Four Conference Breakout Sessions

Day 1 – Wednesday, September 7th:

1. Standards, Metrics, Models for SwA - ***Crystal 2***

   Led by Mr. Ken Hong Fong, OUSD (AT&L)

2. Industry Best Practices for SwA – ***Crystal 3***

   Led by Ms. Kristen Baldwin, OUSD (AT&L)

Day 2 – Thursday, September 8th:

3. *Engineering Processes for SwA – **Crystal 2***

   Led by Mr. Ken Hong Fong, OUSD (AT&L)

4. *Science and Technology for SwA – **Crystal 3***

   Led by Mr. Robert Gold OUSD(AT&L), and
   Larry Wagoner, NSA

Conference Expectations

Determine how the DoD and Industry can work together to achieve assured systems

- Elicit industry insights and ongoing assurance efforts
  - How has industry defined the problem
  - What are industry strategies, best practices
  - What lessons have been learned
- Engage industry in the DoD strategy elements
  - Vet each element (e.g. barriers, issues, experiences)
  - Flesh out the detailed strategy plans and products
  - Identify industry enablers (e.g. IR&D, methodologies, processes)
- Identify recommended actions for continued collaboration

Standards, Metrics and Models for SwA

- Standards
  - Many IA/IT security focused standards, but none directly focused on all of SwA
  - SwA per se, is new ground
- Guidance
  - Much IA/IT assurance related guidance
- Processes
  - Many processes in DoD that support key SwA elements, but none directly address all of SwA
- How to leverage other policies, processes, practices, tools and metrics
- SwA requires focus on attributes of the many Processes and standards as reflected in the end-product artifacts

Day 1, Crystal 2 Breakout Room

Industry Best Practices for SwA

- Present example SwA Best Practices
- Discuss additional examples
- Discuss their application
  - Who performs them?
  - Are they sufficient?
  - Barriers and Lessons Learned
- Areas needing attention or motivation

Day 1, Crystal 3 Breakout Room

Engineering-in-Depth Processes

- Top level definition:
  - An analytical approach of focusing SE to the issues of SwA
  - Like defense-in-depth seeks to implement multiple layers of strength, by building SwA into the product instead of adding it on
- Top level approach:
  - Implement SwA into the engineering process. Impacts include:
    - Requirements, sensitivity analysis, scenarios, T&E, M&S, threat and vulnerabilities assessment, configuration management, technical reviews, red teams, standards, education & training
  - SwA Planning will be documented in Systems Engineering Plans (SEP) and Test and Evaluation Master Plans (TEMP)
  - Work with industry to define SE enhancements
- Derive reasonable and cost effective enhancements
  - Insert agreed enhancements into DoD acquisition policies & guidance

Day 2, Crystal 2 Breakout Room

Science and Technology Breakout Session

- DoD S&T plans
  - Speaker - Gold
- Other Government S&T activities (DHS, NIST, NSF etc.)
  - Speaker - Wagoner
- Current state of practice (tools and techniques available today)
  - Speaker - Wagoner
- Research Agenda
  - Speaker - Gold
- Industry interests (Underwriters Lab, MS SwA)
  - Speaker - Reed

Day 2, Crystal 3 Breakout Room

NDIA Software Assurance Summit Out brief Template

Industry insights and ongoing assurance efforts

- How has industry defined the problem?
- What are Industry strategies and best practices?
- What are lessons learned have been learned?

Industry Thoughts Regarding DoD Strategy Elements

- Vet each strategy element, e.g., identify barriers
- Flesh out the detailed strategy plans and products
- Identify Industry Enablers, e.g., IR&D, Methodologies, Processes

Recommended actions for continued collaboration