



# USG MOSA OBJECTIVE ARCHITECTURE COMMUNITY OF INTEREST (MOSA COI)

## REQUEST FOR TECHNICAL INPUT

This is an application to join the MOSA COI. Once granted, applicant will receive access to controlled unclassified files in order to provide technical feedback to the Government. Interested parties will ideally meet all of the requirements listed below in regard to areas of knowledge and experience.

While this application seeks technical contacts, all interested NAMC members are permitted to participate in the MOSA COI and related events.

### PARTICIPATION REQUIREMENTS

- NAMC Membership ([www.NAMConsortium.org](http://www.NAMConsortium.org))
- Technical knowledge/experience of SysML diagrams
- Experience with vehicle architectures in one or more of the areas of: software, hardware, in-vehicle network, safety, cybersecurity
- Experience with data architectures (e.g., data model, data dictionary)

### PARTICIPANT EXPECTATIONS

- The Government will share MagicDraw SysML model, MS Office, and PDF files documenting the architecture for comment.
- Participants with MagicDraw licenses will be able to open a compressed SysML file, others will access the model using a web browser with a link to a password-controlled database.
  - No MagicDraw license is required by industry to review.
- The Government will adjudicate comments during the architecture development effort but may not provide individual responses.
- Any and all feedback provided to the Government shall be non-proprietary.

## APPLICATION

NAMC members interested in participating in the MOSA COI are required to fill out the following application and submit to NAMC at [Submissions@NAMConsortium.org](mailto:Submissions@NAMConsortium.org).

Organization Name:  
Organization Website:  
Applicant Name:  
Applicant Title:  
Applicant Email:  
Applicant Phone:

1. Please briefly state your interest in joining the MOSA COI:



2. Please briefly describe your individual technical experience/knowledge of SysML diagrams (applicants may include a bio or resume/cv as an attachment):

3. Please briefly describe your individual experience in vehicle and/or data architectures:

4. Do you currently have a MagicDraw License?      Yes              No

Applications will be reviewed to ensure compliance with NAMC membership requirements. Once cleared, the NAMC will notify the applicant of their inclusion in the MOSA COI and will provide them with instructions to access the files.

#### **INFORMATION CONTROL**

NAMC members may not distribute or share documentation made available through the MOSA COI with any third-party company or individual unless it has already been made publicly available. NAMC members are required to provide a current DD2345 Certification upon membership application which names a data custodian for your organization for Militarily Critical Technical Data and precludes non-U.S. persons from receiving such data. MOSA COI participation does not constitute approval by the Government to share data or material provided through the MOSA COI to subcontractors or consultants unless they too have been approved to join the MOSA COI. Participants are responsible for complying with all U.S. laws, rules and regulations, including antitrust and export control.

**Applicant Certifies that the above information is true and correct and that they will not share any information made available to them through participation in the MOSA COI.**

Applicant Signature:

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## **USG MOSA OBJECTIVE ARCHITECTURE BACKGROUND**

### **OBJECTIVE**

- Develop the USG baseline architecture by enhancing PEO GCS Common Infrastructure Architecture (GCIA) based on Modular Open Systems Approach (MOSA) to guide the Optionally Manned Fighting Vehicle (OMFV) system development.
- The effort is directed by the Army Acquisition Executive to achieve transformational capabilities for OMFV via Modular, Open and Scalable Architecture, and by using applicable open standards.
- The effort will be executed by the Government, with input from industry and academia. The output of this MOSA COI will be incorporated the OMFV program and proliferated across the Ground Combat and Tactical Vehicle portfolios. Final architecture decisions will be made by the Government.

## **PRIMARY GOALS**

- Guide the development of MOSA compliant open OMFV system
- A common hardware (AKA vetronics) and software infrastructure
  - Avoid redundant or stove-pipe system development and integrations
  - Avoid non-standard/non-commercial connectors, cables (as appropriate), and wires
  - Enforce sharing resources (e.g., processing) and data across shared network
  - Enforce the use of configurable and manageable switching technologies
    - For handling low-latency constraints and safety-critical functions
- Enable platform upgrades to a more autonomous system
  - To facilitate shared data to the AI based systems and other capabilities
- Avoid costly long-term supply chain lock
- Reduce future integration cost and development effort
- Enable efficient testing and qualification procedures
  - Optimize on validations, qualifications and test (Cost, Schedule and efforts)