DoD 5000 SERIES

ACQUISITION POLICY TRANSFORMATION

HANDBOOK

MULTIPLE PATHWAYS FOR TAILORED SOLUTIONS

FEBRUARY 5, 2021

Order of Contents

ACQUISITION ENABLERS

Adaptive Acquisition Framework Rollout Synopsis

DoD 5000 Series Acquisition Policy Re-Write

Acquisition Policy Transformation

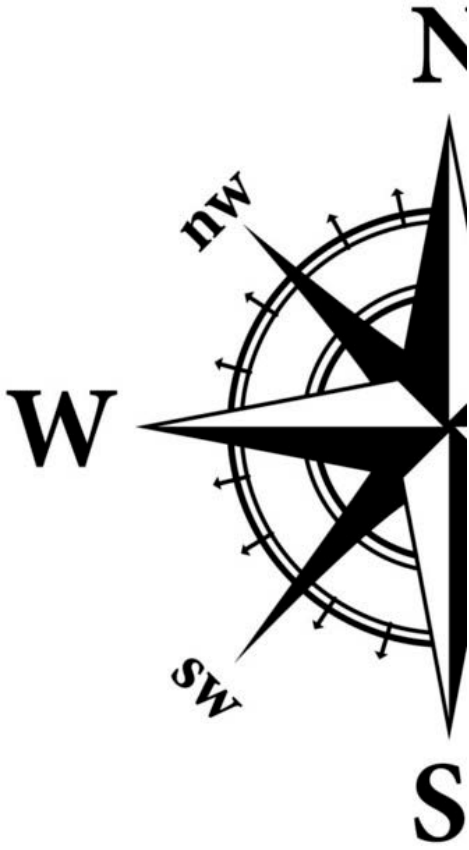
Adaptive Acquisition Framework (AAF)

Pathway Information Sheets:

- Urgent Capability
- Middle Tier
- Major Capability
- Software
- Defense Business Systems
- Acquisition of Services

Functional Area Enclosures:

- Acquisition Intelligence
- Cybersecurity
- Intellectual Property (IP) Policy
- Systems Engineering
- Test & Evaluation
- Information Technology
- Product Support Management
- Analyses of Alternatives
- Cost Analysis Guidance and Procedures



Adaptive Acquisition Framework

Rollout Synopsis

ACQUISITION ENABLERS

The Adaptive Acquisition Framework (AAF) is the Department's transformational tool that improves the ability to deliver warfighting capability at the speed of relevance. OUSD(A&S) is changing the acquisition culture by simplifying policy, empowering program managers (PMs), tailoring acquisition approaches, conducting data driven analysis, actively managing risk, and emphasizing sustainment.

No longer will program teams be limited in achieving warfighting objectives under a traditional 'one-size-fits-all', check-list methodology model, but instead, will utilize a series of six pathways, each designed for the unique characteristics of the capability being acquired. This revised method supports the Defense Acquisition System with the objective of delivering effective, supportable, and affordable solutions in a timely manner.

On September 25, 2019, OUSD(A&S) hosted an AAF training event for over 150 acquisition professionals and senior leaders from across the Department to discuss the redesigned DoD 5000 Series on Acquisition Policy ahead of formal staffing and signature. Attendees submitted survey responses after the event, providing feedback that reflected support for this new direction and the revised acquisition policy. Below is a summarized compilation of key takeaways from Acquisition Workforce members across each Service.

Program Managers are eager to:

- Accomplish mission objectives using a new framework that allows for autonomy, flexibility, critical thinking, risk management, and creativity in their decision-making processes. Attendees noted how seeing the Integrated Visual Augmentation System (IVAS) acquisition process was helpful in their understanding of overall AAF effectiveness.
- Network and collaborate with other acquisition leaders internally and across the Services to share ideas, experiences, case studies, and lessons learned. Attendees benefited from open discussion.
- Incorporate past experiences, new ideas, and creative problem solving to translate concepts into novel applications.
- Address urgent cyber security threats and respond to warfighter urgent needs with a system that allows for fast action.
- Employ processes that keep up with technological advancements.
- Apply commercial innovation to government processes to keep up with industry technology.
- Engage non-traditional industry partners.
- Integrate testing, training, and sustainment requirements early-on in the program lifecycle

The Department needs your help to champion the revised DoD policy:

As champions of the new AAF effort, your support is vital. For successful implementation of the revised DoD 5000 Policy, the Department needs your help to:

- Actively embrace and promote this culture change from a “tailored-out” to a “tailored-in” philosophy; encourage PMs to think critically and embrace tailoring program oversight to minimize unnecessary bureaucratic processes.
- Support intra and cross-service communication and learning opportunities through working groups, collaborative events, and discussions for shared experiences, best practices, lessons learned, etc.
- Encourage the acquisition workforce to participate in events at which they can interact and network with OSD, Service Leadership, and PEO/PM counterparts.
- Recognize and communicate emerging shortcomings, challenges, and successes internally, across the services, and to OUSD(A&S). Share these as powerful examples across the acquisition workforce.

DoD 5000 Series Acquisition Policy Re-write

Information Sheet

ACQUISITION ENABLERS

The DoD 5000 Series Acquisition Policy Re-write enables innovative acquisition approaches that deliver warfighting capability at the speed of relevance by:

Simplifying Acquisition Policy

- DoD is transitioning from a 'one-size fits all' model and check-list methodology to a flexible, streamlined Adaptive Acquisition Framework (AAF) with six tailorable acquisition pathways designed for the unique characteristics of the capability being acquired
- Policy encourages program teams to use appropriate pathway, or combination of pathways, to accelerate the delivery of program objectives
- Policy re-write includes DoDIs for each acquisition pathway and each functional area

Tailoring Acquisition Approaches

- AAF holds Program Managers (PMs) accountable for critical thinking and embraces tailoring in program oversight to minimize unnecessary bureaucratic processes
- PMs will identify and propose recommendations for decision authority approval
- Streamlined and simplified approvals allow stakeholders to focus attention on specific program needs without sacrificing rigor and discipline

Empowering Program Managers

- Policy empowers program managers and program teams to think critically, leverage data, use innovative strategies, tailor-in decision making, and actively manage risk
- DoD will showcase those who leverage innovative strategies to meet a unique requirement

Conducting Data-Driven Analysis

- Section 913 of the 2018 National Defense Authorization Act requires DoD to use data analytics to improve acquisition outcomes
- Promotes collaboration with the Services, as well as agencies internal and external to DoD, to implement modern tools and data analytics for improvement of programmatic decision making

Actively Managing Risk

- Policy enables and encourages program managers to take and actively manage risk
- Oversight continues to ensure taxpayers' dollars are effectively spent, but will be tailored based on the risk profile and capability being developed

Emphasizing Sustainment

- Policy encourages the consideration of a sustainment strategy throughout the entire program lifecycle
- Policy involves end users early in program development to capture sustainment requirements up front

Comprehensive policy approach includes the following:

An updated Major Capability Acquisition pathway to provide flexibility and efficiency

- Decision authorities and program managers may structure program strategies and phase requirements based on the characteristics of the program being acquired
- Program managers will identify or "tailor in" the information needed to manage their program
- Acquisition decisions are made at the lowest competent level commensurate with risk
- Emphasis is placed on Product Support and Sustainment planning to improve readiness and affordability

Implementing a software policy to drive modern software development across DoD programs

- Ultimate goal is to rapidly field more relevant capabilities and deliver software that meets the user's highest priority needs.
- New policy allows for upgradeable and timely fielding versus "static" software
- Integrating software early in the lifecycle allows for user input and continuous development and innovation
- Program teams and industry partners can engage with users to create, modify, or upgrade software to keep up with evolving threats, operational environments, and technology
- Ensuring cybersecurity is built into programs from the beginning

Implementing the Middle Tier of Acquisition (MTA) Policy to prototype/field mature technology in an operational environment within 5 years (DoD currently has 73 active middle-tier programs)

- MTA Rapid Prototyping enables programs to prove out emerging technology before making a larger "investment" decision on a major program acquisition
- Shorter timeframes and focused efforts allow teams to focus on critical technologies and the feasibility of the intended application without the pressure of delivering a complete end-to-end solution.
- This promotes more rapid decision-making with the burndown of key risks/concerns upfront and early in the development cycle.
- Risk taking and speed of technology development are encouraged with off-ramps and learning fast.

Establishing an Intellectual Property (IP) Cadre to facilitate the development of a competent and consistent approach across the Department for IP acquisition, licensing, and management; the IP Cadre:

- Provides timely, expert assistance, and resources on DoD Components on IP matters at various stages of the program lifecycle
- Conducts outreach and liaison with industry, other Federal agencies, and Congress

Engaging with key stakeholders from programs across the Services and DoD components to ensure acquisition policies are enablers, not hindrances

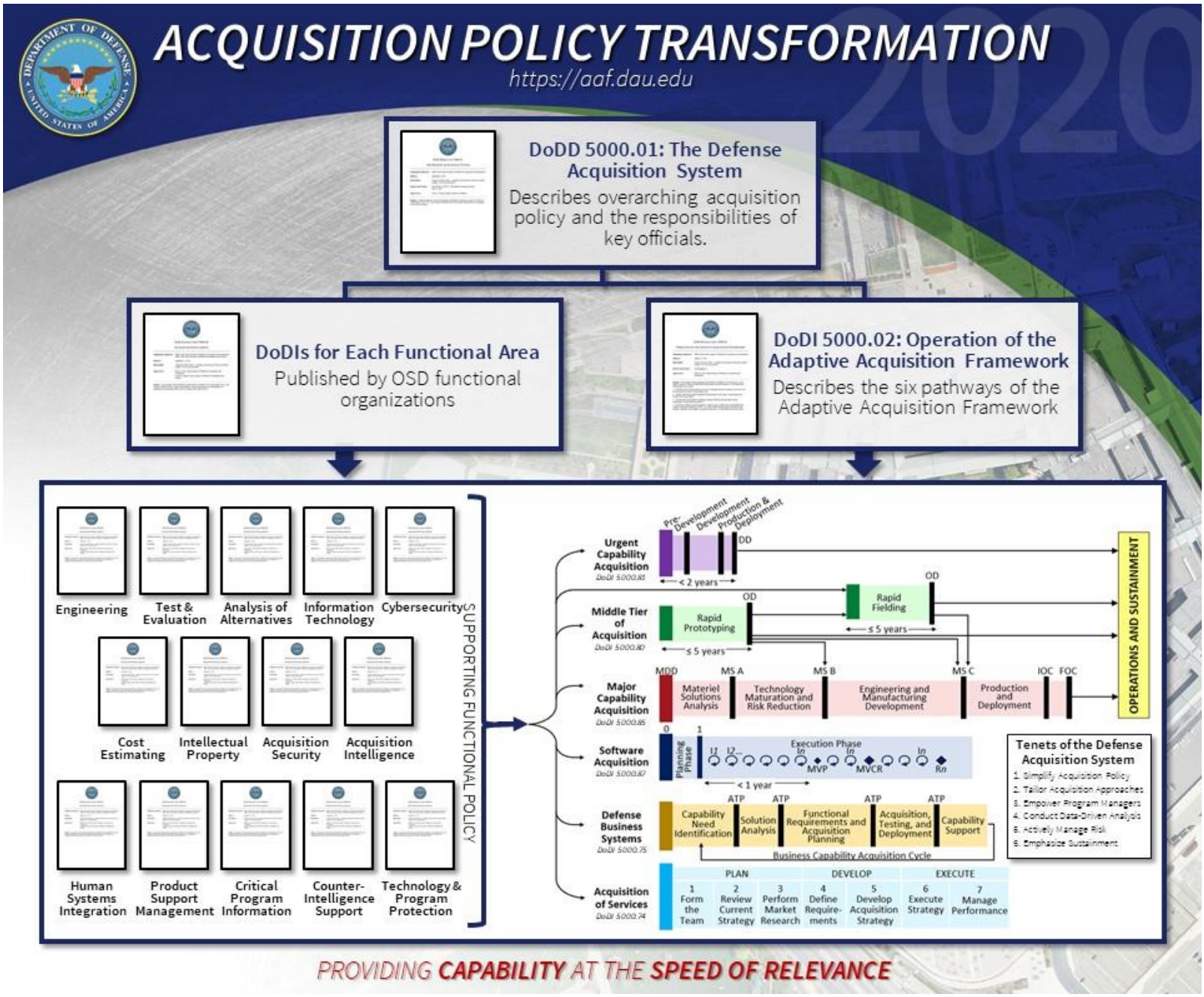
- Pilot programs are underway; DoD has incorporated lessons learned into policy updates
- Continued discussions with the Acquisition Workforce capturing lessons learned and best practices

Creating training tools and classes to educate the workforce on AAF functionality

- DAU hosts the interactive AAF webpage to help guide workforce members through the pathway processes and provides all the information, resources, and guidance workforce members need to develop efficient and effective acquisition programs at AAF.DAU.EDU
- DAU developed specialized AAF training tailored and presented to organizations by request
- DAU hosted 20 interactive webcasts focused on the AAF overall, as well as specific AAF pathways for 6K attendees. DAU continues to regularly host AAF-related webcasts, which are open to all workforce members with the videos available
- Developed a credential program that gives the workforce an opportunity to earn specialty credentials in areas such as digital engineering, Agile methods, cybersecurity, risk management and intellectual property to support key initiatives from the OUSD(A&S), as well as the Department's current and future needs
- Expanded available online resources and incorporated creative training tools and methods: TEDx talks; webcasts; job support tools; powerful examples, and customer-requested, scalable, on-site workshops
- DAU sent 13 emails directly to the Defense Acquisition Workforce related to AAF; published 15 DAU.edu News stories and 16 Defense Acquisition magazine articles; and posted on social media about AAF 184 times resulting in 4.7K engagements

Acquisition Policy Transformation

ACQUISITION ENABLERS



"MULTIPLE PATHWAYS FOR TAILORED SOLUTIONS"

HTTPS://WWW.DAU.EDU/AAF/

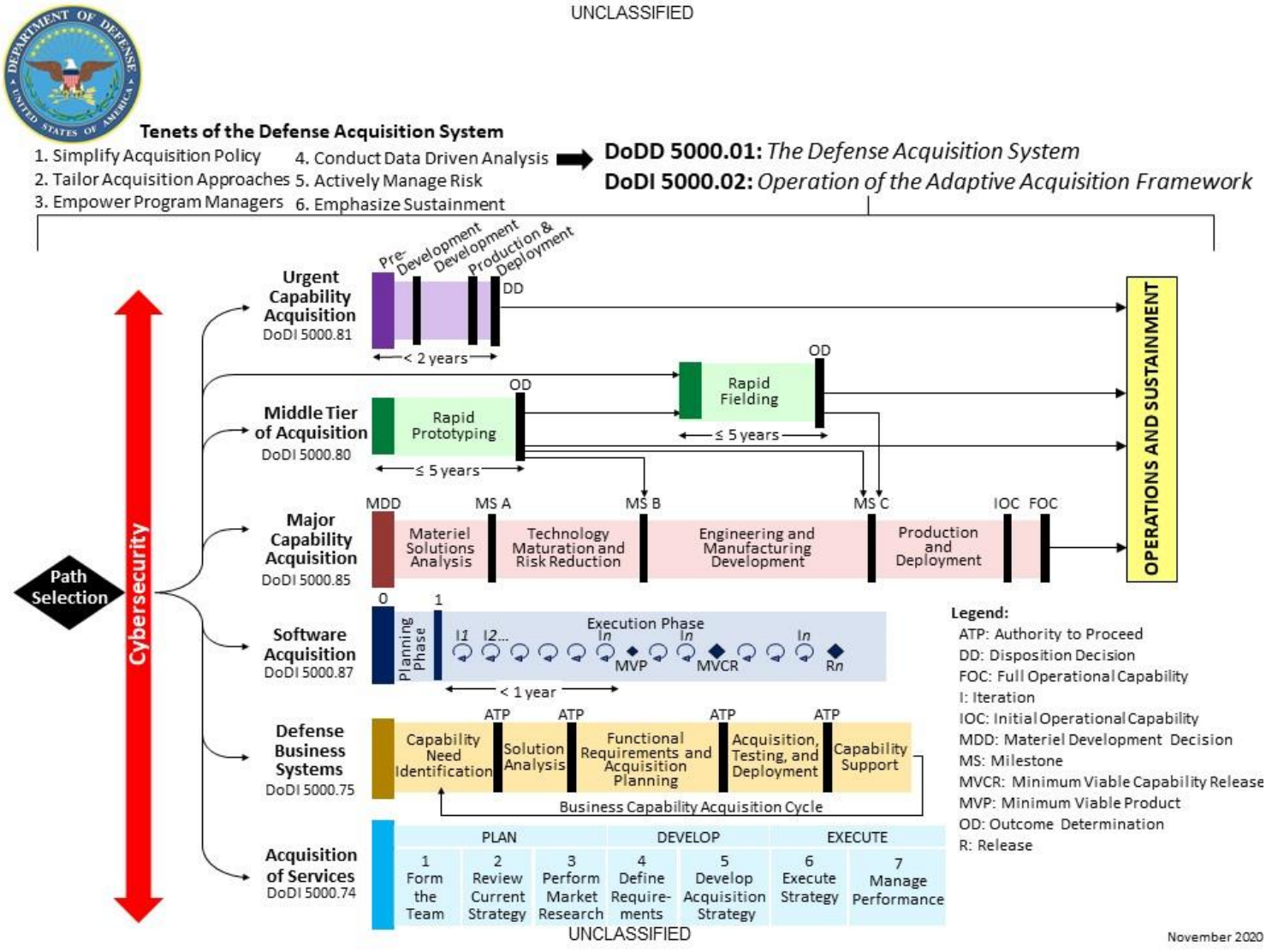
Adaptive Acquisition Framework

Enable Execution at the Speed of Relevance

ACQUISITION ENABLERS

Tailor, combine, and transition between pathways to create your program strategy.

The following pathways describe multiple acquisition approaches that provide capability to the user while capitalizing on advanced acquisition methods and improving DoD's ability to benefit from commercial innovation.



"MULTIPLE PATHWAYS FOR TAILORED SOLUTIONS"

HTTPS://WWW.DAU.EDU/AAF/

Defense Acquisition of Services

DoDI 5000.74 Information Sheet

ACQUISITION ENABLERS

Acquisition of Services DoDI 5000.74	PLAN			DEVELOP		EXECUTE	
	1 Form the Team	2 Review Current Strategy	3 Perform Market Research	4 Define Require-ments	5 Develop Acquisition Strategy	6 Execute Strategy	7 Manage Performance

Purpose

To acquire services from the private sector to include knowledge-based, construction, electronics and communications, equipment, facilities, logistics, medical, research and development, and transportation.

Characteristics

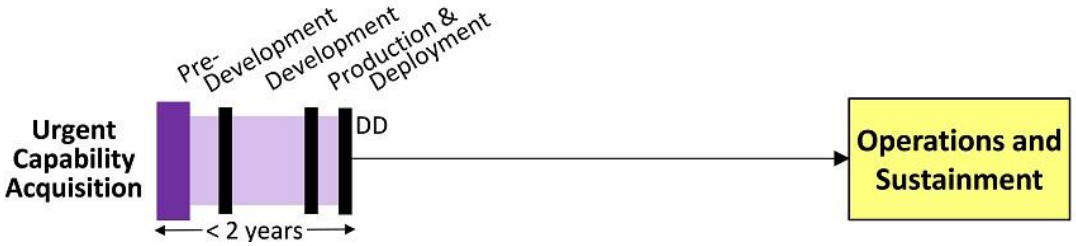
This pathway is intended to identify the required services, research the potential contractors, contract for the services, and manage performance. The pathway activities are broken into three phases: planning, developing, and executing and employs a seven-step process.

- Service Acquisition Process: The steps outlined in the figure above, Seven Steps to the Service Acquisition Process, should be used to the maximum extent possible to ensure the use of proven, repeatable processes and procedures contributing to successful services acquisitions.

Urgent Capability Acquisition

DoDI 5000.81 Information Sheet

CQUISITION ENABLERS



Purpose

To field capabilities to fulfill urgent operational needs (UONs) or other quick reaction capabilities (QRCs) in less than 2 years.

Characteristics

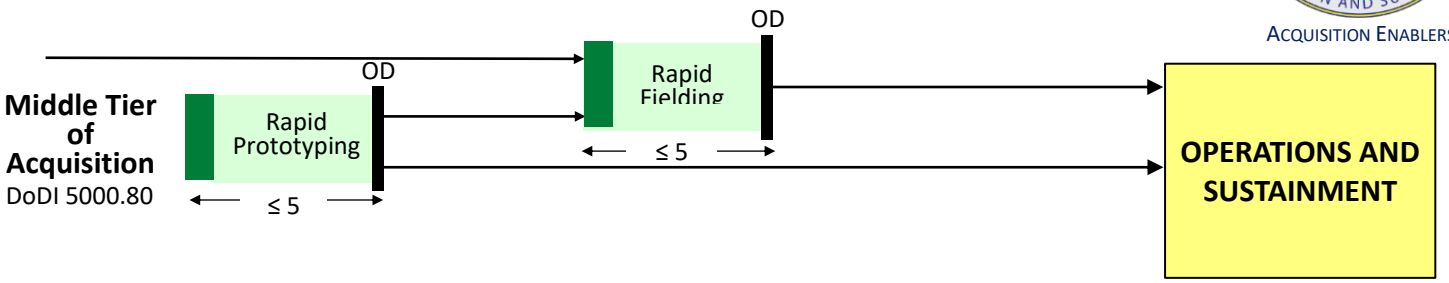
The Department's highest priority is to provide warfighters involved in conflict, or preparing for imminent contingency operations, with the capabilities urgently needed to overcome unforeseen threats, achieve mission success, and reduce risk of casualties. UONs and other QRCs are identified and approved for resolution by designated authorities. The estimated cost must not exceed $525 million in research, development, and test and evaluation, or $3.065 billion for procurements in Fiscal Year 2020 constant dollars. Due to operational urgency the normal acquisition processes are aggressively streamlined. The goal is to plan for the capability in a few weeks with development and production measured in months. The imperative is to quickly deliver useful capability to the warfighter in a timely manner.

- The purpose of **Pre-Development** is to assess and select a course or courses of action to field a quick reaction capability and develop an acquisition approach.
- **Development** includes an assessment of the performance, safety, suitability, survivability, supportability, including software, and lethality, if appropriate, of the capability. It does not require that all identified deficiencies, including those related to safety, be resolved prior to production or deployment. The Milestone Decision Authority will, in consultation with the user and the requirements validation authority, determine which deficiencies must be resolved and what risks can be accepted.
- During **Production and Deployment**, the acquiring organization provides the warfighter with the needed capability, to include any required training, spares, technical data, to include known hazards and accepted mishap risks, computer software, temporary or permanent facilities or infrastructure, support equipment, maintenance, or other logistics support necessary for operation.
- **Operations and Support**: The program manager executes a supportability strategy that meets materiel readiness and operational support performance requirements, is safe, and sustains the capability in the most cost-effective manner over its anticipated total life cycle. Planning for Operations and Support, including support funding, will begin during pre-development and will be documented in the acquisition strategy.

Middle Tier of Acquisition

DoDI 5000.80 & Section 804 of Public Law 11-92 Information Sheet

ACQUISITION ENABLERS



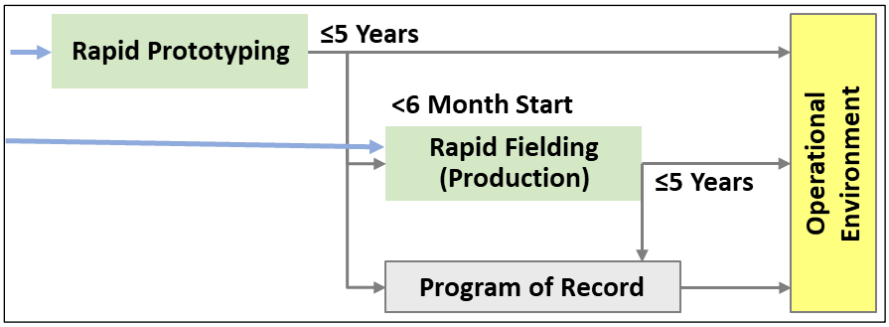
Purpose

To rapidly develop fieldable prototypes to demonstrate new capabilities and/or rapidly field production quantities of systems with proven technologies that require minimal development. The objective of an acquisition program under this path shall be to field a prototype that can be demonstrated in an operational environment and provide for a residual operational capability within five years of the program start date.

Characteristics

The MTA pathway includes Rapid Prototyping and Rapid Fielding activities. The objective of Rapid Fielding is to begin production within 6 months and complete fielding less than or equal to 5 years of the program start date. Programs that are subject to the guidance in DoDI 5000.UC will not be subject to the Joint Capabilities Integration and Development System Manual and DoDD 5000.01, except to the extent specifically provided in the guidance.

- Rapid processes, including those that consider life-cycle costs, issues of product support, logistics support and training, interoperability, and reducing total ownership costs, will be tailored for prototyping and fielding.
- Enables acquisition innovation by encouraging creative compliance through the use of the simplest, most effective acquisition authority and contract type possible.
- Shorter timeframes and schedules allow teams to focus on critical technologies and efforts early in the acquisition process.



Major Capability Acquisition

DoDI 5000.85 Information Sheet

ACQUISITION ENABLERS

Purpose

To acquire and modernize military unique programs that provide enduring capability. This pathway is intended for large scale, traditional hardware acquisitions. Major Defense Acquisition Programs (MDAPs) will use this pathway, and programs in other pathways may transition to Major Capability Acquisitions at the appropriate milestone decision point.

Characteristics

Major capabilities acquisitions typically follow a structured analysis, design, develop, integrate, test, and produce and support approach. Acquisition and product support processes, reviews, and documentation will be tailored based on the program size, complexity, risk, urgency, and other factors. The following paragraphs describe the principal pathway decision events:

- Materiel Development Decision (MDD): The MDD is the formal entry point into the major capability acquisition pathway and is informed by a validated requirements document that identifies a capability gap and determines that a materiel solution is needed.
- Milestone (MS) A: Decision point to pursue specific product or design concepts, and to commit the resources required to mature technology and reduce risks prior to development.
- MS B: Decision point to enter development of a specific product with an associated budget, suppliers, contract terms, and schedule. Generally considered the start of the program of record.
- MS C: Decision point based upon results of developmental testing and an operational assessment to enter Low Rate Initial Production (LRIP) of the product.
- Initial Operational Capability (IOC): Attained when selected organizations in the force structure received a new product and have the ability to employ and maintain it.
- Full Operational Capability (FOC): Attained when all organizations in the force structure scheduled to receive a product have received it and have the ability to employ and maintain it.

Updates & Advantages

DoD Instruction 5000.02, Operation of the Defense Acquisition System, was replaced by DoD Instruction 5000.02, Operation of the Adaptive Acquisition Framework, DoD Instruction 5000. 85. Major Capability Acquisition and related functional instructions.

The Major Capability Acquisition Pathway is designed to facilitate:

--A Tailored-In Approach

- Program managers (PMs) will determine or “tailor-in” the information needed to manage their program
- Milestone Decision Authorities (MDAs) are authorized to tailor decision events and phase content to the unique characteristics of the program

--Improved Responsiveness

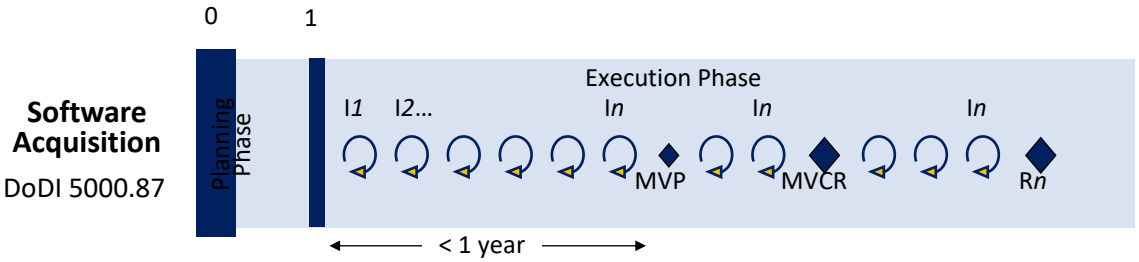
- Functional area leads can change DoDIs separately and more rapidly without requiring revision to DoDI 5000.02 or DoDI 5000.85

- Functional area policies are uniquely designed for the needs of a specific community.

Software Acquisition

DoDI 5000.87 Information Sheet

ACQUISITION ENABLERS



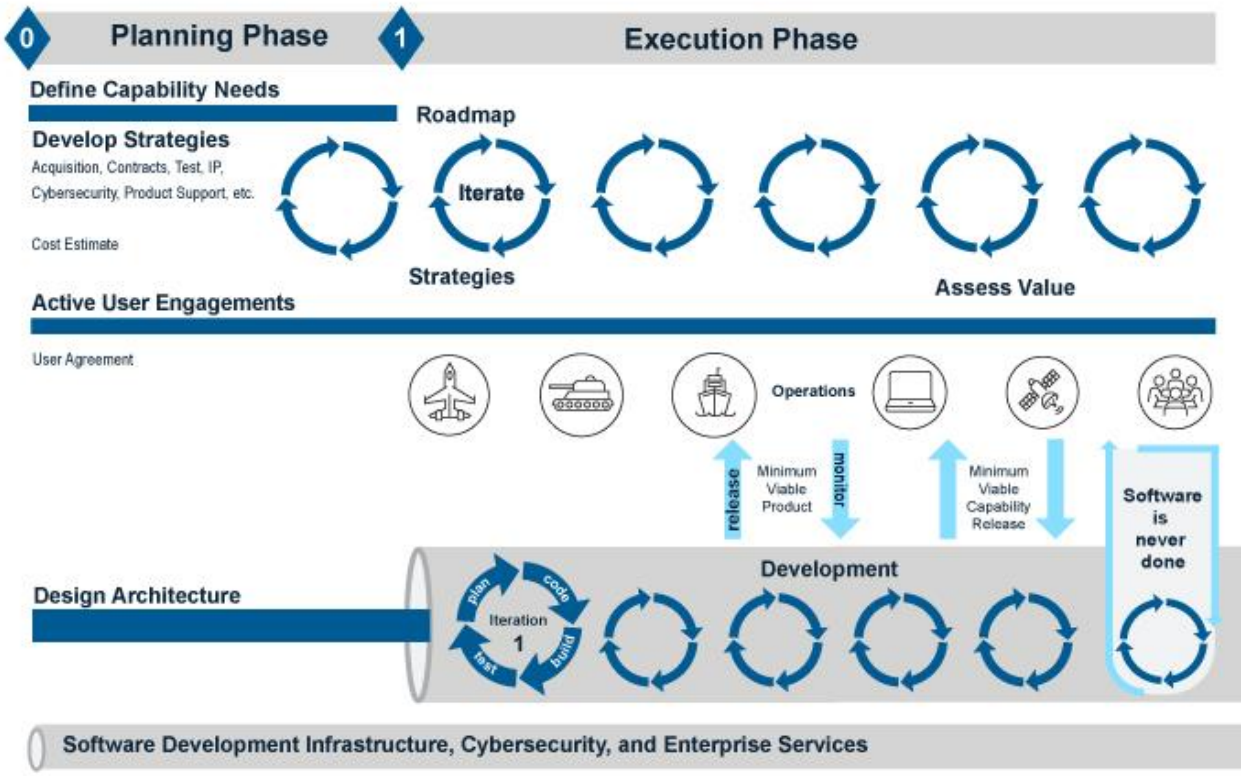
Purpose

This pathway is designed for software-intensive systems and/or software-intensive components or sub-systems. There are two sub paths within the software acquisition pathway: applications and embedded software. The pathway objective is to facilitate effective acquisition, development, integration, rapid and iterative delivery of secure software capability to the end user in the operational environment.

Characteristics

This pathway integrates modern iterative software development practices such as Agile Software Development, Lean, Human-centered Design, and DevSecOps. Capitalizing on active user engagement and leveraging enterprise services, working software is rapidly and iteratively delivered to meet the highest priority user needs. Tightly coupled, mission-focused government-industry software teams, working collaboratively with end-users, leverage automated tools for development, integration, testing, and delivery to iteratively deploy software capabilities to the operational environment.

- Planning Phase: The planning phase focuses on understanding the users' needs and planning the approach to deliver capabilities to meet those needs.
- Execution Phase: This phase focuses on first scoping, developing and deploying a Minimum Viable Product (MVP) and Minimum Viable Capability Release (MVCR) to the Warfighter/end-user as quickly as possible; and iteratively developing and deploying remaining capability thereafter.



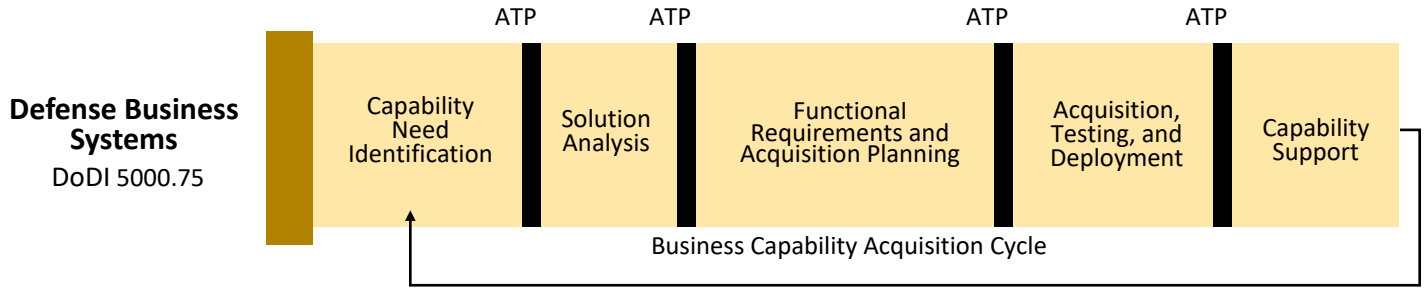
Advantages of the Software Acquisition Pathway

- Tailored acquisition processes for software development employing modern methods
- No formal milestones – Delegated decision authorities – focused on rapid delivery of needed capabilities in small batches
- Exempt from JCIDS (unless VCJCS, A&S, SAEs agree on new process)
  - Streamlined requirements process, document, and iterative backlogs
- Streamlined reviews and documentation requirements
- Exempt from Major Defense Acquisition Program (MDAP) requirements
- Leverages enterprise services and not “rebuilding the factory” for every program
- Program tailoring and flexibility for Services/Agencies
- Close and continuous engagement with users required
- Annual Value Assessment supports “Persist or Pivot” mentality

Defense Business Systems

DoDI 5000.75 Information Sheet

ACQUISITION ENABLERS



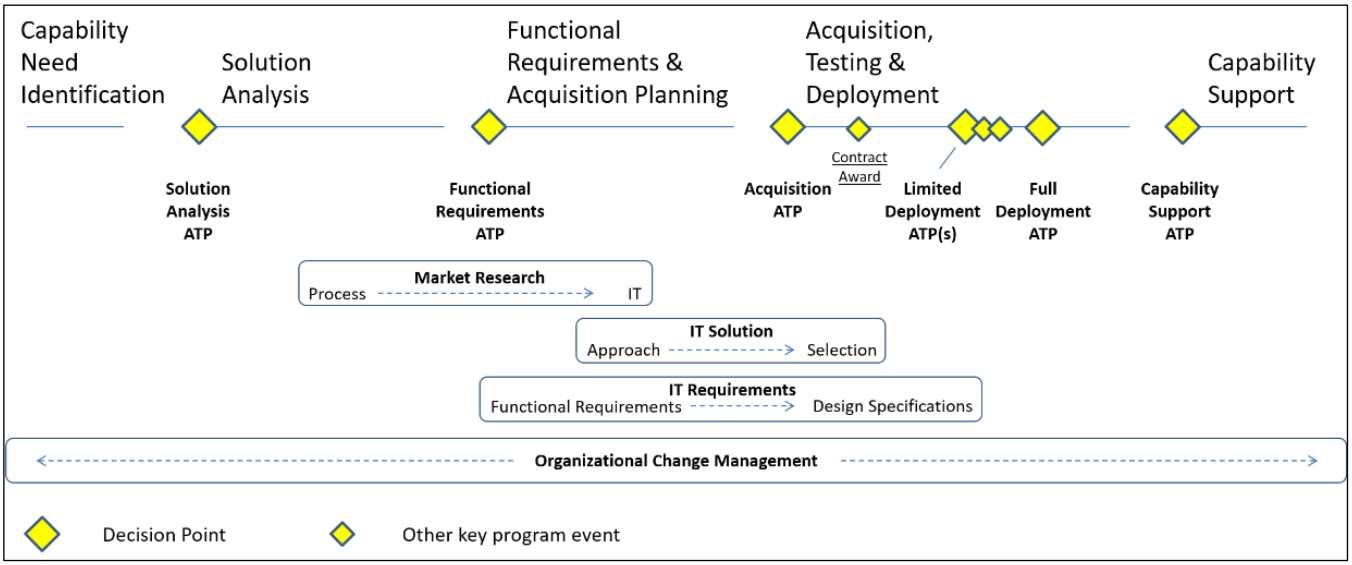
Purpose

To acquire information systems that support DoD business operations. This pathway applies to all defense business capabilities and their supporting business systems, including those with "as-a-service" solutions to include: financial and financial data feeder, contracting, logistics, planning and budgeting, installations management, human resources management, and training and readiness systems. This pathway may also be used to acquire non-developmental, software intensive programs that are not business systems.

Characteristics

This pathway assesses the business environment and identifies existing commercial or government solutions that could be adopted to satisfy DoD needs. DoD reviews its business processes and revises them to align more closely with commercial or government IT best practices. Customization of a selected information technology (IT) solution is minimal. DoD reduces risk and maximizes benefits by using commercial-off-the-shelf software that has been successfully demonstrated in the commercial marketplace.

- Capability Need Identification: Capability need is based on the desired end state in a business mission area, the problem(s) preventing it, and the future capabilities required to achieve it.
- Solution Analysis: Future capabilities are based on reengineering the high-level future business processes that will deliver the capabilities.
- Functional Requirements and Acquisition Planning: Describes how the business system will achieve the future business processes.
- Acquisition, Testing, and Deployment: Detailed fit-gap analysis follows solution selection based on the acquisition strategy. Fit-gap analysis will be based on the known capabilities of the Commercial-Off-the-Shelf/Government-Off-the-Shelf (COTS/GOTS) software in the selected business system solution.
- Capability Support: This phase provides support for the business capability, including continued cybersecurity readiness and enduring support for and appropriate upgrades to the business system.


Capability Need Identification
Solution Analysis
Functional Requirements & Acquisition Planning
Acquisition, Testing & Deployment
Capability Support
Solution Analysis ATP
Functional Requirements ATP
Contract Award
Acquisition ATP
Limited Deployment ATP(s)
Full Deployment ATP
Capability Support ATP
Market Research
Process
IT
IT Solution
Approach
Selection
IT Requirements
Functional Requirements
Design Specifications
Organizational Change Management
Decision Point
Other key program event

ACQUISITION ENABLERS

Functional Area Enclosures

Acquisition Intelligence

DoDI 5000.86 Information Sheet

ACQUISITION ENABLERS

Purpose

- Clarifies roles and responsibilities that strengthen outcomes within the acquisition process to deliver lethal and resilient capabilities, regardless of the acquisition pathway.
- The active, focused and routine use of intelligence enables risk informed acquisition planning and solutions that defeat adversary capabilities.

Updates

- One Acquisition Intelligence policy applies to all pathways in the adaptive acquisition framework.
- Intelligence data dependencies drive fragility without long-term data solutions.
- Threat Support and Planning for Supportability
    - Acquisition Intelligence specialists provide direct input to the acquisition programs as part of the Program Manager's team.
    - Specialists work with Intelligence Community Providers to articulate acquisition intelligence criticality and plan for acquisition needs to assist in program offices in the application of intelligence content to optimize acquisition outcomes.
- Critical Intelligence Parameters (CIPs)
    - CIPs identify threat capabilities or thresholds which, if achieved by adversaries, critically impact the effectiveness and/or survivability of a proposed system.
    - CIPs can help focus Intelligence Community collection, analysis, and reporting toward areas of highest importance for acquisition success.
    - Insight helps set US development, modernization, and resourcing timelines to maintain the competitive advantage over adversaries.
    - Configuration Steering Boards actively monitor capability status and adversary advancements.
- Effective Workforce Training
    - The OUSD(I) Acquisition Intelligence Career Occupation Program is newly enabled by DAU's Credential Program, as Acquisition Intelligence skills differ from traditional intelligence skillsets.
    - ACQ 110 is the first of several modular training opportunities in development to support performance in the Acquisition Intelligence area.

Advantages

- Because technology is constantly advancing and there is a need to address changing threats, Acquisition Intelligence is focusing intelligence efforts where they help acquisition programs most.
    - Ex: Intelligence can inform investments using a modular open systems approach and how to consider intelligence dependencies to support resiliency throughout a program's lifecycle. These types of inputs permit a more rapid response to technological improvements and emerging threats.

Cybersecurity

DoDI 5000.90 Information Sheet

ACQUISITION ENABLERS

Purpose

- This update builds upon existing policy resulting from the USD(AT&L)'s *Better Buying Power 3.0: Strengthen Cybersecurity Throughout the Product Lifecycle*.
- Cybersecurity is a foundational aspect of any acquisition and has critical requirements that cannot be traded for cost, schedule, or performance.
- Cybersecurity requirements must be understood and incorporated both early in, and then throughout, the system lifecycle to effectively and correctly integrate into system program baselines.
- This policy is necessary to provide consistent guidance for decision authorities and program managers to implement proper levels of cybersecurity processes and practices for every acquisition throughout the supply chain, regardless of which adaptive acquisition framework pathway is used.

Updates

- One cybersecurity policy applies to all pathways in the adaptive acquisition framework.
- Policy is based on the DoDI 5000.02: Enclosure 14: *Cybersecurity in the Defense Acquisition System* (Change 5, October 21, 2019), but now incorporates:
    - Acknowledgement of the Cyber Survivability Endorsement to the Joint Capabilities Integration and Development System (JCIDS) System Survivability Key Performance Parameter (SS KPP) as a source of cybersecurity requirements in some acquisitions.
    - Establishment of a Chief Information Security Office (CISO) for Acquisition to prioritize cybersecurity in acquisition programs and within the Defense Industrial Base (DIB) supply chain.
    - Incorporates recent statutes related to supply chain risk management (10 USC 2339a, PL 115-232 §889 §1654 §1655, and PL 115-91 §1656).

Advantages

- Provides a clear focus on the role of acquisition program managers and decision authorities as coordinators and overseers of all aspects of cybersecurity in acquisition programs. Other DoD policies address the details of specific functional aspects of cybersecurity in cyber technology (e.g., 5000.83 for System Security Engineering and 5000.89 for Developmental and Operational Testing of Cybersecurity)
- Adds new requirements to mitigate the risk of the specific threat of foreign ownership, control, or influence affecting key/critical parts of the DoD acquired systems supply chain.

Intellectual Property (IP)

DoDI 5010.44 Information Sheet

ACQUISITION ENABLERS

DoD-Wide Intellectual Property (IP) Policies and Practices

- On October 16, 2019, the Department released its first DoD-wide issuance to establish more effective policies and practices for acquiring, licensing, and managing Intellectual Property (IP): DoD Instruction 5010.44, "Intellectual Property (IP) Acquisition and Licensing."
- Acquiring, licensing, and managing the appropriate IP is vital to ensure DoD systems remain operational, sustainable, upgradable, and affordable.
- The issuance highlights DoD's core principles for IP acquisition and guides the Department to deliver world class, innovative, capabilities at the speed of relevance – and doing so more affordably.
- It encourages the development and implementation of longer-term strategies for acquiring, licensing, and managing IP and associated license rights, as well as emphasizing earlier, more frequent, and more robust communication with industry, and enabling the Department to better understand and implement IP best practices.
- The issuance implements the requirements of Section 2322 of Title 10, United States Code, and integrates the recommendations of the Government-Industry Advisory Panel, and the independent review of DoD IP practices, pursuant to Sections 813 and 875 of the National Defense Authorization Act for Fiscal Year 2016.

Establishing the DoD IP Cadre – a cross-functional team of experts

- The issuance established a DoD-wide cadre of experts on IP acquisition, licensing and management, which is coordinating the development of DoD policy, guidance, and training to more effectively protect and balance the IP rights and interests of the Government and Industry.
- The IP Cadre is a team of personnel who have become experts in the acquisition, licensing, and management of IP, building on their original functional areas of expertise such as engineering, sustainment, contracting, law, program management, and finance.
- The DoD IP Cadre is based on a federated model -- establishing a small mission-focused unit within the office of the Under Secretary of Defense for Acquisition and Sustainment, and formalizing a coordinated community of practice with cross-functional experts throughout OSD, the Military Departments, and other DoD Components.
- One primary function of the DoD IP Cadre is to provide advice, assistance, resources, and across-the-board support on IP matters to DoD programs throughout all DoD Components, and throughout the entire life cycle of a system.
- The DoD IP Cadre will also cultivate IP best practices and support the development of improved training and credentialing, in coordination with Defense Acquisition University (DAU)

- The DoD IP Cadre enable more creative solutions to IP challenges by engaging with our Industry partners earlier, more frequently, and more robustly throughout the technology life cycle.

Six Core Principles for Improved IP Acquisition, Licensing, and Management

- Integrate IP planning fully into acquisition strategies and product support strategies to protect core DoD interests over the entire life cycle.
- Ensure acquisition professionals understand better how IP matters relate to their official duties.
- Negotiate specialized provisions for IP deliverables and associated license rights whenever doing so will more effectively balance DoD and industry interests than the standard or customary license rights.
- Communicate clearly and effectively with industry regarding planning, expectations and objectives for system upgrade and sustainment.
- Respect and protect IP resulting from technology development investments by both the private sector and the Government.
- Clearly identify and match data deliverables with the license rights in those deliverables. Data or software deliverables are of no value unless and until the license rights to use it are attached, and the Government actually obtains and accepts those deliverables.

Additional Efforts

- In September 2020, DAU released a new Foundational IP Credential, which is available to all career fields in the acquisition workforce. The new credential will recognize those professionals having the knowledge and skills necessary to effectively acquire, license, and manage IP. Professionals who complete the credential requirements will understand how to utilize IP in their respective career fields to better protect core DoD interests over the entire program and technology life cycle.
- To further implement the DoDI 5010.44, more detailed guidance is being developed – including an updated DoD Manual 5010.12, “Acquisition and Management of Contractor Prepared Data.”

Department of Defense Goal

- The Department’s goal is to enable a more innovative, timely, effective balance to the manner in which the Department partners with Industry to provide the best technological capabilities to the warfighter, at the speed of relevance, and to do.

Systems Engineering

DoDI 5000.88 Information Sheet

ACQUISITION ENABLERS

Purpose

- Provide overarching engineering management principles that guide the development of DoD systems
- Provide policy and procedure to conduct a comprehensive engineering program

Updates

- DoDI 5000.UJ (Engineering) is a new instruction which encapsulates Enclosure 3 from the most current CH5 DoDI 5000.02 and adds new language to strengthen the engineering process.

- Major Changes:
  - Independent Review
    - Reinforces “best practice” of independent review teams
    - Establishes R&E Priority List for select programs, primarily MDAPs
    - USD(R&E) monitors process, delegates responsibility as appropriate
  - Mission Engineering / Mission Integration
    - Initiated in concept exploration phase, prior to MDD
    - Holistic assessment of system concept, CONOPS, interoperability and overall mission effectiveness
    - Refreshed periodically throughout the program lifecycle
  - Program Technical Planning
    - Requires SEPs to be optimized to program needs
    - Reduces SEP approvals from 4 to 3
    - Earlier SEP deliveries to support RFPs
  - Program Technical Reviews and Assessments
    - Requires SRR/SFR, SVR/FCA, PDR, CDR, and PRR for priority list programs
    - ITRAs include schedule risk assessments
    - Separate TRAs not required for programs with ITRAs
  - Modular Open Systems
    - Severable major system components for lifetime evolution
    - Facilitates competition, enhancements and obsolescence management

Advantages

- Policy and procedures to conduct a comprehensive engineering program

Test and Evaluation

DoDI 5000.89 Information Sheet

ACQUISITION ENABLERS

Purpose

- Improve Test and Evaluation (T&E) efficiency across the Developmental T&E, Operational T&E, and Test Resources Communities
- Reduce the time to get capability to the field
- Promote comprehensive integrated T&E
    - Support department-wide efforts to provide shared data for independent analysis, evaluation, and reporting by all developmental and operational test and evaluation communities
    - Emphasize rigorous developmental testing to improve operational test outcomes

Updates

- DoDI 5000.89 (Test and Evaluation) is a new directive which encapsulates enclosures 4 and 5 from the most current DoDI 5000.02 while adding new language to provide framework to encourage the use of Integrated T&E.
- Assigns responsibilities, and provides procedures for T&E programs across five of the six pathways of the adaptive acquisition. The sixth pathway, defense acquisition of services, does not require T&E policy and procedures.
- Clarifies the mutually supporting USD(R&E) and DOT&E T&E oversight approach while maintaining the independence of both organizations.
- Clarifies USD(R&E) and DOT&E T&E responsibilities for all acquisition pathways (e.g. 804 MTA and Urgent Operational).

Advantages

- Framework allows users to:
    - Understand the required scope and resources of the evaluations
    - Define the-end state for evaluations ahead of time
    - Develop an integrated testing approach that generates the data required to conduct independent evaluations

Information Technology
Requirements for the Acquisition of Digital Capabilities
DoDI 5000.82 Information Sheet

ACQUISITION ENABLERS

Purpose

- This update better aligns digital acquisition policy and procedures, where digital applies to all programs containing IT including National Security Systems pursuant to the relevant sections of Titles 10, 40, and 44, United States Code, with the acquisition pathways of the Adaptive Acquisition Framework.
- It includes policy guidance for Clinger-Cohen Act compliance, architecture, IT category management, cybersecurity, cyber supply chain risk management, C3 (e.g., spectrum, PNT), compute (e.g., data centers, cloud services), software, and data and information.
- As the Joint Force continues to modernize, digital capabilities will become critical and pervasive across all mission sets. This includes not only IT associated with common infrastructure like networks and cloud, but embedded IT capabilities for functions like position, navigation, and timing (PNT) and data management in support of artificial intelligence and machine learning.
- This policy is necessary to provide consistent guidance for decision authorities and program managers to ensure DoD is acquiring digital capabilities that are interoperable, secure, and modern and are in alignment with National and DoD strategies.

Updates

- Consolidates digital-related acquisition policies under a single functional policy that applies to all pathways in the Adaptive Acquisition Framework.
- Policy is based on the previous *DoDI 5000.02: Enclosure 11: Requirements Applicable to All Programs Containing IT* and encompasses the following updates:
    - Title change to reflect digital capabilities as policies pertain to more than just common IT.
    - Addition of cloud policies, which were removed from *DoDI 5000.74, Defense Acquisition of Services*, in an effort to consolidate IT-related content.
    - Addition of policies and update of references to reflect current legislation and strategies (e.g., data centers, data) to include a reordering of content for better readability and flow.

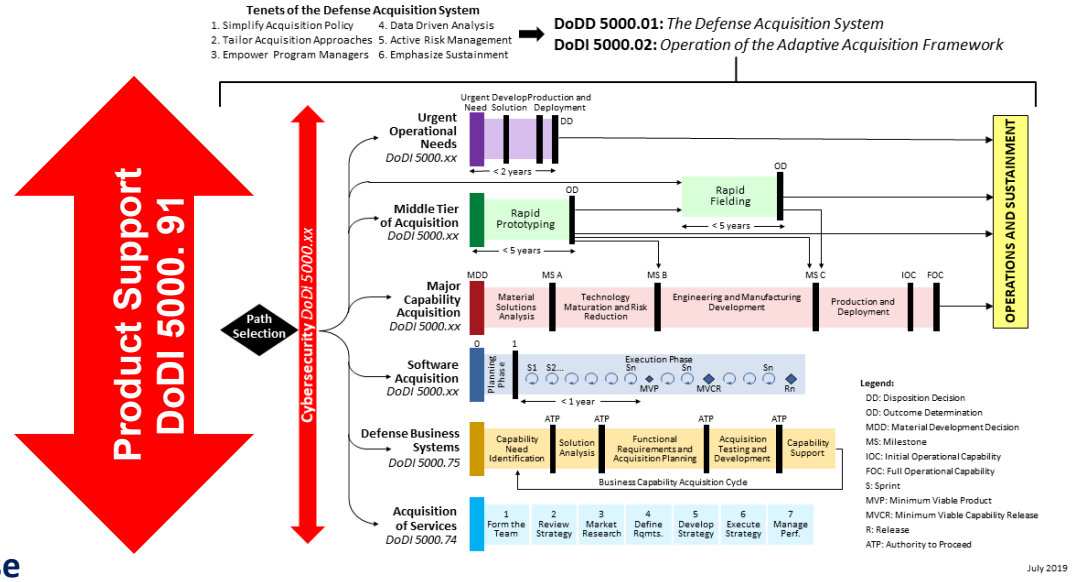
Advantages

- Provides consolidated acquisition requirements for digital capabilities to streamline compliance.
- Highlights unique reporting and documentation requirements for each pathway where applicable and leverages existing pathway documentation to support compliance.
- Ensures that acquisitions with digital components align with IT policies and drive toward improved interoperability and integration of Joint Force capabilities.

Product Support Management for The Adaptive Acquisition Framework

DoDI 5000.91 Information Sheet

ACQUISITION ENABLERS



Purpose

The 5000. 91 Instruction establishes policy, assigns responsibilities, and establishes procedures for product support (PS) factors early in the requirements development and acquisition process. The instruction tracks performance over the completion of the program life cycle, with the intent of increasing operational effectiveness for the warfighter and reducing operating and support (O&S) costs for all programs in the Adaptive Acquisition Framework (AAF) pathways.

Characteristics

This instruction lays the groundwork for product support within all six pathways of the Adaptive Acquisition Framework. It provides a one-stop shop that details the statutory, directive, and regulatory requirements for major pathways, and allows for a more tailored approach to utilizing product support to the individual pathway. This policy empowers program managers and product support managers to be more agile in providing tailored strategies. It will facilitate increased operational readiness and reduced cost. The issuance:

- Identifies a more accurate cost positions: utilizes historical and actual data (Sustainment Factors from REAL systems incorporated via M&S).
- Improves RAM-C: Guidance incorporates product support data into Analysis of Alternatives, Concept of Operation, and cost positions early in the acquisition process.
- Improves Industry Partnership: Provides increased industry collaboration by providing transparency UP FRONT with Industry partners, working together to inform requirements and knowledge sharing. For example, technical data vs. IP, ask for technical data early on in process.
- Implements Agile and Tailored PS Approach: Uses the application of data to identify where and how to effectively tailor approach to individual pathway

Analysis of Alternatives

DoDI 5000.84 Information Sheet

Cost Assessment and Program Evaluation

Purpose

DoDI 5000.84 establishes policy, assigns responsibilities, and prescribes procedures for Analyses of Alternatives (AoAs). AoAs are tailored analyses required for all major defense acquisition programs (MDAPs) pursuant to Section 832 of the National Defense Authorization Act for Fiscal Year 2020 and in support of the certifications to be executed to comply with Sections 2366a and 2366b of Title 10, United States Code.

Characteristics

AoAs explore the trade-space of potential MDAP alternatives to provide leadership with the cost, benefit, and risk information needed to make well-informed decisions. They include three types of analysis. Performance analysis examines the capabilities of each alternative and their contribution to mission accomplishment. Cost analysis develops and compares estimates of life-cycle affordability. Schedule analysis assesses development, testing, and fielding timelines for each alternative.

Process

AoAs are intended to be completed in 9 months. The Director, Cost Assessment and Program Evaluation (CAPE) provides study guidance once a DoD component notifies CAPE of an impending MDAP. CAPE also establishes a study advisory group (SAG) to oversee and provide guidance to the AoA team. The component submits a study plan and memorandum certifying that it is ready to begin the AoA. If necessary, CAPE then initiates a waiver for AoAs that cannot be completed in 9 months. The AoA begins when CAPE approves the study plan and ends when final results are briefed to the SAG. The component submits a written AoA report for CAPE to review. Based on this review, CAPE provides a sufficiency memorandum to the component and Milestone Decision Authority. The sufficiency memo assess the adequacy of the AoA and its consistency with study guidance. The component must certify to Congress that an AoA has been performed consistent with guidance developed by CAPE to receive Milestone A approval.

Cost Analysis Guidance and Procedures

DoDI 5000.73 Information Sheet

Cost Assessment and Program Evaluation

Purpose

To establish policy, assign responsibilities, and provide procedures for the conduct of cost estimation and analysis and the collection of cost data in the DoD.

Characteristics

Cost estimation and analysis typically follows a structured process depending on the program and reason for conducting the analysis. The Director, Cost Assessment and Program Evaluation (CAPE) reviews all cost estimates and cost analysis conducted in connection with major programs and subprograms, as well as estimates of operations and support costs for all major weapon systems. Service Cost Agencies (SCAs) review all other cost estimates. DoDI 5000.73 describes the points at which CAPE, DoD Components, and SCAs conduct cost analyses as well as the timelines and required documentation for the conduct of such analyses.

All cost estimates conducted for DoD programs must include a discussion of risk, and be developed, to the extent practicable, based on historical actual cost information that is based on demonstrated performance and provide a high degree of confidence that the program can be completed without the need for significant adjustment to the program's or subprogram's budgets.

Cost analysis activities include, but are not limited to:

- Independent Cost Estimates (ICEs): These estimates are full life-cycle cost estimates that include all costs of development, procurement, military construction, operations and support, disposal, and trained manpower to operate, maintain, and support the program or subprogram upon full operational deployment, without regard to funding source or management control.
- Cost Analysis for Development Request for Proposals (RFP) Release Decision Point
- Multiyear Procurement (MYP) Certification
- Nunn-McCurdy Cost Assessment
- Post-Initial Operational Capability (IOC)
- Rapid Prototyping and Rapid Fielding Programs
- Cost Estimates for Defense Business Systems, Contracted Services, and Software

Systematic and institutionalized cost data collection by each DoD Component is critical to support credible cost estimates of current and future programs. The primary cost data collection systems are:

- Cost and Software Data Reporting (CSDR)
- Visibility and Management of Operating and Support Costs (VAMOSC)

Adaptive Acquisition Framework

Frequently Asked Questions

ACQUISITION ENABLERS

What is the Adaptive Acquisition Framework (AAF)?

The Adaptive Acquisition Framework is a set of six tailorable acquisition pathways that enable innovative acquisition approaches and improve the ability to deliver warfighting capability at the speed of relevance. The DoD has transitioned from a one-size fits all acquisition model (*DoDI 5000.02, Operation of the Defense Acquisition System*) into a flexible, streamlined framework (*DoDI 5000.02, Operation of the Adaptive Acquisition Framework*) that encourages program teams to use the appropriate pathway, or a combination of pathways, to accelerate the delivery of program objectives. This change best supports the Defense Acquisition System (DAS) with the objective of delivering effective, suitable, survivable, sustainable, and affordable solutions to the end-user in a timely manner.

To achieve these objectives, Milestone Decision Authorities (MDAs), other Decision Authorities (DAs), and Program Managers (PMs) have broad authority to plan and manage their programs consistent with sound business practice. The AAF pathways provide opportunities for PMs to develop and employ acquisition strategies for MDAs/DA approval that match the acquisition pathway process, reviews, documents, and metric to the character and risks of the capability being acquired. PMs may employ multiple pathways in parallel or transition from one to another as part of their acquisition strategy.

The policy re-write includes separate DoD instructions for each pathway as well as each functional area. The AAF policies, along with applicable training and resources can be found at: https://www.dau.edu/aaf/.

How do I access information about the AAF?

The AAF website (https://www.dau.edu/aaf) is the hub of all information pertaining to the DoD 5000 Acquisition Policy Series and offers guidance on pathway selection, vignettes on using multiple pathways, tailoring considerations, and available training opportunities. The website includes policies, guidance, and resources for reach pathway to inform acquisition professionals on specific requirements (per statute and policy) and how to effectively navigate each phase and activity of their respective pathway(s).

What are the six pathways of the AAF?

1. Urgent Capability Acquisition (UCA) (DoDI 5000.81)
   Replaces Encl. 13 of *DoDI 5000.02 Operation of the Defense Acquisition System*. This pathway is used for Joint Urgent Operational Needs, Joint Emerging Operational Needs, and Service unique Urgent Operational Needs.

2. Middle Tier of Acquisition (MTA) (DoDI 5000.80)
   Replaces MTA interim policies with a formal instruction that was collaboratively developed by OSD and the DoD Components. This pathway is used for rapid prototyping and rapid fielding of capabilities within 5 years.

3. Major Capability Acquisition (MCA) (DoDI 5000.85)
   Replaces traditional acquisition policy covered in *DoDI 5000.02 Operation of the Defense Acquisition System*. Until MCA is published, *DoDI 5000.02T* {T stands for transition) will be in effect (please see next FAQ for .02T info). While the title has the word major in it, this pathway is for all ACAT levels and the traditional model that does not fit any of the other pathways, with tailoring further emphasized.

4. Software Acquisition Pathway (DoDI 5000.87)
   This policy is designed to allow PMs to use modern software development techniques to acquire and deliver capabilities.

5. Defense Business Systems (DBS) (DoDI 5000.75)
   This policy has been updated to reflect recent legislation and evolving roles and processes to acquire information systems that support DOD business operations.

6. Acquisition of Services (DoDI 5000.74)
   This policy has been updated to reflect evolving processes on acquiring services from the private sector.

What is the DoDI 5000.02T?

DoDI 5000.02 Operation of the Adaptive Acquisition Framework will eventually cancel the January 7, 2015 version of *DoDI 5000.02 Operation of the Defense Acquisition System* (this version has been renumbered DoDI 5000.02T (Transition) to establish a distinction between the two issuances). *DoDI 5000.02T Operation of the Defense Acquisition System* will remain in effect, with content removed as it is cancelled or transitions to a new issuance.

What about functional policies covered in the enclosures of the 'old' 5000.02 (Operation of the Defense Acquisition System) (i.e. Engineering, Cost, T&E, etc.)?

Each of the major functional areas covered in the enclosures of *DoDI 5000.02 Operation of the Adaptive Acquisition Framework* will have standalone DoDI policies written by each functional area. They will cover applicable content from the 'old' DoDI 5000.02 and new information based on recent statute, direction, and tailoring to support the AAF. In the interim, the policies remain in effect via *DoDI 5000.02T Operation of the Defense Acquisition System*.

Adaptive Acquisition Framework

Frequently Asked Questions

ACQUISITION ENABLERS

How will the new AAF policies be applied?

Unless otherwise determined by the decision authority, new or revised policy will apply to all programs initiated *after* the date the policy is issued. Decision authorities will review programs *already in progress* to determine the earliest decision event by which the policies will be implemented. Policy implementing statute will be implemented as directed by law. Critical regulatory policies, such as those related to Cybersecurity, will receive special attention and be implemented at the earliest possible date.

How do the new policies impact program planning?

PMs, with the approval of MDAs/DAs, may leverage a combination of acquisition pathways to provide value not otherwise available through use of a single pathway. The use of multiple pathways does not affect the application of statutory thresholds, such as the MDAP or major system (ACAT II) thresholds, to the program as a whole, except as provided by statute.

How is this different from what we have done in the past?

Although AAF does not modify statutes, it empowers PMs and DAs to think about program design differently. It breaks away from the conventional “one-size-fits-all” approach and stimulates critical thinking amongst the workforce. It provides a foundational structure to software acquisition with emphasis on tailoring to the unique aspects of the program.