

Strategic Enterprise Testing and Evaluation Approach

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Purpose

- **Demonstrated in this presentation is a concept for a Strategic Enterprise Test and Evaluation (SET&E) process that integrates all test organizations into a single process.**
- **Our intent is to show the relationship between a well-defined SET&E process and a reduction in Total Ownership Cost (TOC).**

SET&E:

Knowledge sharing and best practices in all T&E aspects; systematically and purposefully aligning users and T&E centers' integration efforts to deliver effective T&E capacity and capabilities by optimizing test resources through leveraging performance results across program with common architectures and/or systems.

TOC:

The sum of all financial resources necessary to organize, equip, train, sustain, and operate military forces sufficient to meet national goals in compliance with all laws; all policies applicable to the Department of Defense (DoD); all standards in effect for readiness, safety, and quality of life; and all other official measures of performance for DoD and its components.

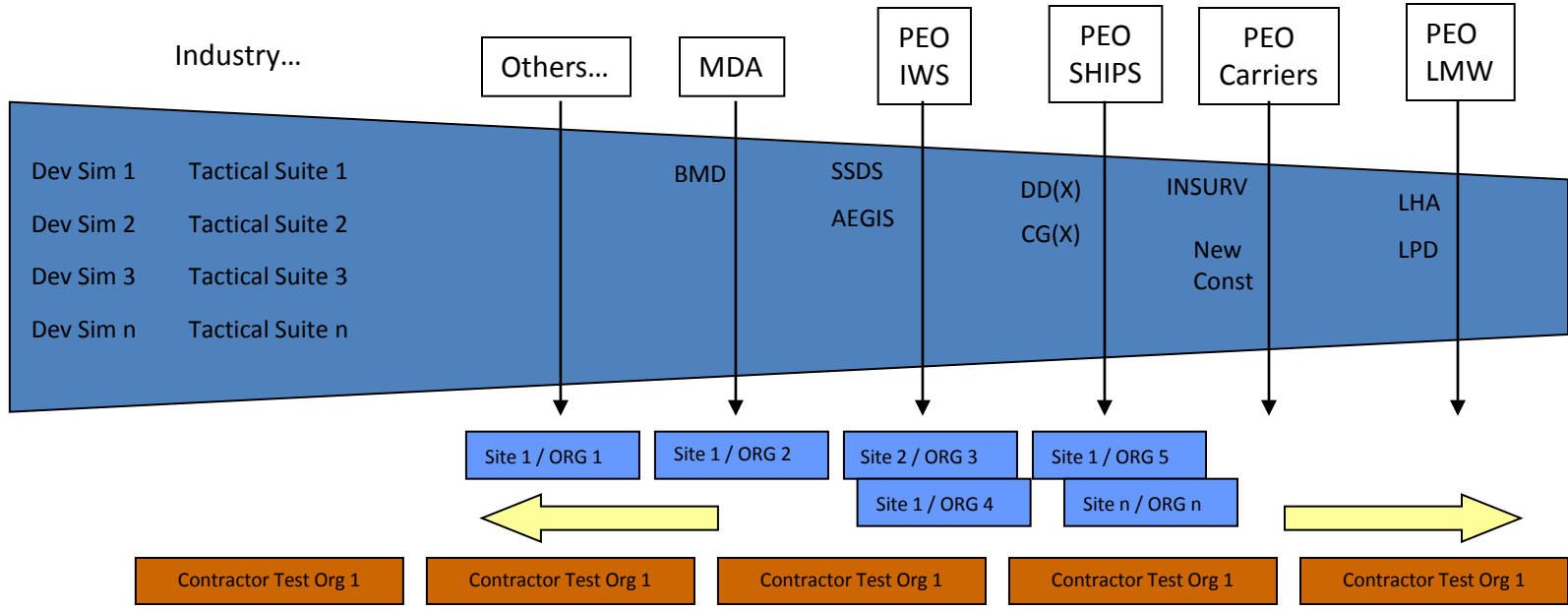
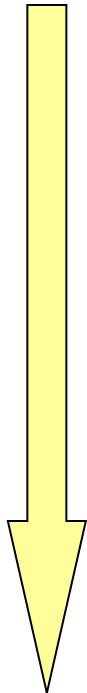
Reduce the cost of delivering warfighter capability

- **Overlapping T&E Infrastructure**
 - Redundant test capabilities and test facilities
- **Limited Coordinated Efforts**
 - Collect or provide T&E requirements
 - Perform planning, scheduling, and execution
 - Conduct testing
 - Perform integration
 - Develop products
- **Funding Similar Efforts for Different Ship Classes**
 - Duplicating key component of systems

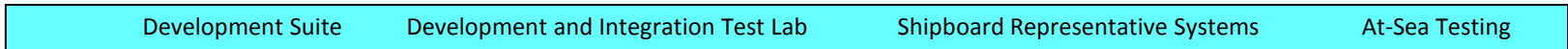
Redundant facilities and infrastructure are significant budget drivers

Duplicate Processes Example

Current State



Ideal State



MDA: Missile Defense Agency
 PEO: Program Executive Office
 IWS: Integrated Warfare Systems
 LMW: Littoral Mine and Warfare

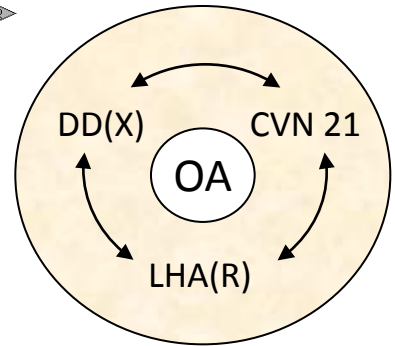
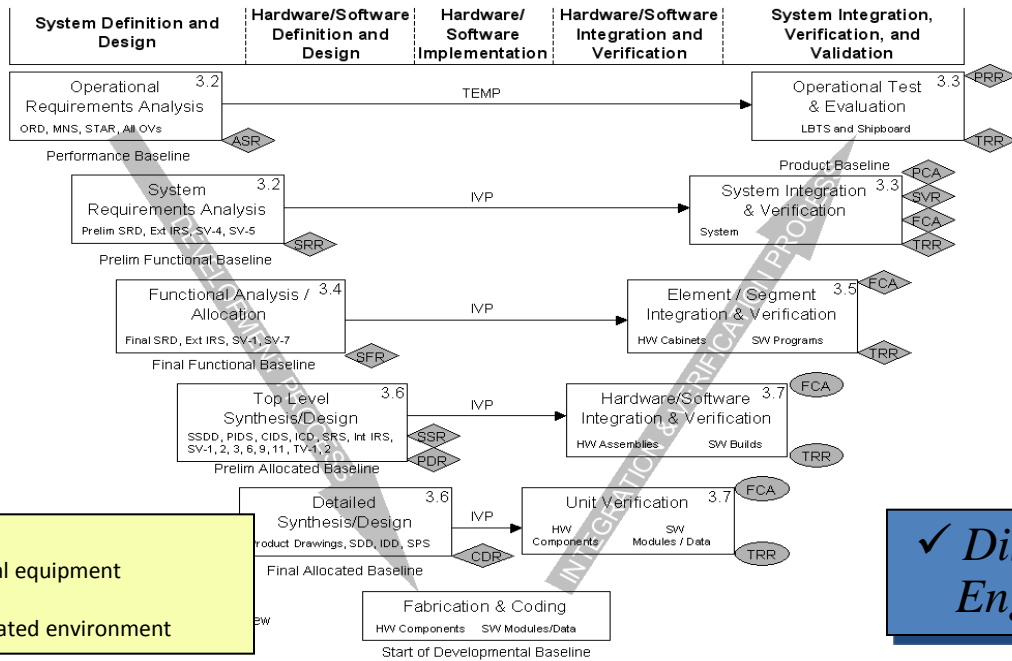
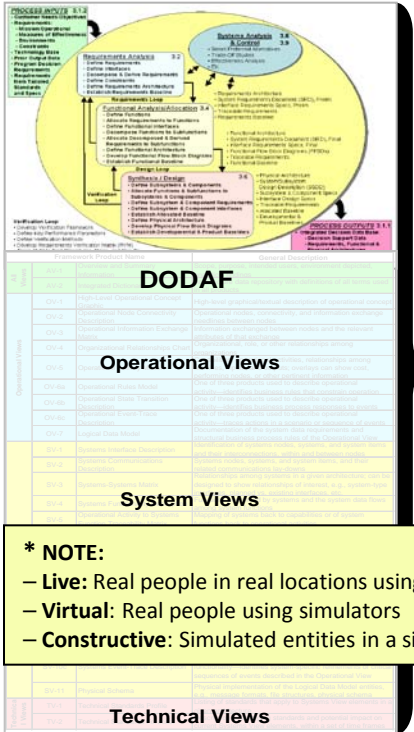
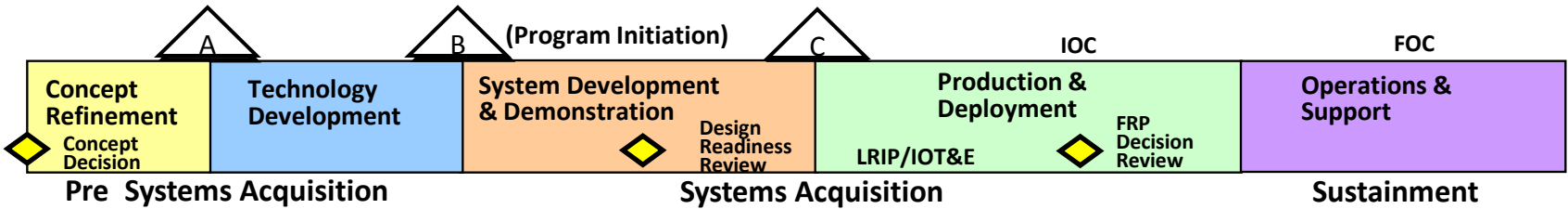
BMD: Ballistic Missile Defense
 SSDS: Ship Self-Defense System
 INSURV: Inspection and Survey

- **Reduce TOC by Better Coordinating Facilities and Infrastructures**
- **SET&E Introduces a Process for Coordinating Facilities and Infrastructures**
 - **Integrated test team**
 - Understand task, schedule, requirements
 - Move toward common processes and automation
 - Blend at-sea and land-Based test teams
 - **Consolidated test facilities and test approach**
 - One development site
 - One integration site
 - One configuration management site
 - Consistent tools

The teams should design, develop, and test with active customer participation.

Leverage Systems Engineering Process Changes To Affect Test Process and Approach

**Test like you fight through application of live, virtual and constructive test and training environments*
 Test & Evaluation Policy Revisions Memo dated 22 Dec 07

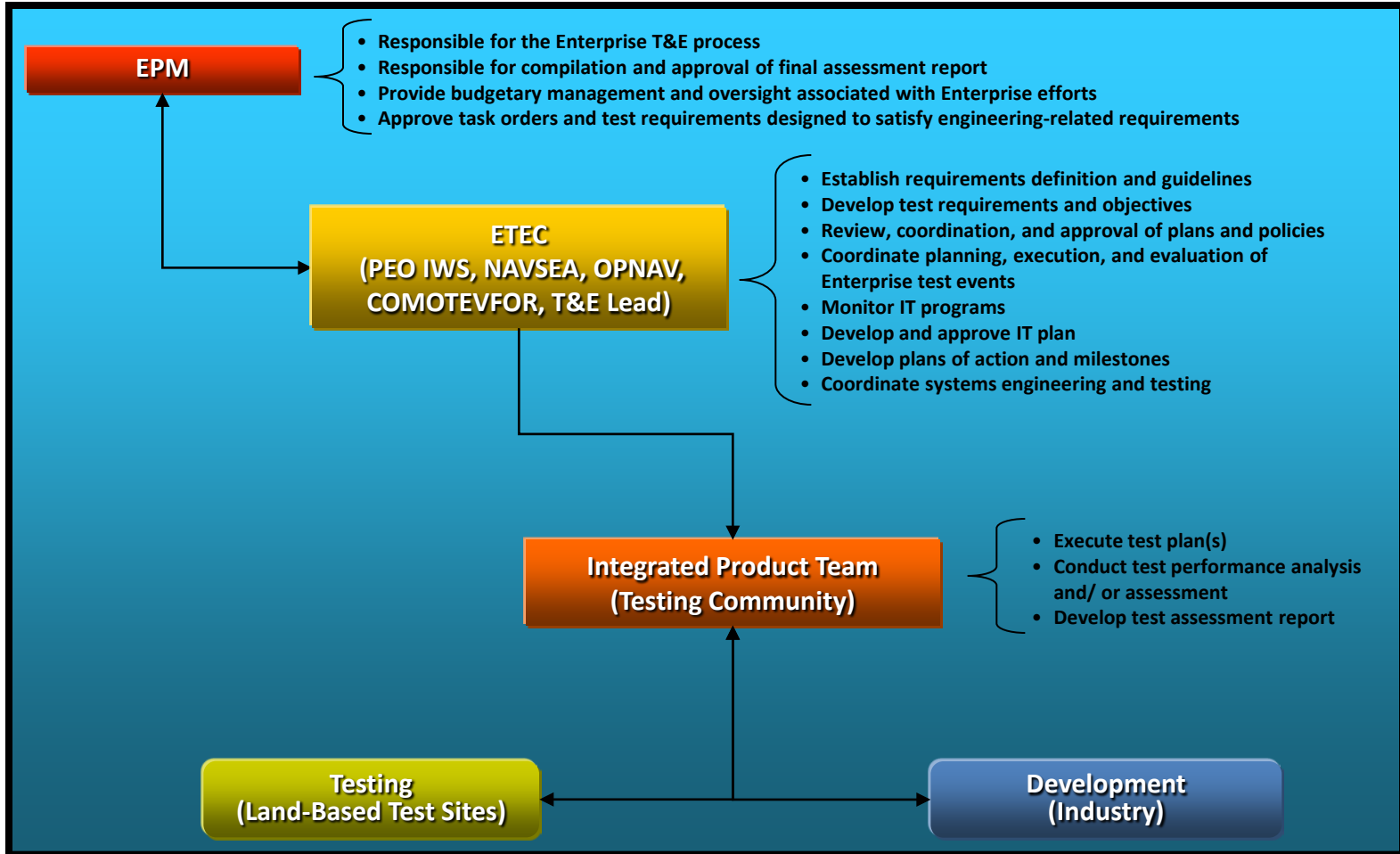


✓ Disciplined Systems Engineering Process

Excerpted and modified from Proceedings of the First Annual NCOSE Conference, Forsberg and Mooz, 1990; and Visualizing Project Management, Forsberg, Mooz, Cotterman, ©2000 by John Wiley & Sons, Inc.

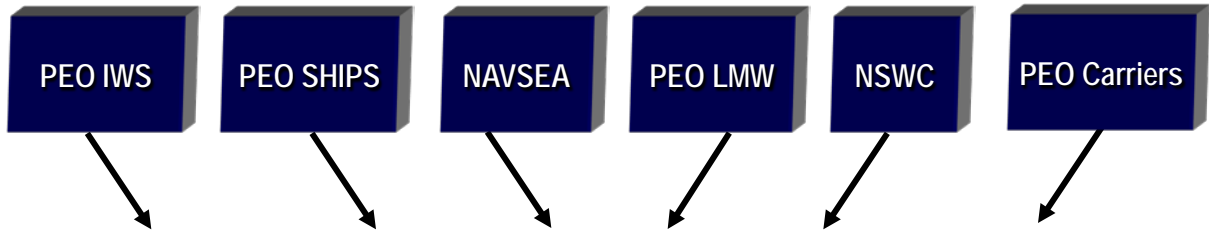
We must change from an approach that is optimized by program and platform to one that can solve the challenges of integrated systems that cross many platforms and functions

Proposed SET&E Process

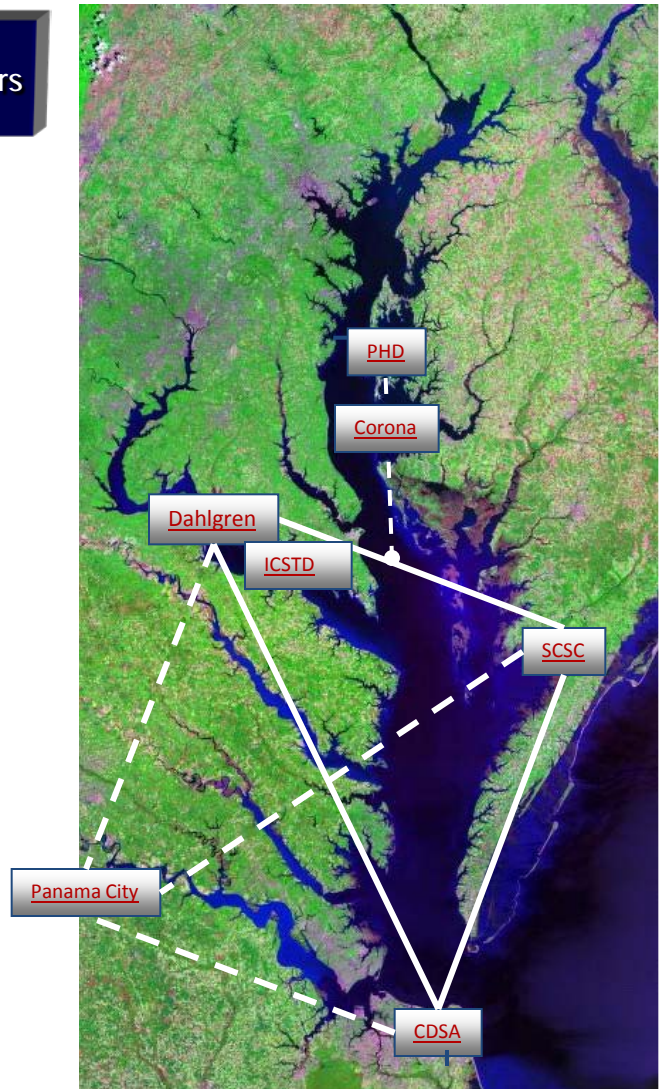
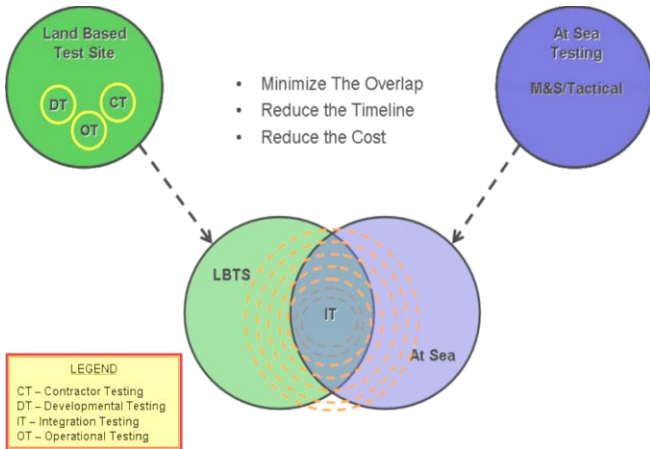


Effective test engineering across the surface Navy enterprise

SET&E Participants

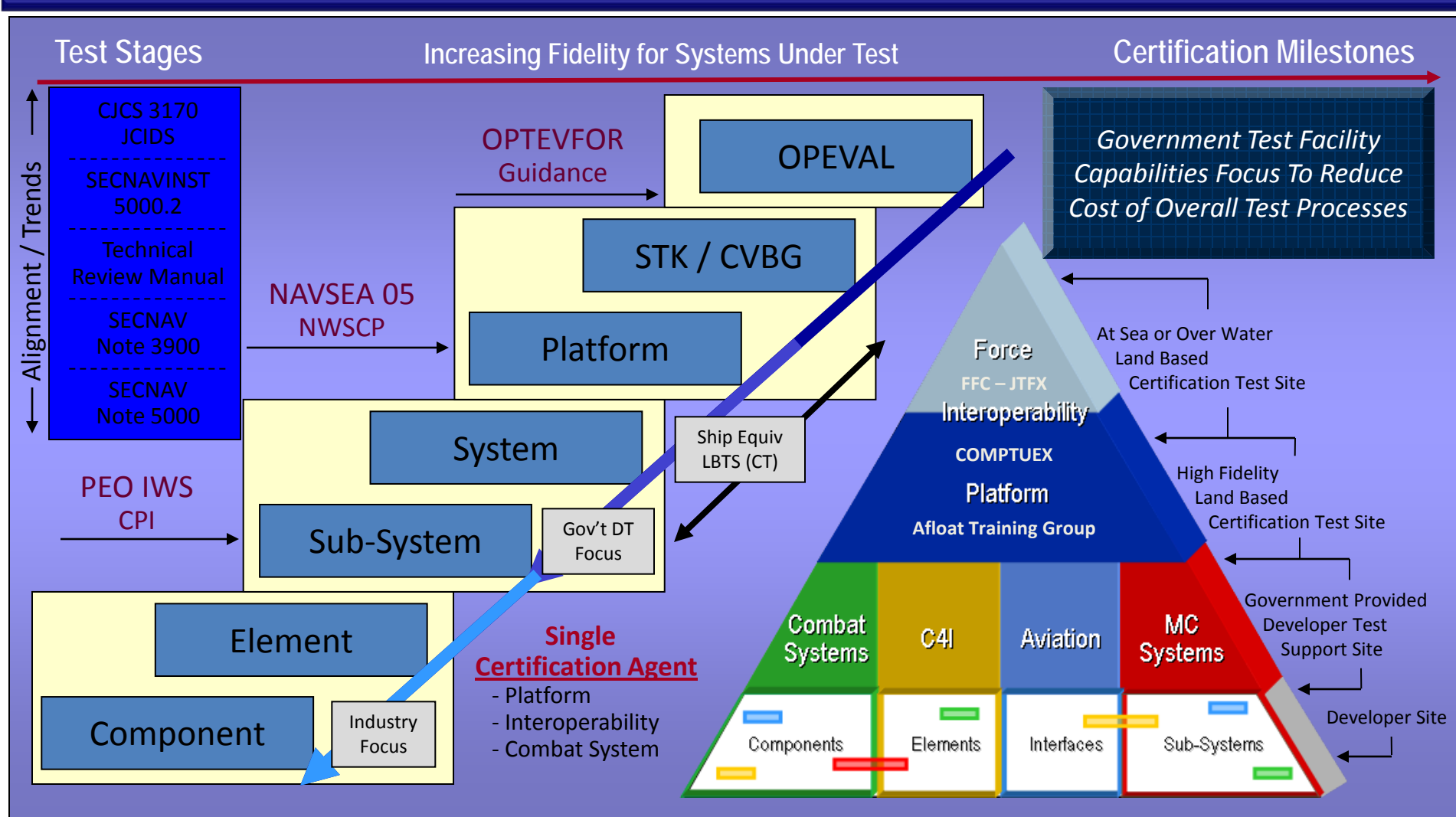


- Single Team for Warfare/Combat System
 - Providing Integration Support and Evaluation of Key Warfare System Elements
 - Land Based Testing and Certification
 - Facilitate *unified* overall land-based test efforts
 - Develop and execute configuration management plan
 - Partner with SCSC, CDSA, Corona, ICSTD
 - Supported by at-sea test team (PHD)
 - Surge to meet land-based test needs
 - Corona detachment at SCSC provides added analysis support
 - At-Sea Testing
 - Facilitate across the at-sea test efforts
 - Supported by land-based test team
 - Surge to meet at-sea needs



- **Enterprise T&E Instruction, in Compliance with Department of the Navy guidelines**
 - Enterprise T&E goals and objectives
 - T&E guiding principles
 - DoD T&E process
- **Enterprise T&E Plan of Action and Milestones**
- **Modeling and Simulation Master Plan**
- **Test Assessment Report**
- **Test Objectives**
- **Integrated Test Plan Document**

Future State - A Fully Integrated Test Approach



Overarching Test Process Alignment To Cost Optimize Test Capabilities and Processes

Questions?