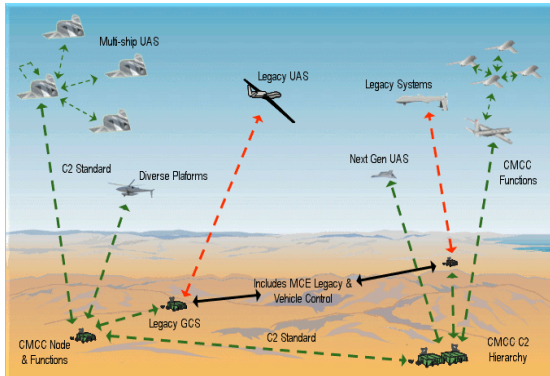


# Open Mission Systems

The goal of the Open Mission Systems is to develop industry consensus for a non-proprietary mission system architectural standard that enables affordable technical refresh and insertion, simplified mission systems integration, service reuse and interoperability, and competition across the life-cycle. Industry and the Government have been working on solutions cooperatively to achieve these goals for several years with extensive testing and demonstrations.

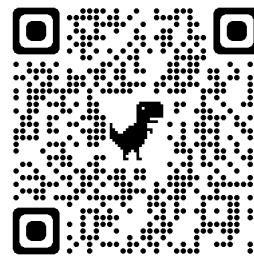


## Universal Command and Control Interface

The Universal Command and Control Interface establishes a set of messages for machine-to-machine, mission-level command and control for airborne systems. The UCI vision is to decrease acquisition and operational costs of manned and unmanned systems and enable interoperability.

## Open Architecture Collaborative Working Group (OACWG)

Friendly, Knowledgeable OMS Subject Matter Experts



### Contact Us

Wright-Patterson AFB  
Building 11, Area B  
Wright-Patterson AFB, OH

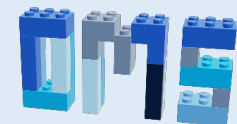
If you have questions on OAM, OMS, or UCI, please fill out the form or email us: [AFLCMC.XZ.OAMO@us.af.mil](mailto:AFLCMC.XZ.OAMO@us.af.mil)



DISTRIBUTION STATEMENT A. Approved for public release. Distribution is unlimited.



## Open Mission Systems/ Universal Command and Control Interface



Use of OMS is Widespread and Growing! US Air Force, Navy, and Space Force programs utilize OMS for their system architecture!

DISTRIBUTION STATEMENT A. Approved for public release. Distribution is unlimited.

## FAQs

**Is OMS “All or Nothing?”** – **NO**. OMS offers a Tiered Compliance mechanism that allows a subset of Services and/or Subsystems within the System to be OMS-compliant.

**Is OMS only for new subsystems and services?** – **NO**. Use OMS Adapters to quickly reach OMS-compliance with little or no changes to legacy hardware subsystems or software services.

**Does OMS require contractors to disclose the inner workings of OMS Subsystems and OMS Services?** – **NO**. OMS only requires documentation and disclosure of your external interfaces and resources required.

**Does OMS guarantee “Plug and Play?”** – **NO**. The OMS Standard enables logical “Plug and Talk” for rapid integration.

**Does Use of UCI equal OMS compliance?** – **NO**. There are a number of OMS technical and documentation requirements beyond the use of UCI.

**Are large UCI messages too big for high-performance systems?** – **NO**. UCI has messages of all sizes, and even large messages can be compressed before transmission; many fields are optional.

**Does OMS eliminate the need for Systems Engineering?** – **NO**. Systems Engineering work is required to employ OMS Services and Subsystems.

**Is OMS only for Linux?** – **NO**. OMS can run on any number of operating systems, such as Windows, Linux, Integrity, VxWorks, etc.; only the Open Computing Environment (OCE) is required to be Linux.

**Is OMS just UCI?** – **NO**. There are four valid OMS Data Exchanges: OMS Messages, Data Transfers, Special Signals, and Security Information Exchanges.

**Is UCI XML?** – UCI is defined in an XML Schema, but UCI messages do **NOT** have to be transmitted as XML text string. UCI messages have been encoded using multiple industry formats for transmission between nodes.

## OMS in a Nutshell

**OMS is a Government-Owned Architecture Specification.** OMS is not an implementation specification. You will not find rules in the OMS documentation on how to implement your system. OMS focuses on the interfaces between software Services and hardware Subsystems, and how data is exchanged across those interfaces.

**What is OMS Compliance?** OMS Compliance is the creation of a subset of a weapon system architecture designed with open interfaces and data exchanges in accordance with the OMS Standard.

**OMS Promotes Interoperability and Reuse.** Use of the standard allows weapon systems, services, and subsystems/payloads/sensors to interact and communicate using common data formats. This interaction can occur within or between weapon systems, between platforms in sub-surface, surface, air, or space domains, or between ground segments.

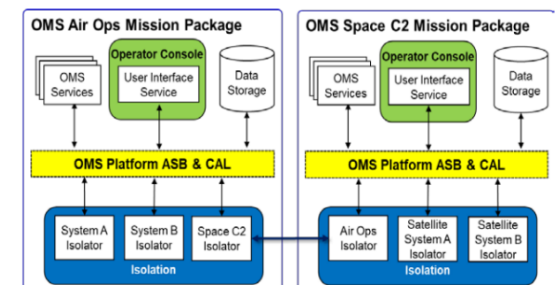
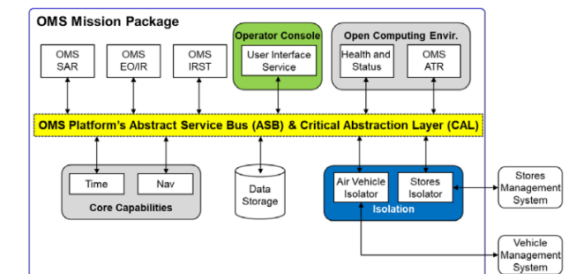
**OMS Provides a Set of Tools.** The OMS Standard does not tell you what to build, nor how to build it. OMS provides a standard set of tools so that anyone can use those tools to extend, modify, and/or replace what is currently fielded in existing systems.

**OMS Allows Rapid Integration of New Sensor Capabilities, Subsystems/Payloads and Services.** If your program is OMS-compliant, an OMS-capable component may be integrated and tested at a minimal cost. If your program has a large amount of common operating picture data, OMS allows you to share it with more users in a standardized format. OMS can also break down boundaries between sensors, allowing data sharing that would be challenging to implement individually.

**OMS Can Be Expanded to Work in Multiple Domains and for Many Use Cases.** OMS has recently been expanded to new areas. Please contact the Open Architecture Management Office to understand whether your application would benefit from OMS.



OMS focuses on the interfaces between software Services and hardware Subsystems, and how data is exchanged across those interfaces. OMS is not an implementation specification.



For more information and examples of OMS implementations please visit [this link](#) or scan the QR Code below

