An Industry Response to the Acquisition Changes

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An Industry Response to the Acquisition Changes - Agenda

- Presentation Agenda
  - The Acquisition Reform and Initiatives
  - Change Analysis
  - T&E Keys Acquisition Tenets
  - The Transformation
  - Conclusions

“Let our advance worrying become advance thinking and planning” - Winston Churchill
An Industry Response to the Acquisition Changes

5000.02 (2008)
Significantly Revised Acquisition Policy
Earlier definition of scope, risk and cost
Mandatory entry point
Special procedures for IT services over $500 million

Risk Reduction
Competitive prototyping
Highly integrated T&E
Evolutionary acquisition (NOT spiral development)

Enhanced Oversight
More/more frequent assessments
Peer reviews
Configuration Steering Boards

WSARA (2009) Key Areas Affecting T&E
Creates Director, Developmental Test & Evaluation
• Reviews and approves DT&E plan in the TES and TEMP for MDAPs and all programs on the OSD DT&E Oversight List
• Monitors and reviews DT&E of MDAPs
• Has access to all Component records and data necessary to carry out duties

S.454 - Weapon Systems Acquisition Reform Act of 2009
Introduced: 02/23/09 Senate Passed: 05/07/09 House Passed: 05/22/09

DoDI5000.02 Implementation of the Weapon Systems Acquisition Reform Act of 2009 & New Changes to Policy Karen Byrd DAU Learning Capabilities Integration Center Learning Asset Program Manager May 2010

Cleared for Public Release 11-0252
MEMORANDUM FOR DOT&E STAFF 24-Nov 2009 - J. Michael Gilmore Director DOT&E

Wherever practicable, IOT&E will be conducted using low-rate initial production (LRIP) systems assembled using the parts, tools, and manufacturing processes intended for use in full-rate production. The system will also utilize the intended production versions of software. In addition, the logistics system and maintenance manuals intended for use on the fielded system should be in place.

Memo - Use of Production-Representative Test Articles for Initial Operational Test and Evaluation (IOT&E) J. Michael Gilmore Director OT&E 18-October-2010

"single most important step...is to...execute a viable systems engineering strategy from the beginning, including a robust reliability, availability, and maintainability (RAM) program"

We know the problem persists. We know that it results in higher costs and less effective systems. We know more stringent engineering is required to deliver reliable products. To that end, industry must be made aware that all our contracts will require, at a minimum, the system engineering practices of ANSI/GEIA STD-0009.

MEMORANDUM FOR PRINCIPAL DEPUTY UNDER SECRETARY OF DEFENSE (ACQUISITION, TECHNOLOGY AND LOGISTICS) SUBJECT: State of Reliability J. Michael Gilmore Director OT&E 30-June-2010

T&E excellence requires active leadership, sound planning, and realistic integrated developmental testing (DT) and operational testing (OT).

Incorporating Test and Evaluation into Department of Defense Acquisition Contracts - MAY 2009 – OUSD, AT&L
Industry Analysis of Acquisition Changes

The New Policies Address The Hard Questions –
✓ Provides Good Answers
Management of New Policies are Just Coming –
✓ Program Management (Customer & Contractor) Embrace the Changes
Implementation Underway –
✓ New Program Implementation a Mixed Bag, Change is Hard

Policy Alone will Not Effect Change
Five (5) Acquisition Keys

**Prototyping**
Increase Modeling and Simulation
Focus on Needed Technology Development
Establish Operational Environment Early

**Operational Realism**
Establish WIPT Early
Early Test Planning
TEMP Alignment

**Integrated Testing**
Data Plans
Proper Contract Language
Early Identification of Data Needs
Evaluate in Proper Environment

**Rapid Fielding**
Slow the Requirements Growth
Test Operationally
Collaborative Test Planning

**RAM**
Early Manufacturing Inputs
Early RAM Simulations
Still Under Work

Key Acquisition Changes Which Drive T&E Change
The Transformation

Training
Skill Mix Development
Enhance Test Techniques
Design Of Experiments
Modeling and Simulations
Develop RAM Test SME

Integrated Across Disciplines
Developed to Support Integrated Testing Concept
Establish RAM T&E Processes

Career Path Development
Rotational Programs Enhance Lifecycle Experience

Develop T&E Test Tools
Test Plan Modeling
Collaborative Test Program Dev.
Optimized Test Program

Modeling and Simulation
Physic Based, Dynamic Test Event Evaluations

Multi-disciplined Team
Test WIPT Established
Processes Based
Aligned / Coordinated & Integrated

Early Program Involvement
Support Good Program Start
Ensure T&E Needs Identified
Integrated Disciplines From the Start

Customer Aligned
Enhances Communications

The T&E DNA Requires Change to Implement the Policies
<table>
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<tr>
<th>Phase</th>
<th>Task</th>
<th>Value</th>
<th>Product</th>
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<td><strong>MDD – M/S A</strong></td>
<td>- Execute Architecture Analysis *&lt;br&gt;- Establish Long Lead Test Program requirements&lt;br&gt;- Establish Integrated Test Team&lt;br&gt;- Develop Test Strategy including Technology development activities</td>
<td>- Testable Architecture&lt;br&gt;- Initial Test Plans and Facilities Definitions Established&lt;br&gt;- Initial Requirements Based on Tested Architecture&lt;br&gt;- Architecture Streamlined Testable, Essential Requirements Identified Aiding in Rapid Deployment&lt;br&gt;- Event Based Test Schedule Developed</td>
<td>- Integrated Architecture&lt;br&gt;- Schedule&lt;br&gt;- Major Test Assets Identified&lt;br&gt;- TES</td>
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| **TDP** | - Conduct Requirements Verifiability Assessment *<br>- Conduct Verification Requirement Development *<br>- Develop Test Unique Design Requirements *
- Conduct Required Prototyping / Risk Assessments<br>- Establish Reliability Program<br>- Establish Test Program Plan | - Verifiable Requirements & Verification Statements Development Avoids Requirements rework.<br>- Test Unique Design Requirements Completes the Requirement Set.<br>- Embedded Operational Realism in Test Program Helps Prove Product can meet its intended use<br>- Support Technology Assessment / Maturation / Risk Reduction – Supply Valuable Decision Data<br>- Support Operational Sustainment Assessment<br>- Integrated Test Program Developed and Coordinated | - Solid Requirements<br>- Integrated Test Program Identified and Planned<br>- Prototyping data<br>- Initial RMA Program Established (ANSI/GEIA STD-0009)<br>- TEMP<br>- Contractor Test Plan Draft |
| **EMD** | - Requirements Refined and Allocated<br>- Integrated Test Planning<br>- Facilities Planning and Development<br>- Integrated Developmental Test Conduct | - Refined Verification Requirements<br>- Conduct Consistent Test Program Through Development Cycle<br>- On Time Establishment of Test Facilities<br>- Coordinated Contractor / DT and OT Test Plans<br>- Integrated and Verified Product<br>- Initial Operational Assessments Supported | - Traditional Test Program Executed<br>- Product Verification<br>- Integrated DT / OT Data Available |
| **Production** | - Support Transition Support to Manufacturing | - Integrated and Tested Product | - Solid Manufacturing Process based on EMD Lessons Learned |

* New Initiative To Improve Test Program Execution
Conclusions

• The Acquisition Changes when implemented will make effective changes to the Warfighter products

• The DNA of the Test Community must change to accommodate the intent of these changes

• Industry is transforming, policies and initiatives are forcing functions

• Early T&E can help programs start right

• PMs must account for early T&E in achieve the policy / initiative intent

• Change is slow, RFP language changes can increase industry change
An Industry Response to the Acquisition Changes

In life questions are guaranteed

Answers not so much
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