



31st Annual ITEA Symposium

"T&E to Achieve Better Buying Power"

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DASD(DT&E)

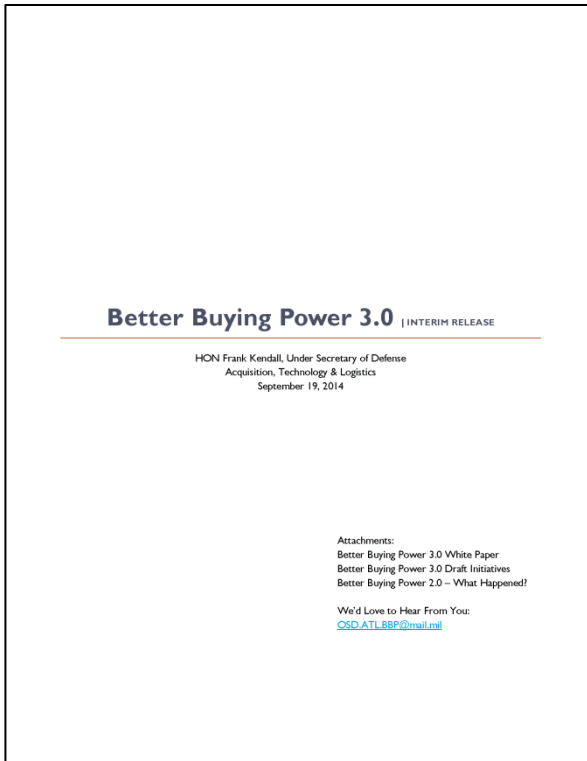
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October 7, 2014



“Shift Left” Initiative



USD(AT&L) White Paper
BBP 3.0

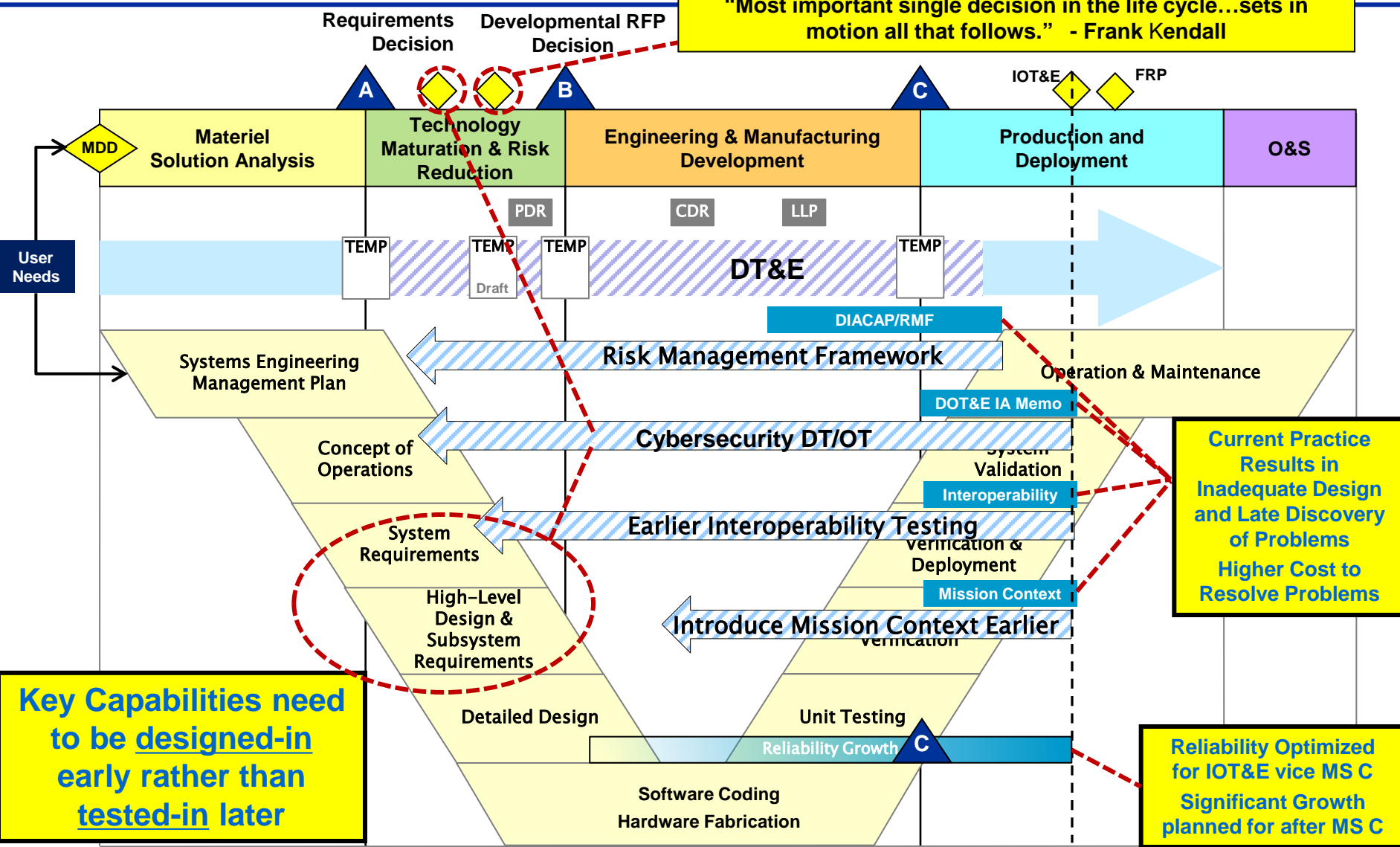
- Achieves Better Buying Power Objectives
 - Focus critical DT&E activities earlier in the acquisition cycle!
 - Three initial focus areas:
 - Earlier **Mission Context**
 - Earlier **Interoperability** Testing
 - Earlier **Cybersecurity** Testing
- “Shift Left” = the right information, right time:
 - Technical (e.g., PDR/CDR)
 - Programmatic (e.g., LLP)
 - Acquisition (e.g., MS C)

*Grounded in USD(AT&L) Better Buying Power Principles
to Improve Acquisition Outcomes*



"Shift Left"

"Most important single decision in the life cycle...sets in motion all that follows." - Frank Kendall





Defense Industry Forum Top-Level



- JHU/APL (Trusted Agent) will create an independent and collaborative T&E Defense Industry Forum (DIF) for government, industry, and other stakeholders to identify policies and technical challenges that affect the efficiency and effectiveness of DoD Test infrastructure.
- Build trust and help Government / Industry Stakeholders
- Recommendations to identify actionable items for AT&L to implement changes to T&E policy and processes

*The Defense Industry Forum was requested by
OEMs in the TRMC Study*



KLP Qualification Board

Key Leadership Position Joint Qualification Board Application

The information collected in this application will be used by the KLP Qualification Board to identify personnel with the knowledge, skills, abilities, and experiences necessary to fill Key Leadership Positions (KLP) of Major Defense Acquisition Programs (MDAP) or Major Automated Information System (MAIS) programs. This application will be reviewed by the KLP Qualification Board who will identify top talent to include in a pool of potential candidates for KLPs. This application is not specific to any open position and does not guarantee selection for a KLP.

Please refer to the *Instructions for Completing a Key Leadership Position Qualification Board Application Package* for step-by-step guidance on completing this application.

Career Field Candidacy	Applicant Name	Component/Organization
	Applicant E-mail	Applicant Phone Number

SECTION 1: KLP COMMON CROSS FUNCTIONAL REQUIREMENTS

Section 1.1: Education, Certification, and Training Requirements

Enter information in the appropriate box			
	Degree	Field of Study	School
Education	Bachelor's Degree		
	Relevant Advanced Degree (Preferred)		
	Intermediate/Senior Service School Degree (Preferred)		
	Auditing	Business-CE	Business-FM Facilities

DRAFT

DEPARTMENT OF DEFENSE

Key Leadership Position
Qualification Board
Standard Operating Procedure



Version 5

First Q-Board Scheduled for December 9, 2014



Developmental Evaluation Framework



Developmental Evaluation Objectives	What		Decisions Supported				
	System Requirements and T&E Measures		Decision #1		Decision #2		
	Technical Reqmts Document Reference	Description	DSQ #1	DSQ #2	DSQ #3	DSQ #4	DSQ #5
Functional evaluation areas			Identify major decision points for which testing and evaluation phases, activity and events. Cells contain description of data source to be used for evaluation information, for example: 1) Test event or phase (e.g. CDT1....) 2) M&S event or scenario 3) Description of data needed to support decision 4) Other logical data source description				
System capability categories							
Performance							
Performance Capability #1	3.x.x.5	Technical Measure #1	DT#1			M&S#2	
	3.x.x.6	Technical Measure #2	M&S#1		DT#3		
Performance Capability #2	3.x.x.7	Technical Measure #3					DT#3
	3.x.x.8	Technical Measure #4					M&S#4
Interoperability							
Interoperability Capability #3	3.x.x.1	Technical Measure #1					DT#3
	3.x.x.2	Technical Measure #2		IT#2			M&S#4
Interoperability Capability #4	3.x.x.3	Technical Measure #3		IT#2			
	3.x.x.4	Technical Measure #4					
Cybersecurity							
SW/System Assurance	PPP 3.x.x	SW Assurance Measure #1				SW Dev Assess	
RMF		RMF Control Measure #1	Cont Assess			Cont Assess	Cont Ass
Vulnerability Assess		Vul Assess Measure #1					Blue Tea
Interop/Exploitable Vuln.		Vul Assess Measure #2					Red Tea
Reliability							
Reliability Cap #1	4.x.x.1	Technical Measure #11		M-demo#1			
	4.x.x.2	Technical Measure #12		M-demo#1			
	4.x.x.3	Technical Measure #13					M-demo#
Reliability Cap #2	4.x.x.4	Technical Measure #14					M-demo#

Why and When

How

IT&E Journal 2013, 34: 189-195

DT&E Strategy Development: Start With the ‘E’; Then Build the ‘T’

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Testing is not conducted for testing's sake. Taxpayers demand more accountability in test and evaluation (T&E) activities; they expect T&E to serve a greater purpose: to improve acquisition outcomes by informing key acquisition decisions, guiding the program's acquisition course, and evaluating the system's performance against what it is supposed to do, both technically and operationally. In addition, thoughtfully executed T&E can save taxpayer dollars through early discovery and remediation of performance deficiencies. Given the expectation that T&E will provide the information to address risk and inform decisions, a logical thought process is required: first, define an evaluation framework; second, build a test program to generate the data for subsequent evaluation; and finally, evaluate the data to develop the knowledge for informed decisions. This article describes key steps in that process using an example from the Deputy Assistant Secretary of Defense for Developmental Test and Evaluation (DASD/DT&E)) Space and Missile Defense Systems portfolio.

Key words: Decision-support; developmental test and evaluation (DT&E); DOE-based test design; evaluation; requirements decomposition; space system; technical performance evaluation framework.

The Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)), Mr. Frank Kendall, has a sign outside his office that states, "In God we trust, all others bring data." In fact, we believe that the USD(AT&L) does not really want raw data; what is really needed is information that accurately characterizes system performance and is derived from a disciplined evaluation of test data. To gather that data, Developmental Test and Evaluation (DT&E) planning begins with activities that define how the system will be evaluated.

The Operational Test and Evaluation (OT&E) community has developed standardized procedures for decomposing the operational requirements specified in the Joint Capabilities Integration and Development System (JCIDS) documents into an OT&E evaluation framework. The OT&E framework is a hierarchical representation of the requirements decomposition from the high-level critical operational issues (COIs), the major operational "chunks" of the mission; to OT&E objectives (operational capabilities); to the measures used to evaluate the system's capability to perform its operational mission.

The DT&E community has not, in the past, developed a similar evaluation framework to guide systems' technical evaluations. Lacking this logical framework that guides the test design and data analysis

Building the evaluation framework
As shown in Figure 1, an evaluation framework



TEMPs



The Good

- Robust T&E Planning
- Contract among Stakeholders

The Bad

- Cumbersome and bureaucratic process
- Document is too big

The Ugly

- “TEMP is only for OSD”
- Long term value is questionable





Questions