OBJECT MANAGEMENT GROUP®

OMG Model-based Acquisition (MBAcq) User Group
A Government & Industry Collaboration Update

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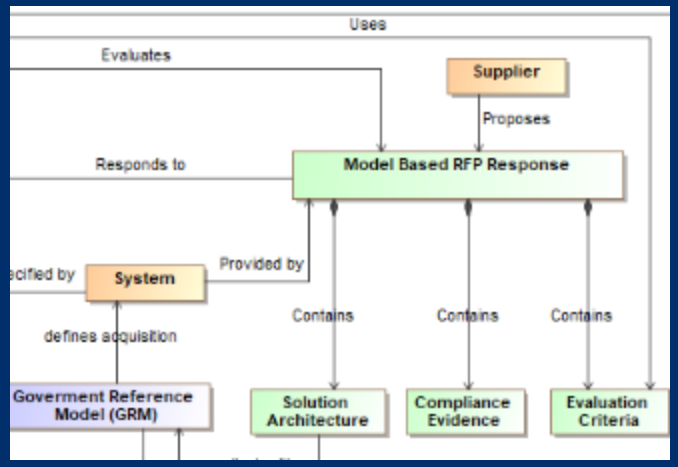
BLUF: Model-Based Acquisition (MBAcq)

About MBAcq

Model-based acquisition is the Technical approach to acquisition that uses models and other digital artifacts as the primary means of information exchange, rather than document-based information exchange.



Why MBAcq Matters

Customers are increasingly specifying MBSE in RFPs
Customers are increasingly requiring models in proposals
Lack of standardization raises proposal learning curves

MBAcq standardization minimizes acquisition risk while improving our communication

OMG MBAcq User Group

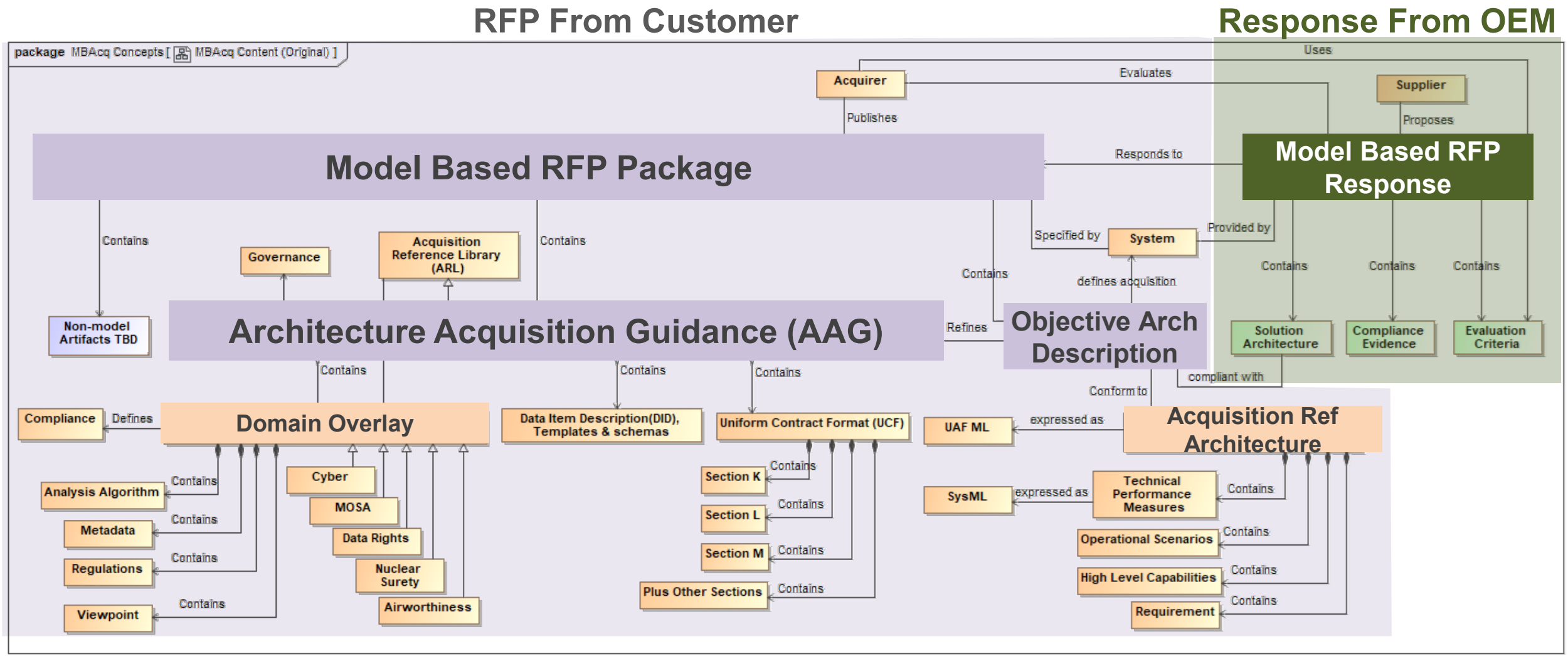
Is a broad industry body with participation from OMG, INCOSE, Armed Services, OUSD, DoD CIO, NDIA, DAU, FFRDCs and many industry suppliers such as Boeing, Northrup Grumman, Lockheed Martin, etc. working together to create the standards and guidance to successfully deploy MBAcq to the larger community.

Expected Timeline

2022: Formed Team & Framework
2023: Q4 Govt Ref Arch
2024: Q2 Acquisition Users Guide
Q2/3 DAU Acquisition Training
Q4 Acquisition Model Example

MBAcq Future State

Bringing it all together!



OMG Standards Development Organization

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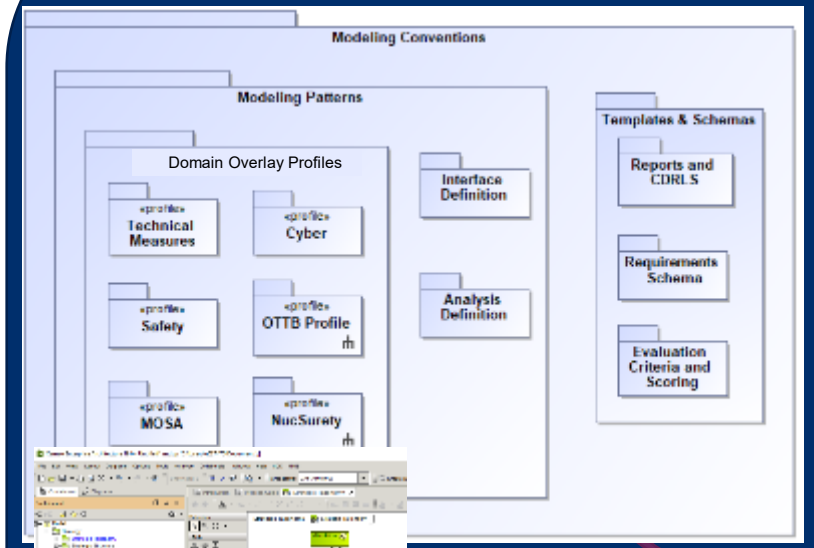
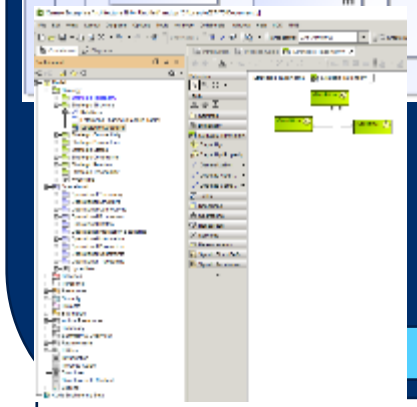
Model-Based Acquisition

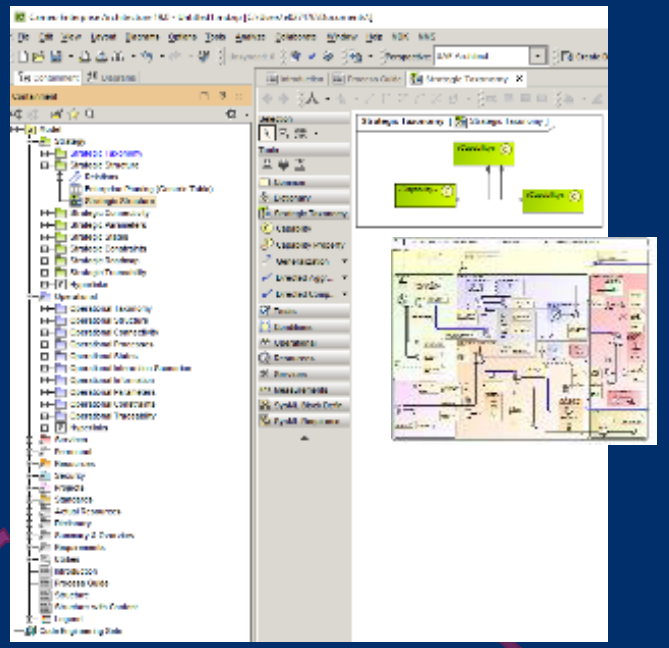
1. Architecture Acquisition Guidance (AAG)





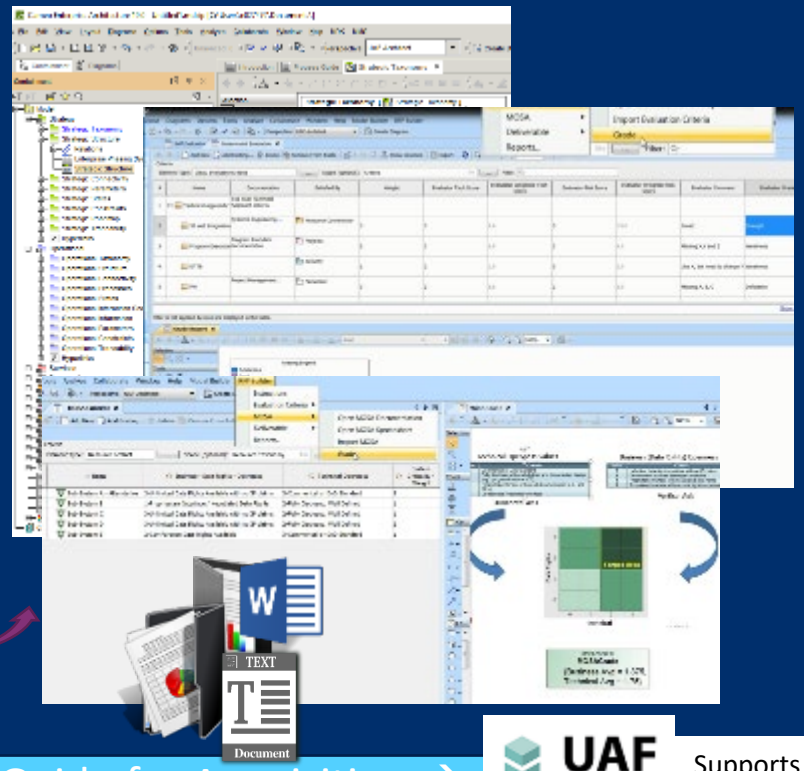
AAG & (OAD)

2. Objective Architecture Description (OAD)



Populated with Program & contract Data

3. Model-based RFP Package



← 4. Unified Architecture Framework (UAF) Process Guide for Acquisition →

UAF OMG UNIFIED ARCHITECTURE FRAMEWORK

Supports DoDAF

1. The Acquisition Ref Model Template provides model structure for RFP content and evaluation tools:

- Modeling Patterns
  - DO Profiles (i.e. MOSA, Data Rights, certs)
  - Interface & Analysis Definitions
- Templates & Schemas
  - Evaluation Criteria & Scoring (Section K, L, M)
  - Reports & CDRLS

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2. The OAD is a descriptive model containing the program requirements, constraints and context

- High-level Capabilities, mapped to Operational scenarios, traced to requirements (e.g. CDD, SRD, Conops)
- Technical performance measures (i.e. KPPs, KSAs, MOEs..)
- Any required architectural partitioning including structural and functional

(Based on UAF acquisition process guide and template)

3. The Model-based RFP model contains the populated OAD&ARM providing **RFP evaluation content**, **CDRL definitions** for documentation generation and **scoring tools** for solution validation and evaluation

4. UAF Process Guide provides the Acquisition Guidance for using the OAD and ARM **template to create, respond and evaluate a Model-based RFP**.

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SOURCE: Laura Hart, MITRE 2017

LOCKHEED MARTIN