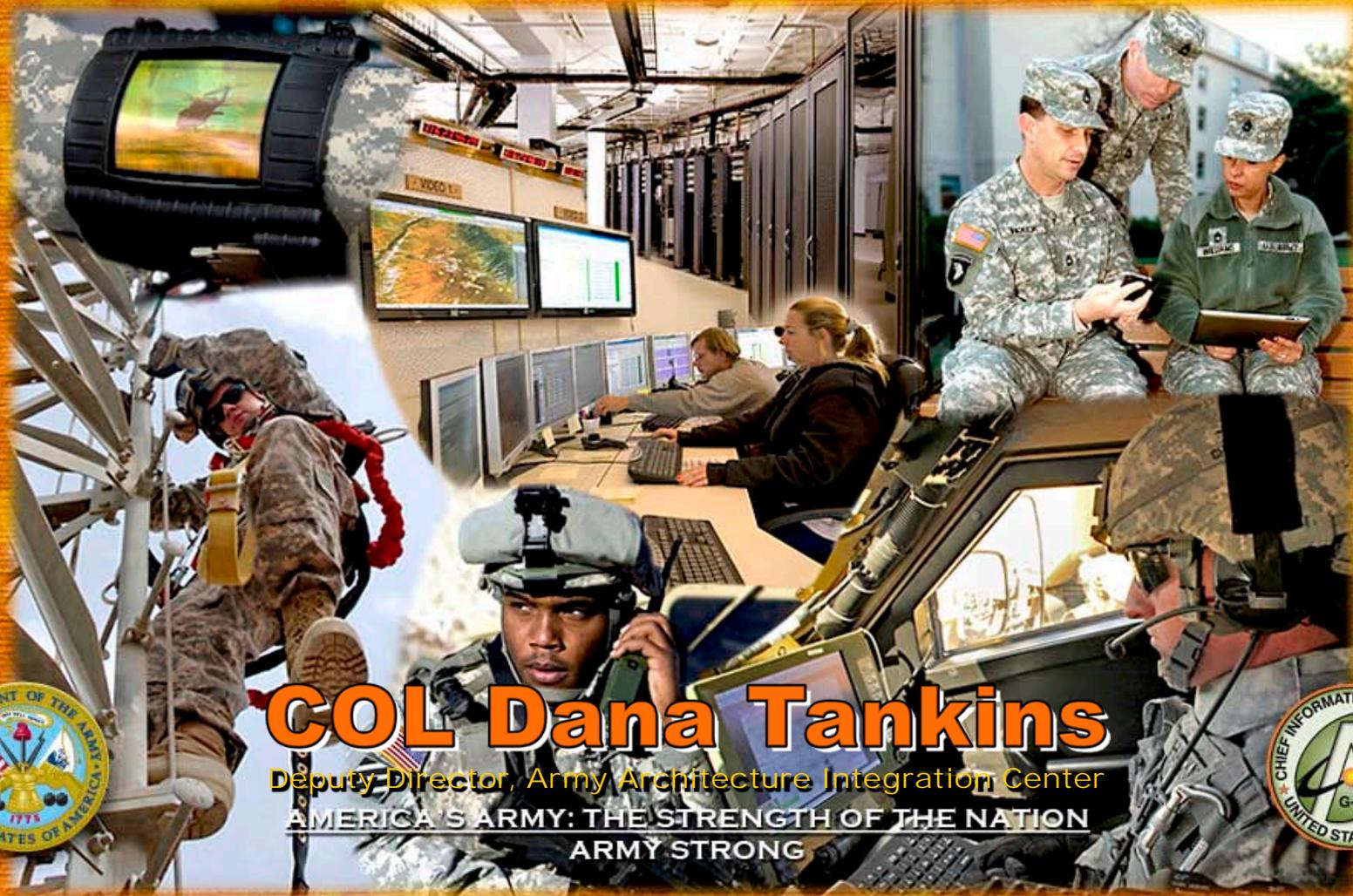


# Signal GO-SES-CSM Summit

*Joint Information Environment*



**COL Dana Tankins**

Deputy Director, Army Architecture Integration Center

AMERICA'S ARMY: THE STRENGTH OF THE NATION

ARMY STRONG





# Agenda

- ★ JIE Background
- ★ JIE End State
- ★ JIE Functional Lanes
- ★ End State: Provide Capabilities
- ★ End State: Operate and Defend
- ★ End State: Governance
- ★ Way Ahead



# JIE Background

14 NOV 11 (JS TANK on IT Efficiencies) directed the JS J8C4 to execute a DoD/Joint Task Force to develop a Plan for a Single Secure Joint Network.

16 DEC 11: (JS TANK on IT Efficiencies) Approved the term Joint Information Environment (JIE) and directed a high level end state JIE descriptor NLT 3 FEB12; a JIE POA&M NLT 15 MAR12; and a JIE ROM NLT 30 APR 12.

3 FEB 12: (JS TANK on JIE) Approved the JIE high level end state descriptor and directed a JIE POA&M NLT 15 MAR 12; and a JIE ROM NLT 30 APR 12.

6 MAR 12: (DMAG on JIE) Directed DoD/JS bring back a JIE POA&M and ROM.

6 APR 12 (JS TANK on JIE POA&M)

TBD: (JS TANK on JIE ROM)

TBD: (DMAG on JIE POA&M/ROM)

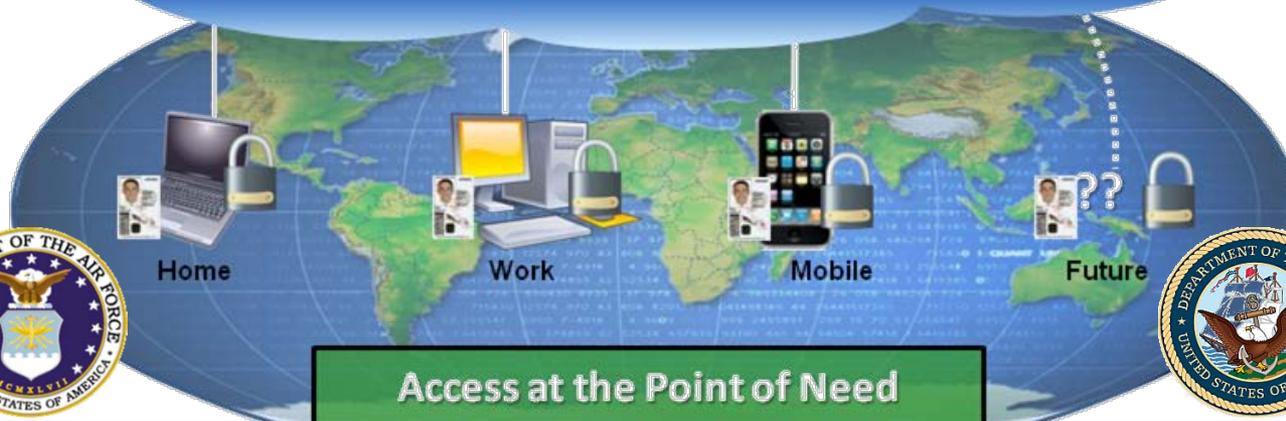
## *Decision #2*

- POA&M: Plan of Action and Milestones
- ROM: Rough Order of Magnitude



# Joint Information Environment – End State –

- Defensibility/Redundancy/Resiliency
- Federation/Shared Infrastructure
- Enterprise Services
- Identity Access Management
- Data Centric



“The U.S. Armed Services must achieve unprecedented synergy to ensure access to contested waters, skies, land, space and networks in the face of emerging weapons”. ~ Chairman of the Joint Chiefs of Staff Gen. Martin Dempsey



# JIE End State

- ★ Shared IT infrastructure used across the Department based on enterprise standards, specifications, and configurations
- ★ For those Components that operate and maintain portions of the shared IT infrastructure, they will do so in accordance with enterprise technical and operational standards and in accordance with USCC direction
- ★ Shared IT infrastructure will look, feel and operate the same regardless of service provider and/or use (i.e. mission specific utilization) using common tactics, techniques, and procedures developed at the enterprise level
- ★ Attributes of the shared IT infrastructure includes a network that is defensible and virtually single-strategic to tactical; DOD level consolidation of data centers and network operations centers; a single security architecture; and, enterprise services
- ★ Capabilities required across the Department to enable information sharing, collaboration and interoperability will be provisioned as enterprise services.
- ★ Enterprise Services can be provided in a federated, franchised or centralized business model
- ★ COA does not preclude any one Service/Agency from becoming a service provider for one or more designated enterprise services or infrastructure offerings; as such, the Service/Agency will be capable of providing those enterprise services to the entire Department



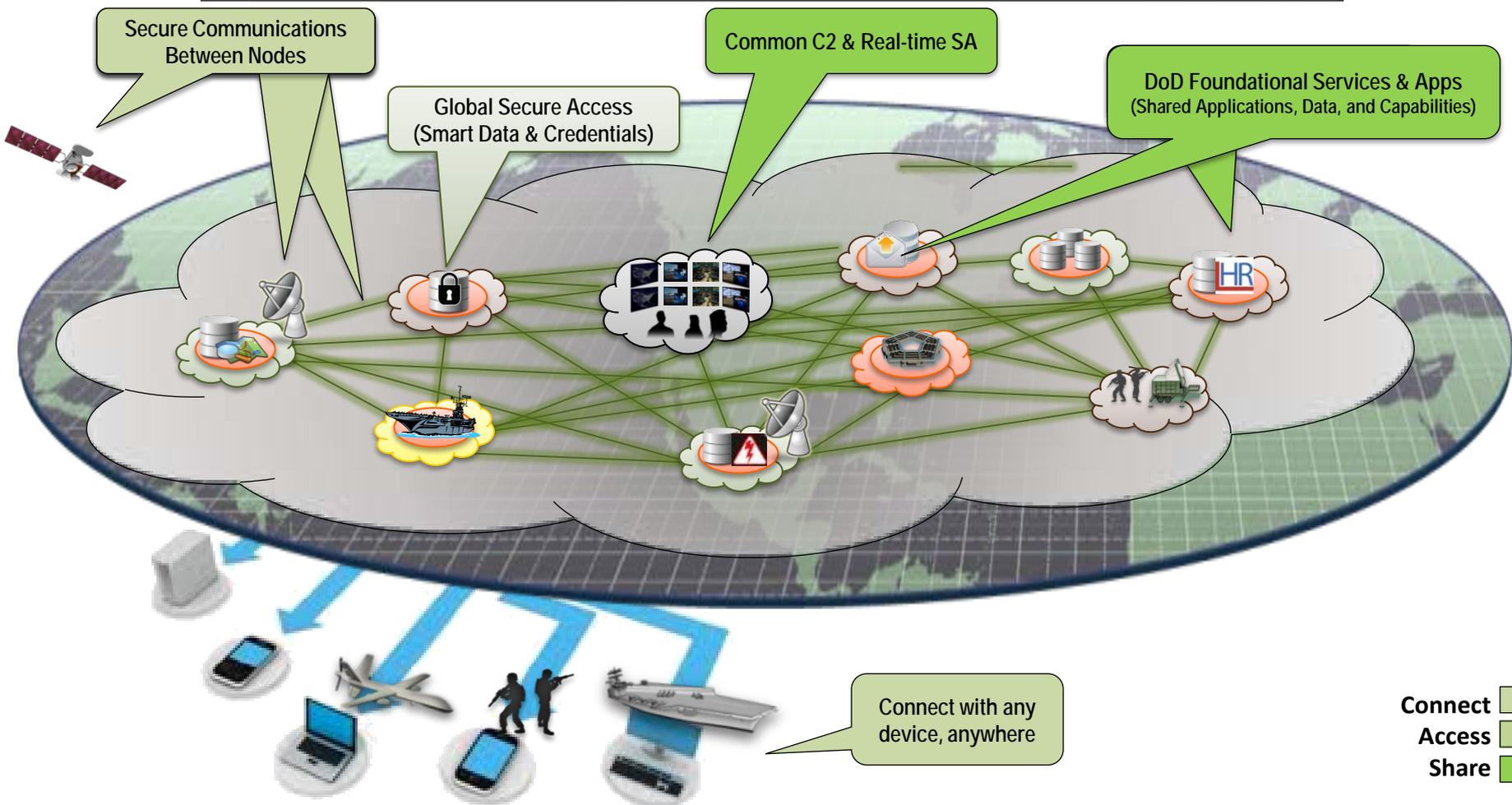
# JIE Functional Lanes

		Definitions	Scope
Provide Capabilities	Connect	Capabilities that enable any user or service to reach any other user or service	<ul style="list-style-type: none"> <li>• Network/Transport normalization and optimization</li> <li>• Data Center/Server consolidation</li> <li>• End-user devices</li> </ul>
	Access	Capabilities that grant or deny use of information assets to both human and machines	<ul style="list-style-type: none"> <li>• Identity Management</li> <li>• PKI</li> <li>• Attribute Services</li> <li>• Rules (Decisions/Enforcement)</li> <li>• Audit</li> </ul>
	Share	Capabilities that enable information assets to be used within and across mission areas	<ul style="list-style-type: none"> <li>• Enterprise Services <ul style="list-style-type: none"> <li>• Foundational/Common</li> <li>• Shared Mission</li> </ul> </li> <li>• Data Services</li> </ul>
Operate & Defend	Operate	Provide real-time situational awareness, protection, and operational management of the JIE	<ul style="list-style-type: none"> <li>• Cyber CONOPS</li> <li>• TTPs/SOPs</li> <li>• Cyber Situational Awareness</li> <li>• Network Management (NetOps)</li> <li>• Ops Desks</li> </ul>
	Security Posture	The conditions that allow the JIE to support mission success and mitigate emerging cyber threats	<ul style="list-style-type: none"> <li>• Security Policy</li> <li>• Cross Domain</li> <li>• Perimeter Defense</li> <li>• Certification and Accreditation</li> </ul>
Govern	Govern	Requirements, planning and execution activity used to manage the cost, schedule and technical baseline of the JIE	<ul style="list-style-type: none"> <li>• Configuration Management</li> <li>• Planning</li> <li>• Policy and Processes</li> <li>• Models/Architecture/Standards</li> <li>• Reviews</li> </ul>



# End State Architecture: Provide Capabilities

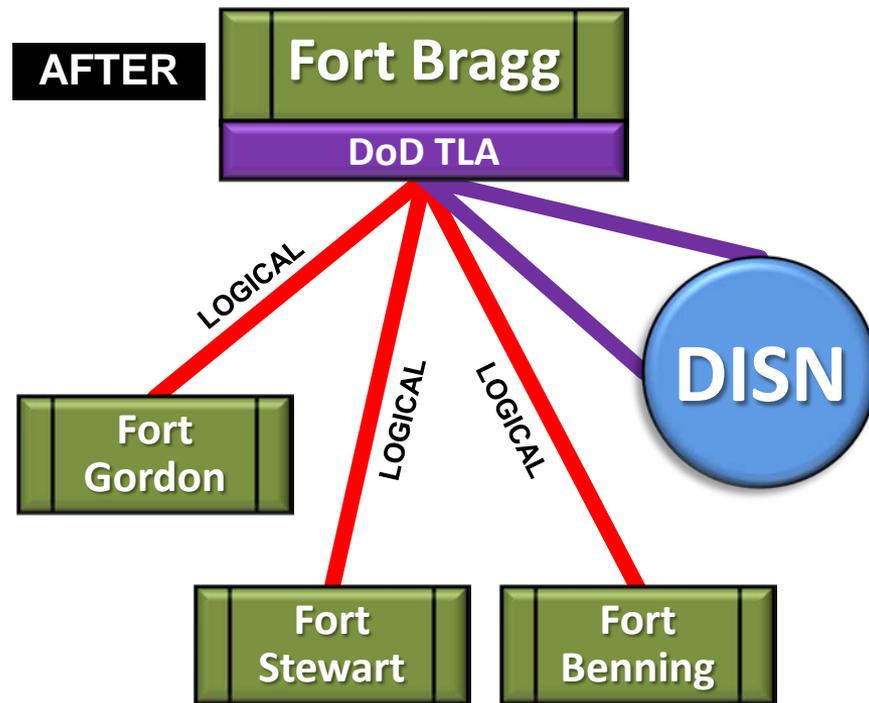
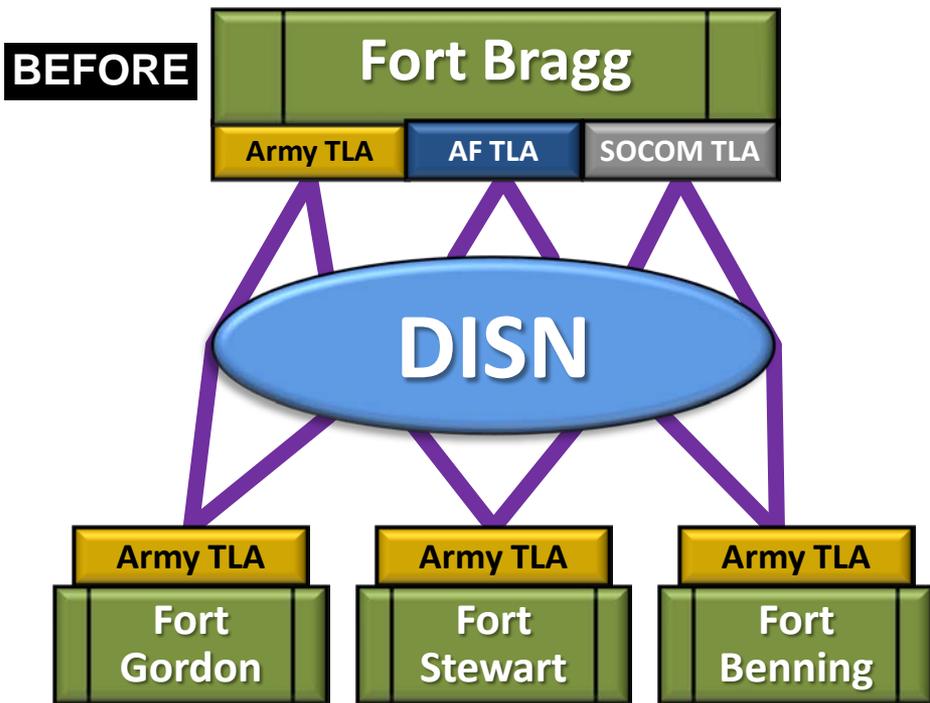
**Cloud Approach (improve effectiveness, reduce cost)  
Centralized provider preferred for common elements**



**“...future access challenges will require a greater degree of integration”  
2011 Joint Operational Access Concept**



# Re-Architect Security Architecture



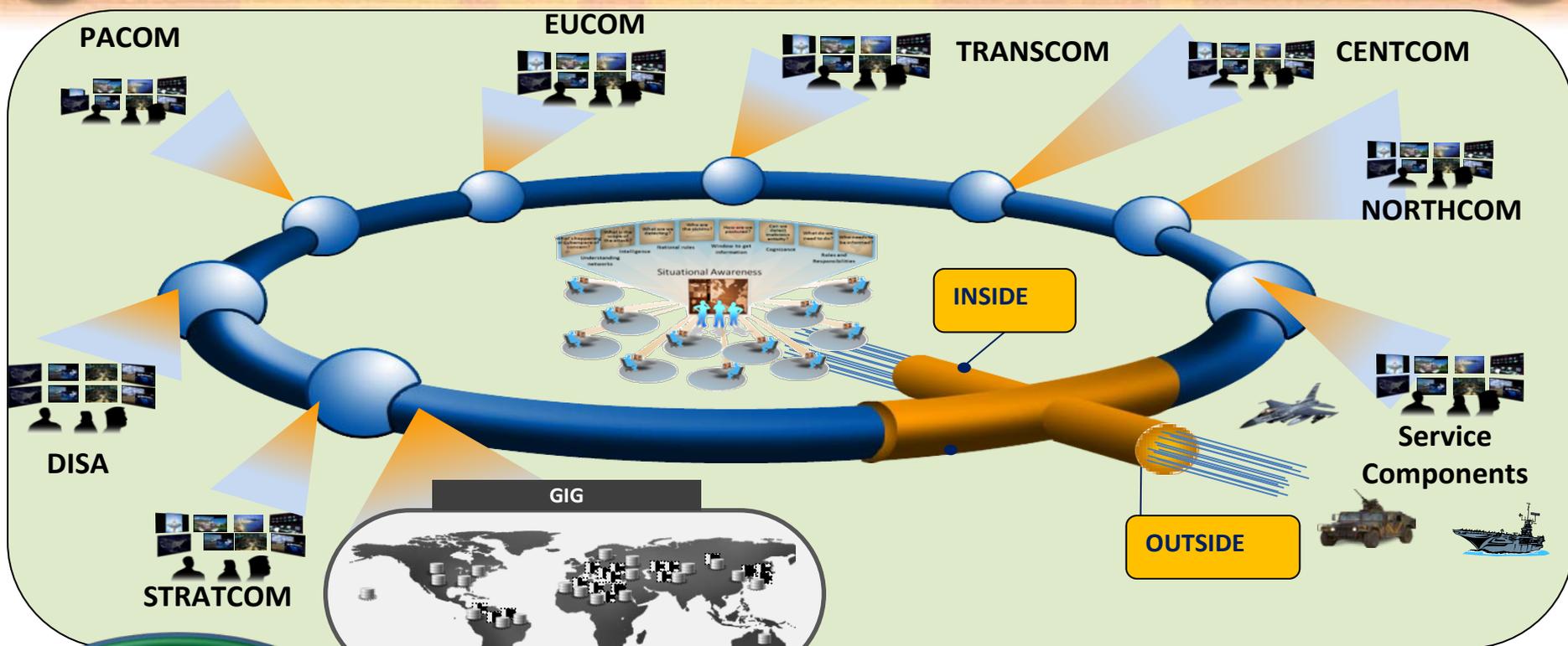
- ★ Need to Develop DoD CONOPS and TTPs
- ★ Good Places to Start:

- Ft Bragg
- Joint Base Lewis-McCord
- Joint Base San Antonio
- PACOM
- EUCOM/AFRICOM

## DoD Top-Level "Purple" Architecture (TLA) Stacks



# End State Architecture: Operate & Defend



**Core Security Functions**

- Policy
- Process
- Architecture
- Standards
- Technology

**Secure, Resilient, Global Mission-Enablement**

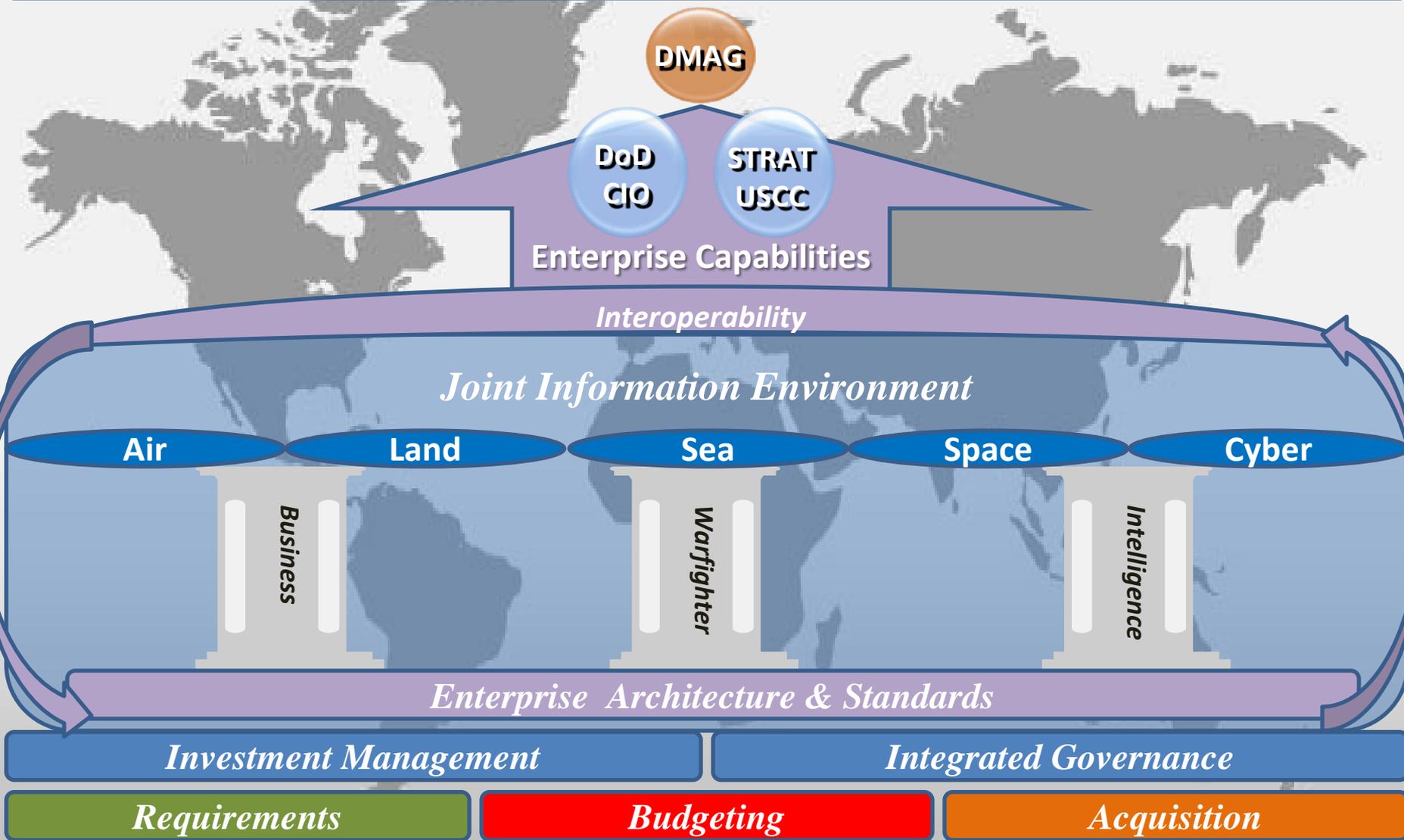
- Secure Share
- Secure Access
- Secure Connect

**Management, Monitoring & Reporting**



# End State Architecture: Govern

*Assured Mission Execution*



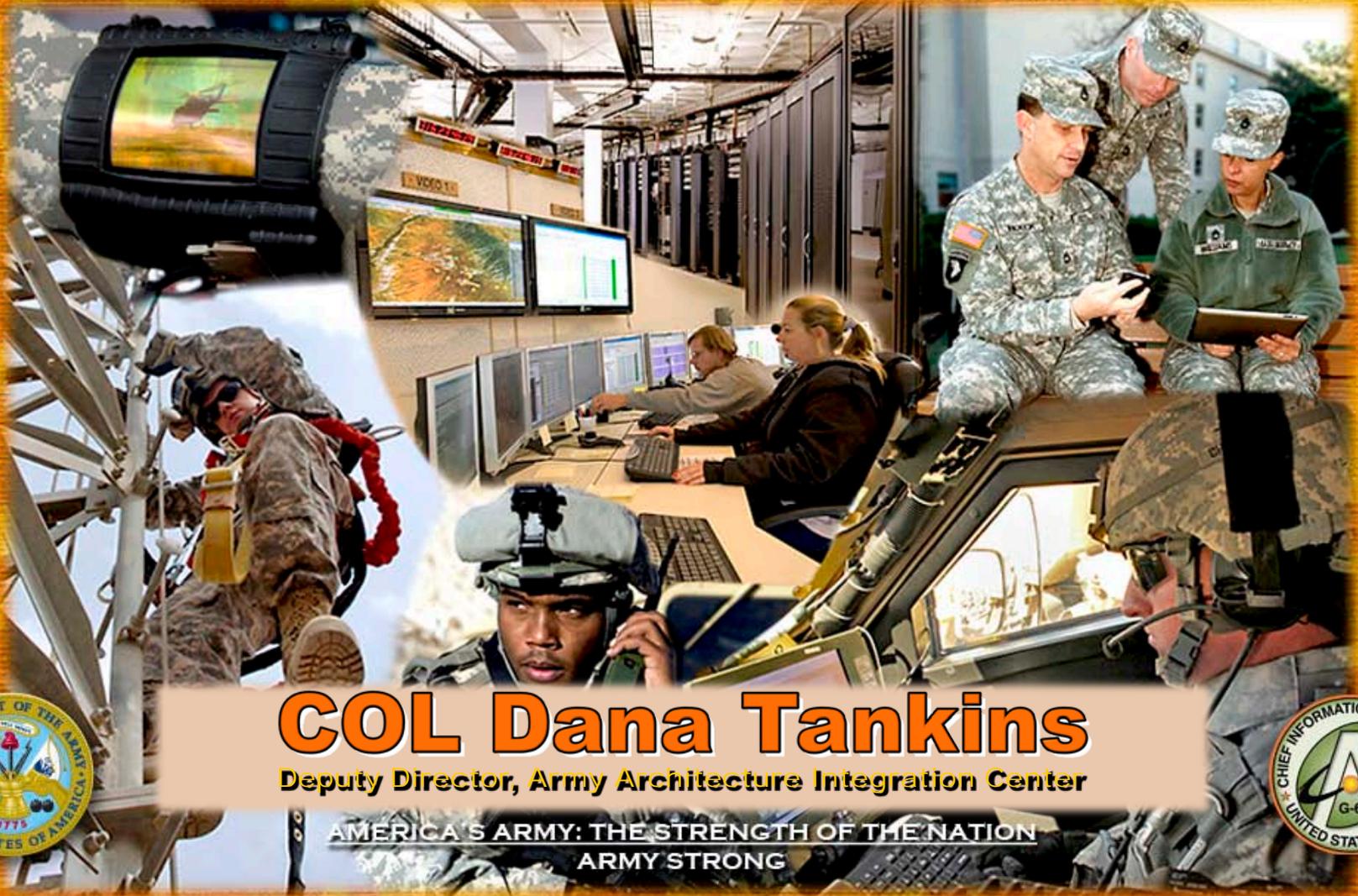


# Way Ahead

- ★ Ensure Army IT Equities are integrated as part of JIE base line: Enterprise Email, Unified Capabilities, Share Point, ID Management & Access Control, Virtual End User Device, data strategy, data centers, TLAs, and IT Reform Initiatives.
- ★ Ensure the Army Team is tracking JIE progress to enable, influence and shape.
- ★ Continue to build out JIE POA&M
- ★ Begin Building JIE ROM

- POA&M: Plan of Action and Milestones
- ROM: Rough Order of Magnitude

# QUESTIONS + THOUGHTS



**COL Dana Tankins**

**Deputy Director, Army Architecture Integration Center**

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