



16266 - Latest Advances in DoD Acquisition ESOH Policy, Guidance, and Initiatives

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Outline

Acquisition Environment, Safety, and Occupational Health (ESOH)

■ Mission

■ Policy, Guidance, and Oversight

■ Initiatives

- Sustainability in Acquisition
- Hazardous Materials Management (HMM) - Phase 1
- Impacting the Requirements Process
- Streamlining and Integrating ESOH in Acquisition Documentation

■ The Way Forward: What's on the Horizon

- HMM - Phase 2
- Acquisition Community Connection (ACC) Update
- Military Standard 882E, Standard Practice Systems Safety
- Life Cycle Sustainment Plan (LCSP) Integration





Acquisition ESOH Mission

■ Support the warfighter and DoD's mission

- Prevent loss of life or serious injury to personnel
- Avoid damage to facilities or equipment
- Prevent harm to the environment and the surrounding community
- Avoid system failures that negatively impact mission capability or mission operability





Acquisition ESOH Policy, Guidance and Oversight





Acquisition ESOH Policy

- **DoD Instruction 5000.02, Operation of the Defense Acquisition System Update**
 - **AT&L Lead: Defense Procurement & Acquisition Policy (DPAP)**
- **Re-write to:**
 - **Incorporate Facts-of-Life changes & *Significantly* Streamline content**
 - **Address separate Acquisition System Types**
 - **Reference MIL-STD-882E, Standard Practice System Safety**
 - **Better Address ESOH for early Testing and Development Activities**





Acquisition ESOH Guidance

- **Defense Acquisition Guidebook (DAG) Chapter 4 Changes:**
 - **Published May 15, 2013**
 - **Target audience - Program Manager & Lead Systems Engineer**
 - **Significant size reduction**
 - **Minimized hyperlinking within chapter**
 - **Added Sustainability Life Cycle Assessment Section as a Systems Engineering process tool**
 - **Operational Energy added as a Design Consideration**





Acquisition ESOH Guidance (continued)

■ DAG Chapter 4, ESOH Section Changes:

- Reference new MIL-STD-882E, Standard Practice System Safety
- Clarify ESOH content between Systems Engineering Plan (SEP) and Programmatic ESOH Evaluation (PESHE)
- Identify National Environmental Policy Act (NEPA) / EO 12114 Compliance Schedule as separate document
- Describe ESOH Risk Acceptance and Reporting Requirements





Acquisition ESOH Oversight - Program Support Reviews (PSRs)

- **Office of Deputy Assistant Secretary of Defense for Systems Engineering (ODASD(SE)) leads PSRs**
 - **DoDI 5000.02 mandated Defense Acquisition Board decision support**
 - **Provides a Systems Engineering Focused Review**
 - **Examines multiple aspects of Program**
- **ODUSD(I&E) provides ESOH Subject Matter Experts to:**
 - **Validate program compliance**
 - **Assess effectiveness of Acquisition ESOH policy**
 - **Work closely with program teams**
- **Currently supporting Small Diameter Bomb II PSR**



Acquisition ESOH Initiatives





Sustainability in Acquisition Programs

- **Refining “Sustainability in Acquisition” Methodology**
 - **Based on three Levels of Life Cycle Assessment (LCA)**
 - **LCA could be placed on contracts**
 - **Communicating with stakeholders to identify improvements and gain support**
- **Programs would identify sustainability factors to be considered at the appropriate decision point**
 - **Use physical, chemical, and toxicity data to make smart choices**
 - **Possible weighting or scoring system for alternatives**
 - **Estimates potential life cycle costs that need to be considered**
- **Could be used to support Life Cycle cost estimating**

Added LCA to DAG Chapter 4 as one of the Systems Engineering Tools



Hazardous Material Management Phase 1

Align National Aerospace Standard 411 (Hazardous Materials Management Program Standard Practice) & MIL-STD-882E Task 108 (Hazardous Materials Management Plan)

- **Goal: Address current HMM challenges**
 - Multiple management approaches
 - Multiple hazardous material lists
- **Approach:**
 - MIL-STD-882E, Task 108 prioritizes efforts to eliminate or reduce hazardous material usage by categorizing targeted materials as:
 - Prohibited, Restricted, and Tracked
 - NAS 411 update provides:
 - Detailed guidance for implementing MIL-STD-882E, Task 108
 - Lists of baseline hazardous materials in the three categories





HMM – Phase 1 (continued)

- **AIA published two issuances on September 30, 2013**
 - **NAS 411 Revision 3**
 - **NAS 411-1, Hazardous Materials Target List Standard Practice**
 - **Standard lists for MIL-STD-822E Task 108 prohibited and restricted materials**
- **Phase 2, develop “tracked” materials list**

**More on this in Presentation 16270,
MIL-STD-882E: Contracting - Task 108 and NAS 411
October 30, 2013 at 4:40PM**



Impacting the Requirements Process

Defense Acquisition University Course - CLR 030, ESOH in JCIDS (Joint Capabilities Integration and Development System)

- Replaces original 2010 version
- Launched February 2013
- Highlights:
 - Updated content to include CJCSI 3170.01H (Jan 2012),
 - Updated test bank. Final Exam 100% score required to pass
 - Improved graphics and screen readability
 - ESOH Subject Matter Expert can complete entire course < four (4) hours



Impacting the Requirements Process (continued)

Developed a Human Systems Integration (HSI) & ESOH Handbook for pre-Milestone A Joint Capabilities Integration and Development System (JCIDS) and Analysis of Alternatives (AoA) Activities

■ **Handbook completed in September 2013**

- **Supports ESOH & HSI participation in the JCIDS process**
- **Contains detailed descriptions of pre-Milestone A JCIDS activities**
- **Identifies most-valued insertion points for HSI & ESOH considerations**
- **Provides example capability statements for variety of platforms**
- **Supports requirements traceability**
- **Builds on DAU course CLR030 “ESOH in JCIDS,” as a resource for applying lessons learned**

More details in Presentation 16272 – October 30, 2013, 11:25AM



Streamlining and Integrating ESOH in Acquisition Documents

Guide to ESOH in the Systems Engineering Plan (SEP), Programmatic ESOH Evaluation (PESHE), and NEPA/EO 12114 Compliance Schedule to:

- Describes technical planning for ESOH considerations in SE
- Documents data generated from implementing the technical plan
- Built on lessons learned & best practices from Acquisition ESOH professionals
- Guide completed in September 2013
 - Improves ESOH risk management
 - Resource for developing system documentation and fielding activities
 - Supports the USD(AT&L) mandate to streamline Acquisition documentation process and improve cost efficiency





The Way Forward: What's on the Horizon





HMM – Phase 2

- **Update NAS 411-1, Hazardous Materials Target List Standard Practice**
 - **Current version lists MIL-STD-822E Task 108 prohibited and restricted materials**
- **Phase 2 will address “tracked” materials**
 - **DoD and AIA working together**
 - **Developing standard list for MIL-STD-882E Task 108 tracked materials to add to NAS 411-1**
 - **Using Naval Sea Systems Command Prohibited and Controlled Chemicals List as a starting point**



Acquisition Community Connection (ACC) Update

- **Updating the ACC ESOH Community of Practice (CoP)**
 - **Remove outdated content to reflect current policy/guidance**
 - **Add links on front page to specific key ESOH areas**
 - Synchronize new look to match Systems Engineering CoP
 - **Front page of ESOH CoP:**
 - Overview
 - Topics
 - Documents
 - Resources
 - Compliance
 - ESOH Policy
 - **Target completion – 2nd quarter FY2014**





ACC Update (continued)

■ ACC Topics

- ESOH Risk Management
- System Safety Methodology – MIL-STD-882E
- Explosives Safety
- Laser Safety
- Radiation Safety
- Battery Safety
- Directed Energy Weapons/Systems
- Energy Usage/Fuel Consumption Reduction
- GOTS/COTS Special Considerations
- Noise and Occupational Health Risks
- National Environmental Policy Act
- Executive Order 12114
- Hazardous Materials Management
- Life Cycle Analysis
- Sustainability
- Green Procurement Program
- ESOH Demilitarization & Disposal Considerations

Each topic will have one or more paragraphs and/or sub topics



Military Standard 882E Update

- MIL-STD-882E, Standard Practice System Safety, published on May 11, 2012
- Users raising Implementation Challenges/Questions/Concerns
- Potential Solutions may include:
 - Changes to MIL-STD-882E
 - Publishing additional guidance
 - Developing new training courses and materials



**More on this in Presentation 16267 - MIL-STD-882E:
Implementation Challenges – October 30, 2013, 4:05PM**



Life Cycle Sustainment Plan (LCSP) Integration

- **Improve ESOH Integration in LCSP, especially right before and after Full Rate Production / Full Deployment (FRP/FD) Decision**
 - **Improve ESOH in post FRP/FD Sustainment Engineering**
 - **Provide necessary System Safety (i.e., hazard tracking system) and Environmental data (i.e., Hazardous Materials data)**
 - **Support eventual Demilitarization and Disposal requirements**





Wrap-up

Acquisition Environment, Safety, and Occupational Health (ESOH)

■ Mission

- Support the War Fighter

■ Policy, Guidance, and Oversight

- Policy and Guidance to Support Mission
- Oversight to ensure Compliance

■ Initiatives

- Activities ranged from Hazardous Materials to Documentation Streamlining

■ The Way Forward: What's on the Horizon

- Activities range from Improving Communications through ACC update to Systems Safety and Sustainability





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