



21st Annual National Defense Industrial Association
Systems and Mission Engineering Conference

Acquisition Agility Act Overview

National Defense Authorization Act for Fiscal Year 2017
Title VIII, Subtitle B, Sections 805-809

Mr. Robert Gold

Ms. Bethany Harrington

Office of the Under Secretary of Defense for
Research and Engineering

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Why the Acquisition Agility Act?



- **Conventional Department of Defense (DoD) acquisition system is “not sufficiently agile to support warfighter demands”¹**
 - Current, evolving, and emerging threat environments place growing demands on the U.S. Armed Forces
 - Urgent warfighter needs for hardware and services are not being met; current processes are so rigid and time-consuming DoD is not often effectively tapping into commercial innovation
 - Challenges exist ensuring the DoD workforce is adequately trained, qualified, and experienced to make sound technical and acquisition decisions

- **The Acquisition Agility Act (AAA)² changes the way capabilities are acquired to remain ahead of emerging threat and take advantage of emerging technologies to reduce cost/schedule and increase interoperability**
 - Encourage modular open systems approach (MOSA) for Major Defense Acquisition Programs (MDAPs)
 - Drive changes in Joint Capabilities Integration and Development System (JCIDS) documents and Analysis of Alternatives (AoA) guidance
 - Increase transparency in MDAPs with affordability, fielding (i.e., schedule), and performance (i.e., anticipation of threat evolution, technology insertion, and interoperability) goal reporting before funds are obligated

1. House Committee Report 114-102 accompanying the National Defense Authorization Act (NDAA) for Fiscal Year 2016 (FY16)

2. AAA is found in FY17 NDAA Sections 805-809

What Is Agile Acquisition?



- A definition of “agile acquisition” for use within DoD does not yet exist
- However, an understanding of the concept can be gained from the following references:
 - Department of Defense Acquisition Agility... This title is intended to begin to address these challenges and change the way capabilities are acquired. Rather than setting requirements in anticipation of future technologies, weapon system platforms should be designed to provide the needed warfighter capabilities in the short-term and **flexible, open-system architectures** that allow components to **evolve with technologies and threats**. The military services should experiment with and incrementally deploy new components, and this ‘component acquisition’ should be unshackled from the traditional and time-consuming requirements, acquisition, and budget processes.”

(House Report 114-537 on FY17 NDAA (Title XVII), May 2016)

What Is Agile Acquisition?



- Agile philosophies promote **rapid** incremental product deliveries, provide **flexibility** to respond to changing requirements, and advocate close customer collaboration. A major aspect of Agile is that changes to requirements, design details, or functional capabilities can be incorporated based on customer value, at any stage of the development cycle. While Agile is primarily used on software development projects, Agile methods are being **used for complex system and hardware developments** as well.

(Defense Acquisition Guidebook, Chapter 1, section 4.2.16.3.4, November 2017)

- Acquisition: The conceptualization, initiation, design, development, testing, contracting, production, deployment, Logistics Support (LS), modification, and disposal of weapons and other systems, supplies, or services (including construction) to satisfy DoD needs, intended for use in, or in support of, military missions.

(Defense Acquisition University's Glossary of Defense Acquisition Acronyms and Terms, September 2015)

There is little commonality between “agile acquisition” and “agile software development” other than encouraging rapidity and flexibility

FY17 NDAA AAA Sections



- **FY17 National Defense Authorization Act (NDAA) Acquisition Agility Act (AAA) includes five sections**
 - **Section 805:** Modular Open System Approach in Development of Major Weapon Systems
 - **Section 806:** Development, Prototyping, and Deployment of Weapon Systems Components or Technology
 - **Section 807:** Cost, Schedule, and Performance of Major Defense Acquisition Programs
 - **Section 808:** Transparency in Major Defense Acquisition Programs
 - **Section 809:** Amendments Relating to Technical Data Rights
- **Sections 805 – 807 create new “Chapter 144B – Weapon Systems Development and Related Matters” in Title 10, United States Code (U.S.C.)**
 - Sections address requirements, acquisition, budgeting
 - DoD is developing policy and guidance (P&G) to implement
- **Sections 805 – 809 amend other existing sections of Title 10 related to acquisition**
 - (Sec. 2320 (Technical Data Rights), 2366a (Milestone A (MS A) approval), 2366b (Milestone B (MS B) approval), 2430 (MDAP defined), 2432 (Selected Acquisition Reports) and 2547 (MDAP requirements))



Section 805

Modular Open Systems Approach

- Requires all MDAPs with MS A or B approval after January 1, 2019, to be designed and developed with a Modular Open Systems Approach (MOSA) to the *maximum extent practicable* [10 U.S.C. 2446a]
- Integrates new requirements for addressing MOSA in capabilities development and acquisition weapon system documentation and MS B approval criteria [10 U.S.C. 2446b]
- Requires the Secretary of each Military Department (MILDEP) [10 U.S.C. 2446c] to ensure:
 - Necessary planning, programming, and budgeting resources are provided
 - Adequate expertise and training
 - Use of open systems approach to support MOSA
- Includes MOSA requirement in MS B Certification of MDAPs [10 U.S.C. 2366b]
- Requires MOSA be included in Selected Acquisition Reports [10 U.S.C. 2432]

**Services and Agencies are working together to coordinate
on standards to enable MOSA**



Section 806

Component or Technology Prototypes

- Requires display of information with respect to advanced component development and prototype activities; Secretary of Defense (SecDef) sets forth the amounts requested for acquisition programs of record and development, prototyping, and experimentation of weapon system components or technology prototypes [10 U.S.C. 2447a]
- Establishes oversight board (or similar group) for managing prototype projects [10 U.S.C. 2447b]
- Sets requirements (i.e., merit-based selection process, transaction types, and funding limits) and limitation that prototype projects are to be completed within two years of initiation [10 U.S.C. 2447c]
- Allows mechanisms for prototype projects to streamline production and rapid fielding [10 U.S.C. 2447d]
- Requires MDAPs initiated after January 1, 2019, to include only the technical development that the milestone decision authority (MDA) determines would not delay fielding target for the program [10 U.S.C. 2447e]

- **Use prototyping (often external to program) to mature technology for insertion to reduce program risk; not dependent on internal prototyping efforts**
- **Oversight board stand-up is under way within the Services**



Section 807

MDAP Cost, Schedule and Performance

- Requires program cost, fielding, and performance goals in MDAPs [10 U.S.C. 2448a] that are:
 - Affordable
 - Anticipates threat evolution, technology insertion, and interoperability
 - Available/fielded when needed
 - Requires that an Independent Technical Risk Assessment (ITRA) be conducted prior to certain program milestone decisions (e.g. MS A, MS B, low-rate initial production (LRIP), full-rate production (FRP)) [10 U.S.C. 2448b]
 - Program capability document (PCD) for MDAPs supporting MS B or subsequent decisions may not be approved until
 - Secretary of military department concerned ensures that chief of the armed force determines in writing that requirements are necessary and realistic in relation to the program cost and fielding targets [10 U.S.C. 2547]
- **Office of the Secretary of Defense (OSD) maintains oversight of programs, even when acquisition authority is delegated**
 - **OSD drafting ITRA framework and guidance to categorize the degree of technical and manufacturing risk in MDAPs**



Section 808 MDAP Transparency

- Requires brief summary report no later than 15 days after granting Milestone A approval for MDAP [10 U.S.C. 2366a]
 - Includes program cost and fielding targets, MILDEP cost and schedule estimate, independent estimated program cost, technical/manufacturing risk summary, ITRA summary, Cost Assessment and Program Evaluation (CAPE) AoA analysis summary, and other information MDA requests
- Requires brief summary report no later than 15 days after granting Milestone B approval for MDAP [10 U.S.C. 2366b]
 - Includes program cost and fielding targets, MILDEP cost and schedule estimate, independent estimated program cost, technical/manufacturing risk summary, ITRA summary, MOSA usage statement, and other information MDA requests
- Requires brief summary report no later than 15 days after granting Milestone C approval for MDAP [10 U.S.C. 2366c]
 - Includes MILDEP cost and schedule estimate, initial operational test and evaluation (IOT&E) and initial operational capability (IOC), and technical/manufacturing risk summary

- **Objective: Keep Congress updated on MDAP progress but keep reporting burden to a minimum**
- **OSD has produced a Milestone Summary scorecard for use by MDAPs**



Section 809

Technical Data Rights

- Defines technical data right interests for the United States Government (USG) and contractors/subcontractors [10 U.S.C. 2320(a)]
 - Government purpose rights given to USG for item or process interfaces funded by both Federal and private funds, except when SecDef determines negotiation of different rights in best interest of the United States [10 U.S.C. 2320(a)(2)(F)]
 - Government purpose rights given to USG for major system interface technical data developed with private or shared government expense and used in MOSA [10 U.S.C. 2320(a)(2)(G)]
 - For technical data that is a contract delivery requirement, limits United States deliveries from “at any time” to “until the date occurring six years after acceptance of the last item (other than technical data) under a contract or the date of contract termination, whichever is later” [10 U.S.C. 2320(b)(9)]
- **Enables DoD and industry to have the technical data rights necessary to enable the benefits of the modular open system approach**

Acquisition Agility Act (AAA) Cross Functional Team (CFT)

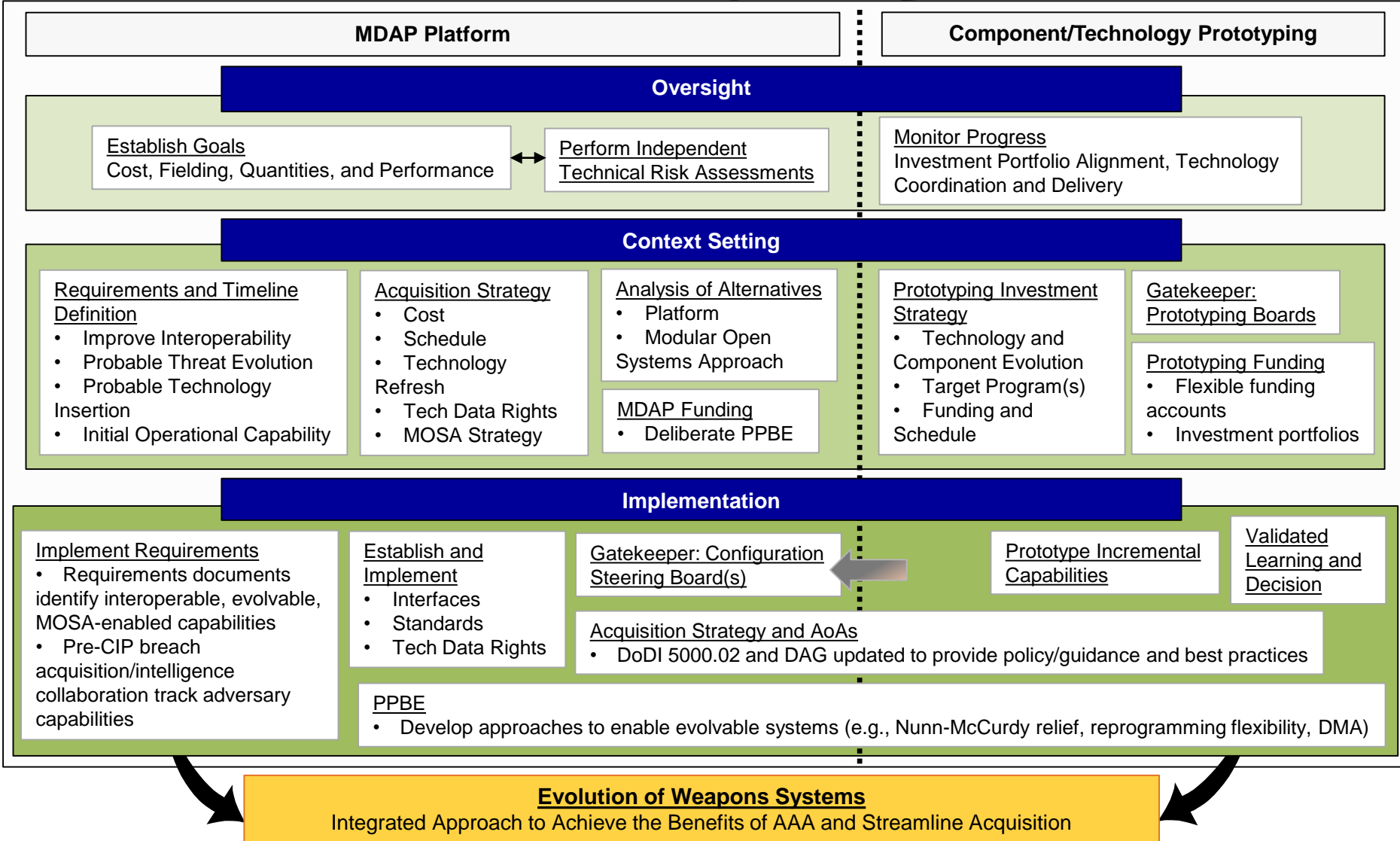


- **DASD(SE) established the AAA CFT in February 2017, meeting twice per month, to:**
 - Ensure stakeholders can cooperatively help implement AAA
 - Analyze impacts to DoD policy, guidance, and procedures
 - Identify friction points where the current DoD policy, guidance, procedures or practices are at odds with the direction or intent of AAA
 - Track implementation progress
 - Develop solutions and best practices
- **Final AAA CFT meeting was held in May 2018**
- **CFT products include the implementation framework, P&G “burn down list” (i.e., action tracker), implementation schedule, friction points, use cases (acquisition and prototyping), etc.**

AAA CFT Participants

- Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E))
- Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S))
- Joint Staff (J8)
- Under Secretary of Defense (Intelligence) (USD(I))
- United States Navy
- United States Air Force
- United States Army
- Office of Cost Assessment and Program Evaluation (CAPE)
- Office of the General Council (OGC)
- Defense Procurement and Acquisition Policy (DPAP)
- Defense Acquisition University (DAU)

AAA Implementation Framework Evolution of Weapon Systems



AAA CFT Products Use Case Analysis



OUSD(R&E) and OUSD(A&S) led concurrent use case analyses to understand the impacts and maturity of the AAA language to the acquisition process and all types of prototyping efforts

Acquisition Use Case

Objectives:

- Exercise acquisition process for an ACAT ID Airborne ISR system to identify friction points
- Strike balance between regulatory oversight constraints/needs, innovation, risk taking and minimum viable capability delivery speed
- Identify best practices; create as-is and to-be process flows based on insight from OSD acquisition, Service sponsors, OSD legal, and Comptroller

Outcome:

- Identified need for new processes, policy, and/or legislative relief
- Proposed policy/guidance/process changes at OSD, Joint Staff, Service levels

Prototyping Use Case

Objectives:

- Identify and address prototyping implementation challenges that encumber agile acquisition and delivery of capabilities
- Determine how existing prototyping authorities (e.g., middle tier of acquisition) can be used and combined to support major programs

Outcome:

- Identified statutory, regulatory, or implementation challenges that need to be addressed to improve the use of prototyping
- Identified best practices for effectively using prototypes to support a program

These use case efforts were wrapped in second quarter CY2018



Remaining Steps AAA Funding Legislative Relief

To implement AAA successfully, legislative relief is required

- Budget guidance
 - NDAA FY17 Section 806 (a)(1) [10 U.S.C. 2447a] requires a “display of budget information” for weapon system component or technology prototype projects.
 - Challenge
 - Although some templates exist (e.g., R2, R2A), none provide guidance on how to differentiate budget submissions for weapon system components or prototype projects, and an acquisition program of record for BA 4 as Section 806 requires.
 - The Services seek a standardized reporting approach to facilitate communication with OSD and Congress.
 - Proposed solution
 - Developed draft language; working with OUSD(Comptroller) for inclusion in the FY20 budget guidance.



Remaining Steps AAA Funding Legislative Relief (cont.)

- **Defense Modernization Account (10 U.S. Code § 2216)**
 - Expiring funds that are excess to the requirements of a program as a result of economies, efficiencies or other savings can be transferred to the Defense Modernization Account (DMA) and extended for three years of use.
 - FY17 NDAA established subaccounts for each of the military departments and Defense Agencies concerned for the use of funds in the DMA.
 - Challenge
 - FY17 NDAA reestablished the DMA, however, there is no guidance on use.
 - Proposed Solution
 - USD(R&E) is working in conjunction with OUSD(Comptroller) to revise the DMA language to be “AAA friendly.”



Remaining Steps AAA Funding Legislative Relief (cont.)

■ Nunn-McCurdy breaches

- Nunn-McCurdy breach occurs when the Program Acquisition Unit Cost or the Procurement Unit Cost increases past certain estimate.

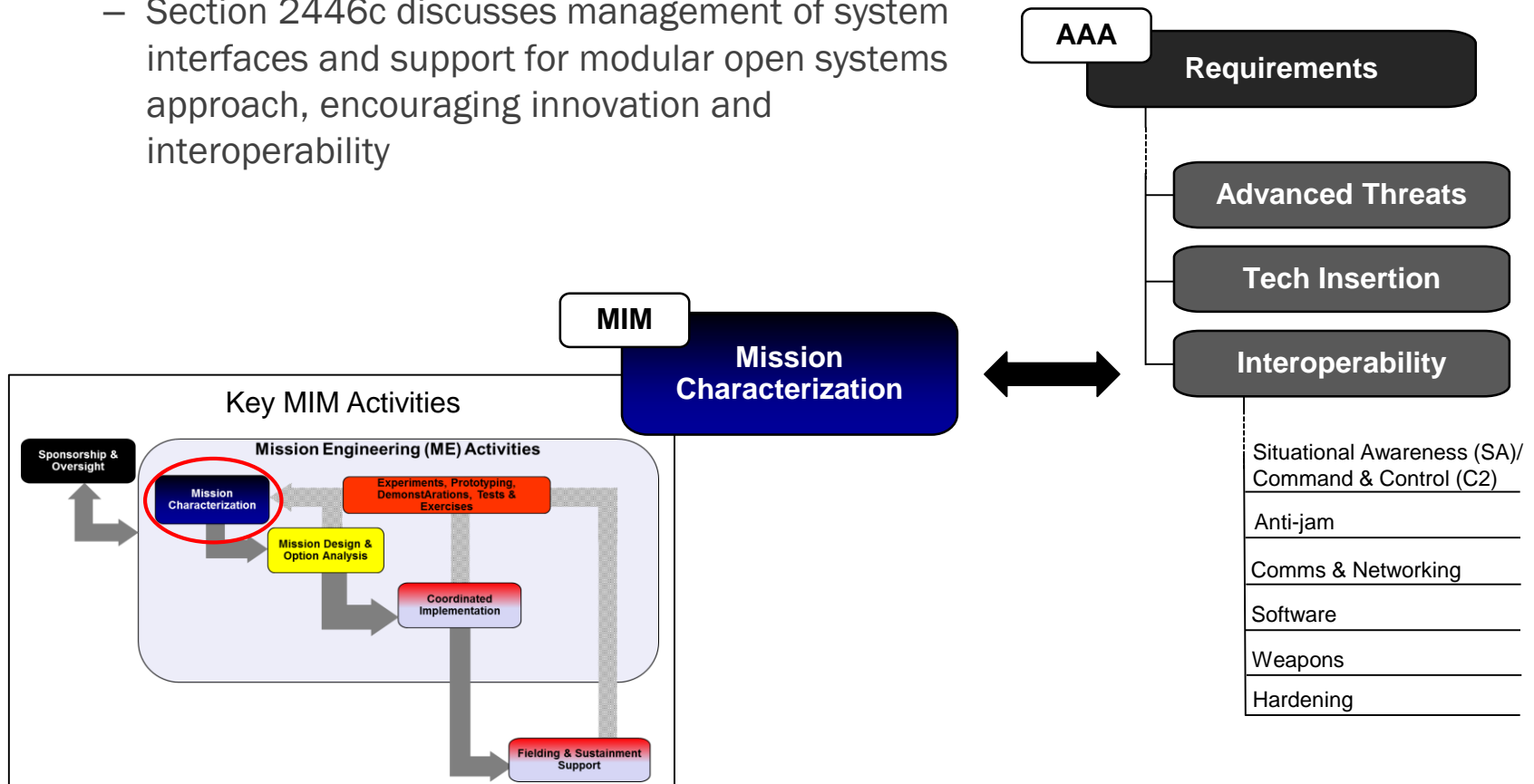
- Challenge
 - Conduct of cost accounting for programs with major baseline changes without incurring a Nunn-McCurdy breach (i.e., those MOSA enabled programs inserting major components to address threat changes, reduce delivery schedule, enhance interoperability).

- Proposed solution
 - Legislative proposal language developed that waives reporting for "deliberate" Nunn-McCurdy breach; reporting process ensures transparency but eliminates assumption of program cancellation.



Remaining Steps Integrating AAA and MIM

- Mission Integration Management (MIM) and AAA are connected in legislation
 - Title 10, U.S.C. section 2446c is a MIM responsibility (see FY17 NDAA Section 855(d)(3)) linking MIM and AAA
 - Section 2446c discusses management of system interfaces and support for modular open systems approach, encouraging innovation and interoperability



Examples of Successful Service Implementation



The Services have successfully implemented aspects of AAA legislation

■ Air Force

- During summer 2017 the Air Force briefed 500 personnel across eight locations on FY17 AAA material, specifically focused on innovation and prototyping
- From December 23, 2016 to May 31, 2017 the Air Force initiated three weapons system component or technology prototype projects as described in their letter to Congress, dated August 31, 2017
- Throughout 2018, AAA was inculcated into training events across the various centers
- Published AAA-related guidance for the workforce to include:
 - “Seven Steps for Incorporating Rapid Prototyping into Acquisition” dated April 10, 2018
 - “Air Force Guidance Memorandum for Rapid Acquisition Activities” dated June 13, 2018
 - “DoDI 5000.02 and Rapid Acquisition - Yes, Rapid!” dated August 10, 2018
- Focus on implementing MOSA into acquisition strategies, including use of open standards (guidance awaiting approval)

Examples of Successful Service Implementation (cont.)



■ Army

- United States Army Futures Command established June 4, 2018.
- On August 27, 2018 the Secretary of the Army issued Army Directive 2018-15, subject U.S. Army Futures Command Relationship with the Office of the Assistant Secretary of the Army (Acquisition, Logistics, and Technology)
- Preparing Army Middle Tier of Acquisition Interim Authority and Guidance

Examples of Successful Service Implementation (cont.)



■ Navy

- Established governance policy on Accelerated Acquisition (SECNAVINST 5000.42). Two programs have been designated Rapid Prototyping, Experimentation, and Demonstration projects under this instruction.
- DON has two official “804” pilots: SM-2 BLK IIIC and SM-6 BLK 1B. There are several more programs investigating the use of 804 and 806.
- Assistant Secretary of the Navy for Research, Development and Acquisition (ASN(RDA)) established Acquisition Agility and Middle Tier Acquisition Working Group to develop guidance for the acquisition workforce; guidance was released April 24, 2018.
- Established Accelerated Acquisition War Room for educating Program Offices / Program Executive Offices on FY16/17 NDAA Acquisition Agility and Middle Tier Acquisition Authorities.
 - War room has had over 1,200 separate visits since being stood up.
 - Roadshows have reached over 700 personnel at SPAWAR San Diego, NUWC Newport, and Naval Surface Warfare Center Port Hueneme; Planning roadshows for NAVAIR Pax River and local east coast commands.

AAA Next Steps



■ Continue:

- Coordination with USD(Comptroller) on budget guidance, DMA, flexible funding, and Nunn-McCurdy breach language and guidance
- Services to update policies, promulgate practices, and further AAA outreach and guidance (i.e., prototyping)
- Collaboration within OSD and Services on workforce skills, competencies, and training required to successfully implement AAA

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For Additional Information



Mr. Robert Gold

**Office of the Under Secretary of Defense for
Research and Engineering**

703-695-3155

robert.a.gold4.civ@mail.mil