



MEETING MINUTES

State of Louisiana ERP Project

Blueprint Workshop / MRP Specific Material Master Record Data

Session: LOG-MD-004

When: 10/07/2008, 8:30am to 4:30pm

Location: DOTD 2nd Floor – War Room

Attendees: (no representatives from LDWF or Veterans were in attendance)

No.	Name	Agency	Invited?	Day 1	Comments
1.	Anderson, Shannon	DPS	Y	N	
2.	Ardoin, Diane	DOTD	Y	N	
3.	Bielkiewicz, Erin	DPS	Y	N	
4.	Bickham, Thomas	DOC	Y	N	
5.	Breaux, Margaret	DOTD	Y	Y	
6.	Cali, Dom	ERP DOTD Team	Y	N	
7.	Denham, Brad	ERP Team	Y	N	
8.	Dutt, Dev	ERP Team	Y	Y	
9.	Elliott, Sterrie	ERP Team	Y	Y	
10.	Evans, Karen	Veterans	Y	N	
11.	Guedry, Mary	LDWF	Y	N	
12.	Hebert, Sharon	ERP Team	Y	N	
13.	Humm, Lori	ERP Team	Y	N	
14.	Jarreau, Mary	DOTD	Y	Y	
15.	Kees, Wynette	LDWF	Y	N	
16.	Ladhur, Jack	ERP Team	Y	Y	
17.	Lawrence, Bernadette	DOTD	Y	Y	
18.	Leerhoy, Mike	ERP Team	Y	Y	
19.	Maranto, Cynthia	ERP Team	Y	Y	
20.	Nolan, Debbie	Veterans	Y	N	
21.	Olivier, Hebert	ERP Team	Y	Y	
22.	Pierce, Karen	ERP Team	Y	Y	
23.	Roubique, Margaret	DOC	Y	N	
24.	Rogers, Belinda	ERP Team	Y	N	
25.	Taylor, Danny	DPS	Y	Y	
26.	Templet, Marty	DOC	Y	Y	
27.	Trivedi, Mandar	ERP Team	Y	Y	
28.	Johnson, Darrell	DOTD	Y	Y	Arrived after lunch break

<i>Agenda Item and Notes</i>	<i>Owner(s)</i>	<i>Action Items & Assignments</i>	<i>Comments / Follow-up</i>
1. Logistics, Ground Rules, & Introductions	Karen Pierce	•	
2. Workshop Objectives -Review general Inventory Replenishment & MRP concepts, As-Is processes and logic. -Define key MRP Material Master functionality and control data.	Karen Pierce	Future Considerations: <ul style="list-style-type: none"> • MRP types • Lot sizing procedures • Special procurement keys • Lead time elements to be applied • Use of MRP Areas or Storage Location MRP • Definition and use of MRP Controller • Locations where MRP applies • Use of statistical forecast • Functional development objects required • Conversion requirements and logic 	
3. Project Overview/Timeline	Karen Pierce	•	
4. Business Process Review -SAP Terms Glossary -Process improvement opportunities -SAP concepts & functionality -Leading practices -Enterprise readiness challenges	Mike Leerhoy Mandar Trivedi Dev Dutt Karen Pierce	•	Hard copies were provided of SAP Glossary and PowerPoint slides and Questionnaire for Determining MRP Types.
5. Action Items		<ul style="list-style-type: none"> • Look at use of vendor consignment (special procurement keys) relating to fuel • Review items currently in inventory but not received at a warehouse, non-storable (i.e. hot mix, concrete) used on demand (also added to Integration Points to discuss with Linear Assets) • Resolve issue of items loaned to non-agency entities or contractors that are not returned • Gather info regarding which plants will be the supplying plants for a particular material. 	

<i>Agenda Item and Notes</i>	<i>Owner(s)</i>	<i>Action Items & Assignments</i>	<i>Comments / Follow-up</i>
6. Key Decisions		•	
7. Organizational Impact		•	
8. Parking Lot		• Numbering schemes for requisitions in association with MRP	
9. FRICE-W (F) Forms (R) Reports (I) Interfaces (C) Conversions (E) Enhancements (W) Workflow		<ul style="list-style-type: none"> • (W) – Look into MRP generated stock transfers being two step (issue/receipt) • (C) – Conversion of historical consumption data 	
10. Integration Points		<ul style="list-style-type: none"> • Discuss with Purchasing re MRP to: blanket orders, scheduling orders, etc. • Discuss with Linear Assets how the concrete and hot mix inventories will be handled in SAP • Integrate with Purchasing to include the MRP Controller as an approver to MRP generated purchase requisitions 	

Discussion:

Karen – In opening statements, gave general overview of MRP (Material Requirements Planning). Affects both inventory and warehousing. Think enterprise – now is the time to make changes.

As-Is processes

Karen – In reviewing current DPS replenishment report and inventory replenishment process slides, noted the following:

- The entire process is essentially MRP, but currently there is no formal systematic way of doing it. We use replenishment reports to see our current stock levels and what may need to be ordered. However, reports are not always used; sometimes it is just the agency's warehouse person's experience (i.e. a storm coming – we need to order certain materials to prepare for the storm)
- Venice is not integrated with AGPS. Functionality is available in Venice but is not currently used (i.e. back order quantity – otherwise dual entry will be needed).
- Anything over \$25,000 goes to State Purchasing (rarely happens). This adds to lead times.
- Stock item numbers are going away. In the new system, we will have a material master record number. Search can be by description.

Sterrie – In reviewing current DOTD inventory replenishment process slide, noted the following:

- Anything over \$5,000 goes to DOTD Central Purchasing

General MRP Concepts

Mike – Gave overview of general MRP concepts. Different techniques used for scheduling – Forecast (push based); Replenishment using reorder points or min/max (pull based) – only kicks out when inventory is below min; Make-to order – order as needed. Purpose of Inventory – used as buffer. Gave examples of how variations in consumption, customer demands, lead times (delivery times), and uncertain supplies from vendors require different safety stocks. When there is a large variation in consumption of stock, a larger safety stock is needed.

Glossary Review

Mike – Materials Requirement Planning levels can be at plant, MRP Area or Storage Location level. Storage Location level is not widely used because of its limitations. Output from the MRP will generate purchase requisitions for the items needed.

Jack – Does the approval process for MRP generated requisitions go through the same approval process as regular purchase requisitions?

Karen - MRP will generate purchase requisitions for the warehouse manager to review to decide if requisition should be forwarded to Purchasing. Then the same approval process will take place to assure money is available.

Jack – Are MRP requisitions and regular requisitions distinguished in SAP?

Mike – It can be done. The system can automatically create a flag to distinguish between the two.

Sterrie – Why do you have to have them distinguished?

Jack – So you can have different approval processes.

Dev – One solution is that requisition numbers can be different number ranges to distinguish the difference.

Karen – Do we see a need for that?

Margaret – If SAP capable of doing it - OK, but not a real issue for us.

Mike – Issue should be put on Parking Lot – not in the scheme of this blueprint.

MRP Functionality

Mike – Gave overviews of different MRP Functionality types: Deterministic Planning – uses higher level plan/forecast (sales forecasting, BOM, spare parts); Consumption-Based Planning – uses forecast based planning or reorder point planning; No Materials Planning – you do not have to use MRP on all materials. We will focus mainly on consumption based planning during this session.

Karen – MRP can be set up for individual items – not warehouse level.

Jack – Will we discuss which MRP types to use for different materials?

Mike – This is a business decision and will need to be looked at by each agency. It is really based on whether the material is a stock item or non-stock item.

Mike – Reorder point planning only compares existing stock to open purchase order quantities and firm Purchase Requisition quantities.

Karen - Firm Purchase Requisitions are those that are being processed (approved) through the system. Does not include the static requisitions that have not begun to be processed.

Mike – The Forecast Driven MRP is similar to the Plan Driven MRP (Deterministic), but only considers forecast requirements quantities – not customer requirements, planned independent requirements, material reservations, etc.

Dev – Bernadette expressed concern with non-expected requirements (i.e. hurricane supplies)

Bernadette – If you know you will need extra supplies, it is easier to order all of the same type of items (all boot sizes) at one time instead of waiting to get to minimum quantity. How will this work in SAP?

Mike – The MRP can be overridden at any time, meaning you can place an order for material at any time.

Karen – Also, seasonal requirements can be used to kick off MRP.

Mike – Prerequisites for MRP functionality are: a valid MRP Type; a valid material status (i.e. if material is blocked for no ordering, or the material master in the process of being created, the material status is not valid); and MRP data must be properly maintained.

Sterrie – Can the same material number be used for a material to be made and also to be bought?

Mike – Yes. The Material Master can be set as undecided – will create a planned order vs. a purchase requisition.

Mike – Realistic lead times are needed to allow the forecasts and MRP runs to produce a correct MRP List. Do you know lead times now? Are they documented?

Sterrie – We have to go by the vendor's word as to delivery time (not always accurate). Purchase Order processing time is known. The Vendor's actual delivery time is not documented.

Mike – It is important to have a realistic delivery time to have MRP work effectively.

Jack - Do we currently capture lead times for individual materials?

Sterrie – Some items we do, some we don't. Certain items do have standard industry lead times.

Margaret – We have accurate and documented lead times on all items that we order.

Mike – The Stock/Requirements List is the most important element in MRP functionality. It is a live function (includes reservations, deliveries, open Purchase Orders, firm Purchase Requisitions, firm Purchase Orders for each material). Going forward, it is critical that items are received in the system without delay because MRP has to look at what is available to determine what is needed.

Key MRP Master Data – MRP Types

Mike – The MRP type is where we tell the system if it will be a plan driven, forecast driven, plant driven or MRP area driven MRP.

Mandar – An MRP area can be used if one material is used in two areas, but based on different criteria. For example, one material is used for plan driven in one area and also consumption driven in another area. It can be set up as a consumption driven MRP type and also a plan driven MRP type.

Herbert - If one material hits two reorder points at the same time, do two different purchase requisitions get generated?

Karen – Yes. Purchasing can combine the two requisitions into one if they wish to do so.

Jack – But we will probably keep the two requisitions separate for organizational purposes.

Mike – Typically the reorder point takes on the role as the min. But you can have a min and a reorder point (i.e. the min may be for safety stock).

Key MRP Master Data – Lot-sizing Procedure

Mike - Lot-sizing is divided into 3 groups: static (always order same quantity); period (planned/forecasted needs for a certain period); Optimum (looks at what the ideal lots to purchase are - rarely used). For HB lot-size (HB=Replenish to max Stock Level), the reorder point becomes the min.

Key MRP Master Data – Special Procurement Keys

Mike – Special Procurement Keys are used to determine which kind of proposal we want for an MRP (i.e. need materials from an external source). Example of possible special procurement types are: Stock transfers (i.e. district is plant – parish gets items from district via stock transfer); Vendor Consignment (material is not billed until consumed); Vendor Managed (vendor comes to warehouse, takes inventory of items and then stocks the shelves with items that have been consumed and bills for consumed items).

Marty – Should vendor consignment be used for fuel?

Margaret – Is this way for us now. Fuel is not billed until it is consumed. And it does not go into inventory. Hot mix is not received as inventory either. It is picked up at the plant and driven to the jobsite(s). The truckload may go to several different jobsites so it is charged to several different work orders. Work orders are not typically known at the time of pick up from the plant, so the Purchase Orders are cut after we know where it was used.

Mike – In that case, there are two options on how to handle it. One option is to cut the PO as the truck goes out, and then receive into inventory and then issue out via work order. Second option is to not cut the PO until you know what the work order number is. Then you can just do a receipt and it will be charged to the work order.

Margaret – We are currently doing partial receipts against blanket Purchase Orders for asphalt. We issue a blanket PO for an estimated usage and do partial receipts against the blanket PO as the asphalt is used. When all quantity is used, we either create a new blanket PO or increase the quantity on the current blanket PO.

Karen – Should this be added to the Action Items list or Integration Points list to identify how SAP will handle? (Was added to the Integration Points list to discuss with Linear Assets how these inventories will be handled in SAP. Also added to the Action Items list to review which materials fit this scenario.)

Key MRP Master Data – Lead Time Elements

Mike – Lead times in MRP Master Data don't have to include all 3 elements (purchasing processing, planned delivery, good receipt processing time) – can focus only on planned delivery time.

Key MRP Master Data – MRP Areas

Mike – MRP Areas are used when you want to carry out material requirements planning separately. For instance, an MRP Area can be used for managing inventory items used in subcontracting (send inventory items out to vendor to have item modified then returned to inventory after modified).

Karen – An example of subcontracting is a cable assembly. We issue out different inventory items (red wire, green wire, white wire) to a subcontractor for them to create the cable assembly. The different items are returned as one assembled item with a new material number assigned to the one assembled item.

Bernadette – We sometimes take items out of inventory to give to contractors because they need the items to stay on schedule. They may have placed an order for the items, but the delivery date is past the work order date. Sometimes we get paid back, but not always. If not, it comes out of our budget.

Sterrie - We do a shortage on these items and have to explain to auditors why a shortage was done. The contractor is supposed to place an order for the item(s) and when their order is received, it is delivered to us to pay us back, but this does not always happen.

Karen – SAP should help you get your funds back because you would show it as an issue and charge the contractor for the item at the time of issue.

Mike – There are three options in SAP for handling this:

- 1) Put the items in blocked stock. Once you get contractor's order in, unblock the stock.
- 2) Issue against a cost center that the project is assigned to.
- 3) Sell outright to the contractor.

Karen – Future practice should probably be to get a project number, cost center, or work order # before issuing the item out. Add this to the list of Action Items to address the situation.

Bernadette – Question regarding PO's for Safety funds – PO is entered by DOTD using DOTD funding and then after the items are received and prior to payment being made, the PO is backed out or deleted and then charged to the safety fund. How will this be handled in SAP?

Mike – Going forward, you would use the project number upfront on the requisition/PO.

MRP Organizational Data

Mike – A Storage Location MRP is very limited. It only has a reorder point and doesn't consider min/max, requirements, etc. A Plant MRP area can use all MRP functionality and is not limited to the reorder point planning procedure. You can assign an MRP for a particular material at plant level and also at MRP Area level.

Karen – (explained the MRP Controller role) If you have one warehouse with two different people in the warehouse handling the inventory, you can assign separate groups of inventory items for each person to be responsible for. For example, the Warehouse Manager is assigned as the MRP controller responsible for a certain group of items; another warehouse person is assigned as the MRP controller responsible for another group of items. Or you could have one person responsible for a certain district and another person responsible for a different district, etc.

Mike – You can use the MRP Controllers as security, but remember the draw back if one is out of office. This will require process evaluation on how we define who the various MRP controllers for the various agency warehouses will be. Plant can also be used as security (i.e. DOTD Plant cannot have authorization within the DPS Plant).

Organizational Levels

Mike – Company Code is the legal entity. Plants can only be assigned to one company code.

Karen – HR currently has two company codes – the first is for standard state agencies and the second is for special groups like universities with their own budgets. But we are leaning very heavily towards having only one company code for the State of Louisiana with this implementation.

Mike – The main item that needs to be done to implement MRP is to map the LA Gov organization to the plants, storage locations and MRP areas. By defining MRP at a plant level, it will give us the maximum functionality going forward.

Karen – Example of MRP area functionality: District is the plant. MRP is at plant level. You can split up your parishes into storage locations and set up a separate MRP area for each storage location. This would allow you to maintain a different min/max for each storage location and/or MRP area.

Margaret – Most of our stock transfers are parish to parish – not district to parish.

Mike – Remember that you can always do a stock transport order to move items from parish to parish (or storage location to storage location).

Karen – MRP areas are the only way to set up different min/max's for separate storage locations within a plant.

Mike – (created drawing on board to explain how to have various min/max levels maintained) District is the plant. Lafayette is separated into 3 storage locations within the plant (District). Shared materials between two of the three Lafayette storage locations have the same min/max levels, so will have the MRP at the Plant (District) level. The third Lafayette storage location has a different min/max than the other two, so an MRP area is created for that storage location. When an MRP run takes effect for this MRP area, it first checks the min/max's of the two storage locations with MRP at Plant level and draws from those two storage locations if material is available. If material is not available at those two storage locations, it draws from the plant.

Live demonstration in SAP by Mike Leerhoy

Material Master fields:

- MRP1, MRP2, MRP3 (will probably never use) & MRP 4 tabs
- Info on these tabs are all for plant level MRPs
 - All fields should be available to the MRP Controller so they can make changes
 - “Storage location for EP” on MRP2 is the delivery location
 - “Planned delivery time” on MRP2 – if no value is entered, then it assumes 0 days

MRP Area Button (at bottom of MRP1 screen)

- Used when setting up an MRP Area
- Stock transfers are one step (one step to reduce inventory from one location and increase inventory in another location)
- Stock transports are two step (1st step to create transport request/transport order/issue – 2nd step to receive at other location)
- MRP Stock transfers can be configured to be a two step process (added to FRICE-W)

MRP Run:

- Review stage is available prior to release of MRP Requisitions
- Items on the MRP list can be deleted if not needed
- Planned delivery time must be manually maintained if it changes

Statistical Forecast

Mike - Do not use for materials that are rarely used. Use only if material has a steady consumption rate, not an erratic rate. Consumption should be fairly constant to use consumption based planning.

Closing

Karen – In closing statements: I foresee us using MRP Areas or MRP at plant level. Not at storage location level because you lose the min/mix reference.