Empowering IT Acquisitions

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The Point – Value Deployed Rapidly to the Warfighter
Enabling the Warfighter

• Net-Centric warfare is today’s reality but hindered by large weapon system approaches
• Procurement require extensive and costly engineering changes to become interoperable and sustainable
• Higher costs per traditional program and decreasing budgets
• Legacy base of capabilities requires sustainment and modernization to meet modern cyber threats
Growing Software Dependency

Figure 1: Air Force’s Growing Reliance on Software in Major Airframes. (Source: Mark T. Maybury, CyberVision 2025, US Air Force, 2012, p. 18; who, in turn, sourced the material from the Software Engineering Institute and Lockheed Martin).
AT&L Better Buying Power

**2010: Better Buying Power 1.0**
- Deliver the warfighting capability we need for the dollars we have
- Restore affordability to defense goods and services

**2012: Better Buying Power 2.0**
- Incentivize Productivity and Innovation in Industry and Government
- Eliminate Unproductive Processes and Bureaucracy
- Promote Effective Competition

**2015: Better Buying Power 3.0**
- Provided specific initiatives for focus areas
  - Remove barriers to commercial technology utilization
  - Use Modular Open System Architecture
  - Cybersecurity
Examples of Disruptive Change

- Air Cavalry / Helicopters
- Tank
- Cavalry
- Military

- Rust Belt Industry
- 3D Printing
- High Tech Manufacturing
- Industry

- Integrated Circuit
- Internet of Things
- Software Defined Everything
- Information Technology

Integrity - Service - Excellence
• Bending The Cost Curve (BTCC) is a complementary Air Force effort to BBP

• Three components:
  – Enhancing interaction with companies
  – Expanding competition to include non-traditional contractors
  – Improving internal business analytics

• Plugfest Plus is a targeted event for expanding competition in the Distributed Common Ground System enterprise
  – Adapt new acquisition approaches to rapid, agile capabilities
Late to Need

- Information Assurance adding 18 month+
- Limited Value
  - Controls vs risk based

Operations

- In last 5 years, poor success with ~50% termination/critical change rate
- Standalone Systems can take 6+ years to deliver, provided they are not terminated first.
The Assembled IT Capabilities Approach enables fine-grained acquisition of mission components which are assembled with shared infrastructure and common technologies.

- C&A inheritance
- Granular, mission software focus
Modular Open System Architecture

• DCGS Int Backbone (DIB)
  – Already a key enabler for information sharing and collaboration among previously isolated intelligence centers

• Licensed as open source software

• Published standards allow for increased competition and plug-in integration

• Allows for acquisition of modular capabilities
  – As opposed to unwieldy system-of-systems gated by slowest development
Basic Assembled IT Capability

Promise of Composability Realized

Assembly
  L | Legacy System
  D | Data Component
  M | Mission Component
  C | Core Server
  I | Infrastructure

Assembled IT Capability

End User

Provider

Delivery

EXAMPLE: Widget
EXAMPLE: DISA
Core Server, JC2CUI, Ozone
EXAMPLE: JIE
Infrastructure, Data Center, Cloud

I n t e g r i t y - S e r v i c e - E x c e l l e n c e
Cybersecurity Approach

1. Acquire a mission component
2. Authorize the mission component to be included in a previously accredited baseline
3. Assemble the mission component with domain infrastructure
4. Use the assembled IT capability, Iterate

Tailored security requirements can be leveraged to rapidly field secure IT capabilities
The Future

- Compelling need: Rapid Secure Capabilities to the Warfighter
- Value proposition: Mission capabilities met through software speed
- Software can be enabled through
  - Assembled Capabilities
  - Reciprocity of security

Software focused mission capability can succeed if supported by rapid, innovative acquisition approaches
AFLCMC... Providing the Warfighter’s Edge

- **Product**
  - Deliver Cost Effective Acquisition Solutions
  - Deliver Affordable and Effective Product Support

- **Process**
  - Launch High Confidence Sustainable Programs
  - Standardize and Continuously Improve Center Processes

- **People**
  - Develop and Place Right Person at Right Time
  - Assure a Safe, Secure, and Quality Work Environment

SPEED WITH DISCIPLINE

TRUST AND CONFIDENCE

UNITY OF PURPOSE

DELIVER TO COMMITMENTS