can maintain master conditions centrally, without having to change the conditions in each purchasing info record or contract relating to the vendor.
- Using this function, purchasing can quickly check a vendor’s pricing strategy and quickly change prices and discount rates.
- You can determine a vendor’s discounts and surcharges on a global basis. In this way, purchasing can define a global discount if the vendor grants a percentage or absolute discount on all POs placed with him.
Conditions (contd)

- You can define conditions in advance. For example, you can store a vendor’s price list for the next year in the system immediately. When the beginning of the validity period is reached, the new prices, discounts, and surcharges are automatically used in purchase price determination.

- For each condition, you can specify whether and to what extent manual changes Upper and Lower Limits to the price, discount, or surcharge that has been determined are permitted.

- Limits can be set in both percentages and absolute amounts.
Conditions (contd)

- Subsequent Settlement with Respect to Conditions
  A vendor’s price can be recalculated after the PO is invoiced. For this reason, a distinction is made between conditions that are effective immediately upon receipt of the invoice and conditions effective at a later date. For example, volume rebates can be calculated at the end of a month or year – long after the invoice has been paid.

- Invoices for POs can also be settled retroactively (subject to the total purchase volume)
The following are some of the condition types available in SAP R/3. Most are maintained directly on the purchase order by the buyer or in a vendor rebate agreement. We can create our own condition types when necessary.

- PB00 Gross Price
- FRA1 Freight
- A001 Rebate (quantity)
- RL01 Vendor discount %
- R000 Discount % on gross
- RA00 Gross % on net
- RB00 Absolute discount
Condition Types - Example

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB00</td>
<td>Gross price</td>
<td>Condition class: Prices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Calculation type: Quantity-dependent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Condition cat.: Base price</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access sequence: Gross price</td>
</tr>
<tr>
<td>FRB1</td>
<td>Freight, absolute</td>
<td>Condition class: Discount/surcharge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Calculation type: Fixed amount</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Condition cat.: Delivery costs</td>
</tr>
<tr>
<td>SKTO</td>
<td>Cash discount</td>
<td>Condition class: Discount/surcharge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Calculation type: Percentage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Condition cat.: Cash discount</td>
</tr>
</tbody>
</table>
Condition Records and Condition Tables

Condition table A017 (info record with plant)

<table>
<thead>
<tr>
<th>Cond. ty.</th>
<th>Vendor</th>
<th>Material</th>
<th>Pur. org.</th>
<th>Plant</th>
<th>...</th>
<th>Cond. rec. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB00</td>
<td>A</td>
<td>1</td>
<td>1000</td>
<td>1000</td>
<td>...</td>
<td>1234</td>
</tr>
</tbody>
</table>

Condition table A018 (info record without plant)

<table>
<thead>
<tr>
<th>Cond. ty.</th>
<th>Vendor</th>
<th>Material</th>
<th>Pur. org.</th>
<th>...</th>
<th>Cond. rec. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB00</td>
<td>A</td>
<td>1</td>
<td>1000</td>
<td>...</td>
<td>4321</td>
</tr>
</tbody>
</table>

Table KONP (item conditions)

<table>
<thead>
<tr>
<th>Cond. rec. no.</th>
<th>Cond. ty.</th>
<th>...</th>
<th>Cond. amount</th>
<th>...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234</td>
<td>PB00</td>
<td>...</td>
<td>10.00</td>
<td>...</td>
</tr>
<tr>
<td>4321</td>
<td>PB00</td>
<td>...</td>
<td>11.00</td>
<td>...</td>
</tr>
</tbody>
</table>
Price determination Process Overview

Calculation schema
Step Cond. type ...
1 PB00
.
.
.
Condition type: PB00
Access sequence: 0002

Purch. order
Pur. org. 1000
Vendor A
For plant 1000
Material 1
10 pc 50.00

Access sequence: 0002
Condition tables:
1. Contract item (excl.)
2. Plant info record (excl.)
3. Info record (excl.)
.
.
.
Condition table
Contract item
No record exists

Condition table
Plant info record
Material 1 50.00
From 500 pc 48.00
Scales

- In SAP a scale can only be applied to a single Purchase Order – not to more Purchase orders
- A scale is linked to a price condition

**Example:**

- PO1 with 80 items: Total price = 80 x 50$ = 4,000 $
- PO2 with 350 items: Total price = 100 x 50$ + 100 x 48$ + 100 x 46$ + 50 x 45$ = 16,650 $
- PO3 with 200 items: Total price = 100 x 50$ + 100 x 48$ = 9,800 $
SAP Info Record Screens
Info Record – Create Initial screen (ME11)

Required Entries:
- Vendor
- Material
- Purch. Org
- Plant – optional
Info Record – Create (contd)

No mandatory fields on this screen. Entries from Vendor and material master Will appear if present.
Info Record – Create (contd)
Info Record – Create (contd)

No mandatory entries on this screen
Info Record – Create (contd)

No required entries
On this screen
Info record notes and
PO text can be entered
Info Record – Create (contd)

Pricing conditions are entered e.g. Gross Price, Freight, Discount etc.
Info Record – Create (contd)

After saving Info Record is created
Info Record – Change
Initial screen (ME12)

Enter Info Record Number that Requires change
After entering Org Level via edit menu select conditions screen for conditions change.
Info Record – Change (contd)

Save to complete
The changes
Info Record – Display
Initial screen (ME13)
Info Record – Display (contd)

Enter Org Level via initial screen or via edit/org levels to view Purch Org Data 1, Conditions screens
After entering the Org. level Conditions and Purch Org Data screen is accessed.
Info Record – Flag for deletion
Initial screen (ME15)

Enter Info Record number
Info Record – Flag for deletion (contd)

Flag Info Record for Deletion: Initial Screen

Vendor: TESTVEN1
Material: 90
Purchasing Org:
Plant:
Info Record:

Info category:
- Standard
- Subcontracting
- Pipeline
- Consignment

Enter and save

Purchase info record 5300000000 changed
Create Condition Record
Transaction Code MEK1

<table>
<thead>
<tr>
<th>Condition type</th>
<th>Gross Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Create Condition Record (contd)

Enter condition type e.g. PB00
Click on Key Combination
And select e.g. Material Info Record
and continue
Create Condition Record (contd)

Enter Vendor Material, P. Org And select 0 for standard Info Rec category and make entries Click on Details
Create Condition Record (contd)

Enter Upper & Lower Limits (optional)
Click on Scales symbol (fourth from left)
Create Condition Record (contd)

Enter scales details (optional entries) And save “Condition records saved” message appears
Change Condition Record
Transaction code MEK2

Enter transaction code MEK2
Enter the condition type
Select Material info Record after clicking on Key Combination
Click continue
(selected the record created previously)
Change Condition Record (contd)

<table>
<thead>
<tr>
<th>Vendor</th>
<th>TESTVEN1</th>
<th>ABC Corp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>98</td>
<td>Uniform medium</td>
</tr>
<tr>
<td>Plant</td>
<td>5510</td>
<td>FCC plant 5510</td>
</tr>
<tr>
<td>Info record category</td>
<td>6</td>
<td>to 6</td>
</tr>
<tr>
<td>Valid On</td>
<td>09/09/2018</td>
<td></td>
</tr>
</tbody>
</table>

Enter Vendor, Material, Purch Organization, Plant and execute
Change Condition Record (contd)

Click on Details and change Upper Limit and save
“Condition records Saved” appears
**Condition Record for Deletion**

### Deletion Indicator for Condition Item
Indicates whether the condition is no longer taken into account during document processing. The condition is deleted during the next reorganization run.

### Repeat the change process
Go to Details
Select the “Deletion Indicator” and save “Condition records saved” appears.
Special Topics
Questions?