



Issues for Future Systems Costing

Panel – 17
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Research Symposium**

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Two Costing Issues



- Determine how much and who pays for shared data and services in future net-centric programs
- Determine cost implications of including training plans early in the JCIDS and Acquisition processes

Considerations



- Streamlining Acquisition
 - **Lean 6 Sigma**
 - **Concept Decision Pilot Programs**
 - **Other**
- Costing of shared infrastructure
- Include detailed Training Plans and details up-front in Concept Decision and as Program KPPs

Streamlining Acquisition



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- **Some problems with acquisition?**
 - **Slow**
 - **Significant labor requirements to satisfy the “process”**
 - **Services report they are spending too much time and money producing acquisition documents which no one reads**
 - **Capabilities frequently reach concept decision and enter into Milestone A or A/B without sufficient “concept refinement”**
 - **Senior managers request need for analysis driving decisions for program start up or go – no go earlier in concept process**
 - **Recent Improvement Initiatives**
 - **Lean 6 Sigma working group looked at documents and timing of process - outcome?**
 - **Four Concept Decision Pilot Programs were formed to expedite critical programs**
 - **Use Technology Readiness Levels to reign in “over optimism”**

GIG Background



Global Information Grid (GIG) – “is a globally interconnected, end to end set of information capabilities, associated processing, and personnel for collecting, processing, storing, disseminating, and managing information on demand”

- **Net-Centric Enterprise Services (NCES)**
 - **Service-Oriented Architecture Foundation (SOAF)**
 - **Collaboration**
 - **Discovery & Delivery**
 - **Portal**
- **Net-Enabled Command Capability**
 - **Net-Centric data strategy (2003)**
 - **C2 in a net-centric environment (2005)**
 - **Provide data and information needed for timely, informed decisions**

Allocating Shared Costs



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- **DoD has no established process (or understanding of need?) for sponsoring enterprise-level efforts**
 - **DISA GIG programs example**
 - **Training Transformation (T2) business model gets at the issue to incentivize Services and Agencies to collaborate on common capabilities**
 - **Joint Simulation System**
 - **Net-centric environments of the future will require more sharing of infrastructure, data and models**
 - **Related issues**
 - **Systems interoperability**
 - **Joint Program Management across programs**
 - **Up-front systems engineering**
 - **Redundant costs across enterprise**
 - **Additional incremental costs for reuse**

Training Implications



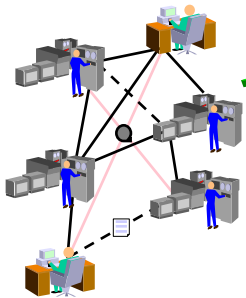
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- **Focus on training during concept development**
 - Training Plans fleshed out in concept definition
 - Training objectives drive use of simulators, simulations and on-line training tools as part of systems design
 - Ensure learning and performance factors are considered
 - **Determine training needs over program life**
 - Establish training as a Key Performance Parameter
 - Include training simulators or training systems for operators/crews prior to introduction of hardware system
 - Include development and operational testing with engineering approach to training
 - **Related issues**
 - Safety
 - Joint Program Management
 - Up-front systems engineering
 - Provide continuous training environment

Questions?

Road to Net-Centric Operations

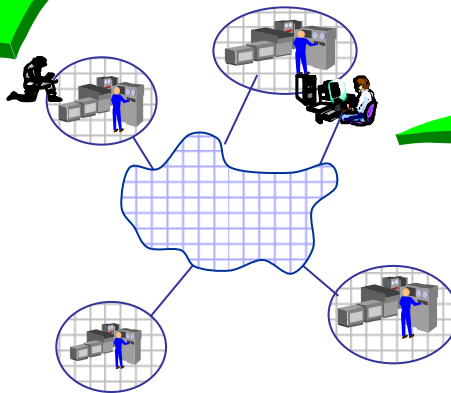


Pre-Web...



- *Stovepipe systems*
- *Little or no interoperability*
- *Some network connections*

...Today...



- *More networks*
- *Some web services*
- *Various directory & security services*
- *Uncoordinated Service/Functional IT transformations*
- *Few authoritative data sources*
- *Network-Centric, but not Net-Centric*

... Joint / Enterprise



The GIG

- *Pervasive networks*
- *Accurate, timely & relevant info to the edge*
- *...it's all about the data...*
- *Services Oriented*
- *Dynamically composable architectures*
- *Mission-effective applications*
- *Assured, interoperable enterprise services*