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Research, Development, and Acquisition

Army Operation of the Adaptive Acquisition Framework

By Order of the Secretary of the Army:

RANDY A. GEORGE General, United States Army Chief of Staff Official:

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Administrative Assistant to the Secretary of the Army

History. This publication is a mandated revision. The portions affected by this revision are listed in the summary of change.

Authorities. The authorities for this regulation are 10 USC 4271, DoDD 5000.01, DoDD 5105.84, DoDI 5000.02, DoDI 5000.73, DoDI 5000.74, DoDI 5000.75, DoDI 5000.80, DoDI 5000.81, DoDI 5000.82, DoDI 5000.83, DoDI 5000.85, DoDI 5000.87, DoDI 5000.88, DoDI 5000.89, DoDI 5000.90, DoDI 5000.91, DoDI 5000.95, and DoDI 5010.44.

Applicability. This regulation applies to the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated.

Proponent and exception authority. The proponent of this regulation is the Assistant Secretary of the Army (Acquisition, Logistics and Technology). The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25–30 for specific requirements.

Army internal control process. This regulation contains internal control provisions in accordance with AR 11–2 and identifies key internal controls that must be evaluated (see appendixes C and D).

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Assistant Secretary of the Army (Acquisition, Logistics and Technology) (SAAL–ZF), 103 Army Pentagon, 2D516, Washington, DC 20310–0103 or usarmy.pentagon.hqda-asa-alt.mesg.asa-alt-publication-updates@army.mil.

Committee management approval. AR 15–39 requires the proponent to justify establishing/continuing committee(s), coordinate draft publications, and coordinate changes in committee status with the Office of the Administrative Assistant to the Secretary of the Army, Special Programs Directorate at email usarmy.pentagon.hqda-hsa.mbx.committee-management@army.mil. Further, if it is determined that an established "group" identified within this regulation later takes on the characteristics of a committee as found in AR 15–39, then the proponent will follow AR 15–39 requirements for establishing and continuing the group as a committee.

Distribution. This regulation is available in electronic media only and is intended for the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

SUMMARY of CHANGE

AR 70–1 Army Operation of the Adaptive Acquisition Framework

This mandated revision, dated 28 November 2023—

- Changes the name of the regulation from Army Acquisition Policy to Army Operation of the Adaptive Acquisition Framework (cover).
- Incorporates Army Directive 2019–29 (Enabling Readiness and Modernization through Advanced Manufacturing) (para 12–5).
- Incorporates Army Directive 2018–26 (Enabling Modernization Through the Management of Intellectual Property) (chap 13).
- Incorporates Army Directive 2022-07 (Army Modernization Roles and Responsibilities) (throughout).
- Incorporates Army Directive 2021–35 (Roles and Responsibilities for Program Objective Memorandum Program Evaluation Groups) (throughout).
- Incorporates changes resulting from the implementation of the Adaptive Acquisition Framework. (throughout).

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Chapter 1 Introduction

Section I

General

1-1. Purpose

This regulation establishes policy, assigns responsibilities, and implements the Department of Defense (DoD) Adaptive Acquisition Framework (AAF) as described in Department of Defense Directive (DoDD) 5000.01, Department of Defense Instruction (DoDI) 5000.02, and the various DoDDs, DoDIs, and other DoD policy publications associated with each AAF pathway for Army-managed acquisition programs. This publication applies to all Army-managed acquisition programs, including national security systems (NSS) and acquisition special access programs (unless specifically excepted by a program charter) (see chap 2). The Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA (ALT)) Systems Special Programs Directorate serves as the Army focal point for all highly sensitive, classified program acquisition matters. The following items are excluded from the purview of this regulation:

- a. Materiel requirements for the U.S. Army Civil Works Program, except for information technology (IT).
 - b. Functional medical clothing and equipment listed in the common tables of allowances (CTA) 8–100.
- *c.* Distinctive articles of clothing and insignia worn and used by the U.S. Corps of Cadets at the U.S. Military Academy.
 - d. Centrally procured heraldic items in the initial and supplemental clothing allowances in CTA 50–900.
- e. Other items excluded as directed by the proponent of this publication after proper Army Secretariat and Army Staff (ARSTAF) coordination; for example, medical material for fixed installation medical facilities and information systems managed in accordance with policy contained in the latest versions of publications including AR 40–60, AR 40–61, and AR 25–1.

1-2. References, forms, and explanation of abbreviations

See appendix A. The abbreviations, brevity codes, and acronyms (ABCAs) used in this electronic publication are defined when you hover over them. All ABCAs are listed in the ABCA directory located at https://armypubs.army.mil/.

1-3. Associated publications

This section contains no entries.

1-4. Responsibilities

Responsibilities are listed in section II of chapter 1.

1-5. Records management (recordkeeping) requirements

The records management requirement for all record numbers, associated forms, and reports required by this publication are addressed in the Records Retention Schedule-Army (RRS–A) and/or the Army Records Disposition Schedule. Detailed information for all related record numbers, forms, and reports are located in Army Records Information Management System (ARIMS)/RRS–A, see DA Pam 25–403 for guidance.

Section II

Responsibilities

1-6. The Secretary of the Army

The SECARMY will execute specific responsibilities in connection with major defense acquisition programs (MDAPs), including—

a. Balancing resources against priorities for acquisition programs and ensuring that appropriate tradeoffs are made among cost, schedule, technical feasibility, and performance on a continuing basis throughout the life of acquisition programs in accordance with 10 USC 3102.

- b. Concurring that appropriate cost, schedule, technical feasibility, and performance tradeoffs have been made prior to Milestone A and B decisions in accordance with 10 USC 4251 and 10 USC 4252.
- c. Certifying in each selected acquisition report (SAR) required under 10 USC 4351 that program requirements are stable and funding is adequate to meet cost, schedule, and performance objectives for the program, and identifying and reporting to the congressional defense committees any increased risk to the program since the last report.
- d. Ensuring the program capability document supporting a Milestone B or subsequent decision for a major defense acquisition program is not approved until the Chief of Staff, Army determines in writing that the requirements in the document are necessary and realistic in relation to the program cost and fielding targets established under 10 USC 4271(a).

1-7. Chief of Staff, Army

The CSA will—

- a. Pursuant to 10 USC 3104(a), the CSA will assist the SECARMY as directed in the performance of the following acquisition-related functions, including—
- (1) The development of requirements for equipping the Army (subject, where appropriate, to validation by the Joint Requirements Oversight Council (JROC) pursuant to 10 USC 181).
- (2) Decisions regarding the balancing of resources and priorities, and associated tradeoffs among cost, schedule, technical feasibility, and performance.
 - (3) The coordination of measures to control requirements creep in programs in the acquisition system.
- (4) The recommendation of trade-offs among life cycle cost, schedule, and performance objectives, and procurement quantity objectives, to ensure acquisition programs deliver best value in meeting the approved military requirements.
- (5) Termination of development of programs for which life cycle cost, schedule, and performance expectations are no longer consistent with approved military requirements and levels of priority, or which no longer have approved military requirements.
- (6) The development and management of acquisition career paths for military personnel (as required by 10 USC 1722a).
- (7) The assignment and training of contracting officer representatives when such representatives are required to be members of the Armed Forces because of the nature of the contract concerned.
 - b. Pursuant to 10 USC 3104(b) in connection with MDAPs, the CSA will-
- (1) Determine in writing that the requirements in the program capability document supporting a Milestone B or subsequent decision are necessary and realistic in relation to program cost and fielding targets established under 10 USC 4271.
- (2) Concur with the need for a materiel solution as identified in the materiel development decision (MDD) review prior to entry into the materiel solution analysis phase under DoDI 5000.02.
- (3) Concur with the cost, schedule, technical feasibility, and performance trade-offs that have been made with regard to the program before Milestone A approval is granted under 10 USC 4251.
- (4) Concur that appropriate tradeoffs among cost, schedule, technical feasibility, and performance objectives have been made to ensure that the program is affordable when considering the per unit cost and the total life cycle cost before Milestone B approval is granted under 10 USC 4252.
- (5) Concur that the requirements in the program capability document are necessary and realistic in relation to program cost and fielding targets as required by 10 USC 3104(a) before Milestone C approval is granted.

1-8. Assistant Secretary of the Army (Acquisition, Logistics and Technology)

The ASA (ALT) is the principal advisor to the SECARMY on all matters relating to acquisitions and is responsible for the overall supervision, strategic direction, and oversight of acquisition, logistics, and technology IAW 10 USC 7016 matters of the DA and management of the Army Acquisition System. The ASA (ALT)—

- a. As designated by the SECARMY, serves as the Army Acquisition Executive (AEE), Senior-Procurement Executive, senior official responsible for the management of acquisition of service contracts, science advisor to the SECARMY, and senior research and development official for DA.
- b. Develops and oversees DA policies, plans, and programs related to acquisitions, including research and development, procurement, and intellectual property (IP), technical data and computer software management..

- c. Oversees the Office of the ASA(ALT), which is designated the single office within Headquarters, Department of the Army (HQDA) for the acquisition and research and development functions.
- d. Oversees Army research and development, including science and technology (S&T) efforts and associated resourcing decisions.
- e. Assists the SECARMY and CSA in the execution of their acquisition-related duties and responsibilities in connection with MDAPs. This includes ensuring the SECARMY and the CSA concur with the cost, schedule, technical feasibility, and performance trade-offs that have been made as part of the milestone decision authority's (MDA's) written determination before Milestone A and certification and determination before Milestone B.
- f. As co-chair of the Equipping Program Evaluation Group (EE PEG) with the Deputy Chief of Staff (DCS), G–8, jointly—
 - (1) Recommends to the SECARMY the EE PEG portion of the budget submission.
 - (2) Conducts program reviews before submission of the program objective memorandum (POM).
 - g. As co-chair of the Sustaining Program Evaluation Group (SS PEG) with the DCS, G-4, jointly—
 - (1) Recommends to the SECARMY the SS PEG portion of the budget submission.
 - (2) Conducts project reviews before submission of the POM.
- h. As the AAE, carries out all authorities, functions, and duties of the SECARMY with respect to the acquisition workforce. This includes appointing, managing, and evaluating program executive officers (PEOs); direct reporting program managers (DRPMs), and program, project, and product managers (PMs) (see chap 3). In addition, the AAE approves the acquisition Centralized Selection List and Key Billet Selection Board results and subsequent assignments (not further delegable).
- *i.* For all Army-managed programs, the AAE is the sole authority for initiation (unless delegated) and termination.
 - j. Chairs Army Systems Acquisition Review Councils (ASARCs).
 - k. Authorizes and ensures PEOs and DRPMs, on behalf of the ASA (ALT)—
 - (1) Oversee assigned program portfolios.
 - (2) Supervise and evaluate their assigned PMs and materiel developers (MATDEVs).
- (3) Confirm compliance with statutory and regulatory requirements consistent with designated acquisition categories (ACATs) or equivalent AAF acquisition pathway category designations (see app D for assigning ACAT equivalency to non-major capability acquisition (MCA) pathway programs).
- (4) Ensure their assigned PMs and MATDEVs appropriately tailor regulatory requirements and obtain milestone decision authority/decision authority (MDA/DA) approval.
- (5) For non-MDAP level efforts for which the AAE has approved program initiation and elects to delegate MDA/DA, act as the approval authority for tailoring program information requirements.
- (6) Exercise delegations of authority consistent with the applicable AAF acquisition pathway and serve as MDA/DA when the AAE delegates those authorities.
- I. Designates the Deputy Assistant Secretary of the Army for Research and Technology (DASA (R&T)) as the Army Science and Technology Executive. On behalf of the ASA (ALT), the Army Science and Technology Executive—
- (1) Oversees Army S&T research activities, including the Technology Maturation Initiative, the Army Manufacturing Technology program, and technical information activities.
- (2) Serves as the Army's S&T representative to the Under Secretary of Defense for Research and Engineering (USD (R&E)) and all DoD and non-DoD partners.
- (3) Develops an overarching Army S&T Strategy, informed by the DCS, G-3/5/7 Threat-Based Strategy.
- (4) In coordination with the CG, U.S. Army Futures Command (AFC); Director, Space & Missile Defense Command (SMDC) Technical Center; Director, U.S. Army Engineer Research and Development Center (ERDC); and Director U.S. Army Research Institute (ARI) for the Behavioral and Social Sciences, conducts comprehensive S&T portfolio and program reviews in support of the POM.
- (5) Oversees the Technology Maturation Initiative Board to ensure the seamless development of maturing capabilities at key points in a capability's developmental life cycle.
- (6) Establishes the Army Science Conference. The conference will serve as a venue to promote the collaboration of S&T knowledge across the Army, the DoD, industry, academia, and international allies.

1-9. Assistant Secretary of the Army (Financial Management and Comptroller)

The ASA (FM&C) will approve the Army cost position (ACP) for MDAPs pursuing the MCA pathway and other MCA programs where the AAE is the MDA/DA. The ASA (FM&C) through the Deputy Assistant Secretary of the Army for Cost and Economics (DASA–CE) will—

- a. Approve the Army cost estimate for major non-MCA programs and other non-MCA programs where the AAE is the MDA/DA.
- b. Provide cost and economic analysis support to the Army Planning, Programming, Budgeting, and Execution (PPBE), affordability goals and caps, and other Army decision-making processes.
- c. Develop statutory independent cost estimates and component cost analyses in accordance with Army and DoD policies and procedures and chair the Army Cost Review Board (CRB).
- d. Serve as the Army's focal point and approval authority for cost reporting, serve as the proponent and approval authority for cost benefit analyses, and establish cost estimating and cost analysis policies and procedures for the Army.
- e. Oversee and manage historical operations and support cost data input to the Army's tool to support the Visibility and Management of Operating and Support Costs initiative in accordance with DoDI 5000.73.
- f. Develop and implement financial management policies and procedures that consider environmental severity classification when allocating resources for acquisition and sustainment of military equipment.

1–10. Assistant Secretary of the Army (Installations, Energy and Environment) The ASA (IE&E) will—

- a. Maintain the Environmental Support Office (ESO) and, in coordination with ASA (ALT), ensure it provides direct support to the Army acquisition community's statutory and regulatory compliance efforts.
- b. Provide environment, safety, and occupational health (ESOH), installation and energy, and sustainability recommendations during acquisition reviews.
- c. Provide technical support to ASA (FM&C) for the development and validation of energy, sustainability, and environmental quality life cycle cost estimates as part of the Army cost review process.
- d. In coordination with the ASA (ALT), ensure that environmental, safety, occupational health, energy and water risk, renewable energy, sustainability, operational energy, installation management, and contingency basing considerations are appropriately addressed by materiel developers, integrated into acquisition program planning and documentation, and addressed during milestone decision reviews.
- e. Ensure compliance with environmental statutory and regulatory requirements impacting operation and support of Army capabilities throughout the life cycle.

1-11. Chief Information Officer

The CIO is responsible for certifying and recording compliance of all Army programs that acquire information technology, including NSS, with the requirements of the Clinger Cohen Act (40 USC, Subtitle III).

1-12. Deputy Chief of Staff, G-1

The DCS, G-1 will provide advice on as well as plan and supervise the execution of Army human systems integration (HSI) program policy and guidance and has primary staff responsibility for HSI assessments and HSI domain assessments.

1-13. Deputy Chief of Staff, G-2

The DCS, G–2 will support the systems acquisition process for intelligence, counterintelligence, and security; in support of Army Cyber Acquisition Discipline (ACAD) policy, integrates tailored intelligence products and support based on the requirements of the acquisition pathway; and has ARSTAF responsibility for threat briefs and Validated Online Life cycle Threat to support the AAF decision process, as appropriate (see AR 381–11, AR 70–77, and DoDI-O 5240.24).

1-14. Deputy Chief of Staff, G-3/5/7

The $G-3/\overline{5}/7$ is the Army's lead integrator and synchronizer across force modernization time horizons. The DCS, G-3/5/7 will—

a. Capture and manage force modernization activities and decisions in the Army Campaign Plan and track these activities and decisions in execution through the Army Synchronization Meeting.

- b. Conduct force integration analyses to assess supportability and affordability for structure, manpower, equipment, fiscal resources, facilities, and training.
- c. Serve as ARSTAF lead for system and non-system training aids, devices, simulators, and simulations (TADSS).
- d. Pursuant to AR 71–9, retain overall responsibility for the Army's urgent operational need (UON) process.

1-15. Deputy Chief of Staff, G-4

The DCS, G-4 will-

- a. Advise ASA (ALT) on Army acquisition logistics and sustainment issues.
- b. Pursuant to AR 1-1, serve as co-chair of the SS PEG with the ASA(ALT).

1-16. Deputy Chief of Staff, G-8

The DCS, G–8 is the Army's lead for matching available resources to the defense strategy and the Army plan by leading the Army's planning, development, and resourcing of programs to balance current force needs with Army capabilities. The DCS, G–8 will—

- a. Pursuant to AR 1–1, serve as co-chair of the EE PEG with ASA(ALT).
- b. Coordinate with ASA (ALT) on all proposed programming and process recommendations related to ongoing and future acquisition programs and S&T initiatives.
- c. Manage and lead the Army Requirements Oversight Council (AROC) process, which is used to validate, approve, and prioritize materiel capabilities (to include information systems categorized as NSS).
- d. In coordination with the ASA (ALT), establish policy and guidance for conducting the analysis of alternatives (AOA).
- e. Determine the Army's approaches for streamlining the process for determining warfighting capabilities. to include—
 - (1) Establishing procedures for documenting and approving directed requirement (DR) solutions.
- (2) Establishing procedures for documenting and approving organizational clothing and individual equipment (OCIE).
- f. Provide the Army's affordability analysis and proposed affordability goals, and demonstrate the program will be fully funded within the Future Years Defense Plan in accordance with AAF pathway-specific guidance in DoDI 5000.73.
- g. Present affordability analysis and affordability goals and affordability caps for unit production and sustainment costs at AAF acquisition pathway reviews.
- h. Establish cost targets in support of the AOA (or equivalent analyses of potential solutions for programs that do not use AOAs) for all AAF program categories.

1–17. The Surgeon General

TSG provides technical advice and assistance to the ASA (ALT) on medical matters, environmental health, and health hazard issues during systems acquisition.

1-18. Test and Evaluation Executive

The T&E Executive will—

- a. Oversee all Army T&E missions and functions, to include formulating overarching Army T&E strategy, policy oversight and managing resources.
- b. When required, approve test-related documentation (for example, test and evaluation master plans (TEMPs)) for HQDA and forward to OSD for approval.
- c. Coordinate and facilitate communication with OSD on all overarching T&E strategy, policy, program oversight, and resource matters.
 - d. Serve as HQDA coordination agent for all T&E policy, resource programming, and related tasks.
- e. Develop policy and guidance on the use of accelerated corrosion testing of full systems, subsystems, and components and maintain capability for accelerated corrosion testing of Army equipment as part of an effective Army corrosion prevention and control (CPC) program in coordination with the Army Corrosion Control and Prevention Executive.
 - f. Serve as the Army Acquisition Functional Leader for T&E.

1-19. Capability developers

Army capability developers (CAPDEVs) develop operational and support concepts; develop doctrine, organization, and force structures; and determine materiel, non-materiel, and software capability requirements for equipping these force structures. As user representatives, CAPDEVs ensure that materiel, non-materiel, and software developmental efforts address user requirements. To ensure that acquisition programs fulfill the needs of the user, CAPDEVs will—

- a. Determine the necessary doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF–P) requirements to support the future force and modernize the Army in accordance with the Army's modernization priorities.
- b. Prepare, staff, review, validate, and approve Army capability requirement documents in accordance with Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 5123.01I and AR 71–9.
 - c. Present alternative sources of analysis where there is no AOA.
- d. In conformance with requirements prescribed in DoDI 5000.91 and AR 700–127, develop an initial life cycle sustainment plan (LCSP) to be transferred to the MATDEV consistent with the approved AAF acquisition pathway.
- e. The U.S. Army Intelligence and Security Command performs the role of CAPDEV for intelligence, biometric, signals intelligence, and electromagnetic warfare systems and will provide counterintelligence support to Army acquisition programs, and MATDEVs.

1-20. Materiel developers

Army MATDEVs acquire or develop materiel solutions to meet capability requirements. Army MATDEVs follow DoD and Army acquisition procedures and direction from the Army acquisition chain of command, unless otherwise directed by the AAE or Defense Acquisition Executive (DAE).

1-21. Materiel commands

Materiel commands will provide functional support and assist MATDEVs in planning, developing, acquiring, and sustaining well-defined, affordable, performance-based product support strategies that meet requirements for Army materiel and software throughout the life cycle of all acquisition programs. Materiel commands include the USAMC and the U.S. Army Corps of Engineers (USACE).

- a. Materiel commands and the U.S. Army Combat Capabilities Development Command (DEVCOM) will provide the ASA (ALT) and its PEOs and PMs development support, support during all phases of the system's life cycle, and integrated system sustainment execution. Support will include development, engineering, logistics, contracting, procurement analysis, production, materiel release, workforce, and other support services as required (for example, verifying a depot's readiness before it assumes responsibility of sustainment level maintenance for weapon systems that were initially interim and now designated as long-term solutions).
- b. Refer to DoDI 5000.91, AR 700–127, AR 770–3, and AR 10–87 for additional policy requirements and specified responsibilities to be used in conjunction with this regulation.

1-22. Commanding generals of Army commands

- a. Commanding General, U.S. Army Futures Command. The CG, AFC is responsible for force design and force development, and is the capabilities developer and operational architect for the future Army. The CG, AFC assesses and integrates the future operational environment, emerging threats, and technologies to develop and deliver concepts, desired characteristics, requirements, and conceptual force designs. The CG, AFC—
 - (1) Serves as Designated Advisor to the EE PEG.
- (2) Is responsible for operation of the research laboratories and centers within the DEVCOM, the Army Artificial Intelligence & Integration Center, and the Army Applications Laboratory.
- (3) Ensures the AFC establishes an annual, Government-only Technology Symposium to promote threat-based, information exchange between S&T Principal Investigators and engagement with the Intelligence Community.
- b. Commanding General, U.S. Army Forces Command. The CG, FORSCOM helps to identify the evolving training, equipment, and other support needs required by Army forces. The CG, FORSCOM also helps to facilitate Soldier and unit feedback throughout the acquisition process, ensuring that requirements and capabilities are informed by the user. Refer to AR 10–87 for an overview of FORSCOM mission, functions, and command and staff relationships.

- c. Commanding General, U.S. Army Training and Doctrine Command. The CG, TRADOC will through the Combined Arms Center and Centers of Excellence, support AFC in force development. Refer to AR 10–87 for an overview of TRADOC mission, functions, and command and staff relationships.
- d. Commanding General, U.S. Army Materiel Command. The CG, USAMC is responsible for the delivery of logistics, sustainment, and materiel readiness from the Strategic Support Area to the Forward Tactical Edge to ensure globally dominant land force capabilities. The CG, USAMC will ensure that sustainment and logistics issues related to acquisition programs are addressed throughout the acquisition life cycle. The CG, USAMC is responsible for operating the Army's organic industrial base. Refer to AR 10–87 for an overview of USAMC mission, functions, and command and staff relationships. In addition, the CG, USAMC—
- (1) Provides functional matrix support to PEOs and PMs in the provision of life cycle sustainment of programs of record (PORs) and in the provision of integrated material life cycle management of systems and equipment.
 - (2) Serves as Designated Advisor to the SS PEG.
- (3) Is responsible for the logistics and installation support of assigned materiel in response to approved requirements.
- (4) Supports PEOs and PMs by overseeing the USAMC life cycle management commands' development and submission of sustainment funding requirements during the Army's PPBE activities.
 - (5) Serves as a stakeholder member on acquisition program reviews.
- (6) Collaborates with the Army Corrosion Control and Prevention Executive, PEOs, and PMs to establish teams of CPC experts to provide engineering support and interact with PM engineering personnel, to include participation on Corrosion Prevention Advisory Teams, on-site assistance, development of a Risk Based Approach to corrosion planning in accordance with AR 11–42, CPC consideration in the LCSP, SEP (systems engineering plan), and TEMP or other support as needed.
 - e. Commanding General, U.S. Army Test and Evaluation Command. The ATEC will-
- (1) Serve as the Army's independent OTA, and lead test organization, unless otherwise specified in the T&E strategy document for a system.
- (2) Plan, integrate, and conduct experiments, DTs, independent OTs, and independent evaluations and assessments
 - (3) Review and endorse T&E strategies for assigned materiel programs.

Chapter 2 Adaptive Acquisition

Section I

Relationship of Army Capability Requirements and Budgeting Processes to the Army Acquisition System

2-1. Relationship summary

Acquisition, requirements, and budgeting are closely related and must operate simultaneously and in close coordination. Validated capability requirements provide the basis for defining the capabilities that will be acquired through the Army acquisition system. The Army budgeting process determines Army fiscal priorities and resource allocations and provides the funds necessary to execute planned programs. Adjustments may have to be made during a program's life cycle to keep the three processes aligned to ensure programs are executable and adapt to evolving circumstances.

2–2. Army warfighting capability requirements

The overall Army approval authority for Army warfighting capability requirements is the CSA, unless delegated to the Vice Chief of Staff, Army (VCSA) or CG, AFC. AR 71–9 establishes Army policy and assigns responsibilities for the identification, determination, and integration of required Army warfighting capabilities; implements, where applicable, the Joint Capabilities Integration and Development System (JCIDS) (detailed in the most current version of CJCSI 5123.01I); and implements the associated guidance in the DoDD 5000.01, and DoDI 5000-Series of instructions. Refer to these references for details and additional information on the Army's warfighting capability requirements process.

2-3. Army budgeting process

The ASA (FM&C) oversees the Army PPBE process and develops and issues Armywide PPBE policy. The Army PPBE process is a component of the DoD PPBE process governed by DoDD 7045.14 and is prescribed in AR 1–1. Refer to DoDD 7045.14 and AR 1–1 for details on PPBE process requirements and additional information.

2-4. Army Acquisition System

DoDI 5000.02, related DoDDs, DoDIs, and other DoD policy publications associated with each AAF pathway, and as cited in this publication, describe the DoD AAF and DoD and Army materiel acquisition systems. The Army acquisition workforce is responsible for delivering effective, secure, supportable, and affordable solutions to the end users' warfighting capabilities requirements within the resources available.

Section II

Adaptive Acquisition

2-5. General

Army personnel involved in research, development, and acquisition (RDA) processes will apply the overarching management principles and mandatory policies that govern the Defense Acquisition System (described in DoDD 5000.01, DoDI 5000.02, and other DoDDs, DoDIs, and DoD policy publications) to all Army-managed acquisition programs. Army personnel involved in the acquisition process will maintain awareness of, and are responsible for, complying with new statutes and higher-level direction related to acquisition program management, even if not incorporated into DoD or DA issuances. Streamlining and tailoring, consistent with statutory requirements, are authorized and encouraged to enable the Army to achieve program objectives, eliminate bureaucracy, and address the unique aspects of the Army acquisition structure, organizations, functions, roles, and missions.

2–6. Adaptive Acquisition Framework and relationship to Department of Defense 5000-series instructions

The AAF is a set of acquisition pathways that enable the workforce to tailor strategies to deliver better solutions faster (see paras 2–7 through 2–12).

- a. Establishing the Adaptive Acquisition Framework. DoDI 5000.02 lays the groundwork for operation of the AAF by establishing policy and prescribing procedures for managing acquisition programs. DoDI 5000.02 assigns acquisition program management responsibilities in accordance with the authority in DoDD 5000.01 and DoDD 5135.02, prescribes the responsibilities of principal acquisition officials, describes the purpose and key characteristics of the AAF acquisition pathways, and restructures Defense acquisition guidance to improve process effectiveness and implement the AAF. This publication and its companion publication, DA Pam 70–3, are intended to be consistent with AAF policy and procedures. Should either publication conflict with the most current OSD or Army AAF policy issuance (for example, a new or revised DoDD or DoDI, or Army General Order, an Army Directive), the latest version of the policy issuance takes precedence.
 - b. Principles of the Adaptive Acquisition Framework. The tenets of the AAF are to—
 - (1) Simplify acquisition policy.
 - (2) Empower PMs.
 - (3) Support and utilize data driven analytics.
 - (4) Employ active risk management.
 - (5) Emphasize sustainment and program protection early in the acquisition life cycle.
- (6) Tailor acquisition approaches. Decision authorities are empowered to tailor program strategies and oversight by phasing the content, timing, and scope of decision reviews and decision levels based on the unique characteristics of the capability being acquired, including complexity, risk, and urgency.
- c. Adaptive acquisition pathways. There are six pathways within the AAF. Additional information on the pathways, decision points and phases (or equivalents), information requirements, and other criteria are identified in DoDI 5000.02 and with more specificity in the DoDI that corresponds to each AAF acquisition pathway as follows:
 - (1) For urgent capability acquisition (UCA), DoDI 5000.81 and paragraph 2-7 of this regulation.
 - (2) For middle tier of acquisition (MTA), DoDI 5000.80 and paragraph 2–8 of this regulation.

- (3) For MCA, DoDI 5000.85 and paragraph 2–9 of this regulation.
- (4) For software acquisition, DoDI 5000.87 and paragraph 2–10 of this regulation.
- (5) For Defense business systems (DBS), DoDI 5000.75 and paragraph 2–11 of this regulation.
- (6) For acquisition of services, DoDI 5000.74 and paragraph 2–12 of this regulation.
- (7) Additional details and active links to overarching policies, functional policies, Service and agency policies, and acquisition guides for each AAF pathway can be found at https://aaf.dau.edu.
- d. Selection of pathway. The AAE approves the pathway for every Army acquisition program (unless responsibility is delegated).
- e. Use of multiple pathways. PMs may leverage a combination of acquisition pathways to provide value not otherwise available through use of a single pathway.
- (1) The AAE must approve changing the pathway for an entire program as well as the use of a new pathway to manage a portion of a program.
- (2) If use of multiple pathways is approved by the AAE, the Army acquisition personnel working with the program must comply with statutory and regulatory reporting, documentation, and oversight rules for each pathway selected. This can result in the PM for one program submitting two (or more) sets of reports, having two (or more) cost positions and having more than one oversight organization.
- (3) Programs with approval to pursue more than one pathway must have one distinct program record in the Program Management Resource Tools (PMRT) software for every pathway being pursued. Additionally, every individual urgent requirement is treated as a separate program. For example, if one program is responding to three different urgent needs, then there should be four PMRT program records: one for the primary program and one for each urgent requirement.
- (4) The use of multiple pathways does not affect the application of statutory thresholds otherwise applicable to the program, such as the MDAP or major system thresholds, unless a statute permits. A general listing of statutory and regulatory requirements associated with each of the pathways is located in the Adaptive Acquisition Framework Document Identification (AAFDID) available at https://www.dau.edu/aafdid/pages/about.aspx. MATDEVs are reminded to ensure that the information in the AAFDID reflects the most current statutory, OSD, or Army AAF policy. Should the AAFDID conflict with the most current statute, OSD, or Army AAF policy issuance, the latest version takes precedence.
- (5) Contact the Deputy for Acquisition and Systems Management's (DASM's) Acquisition Reporting and Management (ARM) team for guidance on recording and managing multiple pathways.

2-7. Urgent capability acquisition

- a. Purpose. The UCA pathway is intended to provide soldiers involved in conflict or preparing for imminent contingency operations with rapidly fielded capabilities needed to respond to threats, achieve mission success, and reduce risk of casualties. Due to operational urgency, normal processes are aggressively streamlined. This includes acquisition, product support, program protection, and sustainment processes, reviews, and documentation requirements. The objective of the UCA pathway is to field capabilities to fulfill UONs and other quick reaction capabilities in less than 2 years. Additional information can be found at https://aaf.dau.edu.
- b. Governing documents. DoDD 5000.71, DoDI 5000.81, Department of Defense Manual (DoDM) 5000.78, and AR 71–9 establish policies and procedures for UONs and other quick reaction capabilities. See DoDI 5000.81 for a description of the main activities and decision points associated with the UCA pathway.
- c. Cost limitations. The estimated cost of any single solution must not exceed \$525 million for research, development, test and evaluation (RDT&E) or \$3.065 billion procurement in fiscal year (FY) 2020 constant dollars.
- d. Pathway decision points and phases. DoDI 5000.81 details the main activities associated with UCAs: pre-development, development, production and deployment, and operations and support. Additional information on the UCA pathway can be found at https://aaf.dau.edu.
 - e. Policy.
- (1) Approval authorities for Army UONs, including their validation, program execution, and the designation of the MDA/DA, reside within the Army. AR 71–9 establishes policies and assigns responsibilities for the identification, determination, and integration of required warfighting capabilities, the validation and approval of capabilities supporting deliberate force modernization planning, and the urgent and emergent needs of operational commanders.

- (2) Army MDAs/DAs will determine procedures for fulfilling urgent needs for a non-standard or unprogrammed capability to correct a deficiency or improve a capability that enhances mission accomplishment. Subject to statutes and regulation, UCA processes will be optimized for speed and accept reasonable risk with regard to cost, performance, and other DOTMLPF-P considerations. Actions will be taken swiftly, and senior leaders will ensure that staffing processes do not inordinately delay the fielding of critical capabilities.
- (3) For urgent capability requirements that can be fielded in less than 2 years, are below cost thresholds in paragraph 2–7c, and receive an office of primary responsibility (OPR) assignment in accordance with paragraph 2–13 of this regulation, the assigned PEO may be delegated MDA/DA upon initiation of predevelopment activities, unless the AAE elects to retain MDA/DA. The MDA/DA will—
 - (a) Execute and manage the assigned program consistent with applicable statutes and regulations.
- (b) Beginning with the course of action decision (see DoDI 5000.81), provide copies of all acquisition decision memorandums (ADMs) to the ASA (ALT) Director of ARM.
 - (c) Provide an annual report on cost, schedule, and fielding to the AAE.
- (d) Notify the AAE immediately when the estimated dollar value of the program is within 10 percent of ACAT I level cost thresholds (see para 2–17).
- (4) Fielding of an interim solution, even if it provides less than full capability, will not be delayed to enable further development of immature technology. In instances where technology is not sufficiently mature to resolve or substantially mitigate the identified need within 2 years from the date of urgent operational need statement (UONS) validation, the requirement should be addressed via another AAF pathway and funded using the normal budget review process.
- f. Rapid acquisition authority. DoDD 5000.71 directs DoD Components to use all available authorities to fund, develop, assess, produce, deploy, operate, and sustain UON capabilities expeditiously. This includes use of rapid acquisition authority (RAA), which authorizes DoD to use funds for certain higher priority requirements without undertaking a reprogramming action or with use of a transfer authority.
- (1) DoDI 5000.81 prescribes policies regarding authorities, types of UONs, and RAA and states that RAA should be considered when, within certain limitations, a waiver of a law, policy, directive, or regulation will greatly accelerate the delivery of effective capability to the warfighter pursuant to Public Law (PL) 107–314.
 - (2) DoDM 5000.78 provides instructions on submitting RAA requests.

2-8. Middle tier of acquisition

- a. Purpose. The MTA pathway is intended to fill a gap in the Defense acquisition system for those capabilities that have achieved a level of maturity to allow them to be prototyped within an acquisition program or fielded within 5 years of MTA program start. The MTA pathway allows programs to be executed outside of the traditional requirements (JCIDS guidance in CJCSI 5123.01I) and acquisition systems (DoDD 5000.01) to realize schedule reductions and better meet emerging needs. The MTA pathway may be used to accelerate capability maturation before transitioning to another acquisition pathway or may be used to minimally develop a capability before rapidly fielding it. The MTA approach encompasses two distinct pathways, as prescribed in DoDI 5000.80: rapid prototyping and rapid fielding.
- (1) Rapid prototyping. The objective of rapid prototyping is to field a prototype meeting defined requirements that can be demonstrated in an operational environment and provide residual operational capability within 5 years of the MTA program start date. Virtual prototyping models are acceptable if they result in a fieldable residual operational capability. MTA programs may not be planned to exceed 5 years to completion and, in execution, will not exceed 5 years after program start without a DAE waiver.
- (2) Rapid fielding. The objective of rapid fielding is to begin production within 6 months and complete fielding within 5 years of the program start date. A DAE waiver is required for rapid fielding start dates that exceed 6 months after program start, that are planned to exceed 5 years to completion, or that, in execution, will exceed 5 years after program start. Additional information can be found at https://aaf.dau.edu.
- b. Governing documents. DoDI 5000.02 and DoDI 5000.80 establish policies and provide procedures for the MTA pathway. See DoDI 5000.80 for a description of the main activities and decision points associated with the MTA pathway.
- c. Cost limitations. There are no restrictions on the use of the MTA pathway based on program cost. Programs exceeding the dollar thresholds for an MDAP pursuant to 10 USC 4201 require written approval by the Under Secretary of Defense for Acquisition and Sustainment (USD (A&S)) prior to using the MTA pathway.

- d. Pathway decision points and phases. DoDI 5000.80 details the main activities associated with the three phases of the MTA pathway: MTA planning, MTA execution, and MTA completion. Additional information on the MTA pathway can be found at https://aaf.dau.edu.
 - e. Policy.
- (1) Army MTA efforts will be established and managed in accordance with policy and procedures for their initiation, execution, and transition prescribed in DoDI 5000.80.
- (2) Major systems intended to satisfy requirements that are critical to a major interagency requirement, are primarily focused on technology development, or have significant international partner involvement are discouraged from using the MTA pathway. The USD (A&S) determines when a program is not appropriate for and may disapprove use of the MTA pathway and direct use of an alternate acquisition pathway.
 - (3) The AAE will—
 - (a) Provide oversight, guidance, and reporting requirements for MTA efforts.
 - (b) Approve the use of MTA authorities.
 - (c) Serve as the decision authority for MTA efforts unless delegated to the PEO and noted in the ADM.
 - (d) Evaluate annually the performance of PEOs and any direct-reporting PMs on assigned MTA efforts.
 - (e) Ensure PEOs evaluate the performance of their PMs on these efforts annually.
 - (4) The Deputy for Acquisition and Systems Management (DASM) will—
- (a) Serve as the ASA (ALT) OPR for capturing and reporting MTA data to the Under Secretary of Defense for Acquisition and Sustainment (USD (A&S)).
 - (b) Establish Army MTA information-reporting and governance protocols.
- (5) The decision authority is the designated individual with overall responsibility for an effort conducted under MTA. The decision authority for each approved Rapid Prototyping/Rapid Fielding initiative will—
 - (a) Approve major decisions concerning progress of the effort at pre-established decision points.
 - (b) Approve MTA program documentation.
- (c) Be accountable for reporting cost, schedule, and performance data to OUSD (A&S) in accordance with DoDI 5000.80 requirements and any DCAPE requirements.
 - (d) Authorize PMs to utilize tailored, streamlined procedures that support effective project completion.
- (e) In coordination with functional stakeholders, ensure that PEOs/PMs structure all individual MTA efforts to adhere to the operating principles outlined in this document.
- (f) Develop and track measurable, quantifiable metrics that assess technical and sustainment performance parameters, cost, and schedule.
- (6) The PM is the designated individual with responsibility for and authority to accomplish the objectives of the MTA effort and is accountable to the decision authority for credible cost, schedule, and performance. The PM for each approved Rapid Prototyping/Rapid Fielding initiative will—
- (a) Execute the MTA effort per the ADM, program strategy, and subsequent direction from the designated decision authority.
 - (b) Report to the designated MTA decision authority.
- (c) Develop and implement disciplined acquisition and funding strategies and make trade-offs among life cycle costs, requirements, and schedules to meet the goals of the MTA effort, in coordination with end users and the test community.
- (d) Tailor-in reviews, assessments, and relevant documentation that results in an acquisition strategy (AS) customized to the unique characteristics and risks of their program.
- (e) PMs will ensure operational, technical, sustainment, and security risks are identified and reduced so that fielded systems are capable, effective, and resilient, and will comply with statutory requirements unless waived in accordance with a relevant provision.
- (f) Ensure that experimentation focuses on outcomes, affords the maximum ability for quantifiable measurement, and centers on military value in an operational environment.
- (g) Coordinate with stakeholders for appropriate concurrence at key decision points. Additionally, include in decision points the requirement for stakeholders to adjust program documentation, including the validated requirement.
- (h) Document metrics to measure the cost, schedule, performance, and risks of the program. Metrics should inform decision makers that the MTA is accomplishing what it intended, when it was intended.
- (i) Report via Defense Acquisition Visibility Environment (DAVE) and any other interfaces the AAE or DA directs.

- (j) Propose to the decision authority tailored reviews, metrics, processes, and assessments that are necessary for achieving cost, schedule, and performance goals and statutory compliance.
- (k) Work closely with contracting officers to select the most appropriate instruments when building the program strategy, including indefinite delivery, indefinite quantity contracts, cooperative agreements (when authorized by statute), other transactions for prototype projects (see 10 USC 4022), experimental authority (see 10 USC 4023), and Federal Acquisition Regulation (FAR) Part 12 procedures.
- (/) In addition to any other AAE-directed or DA-directed status reports, provide the AAE with an executive-level assessment of the program's status with respect to cost, schedule, and performance objectives annually at the President's Budget Submission and submit updated Program Identification Data twice annually with the President's Budget and POM submissions to OSD.

2-9. Major capability acquisition

- a. Purpose. The MCA pathway is used to acquire and modernize military unique programs that provide enduring capability. The MCA pathway is designed to support MDAPs, major systems, and other complex acquisitions and typically follows a structured analyze, design, develop, integrate, test, evaluate, produce, and sustain approach. Additional details can be found at https://aaf.dau.edu.
- b. Governing documents. DoDI 5000.02 and DoDI 5000.85 prescribe MCA policy and procedures that guide the acquisition of MCA programs, including MDAPs; other programs categorized as ACAT I; major systems, usually categorized as ACAT II; automated information systems (not managed by other acquisition pathways); and other capabilities developed via the MCA pathway. See DoDI 5000.85 for a description of the phases and milestone decisions association with the MCA pathway.
 - c. Cost limitations. There are no restrictions on the use of the MCA pathway based on program cost.
- d. Pathway decision points and phases. DoDI 5000.85 details the main activities associated with the MCA pathway. Descriptions are provided for the procedures for each phase and decision review.
- (1) DoDI 5000.85 identifies the following MCA phases and decision points: MDD, materiel solution analysis phase, Milestone A Decision, technology maturation and risk reduction phase, development request for proposal (RFP) release decision point, Milestone B Decision, engineering and manufacturing development (EMD) phase, Milestone C, production and deployment phase, FRP or full deployment decision, and the operations and support phase.
 - (2) Additional information on the MCA pathway can be found at https://aaf.dau.edu.
 - e. Policy.
- (1) MCA acquisition and product support processes, reviews, and documentation will be tailored based on the program size, complexity, risk, urgency, and other factors. PMs will develop an AS for MDA approval that matches the acquisition pathway processes, reviews, documents, and metrics to the character and risk of the capability being acquired.
- (2) PMs will identify, and recommend for MDA approval, the regulatory information that will be employed to document program plans and how that information will be formatted and provided for review by the MDA. The PM's recommendation will be reviewed by the MDA, and the MDA's decision will be documented in an ADM. MDAs will coordinate, when necessary, with other regulatory document approval authorities to facilitate implementation of this approach.

2-10. Software acquisition

a. Purpose. The software acquisition pathway (SWP) provides for more efficient acquisition, development, integration, and delivery of custom software capabilities. The pathway allows programs to be executed outside of the traditional requirements process (JCIDS guidance in CJCSI 5123.01I); however, to ensure software acquisition is effective in capturing users' needs, the Vice Chairman of the Joint Chiefs of Staff, in consultation with the USD (A&S) and the Society of Automotive Engineers, follows a modified requirements development process described in DoDI 5000.87. This pathway requires the use of modern software development practices such as Agile Software Development, DevSecOps, and Lean Practices. PMs must demonstrate the programs' viability and effectiveness of capabilities for operational use not later than 1 year after obligation of funds. The pathway is specifically designed for custom software intensive systems. Army acquisition personnel working with software programs that meet the definition of a covered DBS should use the DBS pathway in accordance with DoDI 5000.75 but may elect to incorporate this pathway for custom-developed software.

- *b. Governing documents.* DoDI 5000.87 establishes policy, assigns responsibilities, and prescribes procedures for the establishment of SWP. See DoDI 5000.87 for a description of the phases, activities, and products associated with the SWP.
- c. Cost limitations. There are no restrictions on the use of the SWP based on program cost. Programs executing this pathway will not be treated as MDAPs even if exceeding thresholds in 10 USC 4201, per PL 116–92.
- d. Pathway decision points and phases. The SWP has two phases, as prescribed in DoDI 5000.87: planning and execution.
- (1) Planning. The planning phase focuses on understanding the users' needs and planning the approach to deliver capabilities to meet those needs. This phase is intended to be 6 months or less.
- (2) Execution. The execution phase focuses on rapidly and iteratively designing, developing, integrating, testing, delivering, and operating resilient and reliable software capabilities that meet the users' priority needs.
 - (3) Additional information on the SWP can be found at https://aaf.dau.edu.
 - e. Policy.
- (1) Army decision authorities and PMs of programs following the SWP will, after appropriate tailoring, comply with the guidance in DoDI 5000.87.
- (2) The AAE may elect to use this pathway for acquisition of software-intensive systems or sub-systems. The AAE will—
- (a) Per DoDI 5000.87, consult with the USD (A&S) as appropriate on policies and guidance for the SWP.
- (b) Serve as the decision authority for programs using the SWP unless the decision authority is delegated to a designated official, or the USD (A&S) designates the program as special interest.
- (c) Tailor and continuously improve Army software acquisition procedures to enable rapid and effective acquisition, delivery, and sustainment of software capabilities.
 - (3) Decision authorities for Army-managed programs following the SWP will—
 - (a) Be either the AAE or the designated official with appropriate AAE-delegated authority.
- (b) Designate PMs and support them in tailoring and streamlining processes, reviews, and decisions to enable speed of capability delivery.
- (c) Assume responsibility for providing required program data to the USD (A&S) to support management and continuous improvement of the SWP.

2-11. Defense business systems acquisition

- a. Purpose. The DBS acquisition pathway provides for the acquisition of information systems that support DoD business operations, including those with as-a-service solutions, to include financial and financial data feeder; contracting; logistics; planning and budgeting; installations management; human resources management; training and readiness systems. The DBS pathway may also be used to acquire non-developmental software-intensive programs that are not business systems. This pathway involves assessing the business environment and identifying existing commercial or Government solutions that could be adopted to satisfy DoD needs; customization of a selected IT solution should be minimal. By doing so, the DoD reduces risk and maximizes benefits by using commercial off-the-shelf (COTS) software that has been successfully demonstrated in the commercial marketplace. DBS programs do not follow the traditional JCIDS process; instead, DBS programs follow processes governed by 10 USC 2222, DoDI 5000.75, and the business capability acquisition cycle (BCAC) process model (depicted in DoDI 5000.75). The BCAC has five phases and is intended to be cyclical and flexible with steps repeating as necessary to drive rapid achievement of intended outcomes. Additional information can be found at https://aaf.dau.edu.
- b. Governing documents. DoDI 5000.75 establishes policy for the use of the BCAC for business systems requirements and acquisition within the Defense acquisition system. See DoDI 5000.75 for a description of the phases and decision points associated with the DBS pathway.
 - c. Cost limitations. There are no restrictions on the use of the DBS pathway based on program cost.
- d. Pathway decision points and phases. DoDI 5000.75 prescribes policy and procedures for the phases and decision points associated with the DBS pathway. Procedures will be tailored to the characteristics of the capability being acquired and will incorporate both the functional and acquisition perspective when developing program strategies and oversight, program information, acquisition phase content, and the timing and scope of decision reviews and decision levels.

- (1) The BCAC consists of five phases separated by authority to proceed (ATP) decision points. The BCAC phases are capability need identification; solution analysis; functional requirements and acquisition planning; acquisition, testing, and deployment; and capability support.
- (2) ATP decision points assess the readiness to proceed to the next phase of the process. They correspond to a BCAC phase. The first ATP occurs after the capability need identification phase, in the following order: solution analysis ATP, functional requirements ATP, acquisition ATP, limited deployment ATP, full deployment ATP, and capability support ATP.
 - (3) Additional information on the DBS pathway can be found at https://aaf.dau.edu.
- e. Policy. Army acquisition workforce using the DBS acquisition pathway will comply with the following requirements prescribed in DoDI 5000.75 and will—
- (1) Be aligned to commercial or Government best practices and will minimize the need for customization of commercial products to the maximum extent practicable.
- (2) Facilitate business changes through DOTMLPF-P to drive performance improvements, efficiencies, effectiveness, cyber resilience, and audit compliance.
- (3) Be the joint responsibility of the functional and the acquisition communities. Both communities are accountable for the successful delivery of business capability and must use COTS and Government off-the-shelf solutions, to the extent practicable.
- (4) Be used for other non-developmental, software intensive programs (including NSSs, productivity solutions, and IT infrastructure), when approved in program ASs. Statutory requirements for other types of IT capabilities when developed in accordance with DoDI 5000.75 will still apply. Chief management officer (CMO) certification requirements in DoDI 5000.75 apply to DBS only.
- (5) Require decision authorities to tailor the application of regulatory requirements and procedures to best achieve capability outcomes, consistent with established statutory requirements prescribed in DoDI 5000.75. In addition, decision authorities will reduce separate reviews and approvals by other organizations when confirmation through direct collaboration is sufficient.
- (6) Accomplish Clinger-Cohen Act (CCA) (Subtitle III, 40 USC) compliance as an iterative process (all information may not be available during early ATP decision points). Full CCA compliance is required no later than the first Limited Deployment ATP (see DoDI 5000.75 for more information on CCA compliance).

2-12. Acquisition of services

- a. Purpose. The acquisition of services pathway provides the means for obtaining services from private sector entities by or for the DoD, including engineering, professional, IT, construction, and maintenance services. Additional information can be found at https://aaf.dau.edu.
- b. Governing documents. DoDI 5000.74, AR 70–13, and AFARS 5137.5 establish policy for the acquisition of services pathway. See DoDI 5000.74 for a description of the main activities associated with the Services pathway.
- c. Cost limitations. The Services pathway is best suited for acquisitions with a total estimated acquisition value in current year dollars that is at or above the simplified acquisition threshold (defined in FAR 2.101).
- d. Pathway decision points and phases. The acquisition of services pathway consists of three phases: planning, development, and execution. Additional information on the acquisition of services pathway can be found at https://aaf.dau.edu and the Defense Acquisition University (DAU) Service Acquisition Mall website (https://www.dau.edu/tools/documents/sam/home.html). Army acquisition workforce personnel using this pathway must use a Services Requirements Review Board (SRRB) process to review, validate, prioritize, and approve services requirements to accurately inform the budget and acquisition processes.
- (1) SRRBs provide a process for senior leaders to assess, review, and validate services requirements. Army acquisition workforce personnel will use an SRRB process for services acquisitions with an estimated total value \$10 million or more. Although not required, decision authorities should consider screening for requirements with an estimated total value below \$10 million which may benefit from the SRRB process.
- (2) The SRRB will be conducted as early in the services acquisition process as practical before a procurement request package is transferred over to a contracting office for execution.
- e. Policy. Army acquisition workforce personnel using acquisitions of services will comply with the requirements prescribed in DoDI 5000.74, AR 70–13, and AFARS 5137.5.

Section III

Acquisition Program Initiation, Categories, Information Requirements, and Review Forums

2-13. Program initiation

The AAE is the approval authority for Army program initiation.

- a. Requesting designation for an office of primary responsibility. The ASA (ALT) must formally assign responsibility for satisfying new requirements to PEOs, joint program executive officers (JPEOs), and DRPMs. The ASA (ALT) DASM accomplishes this by issuing an OPR assignment memorandum.
- (1) There are three types of OPR designation: planning OPR, materiel development OPR, and urgent OPR.
- (a) Planning OPR requests are initiated by CG, AFC or other heads of appropriate requirements generating organizations. Planning OPR assignments provide MATDEV expertise and assistance to the requirements community to refine requirements. This can include PM support to a cross functional team or other organization involved in concept exploration and experimentation.
- (b) Materiel development OPR requests originate with DCS, G–8 or the Director, Office of Enterprise Management, or the JPEO for Chemical, Biological, Radiological, Nuclear Defense (in instances where the DAE has delegated chemical and biological defense program materiel acquisition responsibilities to the AAE). The Materiel Development OPR request is made after approval of the requirements document by the appropriate decision-making body. The Materiel Development OPR is used to assign a responsible PEO and initiate the acquisition of a materiel solution to an identified capability gap via an MDD or other appropriate AAF pathway program initiation decision.
- (c) Urgent OPR requests are in support of operational needs statements, joint UONS, and DRs. When making urgent OPR assignments, the DASM will follow the Materiel Development OPR template but will use an expedited assignment and approval process.
- (2) An OPR assignment does not provide MDA/DA delegation. The assigned OPR must determine the proposed ACAT level or equivalent (see para 2–14a), AAF pathway (see section II of chapter 2), and manpower necessary for the effort. The PM will return to the AAE for authorization before execution of any funds.
- b. Program initiation and designating decision authorities. The AAE is the approval authority for Army program initiation and for policies and procedures for determining Army MDAs/DAs. The AAE will retain MDA/DA for programs that exceed the MDAP threshold or, in the case of DBS for which the DAE has delegated MDA to the AAE, programs that meet or exceed the Business System Category (BCAT) I threshold. For programs below these thresholds, the AAE may either retain or delegate MDA/DA (as established in DoDI 5000.02) to the responsible PEO or JPEO; the Director, Rapid Capabilities and Critical Technologies Office (RCCTO); or an equivalent official as determined by the AAE.
 - (1) Further delegation below these levels is not authorized without written approval by the AAE.
- (2) All MDA/DA assignments and delegations will be compliant with the applicable AAF pathway requirements and will be formally documented.
- c. Documenting program initiation decisions. After an OPR and an MDA/DA have been designated, the AAE identifies the AAF pathway to be followed and formally establishes a POR via an ADM. Army MDAs/DAs will comply with the documentation required for the initiation of a program in accordance with table 2–1.
- (1) An MDD is the formal entry point into the MCA pathway and is informed by an approved requirements document (an initial capabilities document (ICD) or equivalent) that identifies a capability gap and determines that a material solution is needed. For PORs following acquisition pathways other than MCA, the formal entry point is determined in accordance with the applicable pathway policies available at https://aaf.dau.edu.
- (2) An ADM documents any decisions made in any pathway, the acquisition approach, and the entry and exit requirements.
- (3) PMs will load the required entrance documentation and ADMs in the ASA (ALT)-approved knowledge management system, the Acquisition Information Repository (AIR) (see para 2-15f for more information).
- d. Authorization to execute funds. When the OPR determines that execution of funds is necessary for program activities prior to an AAF pathway determination, the PEO will request an ADM from the AAE authorizing execution of funds. This may also coincide with an AAF pathway determination.

Table 2–1
Adaptive Acquisition Framework Acquisition pathways and initiation decision documents

Acquisition Pathway	Acquisition Authority	Requirements Document	Entrance Criteria	Decision Document
Urgent capability acquisition	DoDI 5000.81	Per paragraph 3.2 and 3.3 of DoDI 5000.81	(1) Approved Critical Warfighter Issue statement per DoDD 5000.71 or (2) a RAA determination document, recommended course of action per paragraph 4.2.c of DoDI 5000.81	Development decision ADM
Middle tier of acquisition	DoDI 5000.80	A—CDD or other Army approved requirement	Per Table 1 of DoDI 5000.80	MTA rapid prototyping or fielding ADM
Major capability acquisition	DoDI 5000.85	JCIDS Document	Per Appendix 3B of DoDI 5000.85	MDD ADM
Software acquisition	DoDI 5000.87	CNS	Draft CNS to guide Planning Phase (sponsor will approve the CNS before the execution phase starts)	Planning phase ADM
Defense business systems	DoDI 5000.75	CMO Certification at the Functional Requirement ATP	Per Tables 4 and 5 of DoDI 5000.75	Acquisition ATP ADM
Acquisition of services	DoDI 5000.74*	N/A	Per DoDI 5000.74 paragraph 4.4	Services AS

Each of the AAF pathways is described in a DoDD or DoDI. Each pathway possesses its own entrance criteria for entry into the AAF, to include a capabilities requirements document. The MDA/DA documents the decision to enter any of the pathways of the AAF with an ADM and also establishes the criteria for the next acquisition decision and any additional requirements.

A-CDD-abbreviated capabilities development document

ADM-acquisition decision memorandum

ATP-authority to proceed

CMO-chief management officer

CNS-capability needs statement

DoDD-department of defense directive

DoDI-department of defense instruction

JCIDS-joint capabilities integration and development system

MDD-materiel development decision

N/A-not applicable (no specified requirements document)

MTA-middle tier of acquisition

RAA-rapid acquisition authority

2-14. Program categories and decision authority

The Defense Acquisition System divides its development and acquisition programs into categories that determine the level and amount of oversight, decision authority, and applicable procedures that are required for a program to operate. A program category is assigned to a program based on its AAF pathway, the expected program cost, or level of stakeholder interest. Implementing program procedures may include assigning responsibilities and tasks that are based on statute or DoD and Army policies not

^{*}Services acquisitions are initiated in accordance with DoDI 5000.74 and AFARS 5137.5. DoDI 5000.74 does not apply to services that are managed and reviewed as part of major and non-MDAPs and major and non-major IT acquisition programs or non-major programs whose primary purpose is to provide capabilities, goods, or systems in accordance with DoDI 5000.02. However, it may apply to services in the operations and support phase of these programs at the discretion of the MDA.

specifically addressed in the AAF policy documents listed in paragraph 2–6. The AAE is ultimately responsible for the Army's AAF pathway and category designation and MDA/DA delegation process.

- a. Determining program categories for Army programs. Refer to the appropriate AAF pathway-specific DoDI at https://aaf.dau.edu which provide descriptions and decision authorities for acquisition program categories (for example, see DoDI 5000.85 for MCA categories and DoDI 5000.75 for DBS categories).
- (1) Program categories are based primarily on estimates of eventual total program expenditures as reflected in the program's approved cost estimate (see DoDI 5000.73). A program's category may subsequently change based, for example, on subsequent cost growth attributable to increased quantities.
- (2) MCA programs below the MDAP dollar threshold may be designated as ACAT I on the basis of DAE/AAE special interest.
- (3) Pursuant to 10 USC 4201, MTA and DBS programs are excluded from the definition of MDAP regardless of total program expenditures. Likewise, pursuant to PL 116–92 (10 USC 4571) programs in the SWP are not treated as MDAPs, regardless of total expenditures, without the specific direction of the USD(A&S) or the AAE.
- (4) Army acquisition workforce personnel using programs that are not following the MCA pathway will enter an ACAT-equivalent value in PMRT so leadership can compare anticipated programs' costs and can determine whether MDAP or major system statutes apply (see app D for additional guidance on ACAT equivalency).
- b. Determining decision authority for Army acquisition programs. The AAE will review potential materiel solutions and may retain or delegate MDA/DA, beginning with the MDD or other AAF pathway-compliant initiation decision (see para 2–13).
- (1) Upon delegation, designated MDAs/DAs will execute and manage their programs in accordance with applicable statutory and regulatory policy requirements. When delegated, MDA/DAs assume overall responsibility for program execution.
- (2) New MDA/DA delegations, revisions to existing delegations, or withdrawal of delegations for Army programs must be made in writing and signed by the AAE.
- (3) Delegations may occur at a pathway-compliant initiation decision or later in the life cycle of the program that corresponds to the approved AAF pathway.
- c. Designating an MCA program as ACAT IV. In addition to the ACAT I through III levels delineated in DoDI 5000.85; the Army utilizes an ACAT IV.
- (1) The funding thresholds for ACAT IV programs are as follows: RDT&E less than or equal to \$110 million and procurement less than or equal to \$440 million (expressed in FY20 constant dollars).
- (2) Unless otherwise specified by the AAE, for program efforts within the above thresholds that receive an OPR assignment from the DASM, the responsible PEO is concurrently designated as MDA. No further delegation is permitted unless authorized by the AAE. This subsection applies to the MCA pathway only.
- d. Program recategorization. The MDA/DA will consider re-categorization when at any point in a program there is program cost growth within 10 percent of the minimum cost threshold of the next higher category level. All potential changes in ACAT or AAF pathway-equivalent categories to Army-managed programs will be reported through the acquisition chain of command to the AAE.

2-15. Acquisition program information requirements at program decision reviews and other decision points

The AAFDID tool, available at https://www.dau.edu/aafdid/pages/about.aspx, lists statutory and regulatory requirements for decision points during the acquisition process that apply to Army acquisition programs.

- a. Compliance with information requirements. Army acquisition workforce personnel in Army-managed programs will comply with tailored regulatory requirements and all applicable statutory requirements, unless the statutory requirements are waived in accordance with relevant provisions contained in the statute. Army PMs will propose appropriate waivers of statutory requirements and tailoring of or exemption from regulatory program documentation requirements identified in AAF pathway-applicable 5000-series publications or by Army or OSD proponents with appropriate authority.
- b. Tailoring documentation. Documentation requirements for any Army-managed program will be the result of a tailoring process between the MDA/DA and PM. Information required by statute will be addressed as required by applicable law. Program information requirements required by regulation can be tailored at the MDA/DA's discretion unless otherwise prohibited (for example, when a regulatory requirement implements a specific statutory requirement). Army MDAs/DAs will require only the minimal amount of documentation and regulatory compliance necessary to define and execute the program. Documents

prepared in support of management reviews and decisions are not to be prepared solely for staff review and approval.

- c. Minimum essential documentation for Army acquisition program execution. The following are essential for program execution—
 - (1) A validated, approved, and documented capability requirement.
- (2) A documented, MDA/DA-approved AS or Simplified Acquisition Management Plan (SAMP) that matches the AAF pathway, processes, reviews, documents, and metrics to the character and risk of the capability being acquired.
 - (3) A documented estimate of life cycle cost and affordability.
 - (4) A documented plan for T&E.
 - (5) A documented plan for sustainment.
 - (6) Documented program cost objectives.
- d. Acceptable format and content. Program documentation may take any appropriate, written form determined sufficient by the MDA/DA. Unless waived or modified in writing by the MDA/DA, documents will be compliant with requirements for AAF pathways described in this chapter and in accordance with appropriate implementation guidance and direction provided by the MDA/DA.
- (1) Many information requirements can be incorporated into other documents. As an example, the documented AS is identified as a standalone document, but several strategies may be included or summarized therein (for example, the total life cycle competition strategy required by AR 715–31). Other examples where information requirements can be incorporated into other documents include incorporating the cybersecurity strategy in the documented Program Protection Plan (PPP) or the net centric data strategy in the information support plan.
- (2) Army acquisition workforce personnel may document program information requirements in a SAMP, which may serve as the documented AS for programs that require a stand-alone AS document.
- (a) A SAMP describes a program's overall strategy and addresses statutory and regulatory information requirements. It describes the management framework, provides a vehicle for obtaining required statutory and regulatory approvals, and for documenting waivers. The SAMP provides a venue that facilitates integrating plans and approaches into a single document. The SAMP should combine and simplify document requirements as needed by the PM and agreed to by the MDA/DA.
- (b) The SAMP may be supplemented with standalone documents that are required by statute or regulation, to treat subject matter in greater detail, or to address unique or particularly difficult program aspects. Stand-alone documents should be referenced in the SAMP with final conclusions, recommendations, or summaries incorporated in the SAMP where appropriate.
- (c) Army acquisition workforce personnel will ensure program SAMPs meet statutory and regulatory requirements (after appropriate tailoring) for each milestone or AAF pathway equivalent and at other decision points during the acquisition process. Army acquisition workforce will ensure the documented SAMP for MDAPs will comply with requirements in 10 USC 4211.
- e. Approvals. The MDA/DA is the final authority for determining the adequacy of program documentation and compliance requirements not required by statute. The AAE is the Army's approval authority for waivers, tailoring recommendations, and exemptions for all AAF pathway categories and special interest programs for which MDA/DA is not delegated. The MDA/DA is the approval authority for waivers, tailoring recommendations, and exemptions when the AAE delegates MDA/DA. The Army Deputy General Counsel (Acquisition) must review any request for waiver, tailoring, or exemption of a statutory requirement, or any regulatory requirement that implements statutory guidance (for example, post-implementation review, termination liability estimate). Army MDAs/DAs will document all decisions resulting from acquisition program reviews, including tailoring decisions, in an ADM.
- f. Acquisition information repository. It is essential to the acquisition decision-making process that all program documents are stored in a secure, centralized, and accessible location, and are readily accessible to the acquisition community. To accomplish these objectives, Army acquisition workforce personnel will use the AIR or other repositories for all Army-managed acquisition programs as directed by the AAE or MDA/DA.
- (1) The repository will be used to store final approved acquisition documents in a centralized searchable repository for all programs at all category levels and all AAF pathways.
- (2) This requirement applies to all program decisions or life cycle events (for example, Configuration Steering Boards (CSBs), low-rate initial production decisions, full deployment decisions, and sustainment

reviews (SRs)), for programs where the MDA/DA is the AAE or DAE on or after 1 January 2013, and to all other programs, regardless of AAF pathway or category, on or after 1 July 2018.

2-16. Acquisition program baselines

The AAFDID at https://www.dau.edu/aafdid/pages/about.aspx identifies the acquisition program baseline (APB) requirements and statutory program breach and change definitions that apply to Army programs that have traditional baselines. Traditional and non-traditional baselines are described in this section.

- a. APB applicability. A traditional baseline is required for MCA pathway programs at Milestone B or Milestone C, whichever milestone occurs first in the program's life cycle. A traditional baseline is also required for DBS pathway programs at the Acquisition ATP. Army acquisition programs following the UCA, MTA, and SWP pathways are not required by statute or policy to have a traditional baseline (see para 2–16c. for information on non-traditional baselines). The designated DA/MDA may optionally require a traditional baseline for UCA, MTA, and SWP pathway programs.
- b. Traditional APB Information. At a minimum, the traditional APB information includes objective and threshold values for each appropriation, program acquisition unit cost, average procurement unit cost, schedule events and key performance parameters (KPPs). For programs with assigned affordability constraints, those metrics will be stated in the cost notes section of the APB.
- (1) Threshold determination. The recommended schedule threshold is the objective date plus 6 months. PMs may propose and MDAs/Das can approve a longer threshold period. The recommended cost threshold is 10 percent over the objective value per baselined appropriation. If the MDA/DA approves a threshold greater than 10 percent over the objective value, the cost note will include reasoning for the higher threshold. Performance thresholds are identified in the requirement document and will be copied verbatim into the baseline.
- (2) Establishment and approval. The PM prepares the APB and the MDA/DA approves it. The first APB becomes the original APB. PMs may update APBs at the time of significant program decisions, or due to major program changes or when deviations of cost, schedule, or performance parameters occur. The MDA/DA must approve a rebaseline. Subsequent baselines become the current APB. When more than one baseline exists, the initial APB is the original APB. PMs will not re-baseline acquisition programs to create an appearance of program health. The original baseline may only be revised following a unit cost critical deviation or breach (see the AAFDID Statutory breach definition table at https://www.dau.edu/aafdid/pages/about.aspx).
- (3) Approved acquisition program baseline repository. The OSD DAVE APB application (https://dave.acq.osd.mil) is the approved ASA (ALT) system for APB preparation, maintenance, and storage until the PMRT system (https://pmrt-army.altess.army.mil/portal/) can fulfill the same role. Both original and current APBs will be created and ratified in the approved APB application. The DASM is responsible for ensuring APB data integrity. Training materials including user guides and training videos for the APB module in the DAVE system can be found on the DAVE website.
- (4) Monitoring and use. For all Army MCA, DBS, and other programs as instructed by the MDA/DA, the MDA/DA and PM will monitor baseline parameters until the MDA/DA and PM agree that the parameters of the APB are satisfied.
- c. Non-traditional baselines. Like traditional baselines, non-traditional baselines include cost, schedule, and performance information. Unlike the traditional baseline, non-traditional baselines also contain pathway-specific content like transition plans, software delivery metrics, or operational risks.
 - (1) Establishment and approval.
- (a) Middle tier of acquisition. Army acquisition workforce personnel using MTA authorities must submit their initial semiannual report after pathway approval by the AAE. Army acquisition workforce personnel using MTA authorities create program information datasheets (PIDs) in the DAVE Program Progress Submission application until PMRT can fulfill the same role. The initial MTA PID is treated as a baseline and subsequent PID submissions are compared to the initial PID; identifying cost, schedule, and technology maturity issues that may evolve over the life of the MTA program.
- (b) Software acquisition pathway. Army acquisition workforce personnel using SWP acquisition pathway record and monitor these elements in the initial SWP semiannual report and subsequent semiannual reports. Army acquisition workforce personnel using the SWP acquisition pathway submit their initial semiannual report after pathway approval by the AAE. Semiannual report submission aligns to the POM lock and to the President's Budget release (annually, about August and February). Army acquisition workforce

using SWP acquisition pathway currently file their semiannual reports by Microsoft Excel and email. The creation and submission of semiannual SWP reports will transition to DAVE and subsequently to PMRT.

- (c) Urgent capability acquisition. Army acquisition workforce personnel using the UCA pathway use the decision authority's approved course of action cost, schedule, and performance parameters as a baseline for monitoring the UCA program. The UCA baseline is locally maintained unless the MDA/DA directs the program to create a traditional APB.
- (2) Monitoring and use. MTA, SWP, and UCA programs are managed by the MDA/DA and PM to their non-traditional baseline over the life of the program. There is no mechanism to reset the baseline for these programs. For additional information on MTA, SWP, and UCA acquisition programs, see the corresponding DoD Instructions (5000.80, 5000.87 and DoDI 5000.81, respectively) and Army policies identified in appendix A. If an MDA/DA opts to establish a traditional baseline for an MTA or SWP program, the MDA/DA for the program must still submit their semiannual reports and are still subject to the semiannual report thresholds established by OSD for monitoring MTA or SWP programs.
- d. Army baseline archive. Signed copies of each traditional baseline will be uploaded to the common access card-enabled OSD AIR website, available at https://www.dodtechipe-dia.mil/dodc/plugins/air/airdocuments.action?dtmp=dtair. MTA program PIDs will be retained in DAVE and in PMRT, when the platform incorporates the capability. SWP program semiannual reports will be uploaded to AIR while using Microsoft Excel as the report creation tool. When the DAVE system can accept the SWP program semiannual reports, they will be retained in DAVE until PMRT incorporates the capability. Army acquisition workforce personnel using the UCA pathway will upload their course of action ADM and corresponding course of action to AIR. The Non-classified Internet Protocol Router Network version of AIR can accept unclassified and controlled unclassified documents. The Secret Internet Protocol Router Network version of AIR can accept classified documents.

2-17. Reporting requirements and baseline deviations and breaches

- a. Reporting requirements. The AAFDID tables at https://www.dau.edu/aafdid/pages/about.aspx summarize statutory and regulatory reporting requirements for programs across the AAF pathways. Army acquisition workforce personnel will comply with these requirements as well as those enumerated elsewhere in this publication.
 - b. Declaring programs inactive for reporting purposes.
- (1) Programs below ACAT I (or the equivalent for programs following other AAF pathways) can be declared inactive for program review purposes when 90 percent of items are delivered, and 90 percent of planned expenditures under the program have been made.
- (2) For programs below ACAT I (or the equivalent for programs following other AAF pathways) and for which the AAE retains MDA/DA, the PEO will request cessation of reporting through the DASM to the
- (3) When MDA/DA has been delegated, the MDA/DA may declare the program inactive for program review purposes after completing a closeout review and informing the DASM.
- (4) An MDAP may be declared inactive for SAR reporting purposes once it meets the guidelines in 10 USC 4351.
- c. Reinstating program reporting. Program reporting may be reinstated should changes in program parameters for requirements, cost, or schedule no longer meet the criteria in paragraph 2–17b.
- d. Deviation and breach reporting. For deviation/breach reporting purposes, the below thresholds will apply to programs managed to a traditional APB. APB objectives and thresholds are discussed in paragraph 2–16.
- (1) For MDAP reporting, a schedule deviation exists when an event's current schedule estimate exceeds the event's schedule threshold date. A cost deviation exists when a cost current estimate (that is, any single appropriation or total acquisition cost) is 10 percent over the current APB objective total cost in base year dollars.
- (2) For non-MDAP reporting, cost, and schedule deviations exist when the current estimate exceeds the MDA/DA-approved threshold values.
- (3) The application of Nunn-McCurdy unit cost breach reporting to Congress only applies to MCA pathway ACAT I programs; however, for lower category MCA programs, Nunn-McCurdy principles are applicable for measuring program health. Army acquisition workforce personnel in non-MDAPs will notify their MDA/DA of significant and critical cost growth (see the AAFDID Statutory breach definition table at

https://www.dau.edu/aafdid/pages/about.aspx). Unit cost reporting does not apply to non-traditional baselines (for example, UCA, MTA, and SWP programs) or to DBS programs.

(4) In the event that a program is estimated to deviate from its approved APB, the AAFDID table notes indicate the required actions. If the actual original baseline parameters are not available, then the initial approved APB in the DAVE application will be considered both the original and current baseline.

2-18. Review forums

Tailored reviews, metrics, processes, and assessments should be part of every acquisition program to ensure that they are on track to achieve cost, schedule, and performance goals, and comply with statutory requirements.

- a. Overview. In addition to the review forums detailed in the DoD 5000-series of directives and instructions, the Army has established four Army-level acquisition decision review forums. The ASA (ALT) ARM is the OPR for acquisition decision forum policy and procedures and will receive the full support of all other ASA (ALT) organizations necessary to ensure that ASA (ALT) review forums are conducted in a manner that is current and consistent with statue, regulation, and policy. ASA (ALT) ARM may issue internal interim implementing guidance that is applicable to the ASA (ALT) staff and PEO or JPEO, and RCCTO.
 - b. Army decision forums. The Army's four decision forums include—
- (1) Army overarching integrated product teams. An Army overarching integrated product team (AOIPT) is necessary before any ASARC or CSB. The AOIPT serves as a oneor two-star level forum used to identify and solve issues prior to an ASARC or CSB. The DASM chairs an AOIPT.
- (2) Pathway decision. For all AAF pathways except UCA, the AAE (unless delegated) conducts a pathway decision meeting for any proposed Army acquisition program seeking to enter the Defense Acquisition System (for example, a program seeking entry to the MCA pathway holds an MDD). The DASM will hold a pathway decision preparation meeting prior to any AAE-level pathway decision level meeting.
- (3) Army Systems Acquisition Review Council. The ASARC is the Army's senior-level review body for Army acquisition programs when the DAE or AAE is the MDA/DA. The ASARC provides key stakeholders an opportunity to review programs to determine whether a program or system is ready to enter the next acquisition phase. The AAE chairs the ASARC.
- (a) All ASARCs will include key stakeholder representatives. At a minimum, ASARCs will include appropriate representation from ASA (ALT); ASA (FM&C); Army OGC; DCS, G-2; DCS, G-3/5/7; DCS, G-8; TRADOC; USAMC; and AFC.
 - (b) ACAT ID programs are subsequently reviewed by the Defense Acquisition Board.
- (4) Army Configuration Steering Board. In accordance with DoDI 5000.85, the AAE forms and chairs a CSB for ACAT I MCA pathway programs, unless a formal request for exception is submitted and approved by the AAE. CSBs are conducted to review requirement and configuration changes that could adversely affect cost and schedule for programs in development (see DoDI 5000.85).
- c. Additional review forums. The Army employs additional review forums to assist the AAE and decision authorities that have AAE-delegated authority to manage the Army's acquisition program portfolios. For these forums, the composition and membership are tailored to meet the needs of the AAE, DRPMs, and PEOs. They include—
- (1) Sustainment reviews. In compliance with 10 USC 4323, the Army requires formal SRs on covered systems (as defined by 10 USC 4324). SRs will begin no later than 5 years after initial operational capability (IOC) and continue throughout the program's life every 5 years (or sooner if there are cost or readiness issues) until the program is formally terminated, and there are no longer assets (that is, legacy systems) being sustained within the fleet. Refer to AR 700–127 for additional information on the Army SR forums and SR policy.
- (2) Acquisition in-process review. An in-process review (IPR) is the review forum after the AAE delegates MDA/DA. MDAs/DAs determine the IPR information requirements, content, and attendees. MDAs/DAs will conduct IPRs at AAF pathway-specified decision events and may conduct additional IPRs they deem necessary.
- (3) Annual acquisition program reviews. The acquisition program review is an internal ASA (ALT) review forum through which the AAE exercises program oversight responsibilities. Attendees include the ASA (ALT) Deputy Assistant Secretaries of the Army and the DASM or representatives. The AAE (unless delegated) will conduct acquisition program reviews of acquisition activities for any program that meets at least one of the following criteria:

- (a) MDAP submitting an annual SAR for that FY.
- (b) Selected BCAT I DBS programs.
- (c) MTA programs meeting the definition of a major system pursuant to 10 USC 3041(b).
- (d) SWP programs meeting the MDAP monetary thresholds set forth in 10 USC 4201.
- (e) Programs with significant Joint, OSD, or Congressional interest.
- (f) Any programs otherwise identified by the PEO in their annual acquisition program review plan. The AAE will chair acquisition program reviews but may delegate this role to the ASA (ALT) principal deputy or principal military deputy or DASM. PEOs will conduct acquisition program reviews for all programs within their portfolios not subject to an AAE or designee chaired acquisition program review.
- (4) Acquisition shaping panel. Acquisition shaping panel (ASP) will serve as the forum for ASA (ALT) to provide strategic level guidance to PEOs and PMs before a program's acquisition approach is determined and documented.
 - (a) The ASP requirement applies to all acquisition programs regardless of acquisition pathway.
- (b) Army acquisition workforce personnel will ensure all new start programs, regardless of ACAT (or equivalent AAF category) level, conduct an ASP with the AAE, unless delegated via an ADM. The AAE chairs ASPs for MDAPs, BCAT I programs, and MDAP-equivalent programs on other acquisition pathways. The AAE may delegate this role to either the ASA (ALT) principal deputy, the principal military deputy, or the DASM. PEOs chair ASPs for programs where they are delegated MDA/DA and may further delegate MDA/DA to their immediate deputy.
- (5) Program information and assessments. All Army acquisition programs maintain program information and program assessments in the PMRT system. ASA (ALT) ARM and Acquisition Studies & Analytics provide guidance to PEOs and PMs on the scope and frequency of program updates of their programs in PMRT.

Chapter 3 Program Management

3-1. General

For requirements applicable to a specific pathway, refer to the appropriate references for that pathway available at https://aaf.dau.edu.

3-2. Acquisition chain of command

The chain of command for Army acquisition programs runs upward from the PM, through the PEO, to the AAE. For ACAT ID and other designated acquisition programs (for example, those designated at OSD level as special interest), the chain of command continues upward to the DAE.

3-3. Assignment of program executive officers and program managers

DoDI 5000.66 and Army Director for Acquisition Career Management (DACM) policies address unique position requirements for Army PEOs, Deputy PEOs, PMs, and Deputy PMs that must be met before assignment, including minimum acquisition experience, training courses, and tenure agreements. The Army's assignment processes, as well as policies and procedures from the Army DACM office and US Army Human Resources Command Acquisition Management Branch augment these requirements. As a general rule, a DRPM is a general officer or Senior Executive Service member; a project manager is an O–6, a general schedule (GS)-15, or the broadband or payband equivalent; a product manager is an O–5, a GS–14, or the broadband or payband equivalent.

3-4. Program office structure and organizations

Army MATDEVs will tailor acquisition program organizations to achieve the most effective and efficient structure possible. Joint programs follow DoD and Army acquisition procedures and acquisition chain of command, unless directed otherwise by the AAE or DAE.

3-5. Program management responsibilities

The PM is accountable for achieving program life cycle management objectives throughout the program life cycle. PMs direct the development, production, deployment, product support, sustainment, and supportability of defense systems.

3–6. Program management organization transfers, mergers, disestablishments, or terminations The AAE is the approval authority for transfer of management responsibility for acquisition programs between Army PEOs, DRPMs, and PMs and for mergers of Army program, project, or product management offices (PMOs) between PEOs, DRPMs, and PMs. Disestablishment or termination of a PMO occurs after PM management responsibility for all assigned programs has been completed satisfactorily or when directed by the AAE or the DAE. The MATDEV prepares the termination plan. No Army acquisition program will be terminated without the AAE's approval.

3-7. International acquisition and exportability

DoDI 5000.85 addresses international acquisition and exportability planning. All Army PMs will apply these tools, after appropriate tailoring, when designing management activities for all programs, regardless of their AAF acquisition pathway.

- a. International acquisition and exportability considerations. Army PMs will integrate international acquisition and exportability considerations throughout the life cycle. Army PMs will ensure Army processes and procedures comply with applicable statutory and regulatory requirements that the MDA/DA deems appropriate after approving the requisite tailoring. The ASA (ALT) serves as the SECARMY's single executive for providing export policy oversight and providing policy direction and oversight to the DCS, G–2 on technology transfer. The Deputy Assistant Secretary of the Army (Defense Exports and Cooperation) has delegated authority to develop international agreements on behalf of the U.S. Government, the DoD, or the DA for S&T, RDT&E, acquisitions, or life cycle logistics cooperation, and serves as the single Army point of contact for endorsing the delegation of disclosure authority for technical controlled unclassified information required by AR 380–10 to proponents or originators of the controlled technical information.
- b. International exportability in program decision reviews. Army PMs of MCA programs will incorporate exportability into applicable documentation, such as the documented AS and PPPs, and will address exportability at each program decision review. The exportability review will include a deliberate assessment of potential international market opportunities, incorporation of anti-tampering or differential capability approaches, and cost and schedule implications and funding requirements. Exportability will be addressed in ADMs, as appropriate. Army PMs of MTA programs will add exportability considerations to the SAMP or AS for approval by the MDA/DA upon program initiation. The strategy will be updated, as needed, for MDA/DA review and approval. The MDA/DA may specify additional tasks related to exportability in the ADM.
- c. Foreign military sales non-programs of record. The AAE may establish unique program offices or organizations to satisfy customer-unique requests for foreign military sales that further the national and strategic interests of the United States and do not negatively impact current Army programs or degrade Army readiness. The AAE is the DA for establishment of unique program offices or organizations unless further delegated. Refer to AR 12–1 and the Defense Security Cooperation Agency Non-Program of Record Industry Handbook (available at https://www.dsca.mil/resources/publications).

3-8. Industrial base analysis and considerations

Army PMs will incorporate industrial base analysis, to include capacity and capability considerations, into acquisition planning and execution to support the industrial base objectives enumerated in DoDI 5000.85. AR 700–90 establishes HQDA basic policies and responsibilities governing management and operation of the Army industrial base, both commercial and Government-owned (organic).

3-9. Life cycle management of information and data protection

Army PMs must comply with the records management requirements of 44 USC Chapter 31 and DoDI 5015.02 for the information created, collected, and retained in the form of electronic records.

3-10. Re-procurement and restarting terminated acquisition programs

Re-procurement of an item is authorized when there is a continuing need, based on an updated performance specification or purchase description from the last procurement. Procurement should not require any RDT&E funds other than budget activity 6.5 RDT&E funding for market surveys and associated testing. Procuring an additional quantity of items (re-procurement) from a terminated program that does not require additional development is not considered a restart, but rather requires that an amended termination plan be submitted to the Office of the Deputy Assistant Secretary of the Army for Plans, Programs and Resources (ODASA (PP&R)) for ASA (ALT) staffing. A previously terminated program may be

restarted when there is an enduring need that restarting the program can satisfy without changing its approved capability document. Updating the capability document to a more current format is acceptable as long as new requirements are not added. Program re-starts must have the required funding identified in the POM or available through reprogramming of current funds.

Chapter 4 Engineering Application Requirements

4-1. General

Refer to DoDI 5000.88 for policy, responsibilities, and procedures to implement engineering of defense systems. The principles and practices described in DoDI 5000.88 should be applied, as appropriate, to all DoD systems. Engineering application in the development of DoD systems is available in DoDI 5000.88 and at https://aaf.dau.edu/guidebooks/. This chapter supplements DoDI 5000.88 by addressing considerations and assigning responsibilities that are applicable to Army acquisition programs. The OPR is the Deputy Assistant Secretary of the Army for Data, Engineering, and Software (DASA (DES)) and is the AAE's proponent for digital transformation. This includes enabling programs to adopt modern software practices, data centricity, digital engineering, and cyber security. DASA (DES) also performs systems engineering and systems of systems integration functions to enable fully functional operational capabilities.

4-2. Technical planning and management

- a. Applying systems engineering. The principles and practices described in DoDI 5000.88 should be applied, as appropriate, to all Army systems. Systems engineering activities will be performed as part of concept and system development to inform developmental decisions and ensure the Army is systematically investing in the appropriate capabilities to meet mission needs. They will start before conducting material solution analysis to inform development of the concept baseline and continue through the acquisition life cycle. PMs, lead systems engineers (LSEs), and product support managers will implement engineering processes through best practices, to include concept exploration, mission engineering, technical baseline management, engineering technical reviews, peer and independent reviews, T&E, risk and configuration management, and technical decisions, while ensuring the security and integrity of capabilities and services. Army acquisition workforce personnel in priority programs will use digital engineering practices to the greatest degree possible. The intent of the digital engineering transformation is to replace documents with models and structured data as the foundation for knowledge management and communication of technical information in acquisition programs. Army acquisition workforce personnel in new start programs will incorporate digital engineering as appropriate for the technology being developed and the resources available. Army acquisition workforce personnel in existing programs should incorporate digital engineering when it makes business sense and supports Army modernization needs.
- b. Systems engineering plan. The systems engineering and engineering management approach and processes that guide all technical activities of the program will be documented in a SEP. The SEP is specific to each program and is updated as needed to reflect the program's evolving systems engineering approach. MDAs make decisions regarding how much streamlining and tailoring of SEPs is appropriate on a case-by-case basis, after thoughtful consideration of the program's requirements and technical risk. Some programs may require a standalone, documented SEP, while for others integrating the SEP into the SAMP (para 2–15) may be the appropriate approach.
- (1) For programs on the MCA pathway, the SEP is a regulatory requirement for MDAPs, ACAT II, and III programs unless waived by the SEP approval authority. The USD (R&E), or designee, is the approval authority for ACAT ID program SEPs; the MDA/DA, or designee, is the approval authority for ACAT IB/IC SEPs. The AAE will designate an approval authority for all other programs. SEPs for UONs, MTAs, and other AAF pathways may be streamlined, tailored, or waived per DoDI 5000.02 and DoDI 5000.88, with consent of the approval authority.
- (2) SEPs are a best practice for all defense warfighting system development and can be tailored, as necessary, for application to each AAF acquisition pathway and ACAT.
- (3) SEPs are developed under direction of the PM, by the LSE. SEP requirements are prescribed in DoDI 5000.88 and a DoD SEP outline is available at https://www.dau.edu/cop/stm/pages/search.aspx?k+sep.
- (4) The SEP will be submitted for approval in accordance with the timelines and requirements for submissions, reviews, and approvals specified in DoDI 5000.88 and this regulation. Before submitting the

documented SEP to the USD (R&E), MDAP MATDEVs will submit it to the DASA (DES) for review. The ODASA (DES) also reviews the documented SEPs for non-MDAP programs when the AAE is the MDA/DA. When the AAE delegates MDA/DA to a PEO, the PEO's LSE reviews the SEP, and the PEO is the approval authority.

- c. Technical reviews. Systems engineering technical reviews provide a venue to establish the technical baselines, assess the system's technical maturity, and review and assess technical risks. At each technical review, the PM will, to the extent practicable, assess key risks, issues, opportunities, and mitigation plans. Refer to DoDI 5000.88 for a list of system-level reviews the PM must conduct, unless waived through the SEP approval process; requirements for Office of the Under Secretary of Defense for Research and Engineering (OUSD (R&E)) representative attendance; and preliminary design review (PDR) and critical design review (CDR) assessments applicable to MDAPs.
- d. Preliminary design reviews at Army level. The DASA (DES) will assess PDRs conducted by Armymanaged ACAT IC programs and provide the assessment results to the AAE to inform them of technical risks and the program's readiness to proceed into detailed design.
- (1) Army PMs will invite the DASA (DES) to participate in their PDRs and will provide all the program information needed for the completion of the post-PDR assessment.
- (2) For Army-managed programs below ACAT I (or equivalent categories associated with an AAF acquisition pathway other than MCA), the MDA/DA will determine whether to, and who will, conduct the post-PDR assessment.
- e. Critical design reviews at Army level. The DASA (DES) will assess CDRs conducted by Army-managed ACAT IC programs and provide the assessment results to the AAE.
- (1) Army PMs will invite DASA (DES) to participate in their CDRs and will provide all the program information needed for the completion of post-CDR assessments.
- (2) For Army-managed programs below ACAT I, the MDA/DA will determine whether to, and who will, conduct post-CDR assessments.
- f. Independent technical risk assessments. Independent technical risk assessments (ITRAs) are required for MDAPs and provide a view of program technical risk, independent of the program. ITRAs are not required for non-MDAP programs, but if conducted, will follow the OUSD (R&E)-published ITRA policy and guidance and will be conducted in accordance with the DoD ITRA framework for risk categorization. Refer to DoDI 5000.88 for details on ITRA requirements, to include specific requirements for MDAPs, special access programs that exceed MDAP dollar thresholds, and programs designated by an MDA/DA as ACAT I special interest programs. ITRAs are required for MTA pathway programs when entering into the MCA pathway at MS B, and at LRIP for programs entering at MS C. ITRAs can be tailored based on the program, but all Defense Technical Risk Assessment Methodology risk areas must be considered.
- g. Technology readiness assessments. DoDI 5000.88 requires that MDAPs assess and document technology maturity of all critical technologies consistent with technology readiness assessments guidance. Army programs assess and document the technology maturity of all critical technologies. Technology readiness assessments are conducted within the ASA (ALT) office of the DASA (R&T) for technologies developed for acquisition programs. Program office personnel will coordinate with CG, AFC; CG, USAMC; DCS, G–1; CG, U.S. Army Space and Missile Defense Command; the CG, MRDC; and CG, USACE to brief the ASARC on the results of the acquisition program's technology readiness assessment. For programs for which an ITRA is conducted, a technology readiness assessment report is not required.
- h. Other engineering reviews and assessments at Army level. There are numerous engineering reviews and assessments conducted by Army-managed programs that are not required by DoDI 5000.88. The LSE at PEO and PM levels assisted by DASA (DES), will recommend to PMs and PEOs the types of engineering reviews and assessments to be conducted for Army-managed programs, consistent with their AAF acquisition pathway requirements. Tailoring of reviews and assessments is authorized. The MDA/DA is the final approval authority for program engineering review and assessment requirements and tailoring.
- i. Program protection. DoDI 5000.88 requires that the PM prepare a PPP that will serve as a technical planning tool to guide system security engineering activities for the program in accordance with DoDI 5000.83. AR 70–77 assigns responsibilities and prescribes additional Army policies for developing plans to protect critical program information; conducting information and communications technology supply chain risk management, to include anti-counterfeit requirements (see para 4–5); and performing damage assessment activities resulting from a compromise of unclassified controlled and classified technical information while residing in the defense industrial base. The OPR for program protection policy and oversight is the Deputy Assistant Secretary of the Army for Sustainment (DASA (S)).

4-3. Specialty engineering

Refer to DoDI 5000.88 for policy, responsibilities, and procedures related to specialty engineering. This paragraph addresses specialty engineering considerations and responsibilities that are applicable to Army acquisition programs.

- a. Software engineering. Refer to DoDI 5000.88 for requirements of the software engineering approach. The PM and lead software engineer will implement a software development approach based on scope, requirements, schedule, and risk; they will be cognizant of and comply with DoDI 4630.09 in their software engineering development approach.
 - (1) The software development approach and minimum metrics will be documented in the SEP.
- (2) An Army PEO's or DRPM's chief software architect is responsible for overseeing software development, providing guidance, and ensuring consistent implementation of best practices and standards within the PEO's portfolio or program. Army MATDEVs are responsible for software support throughout the life cycle of the system for mission critical computer resources. Army PMs may obtain product support integration and software support activity services from a sustainment command to maintain software of systems in sustainment—
- (a) When a transition plan is negotiated among the MATDEV, the prospective sustaining command, and the assigned software engineering center (when different than the sustaining command).
 - (b) The first full FY after the hardware production line closes.
 - (c) The first full FY after completion of software fielding.
- b. Reliability, availability, and maintainability. The Army adds "availability" and uses the acronym for reliability, availability, and maintainability (RAM). The Army's RAM program is prescribed in AR 702–19. Refer to DoDI 5000.88 and AR 702–19 for details on requirements for planning and executing a comprehensive RAM program.
- c. Quality and manufacturing. Manufacturing readiness and risk will be assessed and documented in the SEP. Specific guidance on requirements for the phases and production decisions for programs following the MCA pathway are highlighted in DoDI 5000.88. For programs following other AAF acquisition pathways, the production, quality, and manufacturing lead will develop tailored pathway-appropriate procedures for which the MDA/DA is the final approval authority.
- d. Human systems integration. The Under Secretary of Defense for Research and Engineering has prescribed policies and procedures for acquisition responsibilities related to HSI in DoDI 5000.95. Refer to the acquisition policies and guides section of the AAF website (https://aaf.dau.edu) for the latest published HSI guidance. See also AR 602–2.
- e. System safety. ESOH requirements apply to all AAF acquisition pathways and must be appropriately tailored to each. Army ESOH requirements include—
- (1) System safety. Army PMs will establish and manage system safety programs to minimize risks throughout the system life cycle. They will use the Army Weapons Systems Safety Review Board to coordinate the Joint process for Army-led joint programs. If a system safety issue is identified that cannot be resolved within the System Safety Working Group, any stakeholder may request an independent safety assessment from the Director of Army Safety. PMs will be responsible for the funding required to complete the independent safety assessment. Refer to DoDI 5000.69, AR 385–10, and DA Pam 385–16.
- (2) National Environmental Policy Act (NEPA) compliance. Federal law that requires environmental factors be weighted equally when compared to other factors in the decision-making process. The NEPA process enables a program to systematically examine potential adverse environmental effects occurring from all acquisition activities. MATDEVs will comply with the NEPA procedural requirements for Army actions in Part 651, Title 32, Code of Federal Regulations (32 CFR 651).
- (3) Programmatic environment, safety and occupational health evaluation (PESHE). MATDEVs will prepare a PESHE for all MCA programs. MATDEVs for UCA, MTA, and SWP programs controlling weapon system hardware will tailor-in PESHE. The PESHE will include the NEPA Compliance Schedule and ESOH hazard assessments/acceptances. The PESHE must include, at a minimum, identification of ESOH risks and their status; and, identification of hazardous materials, wastes, and pollutants (discharges, emissions, or noise) associated with the system and its support as well as the plans for minimization or safe disposal. The PESHE will be integrated into the SEP and reviewed and updated as needed to ensure content is accurate and current. The PESHE will be included as an annex of the product support strategy for operation and support. The approval authority for the PESHE is the PEO, except in cases where a high risk is documented. High ESOH risk will be approved by the AAE, in coordination with a user representative of equivalent rank.

- (4) Occupational health. Health hazard assessments are required to inform program decision reviews. MATDEVs will request health hazard assessments from the Defense Centers for Public Health–Aberdeen (DCPH–A) in accordance with AR 40–10. MATDEVs will request a toxicity assessment from DCPH–A for any new chemical or material under consideration for the system configuration to guide design tradeoffs. MATDEVs will request a toxicity clearance from DCPH–A for any new chemical or material entering the Army inventory. Toxicity assessments and toxicity clearances will be executed in accordance with AR 40–5. Refer to the DCPH–A website at https://phc.amedd.army.mil/ for more information.
- (5) Hazardous materials and wastes. The AAE has directed the elimination of the use of hexavalent chromium in all Army weapon system acquisitions and modifications by specific dates based on usage. Hazardous and toxic chemicals and materials will be evaluated in accordance with National Aerospace Standard (NAS) 411 or an equivalent method. NAS 411–1 contains a listing of chemicals and materials that may be tailored by the program. The Deputy Assistant Secretary of the Army for Sustainment (DASA (S)) Director, ESO will provide subject matter assistance and will ensure guidance is incorporated into appropriate publications.
- (6) ESOH risk assessment and acceptance. Per DoDI 5000.88, ESOH risk is assessed using a method consistent with MIL-STD-882E. PMs will report the status of ESOH risks and acceptance decisions at technical reviews, and the status of serious and high system-level risk at acquisition program decision points.
- (a) System-level risk will equal the highest individual hazard assessment (for example, a high risk individual hazard equates to high system-level risk).
- (b) PMs will document risk assessment and acceptance and may accept low and medium level risk in all AAF pathways except UCA and MTA. For UCA and MTA pathways, user representative concurrence is required for medium level risk acceptance.
 - (c) PEOs may accept serious level risk.
 - (d) Only the AAE may accept high level risk.
- (e) A user representative at an equivalent rank must formally concur with serious and high level risk acceptance.
- (7) ESOH cost and liability. MATDEVs will provide supporting data, as available, to the ASA (FM&C)-developed ESOH life cycle cost estimates during the Army cost review process. MATDEVs will develop and maintain an estimate of hazardous waste generated during operation and disposal to support estimation of weapon system environmental liabilities. See DoD 7000.14–R, Volume 4 for additional information.
- (8) Mishap investigations. MATDEVs will support Class A mishap investigations as required by 10 USC 2255.
- (9) Emerging chemical restrictions. MATDEVs must seek alternatives to chemicals in restricted supply chains. MATDEVs will report mission critical system requirements for halon 1301, halon 1211, chlorodifluoromethane–22 and hydrofluorocarbons supporting mission critical capabilities on July 1 annually. Reports will be provided to DASA (S). The DASA (S) Director, ESO will provide assistance and will ensure procedural guidance is incorporated into appropriate publications.

4-4. Design and architectural factors

Refer to DoDI 5000.88 for policy, responsibilities, and procedures related to design and architectural factors.

- a. Modular open systems approach. As required by DoDI 5000.88, the LSE, under the direction of the PM, will use the modular open systems approach (MOSA) in product designs to the maximum extent practicable in accordance with 10 USC 4401, 4402, and 4403. The MOSA will be documented in the system engineering plan (SEP)/SAMP, and in any other relevant acquisition documentation (e.g. Acquisition Strategy (AS), Intellectual Property (IP) strategy. MOSA applies to Army programs following the MCA pathway and programs following other AAF acquisition pathways. Refer to DoDI 5000.88 for additional details for MOSA compliance.
- b. Spectrum supportability. Refer to AR 5–12 for Army spectrum requirements, including requirements for spectrum supportability and risk assessment, spectrum certification, and host nation coordination. Army MATDEVs must submit a preliminary request for projected frequency use to the Army Spectrum Management Office that adheres to the capabilities in the ICD. The request should be updated before Milestone B for MCA programs. These requirements also apply to equivalent capabilities requirements (for example, information system ICDs, A-CDDs) and Milestone B equivalents for programs following other AAF acquisition pathways.

- c. Corrosion prevention and control. Refer to DoDI 5000.88 and DoDI 5000.67. Reducing corrosion and its impacts to capabilities, readiness, and its sustainment burden is an Armywide responsibility. The AAE has established an overarching Army CPC program and appointed an Army Corrosion Control and Prevention Executive within the ODASA (S) in accordance with the requirements of 10 USC 2228. The Army CPC program is designed to maintain capabilities, increase safety and reduce sustainment costs of equipment and infrastructure. Consequently, it includes all military equipment owned, operated, leased, or supported by the Army and governs all phases of materiel management life cycle, to include development of capabilities RDT&E, introduction of materiel and parts into the supply chain, and supporting infrastructure.
- d. Item unique identification. Refer to DoDI 5000.88, DoDI 8320.04, and AR 700–145. DoDI 8320.04 prescribes the standards for unique item identifiers (UII). Army programs provide the Army standard data key, the UII, to enable serialized item management; integrate with the DoD unique identification policy that aligns acquisition, maintenance, financial, and logistics processes and information systems; and provide a cornerstone for life cycle traceability. Refer to AR 700–145 for additional details on item unique identification policy for Army programs.

4-5. Other considerations

The following section raises additional systems engineering considerations in addition to those identified in DoDI 5000.88.

- a. Insensitive munitions. The Army lead agent for insensitive munitions (IM) is the ASA (ALT) DASM. MATDEVs must request an approved toxicity clearance for chemicals and materials used in energetic formulations. Refer to AR 40–5 and the DCPH–A website at https://phc.amedd.army.mil/ for more information on toxicity assessments and clearances. The Army Insensitive Munitions Board (AIMB) carries out various responsibilities that are critical to the effective execution of the U.S. Army IM Program. The AIMB serves as an independent advisory board to the Army lead agent for IM on all IM matters. The AIMB assists acquisition managers in the execution of their IM responsibilities. The AIMB reviews IM Strategic Plans, provides IM technical advice, integrates IM and system safety testing, provides IM assessments, provides guidance for out-of-cycle IM waivers, and coordinates emerging IM technology. The AIMB ensures the safety of IM per PL 107–107 and 10 USC 2389.
- b. Anti-Counterfeit Program. The DASA (S) will ensure Army programs implement an anti-counterfeit program to prevent and reduce the risk of introducing counterfeit material into Army's supply chain at any level to prevent negatively impacting readiness. The Anti-Counterfeit Program is leveraged by program protection planning for mission-critical operational and IT components. Refer to DoDI 4140.67 for additional information.
- (1) The Army lead organization for anti-counterfeit policy is the ODASA (S). The OPR for oversight and execution of the Army Anti-Counterfeit Program is the Director of the DEVCOM Chemical Biological Center
- (2) The Anti-Counterfeit Program will be applied in all phases of materiel management, from identifying and defining an operational requirement to an item's introduction into the DoD supply chain, through weapon and information system phase-out and retirement, including operation and maintenance, materiel disposition, and the materiel management data systems. Army implementation includes the following:
- (a) Contracting officers and MATDEVs will comply with DFARS 246.870–3 and ensure contract clauses, when required under DFARS 246.870–3, are included in all applicable contracts. Where DFARS 246.870 does not apply, contracting officers will ensure contractors and sub-contractors at all tiers who obtain critical or high-risk materials or parts implement a risk mitigation process that includes purchasing items only from suppliers authorized to provide the specific materials or parts and notifying the contracting officer when the materials or parts cannot be obtained from an authorized supplier.
- (b) Requiring all occurrences of suspect and confirmed counterfeit materials or parts be documented within 60 days in the appropriate reporting systems and the Government Industry Data Exchange Program.
- (c) Upon completion of the investigation of suspect counterfeit materiel, materiel confirmed or still suspected to be counterfeit are to be destroyed or mutilated to ensure it does not re-enter the supply chain, per DoDM 4160.21.
- c. Sustainable procurement. MATDEVs in all Army acquisition programs will implement sustainable (green) procurement when selecting consumable materials to be used in production and maintenance. Refer to DoDI 4105.72 and FAR 23 for applicability, policies, and procedures for acquiring energy-

efficient, water conserving, and environmentally preferable products and services. The ASA (IE&E) can provide additional technical support and expertise.

d. Diminishing Manufacturing Sources and Material Shortages. MATDEVs for all Army acquisition programs will establish and implement risk-based, proactive DMSMS management. Refer to DODI and DoDM 4245.15, SD–19, SD–22, and AR 700–127 and DA Pam 700–127 for policies and procedures.

Chapter 5 Test and Evaluation

5-1. General

This chapter provides a description of the policies and procedures for testing of Army acquisition programs, including Army acquisition programs under OSD developmental test and evaluation (DT&E), operational test and evaluation (OT&E), and live fire T&E oversight. DoDI 5000.89 establishes DoD policy, assigns responsibilities, and prescribes procedures for T&E programs across the AAF acquisition pathways. Its corresponding implementation, including Army-specific T&E responsibilities, organizations, policies, and procedures, are prescribed in AR 73–1 and DA Pam 73–1.

5-2. Test and evaluation management

The senior Army official providing oversight on all Army T&E policy is the Army T&E Executive. The Army T&E executive is the documented TEMP approval authority for ACAT I and II or equivalent category programs following other AAF acquisition pathways. The Army T&E Executive is the component-level signature authority for Army programs on OSD T&E oversight and other high visibility programs, as appropriate. The MDA/DA is the documented TEMP approval authority unless the program is under OSD T&E oversight, or the Army T&E Executive is the approval authority. The T&E working-level integrated product team resolves issues and assists Army MATDEVs in developing and coordinating the documented TEMP. The CG, Army Test and Evaluation Command (ATEC) supports the system acquisition, force development, and experimentation processes through overall management of the Army's non-medical T&E programs. ATEC is also the Army's lead non-medical DT&E organization responsible for providing independent DT&E in support of MDAPs, and the Army's independent OT&E activity for non-medical programs. The CG, ATEC reports directly to the VCSA through the Director of the ARSTAF. The U.S. Army Medical Test and Evaluation Activity (USAMTEAC) is the Army's ATEC-equivalent lead test organization for medical products and systems. Army PMs are responsible for test planning, resourcing, and execution. Refer to AR 73–1 and DA Pam 73–1.

5-3. Resources and schedule

The Army's Test Schedule and Review Committee provides the Army's centralized management of resources for OT&E, force development test or experimentation, and resource support for DT&E not otherwise available. Refer to AR 73–1 for details about the Army's Test Schedule and Review Committee and the 5-Year Test Program.

5-4. Streamlining operational testing

Army PMs will collaborate with the test community to plan and streamline tests and to find new ways to collect and report relevant data on system capabilities and limitations to decision makers so they can judge operational risk.

- a. Test planning. PMs will work with ATEC and USAMTEAC personnel to instill a continuous process of information gathering and decision making to inform the OT&E community of the capabilities of systems or products in development. OT&E should not be used as a final pass or fail test event, rather, it should be incorporated throughout development of the system to identify operational problems early, instead of relying on costly and time-consuming retests to validate the last 5 percent of capability. Testing should be designed to provide Commanders clear, relevant information about capabilities and limitations, so they can make choices based on the operational and technical risks.
- b. Test data and risk management. Army PMs will work with ATEC personnel and users to establish methods to better quantify and mitigate risk when fielding systems that may be short of 100 percent validation.

Chapter 6 Life Cycle Sustainment

6-1. General

This chapter supplements DoDI 5000.91 as it relates to life cycle sustainment planning for Army acquisition programs. This publication defers to the Army's 700– and 770–Series publications (for example, AR 700–127, DA Pam 700–127, AR 700–145, AR 770–2, DA Pam 770–2, AR 770–3, and DA Pam 770–3) for details on the Army's sustainment and product support policy.

6-2. Sustainment across the life cycle

The PM is accountable for achieving program life cycle management objectives throughout the program life cycle. Planning for operations and sustainment will begin at program inception and supportability requirements will be balanced with other requirements that impact program cost, schedule, and performance.

- a. Transition to sustainment. Transition to sustainment is intended to ensure the MATDEV and supporting Life Cycle Management Command have coordinated and agreed to the conditions that best support moving from the production phase to the sustainment phase of the weapon system life cycle including an incremental, time-phased approach.
- b. Integrated product support. Army MATDEVs will establish an integrated product support (IPS) program, fully address system life cycle product support, and use a standard failure reporting and corrective action system software tool to inform independent logistics assessments, weapons system reviews, and SRs to ensure that reliable systems are produced for Soldiers. Contractors supporting the Government are not required to use the standard software tool, but the contractor's tool should be compatible with the Government software. Refer to DoDI 5000.91 and AR 700–127 for additional IPS policy.
- c. Depot source of repair. 10 USC 2464 and DoDD 4151.18 require maintaining adequate organic core depot maintenance capabilities to provide effective and timely response to surge demands, ensure competitive capabilities, and sustain institutional expertise. A DoDand Army-mandated logical decision process supports depot source of repair determinations. Refer to AR 700–127 for the detailed Army policy on depot source of repair.
- d. Type classification, materiel release, and unit set fielding. Army MATDEVs will employ type classification, materiel release, and unit set fielding in accordance with the requirements prescribed in AR 770–2 and AR 770–3.

6-3. Life cycle sustainment plan

DoDI 5000.91, AR 700–127 and DA Pam 700–127 are to be used in conjunction with this regulation to ensure integral and critical cross-discipline sustainment planning, consideration, review, and execution throughout the life cycle. Army documented LCSPs are initially developed by the CAPDEV and are transferred to the MATDEV as part of the program initiation decision process and as prescribed in AR 700–127. Refer to DoDI 5000.91 and AR 700–127 for additional policy requirements. Preservation of tooling for MDAPs is in conformance with PL 110–417, MATDEVs will prepare a preservation of tooling for MDAPs annex to the documented LCSP. The MATDEV must ensure that there are sufficient resources to identify, preserve, and store any unique tooling for production throughout the program's serviceable life. For detailed requirements and additional guidance, refer to PL 110–417, AR 700–127, and DA Pam 700–127.

6-4. Sustainment metrics

Refer to DoDI 5000.91, AR 700–127 and DA Pam 700–127. The PM must establish program sustainment metrics and collect and test actual performance against these metrics to trace the program's sustainability throughout its life. These metrics will be incorporated into the LCSP to track trends, identify issues, develop cost targets, and establish strategies for improving sustainability at reduced costs.

6-5. Sustainment reviews

Refer to DoDI 5000.91, AR 700-127, and DA Pam 700-127.

6-6. Software sustainment

Refer to DoDI 5000.91, AR 700-127, and DA Pam 700-127.

6-7. Operation and support cost data subset to metrics

Refer to DoDI 5000.91, AR 700-127, and DA Pam 700-127.

Chapter 7

Affordability Analysis and Investment Constraints

7-1. General

10 USC 4271 establishes program cost, fielding, and performance goals for MDAPs. Army decision authorities will enforce affordability constraints throughout the life cycle of all Army programs across AAF acquisition pathways and ACATs or their AAF equivalents. DoDI 5000.85 and this chapter prescribe policies and procedures regarding the fundamental concepts and approaches for developing and applying affordability constraints to Army acquisition programs. A table identifying references that provide additional policy requirements, applicable to specific pathways other than the MCA pathway is in the AAFDID (available at https://www.dau.edu/aafdid/pages/about.aspx).

7-2. Life cycle affordability

Army leaders conduct affordability analysis with support and inputs from the programming, resource planning, requirements, intelligence, and acquisition communities.

- a. General. The DASA–CE, as the principal advisor on all Army cost and economic analysis activities on behalf of the ASA (FM&C), provides cost and economic analysis support to the Army planning, PPBE, affordability goals and caps development efforts, and other Army decision-making processes. The DCS, G–3/5/7 conducts force integration analyses to assess supportability and affordability for structure, manpower, equipment, fiscal resources, facilities, and training. The DCS, G–8 presents tentative affordability goals at the MDD or other pathway-compliant initiation decision review, an affordability analysis and proposed affordability goals at Milestone A or the equivalent AAF pathway-compliant review, and affordability caps for unit production and sustainment costs at Milestone B or the equivalent AAF pathway-compliant review.
- (1) Upon setting the original APB for an MCA pathway program (or equivalent baseline for programs following other AAF pathways), Army MATDEVs will include affordability caps for unit production and sustainment costs in the APB. Affordability caps will be established as fixed cost requirements equivalent to KPPs.
- (2) Any programs that do not include a milestone decision will receive goals or caps commensurate with their acquisition pathway, position in the acquisition cycle, and level of maturity.
- (3) The life cycle affordability of all Army programs is determined within the portfolio where the program resides. The DA will normally make tradeoffs within a portfolio but, if necessary, can and should make tradeoffs across portfolios to provide adequate resources for high priority programs.
- b. Affordability-related reporting requirements for Army programs. Army PMs will report the status of their affordability constraints.
- (1) MDAPs (or when required, AAF equivalent category programs) provide affordability constraints in the cost notes of the APB that resides in the APB repository. The OSD DAVE APB application (https://dave.acq.osd.mil) is the approved ASA (ALT) system for APB preparation, maintenance, and storage until the PMRT system (https://pmrt-army.altess.army.mil/portal/) can fulfill that role.
- (2) MDAPs also report affordability updates via DAVE (or PMRT when it can fulfill that roll) in the cost notes section of their DAE summary and SAR submissions, and in the quarterly management acquisition report in PMRT.
- (3) Programs below the MDAP threshold (or AAF equivalent) generally do not report affordability updates to HQDA unless specifically directed by the MDA/DA. Normally, affordability update reporting for below-MDAP category (or AAF equivalent program categories, when required) is accomplished via the APB cost notes and, in the program's, guarterly management acquisition report in PMRT.
- (4) When the AAE or DAE is the MDA/DA, PMs of programs with affordability constraints will report the current estimate against their affordability constraints to the ODASM and ODASA (PP&R) in accordance with the AAE's guidance.

- (5) When MDA/DA has been delegated, PMs of programs with affordability constraints will report status against affordability constraints, average procurement unit cost, program acquisition unit cost, and life cycle cost estimates in reviews conducted by the MDA/DA in accordance with normal ASA (ALT) program review procedures.
- c. Actions for programs that do not meet affordability constraints. If a PM determines approved affordability constraints cannot be met, even with aggressive cost control and reduction approaches, the technical requirements, schedule, and required quantities must be revisited.
- (1) For programs where the AAE retains MDA/DA, the CSB will support the effort to revisit technical requirements, schedule, required quantities and facilitate requirements reductions proposed to and approved by the capability requirements validation authority (see para 2–18).
- (2) For Army programs where the AAE delegates MDA/DA, the MDA/DA, supported by the CSB (at the appropriate level and with the appropriate composition) or an equivalent review body established at the MDA's/DA's discretion, revisits technical requirements, schedule, and required quantities and facilitates requirements reductions proposed to and approved by the requirements validation authority.
- (3) If constraints still cannot be met and the Army cannot afford to raise the program's affordability caps by lowering constraints elsewhere, the program will be subject to termination.

Chapter 8 Analysis of Alternatives

8-1. General

This chapter augments DoDD 5105.84 and DoDI 5000.84 by prescribing requirements on AOAs for Army acquisition programs. Refer to DoDD 5105.84 and DoDI 5000.84 for policy, responsibilities, and procedures to implement the AOA process for defense systems. The principles and practices described apply, as appropriate, to all DoD systems. Refer to https://aaf.dau.edu/guidebooks/ and other guidance documents listed in DoDI 5000.84. Also refer to AR 71–9 for more information on the AOA as it applies to the warfighting capabilities determination process. The AOA is one of the key inputs to refine requirement documents and acquisition approaches, however, the AOA does not establish or define the requirement or approach. Similarly, the result of an AOA is not the acquisition decision and does not replace a source selection board. Requirements and acquisition authorities use additional information not covered in the AOA (for example, industrial base considerations, support by Congress, manufacturing location, number of prime and supporting vendors) to make their decisions.

8-2. Analysis of alternatives procedures

Prior to the MDD, the DCAPE develops and approves study guidance and study plans for all MDAPs. For non-MDAP programs requiring AOAs, the CG, AFC coordinates with the MDA/DA before approving AOA study guidance and study plans (or alternatives thereto). Army programs following AAF pathways that do not require AOAs may use existing or alternative analyses to satisfy the AOA requirement. The CAPDEV will present alternative sources of analysis to the MDA/DA, who determines their sufficiency for acquisition decisions. For Chemical and Biological Defense Program funded programs, study guidance and study plans (or alternatives thereto) will be developed in accordance with the roles and responsibilities prescribed in DoDD 5160.05E. The DCS, G–8 provides oversight for Army conduct and support of AOAs and other appropriate analyses. The DASA–CE provides oversight for cost analysis in support of AOAs. The CAPDEV maintains analyses as historical records.

8-3. Analysis of alternatives funding

The Army has established a separate Army program element funding line for proposed programs or projects not yet assigned to a PM. The ASA (ALT) and DCS, G–8, in coordination with the Director of Army Budget, will ensure programs identified as the Army's priorities are funded appropriately and accordingly.

Chapter 9 Cost Estimating and Reporting

9-1. General

This chapter augments DoDI 5000.73 by prescribing policies and procedures applicable to cost estimating and reporting for Army acquisition programs. The DoD and Army conduct analyses to provide accurate information and realistic estimates of cost for acquisition programs. Independent and sound cost estimates are vital for effective acquisition decision making and oversight. Cost estimates also support efficient and effective resource allocation decisions throughout the PPBE process. Cost estimating and reporting concepts must be applied to all acquisition programs per policies established in DoD issuances and by the Army's Cost and Economic Analysis Program prescribed in AR 11–18. PEOs will ensure PMs apply should-cost management principles to all acquisition programs to proactively target cost reduction and drive productivity improvements into programs throughout the product life cycle.

9–2. Program cost, fielding, and performance goals for major defense acquisition programs The designated MDA/DA of an MDAP-level program will establish cost, fielding, and performance goals, also called "targets," before funds are obligated for technology development, systems development, or production pursuant to 10 USC 4271. This policy applies to all MDAPs that enter the acquisition process after 1 October 2017 without regard to what milestone initiates the program. Program cost fielding and performance goal development procedures were published in a Deputy Secretary of Defense memorandum, subject: Procedures for the Establishment of Program Cost, Fielding, and Performance Goals for Major Defense Acquisition Programs, dated 16 November 2018.

9-3. Cost estimation

Refer to DoDI 5000.73. The office of the ASA (FM&C) performs Army cost estimating functions equivalent to those performed by the office of the DCAPE at OSD level (see DoDD 5105.84). AR 11–18 assigns responsibilities and prescribes policy for the U.S. Army Cost and Economic Analysis Program and the DA Cost Analysis Manual (available at https://www.asafm.army.mil/) provides a basic framework for implementing the policies of cost and economic analysis concepts, methods, and procedures.

- a. Cost estimates for capabilities documents. CAPDEVs will develop rough order magnitude cost estimates which will be validated by DASA–CE to support development of ICDs, abbreviated capabilities development documents (A-CDDs), capabilities development documents, information system-CDDs, and capability requirements documents (applicable to DBS) for the AROC and MDD ASARC (or their AAF pathway-determined equivalent) decision reviews. Sources of information for these estimates may include AOA, PMOs, S&T community, market research, similar systems, and RFP data, when not restricted.
- b. Cost estimates when the Army Acquisition Executive is the decision authority. For all ACAT I, BCAT I or other AAF equivalent category programs where the AAE is the MDA/DA, or for other programs when approved by the AAE, the DASA–CE, on behalf of the ASA (FM&C), will develop statutory independent cost estimates (when delegated by DCAPE). DASA–CE, on behalf of the ASA (FM&C), will develop component cost analyses in accordance with DoDI 5000.73 and chair the Army CRB. For MDAPs pursuing the MCA pathway, ACPs will be approved by the ASA (FM&C). Army cost estimates for non-MCA programs will be approved by the DASA–CE, on behalf of the ASA (FM&C).
- c. Cost estimates when the Army Acquisition Executive delegates milestone decision authority. For Army programs where the AAE delegates MDA/DA, the PM will develop a program cost estimate in accordance with DoDI 5000.73 and the DA Cost Analysis Manual (available at https://www.as-afm.army.mil/). The estimate will be prepared or updated as necessary for Milestones A, B, and C, and full-rate production (FRP) decisions (or their AAF acquisition pathway equivalents). Upon approval by the MDA/DA, the program-developed estimate becomes the approved program office estimate. The MDA/DA may request that the DASA–CE, at the DASA–CE's discretion, develop cost assessments for any program. PMs may, at their discretion, use another organization with requisite expertise to independently verify the program estimate.
- (1) The AAE, ASA (FM&C), or the DCS, G–8 can nominate ACAT II and below programs or equivalents for an ACP or sufficiency review by DASA–CE. These costs estimates are intended to assist senior Army leaders in making cost-informed decisions. The AAE retains the authority for approving any program nominated for cost estimates. If the AAE approves the review nomination, DASA–CE, on behalf of the ASA (FM&C), will develop the review for the AAE's approval.

- (a) Nominations will be submitted through the DASM to the Deputy Assistant Secretary of the Army for Plans, Programs and Resources (DASA (PP&R)). The DASM and DASA (PP&R) make recommendations to the AAE on whether or not to prepare an ACP (or any cost estimate) as deemed necessary. If the AAE approves the review nomination, the PEO or PM will be notified and informed of the purpose and desired outcome via the program's DA systems coordinator.
- (b) Nominations will be submitted at the general officer or Senior Executive Service level no later than 9 months prior to the decision review.
- (2) Consideration should be given to the resources required by PMOs and the HQDA staff to complete a cost estimate before nominating programs. For example, developing, staffing, and presenting an ACP to a CRB for a program following the MCA pathway requires approximately 6 months to complete and should be submitted well in advance of the desired decision. An alternative to the formal ACP (for example, a DASA–CE sufficiency review) requires less time and provides additional confidence in the accuracy of cost estimates. A detailed DASA–CE cost product timeline planner is available at https://www.as-afm.army.mil/cost-materials/cost-models/#rates-guidance under "Request/Plan a DASA–CE Cost Product.
- d. Economic useful life. The Army defines economic useful life (EUL) as the estimate of the point in time when the Army should plan on replacing or modernizing a weapon or system, based on the expected impact to readiness (technical or operational obsolescence) and resources (Business Case Analysis/Cost Benefit Analysis). MATDEVs should develop and use EUL estimates when developing life cycle cost estimates. The EUL estimate should detail the data and assumptions used in developing the useful life.
- (1) During the system life cycle, MATDEVs will assess the need for system overhaul or recapitalization within the recommended EUL. To achieve the EUL values, past experience has shown programs will likely require depot events targeted towards maintaining integrity of the platforms and increasing capability. These depot events must be resourced as part of overall life cycle sustainment so programs can achieve the required EUL.
- (2) MATDEVs will update the cost position in collaboration with the DASA–CE as the cost position changes and use EUL when developing life cycle cost estimates and APBs. MATDEVs may be required to inform additional stakeholders as the cost position is adjusted. The MDA/DA will determine whether to apply EUL to the MTA pathway.
- (3) To ensure the EUL Matrix keeps pace with Army modernization, the Army's EUL Matrix will be reviewed for update bi-yearly.

9-4. Cost analysis requirements description

Refer to DoDI 5000.73 and the DA Cost Analysis Manual (available at https://www.asafm.army.mil/).

9-5. Cost reporting

Refer to DoDI 5000.73 and the DA Cost Analysis Manual. The DASA–CE serves as the Army's focal point and approval authority for cost reporting and establishes cost estimating and cost analysis policies and procedures. For all efforts that meet the thresholds for cost reporting as defined in DoDI 5000.73, PMs are required to notify DASA–CE 90 days prior to the planned RFP (or similar solicitation) releases in accordance with DoDM 5000.04.

Chapter 10

Requirements Applicable to All Programs Containing Information Technology

10-1. General

DoDI 5000.82 establishes functional acquisition policy and procedures for all programs containing IT (including NSS) pursuant to the relevant sections of 10 USC, 40 USC, and 44 USC. DoDI 5000.82 excludes equipment acquired by contractors that is incidental to the performance of a DoD contract, such as telephones, computers, and fax machines. Program IT responsibilities are assigned in accordance with the authority in DoDD 5144.02 and DoDD 8000.01. This publication supplements DoDI 5000.82 and implements in part DoDI 5000.82, its related policy and guidance publications, and the Army's approach to IT acquisitions and procedures relating to acquisition programs and systems containing IT, regardless of dollar value and including NSS.

10-2. Clinger-Cohen Act compliance

Refer to the AAFDID tables at https://www.dau.edu/aafdid/pages/about.aspx for a summary of requirements levied on all programs that acquire IT, including NSS. Mandatory procedures for CCA compliance is prescribed in DoDI 5000.82. Additional Army-specific policy is prescribed in AR 25–1. Army PMs report CCA compliance to the MDA/DA and the Army CIO. Overall responsibility for recording 40 USC, Subtitle III compliance of all Army programs that acquire IT, including NSS, resides with the Army CIO.

10-3. Cybersecurity for programs containing information technology

Refer to DoDI 5000.82, DoDI 5000.83, DoDI 8500.01, DoDI 5000.90, AR 70–77, AR 71–9, and chapter 11 of this regulation. All acquisition of IT must incorporate cybersecurity requirements, in accordance with DoDI 8500.01. All Army information systems must be assessed and authorized in accordance with AR 25–2 and be categorized based on the National Institute of Standard's Federal Information Processing Standards publication 199 (FIPS 199), available at https://csrc.nist.gov/publications/detail/fips/199/final. Refer to DA Pam 25–2–11 for details on procedures for review and approval process for the cybersecurity strategy, which is included as an appendix to the documented PPP or its equivalent.

10-4. Trusted systems and networks

Refer to DoDI 5000.82, DoDI 5000.83, DoDI 5200.44, AR 25–2, and AR 70–77 for policy and requirements to ensure that systems security engineering and the trusted systems and networks processes, tools, and techniques are incorporated into the acquisition of all applicable systems.

10-5. Department of Defense Enterprise Software Initiative

Refer to DoDI 5000.82. The primary source for Army commercial IT purchases is the Army Computer Hardware, Enterprise Software and Solutions (CHESS) program, under the management of the Program Executive Officer for Enterprise Information Systems (PEO EIS). Army MATDEVs purchasing commercial hardware and software must satisfy their IT requirements by using CHESS contracts and DoD Enterprise Software Initiative agreements first, regardless of dollar value. A complete list of CHESS contracts and the online statement of non-availability process can be found at https://chess.army.mil (this website requires common access card-enabled access). Information system owners will coordinate their hardware and software IT purchases with the Enterprise Mission Assurance Support Service (eMASS) hardware/software module to allow visibility into assets included in their respective authorization boundary and provide the Army with the ability to manage in real time asset inventory, configuration, and vulnerability status. More information on eMASS is available at https://www.dcsa.mil/is/emass/.

10-6. Army Cloud Management

Refer to DoDI 5000.82. Before obligating funds for data servers, data centers, or the information system technology used therein, Army MATDEVs must coordinate with the Army Enterprise Cloud Management Agency prior to expending funds for cloud modernization to ensure compliance with their Cloud Modernization Approval Process. Requestors of waivers of cloud computing must obtain prior approval from the CIO and coordinate with PEO EIS to ensure compliance with CHESS program requirements. The request must be signed by the Army CIO and include a completed Authorization of Funds for Data Centers and Data Server Farms request in accordance with PL 112–81 as amended.

10-7. Information technology interoperability

Refer to DoDI 5000.82, DoDI 8330.01, AR 25–1, AR 25–2, and AR 34–1. The Army CIO is the Army's interoperability certification authority. The CIO makes interoperability determinations for all Army IT and NSS systems in all mission areas. MATDEVs incorporate interoperability considerations and requirements in Armywide technology-based strategies, policy, guidance, planning, and acquisition programs.

- a. Coordination. Army MATDEVs coordinate with the CIO and the DCS, G–6 to address all Joint interoperability requirements with the Combatant Commanders, Services, and agencies. An Army system is considered a baseline system when the CIO certifies its interoperability. Army MATDEVs will adhere to the requirements of the Army Data Management and Standards Program as stated in AR 25–1 and ensure that cybersecurity T&E is conducted throughout the acquisition life cycle and is integrated with interoperability and other functional testing.
- b. Army Chief Information Officer assessments. Army MATDEVs will provide information to the CIO to support assessments of compliance with IT interoperability policies, guidance, standards, and oversight.

This applies to all AAF ACATs, special interest programs, and other qualifying programs at PEO, DRPM, Army Command staff, Army service component command staff, and direct reporting unit staff levels. Interoperability assessments are required for programs using an approved AAF acquisition pathway and those to which DoDD 5000.01 does not apply. The Army CIO also requires any information system using the Army enterprise infrastructure to obtain interoperability and net worthiness certifications before the system or capability can be connected to the Army's network.

Chapter 11

Cybersecurity in the Defense Acquisition System

11-1. General

Cybersecurity must be addressed throughout the entire acquisition and sustainment life cycle in all acquisition programs, regardless of the acquisition pathway applied or classification level, including those that are unclassified. Cybersecurity as a foundational requirement is represented within system survivability KPPs as a mandatory capability consideration in all DoD acquisitions; and continuously enforced through the risk management framework and supply chain risk management.

11-2. Cybersecurity in Army programs

This chapter, together with DoDI 5000.90, DoDI 5205.13, DoDI 8330.01, DoDI 8500.01, DoDI 8510.01, DoDI 8520.02, DoDI 8520.03, DoDI 8523.01, DoDI 8530.01, DoDI 8531.01, DoDI 8540.01, DoDI 8551.01, DoDI 8560.01, DoDI 8580.1, AR 25–1, AR 25–2, AR 34–1, AR 73–1, AR 70–77, DA Pam 25–2–11, and DA Pam 25–2–14, prescribes cybersecurity policies and guidance applicable to Armymanaged acquisition programs. Refer to these publications for additional details.

- a. Cybersecurity is a program management responsibility. Cybersecurity is a requirement for all DoD programs and must be fully considered and implemented in all aspects of acquisition programs across the life cycle. Cybersecurity responsibility and accountability extends to commanders and senior leaders of agencies and activities at all levels and those they appoint. Refer to the references listed in this paragraph for details on implementing cybersecurity and related program protection throughout the materiel acquisition life cycle phases and activities for all AAF pathways.
- b. Additional guidance. PMs, assisted by personnel in organizations supporting the acquisition community, are responsible for the cybersecurity of their programs, systems, and information. (Refer to DoDI 5000.90).
- (1) PMs will pay particular attention to the following areas where a cybersecurity breach or failure would jeopardize military technological advantage or functionality: program information; organizations and personnel; enabling networks; and systems, enabling systems, and supporting systems.
- (2) In coordination with the information systems security manager (ISSM) and systems security engineer (SSE), the system owner is responsible for the development, implementation, and maintenance of the security plan. The ISSM on behalf of the PM, will prepare a plan of action and milestones that describes specific measures to correct security controls weaknesses or deficiencies noted during assessments and to address known system vulnerabilities. The system owner will work with the CAPDEV to ensure that the appropriate cyber survivability risk category is assigned and that the system survivability KPP and the associated cyber survivability attributes have been tailored and included in any necessary acquisition and testing documentation. System owners will use National Institute of Standards and Technology Special Publication 800–160, Vol. 2 during their requirements analysis to select and tailor the cyber resiliency objectives, techniques, and design principles necessary to satisfy their cyber survivability attributes. The chief developmental tester will ensure that appropriate test planning is performed for assessment of the controls.
- (3) Cybersecurity strategies will be prepared in coordination with the ISSM and SSE. ISSMs and SSEs will coordinate with the Director, ASA (ALT) Cyber Focal and the Cybersecurity Director, HQDA CIO for the latest preparation and submission requirements.
 - (4) The Deputy Assistant Secretary of the Army for Data, Engineering, and Software—
- (a) Provides guidance, ensures compliance with ACAD policy, and provides additional cybersecurity assistance to PMs as appropriate.
- (b) Assists the DASM T&E Coordination Directorate in reviewing TEMPs for cybersecurity T&E planning.
 - (c) Leads, plans, integrates, and synchronizes cybersecurity efforts across ASA (ALT).

- (d) Leads the ASA (ALT) CIO/Program-Information Systems Security Manager Council to identify crosscutting issues and opportunities from across the PEOs that require ASA (ALT) senior leader attention.
- (e) Represents ASA (ALT) cybersecurity equities in external stakeholder forums (for example, Army Enterprise Network Council, CIO Executive Board, and others).
- (f) Reviews and shapes all cyberspace related strategies, policies, and orders affecting ASA (ALT) from OSD, HQDA, and United States Army Cyber Command (ARCYBER), and elevates issues to the ASA (ALT) senior leadership, as needed.
- (g) Supports the AAE in reviewing ACAD Implementation Assessments during decision reviews for all ACAT I and II (or AAF equivalent category) programs, as well as MDAs/DAs for other systems when requested.
 - (h) Synchronizes architectures between enterprise and acquisition systems.
 - (i) Supports critical modernization of unsupported software for secure operations.
- (j) Assists and responds to data call requests, synchronization efforts, and IPRs with DoD CIO; Army CIO; DCS, G–6; CG, ARCYBER; and the VCSA.
 - (k) Leverages cybersecurity policy as a technology enabler.
 - (I) Fulfills cybersecurity functions mandated by PL, Federal directives, and DoD/Army policy.
- (m) Coordinates, optimizes, and monitors risk management framework execution among PEOs, assists with common issues requiring senior leader attention, and liaises with CIO and DCS, G–6.
 - (n) Ensures appropriate transfer of eMASS records for systems that transitioned to sustainment.
 - (o) Reviews and approves requirements for communications security materiel.
- (p) Serves as approval authority for ASA (ALT) headquarters eMASS accounts and Army Training and Certification Tracking System records, as well as for reviewing and approving system transfers to sustainment in the Army Portfolio Management System.
- c. Activities to mitigate cybersecurity risks. PEOs and PMs will ensure all proposed acquisition program technology initiatives have demonstrated sufficient cyber survivability engineering and technology protection.
 - (1) ACAD policy requirements include—
- (a) PMs provide necessary cyber survivability attributes and identify them as mandatory performance attributes (that is, performance attributes that CAPDEVs and MATDEVs specify to ensure systems are cyber-survivable in their intended operational environments).
- (b) The mandatory attributes will be provided to research and development activities as part of formal technology transition planning and agreements, and used to assess performance upon receipt of prototypes.
- (c) PMs will include a standardized ACAD Implementation Assessment as a formal artifact during all acquisition decision points as required by the ACAD policy. The ODASA (DES) Cyber Discipline Share-Point contains additional details and a current version of the artifact at https://spcs3.kc.army.mil/asaalt/ocsecf/cyber_discipline/shared%20documents/acad%20-%20implementation%20artifact%20v1.01%20(7%20Mar%2022).pdf.
- (2) PMs will rely on existing cybersecurity standards tailored to reflect analysis of specific program risks and opportunities to determine the level of cyber protections needed for their program information, the system, enabling and support systems, and information types that reside in or transit the fielded system. Appropriate cyber threat protection measures include identifying anticipated threats and testing, cyber hardening, information safeguarding, designed-in system protections, supply chain risk management, software assurance, hardware assurance, anti-counterfeit practices, anti-tamper, and program security-related activities (for example, information security, operations security, personnel security, physical security, and industrial security). All systems with an IT component should be engineered to operate within a contested cyber domain. Threat intelligence will be included throughout design, and a recurring cyberspace resilience assessment process will be established that integrates threat-informed survivability testing in lab and field environments.
- d. Program protection planning. Refer to DoDI 5000.83 and AR 70–77. The ASA (ALT), through the DASA (S), exercises strategic management for all acquisition program protection and damage assessment activities that include the establishment of Army program protection objectives, goals, policies, processes, and procedures. The ASA (ALT), through the DASA (DES), provides management oversight authority for the Army's system security engineering domain.

11-3. Cybersecurity test and evaluation

Refer to the Cybersecurity T&E Guidebook 2.0 available at https://www.dau.edu/cop/test/dau%20sponsored%20documents/cybersecurity-test-and-evaluation-guidebook-version2-change-1.pdf, AR 70–77, and AR 73–1 for detailed requirements and guidance on cybersecurity T&E planning and execution. PEOs and PMs will comply with all phases of cybersecurity testing as prescribed in the referenced publications to verify software and ensure secure cyber resilient systems are developed prior to operational testing. The T&E Coordination Director in the ODASM is responsible for ensuring the Cybersecurity Security Plan and Strategy are incorporated into the TEMP (or AAF pathway-determined equivalents) and for coordinating cybersecurity T&E planning with the PM; CG, ATEC; the Executive Director, USAMTEAC (applies to medical systems), and the T&E Executive.

Chapter 12

Unique Conditions Applicable to Army Acquisition

12-1. General

This chapter prescribes policies that are unique to the Army. Additional guidance on how to implement the policies is contained in the cited references.

12-2. Acquisition-related activities outside the acquisition framework

This general category consists of MATDEV efforts that are neither acquisition programs as defined in DoDD 5000.01 nor established in accordance with one of the adaptive acquisition pathways described in DoDI 5000.02. There may be associated funded activities being conducted by MATDEVs, but these are not considered PORs (that is, acquisition efforts executed in accordance with an approved AAF pathway). While not intended as a complete list, the following, when executed below MDAP funding thresholds, are provided as examples of activities outside the AAF: general S&T development and maturation projects (for example, technology demonstrations, network integration experiments, Joint warfighting experiments, and Joint capability technology demonstrations); limited production instrumentation and testing programs (for example, acquiring fixed commercially-procured equipment for test ranges, and instrumentation for the National Training Center); potential material solutions that may result in an acquisition program in response to a validated requirement, or requirements in the process of being validated, that have investment funding in the Army budget; an effort having special interest to Congress, the DAE, or the Army's senior leadership; and efforts of all types that require financial expenditures and resources that are not accounted for in the AAF (for example, expenditures not directly traceable to a specific acquisition program; expenditures occurring before an MDD or other AAF pathway-compliant initiation decision; DRs, efforts undertaken in response to a request from another organization that provides funds via military interdepartmental purchase request or similar process; actions based on congressional plus-ups, and so forth). PMRT has the capability to record and track acquisition-related activities outside the acquisition framework as support or investment activities.

12-3. Highly sensitive, classified programs

The ASA (ALT) Systems Special Programs Directorate serves as the Army focal point for all highly sensitive, classified program acquisition matters including programmatic, resourcing, technology integration, and policy. The Director of Systems Special Programs ensures highly sensitive, classified acquisition programs' sensitive activities adhere to AR 380–381.

12-4. Modifications, alternate changes, recapitalization, and technology refreshment

- a. Modification. Modification and alternate changes are defined in AR 750–10. Modifications that require AROC approval in accordance with AR 750–10 will also require MDA/DA approval prior to implementation. For proposed modifications to programs where the AAE serves as MDA/DA, PEOs will forward a request for approval to the DASM. Requests and approvals for alternate changes will be accomplished in accordance with AR 750–10.
- b. Recapitalization. The Army's recapitalization strategy follows two paths: rebuild and selected-upgrade-program increment.
- (1) Rebuild is a near zero time/zero-mile maintenance process defined in AR 750–1 and results in a system with the same model and a new life.

- (2) A selected-upgrade-program increment rebuilds the system and significantly increases operational capability (that is, adds capabilities that exceed previously-defined KPP or key system attribute objectives or are newly-introduced capabilities to address capability shortcomings). When using a selected upgrade-program increment, Army acquisition workforce personnel will follow the criteria set forth in the approved AAF acquisition pathway's associated policy and procedure requirements and this regulation. If the program is out of production, follow program restart policies (see para 3–10).
- c. Continuous technology refreshment. Continuous technology refreshment is the intentional insertion of newer technology into existing systems to improve reliability and maintainability or reduce cost—typically in conjunction with normal maintenance. Continuous technology refreshment cannot be operations and maintenance, Army funded when—
- (1) It is classified as an investment under expense or investment threshold criteria in accordance with annual DoD appropriation acts and DoD 7000.14–R.
- (2) The spares or components used in refreshment are subject to inventory control point (wholesale level) management.
 - (3) The end item to be refreshed has not been produced and fielded.
 - (4) The changes are part of a Service Life Extension Program.
 - (5) The changes are made to increase the performance envelope or mission capability.
- (6) If any criteria in paragraph 12-4b(2) of this regulation apply, then RDT&E or procurement funds, as appropriate, will be used in accordance with normal funding criteria.

12-5. Additional Army acquisition policies

The following requirements are applicable to acquisition at Army level.

- a. Prohibition on use of acquisition program funding for contractor support to capability developers. To eliminate conflicts of interest in capability development, PMs are prohibited from funding augmented contractor support to AFC CAPDEVs. Should PMs discover instances of such contractor funding, they will ensure that it is immediately terminated.
- b. Earned value management for Army programs. The DASM is responsible for earned value management (EVM) policy, oversight, and governance across the PEOs. Army acquisition workforce personnel in programs where the DAE is the MDA/DA will follow the OSD process for EVM applicability determination in accordance with DoDI 5000.85 and DFARS 234.2. For programs where the MDA/DA is at Army level, the AAE has delegated to the DASM the authority for review and determination, and to further delegate EVM applicability and waiver decisions for Army-managed programs. The AAE may, as an exception, retain this authority. Where the PEO is the delegated MDA/DA, the PEO has the authority to make determinations of EVM applicability/non-applicability and to approve waivers. This authority may not be further delegated. PMs will analyze their EVM and address their EVM approach in their documented AS.
- c. Low observable and counter low observable technology considerations. Any system, program, plan, or project related to low observable or counter low observable technology must be assessed using DoDI 5230.28 and classified accordingly. Questions concerning classification should be directed to the ASA (ALT) Army low observable/counter low observable OPR, the Special Programs Director, for resolution.
- d. System of systems and family of systems synchronization. All MATDEVs for systems that exchange information must produce designs that incorporate system of systems (SoS) and family of systems synchronization to obtain MDA/DA approval.
- e. System survivability. The force protection of personnel and survivability of materiel is an essential requirement applicable to the entire life cycle of systems that must perform critical functions, whether they are developmental materiel, non-developmental items (NDIs), COTS, or materiel modification. AR 70–75 addresses force protection of Army personnel and survivability of materiel.
- f. Intelligence and security support. Heads of Army organizations with organic or intelligence and security matrix assets will provide the multi-discipline intelligence and security and research and technology protection support to those programs they support per DoDI 5000.86, AR 381–11 and the AR 380-series of publications.
- g. Transportability. MATDEVs of all new systems, major modifications, upgrades to current systems, NDIs, commercial items, and re-procurements designated as transportability problem items must obtain transportability approval from the Director of the Surface Deployment and Distribution Command Transportation Engineering Agency (SDDCTEA) which is the DoD Secretariat for the Engineering for Transportability Program, in accordance with DoDI 4540.07 and AR 70–47. MATDEVs may request a transportability and deployability assessment of transportability problem items from SDDCTEA before Milestone B.

Transportability approval from SDDCTEA is required before a Milestone C production decision. This requirement also applies to all program Milestone Bor Milestone C-equivalent acquisition decision reviews for programs designated as transportability problem items, regardless of AAF acquisition pathway, with the possible exception of an item that enters the acquisition system at or after Milestone C or its AAF pathway approved alternative. In such case, the transportability approval may be delayed until after completion of testing.

- h. Army training aids, devices, simulators, and simulations. Unless otherwise designated by the AAE, the Program Executive Officer for Simulation, Training and Instrumentation (PEO STRI) is the Army's OPR for training and testing enablers, including those T&E acquisition projects designated as major investments. T&E major investments are acquisitions of T&E training and testing enablers that exceed \$2.5 million per year or \$20 million over the life of the program.
- (1) The capability requirements for system TADSS (including other training technologies, such as gaming technologies) and training support requirements to be procured as part of an acquisition program are documented within the appropriate capabilities document and system training plan (required by AFC). Army PEOs, DRPMs, and PMs retain authority and responsibility for the procurement and life cycle management of their system TADSS that do not transition to Army programmed life cycle support. MATDEVs, PEOs, DRPMs, and PMs—
- (a) Will collaborate with PEO STRI during concept formulation of all future system TADSS, including those eligible or expected to transition to Army programmed life cycle support. Exceptions or waivers require AAE approval.
- (b) May choose to use PEO STRI to develop, acquire, and provide TADSS solutions to fulfill system requirements.
 - (2) Army non-system TADSS are procured as a materiel system in accordance with AR 350-38.
- (3) Project Manager, Cyber, Test, and Training (PM CT2) is the Army's OPR for the research, development, production, and fielding of test assets and investments in support of the Army's developmental and operational testing.
- (a) PM CT2, through the Threat Systems Management Office, will maintain cyber blue vulnerability assessment standards and will qualify assessment teams to support all ASA (ALT) programs in all life cycle phases.
- (b) PM CT2's Threat Systems Management Office is the Army's designated lead agent for Cyber Red Team operations support to acquisition and for the acquisition life cycle of products and services that represent the threat during testing of all systems in all life cycle phases.
- i. Army Standardization Program. The Army Standardization Program is conducted under the authority and scope of the Defense Standardization Program pursuant to 10 USC 2451 through 10 USC 2454, 10 USC 2456, 10 USC 2457, DoDD 5000.01, DoDI 4120.24, and DoDM 4120.24. The CG, USAMC retains overall Army responsibility and authority for organizing, overseeing, and directing the Army Standardization Program. A senior official within each Army acquisition organization assists the Army Standardization Executive. In ASA (ALT), DASA (DES) is the designated lead for exercising daily staff cognizance in collaboration with PEO standardization leads and supporting Army organizations.
- *j. Army Make or Buy Program.* Section 7532, Title 10 USC requires the Army to manufacture needed supplies at U.S. owned arsenals so far as the arsenals can make those supplies on an economical basis. The ASA (ALT) is the designated authority for determining which supplies the Army can and should make. In accordance with AR 700–90, PEOs and PMs perform make or buy analyses to meet program requirements, on an economical basis, for both end items and component parts.
- k. Soldier-borne equipment. To minimize the continued overloading of the Soldier with non-integrated or non-interoperable capabilities, any new or updated system/equipment to be worn, carried, interfaced with or consumed by the Soldier will be coordinated with PEO Soldier. This is to ensure that the new/revised equipment being developed or produced does not interfere with existing Soldier-borne systems, Soldier-as-a-System requirements, or development systems with approved ICDs (or AAF requirement equivalents).
- I. Soldier Enhancement Program. PL 101–189 mandates establishment of the Soldier Enhancement Program. This Program Executive Office Soldier program is tasked to increase the combat effectiveness of Army Infantrymen and Soldiers through the procurement of lighter, more lethal weapons, improved equipment, lighter and more comfortable load-bearing equipment, field gear, survivability items, communications equipment, navigational aids, and training capabilities. PEO Soldier develops or procures limited quantities of items under the Soldier Enhancement Program to evaluate feasibility and suitability. Items

that complete evaluation and receive proponent acceptance are type classified and procured in larger quantities.

- m. Clothing and individual equipment. Clothing and individual equipment (CIE) items are relatively low-cost items that are worn and used by the individual Soldier in accordance with AR 670–1, CTA 50–900, CTA 50–909, or CTA 50–970.
- (1) The decision authority for clothing bag, mess, dress, service, and optional purchase uniform items is the CSA. The Army Uniform Board is the primary review forum for clothing bag, mess, dress, service, and optional purchase uniform items. The Army Uniform Board resolves issues and makes recommendations to the CSA. The CSA approves the initiation, adoption, and all modifications to these items.
- (2) The AAE may delegate MDA/DA for any below ACAT I or equivalent AAF acquisition pathway-determined category at any time. Therefore, the AAE may delegate MDA/DA for any OCIE in any program below ACAT I (or equivalent AAF acquisition pathway-determined category) to PEO Soldier. When the AAE delegates MDA/DA for OCIE, the delegated MDA/DA determines the OCIE review forum.
- (3) DA Form 5965 (Basis of Issue for Clothing and Individual Equipment (CIE)) will be used to coordinate and document the basis of issue for new CIE items.
- n. Remote weapons stations development and production. PM Soldier Lethality is the Army's designated lead for development and production of all remotely operated conventional small arms weapons stations. PM Soldier Lethality is responsible for consolidating and managing all remote weapons station acquisitions.
- o. Development, acquisition, and fielding of weapon and information systems that use batteries. The U.S. Army Communication-Electronics Command's Power Sources Center of Excellence (PSCOE) maintains a current preferred battery list. Army MATDEVs will contact the U.S. Army Communications-Electronics Command PSCOE at usarmy.apg.cecom.mbx.ilsc-pe-pscoe-support@army.mil for assistance with identifying an appropriate power source early in the design of the systems.
- p. Developing, acquiring, and fielding weapon and information systems having battlefield mobile electric power systems requirements. DoDI 4120.11 requires all DoD components to maximize use of the mobile electric power system (MEPS) to include mobile electric power generating sources, mobile electric power distribution systems, mobile electric power storage systems, and mobile electric power management systems both in end items and as a component of a system.
- (1) In accordance with DoDI 4120.11, the SECARMY is the assigned acquiring Department and lead standardization activity for DoD MEPS. Product Manager, Mobile Electric Power Systems (PM MEPS) under the Project Manager, Expeditionary Energy and Sustainment Systems (PM E2S2), performs lead standardization activity responsibilities in accordance with DoDM 4140.24 and maintains an open contract with a funding line for procuring the MEPS to accommodate Joint requirements. PM MEPS has additional responsibilities as specified in DoDI 4120.11.
- (2) MDA/DAs of programs in all AAF acquisition pathways with MEPS requirements will ensure compliance at each milestone or its equivalent AAF acquisition pathway-determined review. All Army MATDEV organizations requiring MEPS should establish a continuing relationship with PM E2S2 throughout the acquisition life cycle and will coordinate with PM E2S2 before initiating any development effort that requires power solutions (excluding batteries, addressed in para 12–50) not supported by the DoD standard family of MEPS.
- q. Developing, acquiring, and fielding weapon and information systems having expeditionary shelter requirements. Product Manager, Force Sustainment Systems (PM FSS) is responsible for total life cycle management of the Army's ground-emplaced and vehicle-mounted expeditionary shelters. PM FSS serves as the Army representative and voting member of the Joint Standardization Board for Expeditionary Shelters and Basing Equipment, established under the authority and scope of DoDI 4120.24 and DoDM 4120.24. MDA/DAs for Army programs will ensure that MATDEV organizations establish a continuing relationship with PM FSS throughout the acquisition life cycle to coordinate an effective, safe, and transportable expeditionary shelter solution.
- r. Developing, acquiring, and fielding unmanned ground systems and integrating mission capability packages. PM Force Projection is responsible for the acquisition life cycle for unmanned ground systems. The PM Force Projection will establish memorandums of agreement with each Army PEO; CG, DEVCOM; and other MATDEVs when sensors, emitters, manipulators, or radios from another responsible PM are hosted on Army unmanned ground systems, or when unmanned and optionally manned appliqué systems are hosted on existing manned Army systems.

- s. Developing, acquiring, and fielding weapon and information systems having geospatial information and services requirements. AR 525–95 implements roles and responsibilities for the establishment of an Army Geospatial Enterprise. The Army's focal point for geospatial information and services is the Army Geospatial Information Officer. The Army Geospatial Information Officer works with CAPDEVs and MATDEVs to ensure effective and cost-efficient integration of enterprise geospatial information and services capabilities.
- t. Developing, acquiring, and fielding weapon and information systems having assured position, navigation, and timing requirements. The Army OPR for assured positioning, navigation, and timing (PNT) requirements is Project Manager, Positioning, Navigation, and Timing (PM PNT) under PEO Intelligence, Electronic Warfare & Sensors. MATDEVs will coordinate with PM PNT and establish integration strategies for Assured PNT capabilities.
- u. Developing or modifying conventional ammunition. JPEO Armaments and Ammunition is designated as the Single Manager for Conventional Ammunition Executor. As such, the JPEO is the OPR for Army conventional ammunition efforts across the life cycle, to include development, production, and demilitarization. Refer to DoDI 5160.68 and DoDM 4160.28, Volume 1.
- v. Army responsibilities as the Department of Defense's executive agent for the Chemical and Biological Defense Program. In accordance with 50 USC 1522, the Army is designated as the DoD executive agent to coordinate and integrate RDT&E and acquisition requirements of the Military Departments for chemical and biological defense programs. For roles and responsibilities associated with the Chemical and Biological Defense Program, refer to DoDD 5160.05E.
- w. Army responsibilities as Department of Defense's executive agent for biometrics. Under DoDD 8521.01E, the SECARMY is designated as the executive agent for DoD biometrics. As the executive agent, the Army coordinates and integrates development and acquisition requirements of common biometrics enterprise systems in cooperation with other Services to support common, Service, and Joint requirements.
- x. Assigning popular names. Except for aerospace vehicles, the AAE is the approval authority for popular names for Army major items of equipment. Criteria and categories for consideration during selection of popular names for Army equipment are covered in DoDM 4100.39 and DA Pam 70–3. The AAE can approve exceptions to the suggested criteria or categories. Approval authority for assignment of popular names for military aerospace vehicles is the Air Force DCS, Strategic Plans and Programs, AF/A8 who coordinates with the Assistant to the Secretary of Defense for Public Affairs; AR 70–50 contains Army designation and naming policy for aerospace vehicles.
- y. Forward operations team. When, after coordination with CG, USAMC and the CG, Army service component command, the DASM deems it appropriate, he or she will plan, prepare, and recommend to the ASA (ALT), the establishment of a mission-specific ASA (ALT) forward operations team (FOT) in support of designated theater Army, field Army, or Army Force headquarters.
- (1) When deployed, the FOT serves as the principal systems support-related acquisition advisor to the respective supported headquarters. The FOT is the single point of accountability for all ASA (ALT) organizations, activities, and personnel, and is responsible to coordinate reach-back and call-forward for ASA (ALT) organizations.
- (2) The PEO or PM will ensure all operational support activities are reported to and coordinated with the FOT.
 - (3) Refer to Army Techniques Publications 4–70 for additional details.
- z. Expediting authorities. The Army is authorized to procure items (supplies and services) readily available in the commercial marketplace to meet requirements. Using the commercial marketplace, when appropriate, to take advantage of market innovations and reduce acquisition costs is authorized and encouraged.
- (1) MATDEVs will use the flexibilities prescribed in the FAR, to the maximum extent practicable, including—
 - (a) Using streamlined solicitation procedures to reduce the time needed to solicit offers.
- (b) Using the contract type that is most appropriate to the situation, including (with proper authorization) using other than fixed price contracts to buy commercial items.
- (2) 10 USC 4023 contains a non-FAR acquisition authority that allows for procurement of certain domains of supplies including parts and accessories, and designs thereof, that are necessary for experimental or test purposes in the development of the best supplies that are needed for the national defense. This is a potentially powerful tool for fielding and testing new capabilities. Purchases may be made inside

or outside the United States and by contract or otherwise (using Other Transaction Authorities for example).

- aa. Program manager review of contract requirements packages. PMs will ensure the review of contract requirement packages for sufficiency and accuracy prior to submitting an RFP through the Virtual Contracting Enterprise to a contracting office.
- bb. Adoption of advanced manufacturing. Advanced manufacturing will be considered and incorporated in early design and development and throughout a system's life cycle.
 - (1) The following will occur when the Army develops a new materiel capability or system:
- (a) CAPDEVs, with input from technical subject matter experts, will write performance and readiness capability requirements to account for gains that can be made using advanced methods and materials.
- (b) MATDEVs will use digital engineering throughout all phases of the acquisition life cycle to the maximum extent practical.
- (c) MATDEVs will incorporate advanced methods and materials into system design, development, production, and sustainment when analysis indicates they offer the best value to the Government.
- (d) When MATDEVs incorporate advanced methods into a system, subsystem, or part during materiel design and development, the appropriate engineering analyses, tests and evaluation, certifications, and qualifications will be performed as part of the normal acquisition process.
- (e) MATDEVs must plan for manufacturability and sustainment early in system development and ensure sustainment factors are addressed in design specifications, contracts, and source selection criteria.
- (f) MATDEVs will take appropriate action to collaborate with industry and encourage investment in advanced manufacturing for the development, production, and sustainment of systems when analysis indicates it offers the best value to the Government. MATDEVs can do so through a number of mechanisms, including but not limited to using source selection evaluation factors that favor performance and readiness gains, cost reductions, and schedule reductions that can be achieved using advanced manufacturing; using digital prototypes before physical prototypes are produced, when appropriate (for example, when downselecting); requiring delivery of technical data in 3D architecture models instead of two-dimensional drawings, when appropriate; and adopting industry standards (for example, standards related to qualification, certification, test, and evaluation of systems, subsystems, and parts produced using advanced manufacturing).
- (g) MATDEVs will address advanced methods and materials required to support design, development, production, fielding, and sustainment in program acquisition and planning documentation. This includes the AS, SEP, LCSP, and IP strategy.
- (h) MATDEVs must incorporate advanced materials, processes, and technology into specifications, standards, and technical data packages when advanced manufacturing is part of the production, fielding, or sustainment strategy, consistent with the process used for traditional manufacturing methods.
 - (2) The following will occur when the Army incorporates advanced methods into fielded systems:
- (a) Life cycle managers must consider using advanced methods when shortfalls exist in the ability of the supply chain to support mission readiness. Valid needs must be supported with analysis of materiel availability, backorder status, and order volume. Advanced manufacturing will supplement—not supplant—the supply chain.
- (b) When changing the method of manufacture (for example, subtractive to additive method or additive to extrusion method) for a fielded system, subsystem, or part when the basic material properties could be altered, the head of the current design activity must certify and qualify the system, subsystem, or part, and the life cycle/configuration manager must approve the change.
- (c) Life cycle/configuration managers will collaborate with the CG, USAMC and CG, AFC to fund and expedite the T&E, qualification, certification, inspection, and acceptance of advanced manufactured parts, materials, and equipment.
- (d) Systems, subsystems, and parts produced using advanced methods that were certified and qualified by the head of the current design activity and approved by the life cycle/configuration manager are equivalent to original equipment manufacturer parts.
 - (3) The following must be considered before using advanced methods and materials:
- (a) While advanced manufacturing can improve performance and readiness, risk may be involved and it is not appropriate in all situations. Readiness and performance benefits must be balanced with cost, program protection, and safety.
- (b) Aviation systems, subsystems, and parts must always be certified by the appropriate authority, including for immediate operational requirements.

- (c) Only heads of organizations that are authorized and professionally trained and equipped for explosive ordnance disposal, demolitions, or breaching missions may fabricate or modify energetics, propellants, explosives, and pyrotechnics, including for immediate mission requirements.
- (d) For property accountability, items manufactured or fabricated using additive manufacturing will be treated the same as other items made for the same purpose.
 - (e) The use of IP must comply with all applicable laws, regulations, and policies, including chapter 13.
- (4) For new systems, materiel developers will negotiate early in the acquisition process for the appropriate licenses to the IP required to support advanced manufacturing, if it is part of the acquisition, fielding, or sustainment strategy. Do not seek rights to more extensive IP than is necessary.
- (5) When incorporating advanced manufacturing into a previously fielded system, negotiate for the necessary IP and the appropriate rights to use it. When the IP does not exist, negotiate for the acquisition of the IP and the associated license rights to use the information, consistent with chapter 13 of this publication.
- (6) When negotiating with industry for license rights to IP, consider alternative license models that benefit both the Government and industry, such as a fee-based agreement under which a negotiated price is paid to the entity that created the IP each time a part is 3D-printed.
- (7) All licensed IP must be stored and managed on Armyor Department of Defense (DoD)-approved networks and devices.
 - (8) Proper precautions will be taken so that only authorized personnel have access to the IP.
 - (9) Consult legal counsel for detailed advice on IP and rights.
- (10) Army entities must plan for, resource, and support the adoption of advanced manufacturing. Specifically:
 - (a) The ASA(ALT) will—
 - (1) Establish and maintain policy related to advanced manufacturing.
- (2) In coordination with the Commander, AMC; Commander, AFC; and the DCS, G-4 establish and manage modernization investments in advanced manufacturing technologies and associated processes.
- (3) In coordination with the Commander, AMC and Commander, AFC publish and maintain an advanced manufacturing implementation plan.
- (4) Develop and maintain a digital engineering implementation plan that aligns with DoD's digital engineering strategy.
- (5) Work with the Commander, AMC and Commander, AFC to write requirements for a digital thread to support system development from concept through production and sustainment, which will be developed using the Business Capability Acquisition Cycle (BCAC) process and DoD Instruction 5000.75.
 - (6) Assign an office of primary responsibility for the digital thread problem statement(s).
- (7) Enable integration of advanced manufacturing capabilities into enterprise architecture and supporting business systems and processes.
 - (8) Participate in joint-DoD advanced manufacturing collaborative activities.
- (9) In coordination with the Commander, AMC and Commander, AFC, establish and maintain relationships with other DoD and Federal activities to leverage and integrate advanced manufacturing and digital engineering efforts.
- (10) Ensure the digital and cyber infrastructure and internal guidance supports advanced manufacturing for all operations and is capable of securing data to prevent unauthorized changes and ensure the integrity of design data.
- (b) The DCS, G-2 will develop and maintain policy for tactical and operational uses of advanced manufacturing.
 - (c) The DCS, G-4 will-
- (1) Identify supply chain metrics to assess trends and determine indicators for using advanced manufacturing to augment existing supply chains.
- (2) In coordination with the Commander, TRADOC; Commander, AMC; and Commander, AFC; explore uses of advanced manufacturing at the tactical level to reduce the logistics footprint.
- (d) The DCS, G–8 will program funds for validated and approved advanced manufacturing activities needed for material life cycle management and readiness.
 - (e) The Commander, AFC will-
- (1) Serve as the focal point for the application of advanced manufacturing to achieve Army modernization objectives.

- (2) Serve as the technical authority for the research, development, and engineering of advanced manufacturing.
- (3) Write capability requirements accounting for the performance and readiness gains that can be made using advanced manufacturing methods and materials.
- (4) In coordination with the ASA(ALT); the DCS, G–2; the Commander, AMC; a draft a threat-based strategy for the application of, investment in, and protection of advanced manufacturing to achieve modernization of weapons capabilities and the Army's industrial base.
 - (f) The Commander, AMC will-
- (1) Establish and maintain an advanced manufacturing center of excellence within the organic industrial base to provide an organic capability and serve as the Army's focal point for the application of advanced manufacturing in matters related to sustainment.
- (2) Establish and maintain a capital improvement plan for advanced manufacturing to enable the organic industrial base to address supply chain interruptions affecting readiness.
- (3) Plan rollouts of advanced manufacturing-related capabilities and technologies based on supply chain needs.
- (4) Establish annual advanced manufacturing production goals based on readiness drivers and diminishing sources of supply.
- (5) Establish metrics, with support from the ASA (ALT); Commander, TRADOC; and Commander, AFC; to track the progress of additive manufacturing implementation and its effect on readiness.
- (6) Assist with lessons learned and recommendations for procuring advanced manufacturing equipment and services.
- (7) Establish and maintain collaborations within the defense industrial base, DoD engineering laboratories and centers, academia, and industry to ensure the integration of best practices in manufacturing.
- (8) Integrate advanced manufacturing into appropriate supply chain processes and ensure demand feedback is systematically provided to appropriate DoD supply organizations.
- (9) Coordinate workforce education and training in advanced manufacturing for the organic industrial base. This must include training on materials and equipment.
 - (10) Participate in joint-DoD advanced manufacturing collaborative activities.
 - (g) The Commander, TRADOC will-
- (1) Establish operational doctrine and training requirements for military personnel requiring mastery of skills in advanced manufacturing to perform their duties.
- (2) Explore, in coordination with the Commander, USAMC; Commander, AFC; and DCS, G-4, uses of advanced manufacturing at the tactical level to reduce the logistics footprint.
 - cc. Management of intellectual property. Refer to chapter 13.

Chapter 13

Managing Intellectual Property in Support of Acquisition Programs

13-1. Creation, acquisition, use, maintenance, and protection of data and license rights

This chapter establishes Army policy for the creation, acquisition, use, maintenance, and protection of data (technical data, computer software documentation, computer software, copyrights, patents, trademarks, and trade secrets subject to IP legal protections), and the associated license rights to use, modify, reproduce, release, perform, display, or disclose such data in support of acquisition and sustainment of Army materiel and non-materiel (solutions or systems). For policy governing IP legal matters and Army policy governing patents, see AR 27–60. For policy on Army trademark licensing program, see AR 601–208. For policy governing the management of IP regarding technology transfer activities, see AR 70–57.

13-2. Background

IP plays an important role in the Army's ability to modernize its weapons systems, maintain technological overmatch, support long-term sustainment, and manage cybersecurity. A deliberate and balanced IP management policy is critical to foster private innovation, allow greater access to new technologies, and maintain readiness at an affordable cost. The policy balances the goals of fostering private innovation with considerations for long-term sustainment of weapon systems. The policy requires early planning for long-term IP requirements to ensure flexibility over the life cycle. It directs tailored IP strategies and encourages the Army to seek only the necessary IP to meet its needs. It encourages negotiation of prices

for license rights early in the process when competition exists. Lastly, it urges communication with industry throughout the process. As IP law and regulation continue to evolve, the Army will quickly adapt the IP management policy accordingly.

13-3. Intellectual Property Policy Application

This policy applies to all requiring, acquisition, sustainment, and contracting activities across the Army. It applies to traditional FAR and DFARS-based contracts. Where feasible, the principles of the policy should be applied to non-FAR and DFARS instruments (for example, grants, cooperative agreements, other transaction agreements, agreements under 10 USC 4892, and patent licensing agreements), when follow-on production and sustainment requirements are likely.

13-4. Requiring, acquisition, sustainment, and contracting activities

Th heads of these activities will-

- a. Foster an environment of open communication with industry, academia, and military laboratories early in the acquisition process. This communication will be characterized by the following:
- (1) Exchanges of information early in the process consistent with FAR 15.201(c), which may include industry days, one-on-one meetings, and requests for information. Measures will be taken to protect any IP with industry-asserted restrictions discussed during this phase.
- (a) Consistent with the intent of FAR 15.201(f), all contractor-owned IP discussed will be considered proprietary information and nonpublic contractor-owned IP will not be disclosed publicly. This includes IP the Government is privy to as a result of discussions, documentation, or demonstrations.
- (b) Nondisclosure agreements may be used in the planning and pre-solicitation phase to protect both Government and industry IP.
- (2). Disclosure of as much detail as practicable about the Army's intended product support strategy. This should include information about the Army's intended sustainment needs and the broad categories of data required for reset, repair, and other maintenance of the system.
- (3) Disclosure of appropriate information about the Army's IP strategy to encourage industry or academia to propose innovative approaches to licenses that will enable the Army to achieve desired outcomes. As applicable, discuss data and rights the Army might need for a specific purpose, for a limited time, or under a specific set of conditions.
- (4) Discussion regarding use of a modular open system approach in the system design and development, and associated effects on data and license rights.
- (5) Disclosure of as much detail as practicable about the Army's cybersecurity strategy and discussion of software compliance with cybersecurity standards. This may include reviewing any third party software license agreements and terms, allowing third party certification, or putting the source code in escrow.
- b. Conduct early planning for the data and license rights needed to acquire, sustain, and dispose of Army materiel and non-materiel (solutions or systems). At a minimum, planning will address considerations at paragraph 13–6 of this policy.
- c. Identify the Government's minimum needs for the technical data, computer software documentation, computer software, and license rights. Consider including availability and delivery of identified data and rights as a source selection evaluation factor.
- d. Negotiate appropriate license rights (through the applicable contracting or agreements officer and in coordination with the Army activity's servicing IP legal counsel or servicing legal office) early in the process to obtain the technical data, computer software documentation, or computer software required to support the program and secure competitive prices. See AR 27–60 for policies and procedures for IP license agreements. When negotiation is not appropriate, include in the IP strategy a written justification supporting that position. The MDA/DA will determine if the justification is sufficient. Consider the use of priced contract options. Use of priced options should occur while competitive leverage exists to obtain an economical price. Do not seek rights to more extensive data than is necessary.
- e. Ensure that contractors or subcontractors are fairly compensated for technical data, computer software documentation, computer software, and license rights for Government use of contractor-owned IP.
 - f. Ensure the Army is fairly compensated for contractor use of Army-owned IP.
- (1) In accordance with AR 70–57, Army labs and centers can enter into exclusive, nonexclusive, and partially exclusive license agreements with industry partners to generate revenue for Army-owned IP.
- (2) Heads of Army organizations, including labs, depots, arsenals, ammunition plants, and life cycle software engineering centers, will develop an IP management approach for use of Army-owned IP

generated by their organizations (for example, inventions, technical data packages, and software) so that the Army may receive royalties or discounts may be applied to systems bought by Government. The value of Government IP should be factored into contract negotiations as a form of consideration exchanged between parties, as appropriate.

13–5. Requirements for program managers PMs will—

- a. Assess the short-term and long-term needs for data and license rights consistent with the spirit of 10 USC 3774 and DoDI 5010.44 and DoDI 5000.75. Document the assessment in the program's documented IP strategy, which should be developed and updated before the issuance of a contract or non-FAR based solicitation.
- (1) The IP strategy is part of the program's documented AS. When using a SAMP in place of an AS, the SAMP should include the IP strategy.
- (2) When an IP strategy is not applicable or appropriate, include in the documented AS or SAMP a written justification supporting that position. The MDA/DA will determine if the justification is sufficient or if an IP strategy will be required.
- b. Customize the IP strategy to meet the specific needs of the program. Articulate the custom set of data and rights needed to support the program, instead of assuming the need for broad data and rights. Consider how the Army's rights or IP strategy should change over time and over the program's life cycle. The IP strategy must consider the following:
 - (1) Program-specific and product sustainment considerations.
 - (a) The unique characteristics of the system and components.
- (b) The product support strategy for the weapon system. Explain how the IP strategy will support a change in the product support strategy, if needed. Consider the effect of future manufacturing capabilities on the program or product support strategy.
 - (c) The organic industrial base strategy of the Army.
 - (d) The commercial market.
- (e) How a modular open system approach is to be used for the program, if applicable. Define and differentiate the major systems platforms, major systems components, modular systems interfaces, and general interfaces.
- (2) Data deliverable considerations. The IP strategy must consider the particular data that is required, who paid for the development of which data, the purpose it will be used for, the level of detail necessary, with whom the Government needs to share the data, and the duration of the need for the data. When appropriate, the IP strategy should address how the Army can leverage data with new design methods and rapid manufacturing to enhance systems over time or tailor them to specific environments.
- c. Negotiate appropriate license rights (through the applicable contracting officer or agreements officer in coordination with the Army activity's servicing IP legal counsel or servicing legal office) to obtain the technical data, computer software documentation, or computer software required to support the program. See AR 27–60 for policies and procedures for IP license agreements. When negotiation is not appropriate, include in the documented IP strategy a written justification supporting that position. The MDA/DA will determine if the justification is sufficient. Do not seek rights to more extensive data than is necessary.
- (1) Consistent with the spirit of 10 USC 3771, the following framework will apply when negotiating technical data rights for an item or process—
- (a) Developed by a contractor exclusively with Federal funds (other than in the case of small business innovation research (SBIR)). The Government will have unlimited rights to use, release, or disclose the technical data to persons outside the Government, or permit such persons to use the technical data.
- (b) Developed by a contractor exclusively at private expense. The contractor may restrict the right of the Government to release or disclose technical data to persons outside the Government or permit such persons to use the technical data.

Note. This does not apply to technical data that constitutes a correction or change to data the Government provided; relates to form, fit, or function; is necessary for operation, maintenance, installation, or training (other than detailed manufacturing or process data); is otherwise publicly available; or has been released by the contractor without restriction on further release or disclosure. As an exception, the Government may release or disclose technical data to, or permit use by, persons outside the Government, if it is necessary for emergency repair and overhaul; pertains to an interface necessary for the segregation or

the reintegration of an item or process with other items or processes; or is released or disclosed to, or used by, a foreign government that is in the best interest of the U.S. Government and is required for evaluation or information purposes. Such release, disclosure, or use must be made subject to a prohibition that the data may not be further released, disclosed, or used. The contractor asserting the restriction should be notified of such release, disclosure, or use.

- (c) Developed in part with Federal funds and in part at private expense: The rights will be negotiated as early as possible (preferably during contract negotiations), except in any case where negotiations would not be practicable. The establishment of negotiated rights will be based on small business innovation, interest in increasing competition and lowering costs by developing alternative sources of supply, interest in encouraging contractors to develop at private expense for use by the Government, and other factors the SECARMY identified.
- (2) Consistent with the spirit of 10 USC 3771, the following framework will apply when negotiating technical data rights for a general interface:
- (a) Developed by a contractor exclusively with Federal funds (other than in the case of SBIR). The Government will have unlimited rights to use the technical data, release or disclose the technical data to persons outside the Government, or permit such persons to use the technical data.
- (b) Developed by a contractor exclusively at private expense. The contractor may restrict the right of the Government to release or disclose technical data to persons outside the Government or permit such persons to use the technical data.
- (c) Developed in part with Federal funds and in part at private expense. The Government will have Government purpose rights (GPR), unless it is determined that negotiation of different rights would be in the best interest of the Government.
- (3) Consistent with the spirit of 10 USC 3771, the following framework will apply when negotiating technical data rights for a modular system interface:
- (a) Developed by a contractor exclusively with Federal funds (other than in the case of SBIR). The Government will have unlimited rights to use technical data, release or disclose the technical data to persons outside the Government, or permit such persons to use the technical data.
- (b) Developed by a contractor either exclusively at private expense or in part with Federal funds, and is used in a modular open system approach. The Government will have GPR to use technical data unless it is determined that negotiation of different rights would be in the best interest of the Government. For a modular system interface developed exclusively at private expense for which the Government asserts GPR, the Government will negotiate reasonable compensation with the contractor.
- (4) Consistent with the spirit of DFARS 227.7203–5 and DFARS 252.227–7014, when negotiating data rights for noncommercial computer software and associated computer software documentation, the Government will have unlimited rights in software developed exclusively with Federal funds, restricted rights in software developed exclusively at private expense, and GPR in software developed in part with Federal funds and in part at private expense.
- (a) Consistent with the spirit of 10 USC 2222 and 10 USC 4576, any negotiations should consider acquisition of all software and materials necessary to reproduce, build, or recompile software from original source code and required libraries; conduct required software testing; and deploy working software system binary files on relevant system hardware.
- (b) Any noncommercial computer software or related materials required to be delivered will include software delivered in a usable, digital format; will not rely on external or additional software code or data (unless such software code or data is included in the items to be delivered); and will include sufficient documentation to support maintenance and understanding of interfaces and software revision history.
- (5) When acquiring commercial computer software and commercial computer software documentation, the Government will acquire rights under the licenses customarily provided to the public unless such licenses are inconsistent with Federal procurement law or do not otherwise satisfy user needs; review the commercial license to ensure it meets the Army's desired acquisition and sustainment outcomes; and seek software source code only when the source code delivery is consistent with the license, the Armyfunded development of the source code, or it is required for cybersecurity analysis.
- (6) Emphasize use of specially negotiated licenses. This includes negotiating and contracting for a specially negotiated license for data to support the product support strategy.
- (7) Consistent with the spirit of 10 USC 3772, the Army may use deferred ordering to acquire data and data rights that were not known or identified for delivery under the current contract. Deferred ordering

may be used only under specific circumstances and only up to 6 years after acceptance of the last item under a contract or the date of contract termination, whichever is later. The Army must compensate the contractor only for reasonable costs incurred in having the data converted and delivered.

- (8) Consistent with the spirit of DFARS 252.227–7026, the Army may use deferred delivery. Deferred delivery may be used to order data on the current contract for delivery of the data for up to 2 years after acceptance of all items to be delivered under the contract or termination of the contract, whichever is later.
- d. Negotiate (through the applicable contracting or agreements officer), wherever appropriate, early in the acquisition or procurement process for competitive prices.
- (1) Consistent with the spirit of 10 USC 4236, when appropriate, negotiate the price for IP and data before selecting a contractor for EMD, production, or sustainment for ACAT I and II (or equivalent category) programs.
- (2) For industry IP the Government seeks to use, fairly compensate the contractor or subcontractor for technical data, computer software documentation, computer software, and the appropriate license rights. Consider the use of priced options for data and license rights early in the process while competitive leverage exists to obtain an economical price.
- (3) When the Army seeks greater data or license rights than what is outlined in paragraph 13–6 of this policy, appropriately compensate the contractor or subcontractor.
 - (4) For Army-owned IP industry seeks to use, pursue fair compensation in accordance with

13-6. Contractor rights

Consistent with 10 USC 3771, a contractor or subcontractor may not be required to sell or relinquish to the Government any additional rights in technical data the Government is not already entitled to as a condition of being responsive to a solicitation or as a condition for award of a contract.

13–7. Legal counsel

All interested Government parties should consult local legal offices for detailed advice on IP, data, and rights.

Appendix A

References

Section I

Required Publications

AR 5-12

Army Use of the Electromagnetic Spectrum (Cited in para 4-4b.)

AR 10-87

Army Commands, Army Service Component Commands, and Direct Reporting Units (Cited in para 1–21b.)

AR 11-18

The Cost and Economic Analysis Program (Cited in para 9–1.)

AR 25-1

Army Information Technology (Cited in para 1–1e.)

AR 25-2

Army Cybersecurity (Cited in para 10-3.)

ΔR 34-1

Interoperability (Cited in para 10–7.)

AR 40-5

Army Public Health Program (Cited in para 4–3e(4).)

AR 40-10

Health Hazard Assessment Program in Support of the Army Acquisition Process (Cited in para 4–3e(4).)

AR 40-60

Army Medical Material Acquisition Policy (Cited in para 1–1e.)

AR 40-61

Medical Logistics Policies (Cited in para 1–1e.)

AR 70-77

Program Protection (Cited in para 1–13.)

AR 71-9

Warfighting Capabilities Determination (Cited in para 1–14d.)

AR 73-1

Test and Evaluation Policy (Cited in para 5–1.)

AR 381-11

Intelligence Support to Capability Development (Cited in para 1–13.)

AR 385-10

The Army Safety Program (Cited in para 4–3e(1).)

AR 700-90

Army Industrial Based Process (Cited in para 3–8.)

AR 700-127

Integrated Product Support (Cited in para 1–19*d*.)

AR 700-145

Item Unique Identification (Cited in para 4–4d.)

AR 702-19

Reliability, Availability, and Maintainability (Cited in para 4–3b.)

AR 750-10

Army Modification Program (Cited in para 12–4a.)

AR 770-2

Materiel Fielding (Cited in para 6-1.)

AR 770-3

Type Classification and Materiel Release (Cited in para 1–21b.)

CJCSI 5123.01I

Charter of the Joint Requirements Oversight Council and Implementation of the Joint Capabilities Integration and Development System (Cited in para 1–19b.) (Available at https://www.jcs.mil/.)

DA Pam 70-3

Army Acquisition Procedures (Cited in para 2–6a.)

DA Pam 73-1

Test and Evaluation in Support of Systems Acquisition (Cited in para 5–1.)

DA Pam 700-127

Integrated Product Support Procedures (Cited in para 4–5*d*.)

DA Pam 770-2

Procedures for Materiel Fielding (Cited in para 6–1.)

DA Pam 770-3

Type Classification and Materiel Release Procedures (Cited in para 6–1.)

DoDD 5000.01

The Defense Acquisition System (Cited in the title page.) (Available at https://www.esd.whs.mil/dd/.)

DoDD 5000.71

Rapid Fulfillment of Combatant Commander Urgent Operational Needs and Other Quick Action Requirements (Cited in para 2–7b.)

DoDD 5105.84

Director of Cost Assessment and Program Evaluation (Cited in title page.)

DoDD 5160.05E

Roles and Responsibilities Associated with the Chemical and Biological Defense Program (CBDP) (Cited in para 8–2.)

DoDI 4105.72

Procurement of Sustainable Goods and Services (Cited in para 4–5c.)

DoDI 4120.11

Mobile Electric Power Systems (MEPS) (Cited in para 12–5*p*.)

DoDI 4630.09

Communications Waveform Management and Standardization (Cited in 4-3a.)

DoDI 5000.02

Operation of the Adaptive Acquisition Framework (Cited in the title page.) (Available at https://www.esd.whs.mil/dd/.)

DoDI 5000.66

Defense Acquisition Workforce Education, Training, Experience, and Career Development Program (Cited in para 3–3.)

DoDI 5000.67

Prevention and Mitigation of Corrosion on DoD Military Equipment and Infrastructure (Cited in para 4-4c.)

DoDI 5000.73

Cost Analysis Guidance and Procedures (Cited in title page.)

DoDI 5000.74

Defense Acquisition of Services (Cited in para title page.)

DoDI 5000.75

Business Systems Requirements and Acquisition (Cited in title page.)

DoDI 5000.80

Operation of the Middle Tier of Acquisition (MTA) (Cited in title page.)

DoDI 5000.81

Urgent Capability Acquisition (Cited in title page.)

DoDI 5000.82

Requirements for the Acquisition of Digital Capabilities (Cited in title page.)

DoDI 5000.83

Technology and Program Protection to Maintain Technological Advantage (Cited in title page.)

DoDI 5000.84

Analysis of Alternatives (Cited in para 8–1.)

DoDI 5000.85

Major Capability Acquisition (Cited in title page.)

DoDI 5000.86

Acquisition Intelligence (Cited in para 12–5f.)

DoDI 5000.87

Operation of the Software Acquisition Pathway (Cited in title page.)

DoDI 5000.88

Engineering of Defense Systems (Cited in title page.)

DoDI 5000.89

Test and Evaluation (Cited in title page.)

DoDI 5000.90

Cybersecurity for Acquisition Decision Authorities and Program Managers (Cited in title page.)

DoDI 5000.91

Product Support Management for the Adaptive Acquisition Framework (Cited in title page.)

DoDI 5000.95

Human Systems Integration in Defense Acquisition (Cited in title page.)

DoDI 5010.44

Intellectual Property (IP) Acquisition and Licensing (Cited in title page.)

DoDI 5015.02

DoD Records Management Program (Cited in para 3-9.)

DoDI 5200.44

Protection of Mission Critical Functions to Achieve Trusted Systems and Networks (TSN) (Cited in para 10–4.)

DoDI 5230.28

Policy for LO and Counter LO (Cited in para 12–5c.)

DoDI 8320.04

Item Unique Identification (IUID) Standards for Tangible Personal Property (Cited in para 4–4d.)

DoDI 8500.01

Cybersecurity (Cited in para 10-3.)

Public Law 110-417

Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Cited in para 6-3.)

32 CFR 651

Environmental Analysis of Army Actions (AR 200-2) (Cited throughout in para 4-3e(2).)

10 USC 1722

Career Development (Cited in para 1–7*a*(6).)

10 USC 2222

Defense business systems: business process reengineering; enterprise architecture; management (Cited in para 2–11a.)

10 USC 2255

Aircraft accident investigation boards: composition requirements (Cited in para 4–3e(8).)

10 USC 3041

Major System (Cited in para 2-18c(3)(c).)

10 USC 3102

Customer-oriented acquisition system (Cited in para 1–6a.)

10 USC 3104

Acquisition-related functions of chiefs of the armed forces (Cited in para 1–7a.)

10 USC 3771-3775

Rights in Technical Data (Cited in terms.)

10 USC 4201

Major defense acquisition programs: definition; exceptions (Cited in para 2–8c.)

10 USC 4236

Negotiation of price for technical data before development, production, or sustainment of major weapon systems (Cited in para 13–5*d*(1).)

10 USC 4251

Major defense acquisition programs: determination required before Milestone A approval (Cited in para 1–6b.)

10 USC 4252

Major defense acquisition programs: certification required before Milestone B approval (Cited in para 1–6b.)

10 USC 4271

Program cost, fielding, and performance goals in planning major defense acquisition programs (Cited in title page.)

10 USC 4324

Life-cycle management and product support (Cited in para 2–18c(1).)

10 USC 4351

Selected Acquisition Reports (Cited in para 1–6c.)

10 USC 4401

Requirement for modular open system approach in major defense acquisition programs; definitions (Cited in para 4–4a.)

10 USC 4402

Requirement to address modular open system approach in program capabilities development and acquisition weapon system de-sign (Cited in para 4–4a.)

10 USC 4576

Requirement for consideration of certain matters during acquisition of noncommercial computer software (Cited in para 13-5c(4)(a).)

10 USC 4892

Availability of samples, drawings, information, equipment, materials, and certain services (Cited in para 13–3.)

40 USC Subtitle III

Clinger-Cohen Act -Information Technology Management (Cited in para 1–11.)

44 USC Chapter 31

Records Management by Federal Agencies (Cited in para 3–9.)

Section II

Prescribed Forms

Unless otherwise indicated, DA Forms are available on the Army Publishing Directorate website (https://armypubs.army.mil).

DA Form 5965

Basis of Issue for Clothing and Individual Equipment (CIE) (Prescribed in para 12–5m(3).)

Appendix B

Assigning Acquisition Category Equivalency to Non-Major Capability Acquisition Pathway Programs

B-1. Acquisition pathways

The adoption of the AAF introduced the UCA pathway, MTA pathway, DBS pathway, and SWP. While the DBS pathway delineates program categories based on dollar value (that is, BCAT), the specified thresholds differ from those specified for MCA programs. Moreover, DoD UCA, MTA, and SWP policies do not define distinct program categories on the basis of dollar value.

B-2. Acquisition category equivalency

Certain statutes and DoD and Army policies generically assign reporting and other requirements to acquisition programs meeting ACAT I or II cost thresholds (for example, annual SAR reporting, cost estimation sources, and cost growth limitations), and these requirements may apply without regard to the programs' AAF pathways. To provide a standardized basis for determining which programs are subject to such requirements, OSD and the Services, including Army, utilize ACAT-equivalent designations for all non-MCA programs (that is, those in the SWP and UCA, MTA, and DBS pathways). ACAT equivalency also facilitates establishment of standard acquisition program data and simplifies identification and discussion with leadership regarding MDAP and major system statutes and policies as they relate to non-MCA pathway programs.

B-3. Acquisition category dollar thresholds

PMRT requires entry of ACAT-equivalent values that correspond to the MCA ACAT dollar thresholds. The total RDT&E and procurement dollars documents in the program's cost estimate is compared to the ACAT thresholds to determine an ACAT equivalent level (see table B–1 for ACAT equivalent thresholds).

Table B-1 Acquisition category equivalent thresholds			
	RDT&E	Procurement	
ACAT I-e	>\$525M	>\$3.065B	
ACAT II-e	>\$200M and ≤\$525M	>\$920M and ≤\$3.065B	
ACAT III-e	>\$110M and ≤\$200M	>\$440M and ≤\$920M	
ACAT IV-e	≤\$110M	≤\$440M	
Expressed in FY20 o	constant year dollars		

Appendix C

Internal Control Evaluation for Non-Major Defense Acquisition Programs at Milestone Decision Reviews

C-1. Function

The function covered by this evaluation is the acquisition of non-MDAPs (ACATs II, III, and IV or the equivalent category designation for programs using other approved AAF pathways).

C-2. Key internal controls

The key internal controls for this function are the milestone documentation requirements specified in the AAFDID available at https://www.dau.edu/aafdid/pages/about.aspx, and as tailored and documented by the MDA/DA. DoDI 5000.02 together with its included references establishes policy for the AAF (see the AAF website at https://aaf.dau.edu) and management of all acquisition programs. DoDI 5000.02 lays the groundwork for operation of the AAF, which is part of the Defense acquisition system described in DoDD 5000.01. A general list of statutory requirements associated with each of the AAF pathways is located in the AAFDID available at https://www.dau.edu/aafdid/pages/about.aspx.

C-3. Internal control evaluation process

These key internal controls must be evaluated using the decision review process associated with each AAF pathway and documented on DA Form 11–2 (Internal Control Evaluation Certification). These internal control evaluations should be included in the MATDEV's 5-year Internal Control Plan (see AR 11–2). Because these internal control evaluations are conducted as part of acquisition program decision reviews, they follow the schedule established by each program and not the uniform FY schedule used normally in internal control plans. All programs use decision processes and reviews analogous to those contained in DoDI 5000.02 and the other 5000-series DoDIs identified in paragraph 2–6. The ADM serves as the documentation for the conduct of an internal control evaluation. All documentation required by the MDA/DA for each decision review must be retained on file in the program office for the life of the program.

Appendix D

Internal Control Evaluation Process for Major Defense Acquisition Programs at Milestone Decision Reviews

D-1. Function

The function covered by this evaluation is the acquisition of MDAPs (ACAT I or the equivalent category designation for programs using other approved AAF pathways).

D-2. Key management controls

The key internal controls for this function are the milestone documentation requirements specified in the AAFDID available at https://www.dau.edu/aafdid/pages/about.aspx, and as tailored and documented by the MDA/DA. DoDI 5000.02 together with its included references establishes policy for the AAF (see the AAF website at https://aaf.dau.edu) and management of all acquisition programs. DoDI 5000.02 lays the groundwork for operation of the AAF, which is part of the Defense acquisition system described in DoDD 5000.01. A general listing of statutory requirements associated with each of the AAF pathways is located in the AAFDID available at https://www.dau.edu/aafdid/pages/about.aspx.

D-3. Internal control evaluation process

These key internal controls must be evaluated using the decision review process associated with each AAF pathway and documented on DA Form 11–2. These internal control evaluations should be included in the MATDEV's 5-year Internal Control Plan (see AR 11–2). Because these internal control evaluations are conducted as part of acquisition program decision reviews, they follow the schedule established by each program and not the uniform FY schedule used normally in internal control plans. All programs use decision processes and reviews analogous to those contained in DoDl 5000.02 and the other 5000-series DoDls identified in paragraph 2–6. The ADM or its equivalent document (for programs following other than the MCA pathway) record the MDA's/DA's decisions and program direction and serves as the documentation for the conduct of an internal control evaluation. All documentation required by the MDA/DA for each decision review must be retained on file in the program office for the life of the program.

Glossary of Terms

Acquisition position

A civilian or military position in DoD that is coded an acquisition position and includes acquisition functions as defined in 10 USC Chapter 87, as the predominant (greater than 50 percent) duty in a specific functional area. (see DoDI 5000.66).

Acquisition program

A directed, funded effort that provides a new, improved, or continuing materiel, weapon, information system, or service capability in response to an approved need.

Architecture

The structure of components, their relationships, and the principles and guidelines governing their design and evolution over time. For example, a technical architecture identifies the services, interfaces, standards, and their relationships. It provides the technical guidelines for implementation of systems upon which engineering specifications are based, common building blocks are built, and product lines are developed.

Armaments cooperation

Cooperative research, development, test, and evaluation of defense technologies, systems, or equipment, such as the Coalition Warfare Initiative; joint production follow-on support of defense articles or equipment; and test and procurement of foreign equipment, technology, or logistics support (see AR 70–41 for additional information).

Army acquisition workforce

The personnel component of the acquisition system. The acquisition workforce includes permanent civilian and military members who occupy acquisition positions or are in acquisition development programs.

Army command

The highest level of command, designated by the SECARMY, primarily responsible for generating Army forces and planning and executing 10 USC functions.

Army service component command

An operational command, responsible for recommendations to the Joint force commander on the allocation and employment of Army forces within a CCMD (see JP 1–02).

Army Systems Acquisition Review Council

Top-level DA review body for acquisition programs where the AAE or DAE is the MDA/DA. It is chaired by the AAE and convened at formal milestone or other program reviews to provide information and develop recommendations for decisions by the AAE.

Basis of issue

The authority that prescribes the number of items to be issued to an individual, a unit, or a military activity. Basis of issue is stated in authorization documents.

Capability developer

Responsible for analyzing, determining, prioritizing warfighting requirements for DOTMLPF-P requirements, personnel, facilities, and policy implications within the context of the force development process. Also responsible for representing the end user during the full development and life cycle process (counterpart to generic use of MATDEV).

Capability development document

A document that specifies capability requirements in terms of developmental Key Performance Parameters, Key System Attributes, Additional Performance Attributes, and other related information necessary to support development of one or more increments of a materiel capability solution.

Capability production document

A document that addresses the production elements specific to a single increment of an acquisition program.

Chief information officer assessment

An established matrix of criteria used to evaluate program compliance with statutory and regulatory acquisition requirements.

Chief management officer

The principal advisor to the SECARMY on the effective and efficient organization of business operations and transformation initiatives.

Clothing and individual equipment

Used as a collective term that includes personal clothing, optional clothing, organizational clothing, and individual equipment items that are an integral part of the design of the individual Soldier as a weapons platform.

Commercial item

Any item, other than real property, that is of a type customarily used for nongovernmental purposes and that has been sold, leased, or licensed to the general public; or has been offered for sale, lease, or license to the general public; or any item evolved through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation. This definition also includes services in support of a commercial item, of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. This does not include services that are sold based on hourly rates without an established catalog or market price for a specified service performed (see the DAU Contracting Cone website available at https://aaf.dau.edu/aaf/contracting-cone/ and FAR Subpart 2.1).

Computer software

Computer programs that comprise a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and recorded information comprising source code listings, design details, algorithms, processes, flow charts, formulas, and related material that would enable the computer program to be produced, created, or compiled. Computer software does not include computer databases or computer software documentation.

Corrosion

The deterioration of a material or its properties due to a reaction of that material with its chemical environment.

Critical program information

U.S. capability elements that contribute to the warfighters' technical advantage, which if compromised, undermines U.S. military preeminence. U.S. capability elements may include, but are not limited to, software algorithms and specific hardware residing on the system, its training equipment, or maintenance support equipment (see DoDI 5000.83 and DoDI 5200.39).

Critical technologies

Those technologies that may pose major technological risk during development, particularly during the EMD phase of acquisition.

Data

Recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. It does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information (see FAR Clause 52.227–14).

Decision authority

The person vested with the authority to make acquisition program decisions. This may be the DAE, the component acquisition executive (for the Army, this is the AAE), or an individual with appropriate delegation of authority, (that is, the PEO, a DRPM, or a PM of an ACAT IV acquisition program).

Defense Acquisition System

The management process by which the DoD provides effective, affordable, and timely systems to the users.

Defense business systems

Information systems that are operated by, for, or on behalf of the Department of Defense, including any of the following: a financial system, a financial data feeder system, a contracting system, a logistics system,

a planning and budgeting system, an installations management system, a human resources management system, a training and readiness system. The terms does not include a national security system; or an information system used exclusively by and within the defense commissary system or the exchange system or other instrumentality of the Department of Defense conducted for the morale, welfare, and recreation of members of the armed forces using nonappropriated funds.

Detailed manufacturing or process data

Technical data that describe the steps, sequences, and conditions of manufacturing, processing, or assembly the manufacturer used to produce an item or component or to perform a process (see DFARS Clause 252.227–7013).

Digital engineering

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.

Direct reporting unit

An Army organization comprised of one or more units with institutional or operational support functions, designated by the SECARMY, normally to provide broad general support to the Army in a single, unique discipline not otherwise available elsewhere in the Army. DRUs report directly to a HQDA principal and/or ACOM and operate under authorities established by the SECARMY.

Direct support

A mission requiring a force to support another specific force and authorizing it to answer directly to the supported force's request for assistance.

Director, Acquisition Career Management

The official appointed by the AAE to assist in the performance of duties as they relate to the training, education, and career development of the acquisition workforce.

Domain

For Army enterprise architecture purposes, a group of systems or SoS of a similar nature or focused on satisfying similar objectives. These four domains are primarily used within the DoD Information Technology Standards Registry: command, control, communications, computers, and intelligence; weapon systems; modeling and simulation; and sustainment. For HSI purposes, a group of seven areas that integrate human considerations into the system acquisition process. The domains are manpower, personnel capabilities, training, human factors engineering, system safety, health hazards, and Soldier survivability.

Economic useful life

Estimate of the point in time when the Army should plan on replacing or modernizing a weapon or system, based on the expected impact to readiness (technical or operational obsolescence) and resources (business case analysis and cost benefit analysis).

Family of systems

A set or arrangement of independent systems that can be arranged or interconnected in various ways to provide different capabilities. The mix of systems can be tailored to provide desired capabilities, dependent on the situation. An example of a family of systems is a brigade combat team that includes combat and combat support systems. Although these systems can independently provide militarily useful capabilities, in collaboration they can more fully satisfy a more complex and challenging capability to detect, localize, track, and engage the enemy.

Force sustainment

The management and care of materiel equipment after a capability transitions to sustainment (see para 6–2a) and before the Army divests the capability. It includes the maintenance, targeted modernization, and recapitalization of enduring platform capabilities the Army must retain to enable a multi-domain operations-capable force.

Form, fit, and function data

Technical data that describes the required overall physical, functional, and performance characteristics (along with the qualification requirements, if applicable) of an item, component, or process to the extent necessary to permit identification of physically and functionally interchangeable items (see DFARS Clause 252.227–7013).

Government purpose rights

For noncommercial technical data, the rights to (i) use, modify, reproduce, release, perform, display, or disclose technical data within the Government without restriction; and (ii) release or disclose technical data outside the Government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose that data for United States government purposes. See DFARS 252.227–7013(a)(13). For noncommercial computer software and noncommercial computer software documentation, the rights to (i) use, modify, reproduce, release, perform, display, or disclose computer software or computer software documentation within the Government without restriction; and (ii) release or disclose computer software or computer software documentation outside the Government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose the software or documentation for United States government purposes. See DFARS 252.227–7014(a)(12).

Grant

A legal instrument which, consistent with 31 USC 6304, is used to enter into a relationship—
a. The principal purpose of which is to transfer a thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a law of the United States, rather than to acquire property or services for the DoD's direct benefit or use.

b. In which substantial involvement is not expected between the DoD and the recipient when carrying out the activity contemplated by the grant (see 32 CFR 37.1295).

Health hazard assessment

The application of biomedical knowledge and principles to document and quantitatively determine the health hazards of Army systems. This assessment identifies, evaluates, and recommends controls to reduce risks to the health and effectiveness of personnel who test, use, or service Army systems. This assessment includes: the evaluation of hazard severity, hazard probability, risk assessment, consequences, and operational constraints; the identification of required precautions and protective devices; training requirements.

Heraldic items

All items worn on the uniform to indicate unit, skill, branch, award, or identification and for which a design has been established by The Institute of Heraldry (TIOH) on an official drawing

Human systems integration

A comprehensive management and technical strategy, initiated early in the acquisition process, to ensure that human performance, the burden the design imposes on manpower, personnel, and training, and safety and occupational health aspects are considered throughout the system design and development processes.

Information technology

Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency.

Infrastructure

Fundamental facilities, systems, and related services necessary for the Army to function. For purposes associated with the CCA of 1996, shared computers, ancillary equipment, software, firmware, and similar procedures, services, people, business processes, facilities (to include building infrastructure elements), and related resources used in the acquisition, storage, manipulation, protection, management, movement, control, display, switching, interchange, transmission, or reception of data or information in any format, including audio, video, imagery, or data, whether IT or NSS.

Initial capabilities document

Documents the need for a materiel approach to a specific capability gap derived from an initial analysis of materiel approaches executed by the operational user and, as required, an independent analysis of materiel alternatives. It defines the capability gap in terms of the functional area, the relevant range of military operations, desired effects, and time. The ICD summarizes the results of the DOTMLPF-P analysis and describes why non-materiel changes alone have been judged inadequate in fully providing the capability.

Initial operational capability

The criteria and schedule for when a program must attain IOC is defined as the program's CDD, capabilities production document (when retained as a valid legacy document) or CDD update. It is the first attainment of the capability (as declared by the IOC organization) by a modified table of organization and equipment unit and supporting elements to operate and maintain a production item or system effectively provided that—

- a. The item or system has been type classified-standard or approved for limited production.
- b. The unit and support personnel have been trained to operate and maintain the item or system in an operational environment.
- c. The unit can be supported in an operational environmental in such areas as special tools, test equipment, repair parts, documentation, and training devices.
- d. This designation is usually applied at a point in the Defense Acquisition Model that is after the FRP decision review and implies that the unit is combat ready.

In-process review

Review body for ACAT II, III, and IV programs (or their equivalent AAF pathway-determined categories) when the AAE delegates MDA/DA. Convened at each formal milestone (or AAF pathway equivalent review) and at other critical points to evaluate status and make recommendations to the MDA/DA. An IPR is also commonly called a program review.

Installation

A fixed or relatively fixed location together with its real estate, buildings, structures, utilities, and improvement thereon. It is usually identified with an existing or potential organization and missions or functions (see DAU's Glossary of Defense Acquisition Acronyms and Terms).

Integrated product support

A unified and iterative approach to the management and technical activities needed to influence operational and materiel requirements and design specifications, define the support requirements best related to materiel design and to each other, develop and acquire the required support, provide required operational phase support at lowest cost, seek readiness and life cycle cost improvements in the materiel and support systems during the operational life cycle, and repeatedly examine support requirements throughout the service life of the materiel.

Integrated product team

A working-level team of representatives from all appropriate functional disciplines working together to build successful and balanced programs, identify and resolve issues, and provide recommendations to facilitate sound and timely decisions.

Intellectual property

A product of the human mind which is protected by law. It includes inventions, trademarks, patents, industrial designs, copyrights, and technical information including software, data designs, technical know-how, manufacturing information and know-how, techniques, Technical Data Packages (TDPs), manufacturing data packages, and trade secrets.

Interoperability

The ability of Army systems, units, or forces to provide data, information, materiel, and services to and accept the same from other systems, units, or forces and to use data, information, materiel, and services so exchanged to enable them to operate effectively together.

Interoperability certification

Confirmation that the candidate system has undergone appropriate testing and that the applicable standards and requirements for compatibility, interoperability, and integration have been met.

Item unique identification

A system of marking items with UIIs that have machine-readable data elements to distinguish an item from all other like and unlike items.

Key performance parameters

An attribute or characteristic of a system that is considered critical or essential to the development of an effective military capability and those attributes that make a significant contribution to the characteristics of the future Joint Force as defined in the Capstone Concept for Joint Operations. The KPPs are

validated by the JROC for JROC Interest documents, and by the DoD component for Joint Integration, Joint Information, or Independent documents. Capability development KPPs, CDD update KPPs and capabilities production document KPPs (when capabilities production documents are retained as a valid legacy document) are included verbatim in the APB.

Key system attribute

Performance attribute of a system considered important to achieving a balanced solution/approach to a system, but not critical enough to be designated as a Key Performance Parameter.

Life cycle management

A management process, applied throughout the life (systems development, production, delivery, sustainment, and disposal) of a system (products, processes, or services) that bases all programmatic decisions on the anticipated mission-related and economic benefits (cost, schedule, performance, risk, and supportability) derived over the life of a system.

Limited Production Instrumentation and Testing Program

Effort that provides capability in response to a requirement from the testing community. May include test instrumentation, targets, and threat with limited production quantities. A process that takes a holistic look at the investment in S&T and the life cycle management of equipment and systems to ensure the costs of programs are considered over a 30-year period.

Materiel developer

The RDA command, agency, or office assigned responsibility for the system under development or being acquired. The term may be used generically to refer to the RDA community in the materiel acquisition process (counterpart to the generic use of CAPDEV).

Milestone decision authority

Designated individual with overall responsibility for a program. The MDA will have the authority to approve entry of an acquisition program into the next phase of the acquisition process and shall be accountable for cost, schedule, and performance reporting to higher authority, including Congressional reporting. This may be the DAE, the Component Acquisition Executive (for the Army, this is the AAE), the PEO, or the PM of an ACAT IV program who has been delegated MDA/DA.

Mission critical computer resources

Elements of computer hardware, software, or services with a function, operation, or use that involves intelligence activities or crypto logical activities related to national security, command and control of military forces; or equipment that is an integral part of a weapon or weapon system.

Modular open system approach

With respect to an MDAP, the modular open system approach is an integrated business and technical strategy that—a. employs a modular design that uses modular system interfaces between major systems, major system components and modular systems; b. Is subjected to verification to ensure modular system interfaces—(1) comply with, if available and suitable, widely supported and consensus-based standards; or (2) are delivered pursuant to the requirements established in subsection (a)(2)(B) of section 804 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021; c. Uses a system architecture that allows severable major system components at the appropriate level to be incrementally added, removed, or replaced throughout the life cycle of a major system platform to afford opportunities for enhanced competition and innovation while yielding— (1) significant cost savings or avoidance; (2) schedule reduction; (3) opportunities for technical upgrades; (4) increased interoperability, including system of systems interoperability and mission integration; or (5) other benefits during the sustainment phase of a major weapon system; and d. Complies with the technical data rights set forth in 10 USC 3771–3775 (see 10 USC 4401).

Modular system interface

A shared boundary between major systems, major system components, or modular systems, defined by various physical, logical, and functional characteristics, such as electrical, mechanical, fluidic, optical, radio frequency, data, networking, or software elements. (see 10 USC 4401).

Non-developmental item

Any previously developed item of supply used exclusively for Government purposes by a Federal agency, a state or local government, or a foreign government with which the U.S. has a mutual defense

cooperation agreement; any item described above that requires only minor modifications or modifications of the type customarily available in the commercial marketplace to meet the requirements of the procuring department or agency (see FAR 2.101).

Optional purchase uniform items

Uniform items authorized for wear by the individual but that are not a part of the initial or supplemental clothing issue. Optional purchase uniform items are not centrally procured but may be obtained through the Army and Air Force Exchange Service or authorized commercial sources.

Organizational clothing, and individual equipment

The uniforms, clothing, and equipment listed in the CTA, which are issued to an individual on a loan basis and remain the property of the organization. Commanders issue organizational clothing and equipment in accordance with the allowances and directives published in the appropriate CTA. When issued, organizational clothing is worn when prescribed by the commander in accordance with Army regulations, technical manuals, and the CTA. Examples of organizational uniforms are the maternity work uniform, hospital duty, and food service uniforms, modular load carriage equipment, and cold-weather clothing.

Program protection

The integrating process for managing risks to DoD warfighting capability from foreign intelligence collection; hardware, software, and cyber vulnerability or supply chain exploitation; and battlefield loss throughout the system life cycle.

Program Protection Plan

A living plan to guide efforts to manage the risks to critical program information and mission critical functions and components as well as program and system information. This milestone acquisition document captures both systems security engineering and security activities and the results of the analyses as the program and system become more defined (see DoDI 5000.83, DoDI 5200.39, and AR 70–77).

Program, project, or product manager

An HQDA manager for a system or program. A PM may be subordinate to the AAE, PEO, or DRPM. Refers to the management level of intensity the Army assigns to a particular weapon system or information system.

Programmatic environment, safety and occupational health evaluation

Documents data generated by ESOH analyses conducted in support of program execution—regardless of size, type, or number of ESOH risks that are anticipated or known for the system.

Security assistance

A group of programs authorized by the Foreign Assistance Act of 1961, as amended; the Arms Export Control Act of 1976, as amended; or other related statutes by which the United States provides defense articles, military training, and other defense-related services by grant, lease, loan, credit, or cash sales in furtherance of national policies and objectives, and those that are funded and authorized through the Department of State to be administered by Department of Defense/Defense Security Cooperation Agency, which are considered part of security cooperation. (see AR 12–1).

Serialized item management

Programs and techniques that use life cycle item management data to track the performance of uniquely identified items throughout their life cycle. The overarching goal of these programs and techniques is to enable managers achieve optimum weapon system materiel availability at the best total ownership cost through the use of effective and efficient life-cycle management practices..

Software

Also commonly referred to as computer software, defined as (i) computer programs that comprise a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and (ii) recorded information comprising source code listings, design details, algorithms, processes, flow charts, formulas, and related material that would enable the computer program to be produced, created, or compiled. It does not include computer databases or computer software documentation.

Software support activity

An organization assigned the responsibility for post-production software support.

Synchronization

The coordination, harmonization, and integration effort that starts early in the EMD phase of a program and continues throughout its life cycle. The objective is the appropriate consideration of the interoperability and interdependency of the constituent legacy, current, and future systems so that capabilities which are greater than the sum of individual systems are provided to the Warfighter.

System of systems

A set or arrangement that results when independent and useful systems are integrated into a large system that delivers unique capabilities. The SoS may deliver capabilities by combining multiple collaborative and independent-yet-interacting systems. The mix of systems may include existing, partially developed, and yet-to-be designed independent systems.

Technical data

Recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer databases and computer software documentation). The term does not include computer software or financial, administrative, cost or pricing, or management data or other information incidental to contract administration.

Technology transfer

The intentional sharing of knowledge, expertise, facilities, equipment, and other resources that benefit the DoD and/or non-DoD entities. (see DoDI 5535.08).

Total life cycle competition strategy

Describes the technical and contracting methods for maximizing effective competition, with an objective of full and open competition, throughout the system's life cycle. Addresses the entire system, to include end items, components, and spare parts in light of breakout, spares acquisition integrated with production, support services and other software, and acquisition of technical data and data rights.

Training aids, devices, simulators, and simulations

A general term that defines training equipment that supports training in the live, virtual, and constructive environments. The TADSS are justified, developed, and acquired to support training of designated tasks. Examples include battle simulations, targetry, training-unique ammunition, flight or driving simulators, gunnery trainers, and maintenance trainers. The TADSS are categorized as system (supported by the MATDEV) or non-system (supported by the training program evaluation group). System devices are designed for use with a specific system, SoS, or item of equipment, including subassemblies and components. System TADSS may be designed or configured to support individual, crew, collective, and combined armed training strategies. System TADSS may be stand-alone, embedded, or appended. Non-system TADSS are designed to support general military training and non-system specific training requirements. Both system and non-system TADSS are required for operational and unit readiness. Both types of TADSS are therefore considered integral parts of weapons, weapon systems, and SoS.

Transition to sustainment

The deliberate, predictable, conditions-based and informed decision to transfer responsibility to execute sustainment of post FRP decision systems delivering sufficient capability to execute the mission and that no longer require significant enhancements, upgrades, or modernization.

Transportability

The inherent capability of an item or system to be moved effectively and efficiently by required transportation assets and modes.

Unique item identifier/unique item identification

A globally unique and unambiguous identifier that distinguishes an item from all other like and unlike items. The UII is derived from a UII data set of one or more data elements. a set of data elements marked on items that is globally unique and unambiguous.

Unlimited rights

Regarding rights in technical data other than commercial products and commercial surfaces, the rights to use, modify, reproduce, perform, display, release, or disclose technical data in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so. (see DFARS 252.227–7013(a)(16)). Regarding rights other than commercial computer software and other than commercial computer software documentation, the rights to use, modify, reproduce, release, perform, display,

or disclose computer software or computer software documentation in whole or in part, in any manner and for any purpose whatsoever, and to have or authorize others to do so. (see DFARS 252.227–7014(a)(16)).

Urgent operational need

Capability requirements identified as impacting an ongoing or anticipated contingency operation. If left unfulfilled, UONs result in capability gaps potentially resulting in loss of life or critical mission failure. When validated by a single DoD component, these are known as DoD component UONs..