OSD DMSMS Strategy

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DMSMS Strategic Objectives

- Policy and Working Group Charter
- Contract Language
- Programming and Budgeting
- Commonality Assessment
- Metrics (including Readiness)
- Technical Resources (Organic & Industry)
- Commercial Industry Incentives
- Internal DOD Incentives

- Software DMSMS Management
- Acquiring Data

Facilitate the implementation of PROACTIVE DMSMS MANAGEMENT throughout the DOD in order to REDUCE, where possible, adverse IMPACTS of DMSMS issues on READINESS, SCHEDULE, and COST.
Product Support Guiding Principles

The product support guiding principles enable a sustainment vision that aligns operational, acquisition, and sustainment communities to deliver required and affordable Warfighter product support outcomes.

Implementation Guidelines:
- Demonstrate and enforce life cycle focus.
- Optimize public and private product support capabilities.
- Implement guidelines to incentivize accountability for performance.
- Build and evolve BCA's that enhance decision making.
- Ensure consistency in product support processes and infrastructure.
- Design for sustainability and integrate acquire-to-retire processes.
- Manage predictable costs throughout the life cycle.
- Integrate human capital planning into life cycle issues.
- Demonstrate and enforce end life planning.
- Procure sustainment as part of the life cycle.
- Ties metrics directly to Warfighter outcomes.
- Start and End with the Warfighter's Objectives.
Key Elements of DMSMS Policy & Guidance

- DoD Instruction (DoDI) 5000.02, Operation of the Defense Acquisition System
- DoD Manual (DoDM) 4140.01 Vol. 3, DoD Supply Chain Materiel Management Procedures: Materiel Sourcing
- SECNAVINST 5000.2E Implementation And Operation Of The Defense Acquisition System And The Joint Capabilities Integration And Development System
- USAF DMSMS Program Instruction AFMCI 23-103
- ARMY Industrial Base Process Regulation AR700-90
- SD-22 DMSMS: A Guidebook of Best Practices for Implementing a Robust DMSMS Management Program
- ASN (RD&A) Memo July 2016 DMSMS Management Plan Guidance
- DMSMS as a Design Consideration in the Defense Acquisition Guidebook (DAG)
- DMSMS within a Product Support Strategy / PSM Guidebook
- DMSMS questions in Systems Engineering Technical Review (SETR) and Independent Logistics Assessment (ILA) checklists

Policy & Guidance establish the basis for DMSMS Management in Programs
DMSMS is Inevitable

- DOD systems can require a decade or more to develop and then have a fielded life expected to span decades

- Yet, the life cycles of many parts that make up a DOD system’s design are brief by comparison
  - As low as 18 months for COTS hardware/electronics
  - Approximately 5 years for COTS software
  - Environmental or regulatory restrictions can happen at anytime

- Not just Electronics!
Overarching DMSMS Program Objectives

Cost effectively
• Minimize the scope of DMSMS-related out-of-cycle redesigns when they cannot be eliminated

• Eliminate DMSMS-related production schedule impacts

• Eliminate DMSMS-related degradations to readiness

… in order to assist in developing, fielding, and supporting a sustainable product
Robust DMSMS Management Minimizes the Negative Impacts

• A robust and more proactive DMSMS management approach ensures that—

  • More resolution options are available

  • There is more time to consider available resolution options, which allows for many benefits

  • The optimal resolution for the program can be selected
Product Improvement as a Potential By-Product

• While not their primary purpose, planned redesigns to resolve DMSMS can result in **Product Improvement**:
  
  • Opportunity to upgrade to better, faster, and cheaper parts
  • Reduction in the number of parts
  • Reduction in power usage
  • Improved reliability, logistics footprint, and sustainability
  • Reduction in transportation, labor, and spare part costs
  • Opportunity to develop improved supply chain relationships
Most Important Program Leadership Actions to Enable Robust DMSMS Management

- Establish Strategic Underpinnings for DMSMS Management
- Establish a Strong Foundation for Robust DMSMS Management
- Ensure DMSMS is Fully Funded
- Make DMSMS Management a High Priority in the Government Program Office and with the Prime Contractor
- Link DMSMS Health Assessments to Product Roadmaps
- Obtain DMSMS Health Assessments on All Designs, Redesigns, and Design Reviews
Establish Strategic Underpinnings for DMSMS Management

• Program Management should:

  • Make strategic decisions that drive a risk-based **DMSMS Management Plan**
    • DMSMS Management Objectives
    • DMSMS Management Team (DMT) membership and roles and responsibilities
    • DMT Operating Guidelines
    • Metrics

  • Define Program Leadership involvement
Establish a Strong Foundation

The elements of a strong foundation for DMSMS management are:

- **Data and Tools**

- **Prime contractor/Original Equipment Manufacturer (OEM) support** thoroughly codified and incentivized in **Contract Language**

- **Independent subject matter experts** should be involved in every aspect of DMSMS management. They ensure adequate communication by
  - Providing a second set of eyes
  - Pulling everything together
  - Acquisition and Sustainment

- **Centralized linkage to DMSMS activities and Best Practices** in other programs (Commonality, Data Sharing, Resources, etc.)

![Diagram showing the process of DMSMS Risk Management with stages: Identify, Prepare, Assess, Analyze, Implement.](image)
Ensure DMSMS is Fully Funded

Adopt a **Risk-Based Approach** to budget for:

- **Program Management and Operations** activities
  - Prepare
  - Identify
  - Assess
  - Analyze
  - Implement

- **Resolutions**
  - Be prepared to react to end-of-life notices
  - Based on forecasts developed from historical data and analysis
Make DMSMS Management a High Priority

• Establish a **Program Office Champion**
  • Full time
  • Knowledgeable
  • Access to prime contractor and DOD program leadership

• Ensure **Stakeholder Involvement** in DMSMS Management Team activities
  • Participation by all stakeholders
  • Full cooperation
  • Open and full communications
  • Ensure the team is empowered to make decisions
  • DMSMS Contract Language
Link DMSMS Health Assessments to Product Roadmaps

Technology Refreshment

- Periodic replacement of items to mitigate DMSMS issues
  - Example:
    - A program simulated 6- and 10-year technology refresh scenarios to optimize duration between refresh over 30 years
    - Total cost of 6-year interval method over 30 years: $440M
    - Total cost of 10-year interval method over 30 years: $250M (i.e., procurement of life-of-need buys)
    - The program selected to pursue a 10 year cycle

Product Roadmap

- Planned technology insertion for increasing capability to meet current or future requirements
  - Combining these processes minimizes out-of-cycle redesign
  - Align life-of-need buys to the roadmap to avoid under- or over-buying obsolete material
  - Don’t plan your roadmap based on obsolescence, but drive your solutions to your roadmap
Obtain DMSMS Comments on Design Reviews & Redesigns

• Begin DMT involvement by the Preliminary Design Review (PDR) to ensure there are no obsolete or soon to be obsolete parts on the parts list
  • Example: Independent SMEs reviewed list of 323 parts that could be used in design
    • 80 obsolete/being phased out
    • 31 in “declining” phase of life cycle (within 2 years of losing support)
    • 22 were mature (2-6 years of support)
    • 190 in “growth” phase (7+ years of support)
    • Enabled program to not have obsolescence designed in

• Review of Redesigns is another source of savings
  • Example:
    • Program facing $150M redesign bill due to redesign
    • SMEs performed parallel obsolescence analysis (costing $42,000) and recommended:
      • $5M in resolutions
      • Prime contractor ultimately proposed $65M additional to implement modernization and low maintenance mods
      • Saved the program $80M

• Program Leadership should ensure DMT input is not overlooked: it often will reduce some short term costs and avoid some long term costs
## Other Success Stories

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<thead>
<tr>
<th>Program Office was unable to locate a Tunnel Diode Detector. OEM provided price quote pf $2M for a redesign. OMT identified a logistics solutions costing $10K</th>
<th>After assisting with contract negotiations the price of managing DMSMS for Program Office by OEM decreased from $6M to $2M</th>
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<tbody>
<tr>
<td><strong>$1.9M Cost Avoidance</strong></td>
<td><strong>$4M Cost Avoidance</strong></td>
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<th>Program Office was facing redesign of a Motion Transducer / Air Data Computer. OMT determined there were enough spares to last Program Office until sundown</th>
<th>Program Office received a ROM for DMSMS management from OEM for 1 system of $200K. OMT ROM is $50K</th>
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<tr>
<td><strong>$500K Cost Avoidance</strong></td>
<td><strong>$150K Cost Avoidance</strong></td>
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There Are Thousands of Examples of ROI
For More Information
DMSMS is going to happen!

- Make DMSMS Management a high priority throughout the lifecycle and ensure the right people are involved.
- Risk-based DMSMS Management Plan.
- Fully fund DMSMS Management activities (including infrastructure, data, and resolutions).
- Ensure DMSMS Management activities are included in your Contracts.
- Strive to mitigate DMSMS issues before they have negative impacts to cost, schedule, and readiness.
- More resolution options available – More time to make most cost effective decisions.
- Cross Platform / Service Collaboration (data, resolutions, standardized processes, training, etc.)
- OSD Strategic Objectives.

“Better Buying Power” means controlling future costs to achieve affordable systems. Robust, risk-based DMSMS management seeks to do just that. Acquisition and systems managers should promote robust, effective DMSMS management.

High Payoff from Proactive DMSMS Management.
Questions?

THANK YOU for your TIME!!!