



# Standards Panel Introduction

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# Purpose



- **Part of a series of outreach opportunities for DoD M&S CO to**
  - Describe the current DoD M&S Standards Management Process
  - Update the T&E community of practice on current M&S standards Activities
  - Get feed back from the T&E community on M&S standards needs and efforts
- **Members of the Panel**
  - John “JD” Diem, Associate Director for Services, OSD (AT&L)/M&S CO
  - Mark Young, Chief, M&S Division, Army Modeling and Simulation Office
  - Dennis Reed, ASN/RDA M&S Community Action Officer, U.S. Navy
  - Timothy Menke, Air Force’s Aeronautical Systems Center
  - Dr. Katherine Morse, The Johns Hopkins University Applied Physics Laboratory



# What is a Standard?



- **De facto (“in practice”)**
  - Commonly used technologies, protocols, etc.
  - Sometimes referred to as little ‘s’ standards
    - Microsoft PowerPoint
- **De jure (“by law”)**
  - Developed by standards development bodies with legal and recognized standing
  - These standards are the focus of this tutorial



# Definition



- For this discussion, we adopt the DoD definition of a standard:

**“A document that established uniform engineering or technical criteria, methods, processes and practices”**

**DoD 4120.24-M**



# Why M&S Needs Standards



- **Communication**

- “... infrastructure for linking simulations of various types at multiple locations to create realistic, complex, virtual “worlds” for the simulation of highly interactive activities.”

- **Interoperability**

- The ability to exchange data and the ability to interpret it consistently (common context)
- Determined by the needs of the community of common interest
- Within and among architectures

- **Cost**

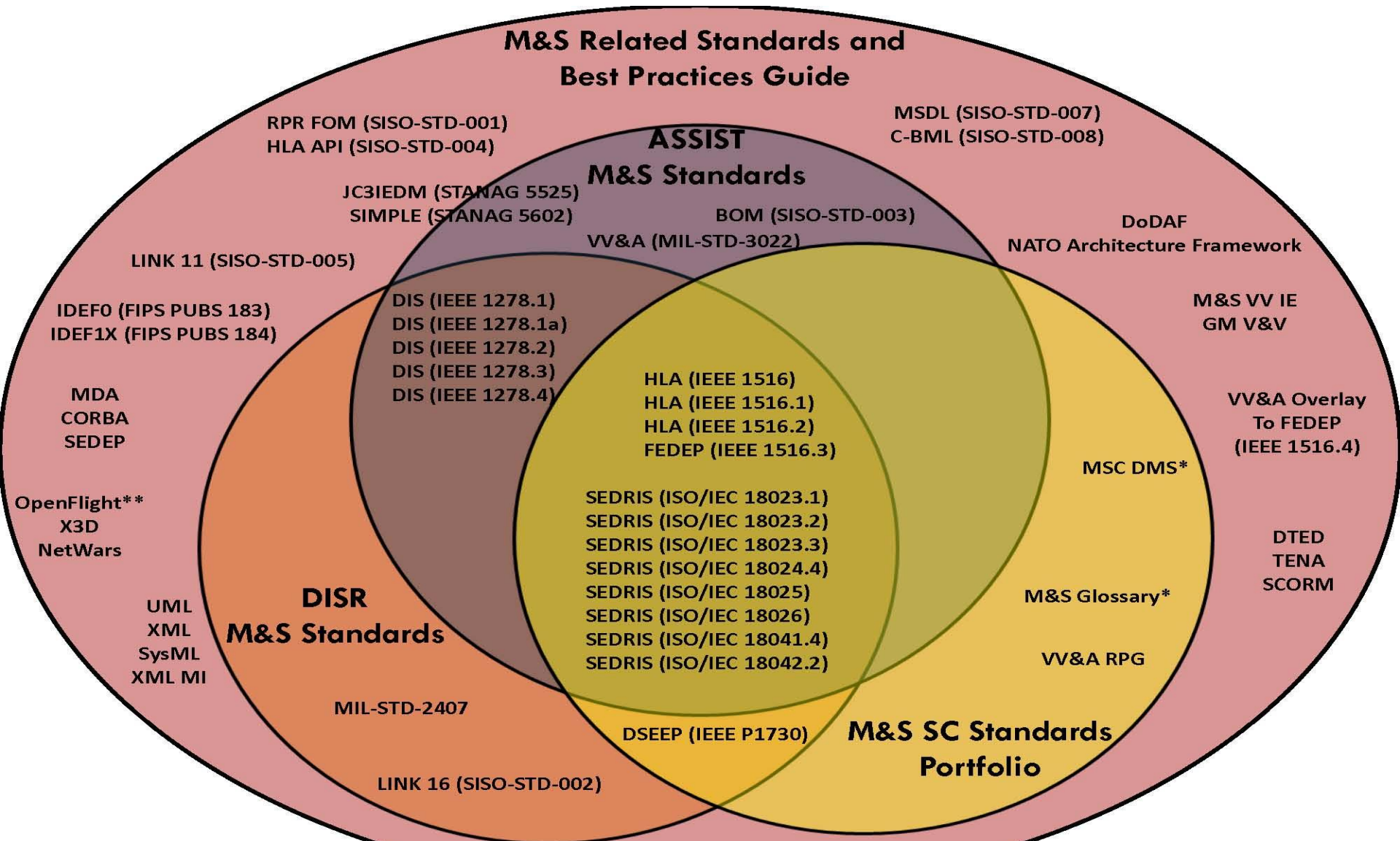
- Lower barriers to entry
- Access to multiple vendors

- **Reusability**

- Ability to adapt components (e.g., ideas, whole simulations, lines of code) for new simulations



# M&S Standardization



\*\*Not an open standard

\*Not in current Profile



# M&S Related Standards & Best Practices Guide



- Concept
  - A list of selected standards that support various types of DoD M&S Communities' M&S application needs
  - Background information and relationships within DoD M&S standardization programs
  - Strategy and criteria for the selection of applicable standard
- Purpose
  - Improve DoD M&S Community knowledge, access and leverage of standards technology and products
  - Maintain information on M&S standards and recommended practices relevant to achieving M&S interoperability and re-use of M&S components



# M&S CO's Standards Responsibilities

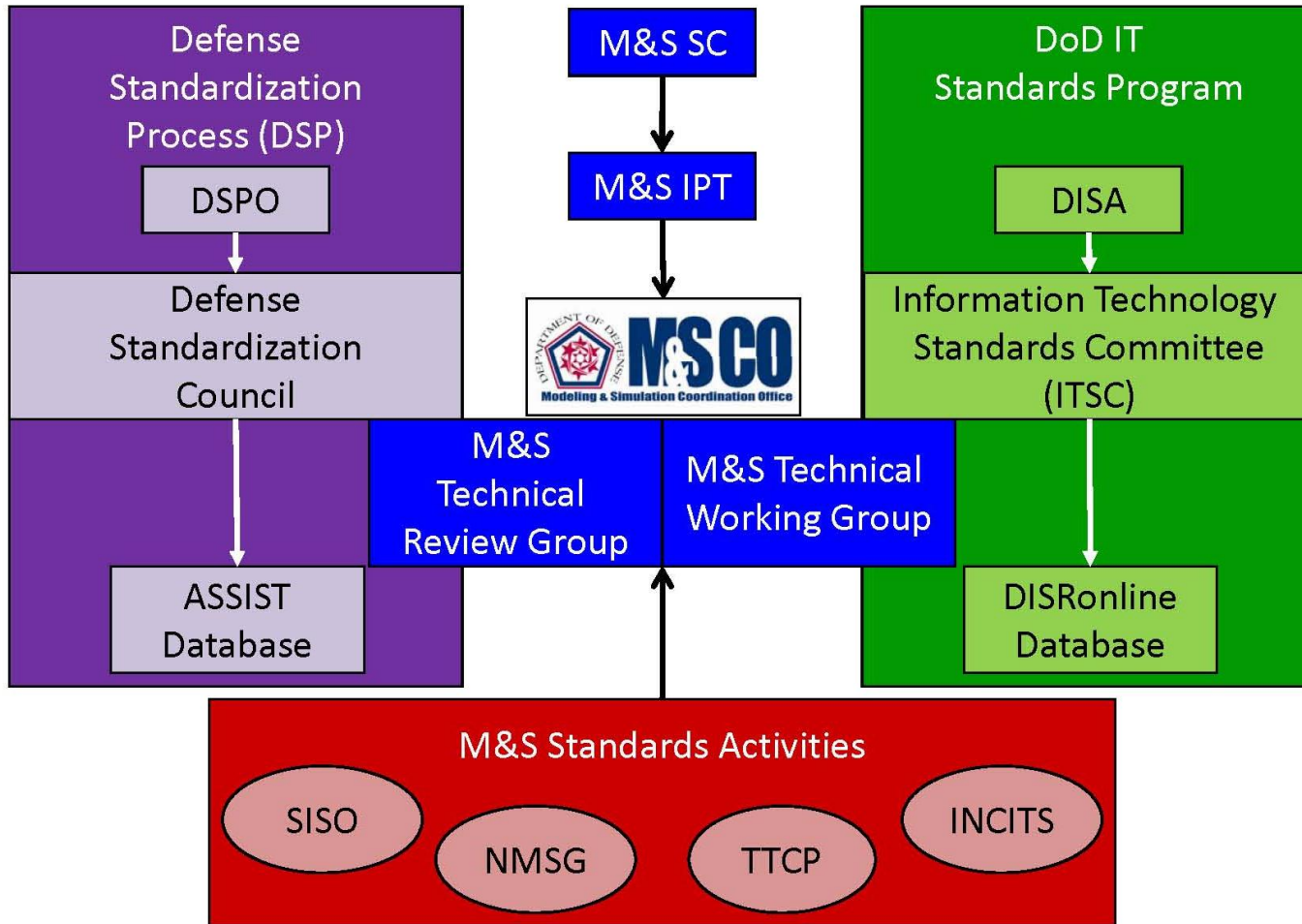


- **Manage the MSSM Standardization Area in accordance with DoD 4120.24-M, *Defense Standardization Program (DSP) Policies and Procedures.***
  - Coordinate the review and adoption of standards in other Standardization Areas that are utilized in support of M&S efforts.
  - Coordinate M&S standardization among Services, JFCOM and other DoD Components
  - Maintain liaison with non-Governmental standards bodies (NGSBs) that sponsor standardization documents that are utilized for M&S applications.
- **Manage the M&S TWG in accordance with Standard Operating Procedures for the ITSC, IT Subcommittee Chairs (ISCs), and TWGs. (DISA, 2007)**
  - Recommend the disposition of M&S standards listed or proposed for listing in the DISR
  - Coordinate the disposition of standards in other technical areas that are of interest to the M&S community
  - Represent M&S interests on other TWGs
  - Publish a M&S Standards Profile detailing the recommended application of standards listed in the DISR that are used for M&S applications
  - Staff ITSC action items of interest to the M&S community
- **Develop, coordinate, promulgate and maintain NATO M&S STANAGS (Approved M&S CO Roles and Missions)**





# M&S CO Standards Interactions





# Cyber Operations Research Environment and Network Analysis (CORONA)



- **CORONA will provide scalable framework environment**
- **Use will allow assessment of the effects of cyber exploits**
- **Effort will develop this capability through**
  - Network Under Test Module
    - Reconfigurable representative network infrastructure
    - Experimental control station
    - Automated approach to network specification and creation
    - Tools that identify tradeoffs
  - Environment Module
    - Framework to facilitate specifications
    - Automated solutions to separate test plane from control plane
  - Attack Module
    - Identify existing vulnerability databases
    - Interfaces for data extraction
    - Automated attack tree structures
    - Mechanism for replay of human developed plans
  - System Under Test Module
    - Test harness
    - Make module easily reconfigurable



# For More Information...

- Visit the M&S CO website at [www.msco.mil](http://www.msco.mil)
- Send your e-mail inquiries to [ask.msco@osd.mil](mailto:ask.msco@osd.mil)

