



**Department of Defense  
Modeling and Simulation Conference**

**DoD M&S Project:  
Standardized Documentation for  
Verification, Validation, and  
Accreditation**

**Thursday, 13 March 2008  
2:30-3:00 p.m.**

**Presented by  
Project Management Team (PMT)**

# Report Documentation Page

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# Outline

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- Project Introduction
- Project Organization
- Concept of Operations
- Updates across major areas
- POA&M
- Summary
- Points of Contact
- Exhibit Hall



# DoD M&S Project

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- Sponsor: Department of Defense (DoD)  
M&S Steering Committee  
(M&S SC)
- Oversight: Acquisition Community Lead
- Project title: Standardized Documentation  
for VV&A



# DoD Acquisition M&S Master Plan Acquisition Objectives & Actions

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- **OBJECTIVES**

- Obj 2: Enhance the technical framework for M&S
- Obj 4: Improve M&S use

- **ACTIONS**

- Establish a standard template of key characteristics (metadata) to describe reusable M&S resources
- Enhance the means (e.g., directory service, registries, bulletin boards) to discover the existence of reusable resources required for M&S and contact information
- Require standardized documentation of VV&A DoD-wide



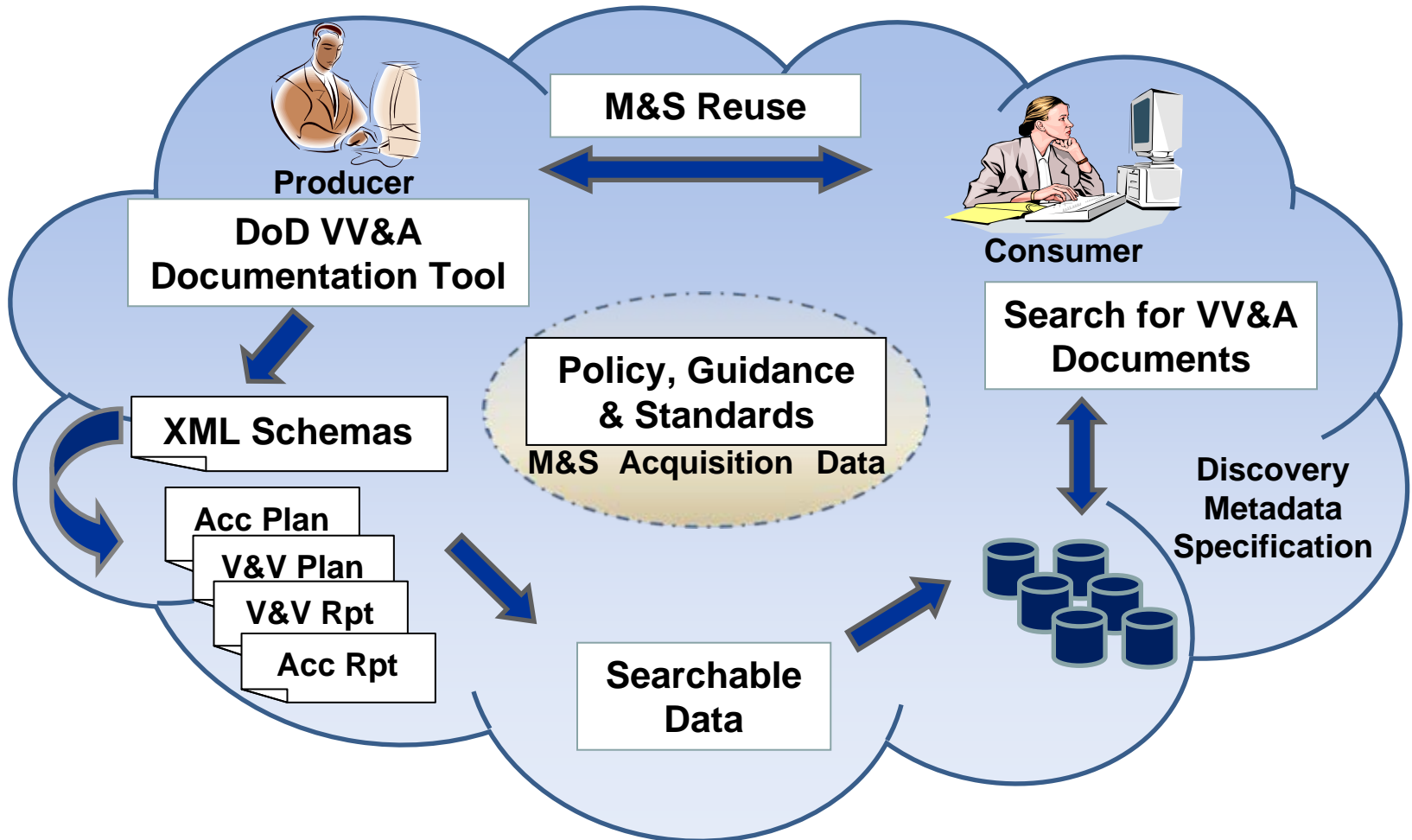
# Project Scope

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- Three major tasks and associated deliverables:
  - recommend updates to associated policy, guidance, and standards documents
  - develop VV&A XML schemas and VV&A ontology for M&S
  - produce and field DoD VV&A Documentation Tool (DVDT)

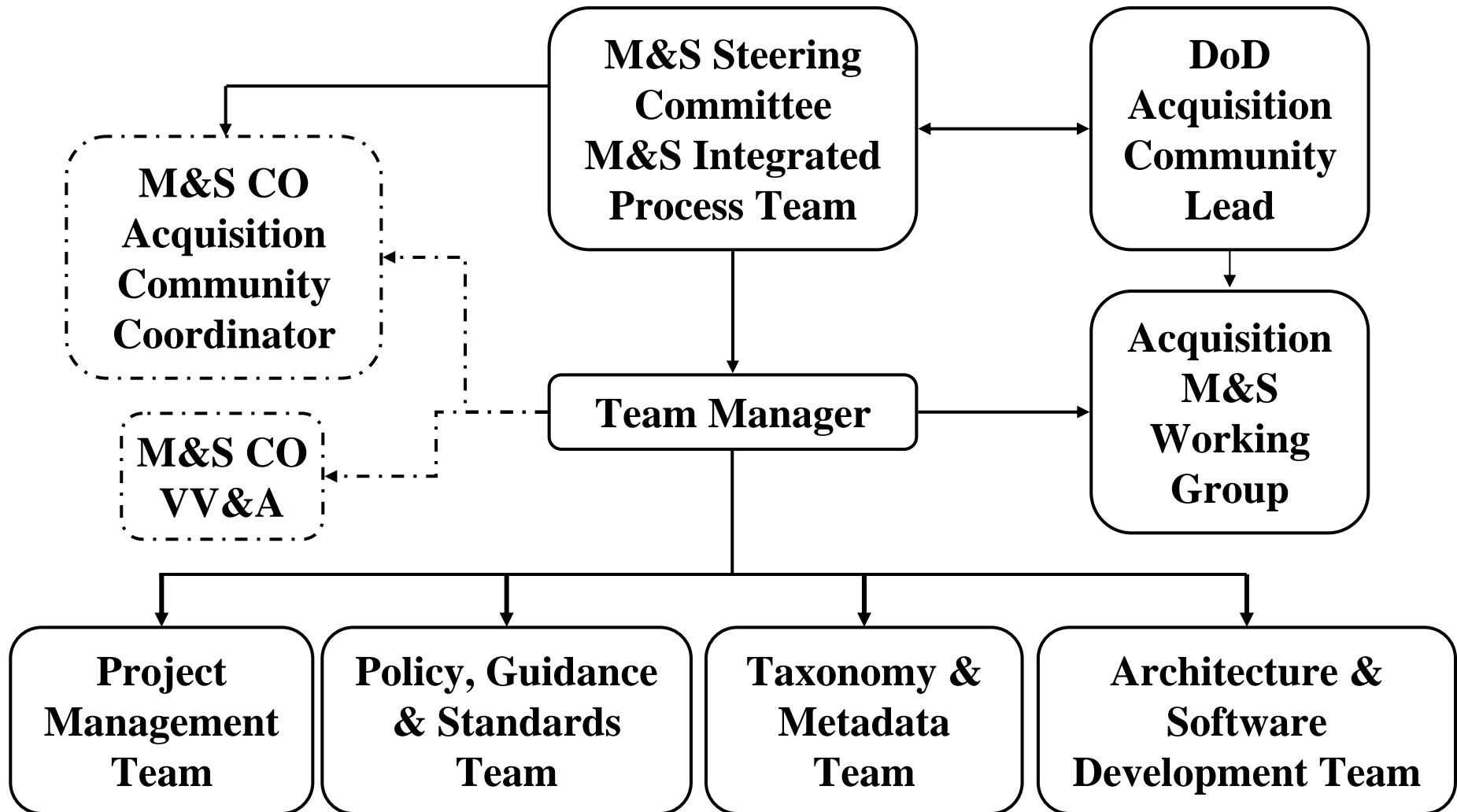


# Concept of Operations



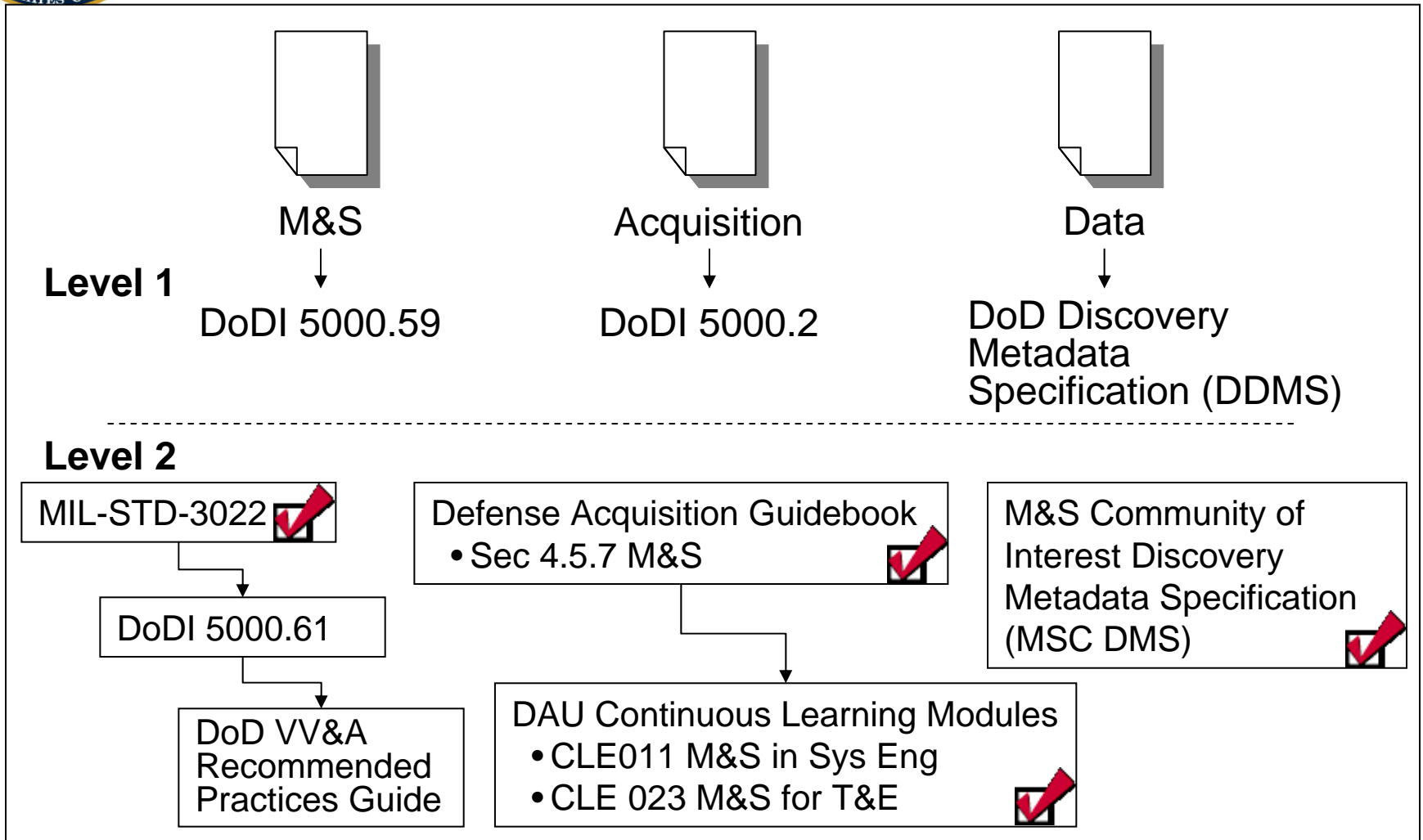


# Project Organization





# Policy, Guidance & Standards

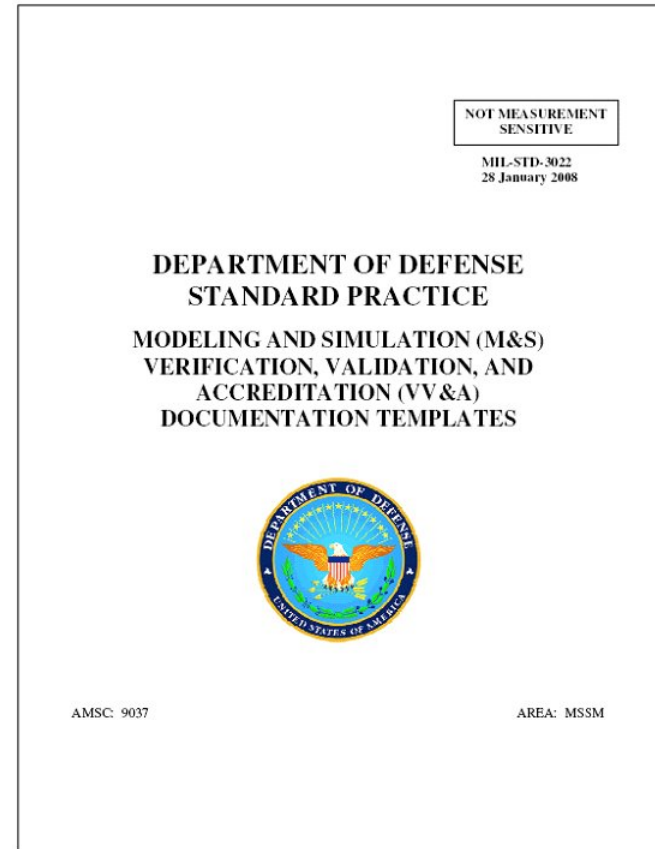


***VV&A information is important not only for the decision at hand, but for future decisions to reuse M&S***



# MIL-STD-3022

- **2005-2006:** DoD-sponsored Tri-Service VV&A Templates Tiger Team developed templates for four core VV&A documents
  - Accreditation Plan
  - V&V Plan
  - V&V Report
  - Accreditation Report
- **2007:** Processed through DoD M&S management system and Defense Standardization Program
- **2008:** Approved as DoD Standard Practice
  - Available from the Acquisition Streamlining and Standardization Information System (ASSIST)
  - <http://assist.daps.dla.mil/>



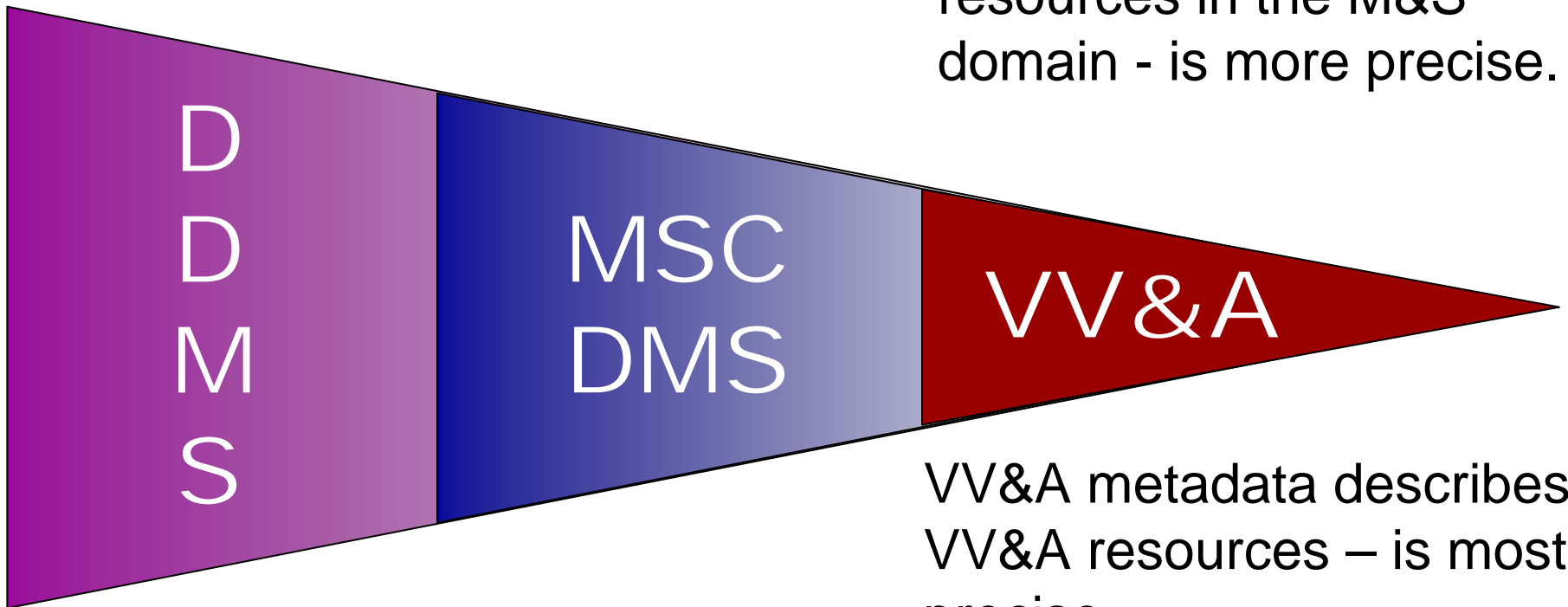
**DVDT automates standard templates enabling sharing of VV&A information across Global Information Grid (GIG) enterprise**



# Taxonomy & Metadata

DDMS describes DoD resources - is very broad.

MSC DMS provides more detail to describe resources in the M&S domain - is more precise.



VV&A metadata describes VV&A resources – is most precise.

DDMS: DoD Discovery Metadata Specification

MSC DMS: M&S Community of Interest Discovery Metadata Specification



# DoD Metadata Registry

**VV&A  
Project  
Metadata  
XML  
Schema**

**VV&A  
Document  
Metadata  
XML  
Schema**

**VV&A  
Document  
Common  
Elements  
XML  
Schema**

**Accreditation  
Plan  
XML  
Schema**

**Accreditation  
Report  
XML  
Schema**

**V&V  
Plan  
XML  
Schema**

**V&V  
Report  
XML  
Schema**

DoD Metadata Registry and metadata registration process established to collect, store, and disseminate structural metadata information resources, e.g.:

- schemas
- data elements
- attributes
- document type definitions
- style-sheets
- data structures


The project's XML products will be registered and available for use by industry and government.




<http://metadata.dod.mil>



# DVDT Portal



## VV&A Documentation Tool



**VV&A ASSISTANCE** ▾

- M&S Interview
- DoD VV&A RPG
- MIL-STD-3022
- Data Item Descriptions
- Policy
- Standards

**TOOL OPTIONS** ▾

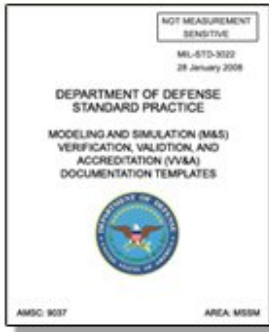
- Register
- Login
- Help
- Feedback

### Welcome to the DoD VV&A Documentation Tool (DVDT)



The DoD VV&A Documentation Tool (DVDT) addresses the need to capture VV&A information in a consistent format with consistent content. The purpose for the DVDT is to support the various DoD- and Service-level Communities by producing standardized VV&A documentation and meeting net-centric architecture requirements for sharing, discovering, and retrieving VV&A information within the Global Information Grid (GIG) enterprise.

The DVDT is the technology that automates the standard DoD VV&A documentation templates formalized in the DoD Standard Practice Modeling and Simulation (M&S) Verification, Validation, and Accreditation (VV&A) Documentation Templates (MIL-STD-3022).

Automation of the templates saves users time by expediting the VV&A documentation production process and ensuring standardization of content and format across DoD and the Military Departments.



NOT MEASUREMENT SENSITIVE  
MIL-STD-3022  
28 January 2008  
DEPARTMENT OF DEFENSE  
STANDARD PRACTICE  
MODELING AND SIMULATION (M&S)  
VERIFICATION, VALIDATION, AND ACCREDITATION (VV&A)  
DOCUMENTATION TEMPLATES  
AMSC 3037 AREA M33M



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# Notional Requirements Traceability

MILSTD 3022 Guide

Accreditation Plan.xml - Microsoft Word

Window Help Type a question for help

DVDT DVDT Home View Metadata Send for Review... Check In Check Out Access RTM... DOD RPG Guide

	Accreditation Plan	V&V Plan	V&V Report	Accreditation Report	
#	M&S Requirement	Acceptability Criterion	Planned V&V Task / Activity	V&V Task Analysis	Accreditation Assessment
1	REQ#- 01	1.1	1.1.1	1.1.1	1.1.1
		1.2	1.2	1.2	1.2
		1.n	1.n	1.n	1.n
2		2.1	2.1	2.1	2.1
		2.n	2.n	2.n	2.n
n		n.n	n.n	n.n	n.n

Appendix B - M&S Requirements Traceability Matrix

1.1: HERP range 12Mhz - 16Mhz.

Acceptability Criteria 1.2: HERF range < 1KM from any fuel storage facility

Planned V&V Task / Activity: 1-2, 1.3,2-1, 2-5, 3-2, 4-3, 4-5

The Requirements Traceability Matrix maintains the link between V&V tasks, and acceptable criteria to the M&S requirement.

Page 1 Sec 1 1/1 At 1" Ln 1 Col 1 REC TRK EXT OVR English (U.S.)

DVDT Tool Bar

Notional

Short field description





# Summary

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- Provided information about the DoD M&S Project, “*Standardized Documentation for VV&A*”
- Highlighted four main areas of the project
  - Initial policy, guidance, and standards recommendations were made to the DoD Acquisition Community Lead through the AMSWG.
  - Various XML description documents began coordination through the GIG M&S COI.
  - On schedule to release the DVDT beta production version in Spring 2008.



# Points of Contact

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For more information,  
to become a DVDT beta tester, or  
to use the DVDT to support a VV&A project,  
contact any one of the authors below.

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# Acquisition Community Display

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For more information,  
talk to my

Project Management Team  
at the Acquisition Community's display  
in the Exhibit Hall  
(Tuesday-Thursday).

Be sure to pick up a flyer to take with you.



# Acronyms

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AMSWG	Acquisition M&S Working Group
ASSIST	Acquisition Streamlining and Standardization Information System ( <a href="http://assist.daps.dla.mil/">http://assist.daps.dla.mil/</a> )
DDMS	DoD Discovery Metadata Specification
DoD	Department of Defense
DVDT	DoD VV&A Documentation Tool
GIG	Global Information Grid
IC-IMS	Intelligence Community-Information Security Marking
M&S	Modeling and Simulation, model(s) and simulation(s)
M&S CO	M&S Coordination Office
M&S SC	M&S Steering Committee
MSC DMS	M&S Community of Interest Discovery Metadata Specification
PMT	Project Management Team
POA&M	Plan of Actions and Milestones
VV&A	Verification, Validation, and Accreditation
XML	Extensible Markup Language