



DoD M&S Strategic Vision & Initiatives

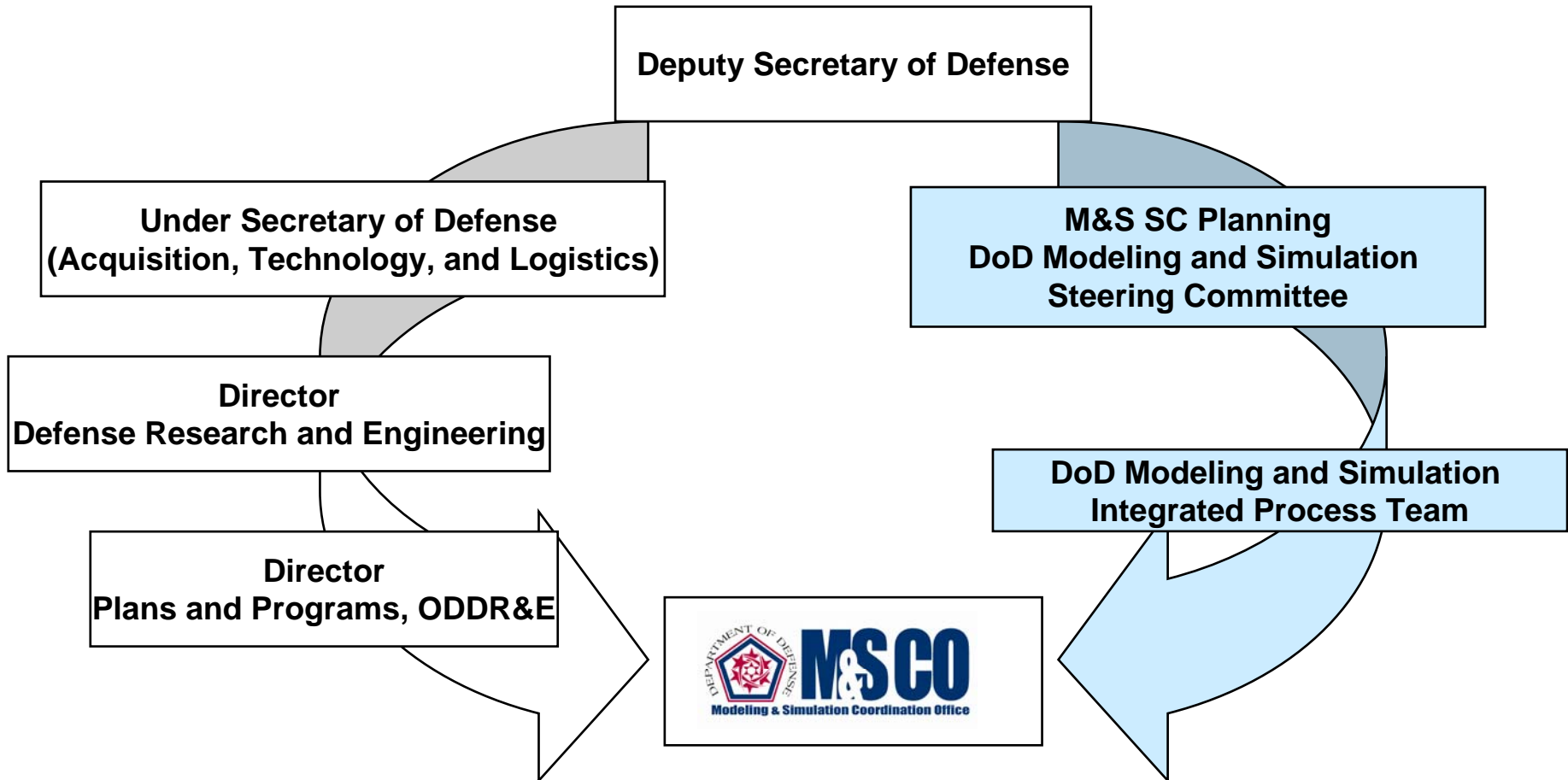
Presented to:
NDIA System Engineering Division's
Modeling and Simulation (M&S) Committee
April 24, 2008

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Director, US DoD Modeling and Simulation
Coordination Office

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Modeling and Simulation Coordination Office (M&S CO) Command and Communication



***The USD(AT&L) is the DoD lead for M&S...
The DoD M&S Steering Committee is the governance for DoD M&S activity***



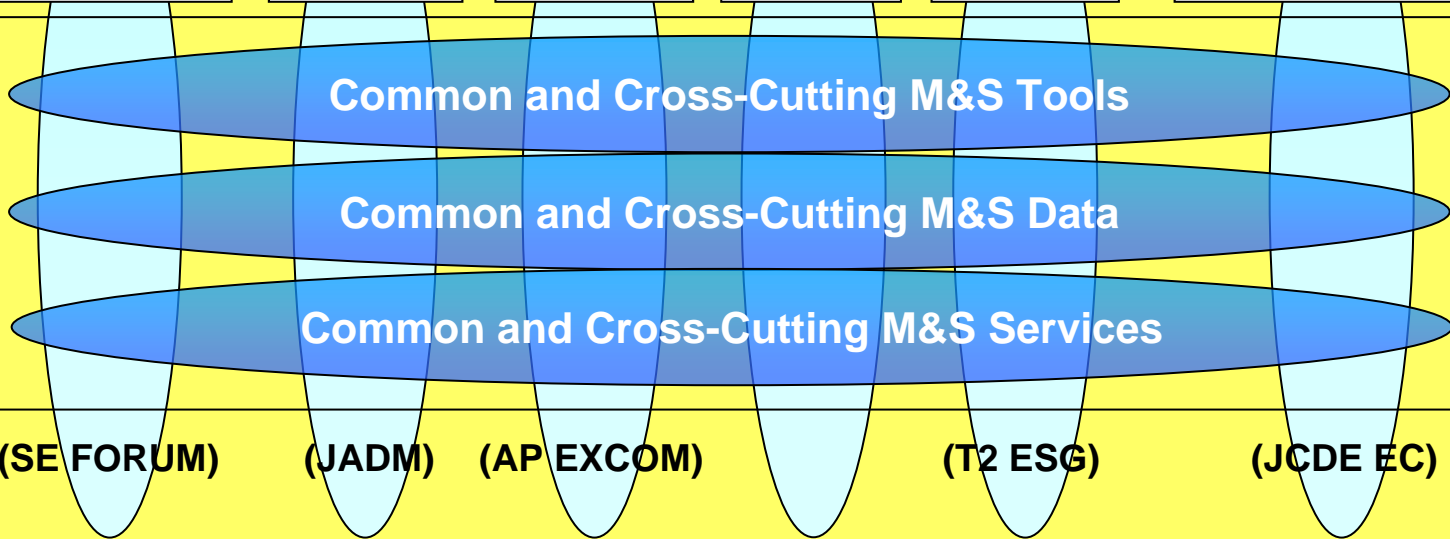
DoD Modeling and Simulation (M&S) Governance



New M&S Governance and Management Structure Organized by Communities. Designed to Support & Integrate M&S Activities across the Department. Led by a 1 to 2 Star M&S Steering Committee (M&S SC) to provide governance.

Acquisition AT&L	Analysis PA&E & JS	Planning JS & Policy	Testing DOT&E & AT&L	Training P&R	Experimentation JFCOM
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M&S Practices



(SE FORUM) (JADM) (AP EXCOM) (T2 ESG) (JCDE EC)

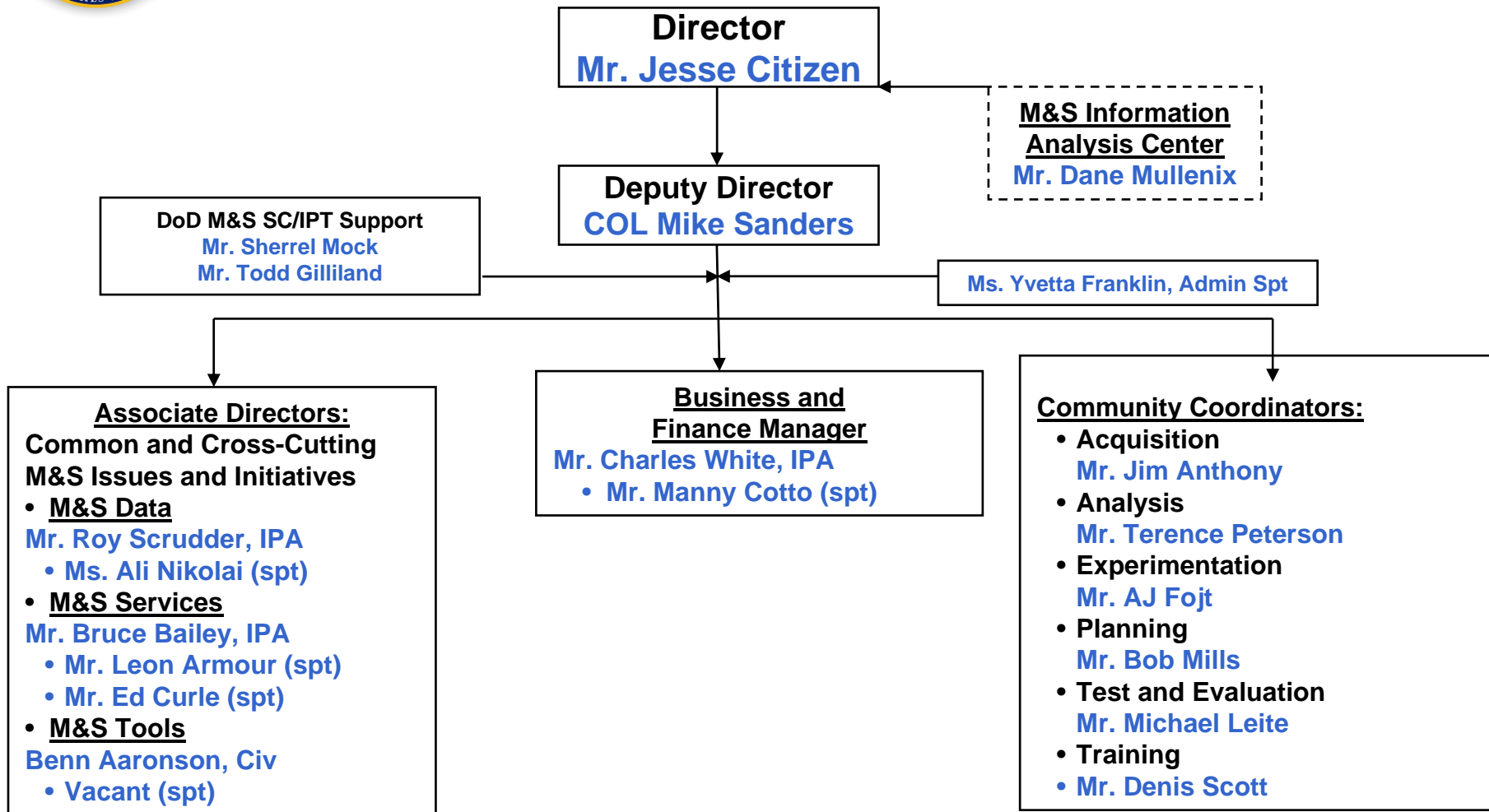
Components

OSD, Joint Staff, COCOMs, Services

Goal: Establish corporate M&S management to address DoD goals: Leads/guides/shepherds the \$Bs in DoD M&S investments; adds value thru metrics & ROI-driven priorities; and seeks to provide transparency.



Modeling and Simulation Coordination Office (M&S CO)



NOTES:

1) M&S Services: Armour is spt for M&S standards and international coordination; Bailey is spt to balance of Services (VV&A, M&S education, best practices, etc.)

2) Gilliland's duties are webmaster, IT transition spt, and SC/IPT assist to Mock for SC/IPT



M&S CO Mission



The Modeling and Simulation Coordination Office (M&S CO) performs those key corporate-level coordination functions necessary to encourage cooperation, synergism, and cost-effectiveness among the M&S activities of the DoD Components as well as NATO and other international partners. The M&S CO is the Executive Secretariat for DoD M&S Management in fostering the interoperability, reuse, and affordability of cross-cutting M&S to provide improved capabilities for DoD and international operations.



M&S CO Mission (cont.)



Lead Standardization Activity:

The M&S CO is DoD's lead standardization activity (LSA) for managing modeling and simulation standards and methodologies (MSSM). On behalf of the DoD M&S SC, responsibilities are to coordinate:

- DoD standardization documents in the MSSM area
- Adoption of non-government standards for DoD use
- Comments on standardization documents from other defense standardization program (DSP) areas that affect M&S
- Responsible for the development, coordination, promulgation and upkeep of NATO M&S Standardization Agreements (STANAGS)

NATO and Other International Partners:

The M&S CO is DoD's POC for coordinating M&S activities with NATO and Partnership for Peace (PfP) nations, and other international Allies. Responsibilities:

- Fully participating in on-going NATO/NMSG technical activities that support the DoD Strategic Vision to promote interactions between DoD and international partners
- Increase reuse of models & simulations and the data used by the models
- Improve efficiency in the development and use of M&S by influencing the framework where Communities, Services as well as international partners can combine efforts to meet US and NATO objectives
- Serve as the lead for the US Delegation to ensure consistency in US participation



M&S Strategic Vision



DoD M&S Vision

Empower DoD with Modeling and Simulation capabilities that effectively and efficiently support the full spectrum of the Department's activities and operations.

Goals

- Shared accessible standards, architectures, networks and environments
- Tools and authoritative data that are available to credibly support full range of DoD interests
- Enterprise-wide policies that promote use of common capabilities and minimize unnecessary duplication
- Management processes that promote sharing, reuse, and cost/effective development of M&S tools and data
- Well-trained workforce



M&S CO

- Technical Goals -



The Program Element Funds Specific Projects that are Sponsored by at Least Three Communities and a Service to Address Cross-Community Deficiencies:

- M&S Efficiencies – Improve the management, development, and reuse of M&S systems, which are comprised of:
 - Tools
 - Services
 - Databases

- M&S Effectiveness – Improve the Understanding of the Validity of Models

- M&S Interoperability – Improve Interoperability of M&S Across the Department

- M&S Commonality – Enable wide-spread use of common M&S tools, data, and services

- M&S Visibility/Accessibility – Enable M&S tools, data, and services to be readily visible and accessible to new users

- M&S Reuse – Enable Reuse of M&S tools, data, and services



Program Output – FY07 Projects



M&S Business Plan: AC, AN, C&CC, EX, PL
Live Virtual Constructive Architecture Roadmap (LVCAR)
Simulation Interoperability Standards Organization
DOT&E Computer Network Operations
Open Scenarios for Defense Planning
System Dynamics
Africa Concept and Potential Centurion Applications
Supply Chain Modeling
Joint Analysis System
Non-Traditional ISR (NTISR) Modeling & Simulation
CFAST: Enabling Rapid Force Sourcing
IGS: Enhanced Wargaming Support for Planning, Logistics, Intelligence & Analysis
Data Farming for Test Planning
Environmental Data Cube (EDC): Facilitating Distributed Simulations
Information Operations Network Analysis Model (renamed)
Space Environment Integration System (SEIS)
Joint Targeting & Battle Damage Assessment (BDA) Simulation Capability
Human Intelligence Wargaming Trainer
Joint M&S Standards Vetting Tool
Combat XXI Joint Scenario Integration Tools
Representing Urban Cultural Geography in Stability Operations



Program Output – FY07 Projects (Continued)



MCO-1 Catastrophic M&S Support
Validation Methodology for Agent-based Simulation
Campaign-Level DIMEFIL/PMESII Analytical Model
Modeling Attacks on C3 Networks (formerly Tools for New Triad)
Agent-Based Modeling for GWOT
Human Behavior Research for GWOT M&S
Unclassified DPS & Analytical Baseline Development
Using the Integrated Natural Environment Authoritative Representation Process (INEARP)
M&S Resource Reuse Business Model
Educating the M&S Workforce
VV&A Standardization
Models to Support Non-Traditional Analysis
Addition of Marine Corps Capabilities to the STORM Campaign Model
High Level Architecture Sustainment
SEDRIS Sustainment/Harmonization with NGA as Bridge/Transition Step
M&S Community of Interest Metadata
Reliable Repository Registry
VV&A Proponency (Use Case)
Baseline Standards, Protocols & Interfaces of the Most Used DoD/Industry Models & Simulations
Decision Metrics for M&S Investments



Program Output – FY08 Projects



Using the Integrated Natural Environment Authoritative Representation Process (INEARP)

Educating the M&S Workforce

VV&A Proponency Use Case

CFAST Enabling Rapid Force Sourcing

Joint Data Alternatives (JDA)

Training for Aviation Urban Operations (TAUO)

Representing the Impact of Insurgent Forces on Urban Cultural Geography

M&S tools for Effects Based Analysis of Electronic Warfare (EW) Impacts within Foreign Integrated Air Defense Systems (IADS)

Vulnerability Assessment for Compilation of Data (VACDAT) to enable the use of Global Force Management Data in M&S

Employment Planning Integration Through the Integrated Gaming System (IGS)

Common Live, Virtual, Constructive (LVC) Terrain Database Evolution

Joint Composable Object Model (JCOM)

Unclassified DPS & Analytical Baseline Development

Live Virtual Constructive Architecture Roadmap (LVCAR)



Joint Wargaming Simulation Mgmt Office



- Anticipated Deliverables -

- Tools, services, and data that knits the total DoD investment (estimated in the \$Bs) in M&S together and provides:
 - DoD policies for effective governance of enterprise-wide M&S
 - M&S business plans for providing strategic guidance and direction to DoD Communities
- The M&S CO shall also provide effective project management oversight for M&S projects targeted at implementing elements of the “*Strategic Vision for DoD Modeling and Simulation.*”



Joint Wargaming Simulation Mgmt Office

- Recent Program Deliverables -



FY 07 PE Funded projects

M&S Business Plan: AC, AN, EX, PL, Trn, Testing
Live Virtual Constructive Architecture Roadmap
Simulation Interoperability Standards Organization
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Joint Wargaming Simulation Mgmt Office - Recent Program Deliverables – (Continued)



FY 07 PE Funded projects

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Verification, Validation, and Accreditation (VV&A) Standardization
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M&S Catalog
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Joint Wargaming Simulation Mgt Office - FY 08 Program Highlights -



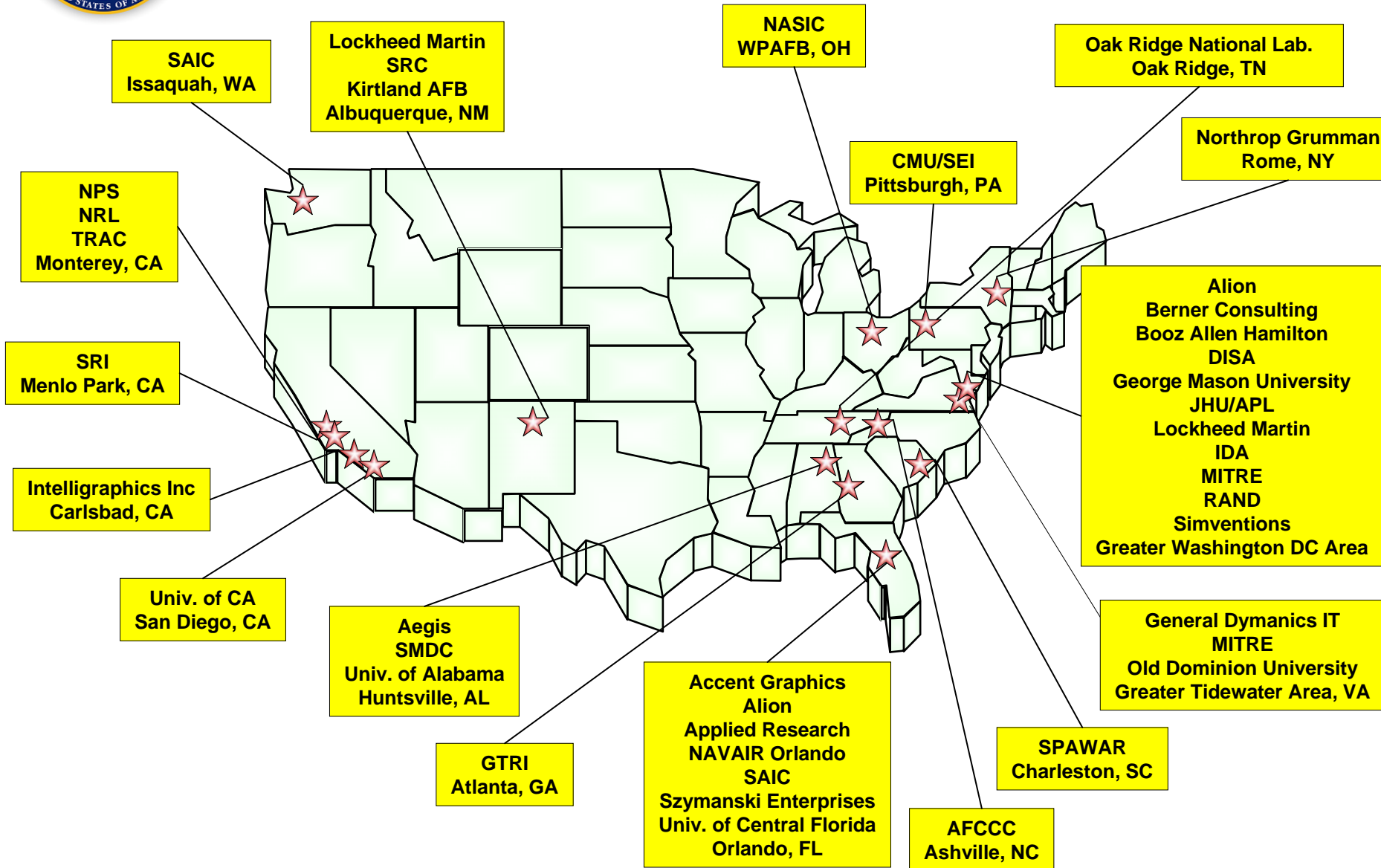
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- DoD M&S Data
 - Joint Data Alternatives
 - Common Live, Virtual, Constructive Terrain Database Evolution
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 - Vulnerability Assessment for Compilation of Data to enable the use of Global Force Management Data in M&S
 - Joint Composable Object Model
 - Unclassified Defense Planning Scenario & Analytical Baseline Development
- DoD M&S Services
 - Educating the M&S Workforce
 - VV&A Proponency Use Case



Joint Wargaming Simulation Mgt. Office PE

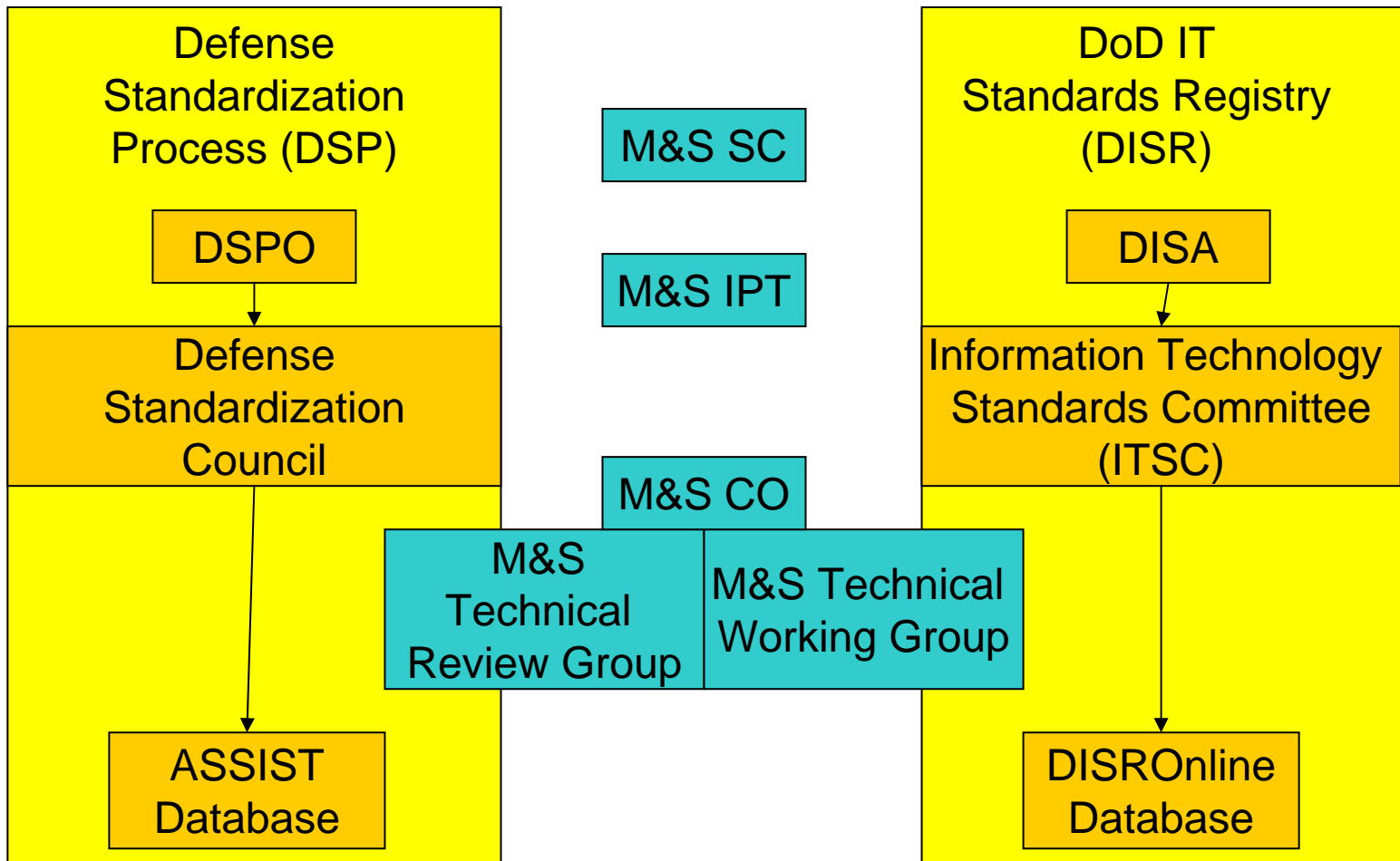


- Performers -





M&S Government Standards Relationships





Back-Up



Back-Up



Tools-Data-Services Scope

