MOSA

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MOSA is an important element of the PEO Aviation strategy and extends into all of our Project Offices. I ask you to review this document and contact the MOSA TO or your MOSA PM POC if you have any questions ·

BG Robert Barrie
Program Executive
Officer, Aviation

MOSA

PEO Aviation is committed to implementing MOSA

As many are aware, PEO Aviation is committed to implementing MOSA as a core part of how we both acquire systems and manage the fleet of systems to meet the MOSA Objectives and better support the warfighter in the future. This is a complex initiative; so we created the MOSA Transformation Office (TO) to provide leadership and rigor to our approach.

A recent survey revealed that our teammates need additional information to better understand PEO Aviation's MOSA transformation effort and the impact and goals of MOSA.

In this newsletter, we cover four critical questions regarding the MOSA transformation

INTERACTIVE
click below to go to the corresponding sections

> 66
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> MOSA is a top priority that will impact readiness, affordability, and innovation. We appreciate your active support and engagement with the MOSA Transformation Office
> BG Robert Barrie, Program Executive Officer, Aviation
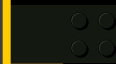
MOSA

What is MOSA?

Accelerating innovation across PEO Aviation

MOSA, Modular Open System Approach, is an integrated technical and business strategy for managing and sustaining: a system, a family of systems, and a fleet of systems, that employs modular and open principles and is tailored to meet a particular set of objectives or addresses challenges with existing architectures and/ or acquisitions.

Applying MOSA at the enterprise level fosters collaboration across PMs to drive towards enterprise-wide objectives. MOSA will establish consistent engineering design principles across weapon systems to make components more easily removable, upgradeable, and interoperable.

MOSA objectives

Reduce supply chain risk
Competitive options, obsolescence mitigations, and simplified logistics tail.

Reduced schedule pressure
Quicker and more flexible contracting options and reduced repetitive NRE efforts.

Increased affordability
Avoid vendor lock, increase competition, and enable reuse (develop & certify once, deploy many).

Enhanced capabilities
Lower barrier to entry for technology insertions by strategically creating "windows" of capability insertion with defined key interfaces.

Increased readiness
Increased speed to field, simplified logistics tail, increases cyber resiliency.

Enterprise objectives will be driven by application of MOSA principles and through increased PM collaboration on Major System Components (MSCs).

Complex systems are broken down into building blocks called Major System Components (MSCs)

Aviation Mission Computing Environment (AMCE)	Dynamic Airspace and Mission Planning Environment (DAMPE)
Link 16	Common Pilot Vehicle Interface (PVI)
Navigation	Degraded Visual Environment (DVE)
Airborne Radio Control Manager (ARCM)	Power Distribution
Aircraft Survivability Equipment (ASE)	Unmanned Vehicle Control

These initial MSCs are the first set of building blocks to enable PEO Aviation to tangibly implement MOSA

Modularity of MSCs is enabled through making architectural decisions and the application of MOSA standards

These five principles are captured in guidance via the MOSA implementation guide

01 Establish enabling environment

02 Employ modular design

03 Designate key interfaces

04 Select open standards

05 Certify conformance

Consistent implementation across PMs will increase effectiveness of MOSA

Note: The MSCs listed above are prioritized for potential in enterprise wide application.

MOSA has a proven record of success within PEO Aviation and the automobile industry

	FROM →	TO	CREATING VALUE
PEO AVIATION	**LINK 16** Separate hardware purchases without coordinated buying strategy (CFE vs GFE)	GFE AH buys and coordinated hardware purchases for across fleet	**Millions in cost** savings from future GSA AH-64 buys, Increased AH-64 Enhanced Modem Module (EMM) capability and received ICD through UAS buy
	AMCE One-off platform-specific solutions for mission processing in both legacy and unproven solutions	Common solutions set to highest technical standards to meet fleet needs	**Enhanced capabilities and avoided qualification costs** (FW expected to have millions in cost savings in near-term while achieving greater capability)
AUTOMOBILE INDUSTRY	Bosch joined Honda, Nissan, BMW and Hyundai in the GENIVI Alliance to implement standard open architecture in-vehicle technology with the goal of being quicker and more cost-effective		Bosch measured the impact of three generations of implementation and saw **program costs reduced ~80% and time to market reduced by ~70%**

MOSA

What will MOSA mean for you?

Your PM will adhere to specific guidelines related to the MOSA Major System Components (MSCs) that achieve enterprise-wide objectives and introduce new MSCs.

All PEO Aviation employees should read the MOSA implementation guide and policy and are encouraged to take the DAU CLE 019 MOSA course.

You should engage with the MOSA Transformation Office (TO) through your PM POC for any guidance related to MOSA initiatives; ideally while drafting documents and strategies.

Accelerating innovation across PEO Aviation

MOSA TO coordinates efforts across the PEO Aviation

The Transformation Office will oversee implementation of MOSA and coordinate efforts and collaboration across PEO Aviation to ensure success. The TO will serve as a:

Single point of accountability for managing MOSA processes/timelines

Organization to manage and coordinate lines of effort

Ensure the establishment of a MOSA conformance capability

Governance to represent enterprise perspective and avoid stove-piped decision making

Source of leverage for working teams on all matters regarding MOSA

Formal responsibilities of the Transformation Office (TO) are split into four areas:

01 Governance

02 Architecture and standards

03 Conformance

04 Business and programmatic

66 The MOSA Transformation Office is here to help PMs implement tailored MOSAs, drive enterprise considerations/investments, path -find new MOSA processes, and serve as a resource for your efforts related to MOSA
Matt Sipe, Director of MOSA transformation

MOSA Transformation Office Key personnel

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