

**8 August 2019**

**NDIA Systems Engineering Division Meeting  
Environment, Safety, and Occupational Health  
(ESOH) Committee Report**

**Industry Chair: Mr. David Schulte, SAIC**

**Government Liaison: Mr. Sherman Forbes, SAF/AQRE**

# 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"> <li>- Focus on providing ESOH risk and requirements data inputs and extracting ESOH-related data</li> <li>- Evaluate Industry/Government efforts</li> <li>- Participate in relevant meetings and initiatives</li> <li>- 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</li> <li>- Using HAZMAT management as pathfinder for integrating full scope of ESOH considerations into DE/MBSE</li> </ul>	In Progress	<ul style="list-style-type: none"> <li>• Developed Hazardous Materials (HAZMAT)/National Aerospace Standard (NAS)411-1, "Hazardous Materials Tracked List," SysML Model Library</li> <li>• Goal: Library importable by Digital Engineering tools</li> <li>• Demonstrated Library to Boeing representatives on 24 June, and to SAF/AQRE and DASD(S) representatives on 19 July 2019</li> <li>• Next steps:               <ul style="list-style-type: none"> <li>(1) Collaborate with Boeing and USAF on one or more pilot use cases on integration of the Library into MBSE Life Cycle Materials/ Product Management tools/software initiatives to include collaboration with vendors that are digitizing Safety Data Sheets. <b>Any interested Industry representatives are invited to participate in a Library pilot use case.</b></li> <li>(2) Developing a proposal for AIA to adopt the Library and make it available as part of NAS411-1 purchases.</li> </ul> </li> <li>• Participated in DoD and AIA Working Group meetings on NAS411 and 411-1, and held a Face-to-Face principals meeting on 8 July               <ul style="list-style-type: none"> <li>• Discussed proposed updates to NAS411 and 411-1</li> <li>• Continued discussions on the digital exchange and standardization of electronic HAZMAT data using IPC-1754, <i>Materials Declaration Standard</i>.</li> </ul> </li> <li>• AIA is reaching out to ASD (S), Mr. McMahon, regarding DoD policy to have DoD Acquisition and Sustainment Program Offices use NAS411 and 411-1</li> </ul>
<p>2. Assess impact of DoD Reorganization of "Operational Safety" to USD (P&amp;R) from USD (R&amp;E) and USD (A&amp;S)</p>	Completed	<ul style="list-style-type: none"> <li>• DoD centralized safety and health under USD (P&amp;R); Environmental Management under USD (A&amp;S)</li> <li>• DoD Acquisition ESOH IPT led by ODUSD(S) responsible for system development and sustainment policy on environmental management and system safety integration into engineering</li> <li>• USD (A&amp;S) rewriting DoDI 5000.02</li> </ul>
<p>3. ESOH Committee Meeting</p>	In Progress	<ul style="list-style-type: none"> <li>• 21 participants at the June 2019 ESOH Committee meeting: Industry 6 (29%), OSD 3 (14%), Army 2 (10%), Navy 4 (19%), Air Force 5 (24%); DCMA 1 (5%)</li> <li>• Holding ESOH Committee meeting this afternoon (next chart)</li> </ul>
<p>4. NDIA SE Conference ESOH Track</p>	In Progress	<ul style="list-style-type: none"> <li>• ESOH track formalized – 19 presentations selected; Follows HSI track. to enable maximum participation in both due to content overlap</li> </ul>

# ESOH Committee Meeting Information



- **Date:** August 8, 2019
- **Time:** 1430 – 1600 EDT
- **Location:** Booz Allen Hamilton, 1550 Crystal Drive, Arlington-Crystal City, Room 11119, 11th Floor (check-in and badge),  
**POC:** Lucy Rodriguez
- **Preferred participation via teleconference and web**
  - Call-in Number: 877-885-1087; Access Code 7706930636#
  - Web Link: <https://connect.apan.org/aug2019ndiaesoh/>
- **Meeting Agenda:**
  - NDIA Systems Engineering Division – ESOH Committee Report
  - Demonstration of the Hazardous Materials/NAS411-1 SYSML Model Library – Characterizing Applicable ESOH Data and Adapting It for Use with Digital Engineering Tools
  - Overview of Draft DODI 5000.UC, "Operation of the Middle Tier of Acquisition (MTA)"
  - Update on ESOH Track at 22nd Annual NDIA Systems & Mission Engineering Conference

# 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