



DEPARTMENT OF THE AIR FORCE
WASHINGTON DC 20330

OFFICE OF THE ASSISTANT SECRETARY

SEP 13 2004

MEMORANDUM FOR SEE DISTRIBUTION

FROM: SAF/AQ
1060 Air Force Pentagon
Washington DC 20330-1060

SUBJECT: Modular Open Systems Approach (MOSA) Implementation

The 5 Apr 04 Under Secretary of Defense (USD) for Acquisition, Technology, and Logistics (AT&L) memo at Attachment 1 amplifies the DoDD 5000.1 guidance on the use of MOSA. Effective 1 Oct 04, it requires all programs subject to milestone review to brief the Milestone Decision Authority on their program's MOSA implementation status. The 7 Jul 04 USD(AT&L) Director, Defense Systems memo (Atch 2) provides additional guidance on meeting the requirement for the milestone review of MOSA implementation. This memorandum sets forth Air Force expectations for compliance with the USD(AT&L) direction.

MOSA employs an integrated business and technical strategy to support the identification of the key modules and interfaces in a system's architecture. This allows the assessment and implementation, when feasible, of widely supported commercial interface standards. MOSA enables programs to more rapidly field systems that are designed for affordable change throughout their life-cycle and that are interoperable in the joint battle space. In this way, MOSA is an integral part of the toolset that supports the DOD and Air Force emphasis on evolutionary acquisition and joint architectures.

MOSA is based upon sound systems engineering (SE) practices, which should be implemented and incentivized throughout the life cycle of Air Force systems and families-of-systems. The existing SE policy and guidance in the 20 Feb 04 USD(AT&L) memo, SAF/AQ Policy memos 03A-005 and 04A-001, AFI 63-101 (interim guidance), and the *Guide for Robust Systems Engineering* at <http://cse.afit.edu/> all support the more rigorous application of SE and are consistent with MOSA.

The Program Assessment and Review Tool (PART) identified in the AT&L memos contains 24 questions that Program Managers can use to measure how well a program has implemented both the business and technical aspects of MOSA. Per the USD(AT&L) guidance, Program Managers should use either the PART or an equivalent method of assessment to determine the success of their MOSA implementation status. Program managers should include the results of this assessment in their MOSA implementation status briefings during milestone reviews.

Ms. Alice Maddox, AF/XIWA, 703.588.6316, is the point of contact for technical/architecture interface with AT&L on MOSA. Mr. Jeff Loren, SAF/AQRE, 703.588.7845 is the point of contact for SE policy interface.



MARVIN R. SAMBUR
Assistant Secretary of the Air Force
(Acquisition)

Attachments:

1. OSD Guidance Regarding MOSA Implementation, 5 April 2004
2. OSD Instructions for MOSA Implementation, 7 July 2004

cc:

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See Attached List

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THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

APR 5 2004

MEMORANDUM FOR: SEE DISTRIBUTION

SUBJECT: Amplifying DoDD 5000.1 Guidance Regarding Modular Open Systems Approach (MOSA) Implementation

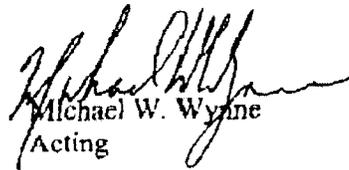
A key enabler in the Department's focus on joint architectures and evolutionary acquisition is a modular, open systems approach (MOSA) to systems acquisition. MOSA is an integrated business and technical strategy that employs a modular design and defines key interfaces using open standards. MOSA is based on a robust systems engineering approach as defined in my Policy for Systems Engineering in DoD, dated February 20, 2004. MOSA enables programs to: 1) design for affordable change; 2) employ evolutionary acquisition and; 3) identify key modules and interfaces of a system's architecture. The Department's intent is to use open architectures to rapidly field affordable systems that are interoperable in the joint battle space. A required step in this direction is to ensure each Service has a coordinated business and technical approach to MOSA across their respective programs that will ultimately support the progression towards joint integrated warfare.

The purpose of this memorandum is to amplify and expand the policy for implementation of MOSA as set forth in DoDD 5000.1, dated May 12, 2003. Paragraph E1.27 states that, "A modular, open systems approach shall be employed, where feasible." Commencing October 1, 2004, all programs subject to milestone review shall brief their program's MOSA implementation status to the Milestone Decision Authority (MDA) to determine compliance. Programs not complying with MOSA implementation guidelines shall provide justification or a migration plan to the MDA for achieving compliance. This policy will be included in the next revision of DoDI 5000.2.

The Open Systems Joint Task Force (OSJTF) is my lead for MOSA and has developed a Program Manager's Guide that provides principles and guidelines for implementing MOSA in new and current programs. In addition, OSJTF has adapted the Office of Management and Budget (OMB) Program Assessment and Rating Tool (PART) in assessing MOSA implementation. Each program will present the results of their PART assessment, using the results generated by the tool, at all major milestone and program reviews. The guide and the PART are available at http://www.acq.osd.mil/osjtf/html/mosa_assessment.html.



Further, I direct the OSJTF to establish and chair the MOSA Review Team (MOSART). The MOSART shall synchronize MOSA implementation across the Services and DoD Agencies, and recommend strategies and related actions that leverage MOSA across joint integrated warfare systems. The Services are asked to assign representatives to the MOSART with the responsibility of addressing service-wide MOSA implementation issues. My MOSA point of contact is LTC (P) Ken Flowers, Director OSJTF at 703-602-0851 x116.



Michael W. Wynne
Acting

cc:
Defense Systems Warfare Offices
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AND LOGISTICS

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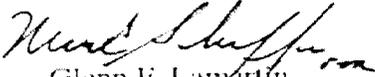
SUBJECT: Instructions for Modular Open Systems Approach (MOSA) Implementation

A Modular Open Systems Approach (MOSA) is a means to assess and implement, when feasible, widely supported commercial interface standards in developing systems using modular design concepts. It is an integral part of the toolset that will help DoD achieve its goal of providing the joint combat capabilities required in the 21st century, including supporting and evolving these capabilities over their total life-cycle. The USD(AT&L) memorandum, dated April 5, 2004 states: "commencing 1 Oct 04 all programs subject to milestone review shall brief their program's MOSA implementation status to the Milestone Decision Authority (MDA) for compliance." The purpose of this memorandum is to describe how this requirement will be addressed for systems and systems-of-systems in the formal acquisition process.

Given the enabling relationship of a modular open systems approach to evolutionary acquisition, DoD acquisition programs should address Modular Open Systems Approach (MOSA) early in their program and acquisition planning, and should discuss MOSA implementation in the context of their overall Acquisition Strategy and to the extent feasible in the Technology Development Strategy. MOSA implementation issues should be identified and addressed via the IPT process and presented as issues to the MDA only when unresolved at a lower level.

The Open Systems Joint Task Force (OSJTF) is my lead for MOSA and has developed the Program Assessment and Rating Tool (PART) for your use in conducting your internal MOSA implementation assessments. Program Managers should either use the PART, or an equivalent method of assessment, to generate objective data on the success of their MOSA implementation. The OSJTF Program Managers MOSA guide and PART are available at http://www.acq.osd.mil/osjtf/html/mosa_assessment.html. Additionally, pertinent MOSA and PART information will be provided in the next update to the DoD Acquisition Guidebook.

The OSJTF is responsible for the development and oversight of MOSA policy to include emerging system-of-systems policy to develop open integrated architectures for capability areas. If you have any questions, or need further guidance on required reporting, my point of contact is COL Ken Flowers, Director, OSJTF. He can be contacted at 703-602-0851 x116, or via email at Kenneth.flowers@osd.mil.


Glenn F. Lamartin
Director
Defense Systems

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