

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

**Prepared for the
NDIA Systems Engineering Division Meeting
26 August 2015**

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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 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 Digital System Model Workshop (Engility – Clarendon)**

2015 Tasks

- Complete study to determine essential elements of a “System Model” that evolves over the life cycle
- Lead Digital 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 Digital System Model Workshop
- Committee meeting presentations posted on committee web site

Schedule

- Final report on Essential Elements of a System Model – October 2015
- Committee meetings in February, April, and June 2015
- Digital System Model Workshop – 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 (no longer meeting)
 - Simulation Interoperability Standards Organization (SISO) standards and Acquisition track
- Task Objective: Focused on M&S issues for engineering, of interest to ODASD(SE)/EE

Digital System Model Workshop – Objectives

- **To define/refine the principal uses of the Digital System Model in the acquisition of systems – from concept to disposal – to aid in ensuring its usefulness and completeness**
- **To obtain Systems Engineering community input (particularly from Industry) on the critical contents of the Digital System Model**
- **To obtain community input on the issues associated with the implementation of the Digital System Model across the acquisition lifecycle and between the Government and Industry**
- **To assess the degree to which the Digital System Model is consistent with the larger goal of Model-Based (Systems) Engineering, to aid in determining if there are gaps in the Digital System Model concept.**

Digital System Model Workshop – Agenda, Day 1

13:00	Introduction	Jim Coolahan (Coolahan Assoc.)
13:10	Advancing Digital Model-Centric Engineering: Digital System Model/Digital Thread	Piil Zimmerman (ODASD(SE))
13:40	Digital System Model - A Raytheon Perspective	Louisa Guise (Raytheon)
14:10	Digital Tapestry: Digital System Modeling at Lockheed Martin	Chris Schreiber (Lockheed Martin)
14:40	MBSE Implementation Across Diverse Domains at The Boeing Company	David Allsop (Boeing) Curtis Potterveld (Boeing)
15:10	A Look at the State-of-the-Art of the Digital System Model: the Status Beyond the Hype	Hubertus Tummescheit (Modelon) James Roche (CIMData)
15:40	Essential Elements of the Digital System Model: Sharing and Evolving Data Across the Acquisition Life Cycle	Jeff Bergenthal (JHU/APL)
16:05	Potential Taxonomy for Digital System Model Data	Jim Coolahan
16:30	Adjourn for the day	

Digital System Model Workshop – Agenda, Day 2

8:30	Summary of Day 1 Activities and Charge to Breakout Groups	Jim Coolahan (Coolahan Assoc.)
9:00	Breakout Sessions (mid-morning break, as needed):	Facilitators:
	System Characteristics (e.g., form and fit) Data	Louisa Guise (Raytheon)
	System Performance/Effectiveness (e.g., function) Data	Jeff Bergenthal (JHU/APL)
	System Financial (e.g., cost) Data	Beth Wilson (Raytheon)
	Policy and Legal Considerations	Jim Coolahan
12:00	Lunch break (on your own)	
13:00	Breakout Sessions Continue and Prepare Out-briefs	Breakout session facilitators
15:00	Break	
15:15	Plenary Session: Breakout Session Out-briefs	Breakout session facilitators
16:30	Adjourn workshop	