Information Systems Summit II (ISS II)

sponsored by

C4ISR Division

Baltimore, Md
April 4-6, 2011
ISS II Introduction
Hyatt Regency Baltimore, Md
April 4-6, 2011

Dr Steven Kimmel
Alion Science and Technology
C4ISR Division & Program Chair
ISS II Program Summary

• Commercial Experience with Agile Software Development & Test

• Information Sharing, Assurance and User expectations

• IT policy, management and CIO imperatives to deliver Information System solutions
ISS History
ISS I convened Jan 2009

Improving Defense
Information System (IS)
Acquisition:

Testing IS Capability in a Network Enterprise
DOD IT is a National “Asset”

- National security industrial base key components
  - C4 (decision support, command execution, information-sharing, connectivity, and situational understanding)
  - ISR (means and tools which generate the data)
  - IT (provides infrastructure and support)

- Directly tied to war fighting
  - Defend the networks and systems
  - Attack our enemies networks and systems

- Network-enabled C4ISR/IT capabilities
  - On the ground situational awareness
  - Enhances our warfighting capabilities
Stakeholder Recommendations

• Defense Science Board
  – Developmental Test and Evaluation, May 2008
  – DOD Policies and Procedures for the Acquisition of Information Technology, March 2009

• 2010 National Defense Authorization Act (Sec 804)
  – Implementation of a New Acquisition Process for Information Technology Systems

• NDIA-OUUSD (AT&L) System Engineering Division/Development T&E Committee and Software Industry Experts
  – Software T&E Summit/Workshop September 2009
  – Joint Authored White Paper, Dec 2009

• National Academies of Science Study
  – Achieving Effective Acquisition of Information Technology in the Department of Defense, December 2009
New Emerging DOD IT Landscape

**804 Compliance**: FY2010 National Defense Authorization Act, Section 804

- New IT system acquisition process required
  - Multiple rapid capability increment
  - Early prototyping for evolutionary approach
DOD Agile IT Precepts

1) achieve significant time and cost resource efficiencies

2) support software application “sprints”

3) provide tailored test environments established on demand

4) create a virtual library of systems and services to avoid having to stand up physical systems for every test

5) establish a DOD wide accepted restructured IT T&E process
DOD Agile IT Challenges

- Incremental Requirements (IT Box)
- Incremental Budgets
- Iterative S&T Investments
- Iterative Systems Engineering

FRCB ??
Testing ??
C&A ??
Contract Language?
Warfighter Feedback?
Closing Comments

• IT systems are different than weapons systems…current DOD 5000 inappropriate for both

• DOD agile developed IT systems/applications are on the horizon……IT “sprints” projects will cause closer collaboration between users, developers and testers

• Serial or “soda straw” T&E to migrate towards –
  – parallel acceptance, certification, accreditation, interoperability and integration
  – test once, accept by all.
Information Systems Summit II (ISS II)

sponsored by

C4ISR Division

Baltimore, Md
April 4-6, 2011