Management of DoD Modeling and Simulation

Mr. Jesse Citizen, Director
DoD Modeling and Simulation Coordination Office (M&S CO)
OSD/AT&L/DDR&E
Agenda

• Value of Modeling & Simulation
• Governance
• Vision
• Strategic Planning
• Questions
• **Saves Lives**  
  – M&S supports real-world applications that save lives.

• **Saves Taxpayers Dollars**  
  – M&S supports real-world applications that preserve taxpayer dollars and accelerate the search for solutions to national challenges.

• **Increases Operational Capability**  
  – M&S provides strategic operations and support functions to our military, aids plans for national disaster responses and emergency preparedness, fosters and maintains our strategic partnerships, and enhances economic competitiveness globally.
Governance
Mr. Alan R. Shaffer, OUSD(AT&L) – Steering Committee Chair
Mr. Dan Gardner, OUSD (P&R) – Training Community
Mr. James Bexfield, ODPA&E – Analysis Community
Mr. Nicholas Torelli, OUSD(AT&L)(SSE) – Acquisition Community
Ms. Monica Shephard, JFCOM J-9 – Experimentation Community
BG Michael E. Rounds USA, Joint Staff J-7 – Planning Community
Mr. Joseph Bonnet, Joint Staff J-7 – Planning Community
Mr. David W. Duma, (ODOT&E) – Testing Community
Mr. Chip Ferguson, (OUSD(AT&L)/TRMC) – Testing Community
Ms. Lisa Disbrow, Joint Staff J-8 – Joint Staff & Combatant Commands
Mr. James C. Cooke – Army Representative
Mr. Carl R. Siel – Navy Representative
Dr. George Akst – Marine Corps Representative
Mr. Allen Murashige – Air Force Representative
Mr. Michael McNerney, OUSD(Policy)
Ms. Susan Shekmar, OASD(NII)
DoD Modeling & Simulation Governance

A New Approach for Managing DoD Modeling and Simulation (M&S)

New M&S 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.

- Corporate and Crosscutting M&S Tools
- Corporate and Crosscutting M&S Data
- Corporate and Crosscutting M&S Services

M&S Practices

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

Components

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

Goal:

Establish corporate M&S management to address DoD goals: Leads/guides/shepherds the SBs in DoD M&S investments; adds value thru metrics & ROI-driven priorities; and seeks to provide transparency.
How DoD Management Harnesses the Value of M&S

- DoD M&S Leadership
- DoD M&S Steering Committee
- DoD M&S Coordination Office
- DoD M&S Policies and Plans

Governance, applied through a clear vision statement, business plans, and effective leadership and management, enables better decisions.
Modeling & Simulation Coordination Office (M&S CO)

Director
Mr. Jesse Citizen

Deputy Director
COL Mike Sanders, USA

DoD M&S SC/IPT Support
- Mr. Sherrel Mock (spt)
- Mr. Clint Richardson (IT spt)
- Ms. Joy Senavanh (IT spt)

M&S Information Analysis Center (MSIAC)
- Mr. Dane Mullenix

Associate Directors:
- Corporate & Crosscutting M&S Issues & Initiatives
  - M&S Data
    - Mr. Roy Scrudder, IPA
    - Mr. John Daly (spt)
  - M&S Services
    - Dr. Amy Henninger, IPA
    - Mr. Ralph Gibson (spt)
  - M&S Tools
    - Mr. Benn Aaronson, Civ
    - Mr. Mike Strickland (spt)

Business and Finance Manager
Mr. Charles White, IPA
- Mr. Denis Scott (spt)
- Mr. Manny Cotto (spt)

Community Coordinators:
- Acquisition
  - Mr. Mike Ellian (spt)
- Analysis
  - Mr. Steve Hadley (spt)
- Experimentation
  - Mr. Kenneth Konwin (spt lead)
- Planning
  - Mr. Michael Capitman (spt)
- Test & Evaluation
  - Mr. Robert Rayome* (spt)
- Training
  - Mr. Don Newton (spt)

* Mr. Robert Rayome is support for International Coordination

Ms. Yvetta Franklin (Admin spt)
Vision
Empower DoD with modeling and simulation capabilities that effectively and efficiently support the full spectrum of the Department’s activities and operations.

**End State:** A robust modeling and simulation (M&S) capability enables the Department to more effectively meet its operational and support objectives across the diverse activities of the services, combatant commands, and agencies. A defense-wide M&S management process encourages collaboration and facilitates the sharing of data across DoD components, while promoting interactions between DoD and other government agencies, international partners, industry, and academia.

**The Goals of DoD’s M&S efforts are to provide:**

1. Standards, architectures, networks and environments
2. Policies at the enterprise level
3. Management processes for models, simulations, and data
4. Tools in the form of models, simulations, and authoritative data
5. People who employ existing models, simulation and data to support departmental objectives and advance M&S to support emerging departmental challenges (through education and training)
DoD M&S Vision End States

- Foundational M&S architectures, standards, and environments
- Effective policies
- Efficient management processes for models, simulations, and data
- Easily understood verification, validation and accreditation guidelines
- Advance and promote M&S across communities
- Fiscal philosophy to "spend each M&S dollar like it was your own"
Strategic Planning
DoD M&S Strategic Planning

Guidance for Development of the Force

Congressional Reports 1 & 2
- Identify
- Quantify
- Manage

2008 Interviews with SC Members
- Informed the development of high-level tasks
- Informs future development of C&CC and Community BPs
- Used to select proposals

Vision & Goals

2008 Community Business Plans

2010 Community Business Plans

Bi-Annual Iteration

Enables senior OSD leaders to advise and assist in the allocation of enterprise-level funding.

Future Strategic Planning
# High-level Tasks & SC Leads

The M&S SC has identified nine high-level tasks that will enhance the applications of M&S throughout the DoD for the benefit of our Warfighters.

By focusing on standards, interoperability, and visibility, these high-level tasks are delivering solutions that will contribute to closing fundamental gaps in current M&S capabilities.

<table>
<thead>
<tr>
<th>Task ID</th>
<th>Project Title</th>
<th>SC Oversight Lead</th>
<th>Other SC Oversight</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-C-1</td>
<td>M&amp;S Standardization Process</td>
<td>Shaffer</td>
<td>AC, AN, EX, JS, PL, TRMC, TR, USA, USN</td>
</tr>
<tr>
<td>S-C-2</td>
<td>LVC Architecture Roadmap Implementation &amp; Net-Centric Environment Implications</td>
<td>Gardner</td>
<td>AC, EX, JS, USAF</td>
</tr>
<tr>
<td>S-C-3</td>
<td>Development and Maintenance M&amp;S Standards</td>
<td>Shaffer</td>
<td>AC, AN, EX, JS, PL, TRMC, TR, USA, USN</td>
</tr>
<tr>
<td>S-C-4</td>
<td>Develop Best Practices Guide for Contracting for Models, Simulations &amp; Associated Data</td>
<td>DiPetto</td>
<td>AN, EX, JS, PL, USMC</td>
</tr>
<tr>
<td>I-C-1</td>
<td>Integrate DoD-wide M&amp;S into Net-Centric Environment</td>
<td>Shekmar</td>
<td>AC, AN, JS, TR, USAF</td>
</tr>
<tr>
<td>I-C-2</td>
<td>Rapid Data Generation (RDG)</td>
<td>Bonnet</td>
<td>AN, JS, TR, USAF</td>
</tr>
<tr>
<td>I-C-3</td>
<td>Enhancing Department Irregular Warfare Models &amp; Simulations</td>
<td>Bexfield</td>
<td>EX, PL, JS, PL, USA, USMC</td>
</tr>
<tr>
<td>V-C-1</td>
<td>Visibility of M&amp;S Tools &amp; Data</td>
<td>Bexfield</td>
<td>AC, EX, JS, NII, PL, TR, USAF, USN</td>
</tr>
<tr>
<td>V-AQ-2</td>
<td>Risk Based Methodology for Verification, Validation &amp; Accreditation (VV&amp;A)</td>
<td>DiPetto</td>
<td>AN, PL, TRMC, USN</td>
</tr>
</tbody>
</table>
• Developed business plans that inform the FY 09 & FY 10 allocation of funding, and lay the groundwork for FY 11 and out-years to address future challenges
• Tackled the Department’s #1 Priority – Irregular Warfare (IW)
  ✓ Established IW M&S Senior Coordination Group (GO/FO/SES) as a forum for knowledge sharing of IW M&S activities
  ✓ Highlighted M&S High-Level-Tasks (HLT) addressing:
    o Standards
    o Interoperability
    o Visibility
Mr. Alan R. Shaffer  
Principal Deputy, Defense Research & Engineering

Mr. Jesse Citizen  
Director, Modeling and Simulation Coordination Office

Visit the M&S CO website at www.msco.mil
Send your e-mail inquiries to ask.msco@osd.mil
Call the M&S CO at 703-681-7000
Backup
Strategic Vision for DoD M&S

M&S SC Signatories

Mr. Alan R. Shaffer, OUSD(AT&L)
Mr. Fred E. Hartman, OUSD (P&R)
Mr. James Bexfield, ODPA&E
Mr. Christopher DiPietro, Acquisition Community
Mr. Bud Hay, Experimentation Community
BG Michael E. Rounds USA, Planning Community
Mr. David W. Duma, Testing Community (ODOT&E)
Mr. Chip Ferguson, Testing Community (OUSD(AT&L)/TRMC)
Ms. Lisa Disbrow, Joint Staff & Combatant Commands
Mr. James C. Cooke, Army Representative
Mr. Carl R. Siel, Navy Representative
Dr. George Akst, Marine Corps Representative
Mr. Keith Seaman, Air Force Representative
Ms. Rosemary Wenchel, OUSD(Intelligence)
Ms. Susan Shekmar, OASD(NII)

Signed April 24, 2007
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 crosscutting M&S to provide improved capabilities for DoD and international operations.
M&S CO Strategic Objectives

- **Standards:** Achieve a set of standards for the development, integration, and conduct of DoD modeling and simulation activities.

- **Interoperability:** Drive towards integrated modeling and simulation (tools, data, services) across Department activities.

- **Visibility:** Provide the capability to discover modeling and simulation (tools, data, and services) across DoD.

  Each “objective” will have “tasks” established for implementation with deliverables, metrics, and completion date.