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A Panel Discussion on Distributed Testing

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A Few Comments to Get Us Started



- **What is Distributed Testing?**
- **Impacts of Distributed Testing**
- **Future of Distributed Testing**



What is Distributed Testing?



- **A persistent and continuous process of linking various geographically separated Live, Virtual, and Constructive sites and capabilities together in a distributed environment, across the acquisition life cycle to support and conduct the Test and Evaluation (T&E) of a system or systems-of-systems.**
- **A new way of thinking for many in the T&E enterprise!**



Distributed Testing Impacts



- **Distributed Testing has already demonstrated:**
 - Time savings, risk reduction, new capabilities, cost savings
 - Efficiencies across the developmental and T&E process
 - Move data—not people
 - Near real-time Test-Fix-Test
- **Distributed Testing, when fully implemented also:**
 - Provides for agile, persistent T&E
 - Allows for early integration of OT and DT
 - Gives SME's an “Intensive Lab” and connective relationship with other entities in the systems-of-systems environment that they wouldn't have otherwise.

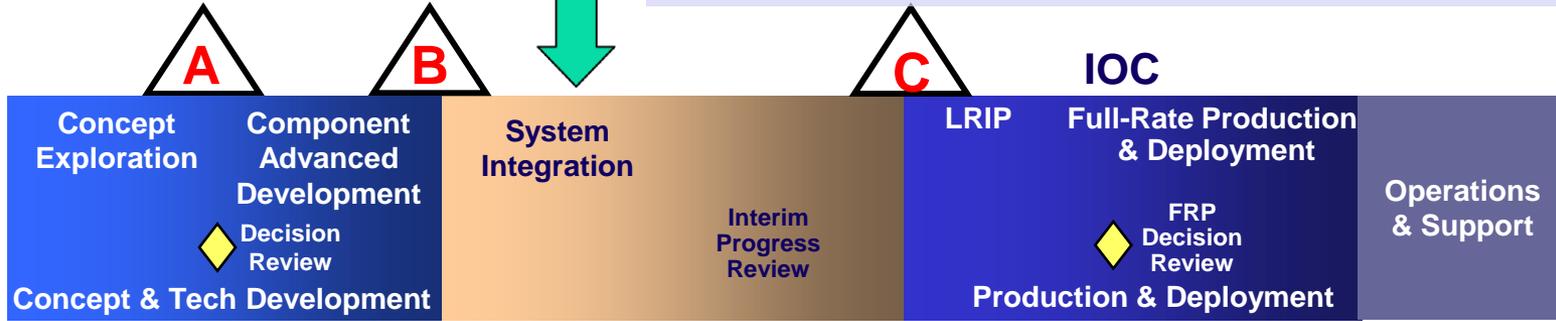


Distributed Testing Allows “Test Early and Test Often” Across the Acquisition Life Cycle



Outline Distributed Testing requirements in TEMP

Rapid Acquisition, Developmental Test, Operational Test, Interoperability Certification, Net-Ready Key Performance Parameters testing, Joint Mission Capability Portfolio testing



Pre-Systems Acquisition

Systems Acquisition
(Engineering & manufacturing development, demonstration, LRIP & production)

Sustainment

Enables early verification that systems work stand alone and in a Joint Environment

Helps find problems early in acquisition – when they are less costly to fix

Support to Acquisition Programs with the expertise to integrate distributed test facilities

Distributed Testing enables continuous testing across the acquisition life cycle
Reduces acquisition time and cost

JMETC Provides

- Readily-available, persistent connectivity with standing network security agreements
- Common integration software for linking sites
- Accredited test tools for distributed testing



The Future of Distributed Testing



- **Distributed Testing + Distributed Data Collection + Distributed Data Analysis enables rapid transformation of T&E**
- **Components of rapid transformation in T&E**
 - **Enables efficient Testing with legacy systems**
 - **Enables Interoperability Testing with new systems**
 - **Distributed data collection**
 - **Distributed analysis (Will bring the data to the SMEs)**
- **This rapid transformation already enables near real time performance analysis and problem resolution: Test-fix-test. It also enables efficiencies and capability improvements across the entire acquisition and program life cycle.**



Session Overview



- **Rear Admiral David Dunaway, USN, Commander Operational Test and Evaluation Force**
- **Mr. Steve Kreider, Executive Director & Acting Deputy, Program Executive Office-Integration/ USAASC**
- **Mr. Richard Clarke, Chief, Strategic Planning and Engineering Division, Joint Interoperability Test Command**
- **Mr. John Kriz, Deputy Director, Integrated Battlespace Simulation and Test Department, NAVAIR**



Back ups





Some Perceived Liabilities in Using Distributed Testing



- **“It will cost me time and money” when actually:**
 - Saves time & money and reduces technical risk
- **“It will bring VV&A problems to me” when actually:**
 - Every T&E Program will deal with VV&A
- **“Since I don’t own the infrastructure, it won’t be available when I need it” when actually:**
 - JMETC connectivity and support has proven persistence and reliability
- **“My Program has latency and other special technical requirements so geographically separated sites just won’t work” when actually:**
 - JMETC has proven track record of reliably moving large amounts of data, satisfying stringent latency requirements, across classified networks, even peering to other networks, with full access to data, for both large and small events



Suggested Topics



- **Have you had Distributed Testing Success?**
- **How is Distributed Testing changing T&E and Acquisition?**
- **What is the most serious challenge to distributed test as we move forward?**
- **Why would a PM want to consider distributed testing? (e.g., Time, cost, risk reduction)**