New US Program Management Model – Role of the Lead Systems Integrator

An Industry Perspective
Ken Medlin, Vice President & General Manager
Ground-based Midcourse Defense Program
The Boeing Company
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Evolving A Management Model

Historic Model
Prime

- Long Development Cycles
- Tends to Build Everything
- Premature Configuration Lockdown
- Capital Intensive and slow to adjust

Transition Point
LSI

- Somewhat Decreased Cycle Times
- Prime Builds Products Deemed “Important”
- Select Subcontracting
- More Flexibility for Configuration
- Early Lockdown
- Multiple Dem-Val / Development Phases

Emerging Model
LSI/Prime

- Reduce Development Cycle Times
- Groups Capabilities in Unforeseen Ways Building Complete System
- Continuously Evolving for Increased Capability
- Concurrent Test and Deployment
- Delivers Affordable Capabilities – Based System of Systems
Keys to Success

LSI/Prime

Capabilities-based Acquisition

Development Spirals & Adaptability
Capabilities Based Acquisition

**% Probability of **% Negation

Threats of Interest

Capability Roll-up from Components

GBI  BMC3  Sensors

NMD

Req't

GBI  Sensors

Req't

GMD

No Req't

GBI  GFC  Sensors

Performance vs. Cost
Lead Systems Integrator Attributes

Collaboration Across Institutional Boundaries

Innovative, adaptive & agile way of doing business

Accountability at every step

Developing, translating and integrating joint requirements, architectures and systems of systems solutions

CORE LSI/Prime COMPETENCIES:
- Large – scale systems integration and engineering
- Customer and domain knowledge
- Supply Chain Management

Evolving Requirements & CONOPS
Development Spirals and Adaptability

Performance vs Cost

T1

T2

T3
GMD as LSI Model

• Strength of Boeing processes, integration experience and flight test success

• Brings best technology to the challenge instead of the best in-house technology

• LSI Role transitioned into Prime Role for single program management responsibility
Challenges

• Balance between real and advanced technologies and then figuring out how to integrate seamlessly
• Conducting concurrent test and operations
• Cost share between MDA and Services on O&M
• Deciding operational test requirements
• Integrating the warfighter in the development process
• Figuring out when to transition system from MDA to Service and how