DAU

The DoD Adaptive Acquisition Framework and the DoD Digital Technologies Update

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The Adaptive Acquisition Framework

- Re-write of 5000.01 and .02 as well as new 5000.xx policies (pathways) and functional policies currently covered by .02 enclosures (sustainment, engineering, cost, T/E, etc.)
  - 5000.02 no longer reflects MDAP policy, but reflects the Adaptive Acquisition Framework (AAF)
- Encourage critical thinking amongst our acquisition workforce
  - Tailor-in vice tailor-out philosophy
- Acquisition workforce can access new policies/guides via DAU hosted website https://aaf.dau.edu

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Tenets of the Defense Acquisition System

1. Simplify Acquisition Policy
2. Tailor Acquisition Approaches
3. Empower Program Managers
4. Conduct Data Driven Analysis
5. Actively Manage Risk
6. Emphasize Sustainment

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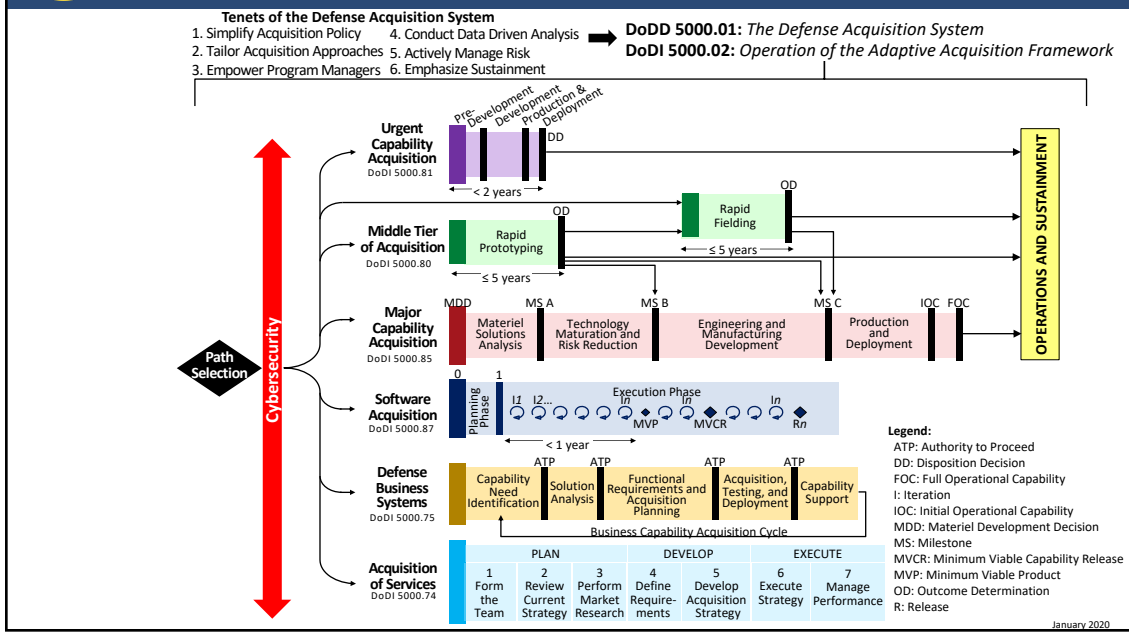
Adaptive Acquisition Framework

Enable Execution at the Speed of Relevance



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Transforming Acquisition Policy

USD(A&S) and USD(R&E) Charters

DoDD 5000.01: The Defense Acquisition System

Updated to specify the overarching policy and the responsibilities of key officials.

DoDI 5000.02: Operation of the Adaptive Acquisition Framework – 23 Jan 2020

Outlines the six pathways of the Adaptive Acquisition Framework.

*New Policies

DoDIs for Each Acquisition Pathway

- Urgent Capability Acquisition (5000.81) – 31 Dec 2019
- *Middle Tier of Acquisition (5000.80) – 30 Dec 2019
- Major Capability Acquisition (5000.85)
- Software Acquisition (5000.87) - 1 Oct 2020
- Defense Business Systems (5000.75) – 24 Jan 2020
- Acquisition of Services (5000.74) – 10 Jan 2020

DoDIs for Each Functional Area

Key policies published by various OSD functional organizations

- Engineering
- T&E
- *Cybersecurity
- AoAs
- Cost Est 5000.73
- *IP (5010.44) - 16 Oct 2019
- *Tech & Program Protection
- HSI
- *Acquisition Intelligence
- IT 5000.82
- 5000.91
- Counterintel Support
- CPI
- *Acq Security

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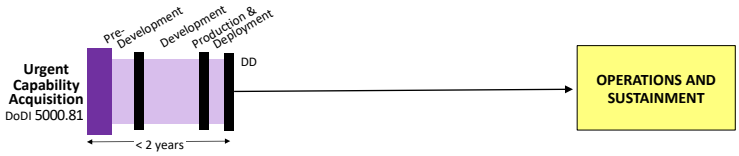
Urgent Capability Acquisition 5000.81



Highly tailored support strategy, to include software

Purpose

To field capabilities to fulfill urgent operational needs or other quick reaction capabilities in less than 2 years

Characteristics

- 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 procurement in Fiscal Year 2020 constant dollars.
- The acquisition processes, reviews, and documents are aggressively streamlined due to operational urgency.
- The goal is to plan for the capability in a few weeks with development and production measured in months.
- Chart illustrating flow of JUONs & JEONs thru the process

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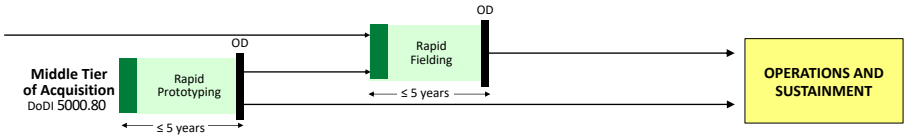
Middle Tier of Acquisition 5000.80



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

Characteristics

Rapid Prototyping – Focus on "Designing for Supportability" through requirements and design specifications. User feedback.

- Field a prototype that can be demonstrated in an operational environment
- Provide for residual operational capability within 5 years of an approved requirement – Shift left (initial contract priced options as supportability and sustainment enablers) ensures tailoring for transition to other pathways.

Rapid Fielding – Early data analysis enables tailored product support strategies that meet rapid fielding timelines.

- Begin production within 6 months
- Complete fielding within 5 years of an approved requirement

Documentation

For MTA programs expected to exceed major system thresholds, CAEs will ensure the entrance documentation (previous charts, and Table 1, DoDI 5000.80), is available via DAVE (https://dave.acq.osd.mil) at the time of the President's budget submission.

- Full funding plans (to include year of execution), will be reflected in the documentation, consistent with the cost estimate.

Documentation for non-major systems will be made available via DAVE interfaces at least 10 workdays prior to the desired obligation of funds to a performing activity.

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Major Capability Acquisition 5000.85

- **Looks like we currently operate**

Purpose

To acquire and modernize military unique programs that provide enduring capability
This pathway is intended for large scale, traditional hardware acquisitions.

Characteristics

- Typically follows 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
- Software intensive components may be acquired via the software acquisition pathway, with the outputs and dependencies integrated with the overall major capability pathway

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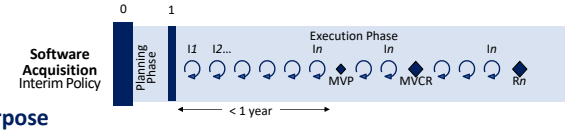
Software Acquisition 5000.87



S/W sustainment is development, part of the overall process. As s/w teams deliver capability per user agreements, continuous engineering will be part of that process along with product improvements/increased capability. Single color appropriation

Purpose

To facilitate rapid and iterative delivery of software capability to the user

Characteristics

- Integrates modern iterative software development practices such as Agile or Lean Software Development Methods, and DevSecOps
- Tightly coupled, mission-focused government-industry software teams leverage automated tools for development, integration, testing, and delivery to iteratively deploy software capabilities to the operational environment
- Will often be used in combination with other pathways due to the pervasiveness of software in the majority of acquisition systems
- JCIDS waived; Capability Needs Statement will be developed
- MDAP threshold rules waived
- Early user engagement

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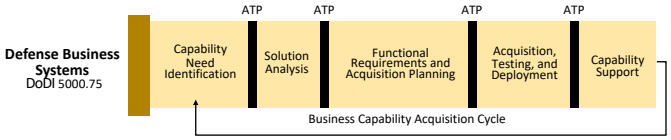
Defense Business Systems 5000.75



Product support involves determining relationships between the OEM and product support integrators and providers, as OEMs push product upgrades and the gov't ensures cybersecurity remains valid

Purpose

To acquire information systems that support DoD business operations, or non-developmental, software intensive programs that are not business systems

Characteristics

- Assesses the business environment and identifies existing commercial or government solutions that could be adopted to satisfy DoD needs
- DoD reviews and revises its business processes 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 off-the-shelf software that has been successfully demonstrated in the commercial marketplace

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Acquisition of Services 5000.74

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

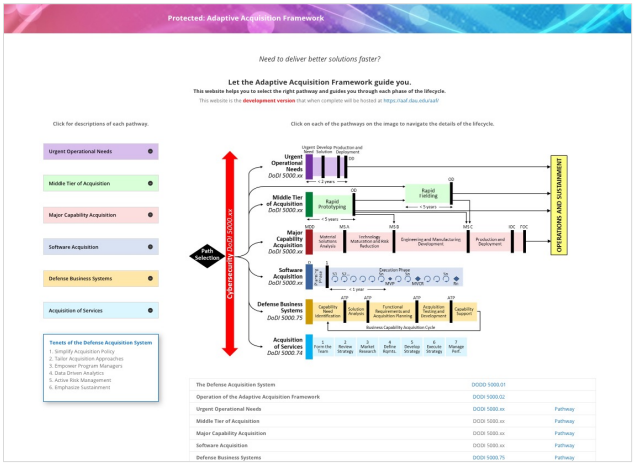
Purpose

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

- Identify the required services, research the potential contractors, contract for the services, and manage performance
- The pathway employs a seven-step process that is broken down into three phases: planning, developing, and executing
- Seven steps should be used to the maximum extent possible to ensure the use of proven, repeatable processes and procedures contributing to successful services acquisitions

Adaptive Acquisition Framework Website



Integrates all the new policies, guides, and resources online for the acquisition workforce

WHAT is required

HOW to do each activity

Navigate the pathways with greater speed and success!

https:// aaf.dau.edu/

The Adaptive Acquisition Framework and the Digital Engineering Path Forward.

- Integrating technology into acquisition practices
- Identifying and leveraging commercial best practices
- Leveraging commercial standards
- Keeping an eye on life cycle sustainment

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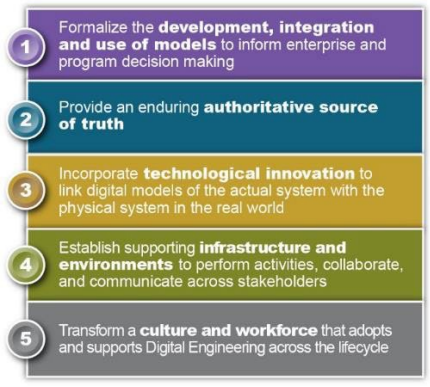
Digital Engineering Strategy: What, not How



Describes an integrated digital approach that uses authoritative sources of systems' data and models as a continuum across disciplines to support life cycle activities from concept through disposal

Layman's terms: combine standard representations of 'system', with computers, additional computational techniques as a continuous, complete and evolving ecosystem to provide data for data-informed decisions and interactive visualizations to a continuum of questions

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GOAL 1

Formalize the development, integration, and use of models to inform enterprise decision making

Focus Areas:

1. Formalize the planning for models to support engineering activities and decision making across the lifecycle
2. Formally develop, integrate, and curate models
3. Use models to support engineering activities and decision making across the lifecycle

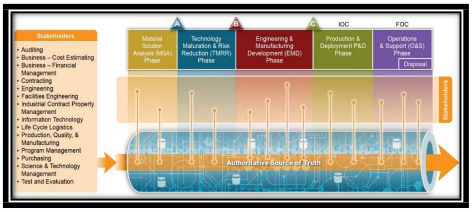
Key Implementation Updates

Infusion in Policy & Guidance
- DoDI 5000.02, Enclosure 3, Section 9: Modeling and Simulation
- Model Based FMECA DID
- DoDI 5000.61, DoD M&S VV&A

Other Efforts
- INCOSE Digital Engineering Information Exchange Working group (DEIXWG)
- USN Common Modeling Approach

GOAL 2

Provide an enduring authoritative source of truth



Focus Areas:

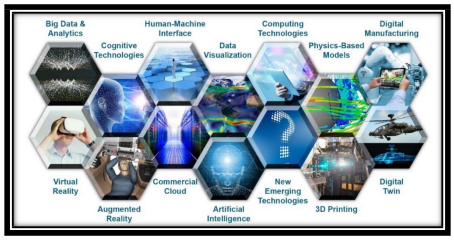
1. Plan and develop the authoritative source of truth
2. Govern the authoritative source of truth
3. Use the authoritative source of truth across the lifecycle

Key Implementation Updates

- Infusion in Policy and Guidance (see previous slide)
- INCOSE Digital Engineering Information Exchange Working group (DEIXWG)
- OSD and Service Government Reference Architecture (GRA) and Mission Thread coordination and development
- Service Digital Models and Digital Twin Efforts

GOAL 3

Incorporate technological innovation to improve the engineering practice



Focus Areas:

1. Establish an end-to-end digital engineering enterprise
2. Use technological innovations to improve the digital engineering practice

Key Implementation Updates

- USAF Digital Campaign
- USN Digital Transformation
- Army Digital Transformation
- Cutting-Edge Digital Engineering Tools Across the Workforce (ex. PLM tools, ADVANA, CAMEO, Satellite Tool Kit (STK), ModelCenter

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GOAL 4

Establish a supporting infrastructure and environments to perform activities, collaborate, and communicate across stakeholders

Focus Areas:

1. Develop, mature and use digital engineering IT infrastructures
2. Develop, mature, and use digital engineering methodologies
3. Secure IT infrastructure and protect intellectual property

Key Implementation Updates

- USAF Digital Campaign
- USN Digital Transformation
- Army Digital Transformation and “Cloud Smart” approach
- Cloud Hosting Services and Platforms (ex. Cloud One, High Performance Computing Modernization Program (HPCMP), AF Digital Engineering Environment Sandbox, Navy Integrated Modeling Environment)

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GOAL 5

Transform the culture and workforce to adopt and support digital engineering across the lifecycle

Focus Areas

1. Improve the digital engineering knowledge base
2. Lead and support digital engineering transformation efforts
3. Build and prepare the workforce

Key Implementation Updates

- Digital Engineering Body of Knowledge (DEBoK) Vision
- USAF Digital Guide
- USN MBSE Guidebook
- Service Workforce Training

Digital Engineering Way Ahead

Collaborators/Partnerships

Strategy & Service Plans

Outlines DoD's five strategic goals for Digital Engineering initiatives

Service Implementation Plans

Next Steps

- Digital Engineering Policy
- Regular updates of Services Digital Engineering Implementation at quarterly DEWG-COP meetings
- Service, Industry, Academic, and Standards organization collaborations to further the Digital Engineering implementations
- INCOSE/NDIA Digital Engineering Information Exchange Working Group to advance concepts
- Research areas initiating in curation, credibility, and metrics

Implementing Digital Engineering Across the Department

Discussion / Questions?