



T&E Workforce Development

2016 ITEA Cyber Security Workshop

Mr. Thomas W. Simms
Deputy Director, T&E Competency & Development
Deputy Assistant Secretary of Defense (DT&E)
March 17, 2016



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 5000.02, “*Operation of the Defense Acquisition System*”, Jan 7, 2015



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

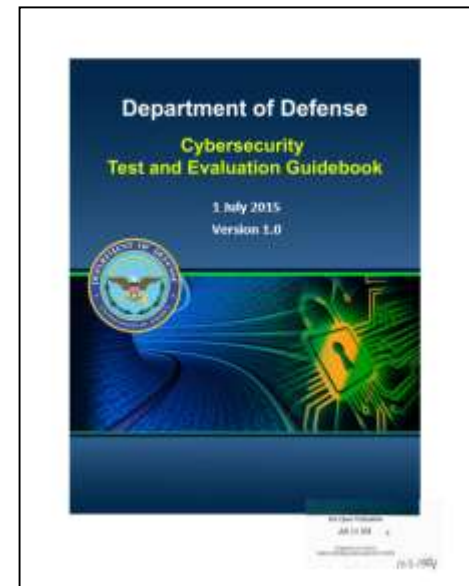


- **Purpose:**

- 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:**

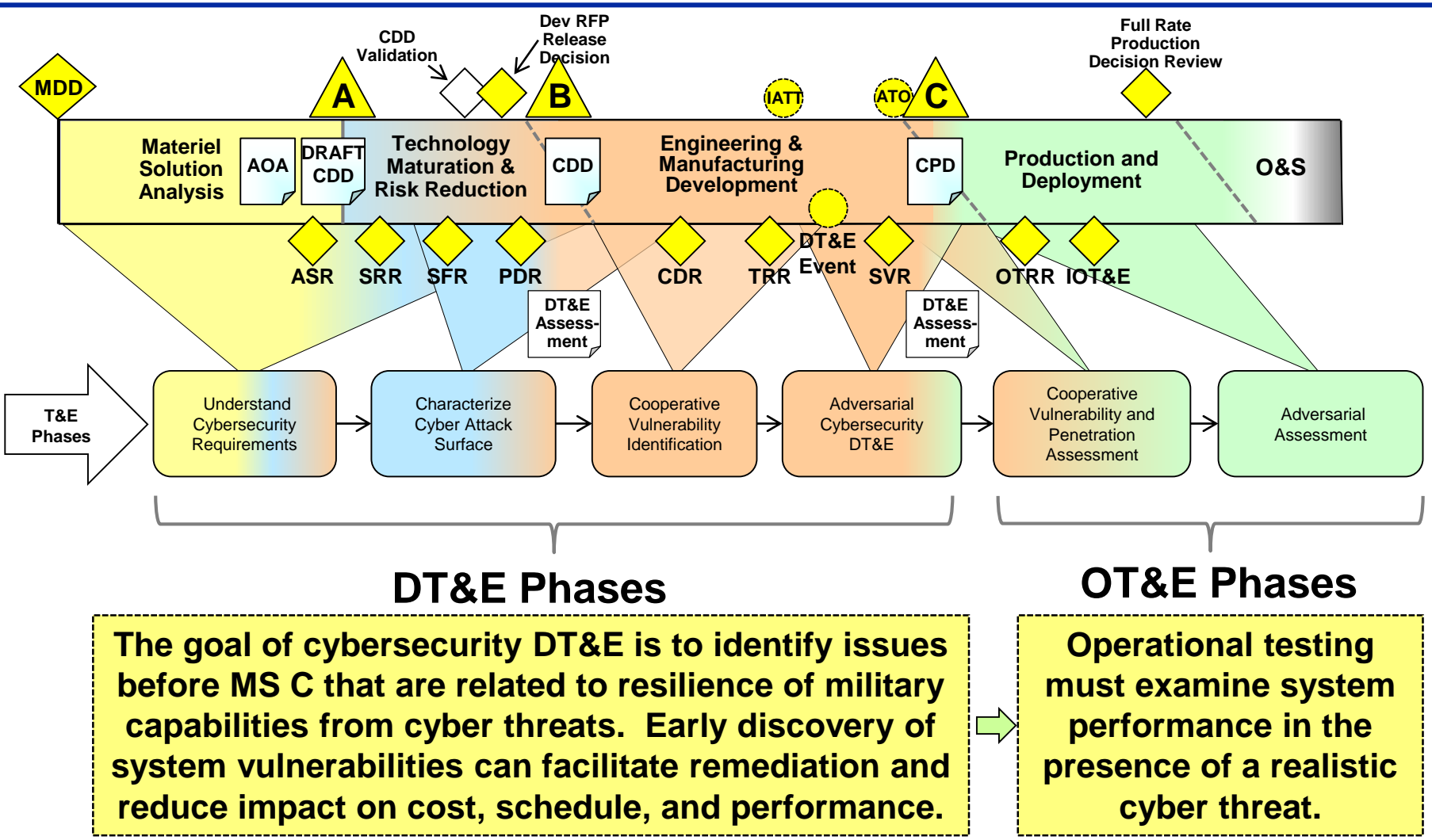
- Cybersecurity T&E process and implementation guidance
- Program Protection Plan (PPP) analysis guidance for T&E
- Overview of Risk Management Framework (RMF)
- Cybersecurity T&E Resources
 - Cyber Ranges and Facilities
- Examples of common vulnerabilities



July 1, 2015



Cybersecurity T&E Process

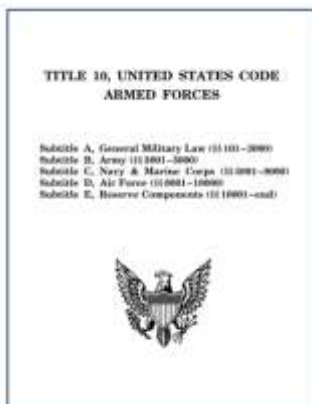




Chief Developmental Tester (Title 10, U.S.C., section 1706)



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.



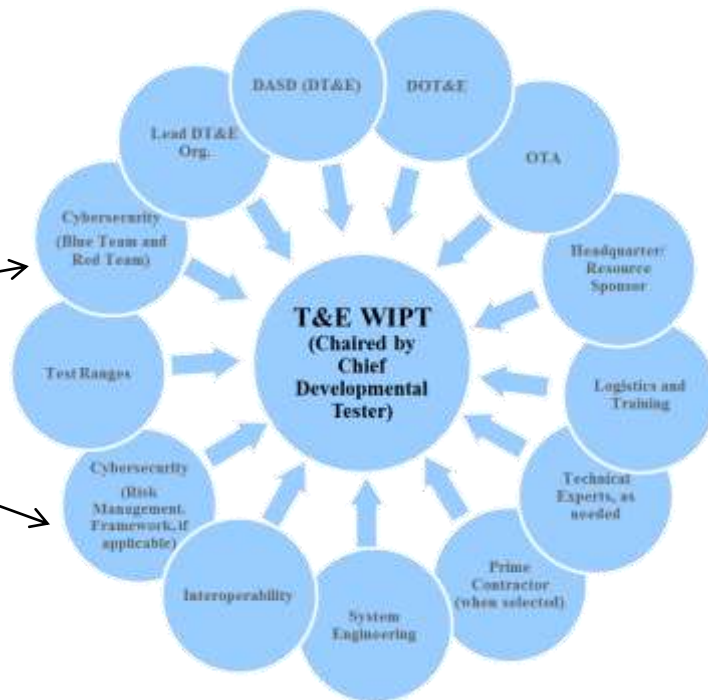
T&E WIPT

(T&E Working-level Integrated Product Team)

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

Includes Subject Matter Experts:

- Blue Team/Red Team
- Cybersecurity (RMF)



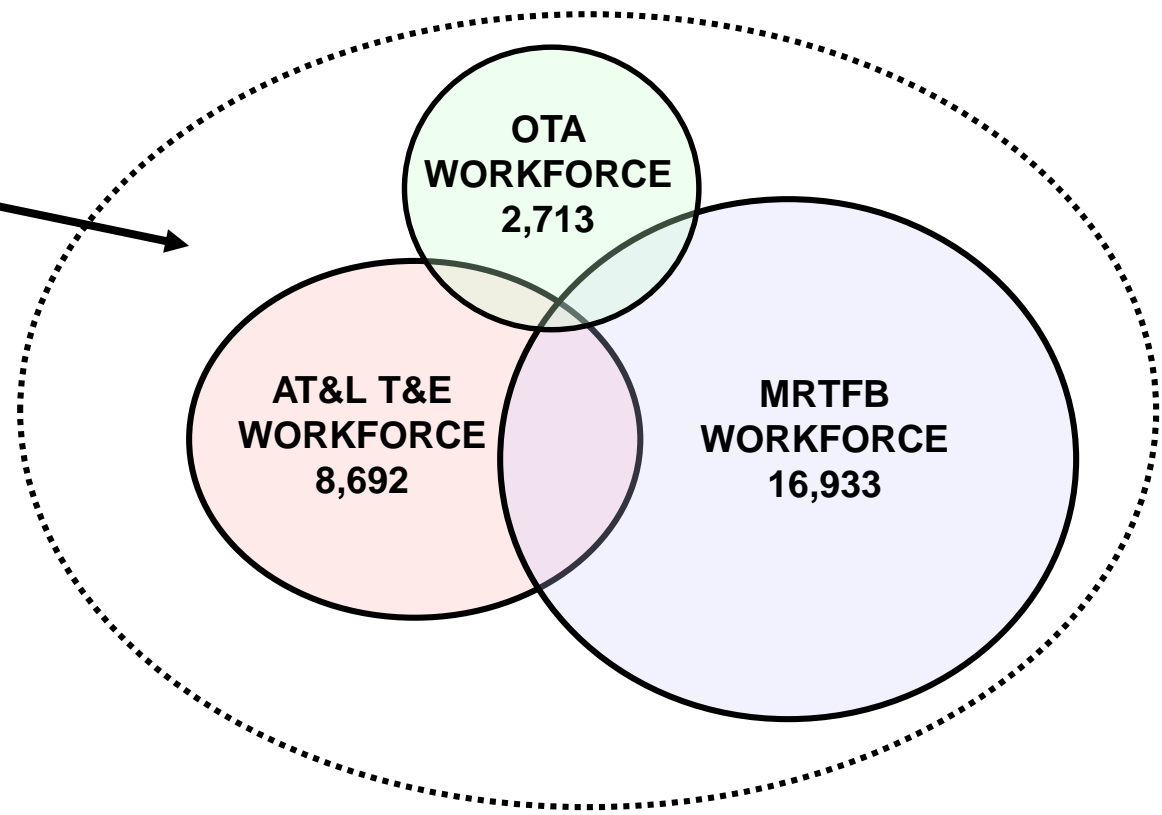
The T&E WIPT supports the program in developing a T&E strategy and designing the T&E program as well as in the analyzing, assessing, and reporting of test results.



T&E Workforce

(FY 2015 Government T&E Personnel)

Additional T&E Personnel



Contractor personnel not included

Venn diagram not drawn to scale



T&E Workforce Development (FY 15 – FY 17 Roadmap)



Input:

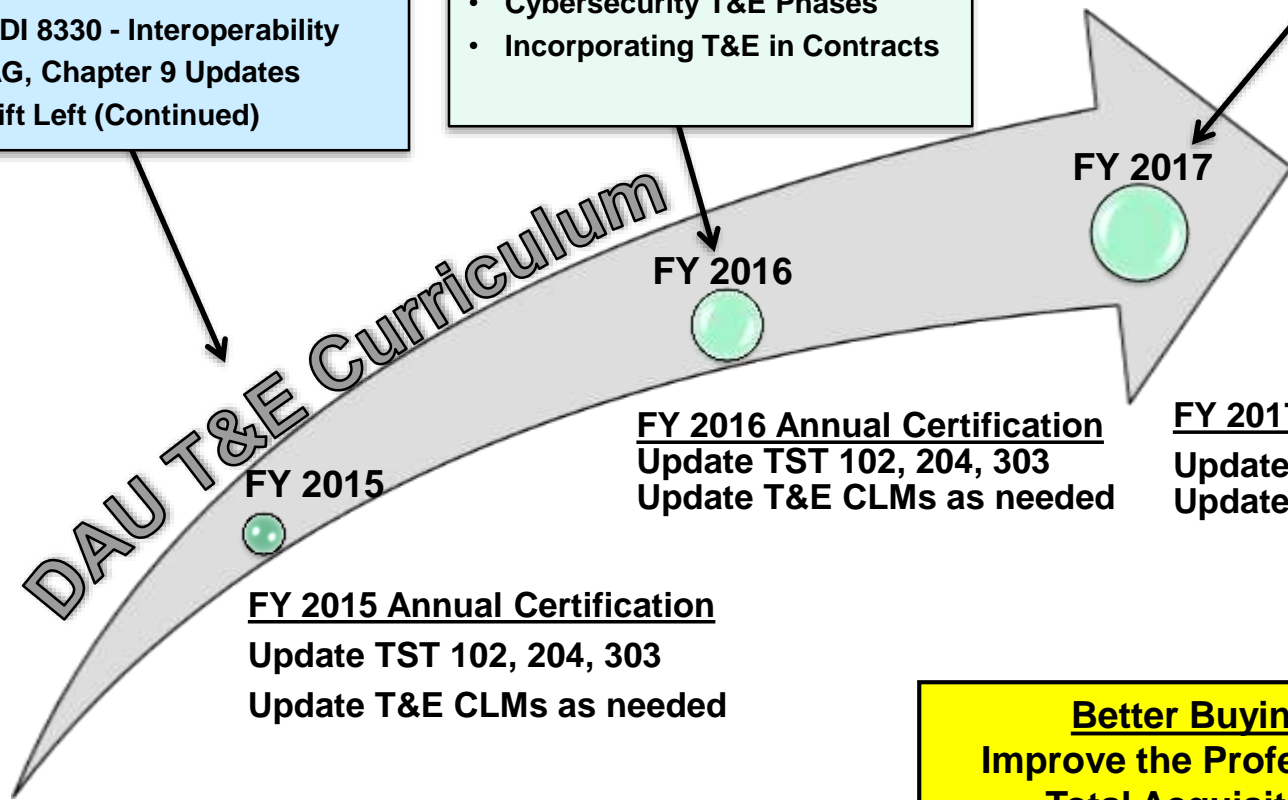
- DASD(DT&E) Priorities
- FY 2014 NDAA
- Interim DODI 5000.02
- DoDI 8500 – Cybersecurity
- DoDI 8510 – RMF
- DoDI 8330 - Interoperability
- DAG, Chapter 9 Updates
- Shift Left (Continued)

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



- Improve efficiency of T&E activities
- Advance skills of Chief Developmental Testers
- Improve acquisition outcomes

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

FY 2017 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

→

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

→

SYS 202
Applied Systems Engineering in Defense Acquisition, Part 1

→

CLE 301
Reliability and Maintainability

→

CLM 016
Cost Estimating Overview

→

CLM 013
Work Breakdown Structure

→

CLE 003
Technical Reviews

→

CLE 029
Testing in a Joint Environment

→

CLR 101
Intro to JCIDS Process

→

CLE 035
Probability and Statistics

→

CLE 030
Integrated Testing

- 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

↑

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



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

ENG 101
Fundamentals of Systems Engineering (Replaced SYS 101)

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

SYS 202
Applied Systems Engineering in Defense Acquisition, Part 1

CLR 101
Intro to JCIDS Process

CLM 016
Cost Estimating Overview

CLE 035
Probability and Statistics

CLM 013
Work Breakdown Structure

CLE 030
Integrated Testing

CLE 003
Technical Reviews

CLE 029
Technical Reviews

Includes Cybersecurity

Equivalent in technical or scientific courses

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



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?