

Educating Consumers of Modeling and Simulation: M&S Education for the Acquisition Workforce

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## **Background – Navy Project**

- Acquisition M&S Working Group (AMSWG)
  - Acquisition M&S Master Plan Objective 5: <u>Shape the Workforce</u>
  - M&S education & training
- M&S Acquisition/T&E Mission Enable the Department of the Navy to effectively use M&S within and across the Acquisition Enterprise
  - Need a unified approach for enabling the workforce to determine WHICH tools to use, WHEN to use them, and HOW to use them across development lifecycle
  - Need training options to improve workforce capabilities to select and use M&S tools effectively and efficiently. These include
    - Initial education and training, refresher training, continuing education, and certification opportunities
- <u>Ultimate Goal</u>: M&S savvy workforce, able to apply M&S tools appropriately to enhance warfighting capability, reducing lifecycle development time and costs.

Acquisition Research Program: Creating Synergy for Informed Change

# **MSCO Project**

- MSSC C&CC Business Plan, "The M&S workforce is not equipped with adequate education, processes, practices, tools, technology and resources to support the institutionalization of M&S across the DoD's mission space." Workforce development needs specified in the plan:
  - A DoD Human Capital Strategy for M&S to articulate competencies required.
  - A widely-accepted multi disciplinary M&S Body of Knowledge (BOK).
  - Dedicated educational programs and curricula are needed to enable DoD engineers, acquisition professionals and program managers to apply current technology with credibility.
- Project has been approved and funding is in place.



# **Project Overview**

Deliverables are outcomes of each of 4 Spirals

- 1. Learning Matrix
  - Desired instructional content based on ESRs for Acquisition workforce
  - Integrates educational background, learning style, workforce role, and desired education end state
  - M&S Workforce Education Gap Analysis
- 2. Learning Architecture/Instructional Framework
  - Degree/certificate programs and continuous learning modules
  - Content modules (course syllabi)
- 3. Prototype Curriculum
  - Develop curriculum from content architecture
  - Deliver with endorsement/accreditation to DAU, NPS and services
- 4. Assessment
  - Longitudinal Curriculum Effectiveness Evaluation











### Backup



Naval Postgraduate School Monterey, CA

### **Stakeholder Group**

- DASN RDT&E
  - CAPT Mike Lilienthal
- AFAMS
  - Dr. Ed Degnan
- HQDA
  - Gary Dahl
- INCOSE
  - Mark Sampson
- CVN
  - Leslie Taylor

- SPAWAR
  - Dr. Bill Rix
  - Kevin Charlow
- COMOPTEVFOR
  - Steve Whitehead
- Future Combat System
   Oral Walker
- Broad educational discipline representation

### **Academic Partners**

- Air Force Institute of Technology
- Defense Acquisition
  University
- George Mason University
- Johns Hopkins University/ Applied Physics Lab

- Stevens Institute
- Texas A&M
- University of Alabama, Huntsville
- University of California, San Diego
- University of Central Florida
- Old Dominion University Note: In most cases, official partnerships are currently being negotiated.