

**National Defense Industrial Association
Systems Engineering Division
Modeling and Simulation Committee**

**Prepared for the
NDIA Systems Engineering Division Meeting
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- **The mission of the NDIA SE M&S Committee is to advance the understanding and use of modeling and simulation in the practice of systems engineering**
- **Presentations from the past seven years of committee meetings are posted on the committee's web site**
- **2016 meetings (scheduled for the day before the NDIA SE Division meeting)**
 - **16 February (Applied Research Associates – Ballston)**
 - **19 April (GTRI – Rosslyn)**
 - **21 June (Engility – Washington Navy Yard)**
 - **15-16 August workshop (LMI – Tysons Corner)**

8:40	Welcome, agenda review, self-introductions	
8:55	Committee overview, meeting schedule	Jim Coolahan (Coolahan Assoc.)
9:00	ADAPT - The ARDEC/ANSYS Developed Analysis Preprocessing Tool for Government Solvers	Anthony Dawson (ANSYS)
10:00	High-Fidelity Modeling and Simulation of Ground Robots at ERDC	Chris Goodin (US Army ERDC)
10:45	Break	
11:00	Digital Engineering with the CREATE Tools: Physics-based HPC Software Applications to Reduce the Costs, Risks and Time of DoD Acquisition	Dr. Douglass Post (HPCMP/CREATE)
12:00	Planning for an NDIA-Sponsored Workshop on Use of Digital Models for Competitive Down-Selection	Jeff Bergenthal
12:30	Adjourn	

2016 Tasks

- Publish reports on study on essential elements of a Digital System Model (DSM), and on August 2015 DSM Workshop
- Conduct workshop on the Use of Digital Models for Competitive Down-Selection
- Provide continuing situational awareness for M&S Committee members (ongoing)
- Motivate submittal of abstracts to populate full-length M&S track at 2016 SE Conference

Schedule

- Final report on DSM Workshop – March 2016 (in SE Division review)
- Final report on Essential Elements of a Digital System Model – June/July 2016
- Committee meetings in February, April, June, and August 2016
- M&S track in NDIA SE Conference – October 2016 [Abstracts due 24 June]

Deliverables/Products

- Final report on Essential Elements of a Digital System Model
- Final report on DSM Workshop
- Committee meeting presentations posted on committee web site

Stakeholders/Alignment

- Task Liaison: Ms. Philomena Zimmerman, ODASD(SE)/EE
- Key Interfaces:
 - Simulation Interoperability Standards Organization (SISO) standards and Acquisition track
- Task Objective: Focused on M&S issues for engineering, of interest to ODASD(SE)/EE

Use of Digital Models for Competitive Down-Selection Workshop – Overview

- **Dates/Times:**
 - **Monday, 15 August: 1:00 pm – 5:00 pm**
 - **Tuesday, 16 August: 8:30 am – 5:00 pm**
- **Location:**
 - **LMI offices at 7940 Jones Branch Drive, Tysons, VA**
 - **Closest Metro stops:**
 - ◆ Tysons Corner on the Silver Line
 - ◆ McLean on the Silver Line
 - **Parking garage with complimentary parking for those who drive**
- **High-level Agenda:**
 - **15 August:**
 - ◆ Plenary Session
 - ◆ Scoping the Problem Space
 - **16 August:**
 - ◆ Breakout group meetings
 - ◆ Out-brief by breakout groups

1300 Welcome, Introductions, and Overview

1315 Plenary Session

- **ODASD(SE)/EE – Importance of the use of digital models for competitive down-selection**
- **DoD and Industry Briefings (3) – Current or past efforts and experiences with using digital models in Requests For Proposals (RFPs), proposals, and/or proposal evaluation**
 - ◆ Aerospace Vehicle Systems Institute (AVSI) – System Architecture Virtual Integration (SAVI) [tentative]
 - ◆ US Army Aviation and Missile Research, Development, and Engineering Center (AMRDEC) – Joint Common Architecture (JCA) [tentative]
 - ◆ To Be Determined

(15-minute break mid-way through the Plenary)

1615 Setting the Stage / Bounding the Scope

- **Establish boundaries for the breakout groups**

1700 Adjourn Day 1

- 0830** Summary of Day 1 and charge to breakout groups
- 0900** Breakout groups meet (tentative groups)
- Technical Considerations for Model-Based RFPs and Proposal Evaluation
 - Technical Considerations for RFP Interpretation and Proposal Preparation
 - Policy and Legal Issues
- (mid-morning 15-minute break decided by each group)
- 1200** Lunch break (on your own)
- 1300** Breakout groups continue & prepare out-briefs
- 1500** Break
- 1515** Convene plenary session – breakout groups report
- 1700** Adjourn workshop