DoD Parts Management
Under the
Defense Standardization Program

DoD Parts Management Reengineering
Industry Day
19 May 2009

Director
Defense Standardization Program Office

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│  DUSD (Logistics & Materiel Readiness)  │
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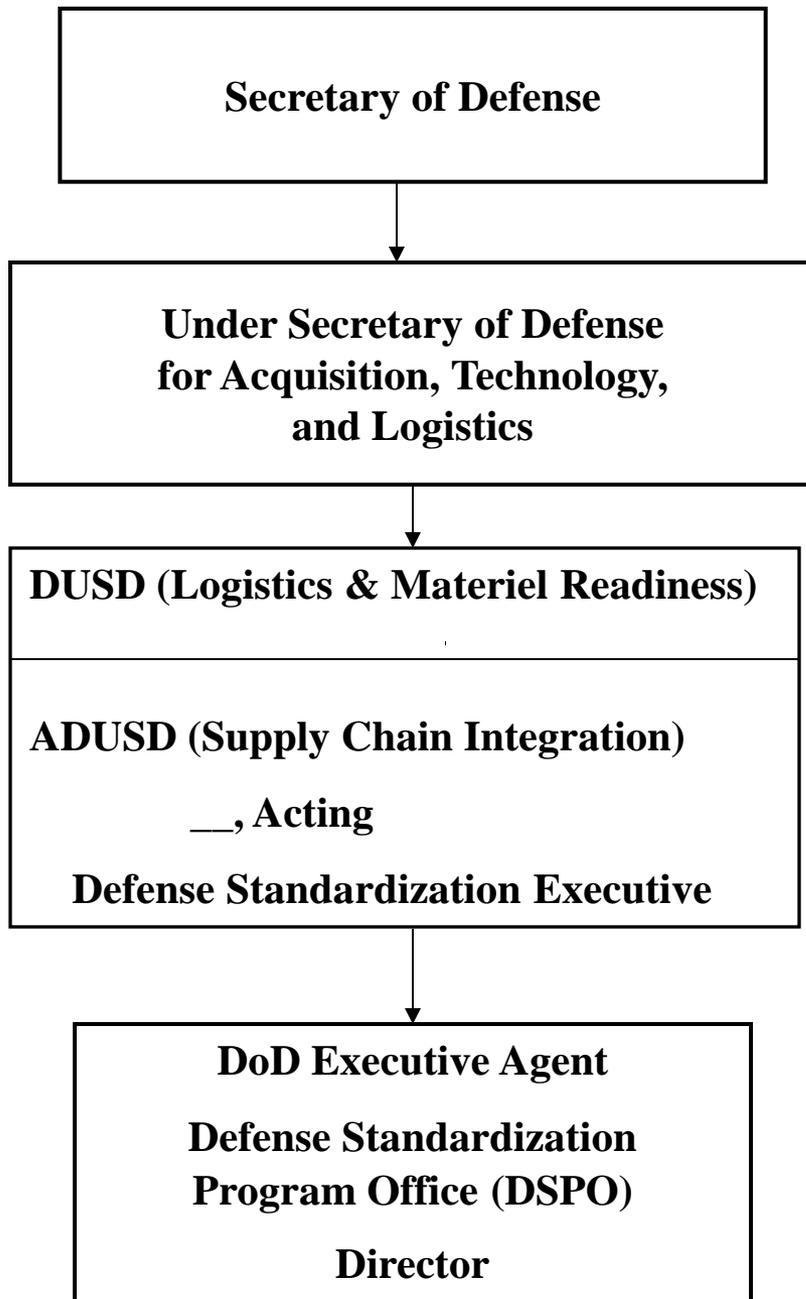
Centrally Managed

DEFENSE STANDARDIZATION PROGRAM OFFICE (DSPO)

| ARMY DepSO* | NAVY DepSO* | AIR FORCE DepSO* | DLA DepSO* | Other DoD Agencies |

MAJOR SUBORDINATE COMMANDS, CENTERS (E.G. TACOM)

SYSTEMS COMMANDS CENTERS LABORATORIES TECH. FACILITIES (E.G. NAVSEA)

FIELD COMMANDS CENTERS/DIVISIONS LABORATORIES DEV. CENTERS (E.G., ASC, ALCs)

DLA CENTERS (E.G. DSCC)

MORE THAN 100 STANDARDIZATION OFFICES IDENTIFIED IN SD-1, "STANDARDIZATION DIRECTORY"** DEVELOP, ADOPT, REVIEW, AND MAINTAIN STANDARDS

Decentrally Executed

* DepSO = Departmental Standardization Office
**SD-1 available from DSPO website at www.dsp.dla.mil. Click on "Library" and then click on "Standardization Documents Issued by DSPO."

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WHY DOD STANDARDIZES

IMPROVE OPERATIONAL CAPABILITIES	REDUCE COSTS	OTHER REASONS
•Joint Service Operations	•Larger Economical Buys	•Safety
•Coalition Warfare	•Less Inventory	•Less Misunderstanding Between Government & Contractor
•Higher Reliability	•Reduce Development Cost	
•Readily Available Parts & Supplies	•Common Training	•Reduce Development Risk
•New Technology Insertion	•Reduce Maintenance Cost	•Competition

*Standardization case studies available from DSPO website at www.dsp.dla.mil.

REDUCE COSTS
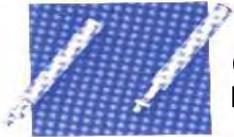
A. Stud Type Spacer
NAS 1829

Standardizing on Aerospace Spacers:

B. Swage Type Spacer
NAS 1830

Reduced inventory by over 1200 types of spacers

C. Conventional Spacer
NAS 1831

Cost avoidance of $6M over 5 year period

Defense Standardization Program Office (DSPO) Provides Support

TOOLS	TRAINING AND EDUCATION	JOINT AND SERVICE SPECIFIC EFFORTS	COALITION EFFORTS	STANDARDS DEVELOPMENT ORGANIZATIONS

➢Acquisition Streamlining and Standardization Information System (ASSIST)
 	
➢Government Industry Data Exchange Program (GIDEP)
 	
➢Diminishing Manufacturing Sources and Material Shortages (DMSMS) Knowledge Sharing's Portal
 	
➢Guide Books
 	
➢Weapon System Impact Tool (WSIT)
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	➢Defense Standardization Annual Conference
	
	➢DAU Led Courses
	
	➢Continuous Learning Modules
	
	➢Defense Standardization Program Journal
	
	➢DSPO Led Courses
	
	➢Case Studies
	
	➢Industry Conferences
	  –AIA
	  –Aging Aircraft
	  –DMSMS
	  –ARSSG
		➢Defense Standardization Council
		
		➢Joint Standardization Boards
		
		➢Annual Defense Standardization Program Awards
		
		➢*Parts Management*
		
		➢Qualification
			➢**NATO –** operational, materiel, and administrative standards
			
			➢**ABCA -** Australia, Britain, Canada, America – mostly land based standards
			
			➢**AUSCANZUKUS -** Australia, Canada, New Zealand, United Kingdom, USA – mostly naval standards
			
			➢**ASIC -** Air and Space Interoperability Council
			
			➢**CCEB -** Combined Communication Electronics Board
				➢**ANSI -** American National Standards Institute –
				➢**ISO –** International Standards Organization
				➢**IEC –** International Electrotechnical Commission
				➢**ASTM International**
				➢**SAE -** Society of Automotive Engineers
				➢**AIA –** Aerospace Industries Association
				➢**AIAA –** American Institue of Aeronautics and Astronautics
				➢**EIA –** Electronic Industries Alliance
				➢**IEEE –** Institute for Electrical and Electronic Engineering

DSPO Parts Management Responsibilities

- ➢ DoD Parts Management Program
- ➢ Diminishing Manufacturing Sources and Material Shortages (DMSMS)
- ➢ Government-Industry Data Exchange Program (GIDEP)
- ➢ Item Reduction Program (during sustainment)
- ➢ Support ADUSD/Supply Chain Integration in addressing counterfeit parts

Counterfeit Reporting

➢ GIDEP is the Federal Government Focal Point for Collecting Counterfeit and Suspect Counterfeit Information

➢ Commerce Dept Study shows over 9,000 counterfeit parts discovered in 2008

➢ GIDEP received reports of only 88 parts

➢ Solving this problem will take information sharing

"Barriers" to Submitting Suspect Counterfeit Reports

➢ **"Legal counsel does not permit"**
  – One Defense Contractor's legal counsel participating in AIA IPT has stated no legal issues to reporting and have never been sued.

➢ **"Do not want to damage supplier relations"**
  – Honest suppliers will work with you to get to root of problem and show they are honest.

➢ **Do not want to appear to "have a counterfeit problem"**
  – Being upfront is better than hiding the problem

Take Aways

➢ GIDEP staff can teach how best to deal with reporting Suspect Counterfeit incidents.

➢ Greater focus by DoD, GAO, the news media, and Industry. Sharing through GIDEP (by all) is best way to head off the problem.

   – Any single QA shop has 15% chance of discovering Suspect Counterfeits

What Is Parts Management?

➢ Selecting parts during weapon system design

➢ Analyzing parts for reliability, availability, and quality

  – Mitigating DMSMS (obsolescence) is critical

➢ Screening for common usage

➢ Reducing the number of unique parts

➢ Qualifying products

Diminishing Manufacturing Sources & Material Shortages Defined

➤ "The loss or impending loss of manufacturers of items or suppliers of items or raw materials."

➤ Traditional Areas of DMSMS
  – Electronics with short production cycles (Intel Pentium II)
  – Single (or multiple) defense supplier goes out of business
  – Defense-Unique manufacturing process for legacy systems
  – Long Life Cycle Defense Systems (1940 gun barrels)

➤ Newer Areas of DMSMS
  – COTS embedded systems with no breakout BOM
  – Lead-Free Electronics or Hazardous Chemicals with no known substitute (RoHS)

➤ Future Areas facing DMSMS
  – Other Policy Initiatives (REACH, WEE)
  – Counterfeit Parts
  – Failing domestic manufacturing supply base

DMSMS Tenets

➢ Prioritization of Solutions
- Parts Supply
- Aftermarket
- Emulation
- Redesign

➢ Enable Programs to Proactively Manage DMSMS throughout the entire Life Cycle of the Weapon System

➢ Develop Effective Metrics to support OSD Program Assessment Reviews

➢ Support the Collaboration and Sharing of DMSMS Case Resolution Results

OSD DMSMS Strategy

➢ Mission
  – The mission of DMSMS Management is to provide techniques, tools, policies and training that facilitate pro-active management practices across all Services and Agencies

➢ Vision
  – Be the recognized leader within DOD and the Defense Industry for providing collaborative and cost effective DMSMS management and solutions

➢ Goals
  – Ensure effective DMSMSM management by delivering available and affordable defense systems
  – Ensure a sufficient and well educated DMSMS workforce
  – Develop a complete and collaborative DMSMS enterprise serving the U.S. and coalition forces
  – Ensure efficient DMSMS leadership by promoting best practices across Services and Agencies

DMSMS Guidebook (SD-22)

- ➤ **Introduction**
- ➤ **Encompassing Total Life Cycle System Management and Performance Based Logistics Tenets**
- ➤ **Establishing a DMSMS Program**
  - Determining Level of Involvement
  - Implementation Intensity Levels
  - Selection of Practices
  - Key Program Elements to Consider
  - Program Implementation
  - DMSMS Management Program Elements
  - Bill of Materials (BOM) Development
  - Resolution Alternative by Acquisition Life Cycle Phase
  - Resolution Definitions
  - Continuous Modernization
  - Microcircuit Emulation program
  - Shared Data Warehouse
  - DMSMS Knowledge Sharing Portal
  - DMSMS Training Resources

- ➤ **Analyzing Results**
  - OSD Tracking and Accounting for DMSMS Programs
  - Resolution Cost Trade-Off Studies
  - Cost Avoidance
  - Business Case Analysis
  - Funding Impact versus Time
  - Performance Measures
  - Operations Impact Analysis (OIA)
  - Platform Readiness Status
  - Performance Measures
  - Design Interface Criteria Evaluation
  - DMSMS Progress Indicator

- ➤ **Appendixes**
  - Acronyms
  - Contract Language Examples
  - Assessment of DMSMS Resolution Alternatives
  - Design Interface Evaluation Criteria
  - Commercial Off the Shelf Guidance
  - DMSMS Assessment Guide
  - References

DMSMS Program Activities

- ➢ Launched DMSMS Knowledge Sharing Portal
- ➢ Developed five DMSMS computer based training courses
  - Content vetted through DMSMS Working Group
  - Defense Acquisition University Continuous Learning Center
- ➢ Developed DMSMS Plan Builder available on Army SYSPARS
- ➢ Support the Shared Data Warehouse
  - Army
  - USMC
  - Navy
  - Air Force
  - DLA
  - GIDEP
- ➢ Participate in future DABS reviews
  - DAES Reports process explicitly includes DMSMS

Benefits of
Parts Management

➢ Cost avoidance

➢ Enhanced logistics readiness and interoperability

➢ Increased supportability and safety of systems and equipment

➢ Improved Warfighter support

➢ Reduced acquisition lead-time

➢ Benefits government and industry

Short History of Parts Management

➤ The days of MIL-STD-965

➤ Acquisition Reform

➤ ADUSD(LPP) Tasking to Reengineer Program

➤ Parts Management Reengineering Working Group (PMRWG)

➤ Parts Management Reengineering Implementation Process Team (PMRIPT)

➤ Parts Standardization and Management Committee (PSMC)

Top Three PMRWG Recommendations

➢ Revitalize parts management within systems engineering

➢ Make parts management a policy and a contractual requirement

➢ Develop improved parts management tools and metrics

Warfighter Support

Parts Management:

➤ Ensures optimum part is used in a design

– quality, reliability, availability, logistical, and cost

➤ Provides Warfighter a more reliable, available, and maintainable weapon system

➤ Ensures the logistics community has a better understanding of the part and its application

➤ Provides metrics that relate parts management decisions to increases in readiness and ROI

Where are we going?

➢ Coordinate directive parts management memorandum for AT&L signature

➢ Finish the reengineering implementation tasks

   – Support OSD/Systems Engineering's revitalization

   – Provide appropriate guidance and education

   – Develop helpful tools

What Happens When You Don't Standardize

Photo of 10% of the 5000 Different Batteries Used by DoD

Back Up Material

History of
Parts Management

1977: **MIL-STD-965, Parts Control Program**

1983: **SECDEF Weinberger Spare Parts Acq memo**

1984: **DEPSECDEF Taft DoD Parts Control memo**

1994: **SECDEF Perry Acquisition Reform memo**

1996: **MIL-HDBK-965, Parts Management Program**

2000: **MIL-HDBK-512, Parts Management**

2004: **Begin Re-engineering DoD Processes**

DSP Automation Toolset

➢ DSP Web Site -- http://dsp.dla.mil

➢ Acquisition Streamlining & Standardization Information System (ASSIST)

- http://assist.daps.dla.mil (password needed)
- http://assist.daps.dla.mil/quicksearch (no password)
- www.assistdocs.com (no password needed)

➢ Weapon System Impact Tool (WSIT)

➢ Qualified Products Database

2009 DMSMS and Standardization Conference

- *September 21 – 24, 2009*
- *Rosen Centre Hotel - Orlando, FL*
- *http://www.dmsms-stdz2009.com*