

10 April 2019

NDIA Systems and Mission Engineering

Division Meeting

Environment, Safety, and Occupational Health

(ESOH) Committee Report

Status Update



2019 Tasks	Status	Accomplishments (deliverables, etc.)
<p>1. Develop practical guidance for integrating ESOH into Digital Engineering (DE)/Model Based Systems Engineering (MBSE)</p> <ul style="list-style-type: none"> - Focus on providing ESOH risk and requirements data inputs to the model and extracting ESOH-related data - Evaluate Industry/Government efforts - Participate in relevant meetings and initiatives - Work with AIA Hazardous Materials Committee responsible for NAS411 and NAS411-1 to develop a method to exchange digital Hazardous Materials (HAZMAT) data between the system model, hazard tracking system, and logistics product databases 	In Progress	<ul style="list-style-type: none"> • DE/MBSE Tool vendor, Intercax, developed Syndeia software to manage data connections between the multiple models and data sources that make up the system model. • At the March 2019 DoD Acquisition ESOH IPT meeting (chaired by ASD(S)/Environmental Management), Intercax used a cruise ship model to demonstrate how Syndeia pulls together artifacts from the modeling applications to provide visualization of the data • The demo highlighted that MBSE can be used to identify ESOH-critical elements and failure modes; and to access, share, and verify ESOH-critical information/requirements. • Met with DoD and AIA on 27 Feb 2019 on National Aerospace Standard 411 and 411-1 on Hazardous Materials • Discussed the digital exchange and standardization of electronic HAZMAT data using IPC-1754, <i>Materials Declaration Standard</i>, • Direct interest by Assistant Secretary of Defense for Sustainment, Mr. Mahon, in the DoD and AIA initiative NAS411/411-1 • Considering developing NAS411/411-1 profile as input to MBSE tools
<p>2. Assess impact of DoD Reorganization of "Operational Safety" to USD(P&R) from USD(R&E) and USD(A&S)</p>	In Progress	<ul style="list-style-type: none"> • DoD centralized operational safety and health under USD(P&R) • DoD has Acquisition System Safety in USD (R&E) and Acquisition Environmental Management in USD (A&S) • Acquisition ESOH Policy in DoDI 5000.02; status TBD • DoD Components issuing ESOH policies for Rapid Acquisitions (Rapid Prototyping and Rapid Fielding, aka Middle Tier Acquisition)
<p>3. ESOH Committee Meeting</p>	In Progress	<ul style="list-style-type: none"> • 25 participants in the Feb 2019 ESOH Committee meeting • Holding ESOH Committee meeting this afternoon
<p>4. NDIA SE Conference ESOH Track</p>	In Progress	<ul style="list-style-type: none"> • Initiating solicitation of abstracts

ESOH Committee Meeting Information



- **Date:** April 10, 2019
- **Time:** 1430 – 1600 EDT
- **Location:** Booz Allen Hamilton, 1550 Crystal Drive, Arlington-Crystal City, 11th Floor (check-in and badge), 5th Floor – Room 5008 (for meeting; seating is limited)
- **POCs:** Lucy Rodriguez and Karen Gill
- **Call-in Number:** 877-885-1087; Access Code 7706930636#
- **Web Link:** <https://connect.apan.org/apr2019ndiaesoh/>
- **Meeting Agenda:**
 - Updates on ESOH Reorganizations at OSD and its impacts on Acquisition ESOH policy and practice
 - A-10 Program Office Digital Engineering and Modeling Tools and ESOH Integration/Profiles
 - Rapid Digital Maintenance Data Communication, Risk Mitigation, and Prognostics
 - Product Lifecycle Management (PLM)
 - Structural Models & Tools
 - CFD Aero-Performance Analysis

ESOH Committee - 2019 Task Plan



2019 Tasks:

1. Develop practical guidance for integrating ESOH into Digital Engineering (DE)/Model Based Systems Engineering (MBSE)
 - Focus on providing ESOH risk and requirements data inputs to the model and extracting ESOH-related data
 - Evaluate Industry/Government efforts
 - Participate in relevant meetings and initiatives
 - Develop a method to exchange digital Hazardous Materials data between the system model, hazard tracking system, and logistics product databases
2. Assess impact of DoD Reorganization of "Operational Safety" to USD(P&R) from USD(R&E) and USD(A&S)
3. Conduct ESOH Committee Meetings
4. NDIA SE Conference ESOH Track

Deliverables / Products:

1. Draft Document with recommended guidance for integrating ESOH data into DE/MBSE and revision to AIA NAS411 addressing utilizing digital data for Hazardous Materials management and reporting
2. Work with DoD Acquisition ESOH IPT to assess need for Acquisition Systems Engineering policy changes
3. Quarterly ESOH Committee Meetings
4. ESOH Track at the October 2019 NDIA SE Conference

Schedule / Resources:

1. ECD December 2019 / OUSD(R&E), OASD(EI&E), DoD Acquisition ESOH IPT/WGs, NDIA Mission Engineering, NDIA M&S, OSD/Service Digital Engineering WGs, DEIXWG, DoD-AIA NAS411 WG, and Industry
2. ECD December 2019 / DoD Acquisition ESOH IPT
3. Bi-monthly meetings in 2019 following the NDIA SE Division meetings / DoD and Industry Participants
4. ECD October 2019 / Government and Industry Participants

Issues / Concerns:

1. Challenging when Government in early stages of implementation / Funding, timing, and availability of staff.
 - Identifying programs using DE/MBSE with ESOH integrated into the model that would be willing to participate / funding, timing, and availability of staff
 - Challenging to determine data transfer mechanism and consensus on approaches / Funding, timing, and availability of personnel with experience
2. DoD Acquisition Systems Engineering ESOH policy not considered in discussions to move "Operational Safety" to P&R
3. Recruiting Presenters
4. Recruiting presenters