Closing the Yap Gap
Lessons on DCGS (and other’s) SOA Implementations & Governance

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Net Centric Warfare
(aka SOA)

An Information Superiority concept of operations
Generates increased combat power by networking

- Sensors
  - Decisions makers
  - Shooters

Achieves
- Shared awareness
- Increased speed of command
- Higher tempo of operations
- Greater lethality
- Increased survivability
- Self synchronization

Transformation Strategy: Fully leverage information and information technology requires changes
- Concept of Operations
- Doctrine
- Organizations, and
- Force Structure

Associated changes are needed in
- Logistics
- Education, and
- Training
BENEFITS OF A SERVICE-ORIENTED ARCHITECTURE

- Reduced development times and costs through standard, reusable components, applications and data
- Better alignment of business needs and IT infrastructure
- Decreased integration costs and lower application development risks
- Elimination of redundant data and systems based on shared services
- Consolidated and integrated legacy data and systems leads to lower maintenance costs and higher data integrity
- Foundation for composite applications and an integrated enterprise.
AF DCGS Interoperability Supports Joint ISR Enterprise Vision

DCGS 10.2 Node (DGS-X)

Data Strategy
Information Assurance
Global Connectivity
Enterprise Services

AF IC GIG and Enterprise Capabilities

DCGS
Node
(DGS-X)
Common Challenges

• DoD Governance Model
  – Manage the Seams
  – Requires Joint Funding

• Synchronize Enterprise Requirements, Schedules and Budgets
  – Co-evolution of network centric architectures, standards, components, CONOPS, mission systems, organizations,…
  – Harmonization of Metadata content, structure, ontology, registries and standards

• Many Stakeholders
  – Pursue Technical Solutions that are only inhibited by policy

• Enterprise Management and System Engineering
  – Requirements, Risk and Configuration Management
  – Integration and Test environments
  – Security
  – License Strategy
  – Developer’s environment

• Coalition Interoperability
Discussion Points

• Net-centric & distributed ops enabled for ISR enterprise and C2 integration
  • DIB enables interoperability
  • Other SOA based systems coming
• Need to focus beyond single programs
• Establish new business model for developing & maintaining services instead of systems to address **SOA Governance Questions**
  – Who defines shared services?
  – Who builds shared services?
  – Who uses shared services?
  – Who operates and manages shared services?
  – Who brokers change?
  – Who orchestrates and governs the five above activities?
  – Who funds shared services?
  – How do you create incentives for reuse?