Testing at the Speed of Need

Agile Development

September 18, 2012

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- DOT&E Role
- Agile Framework
- Agile T&E Activities
- Agile T&E Best Practices
- Summary
Director, Operational Test & Evaluation

- Principal advisor on operational test and evaluation to Office of Secretary and component heads
- Prescribes T&E policies and procedures for the Department
- Provides independent T&E oversight and assessment for Major Acquisition Programs
- Reviews Operational Requirements Documents
- Has access to all data or records related to acquisition programs
- Approves Test and Evaluation Master Plans (TEMPs), Operational Test Plans, and Operational Test Agents
- Writes Letters of Assessment
- Member of Acquisition Review Board
- Catalogs DHS organic and non-DHS T&E capabilities in database that can be accessed by all components

*DOT&E Delegation 10003 signed 6 May 2009*
Agile Framework

**Agile Approach**

- **Release 1**
  - Release Planning
  - Sprint 1
  - Sprint 2
  - Sprint n
  - Release Integration
    - Design, Development & Test

- **Release n**
  - Release Planning
  - Sprint 1
  - Sprint 2
  - Sprint n
  - Release Integration
    - Design, Development & Test

* Notional timeline

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**Legend**

- **ESC Decision Event**
- **RPR** Release Planning Review
- **SRD** Sprint Review & Demo
- **ATRR** Acceptance Test Readiness Review
- **RRR** Release Readiness Review
OTA Release A2 Activities and Deliverables

### Events and Deliverables

**LOO – Letter of Observation**
- **Purpose**: Observe developmental testing and provide program management with continuous and early insight into operational testing, issues, and concerns

**A-OA – Abbreviated - Operational Assessment**
- **Purpose**: Observe new operational capabilities operated and maintained by operational users

**A-OA Brief – Abbreviated-Operational Assessment Brief**
- **Purpose**: Provide summary of capabilities observed that are being performed by operational users

**OOC – Observation of Operational Capability**
- **Purpose**: Document observations of new operational capabilities operated and maintained by operational users; identify potential problem areas and potential enhancements

**OA – Operational Assessment**
- **Purpose**: Observe enhancements and progress being made with particular focus on risks likely to be observed during OT&E

**OA Brief – Operational Assessment Brief**
- **Purpose**: Provide initial summary of enhancements and significant areas of risk to OT&E

**OAR – Operational Assessment Report**
- **Purpose**: Identify enhancements and significant areas of risk to the program’s successful completion of OT&E

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**Phase 1**
- **Deploy**
  - 09/11/2012

**Phase 2**
- **Deploy**
  - 01/1/2013

**Phase 3**
- **Deploy**
  - 04/23/2013

### OTA Activities

**Sprint Review**
- Activity: Observe Sprint Reviews and Sprint Kick-Offs
  - Deliverables & Times:
    - LOO [E+5]

**Hardening Sprint**
- Activity: Witness Final User Acceptance Test & Observe Hardening Sprint Review
  - Deliverables & Times:
    - LOO [E+5]

**Phase 1 Deployment**
- Activity: Conduct A-OA
  - Deliverables & Times:
    - A-OA Brief [E+10]
    - OOC [E+30]

**LOO**
- Witness UAT

**Phase 2 Deployment**
- Activity: Conduct A-OA
  - Deliverables & Times:
    - A-OA Brief [E+10]
    - OOC [E+30]

**Phase 3 Deployment**
- Activity: Conduct OA
  - Deliverables & Times:
    - OA Brief [E+10]
    - OAR [E+30]
Agile T&E Best Practices

- Early involvement of all key stakeholders
- Form T&E Integrated Product Team
- Develop a realistic and executable test strategy
- Early identification of an adequate OTA
- Risk Based Operational Test and Evaluation
- Set realistic goals for planning, execution and reporting
- Schedule should allow for identification and correction of major deficiencies
- Involve the T&E COE

Agile T&E Best Practices are the Same as Basic T&E Best Practices
Summary

- DHS piloting on three major programs
- Still many unknowns
  - Small scale vs. large scale programs
  - User involvement/empowerment
  - Governance
  - Skills of Agile teams
Questions?