T&E Workforce Development

2016 ITEA Cyber Security Workshop

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Agenda

- Policy Overview
- Cybersecurity T&E Guidebook/Process
- Chief Developmental Tester (CDT)
- T&E Working-level Integrated Product Team (WIPT)
- T&E Workforce
- T&E Workforce Development
- T&E Training Requirements
- DAU Cybersecurity Training
Policy Overview


DoDI 8500.01, “Cybersecurity”, Mar 14, 2014

DoDI 8510.01, “Risk Management Framework (RMF)”, Mar 12, 2014

DOT&E Memo – “Procedures for OT&E of Cybersecurity in Acquisition Programs”, Aug 1, 2014
Cybersecurity T&E Guidebook

• **Purpose:**
  – Provides guidance to assist the **Chief Developmental Testers, Lead DT&E Organizations, Operational Test Agencies**, and the larger **T&E community** in developing an approach to cybersecurity, using the Cybersecurity T&E Six Phase Process

• **Contents include:**
  – Cybersecurity T&E process and implementation guidance
  – Program Protection Plan (PPP) analysis guidance for T&E
  – Overview of Risk Management Framework (RMF)
  – Cybersecurity T&E Resources
    – Cyber Ranges and Facilities
  – Examples of common vulnerabilities

July 1, 2015
Cybersecurity T&E Process

The goal of cybersecurity DT&E is to identify issues before MS C that are related to resilience of military capabilities from cyber threats. Early discovery of system vulnerabilities can facilitate remediation and reduce impact on cost, schedule, and performance.

Operational testing must examine system performance in the presence of a realistic cyber threat.
GOAL.—It shall be the goal of the Department of Defense and each of the military departments to ensure that, for each major defense acquisition program and each major automated information system program, each of the following positions is performed by a properly qualified member of the armed forces or full-time employee of the Department of Defense:

- Program manager.
- Deputy program manager.
- Senior contracting official.
- Chief developmental tester.
- Program lead product support manager.
- Program lead systems engineer.
- Program lead cost estimator.
- Program lead contracting officer.
- Program lead business financial manager.
- Program lead production, quality, and manufacturing.
- Program lead information technology.
T&E WIPT
(T&E Working-level Integrated Product Team)

Includes Subject Matter Experts:
- Blue Team/Red Team
- Cybersecurity (RMF)

DoDI 5000.02: Program managers designate a T&E WIPT .... The T&E WIPT will include empowered representatives

The T&E WIPT supports the program in developing a T&E strategy and designing the T&E program as well as in the analyzing, assessing, and reporting of test results.
T&E Workforce
(FY 2015 Government T&E Personnel)

AT&L T&E WORKFORCE 8,692
OTA WORKFORCE 2,713
MRTFB WORKFORCE 16,933

Additional T&E Personnel

Contractor personnel not included
Venn diagram not drawn to scale

DISTRIBUTION STATEMENT A. Approved for public release. Case 16-S-1503
T&E Workforce Development
(FY 15 – FY 17 Roadmap)

**Input:**
- DASD(DT&E) Priorities
- FY 2014 NDAA
- Interim DODI 5000.02
- DoDI 8500 – Cybersecurity
- DoDI 8510 – RMF
- DoDI 8330 - Interoperability
- DAG, Chapter 9 Updates
- Shift Left (Continued)

**Input:**
- Final DoDI 5000.02
- DoDI 5134.17 (DT&E)
- FY 2015 NDAA
- Improve DEF Guidance
- Reliability Growth
- Cybersecurity T&E Phases
- Incorporating T&E in Contracts

**Input:**
- DEF Guidance
- Update Cybersecurity T&E Phases
- T&E Interoperability
- MS A TEMP / TEMP Format
- Improve Reliability T&E
- STAT
- Others as needed

**FY 2015 Annual Certification**
Update TST 102, 204, 303
Update T&E CLMs as needed

**FY 2016 Annual Certification**
Update TST 102, 204, 303
Update T&E CLMs as needed

**Better Buying Power 3.0:**
Improve the Professionalism of the Total Acquisition Workforce
T&E Training Requirements (FY 2016)

**Level I**
- **ACQ 101**
  Fundamentals of Systems Acquisition Management
- **TST 102**
  Fundamentals of Test and Evaluation
- **CLE 023**
  Modeling and Simulation for Test and Evaluation
- **CLE 074**
  Cybersecurity
- **ENG 101**
  Fundamentals of Systems Engineering (Replaced SYS 101)

- 1 Year T&E Experience
- Associate’s degree in any discipline

**Level II**
- **ACQ 202 and 203**
  Intermediate Systems Acquisition
- **CLE 301**
  Reliability and Maintainability
- **CLR 101**
  Intro to JCIDS Process
- **CLE 035**
  Probability and Statistics
- **CLE 030**
  Integrated Testing
- **TST 204**
  Intermediate Test & Evaluation
- **SYS 202**
  Applied Systems Engineering in Defense Acquisition, Part 1
- **CLE 003**
  Technical Reviews
- **CLE 029**
  Testing in a Joint Environment
- **CLM 014**
  IPT Management Leadership
- **CLM 016**
  Cost Estimating Overview
- **CLM 013**
  Work Breakdown Structure
- **CLM 016**
  Intro to EVM
- **CLM 008**
  Program Execution
- **CLM 031**
  Improved SOW
- **CLL 015**
  Product Support Bus Case Analysis

- 2 Years T&E Experience
- Bachelor’s degree with 24 semester hours or equivalent in technical or scientific courses

**Level III**
- **TST 303**
  Advanced Test and Evaluation
- **CLB 009**
  PPBE & Budget Exhibits
- **CLB 008**
  Program Execution
- **CLL 015**
  Product Support Bus Case Analysis

- 4 Years T&E Experience
- Bachelor’s degree in technical or scientific field
T&E Training Requirements
(FY 2016)

**Level I**
- ACQ 101: Fundamentals of Systems Acquisition Management
- TST 102: Fundamentals of Test and Evaluation
- ENG 101: Fundamentals of Systems Engineering (Replaced SYS 101)
- CLE 023: Modeling and Simulation for Test and Evaluation
- CLE 074: Cybersecurity

- 1 Year T&E Experience
- Associate’s degree in any discipline

**Level II**
- ACQ 202 and 203: Intermediate Systems Acquisition
- TST 204: Intermediate Test & Evaluation
- CLE 301: Reliability and Maintainability
- CLR 101: Intro to JCIDS Process
- CLE 031: Integrated Systems Engineering
- CLE 035: Probability and Statistics
- CLE 030: Integrated Testing
- CLE 003: Technical Reviews
- CLE 029: Technical Reviews

- Includes Cybersecurity

**Level III**
- TST 303: Advanced Test and Evaluation
- CLB 009: PPBE & Budget Exhibits
- CLM 014: IPT Management Leadership
- CLV 016: Intro to EVM
- CLB 008: Program Execution
- CLM 031: Improved SOW
- CLL 015: Product Support Bus Case Analysis

- 4 Years T&E Experience
- Bachelor’s degree in technical or scientific field

Includes Cybersecurity
DAU Cybersecurity Training

- **DAU learning assets deployed:**
  - Cybersecurity Throughout DoD Acquisition: Continuous Learning Module (CLM)
  - Risk Management Framework workshops (upon request)
  - Tailored cybersecurity training workshops (upon request)

- **DAU learning assets in development:**
  - Risk Management Framework (RMF) for Practitioners: Distance Learning (DL) – Feb 2017
  - Program Protection Planning Awareness: DL – May 2016
  - Intermediate Program Protection Planning: Resident Course – April 2017
  - Software Assurance: CLM – Feb 2017
  - Supply Chain Risk Management: CLM – Feb 2017
Questions?