

18848 – An approach to ensure Design Considerations are part of the materiel solution: ESOH-related Capabilities in JCIDS Examples

CLR 030: Environment, Safety, and Occupational Health (ESOH) in the Joint Capabilities Integration and Development System (JCIDS)

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Purpose

The Secretary of Defense established the Defense Safety Oversight Council (DSOC) to provide oversight on DoD efforts to reduce preventable mishaps. The National Defense Center for Energy and Environment (NDCEE) was tasked with executing DSOC mishap reduction initiatives across the DoD, including launching CLR 030 and "Integrating ESOH into Systems Engineering" CLE 009 through the Defense Acquisition University (DAU).

This presentation is an update on the DAU Continuous Learning Module (CLM) curriculum offering enhancing ESOH involvement in the Joint Capabilities Integration and Development System (JCIDS) document development process, "ESOH in JCIDS" CLR 030.



CLR 030 - Environment, Safety and Occupational Health (ESOH) in JCIDS

- Developed and maintained for DAU by the DoD Acquisition ESOH IPT;
 Chaired by ASD(EI&E)
- This course was developed for ESOH SMEs to increase their ability to effectively integrate ESOH requirements into JCIDS documents
- It is important to understand what JCIDS is, and how an experienced ESOH SME can apply their knowledge to influence the JCIDS process
- Updated version CLR 030 went 'live' on-line July 12, 2016
- Available in the DAU icalolog (requires CAC)
- http://icatalog.dau.mil/onlinecatalog/courses.aspx?crs_id=1801

Why this Course?



- The most effective results for creating safe and environmentally sound systems are achieved when ESOH principles are applied early and consistently in the development of a system
- Historically, the ESOH community has primarily engaged the system development later in the acquisition process sometimes - after system fielding has begun
- ESOH engagement throughout the system development process will aid in reducing avoidable costs and mishaps by mitigating life cycle safety, environmental, and occupational health risks
- The requirements process begins before the acquisition process and offers an opportunity, often underused, to significantly improve ESOH integration into the systems engineering process
- To successfully influence system design development from ESOH perspective, need to first influence the JCIDS document development process
- The course offers learning centered on JCIDS document development from a context of ESOH equities, including "capability statements" that:
 - Enable program office ESOH staff to trace ESOH technical requirements back to the JCIDS requirements
 - Enhance program office ESOH staff ability to successfully advocate for ESOH considerations in design trade off decisions
 - Link ESOH risk reduction to system cost, schedule, and performance requirements

ESOH in JCIDS 2016 Update



ESOH IN THE JOINT CAPABILITIES INTEGRATION AND DEVELOPMENT SYSTEM (JCIDS) Course Introduction

ESOH Introduction

Welcome to the Environment, Safety, and Occupational Health (ESOH) in the Joint Capabilities Integration and Development System (JCIDS) course.

This course was developed for ESOH SMEs to increase their ability to effectively integrate ESOH requirements into JCIDS documents. The term 'ESOH SME' refer to those professional DoD or Defense contractor personnel working in the areas covered by the acronym 'ESOH' as defined in Military Standard 882E, "Standard Practice for System Safety." According to Military Standard 882E, ESOH refers to the combination of disciplines that encompass the processes and approaches for addressing laws, regulations, Executive Orders (EO), DoD policies, environmental compliance, and hazards



associated with environmental impacts, system safety (e.g., platforms, systems, system-of-systems, weapons, explosives, software, ordnance, combat systems), occupational safety and health, hazardous materials management, and pollution prevention.

This section introduces the course and discusses the reason for the course. It is important to understand what JCIDS is, and how an experienced ESOH SME can apply their knowledge to influence the JCIDS process. It is expected that the ESOH SME, if not familiar with JCIDS, can complete this course in less than four hours and gain the requisite familiarity to make a positive impact with in JCIDS.

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Updated to align with:

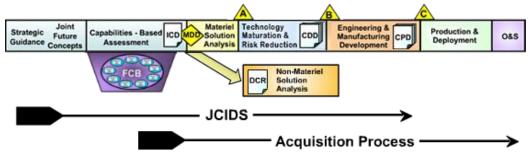
- JCIDS Manual (12 February 2015, including errata as of 27 March 2015)
- Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01I (23 January 2015)
- The 2013 and 2015 updates to the DoDI 5000.02, Operation of the Defense Acquisition System

Updated in the spirit of:

- OSD AT&L Better Buying Power 3.0
 <u>Control Costs Throughout the</u>

 Product Lifecycle
 - Build stronger partnerships with the requirements community to control cost





updated

updated

Topic Areas

- Course Introduction updated
- JCIDS & Acquisition Processes updated
- JCIDS Overview and Acquisition Familiarization
- Navigating the JCIDS & Acquisition Processes
 - Introduction
 - Capability Based Assessment (CBA) Process
 - Initial Capabilities Document (ICD)
 - Capability Development Document (CDD)
 - Capability Production Document (CPD)
- Participating in the JCIDS Process
- Final Assessment updated

Specific Updates to the Course



- Updated Acquisition Decision Points & Milestones and the Relationships to JCIDS Documents
- Requirements Management Certification Training (RMCT)
- Updated Graphics on Acquisition Process/Framework
- Updated DOTmLPF--P Analysis to add the "P" for policy
- Added info that DoDI 6055.01, DoD Safety and Occupational Health (SOH) Program, now requires the Service Sponsor of each JCIDS document obtain senior-level SOH endorsement.
 - The endorsement confirms ESOH participation (or opportunity existed for participation) in the document development process
- Updated JROC membership
- Updated content on Urgent Operational Needs (UONs): JUONS, JEONS
- Updated ICD content and structure, ESOH examples
- Updated CDD content and structure, ESOH examples, Added Additional Performance Attributes (APAs)
- Updated CPD content and structure, ESOH examples
- Updated knowledge checks, final exam, resources

Course Objectives Summary



- Geared to help the ESOH practitioner (i.e., SME) become more effective in JCIDS document development
- Designed to describe the JCIDS process from the perspective of those professional career DoD employees or Defense contractor personnel working in the fields of Environmental Science / Engineering; Safety including System Safety Engineering; and Occupational Health
- Identifies the key to successful ESOH SME participation in the JCIDS process as the ability to communicate how ESOH-related criteria can contribute to successfully responding to warfighter capability needs and priorities



ESOH IN THE JOINT CAPABILITIES INTEGRATION AND DEVELOPMENT SYSTEM (JCIDS)

Participating in the JCIDS Process (Lessons in Reality)

Topic Summary

To be effective in the JCIDS process requires understanding and a great deal of commitment from ESOH participants. This topic outlined the following recommendations for improving the effectiveness of ESOH SME participation in the JCIDS document development process:



- · Maintain access to the SIPR network.
- Prioritize levels of effort depending on the type of system and type of document.
- · Understand capability gaps, potential materiel solutions, and CONOPS.
- · Commit to fully participating in the document development process.
- Recognize typical opportunities for engagement throughout the duration of the process.

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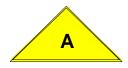
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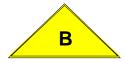


Integrating ESOH into Acquisition





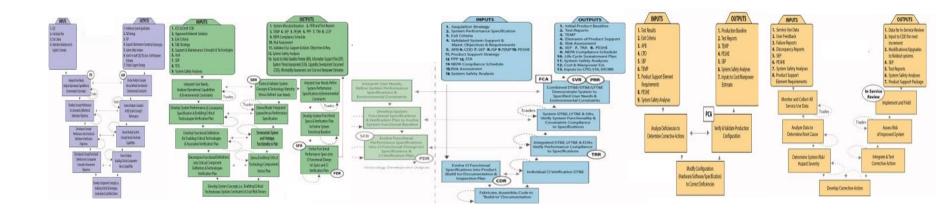






CLR 030 ESOH in Joint Capabilities & Integration Development System





CLE 009 ESOH in Systems Engineering

Conclusion



- CLR 030, ESOH in JCIDS, course:
 - Offers practical guidance for negotiating the JCIDS process where different interests, ESOH-related and non-ESOH related, often compete among stakeholders in a resource constrained context
 - Provides a working level knowledge of pertinent aspects of the JCIDS process and how it influences the acquisition process
 - Provides guidance for ESOH SMEs on how to identify and develop ESOHrelated criteria appropriate for inclusion in JCIDS documents

- CLR 030, ESOH in JCIDS, is designed to contribute to preservation of combat capability by reducing preventable losses without encumbering the JCIDS process
- DAU CLM CLE 009, ESOH in Systems Engineering, is designed to help DoD
 protect personnel from accidental death, injury or occupational illness; defense
 systems, infrastructure, and property from accidental destruction, or damage while
 executing the mission requirements of National Security

In the [near] Future....



- The future of ESOH is:
 - The NDIA SE Division Task Group on Top Systems Engineering Issues in US Defense Industry is assessing progress towards the 2003, 2006 and 2010 recommendations.
 - ☐ The TG will submit a Study Report to DASD/SE by the end of October 2016.
 - 3 of the Top 5 Issues are directly related to the ESOH experience summarized in Slide # 4. Applies to the HSI Industry too. For ESOH equities in these 3 (of 5) issues, DoDI 6055.01, DoD Safety and Occupational Health (SOH) Program, requirement for the Service Sponsor of each JCIDS document obtain senior-level SOH endorsement, is a beach-head for improvement.
 - From the June 2016 DAU-published "Improving Acquisition From Within: Suggestions From Our PEOs" by AT&L: it is clear ESOH SME's can contribute to a PEO in meaningful ways, including offering insights to these intersections: <u>Innovation</u> & everything you were taught, parts <u>Obsolescence</u> & counterfeit detection, and Risk Management Framework (RMF) & MIL STD 882E.
 - Why not ? develop a model where none exists in DoDI 5000: Service Life Extension Program, Diminishing Manufacturing Sources Program, Contractor Logistics Sustainment Program
- The future of JCIDS is:
 - JCIDS from the start was conceived as a necessarily adaptable, evolving process. JCIDS has indeed changed much since inception in 2003. Is the *pre-decisional* Joint Military Requirement System (JMRS) a next step for JCIDS - or - wholesale replacement? JMRS proposes to downgrade Mandatory KPPs to KSAs.
 - ☐ If the Joint Staff J8 /OSD AT&L decide to move forward, GOFO comment adjudication starts December 2016.



Questions

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