NDIA Systems Engineering Division

NDIA System Security Engineering Committee

February 2020

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SSE Committee Dec – Jan Summary

IEEE NDIA INCOSE System Security Symposium, 6-9 April 2020

Cyber Resilient Weapon System (CRWS) Work Shop (This week) in McLean

AF CROWS Industry Roundtable participation at the end of January in Orlando

AF SSE Acquisition Guidance v 2.0 dtd 1/24/2020 received from Air Force incorporating SSE Committee comments

2/12/2020

System Security Engineering Committee Meeting Agenda

2 / 20 / 2020 2:00 PM – 5:00 PM EST,
Location: Telecon Only

Call in information: (877)336-1275   Access Code:3019886

Agenda:

- **Opening Remarks (Holly Dunlap)**
- **Technology and Program Protection (Melinda Reed)**
- **Cyber Resilient Weapon System (CRWS) Workshop Outbrief (Melinda Reed)**
- **Evolution of DoD SW Acquisition and Measurement (Geoff Draper / Cheryl Jones)**
- **Air Force Cyber Resiliency Office for Weapons Systems (CROWS) Roundtable (Holly Dunlap)**
- **Cybersecurity Maturity Model Certification (CMMC) Discussion**
- **Supply Chain Risk Management**
  - **NDIA SCRM Community of Interest**
  - **Pre-draft call for comments NIST Special Publication (SP) 800-161: Supply Chain Risk Management Practices for Federal Information Systems and Organizations**
  - **Feedback on Draft NISTIR 8276: Key Practices in Cyber Supply Chain Risk Management**
- **NMCARS Annex 16 Review & Discussion**
- **NDIA INCOSE IEEE System Security Symposium (Holly Dunlap)**

2/12/2020

2020 Plans / Events / Milestones

Primary Focus: IEEE NDIA INCOSE System Security Symposium, 6-9 April 2020

Collaboration/engagement with NNSA, JFAC, Services, OSD

Support OSD Standardization Efforts – Data Item Descriptions, Work Breakdown Structure, etc

Help establish a Software Assurance Committee in conjunction with JFAC

SCRM Community of Interest awareness and participation

Provide recommendations based on recent NDIA Survey on SCRM

Air Force policy review to minimize compliance activities

Advocate for a program perspective on CDI – implementation and impacts

Standards review, comment, and analyze as appropriate:

- NIST 800-53 Rev 5 Security and Privacy Controls for Federal Information Systems and Organizations
- SAE G32 Cyber Physical Systems
- Cybersecurity Maturity Model Certification
- NIST Special Publication 800-161 - Supply Chain Risk Management Practices for Federal Information Systems and Organizations
- NISTIR 8276 - Key Practices in Cyber Supply Chain Risk Management
- DoDI & DoDM 8140 Cyberspace Workforce Management

Review and consider SSE related impacts of 5000.02 update

Questions?

Backup

Approved for Public Release

2/12/2020

System Security Engineering Committee

Mission / Purpose	Stakeholders / Sponsors / Collaborators
To promote System Security Engineering integration into the Systems Engineering and Mission Assurance processes in the Department of Defense (DoD) acquisition of weapon systems. Chair: Holly Dunlap Co-Chair: Cory Ocker	Stakeholder: OSD (R&E) Government Liaison: Melinda Reed Collaborating organizations: AF CROWS, NAVAIR 4.0, JFAC, NNSA, SAE, INCOSE, IEEE

2019 Accomplishments	2020 Plans / Events / Milestones
Accomplishments (see chart 4): • Projects & Initiatives • Information Exchange • Committee Chair Representation Events: • 20+ SSE Track Briefings at NDIA Systems & Mission Engineering Annual Conference Publications reviewed: • 4 standards/guidebooks/policies reviewed and commented on	Planned Activities • Collaboration with OSD, Services, JFAC, NNSA • SCRM Community of Interest • AF Policy Review to minimize compliance activities Planned Events • IEEE, NDIA, INCOSE System Security Symposium April 2020 Planned Publications • Standardization – DIDs, WBS • 5000.02 Review • OSD Org Chart with SSE Swim Lanes

Mission / Purpose

To promote System Security Engineering integration into the Systems Engineering and Mission Assurance processes in the Department of Defense (DoD) acquisition of weapon systems. To foster the development of System Security Engineering methods, tools, techniques, and processes required for the role of System Security Engineers. To provide a forum for the open exchange of ideas and concepts between government, industry, FFRDC and academia. To develop a new understanding of System Security Engineering and the critical role it plays to ensure system survivability in a cyber contested environment.

05-Dec-2019

Goals

NDIA

The System Security Engineering (SSE) Committee seeks to:

- *Advance SSE technical and business practices within the aerospace and defense industry.*

- *Focuses on improving delivered system security performance including survivability, resiliency, and affordability.*

- *Promote and emphasize excellence in systems security engineering throughout the program life cycle and across engineering and non-engineering disciplines required for a holistic approach to system security and program protection.*

Objectives

- *Lead projects in areas that challenge the role and responsibility unique to System Security Engineering.*

  - *Projects may include but are not limited to providing a system security engineering industry perspective on draft or current System Security Engineering relevant government policies, government instructions, industry standards, industry best practices, customer requirements, risk management, etc.*

- *Support security specialty projects and initiatives by providing a system security engineering perspective that directly effects and interfaces with system security engineering.*

- *Encourage and promote the advancement, education, and skill development of the role of system security engineering.*

How do we operate?

NDIA Systems Engineering Division (SED) Planning meeting in December.
  Attended by OSD & Services Executive Leaders & NDIA SED Committee Chairs
    OSD & Services communicate their plans and priority needs for the next year.

Committee Chairs work with their committee to draft a list of priority challenges & candidate projects.

1st meeting of the year, present both the Government SSE challenges and Industry SSE challenges.

The Committee then reviews and proposes projects to address the challenges / needs.

This process establishes the plan for the year. However as opportunities and needs are presented throughout the year, the committee has the opportunity to consider updating the plan.

The SSE Committee typically meets the afternoon of the NDIA Systems Engineering Divisional meetings which are posted on the NDIA Systems Engineering website. We also send out an e-mail to NDIA SSE Committee members so please let us know if you'd like to be added to the committee email list.

We welcome and encourage participation at all skill levels.

Welcome and highly encourage committee members to lead projects and foster collaboration with other security specialty committees and working groups.

*** The number of projects, workshops, collaborations etc. along with the depth, quality, and level of rigor is dependent on the committee members commitment.

2019 Accomplishments

Activity	Title
Projects & Initiatives	• USAF Weapon System Program Protection and System Security Engineering Process Guidebook • NDIA Critical Program Information (CPI) Assessment and Identification Guide (CAIG) • DoD DRAFT Software Acquisition Pathway Policy Guidance • Cyber Secure & Resilient Approaches for Feature Based Variation Management • IEEE, NDIA, INCOSE System Security Symposium April 2020 • NDIA Systems & Mission Engineering Annual October Conference • NIST SP 800-160 Developing a Cyber Resilient Systems Vol 2: A Systems Security Engineering Approach
Information Exchange	• DASD(R&E) Sponsored SEI SwA Products, PM & Designer Guide • DoD Cyber Workforce Management • SAE G32 Cyber Physical Systems • ASD(R&E) Cybersecurity Challenges – Protecting DoD Unclassified Information • NAVAIR CyberSafe • AF CROWS Program Protection and System Security Engineering Tools • ASD(R&E) CRWS Workshop Series
Committee Chair Rep.	• SecNav Cybersecurity Advisory Panel Meeting • Collaboration on Quality in the Space & Defense Industries Forum, March 2019