

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

**Prepared for the
NDIA Systems Engineering Division Meeting
17 June 2015**

Jim Coolahan

Coolahan Associates, LLC
and Johns Hopkins University

Jeff Bergenthal

Johns Hopkins University
Applied Physics Laboratory

- **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 five years of committee meetings are posted on the committee's web site**
- **2015 meetings (scheduled for the day before the NDIA SE Division meeting)**
 - **17 February (online, due to weather)**
 - **21 April (Engility – Washington Navy Yard)**
 - **16 June (Engility – Clarendon)**
 - **(17-)18 August (location TBD – Digital System Model workshop)**

8:15	Meeting room open	
8:45	Welcome, agenda review, self-introductions	
8:55	Committee overview, meeting schedule	Jim Coolahan (Coolahan Assoc.)
9:00	Enterprise Data Services (EDS) - Discovering and Using Simulation Data	Dr. Rob Cox (PEO STRI)
9:45	Enabling the Simulation of Complex, Heterogeneous Systems Using the Functional Mockup Interface (FMI)	Hubertus Tummescheit (Modelon)
10:45	Break	
11:00	Army Models and Simulations as Services	COL Robert Kewley (USMA)
11:45	Overview of the CREATE Portal – Secure Access for Engineers & Scientists in Government and Defense Industries	Dr. Chris Atwood (CREATE)
12:30	Planning for August Workshop on the Digital System Model	Jim Coolahan
12:45	Full committee meeting adjourns; lunch (on your own)	
13:45	Subcommittee Meeting, Essential Elements of a System Model	Jeff Bergenthal (JHU/APL)
15:45	Adjourn subcommittee meeting	

2015 Tasks

- Complete study to determine essential elements of a “System Model” that evolves over the life cycle
- Lead System Model workshop
- Provide continuing situational awareness for M&S Committee members (ongoing)
- Motivate submittal of abstracts to populate full-length M&S track at 2015 SE Conference

Deliverables/Products

- Final report on Essential Elements of a System Model
- Report on System Model workshop
- Committee meeting presentations posted on committee web site

Schedule

- Final report on Essential Elements of a System Model – August 2015
- Committee meetings in February, April, June, and August 2015
- M&S track in NDIA SE Conference – October 2015

Stakeholders/Alignment

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

- **Dates/Times:**
 - Monday, 17 August: 1:00 pm – 4:30 pm
 - Tuesday, 18 August: 8:30 am – 4:30 pm
- **Location:**
 - Washington, DC area (TBD)
 - Need main room to accommodate 40 persons
 - Need three additional breakout rooms to accommodate 15 persons each (18 August only)
- **Desired Plenary Presentations (17 August)**
 - ODASD(SE)/EE – System Model concept
 - Industry Briefings (3) – Current implementations / desired features of System-Model-like constructs
 - NDIA – Essential Elements of the System Model study; potential taxonomy for System Model data/information

Digital System Model Workshop – Tentative Day 2 Agenda

- 0830** Summary of Day 1 and charge to breakout groups
- 0900** Breakout groups meet (tentative groups)
 - System Characteristics Data Needs
 - System Performance Data Needs
 - System Financial Data Needs
 - 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
- 1630** Adjourn workshop