DMSMS/OBSOLETECE STUDIES- IDENTIFYING RESOURCES TO MITIGATE THE IMPACT OF OBSOLETECE

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Vinh Phan
Engineering Support
NAVAIR 6.7.1.6 DMSMS Branch
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Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std Z39-18
Overview

- DMSMS 3 Phased Process
- Bill of Materials (BOM)
- DMSMS Tools Utilization
- Summary
Phase 1 – Program Establishment:

- **Determine Program DMSMS Requirements**
  - Identify what information you will need to track
  - Identify Metrics you will need to capture

- **Draft a DMSMS Management Plan**
  - Create a DMSMS Database and Case Sheet to track case files
  - Identify stakeholders and invite them to participate on a team

- **Establish a DMSMS Management Team (DMT)**
  - Establish Teaming Agreements - Charter – MOAs - NDAs
  - Establish Roles and Responsibilities
  - Set Goals
  - Create DMSMS DMT processes and procedures
  - Identify and Acquire Proactive DMSMS Management, Monitoring, Logistics, and Reliability Tools needed
  - Refine and Publish Plan

- **Continue to Phase 2: Data Collection and Analysis**
Phase 2 – Data Collection and Analysis:

Determine what Systems/WRA/SRA you need to assess/monitor -Prioritize using cost & readiness degraders, reliability, tech. roadmaps etc...

Acquire a current BOM -Determine level of indenture -Acquire from OEM or -Build an updated BOM and -Validate/Establish System Configuration Baseline

Load and Monitor BOMs in DMSMS Tool

Perform Health Analysis with Proactive DMSMS Tools. Triggers/Alerts

Phase 2 – Data Collection and Analysis:

Phase 1 Completed or being done in conjunction with Phase 1

Preliminary Obsolescence Assessment -Identify and Prioritize which components may be DMSMS issues

Identify which System, WRA, SRA is affected

Evaluate DMSMS issues' impact on each stakeholder

Review technology roadmap

Look at prior DMSMS Actions for this system

Integrate Supply/Demand Information

Reliability and Maintainability (R&M)

Check SDW for Resolutions

Perform Analysis of Alternatives (AoA)/BCA, as required

DMT approves recommendation(s)

Continue to Phase 3: Reporting, Metrics, and Feedback

Research potential solution options for DMSMS issues and their effects on each stakeholder -Existing Stock -Alternate -Substitute -Aftermarket -Emulation -Lot Buy -Redesign

Integrate Supply/Demand Information

Reliability and Maintainability (R&M)

Continue to Phase 3: Reporting, Metrics, and Feedback
Possible Options

Component Solution--------System Replacement

Aftermarket Manufacturer

Box Redesign/Subsystem Replacement

Chip (IC) Emulation

Full System Replacement

Part Substitution

Card Emulation

System Redesign/Box Replacement

Life-of-Type Buy or Bridge Buy

$ $ $ $ $
Phase 3 – Reporting, Metrics, and Feedback:

Phase 2 Completed

DMT recommends/reports range of option(s) to Program Manager

- No
- Go

Option is Rejected

Option is approved by PM and implemented

Go back to Phase 2: Load and Monitor BOMs in DMSMS Tool (#12)

Process Step # as determined by PM

Update DMSMS Database

Update Case Sheet

Compute and Record Metrics

Close DMSMS Case File

Feedback

Shared Data Warehouse (SDW)

Update Configuration Management

Update BOM

Update Tools

Engineering Evaluation

Testing Validation

Logistics Assessment
Bill of Materials (BOM)

• Indentured BOM
  – Displays Next Higher Assembly, Sub-assembly and Components level
  – Easy to trace total parts quantity used in the system/box. Helps build strong cases for overall redesign efforts/decisions

• Flat BOM
  – A list of part numbers (no indenturing structure)
  – Common type of BOM received from OEMs and Suppliers when requested
Indentured Systems

Level 0: System

Level 1: WRA/LRU/Box

Level 2: SRA/SRU/Module/Board

Level 3: CCA/SSRA

Level 4: Component
## Indentured BOM Sample

<table>
<thead>
<tr>
<th>A</th>
<th>Internal Part Number</th>
<th>Indenture Code</th>
<th>Part Number</th>
<th>MFR Name</th>
<th>Qty per BOM</th>
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**Notes:**
- The table above is an example of an indentured bill of materials (BOM) sample.
- Each row represents a component with its internal part number, indenture code, part number, MFR name, and quantity per BOM.
- The BOM is used to track and manage inventory and production processes.
DMSMS Research Tools

• Government Tools
  – Great use for parts with NSNs to obtain logistics data, vendors/suppliers info, stock inventory…

• Industry Predictive Tools
  – Used to obtain manufacturer status for active and passive components. Some display inventory for DLA managed items of supply, as well as aftermarket sources, alerts, etc…
Logistic Tools

- Haystack has FLIS data and hyperlinks connected other tools/databases
  - Batch load capabilities are useful for retrieving NSNs that tie to part numbers

![Logistic Tools Diagram]
Logistic Tools (cont’d)

• HAYSTACK integration with databases makes APL/AEL available online.
  – These part lists can be used to build BOMs
Logistic Tools (cont’d)

ILSmart is a subscription tool useful for finding inventory availability for parts.

ILSmart.com

Parts Availability Results

Want supply and demand plus pricing for part? Click Here

Always show condition codes: ☑ NE ☑ NS ☑ OH ☑ SV ☑ AR

ILS Market - Updated No Less than Monthly

Century Components Corp (AXRX)
Phone: 1-817-831-8301
Fax: 1-817-831-8344

HUB, BODY

Human Agencies (RQYG)
Phone: 1-817-831-8301
Fax: 1-817-831-8344

HUB, BODY
Logistic Tools (cont’d)

DoD EMALL - Online shopping portal where you can order parts using MILSTRIP or government credit card. Contains information of other activities using the common part. Multiple parts search capability.
Logistic Tools (cont’d)

• Government-Industry Data Exchange Program (GIDEP)
  – Manufacturing part statuses/ alert notifications
  – Counterfeit reports
  – SOS/UDR services

Part Identifier Results

Part Set Information can be viewed by clicking on the appropriate Part Identifier link below. Document text and images can be viewed by clicking on the appropriate Document Number link below.
GIDEP (cont’d)

You receive this GIDEP message according to your registration for UDRs [SOS or RFI]. To unsubscribe, please use the on-line forms at https://members.gidep.org/services/pushmail/pushmail.htm and uncheck the selection for this list. You also can contact the GIDEP Help Desk at 851.898.3207, or by email at mailto:rosten@gidep.org and request to be removed from the list.

If you have any information DIRECTLY APPLICABLE to this request, please respond to the on-line response-form provided via this link:

https://gidep-data.gidep.org/cgi-bin/unicgi?key_find3433473

3. DATE: 13 JULY 2010
4. SUBJECT CATEGORY: SOURCE OF SUPPLY REQUEST FOR POTentiOMETER, DIGITAL

5. TYPE OF DATA NEEDED:

   TEST
   DESIGN
   METROLOGY
   FAILURE RATE
   FAILURE EXPERIENCE
 X SOURCE OF SUPPLY
   FAILURE MODE
   SPECIFICATION
   METHODOLOGY
   MAINTENANCE
   OTHER:

6. COMPONENT/PART/MATERIAL/TEST EQUIPMENT/PROCESS DESCRIPTION:

   SOURCE OF SUPPLY DATA INFORMATION NEEDED: SPECIFIC PART

   SOURCE OF SUPPLY REQUEST FOR OBSOLETE MAXIM IC POT DIGITAL 1-WIRE 100K GT50C.

   REQUEST EXPIRATION DATE: 11 OCTOBER 2011

7A. MANUFACTURER: MAXIM/DALLAS
7B. MANUFACTURER CAGE CODE: NOT AVAILABLE

8A. MANUFACTURER PART NUMBER: DS1800P
8B. PART QUANTITY: 1000 PCS
Predictive Tools

• Web based
• Spec sheets
• Manufacturer statuses mainly for passive and active components
• BOM management/monitoring
• Ad hoc report capability
• Alert notifications
• Out-year component life cycle prediction
• Systems health
Predictive Tools (cont’d)
Predictive Tools (cont’d)

Integrated with other tools/databases to report counterfeiting
Conclusion

- No “One Stop Shop” DMSMS tool for all part type researches
- No DMSMS predictive tool developed for mechanics to date
- Utilize government tools for logistic data
- Explore the organic capabilities/availability within DoD
Questions???