February 6, 2019

NDIA Systems Engineering Division Meeting

Environment, Safety, and Occupational Health (ESOH) Committee Report

As of: 5 February 2019

Status Update

2019 Tasks	Status	Accomplishments (deliverables, etc.)
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 - 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	• Focusing on identification of Program Offices and DE/MBSE Tool Suppliers to work with in determining lessons learned and best practices for integration of ESOH risks and requirements data. Sent e-mail query to suppliers that participated in the Ms. Zimmerman's "Tool Vendor Demonstration for MBSE/DE" track at the 2018 NDIA Mission and Systems Engineering Conference. • DoD/Industry DE/MBSE initiatives/meetings include DoD DE Working Group (WG), International Council on Systems Engineering DE Artifacts WG, Institute of Electrical and Electronics Engineers Technical Committee on Model-Based Systems, Booz Allen Hamilton tools • Direct interest by Assistant Secretary of Defense for Sustainment, Mr. Mahon, in the DoD and Aerospace Industries Association (AIA) collaboration on National Aerospace Standard (NAS)411 *Hazardous Materials Management* and NAS411-1 *Hazardous Materials Target List*. • Completed a study and draft white paper of primary data exchange schema – IPC-1754, *Materials Declaration Standard*, data structure, and XML schema definitions (XSD)
2. Assess impact of DoD Reorganization of "Operational Safety" to USD(P&R) from USD(R&E) and USD(A&S)	In Progress	• DoD centralized operational safety and health under USD(P&R) • Systems Engineering retains Acquisition ESOH policy between USD(A&S) and USD(R&E) using the MIL-STD-882E System Safety methodology
3. ESOH Committee Meeting	In Progress	• Holding ESOH Committee meeting this afternoon - report on the 29-30 Jan 2019 Chrome-Free Coating Systems Technical Interchange Meeting • ESOH Committee meeting to follow each SE Division meeting.
4. NDIA SE Conference ESOH Track	Not Started	• Planning initiated in Mar/Apr timeframe.

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ESOH Committee Meeting Information

- **Date: February 6, 2019**
- **Time: 1430 - 1600**
- **Location: Booz Allen Hamilton, 1550 Crystal Drive, Arlington-Crystal City, 11th Floor (check-in and badge), 5th Floor – Room 1114 (for meeting; seating is limited), POC is Lucy Rodriguez**
- **Call-in Number: 877-885-1087; Access Code 7706930636#**
- **Web Link: https://connect.apan.org/feb2019ndiaesoh/**
- **Meeting Agenda:**
  - Results of 29-30 January 2019 Chrome-Free Coating Systems Technical Interchange Meeting (TIM)
    - New American Conference of Governmental Industrial Hygienists Threshold Limit Value (TLV) for safe exposure to chromium that is an order of magnitude below the current Occupational Health and Safety Administration Permissible Exposure Limit (PEL)
      - Will increase pressure to qualify and implement non-chrome alternatives on DoD weapon systems
      - Issue of Corrosion Control versus Toxicity
    - Status of various DoD and Industry programs efforts to implement non-chrome paints and primers -- issues, problems, successes
    - Presentations by manufacturers of non-chrome alternatives/replacements

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

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