



Defense Information Systems Agency

Department of Defense



***Tech Forum Panel:
Tactical Implementation of
Net-Centric Enterprise Services
(NCES)***

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Tactical Implementation

Operational Capability:

“NCES will provide enterprise services that operational and tactical users can access, *commensurate with the performance of the available transport, doctrine, and the Commander’s Intent for bandwidth usage and information policy.*”



Tactical Implementation

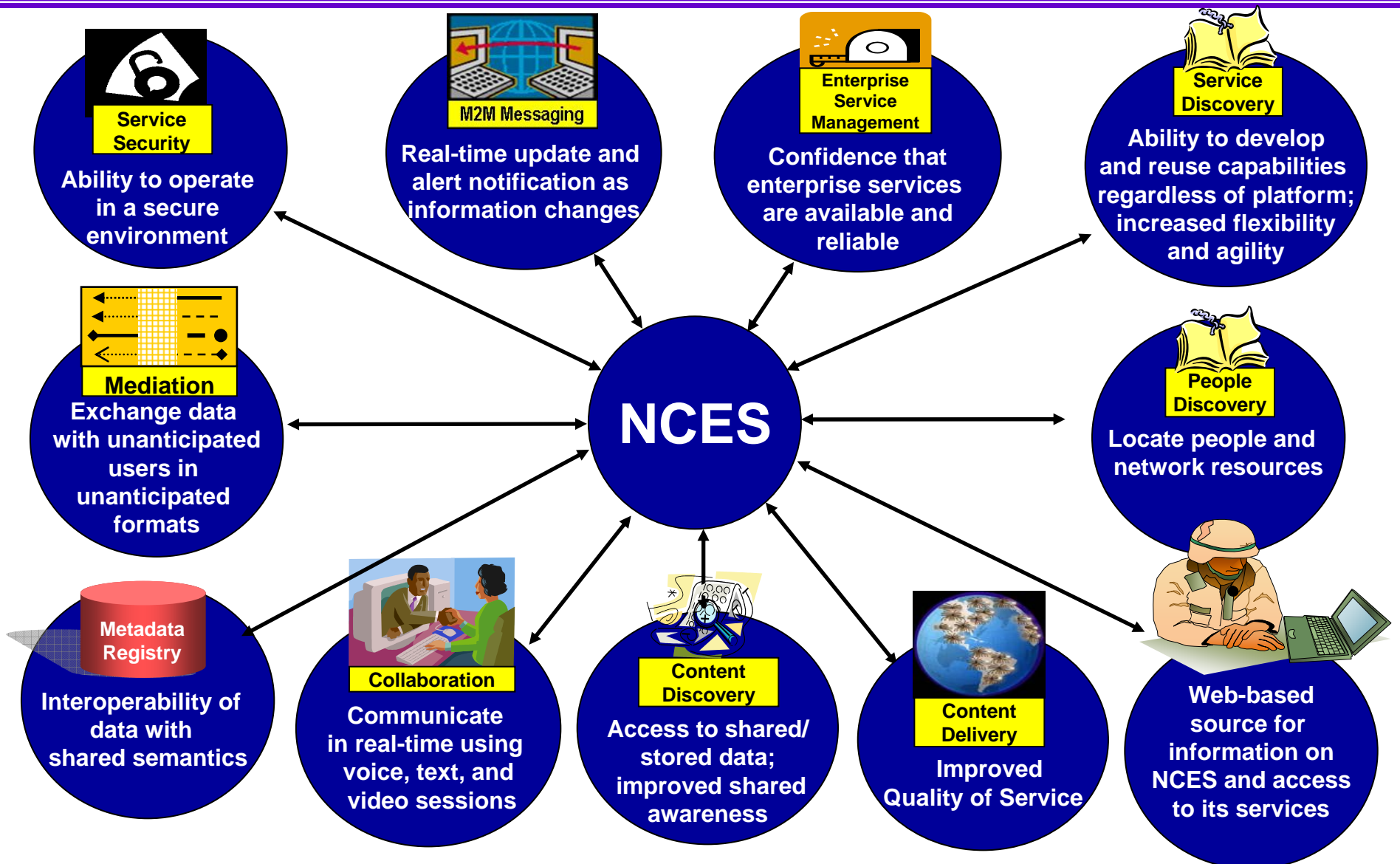
Operational Capability:

“NCES will provide enterprise services that operational and tactical users can access, *commensurate with the performance of the available transport, doctrine, and the Commander’s Intent for bandwidth usage and information policy.*”

Technical System Interdependencies:

- Available Transport Bandwidth & Quality of Service
- Policy-based Network Management
- Information and Data Management
- Adaptable/extendable Enterprise Services
- User Profile enabled Applications

Enterprise Services





Tactical Enterprise Service Implementations

Mission Benefit Capability

Tactical Service Extensions/Capabilities



- Joint Instant Message (IM)/Chat Interoperability (XMPP) & Web Conferencing

- Local IM/Chat Capability interface with DoD Enterprise Collaboration Service using Federated IM/Chat Specification



- Forward Caching of Large Data Files (e.g., NGA Imagery, Map Data, Streaming Video)

- Extend smart cache capability to forward deployed nodes (e.g., Global Content Delivery Service (GCDS) Edge Node)



- Search & Discover content across federated data sources

- Local Search Capability interface with DoD Enterprise Content Discovery Service (Intelink) using Federated Search Specification



Tactical Enterprise Service Implementations

Mission Benefit Capability

Tactical Service Extensions/Capabilities



Service Security

- Provides PKI (SIPR & NIPR) Certificates
- Enables Attribute Based Access Control (ABAC) Security Model



People Discovery

- Harvest & provision approved attributes from authoritative attribute source(s)



Service Discovery

- Register Enterprise Services

- Certificate Validation Service (CVS) delivers certificates to forward deployed nodes
- Local ABAC software performs local access policy decisions and interfaces with NCES Service Security Specifications & Reference Implementation.
- Joint Enterprise Directory Service (JEDS) delivers attributes to forward deployed nodes to enable Local ABAC decisions
- Local Service Registry replicates services information with DoD Enterprise Service Registry
- Next Generation - Local Service Registry federates with DoD Enterprise Service Registry



Tactical Enterprise Service Implementations

Mission Benefit Capability

Tactical Service Extensions/Capabilities



- NetOps monitors Enterprise Services Performance

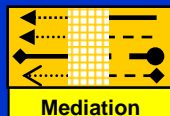
- Tactical Enterprise Service Management System (ESM) provides NetOps visibility to DoD NetOps Capabilities

- Deploy ESM agents to monitor critical services



- Interoperability using Enterprise Message Bus w/ data sources/ providers

- Tactical Messaging Service interfaces with DoD Enterprise Messaging Service

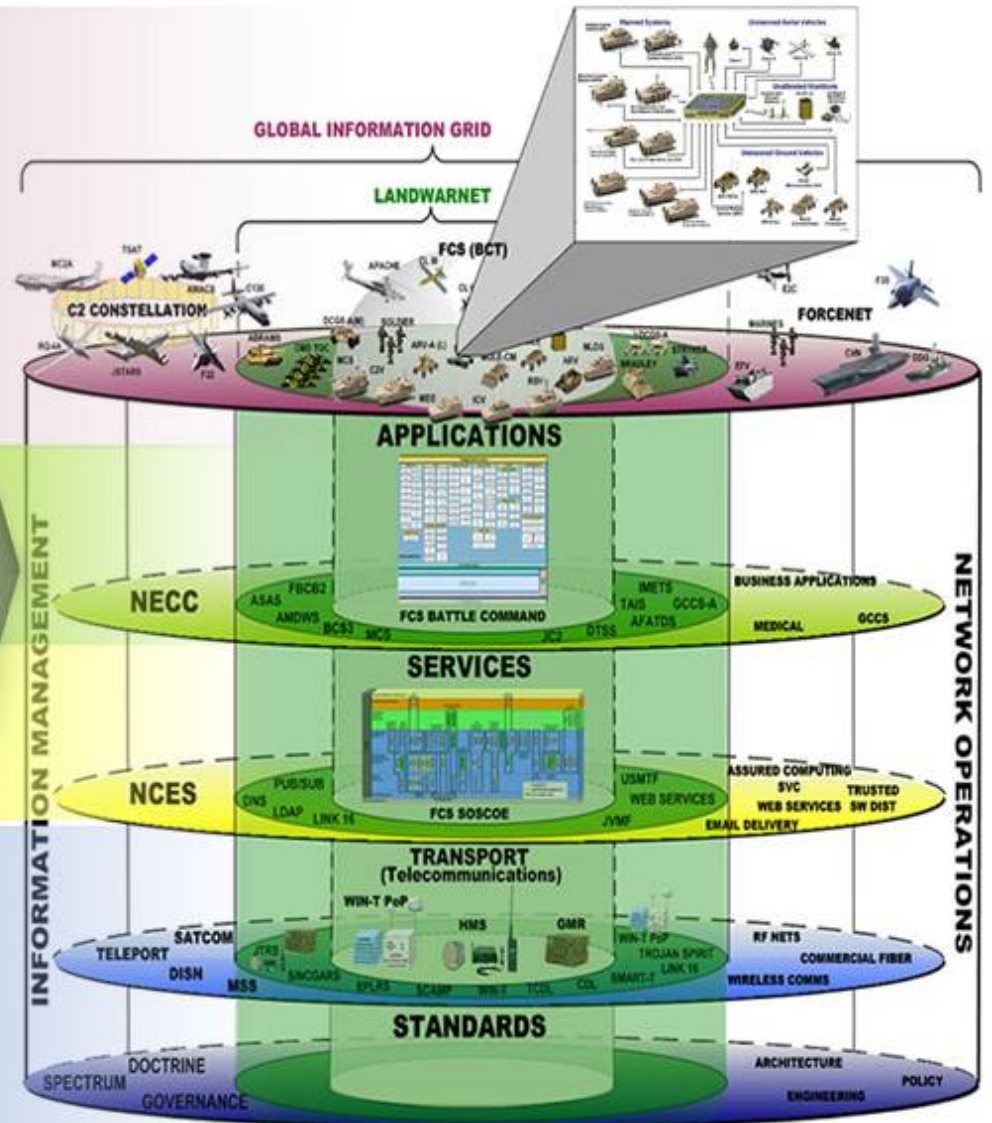


- Translate XML – XSLT schemas and message/data formats

- Deploy Tactical Mediation Service

Implementation of Tactical Net-Centric Enterprise Services that support Disconnected, Intermittent, and Low Bandwidth Users will depend upon . . .

- Availability of transport bandwidth & network quality of service
- Policy-based Network Management
- Information and Data Management
- User Profile enabled Applications
- Standards and Specifications





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