Army Regulation 70–1

Research, Development, and Acquisition

Army Acquisition Policy

Headquarters
Department of the Army
Washington, DC
22 July 2011

UNCLASSIFIED

SUMMARY of CHANGE

AR 70–1
Army Acquisition Policy

This major revision, dated 22 July 2011--

- Updates responsibilities for several leaders (chap 2).
- Adds requirements for item-unique identification (paras 2-2*v*, 2-3*ab*, 2-6*ae*, 2-29*u*, 4-7*b*(3)(p), 6-15, and terms).
- Updates Army recapitalization program policy (para 3-6).
- Adds Army prototyping and competition requirements (para 4-2).
- Changes “Supportability Strategy” to “Life Cycle Sustainment Plan” and associated requirements (para 4-7).
- Corrects reference to "Army Executive Agent for Insensitive Munitions" terminology to read "Army lead agent for insensitive munitions (ASA (ALT) (SAAL-ZS))” (para 6-14*b*).
- Adds requirements for the Army’s Computer Hardware, Enterprise Software Solutions program (para 7-20).
- Updates information on the Army Systems Acquisition Review Council and the Army Overarching Integrated Product Team (para 8-1).
- Adds briefing requirements regarding program termination costs (para 8-1*g*).
- Adds policy guidance on Army Configuration Steering Boards (para 8-2).
- Moves type classification information and adds a policy reference (para 8-3).
- Updates the purpose and requirement for materiel release (para 8-5*c*).
- Replaces the software blocking paragraph (para 8-6).
- Adds unmanned ground systems acquisition policy (para 8-12).
- Updates responsibilities for the Chemical and Biological Defense Program (para 8-16).
- Combines acquisition, logistics, and technology workforce updates (chap 9).
- Adds acquisition-related policy issuances (app B).
- Implements revisions to DODI 5000.02 and removes Horizontal Technology Integration program information (throughout).
- Makes other administrative changes (throughout).

Headquarters
Department of the Army
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22 July 2011

*Army Regulation 70–1

Effective 22 August 2011

Research, Development, and Acquisition

Army Acquisition Policy

By Order of the Secretary of the Army:

MARTIN E. DEMPSEY
General, United States Army
Chief of Staff

Official:

JOYCE E. MORROW
Administrative Assistant to the Secretary of the Army

History. This publication is a major revision.

Summary. This regulation implements DODD 5000.01, The Defense Acquisition System, and DODI 5000.02, Operation of the Defense Acquisition System. It governs research, development, acquisition, and life cycle management of Army materiel to satisfy approved Army requirements. This regulation is first in the order of precedence for managing Army acquisition programs following statutory requirements, the Federal Acquisition Regulation, the Defense Federal Acquisition Regulation Supplement, DOD regulatory direction, and Army Federal Acquisition Regulation supplements. If there is any conflicting guidance pertaining to contracting, the Federal Acquisition Regulation, the Defense Federal Acquisition Regulation Supplement, and the Army Federal Acquisition Regulation Supplement will take precedence over this regulation and DOD guidance.

Applicability. This regulation applies to the active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated. It also applies to personnel involved in research, development, acquisition, and support of materiel and systems. It applies to all Department of the Army acquisition programs, including national security systems; special access programs (unless specifically excepted per program charter); medical systems; computer resources integral to those items or systems; system and nonsystem training aids, devices, simulations, and simulators; embedded training; embedded testing; instrumentation, targets, and threat simulators; and clothing and individual equipment. It applies to command, control, communications, and computers/information technology systems where the Army is the executive agent for another organization or Service or where a command, control, communications, and computers/information technology system is developed cooperatively with other governments unless such organizations can assure their compliance. The portions of this regulation pertaining to the Army's acquisition, logistics, and technology workforce management apply to active Army, the Army National Guard of the United States, the Army Reserve, and Department of the Army civilian personnel serving in designated acquisition positions. The following items are excluded from the purview of this regulation: (1) materiel requirements for the U.S. Army Civil Works Program except for information technology; (2) functional medical clothing and equipment listed in Common Table of Allowances 8–100; (3) those distinctive articles of clothing and insignia worn and used by the U.S. Corps of Cadets at the U.S. Military Academy; (4) centrally procured heraldic items in the initial and supplemental clothing allowances (Common Table of Allowances 50–900); (5) other items as determined by Headquarters, Department of the Army and so directed after proper Army Secretariat and Army staff coordination; (6) medical materiel and information systems that support fixed facility tables of distribution and allowances health care missions within the Defense Health Program, which will be managed under AR 40–60, AR 40–61, and AR 25–1.

Proponent and exception authority. The proponent of this regulation is the Assistant Secretary of the Army for 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 guidance.

Army internal control process. This regulation contains internal control provisions and identifies key internal controls that must be evaluated. (See appendixes D and E.)

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from the Assistant Secretary of the Army for Acquisition, Logistics, and Technology, SAAL–PA, 2511 Jefferson Davis Highway, Arlington, VA 22202–3911.

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 for Acquisition, Logistics, and Technology, SAAL–PA,

*This revision supersedes AR 70–1, dated 31 December 2003, and rescinds AR 70–35, dated 17 June 1988.

2511 Jefferson Davis Highway, Arlington, VA 22202–3911.

Committee Continuance Approval. The Department of the Army committee management official concurs in the establishment and/or continuance of the committee(s) outlined herein. AR 15–1 requires the proponent to justify establishing/continuing committee(s), coordinate draft publications, and coordinate changes in committee status with the U.S. Army Resources and Programs Agency, Department of the Army Committee Management Office (AARP–ZX), 105 Army Pentagon, Washington DC 20310-0105. Further, if it is determined that an established "group" identified within this regulation, later takes on the characteristics of a committee, as found in the AR 15–1, then the proponent will follow all AR 15–1 requirements for establishing and continuing the group as a committee.

Distribution. This publication is available in electronic media only and is intended for command levels D and E for the active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

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Chapter 1
Introduction

1–1. Purpose

This regulation and DA Pam 70–3 implement the Army's acquisition policy for programs in acquisition categories (ACATs) I through III. (See para 3–2, below.) This regulation assigns responsibilities to Army organizations in accordance with DODD 5000.01 and DODI 5000.02. The Army will apply the direction contained in DODD 5000.01 and DODI 5000.02 to all acquisition programs while streamlining and tailoring the procedures within statutory and program requirements. This regulation also specifies Army's acquisition workforce management responsibilities and defines clothing and individual equipment (CIE) acquisition responsibilities.

1–2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

1–3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1–4. Responsibilities

Responsibilities are listed in chapter 2.

1–5. Tenets of Army acquisition

a. Army acquisition executive. The Army acquisition executive (AAE) is solely responsible for acquisition matters within the Department of the Army (DA) and is the single decision authority for all Army acquisition matters. The AAE is responsible for approving all requests to initiate new acquisition programs, and will do so only when they are supported by approved capability documents, requisite funding, and program documentation.

b. Milestone decision authority. Each Army acquisition program (to include CIE) will have only one designated milestone decision authority (MDA), designated by duty position in order to ensure clear lines of responsibility. These assignments are reflected in chapter 3.

c. Program, project, or product manager. All Army acquisition programs approved by the AAE for central select list (CSL) management will be managed by a program, project, or product manager (PM) who reports to his or her assigned MDA. Only a DA CSL product manager will manage these designated acquisition programs. All other acquisition programs may be managed by a project director (PD) as deemed appropriate by the AAE.

d. Core management issues. The MDAs must rigorously address core issues before making program decisions, and there are certain core management issues that must be formally addressed at the appropriate milestone for every acquisition program. The objective outcome of a system acquisition is a product that represents a judicious balance of cost, schedule, performance, and supportability in response to the user's expressed need. The core management issues that MDAs must address are the following:

(1) Why is the program needed?

(2) Has the need been validated, and has the appropriate capabilities document been approved?

(3) What specific capabilities are necessary?

(4) When do the specific capabilities need to be introduced to the field or fleet?

(5) How much will the total program cost, to include the cost of all increments and retrofit actions to upgrade to the latest configuration?

(6) Is the program affordable and fully funded?

(7) Have alternative solutions, including solutions from other Services, been reviewed, and why was this solution selected?

(8) Does the acquisition strategy adequately describe what is to be developed or produced to the specified capability?

(9) Has the program's risk been assessed and managed?

(10) Has a program baseline been developed?

(11) Is the system or item designed and programmed such that the national technology and industrial base is encouraged to compete, using available commercial manufacturing processes?

(12) Does the program include quality requirements comprised of repeatable, reproducible processes that enable maximum materiel availability, mission effectiveness, and customer satisfaction with products, services, and systems in accordance with AR 702–11?

(13) Have the stability of the design and the operational capability of the system been verified?

(14) Has the program's or system's plan been fully coordinated and synchronized with joint plans and the plans of other applicable programs or systems from system of systems (SoS) and family of systems (FoS) synchronization, interoperability, fielding, and interdependency perspectives?

(15) Has the system been determined to be safe, operationally suitable, operationally effective, and logistically supportable?

e. Total life cycle systems management. The PMs are responsible and accountable for the life cycle management of their assigned programs from program initiation through demilitarization and disposal. This is known as total life cycle systems management (TLCSM). There is no transition of life cycle management responsibility away from the PM. They will manage assigned programs in a manner consistent with the policies and principles articulated in governing regulations, and in chapter 2, below.

f. Evolutionary acquisition. Evolutionary acquisition is the preferred approach to satisfying capability requirements. The objective is to balance the requirements and available capability with resources and technologies to put operational capabilities into the hands of the user quickly. To this end, PMs will use appropriate enabling tools, including a modular open systems approach, to ensure access to the latest technologies and products. The right tools will ensure affordable and supportable modernization of fielded assets.

(1) In planning evolutionary acquisition strategies, program managers will strike an appropriate balance among key factors, including the urgency of the capability gap; the maturity of critical technologies; SoS operational and technical factors; and the interoperability, supportability, sustainability, and affordability of alternative acquisition solutions. Achieving evolutionary acquisition requires collaboration among the user, tester, evaluator, developer, and sustainer.

(2) An evolutionary acquisition strategy must be based on time-phased operational requirements, documented in the appropriate capability document, and must indicate an initial increment of capability and the subsequent increments necessary to provide the full capability.

(3) A preliminary acquisition strategy, including overall cost, schedule, and performance goals for the total research and development program is included in a technology development strategy (TDS) that must be approved before starting the technology development phase. The first formal acquisition strategy for the evolutionary acquisition approach must be completed for the MDA's approval at milestone B. It will describe increment 1 (the initial deployment capability) details to include how it will be funded, developed, tested, produced, and supported. The acquisition strategy will also describe how to approach subsequent increments. See chapter 4, below, for additional requirements.

g. Supportability. Supportability is of co-equal importance as cost, schedule, and performance. System supportability must be fully addressed throughout the system acquisition process. (See para 4–7, below, and AR 700–127.)

h. Balanced fielding. The acquisition of a training system that supports a new defense system or piece of equipment will be assigned the same priority as that of the parent defense system or equipment. All MDAs will ensure that all system support costs—including training system development and infrastructure upgrades related to new or modified equipment acquisitions—are included in the system's management decision package before approval is granted for fielding. The PMs will perform required fielding actions in accordance with AR 700–142. Exceptions to this balanced fielding policy must be approved by the AAE.

i. Integrated process and product teams. Integrated process and product teams (IPTs) are an integral part of the defense acquisition process. They will be used throughout the acquisition process to produce quality systems. They are the forum within which issues are defined and adjudicated. Information on IPTs is included in the "Defense Acquisition Guidebook."

1–6. General Army acquisition policy and guidance

a. Approval of Army warfighting requirements. The Army approval authority for all warfighting capabilities is the Chief of Staff, Army (CSA), and it may be delegated to the Vice Chief of Staff of the Army (VCSA). All warfighting needs in the form of capabilities documents, regardless of ACAT, will be submitted to Headquarters, Department of the Army (HQDA) for validation and approval. The Army Requirements Oversight Council (AROC) advises the CSA in the assessment and prioritization of capabilities integrated across doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF). The AROC reviews capabilities documents developed under the Joint Capabilities Integration and Development System (JCIDS) process. For documents requiring Joint Requirements Oversight Council (JROC) action, the AROC will validate documents (with or without AROC modification) and forward to the JROC. (See the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01 series for additional information.)

b. Streamlining and tailoring. All MDAs will take action to streamline and tailor their programs and will document decisions to tailor regulatory information requirements. Streamlining and tailoring include program documentation, acquisition phases, the timing and scope of decision reviews, and decision levels, within statutory requirements (statutory requirements include, but are not limited to, acquisition program baselines (APBs), market research, and TDSs) unless waived as follows:

(1) Requests for tailoring of regulatory requirements contained in DODI 5000.02 and Army regulations must be coordinated with the appropriate Army policy proponent prior to submittal to the MDA for approval. The functional proponent may appeal the MDA's tailoring decision to the AAE. The MDA must document decisions to tailor functional requirements.

(2) Waivers for exemptions to regulatory requirements must be approved by the appropriate functional proponent.

Waivers affecting ACAT ID and IAM programs will be submitted through the AAE to the Defense Acquisition Executive (DAE), the DOD Chief Information Officer (CIO), or the Director, Operational Test and Evaluation (DOT&E), as appropriate, for approval.

(3) Statutory requirements cannot be waived unless the statute specifically provides for waiver of the stated requirements.

c. Cost. The default definition of cost for the DA is life cycle cost as defined in DOD 5000.4–M, paragraph C3.3.7: "...includes ALL [work breakdown structure] WBS elements; ALL affected appropriations; and encompasses the costs, both contractor and in house effort, as well as existing assets to be used, for all cost categories. It is the TOTAL cost to the Government for a program over its full life, and includes the cost of research and development, investment in mission and support equipment (hardware and software), initial inventories, training, data, facilities, etc., and the operating, support, and, where applicable, demilitarization, detoxification, or long term waste storage."

d. Competition. Emphasis will be placed on innovation and competition to achieve the best possible system solution. Existing commercial off-the-shelf functionality and solutions drawn from a diversified range of large and small businesses shall be considered. The PMs shall seek to maximize competition and shall consider sole source contracting only when it is clearly in the best interests of the Army and can be accomplished in accordance with all requirements of the Federal Acquisition Regulation (FAR), the Defense Federal Acquisition Regulation Supplement (DFARS), and the Army Federal Acquisition Regulation Supplement. Conditions that form the basis for competition (technical or product data, technology readiness, and commercial solutions) must be leveraged to the fullest extent.

e. Program acquisition for command, control, communications, computers, and information technology. Materiel developers must develop and procure systems that are fully compliant with the DOD Information Technology Standards Registry (DISR) and AR 25–1. Procurement or other acquisition of the hardware infrastructure needed by the Army to support its implementation of joint acquisition information technology (IT) and National Security System (NSS) programs is subject to the oversight and direction of the Army CIO. (See chap 7, below.)

f. Army enterprise strategy. Ensure each research, development, and acquisition (RDA) information technology initiative fully meets the requirements of the Clinger-Cohen Act (CCA) of 1996.

g. System of system synchronization. System of system and family of system synchronization during program design will ensure requirements and system developments are harmonized during program execution. The policy extends to all systems that exchange information regardless of their place in the life cycle and includes not only systems in development but also those being maintained through post deployment software support (PDSS) as well as those being modified in accordance with AR 750–10. All PMs will provide an interoperability assessment at each milestone and major program review (to include preliminary design review (PDR), critical design review (CDR), and test readiness review (TRR)) in accordance with paragraph 6–7, below.

h. Chief Information Officer assessment process. The Army CIO/G–6 performs an evaluation on all ACATs I and II and special interest programs for compliance with statutory and regulatory requirements. The assessment on ACAT III and other qualifying programs falls under the purview of the CIO/G–6 at the level of the program executive officer (PEO), direct reporting project manager (DRPM), Army command (ACOM) staff, Army service component command (ASCC) staff, and direct reporting unit (DRU) staff. The Army CIO/G–6 requires any Automated Information System (AIS) using the Army Enterprise Infrastructure (AEI) to obtain interoperability and networthiness certifications before the system or capability can be connected to the Army's network. (See para 7–4, below.) Acquisition requirements are documented in the CIO/G–6 Assessment Criteria and are updated as required based upon changes in statute and regulations. The PMs provide a self-assessment based on the CIO/G–6 Assessment Criteria that serve as the basis for the required evaluation. In support of ACAT I and ACAT II milestone decisions, a CIO/G–6 assessment memorandum is prepared by the Army CIO/G–6. The Army CIO/G–6 has the responsibility to recommend to the AAE the continuation, modification, or termination of Army programs having IT or NSS impact. The Army CIO/G–6 assesses all new command, control, communications, and computers (C4), information management systems, and systems with embedded IT for compliance with statutory and regulatory requirements. The PEOs, DRPMs, and PMs will provide information through the CIO/G–6 assessment process to support evaluations of ACAT systems.

i. Post-implementation review. The Government Performance and Results Act requires Federal agencies to compare actual program results with established performance objectives. The DODI 5000.02 refers to this information requirement as a post-implementation review (PIR) and requires a PIR for major automated information system (MAIS) and Major Defense Acquisition Program (MDAP) acquisition programs at the full-rate production or full-deployment decision reviews. A draft PIR plan is required prior to milestone B and a final PIR plan at milestone C with the actual PIR occurring after initial operational capability (IOC) and generally before full operating capability. In short, the PIR is a process that aggregates information needed to successfully evaluate the degree to which a capability has been achieved. The program sponsor is responsible for articulating outcome-based performance measures of effectiveness or benefits and ensuring they are articulated in the initial capabilities document (ICD) or business plan. The sponsor is responsible for planning the PIR, gathering data, analyzing the data and assessing the result. The PM is responsible for maintaining an integrated program schedule that includes the PIR on behalf of the sponsor. The PIR plan is submitted to the action officer for Title 40 or CCA issues at milestones B and C. See the "Defense Acquisition Guidebook" for additional PIR information.

j. Test and evaluation. Materiel developers must develop a test and evaluation strategy that optimizes the use of

available test resources (for example, instrumentation, test ranges and facilities, modeling and simulation (M&S), and so forth) and appropriate types of events to support the acquisition program. Consider use of separate developmental tests (DTs) and operational tests (OTs), combined and integrated DTs or OTs, M&S, and alternate test events, as appropriate, to meet program requirements. (See AR 73–1 and DA Pam 73–1.) In particular, proper use of M&S can support evaluation, can reduce test costs, and can guide and inform the test and evaluation (T&E) process to reduce risk and resources required throughout the system acquisition process. System performance will be continuously evaluated during the system's life cycle, to maximize opportunities to collect system performance data in a cost-effective manner.

k. Modeling and simulation.

(1) Modeling and simulation should be used throughout the system acquisition process in a robust, collaborative manner to address system development such that the total ownership cost is reduced, time to field IOC is reduced, and military utility and supportability are increased through the collaborative efforts of all disciplines directly involved in or providing support to the acquisition process.

(2) The use of M&S should be considered throughout all modification and upgrade efforts—assessing the impact of upgrades and additions to existing system designs, as well as measuring supportability and military worth.

l. Manpower and personnel integration, and human system integration requirements. Acquisition programs must fully address manpower and personnel integration (MANPRINT), as well as human system integration (HSI) throughout the system acquisition process. As such, MANPRINT and HSI analyses must be conducted as an integral part of the systems engineering process to ensure that MANPRINT and HSI requirements are integrated into the system design. This will optimize total system performance and minimize life cycle ownership costs. Specific initiatives, applications, and assessments are the primary mechanisms by which MANPRINT domain risks are identified, resolved or mitigated. Additional information on MANPRINT and the domains can be found in AR 602–2.

m. Supportability. System supportability must be fully addressed throughout the system life cycle. Supportability analyses must be conducted as an integral part of the systems engineering process to ensure that supportability requirements are identified to optimize total system performance. Supportability planning and execution are a component of the integrated logistic support (ILS) process, as defined in AR 700–127.

n. Performance based logistics. The Army will implement performance based logistics (PBL) in accordance with requirements detailed in AR 700–127. Performance based logistics is the DOD preferred product support arrangement for weapon system support that is documented with an approved PBL business case analysis, performance metrics, and performance based agreements.

o. The Army working capital fund—supply management, Army; the operating and support cost reductions program.

(1) The Army working capital fund–supply maintenance, Army (AWCF–SMA) operation support cost reduction program (OSCR) is defined as the re-engineering or redesign of repair parts that will improve reliability; decrease operating and support costs for depot level repair, secondary items, and repair parts; or extend useful life. The reengineering is expected to reduce turnover for the items and reduce funding requirements in field operating budgets. The AWCF–SMA–OSCR program funds projects to reengineer AWCF–SMA-managed spare parts for the specific purpose of achieving field operating tempo savings. Secondary items are redesigned or reengineered for the purpose of lowering unit cost or extending the useful life of the item directly for the field.

(2) The AWCF obligation authority finances the AWCF–SMA–OSCR program. Funding is contained within the hardware operating cost authority of the AWCF wholesale SMA activity group and is limited to AWCF–SMA-owned-and-stocked secondary items. The program includes all Army-managed spares that are procured by either the AWCF or the Defense Working Capital Fund. The program consists of individual approved projects funded by AWCF–SMA–OSCR to perform only nondevelopmental engineering design or redesign efforts that result in a physical hardware application for spares, using existing technology, and extends from the time projects are defined until the project is delivered.

p. Unit set fielding. Unit set fielding (USF) is a disciplined systems modernization approach that fields multiple systems with associated software to units during a single modernization window. This approach, which expands on single system modernization policies and procedures, focuses on fielding fully integrated combat capability. Thus, USF is the integration and synchronization of the resourcing, planning, preparation, and fielding of a unit set of equipment with associated software to a designated unit. (See AR 700–142 for additional USF information.)

q. Army quality program. The PEOs, PMs, and MATDEVs will apply quality practices, policies, and methodologies in early program planning and appropriately throughout the acquisition life cycle. All PEOs, PMs, and MATDEVs will ensure compliance with AR 702–11, with specific emphasis to key functional areas of manufacturing and product quality, supplier quality, product verification and validation testing, and software quality.

r. Contractors on the battlefield. The PEOs, DRPMs, and PMs will strive to develop systems that do not require the routine assignment of contractor support personnel within the brigade combat team or equivalent unit. The PMs will address the support philosophy for systems, including plans for contractor support, in the system's life cycle sustainment plan (LCSP) in compliance with AR 700–127 and AR 715–9.

s. Environment, safety, and occupational health risk management. Environment, safety, and occupational health (ESOH) risk management identifies hazards, assesses risks, makes risk decisions, implements plans, and oversees them.

It is the mechanism the Army uses to build effective systems that are as environmentally acceptable, safe, and healthy as possible, given programmatic cost and schedule. The PMs will integrate processes that are compliant with military standard 882 (MIL–STD–882) into the systems-engineering process. This will allow for timely and informed ESOH risk decisions and will provide a means to inform users of residual hazards, ultimately protecting the force. The programmatic environment, safety, and occupational health evaluation (PESHE) will document environmental analyses, system safety risk assessments, and the health hazard assessments used to make decisions for the acceptance of risk. Decisions to accept risks associated with hazards will be made at a management level commensurate with the risk (See MIL–STD–882 for a risk decision authority matrix.) The assessment and acceptance will be available at milestone B and subsequent milestone decision reviews (MDRs). Identified hazards and the status of corrective actions will be recorded, provided to evaluators, and maintained until system disposal.

t. Environmental sustainability. All Army acquisition managers will establish an environmental management process to integrate pollution prevention and sustainable processes with minimal environmental impact into the systems engineering process. This endeavor will be maintained throughout the acquisition process.

u. Green procurement. Federal Acquisition Regulation subparts 23.4 and 23.7 prescribe policies and procedures for acquiring energy-efficient, water conserving, and environmentally preferable products and services. All acquisition programs shall implement green procurement in the selection of consumable materials used in production and maintenance. Green procurement includes the use of recovered materials acquired in a cost-effective manner and items composed of the highest percentage of recovered materials practicable, and which is consistent with maintaining a satisfactory level of competition without adversely affecting performance requirements or exposing suppliers' employees to undue hazards from the recovered materials.

v. Re-procurement. Re-procurement of an item is authorized when there is a continuing functional need based on an updated performance specification or purchase description from the last procurement. Re-procurement should not require any research, development, test, and evaluation (RDT&E) funds other than "budget activity 6.5" RDT&E funding for market research and associated testing. The capability developer (CAPDEV) will provide a statement of continuing need for the item to the Deputy Chief of Staff, G–3/5/7 (DCS, G–3/5/7), where the requirement will be approved. As required by DCS, G–3/5/7, a revised capability document may be developed to support the continuing need. The capability document must be validated and approved by the Office of the DCS, G–3/5/7. An approved SCN will then be provided to the Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA (ALT)) for re-procurement actions. (See DA Pam 700–56.)

w. Tools acquisition.

(1) *Special tools.* The elimination of special tools shall be a primary objective in system development. A special tool is a tool designed to perform a specific task for use on a specific end item or a specific component of an end item. It is authorized by the repair parts and special tools list located within that end item's technical manual (TM). Special tools differ from common tools, which are used on multiple end items and are found in a set, kit, or outfit as authorized by a supply catalog. As part of the ILS process, planning for special tools must begin in the development phase and continue after deployment of all weapon systems to help reduce the logistics footprint.

(2) *Common tools.* The number of common tools shall be kept to the minimum required as a primary design objective during system development.

x. Explosive ordnance disposal. All Army programs for the acquisition of explosive ordnance (including applicable weapon delivery systems) will include the development of explosive ordnance disposal (EOD) technical data (in accordance with the specifications of the single manager for conventional ammunition), the availability of hardware for EOD validation or verification testing, and the recommendation for the unique tools necessary to render safe and dispose of the explosive ordnance.

y. Insensitive munitions. Insensitive munitions (IM) design features will be developed and introduced via a total systems engineering approach that ensures that all combat system requirements are met while enhancing survivability to unplanned stimuli. Munitions survivability is crucial to the success of combat systems. The reactive nature of munitions and combat systems makes them susceptible to degradation and destruction when exposed to stimuli such as bullet impacts, fragment impacts, fires (fast cook-off), heat (slow cook-off), shaped charge jets, and explosions (sympathetic detonation).

z. Chemical, biological, radiological, and nuclear system survivability. Programs identified as mission critical by a capability development document (CDD) or capability production document (CPD) have to meet survivability criteria. The U.S. Army Nuclear and Combating Weapons of Mass Destruction Agency issues survivability criteria for high altitude electromagnetic pulse, other initial nuclear weapons effects, chemical, biological, radiological, and nuclear (CBRN) contamination as appropriate. The PMs and MATDEVs will obtain the criteria and will then use this criteria in the design and testing of the system. (See AR 70–75.)

Chapter 2
Responsibilities

Section I
Army Acquisition Executive, Program Executive Officers, and Program, Project, and Product Managers

2–1. Army acquisition executive

Upon direction of the Secretary of the Army, the ASA (ALT) serves as the AAE. The AAE will—

a. Administer acquisition programs in accordance with statute and DOD policies.

b. Promulgate acquisition policies and procedures.

c. Act as the final authority on all matters affecting the Army's acquisition system, except as limited by appropriate authority.

d. Oversee the Army Acquisition Corps (AAC).

e. Appoint a Director, Acquisition Career Management in the office of the AAE to assist the AAE in performing duties with respect to the Army acquisition, logistics, and technology (AL&T) workforce.

f. Appoint, supervise, and evaluate assigned PEOs and DRPMs. The AAE also approves and signs all PEO, DRPM and PM charters and designates acquisition central selection list key billets (for example, the PM, contingency contracting battalion commander, contracting support brigade commander).

g. Serve as the MDA for ACATs IC, IAC, and, unless delegated, ACAT II and III programs.

h. Review and approve, for ACAT ID and IAM programs (under chap 3, below), the Army position at each milestone decision before the Defense Acquisition Board (DAB) review or information technology acquisition board (ITAB) review. This includes the review and approval of APBs.

i. Designate the appropriate level of centralized management and approve any establishment or disestablishment of a program or a PM in the Army acquisition structure.

j. Ensure compliance with the Army's program design SoS or FoS synchronization requirements as outlined in para 1–6*g*, above.

k. Approve and assign software reuse domains and domain management responsibility based on recommendations from the Army CIO/G–6.

l. Develop safety, health, and environmental risk management processes for materiel development and oversee process implementation to ensure compliance of acquisition, logistics, technology, procurement, the industrial base, and security cooperation programs with ESOH statutory and regulatory requirements; act as the risk decision authority for high-risk residual hazards associated with Army systems. Implement the National Environmental Policy Act requirements pertaining to weapon system acquisition programs as described in Part 651, Title 32, Code of Federal Regulations (32 CFR 651).

m. Ensure technical and functional integration and synchronization across assigned programs.

n. Promulgate policy and guidance for energy productivity of weapon systems.

o. Chair Configuration Steering Boards (CSBs) for every current and emerging ACAT I program in development pursuant to DODI 5000.02, enclosure 2.

2–2. Program executive officers and program, project, or product managers reporting directly to the Army acquisition executive

The PEOs, and direct-reporting PMs will—

a. Serve as a MATDEV, have no other command or staff responsibilities, and report to and accept acquisition-related direction only from the AAE.

b. Evaluate assigned programs for compliance with statutory and Army regulatory acquisition requirements.

c. Establish a continuing relationship with the Office of the DOD PM, Mobile Electric Power (MEP) throughout the acquisition life cycle for all mobile electric power generating sources (excluding batteries).

d. Establish a continuing relationship with the U.S. Army Geospatial Information Officer (GIO), Corps of Engineers, throughout the acquisition life cycle of all acquisition programs requiring geospatial information and services (GI&S). Work the concept formulation of all future system GI&S requirements with the GIO, unless released from the requirement by the AAE.

e. Be responsible for schedules, technical requirements, and the planning, programming, budgeting, and execution necessary to guide assigned programs through each milestone within approved baselines and established exit criteria.

f. Provide the planning guidance, direction, control, oversight, and support necessary to ensure systems are developed in accordance with the Army Enterprise Architecture (AEA) and program design SoS or FoS synchronization requirements; meet joint, allied and/or coalition forces interoperability requirements; meet security requirements; minimize life cycle cost; and ensure systems are supported and fielded within cost, schedule, performance, and supportability baselines, providing a coordinated, Armywide solution.

g. Oversee the development, coordination, and commitment to an APB and ensure immediate reporting of all imminent and actual breaches of approved baselines. Include program related operation and support costs in the APB.

h. Ensure APBs and solicitations include requirements from the capability document.

i. Use IPTs throughout the acquisition process.

j. Provide technical and functional integration across assigned programs. Ensure that functional (matrix) support to subordinate offices and PMs includes all appropriate disciplines and is planned and coordinated with the supporting organizations.

k. Supervise and evaluate assigned PMs. Program and project managers will supervise and evaluate assigned project and product managers.

l. Exercise the fund-control responsibilities of an independent general operating agency.

m. Design, plan, program, coordinate, and execute a viable T&E program in accordance with AR 73–1.

n. Establish an ESOH management process to ensure the sustainment of acquisition, logistics, technology, procurement, industrial base, and security cooperation programs with ESOH statutory and regulatory requirements. Establish an ESOH risk management process conforming to MIL–STD–882 and serve as the safety officer for assigned systems with the responsibility for proper planning and execution of system safety requirements per AR 385–10 with authority for accepting, with concurrence of the user's representative, serious residual hazards associated with Army systems. Be responsible for identifying all hazards, eliminating or mitigating when possible, and for providing an assessment of hazards that are not eliminated for an assigned program. Plan and execute the requirements for health hazard assessments and toxicity clearances per AR 40–5 and AR 40–10.

o. Establish program requirements for corrosion prevention and control of assigned weapon systems.

p. Ensure embedded diagnostics acquisition strategies are coordinated with the PD for test, measurement, and diagnostic equipment (TMDE).

q. Support development and re-engineering of all software by integrating software reuse principles into the system software engineering process. Incorporate reuse technology into the systems engineering and acquisition processes.

r. Ensure subordinate offices and PMs plan, at an execution level, for the integrated use of M&S throughout the acquisition life cycle of their programs. Such planning should encompass development of digital product descriptions; verification, validation, and accreditation; and collaboration with the requirements, T&E, experimentation, logistics, M&S, systems engineering, and training communities so that information developed via M&S efforts will lead to more informed decisionmaking. Decisions based on analysis conducted using M&S are expected to result in reduced ownership costs and increased supportability and military worth.

s. Conduct small business outreach activities at least once each year and ensure subordinate offices include small business specialist input in developing the business strategy section of acquisition strategies.

t. Appoint a technical data management point of contact to ensure assigned programs assess the long-term data management and technical data rights. Ensure ACAT I and II PMs document that assessment in a program data management strategy (DMS) that becomes part of the program's acquisition strategy per DODI 5000.02. (While not specifically required by statute and policy, applying data management and technical data rights assessments for ACAT III programs is strongly encouraged.)

u. Assure energy productivity analysis occurs for assigned weapon systems as required by the system's capability documents. (See para 6–9, below.)

v. For item unique identification (IUID)—

(1) Provide planning guidance, direction, control, oversight, and support necessary to ensure that IUID is implemented throughout the life cycle for assigned programs (new acquisitions and legacy).

(2) For direct reporting PMs—

(a) Ensure that the PM, Joint–Automatic Identification Technology (J–AIT) Office is used as a central source for AIT products and technical expertise.

(b) Develop IUID implementation plans that are aligned with the HQDA IUID Implementation Plan and obtain approval from the assigned MDA within 90 days of program initiation.

(c) Develop updates to IUID implementation plans at least annually and obtain approval from the assigned MDA within 90 days of the anniversary date of the prior year plan.

(d) Provide IUID implementation status at program reviews.

(3) Ensure that Clause 252.211–7003, Defense Federal Acquisition Regulation Supplement is incorporated in all new contracts and existing contracts where items acquired are subject to IUID criteria. (See para 6–15, below.)

(4) Identify IUID resource requirements in the program objective memorandum (POM), program budget reviews (PBRs), and weapon system reviews (WSRs).

(5) Coordinate requirements and process development with applicable government activities to ensure designated marking activities can support implementation of IUID during marking trigger events.

(6) Unique MDAP tooling required for production hardware is DOD serially managed and requires IUID.

w. Provide a MATDEV representative to the U.S. Army Training and Doctrine Command (TRADOC) director of Army Capabilities Integration Center's (ARCIC's) chartered integrated capabilities development teams (ICDTs).

x. Ensure assigned PMs provide the warfighter with fully supportable systems that meet reliability, availability, and maintainability (RAM) requirements.

y. Ensure assigned PMs achieve type classified standard (TC-STD) and full materiel release by the full-rate production (FRP) decision review in accordance with AR 700–142.

z. Ensure assigned programs are designed for ease of demilitarization as part of the systems engineering process throughout the life cycle.

aa. Provide planning guidance, direction, control, oversight, and support necessary to ensure that quality is implemented throughout the life cycle for assigned programs (new acquisition and legacy) in accordance with AR 702–11.

2–3. Program, project, and product managers

The PMs will—

a. Serve as MATDEVs and will have no other command or staff responsibilities.

b. Plan and manage acquisition programs consistent with the policies and procedures issued by the AAE and other appropriate statutes, regulations, policies, procedures, and standards.

c. Provide the planning guidance, direction, control, oversight, and support necessary to ensure systems are developed and maintained in accordance with the AEA and the program design SoS or FoS synchronization requirements. This will include certification to the MDA of compliance with the architecture and the program design SoS or FoS synchronization requirements prior to formal release of the draft and final solicitations. Systems must also satisfy joint interoperability requirements in accordance with the Army interoperability certification process, minimize life cycle cost, and be fielded within cost, schedule, performance, and supportability baselines. The PMs must coordinate their system development, testing, and fielding plans with other system PMs in accordance with the program design SoS or FoS synchronization requirements.

d. Develop and submit requirements for financial, manpower, matrix, and contractor support to the AAE through the respective PEO or DRPM.

e. Develop, coordinate, and commit to an APB, and immediately report all impending and actual breaches of approved baselines.

f. Perform cost, schedule, and performance tradeoff studies and work with the Office of the DCS, G–3/5/7 and the CAPDEV to establish new system cost targets.

g. Prepare and submit timely and accurate program performance reports as required.

h. Prepare and submit a technology maturity assessment before milestones B and C as part of the technology readiness assessment process. For programs where the MDA is either the AAE or DAE, submit maturity assessments to ASA (ALT) at SAAL–ZT. All other programs must submit maturity assessments to the designated MDA.

i. Through their respective PEO or DRPM, coordinate their embedded diagnostics approach and requirements with the PD for TMDE.

j. Coordinate with the appropriate domain managers to ensure that software reuse opportunities are adequately addressed.

k. Use IPTs throughout the acquisition process.

l. Be responsible for weapon system IT and NSS system configuration management.

m. Develop, process, and maintain current input of basis of issue plan (BOIP) feeder data in accordance with AR 71–32.

n. Plan and perform systems engineering activities intended to prevent or delay exploitation of critical technologies in U.S. weapon systems (for example, software tampering and piracy).

o. Integrate energy productivity program requirements into systems engineering, including the use of the fully burdened cost of fuel during system trade studies and estimation of the total ownership cost.

p. Ensure assigned programs are designed for ease of demilitarization as part of the systems engineering process throughout the life cycle.

q. For ACAT I, ACAT II, and special interest programs, perform a program self-assessment utilizing the CIO assessment criteria list and submit results to Army CIO/G–6 for review and evaluation. Perform a self-assessment for ACAT III programs using the CIO assessment criteria list and submit results to the CIO functional organization within their PEO or DRPM for review and evaluation. The assessment criteria are available and the submission can be made online via the CIO assessment module located within the applications tab on the AcqBiz Central Web site at https://im.altess.army.mil/.

r. Ensure that all IT acquisitions and investments are registered in the Army Portfolio Management System (APMS).

s. Plan for the integrated use of M&S throughout the acquisition life cycle of assigned programs. Such planning should encompass development of digital product descriptions; budgeting for and purchasing the necessary data models and drawings to support the program's M&S approach; keeping the models current throughout the program; verification, validation, and accreditation; and collaboration with the analysis, requirements, testing, evaluation, and training communities so that information developed via M&S efforts will lead to more informed decisionmaking. Planning

should also include data transfer of empirical data from developmental test, integrated testing, and operational testing back to M&S.

t. Design, plan, program, coordinate, and execute a viable T&E program in conjunction with the T&E working-level IPT. This will include early coordination of the test and evaluation strategy for their respective systems with the Army Test and Evaluation Command (ATEC).

u. Integrate an ESOH management process into systems engineering to ensure all programs comply with ESOH statutory and regulatory requirements.

(1) Establish an ESOH risk management process conforming to MIL–STD–882.

(2) Establish a system safety effort in accordance with AR 385–10 and serve as the safety officer for assigned systems with the responsibility for proper planning and execution of system safety requirements. Ensure a tailored system safety program is implemented for all systems.

(3) Include the status of all "high" and "serious" risks in all acquisition reviews and fielding decisions using the MIL–STD–882 and DA Pam 385–16. Identify all hazards, eliminating or mitigating them when possible, and provide an assessment of hazards that are not eliminated.

(4) Include the system program office analysis of hazards that contributed to the accident in all system-related class A and B mishap investigation reports. Recommend materiel risk mitigation measures, especially those that minimize potential human error.

(5) Plan and execute the requirements for health hazard assessments and toxicity clearances in accordance with AR 40–5 and AR 40–10.

(6) Obtain safety releases from ATEC before testing, demonstration, or pre-test training using troops. This includes tests with type-classified materiel used in a new or innovative manner.

v. Implement a system corrosion prevention and control program within systems engineering. The corrosion prevention and control (CPC) program will conduct trade studies to minimize the impact of corrosion issues on system safety and total ownership costs. The complete CPC plan will be part of the program's acquisition strategy and discussed during technical program reviews. The CPC plan will identify risks to meeting key performance parameters (KPPs) and key system attributes impacted by corrosion issues.

w. Document compliance with industrial base requirements to include the core logistics capability statute (Title 10, United States Code, Section 2464) and the "50/50" statute (10 USC 2466). Assess the ability of the industrial base to support the life cycle requirements for an assigned program. Develop and implement a strategy to encourage industry to compete, invest and modernize the industrial base for assigned programs.

x. Incorporate condition based maintenance plus (CBM+) concepts and technologies in the design and development of new equipment and major weapon systems, and in current weapon systems, equipment, and materiel sustainment programs where it is technically feasible and beneficial. The decision for implementing CBM+ to current weapon systems, equipment, and materiel sustainment programs will be based on any of the following:

(1) Results of reliability analyses, including reliability centered maintenance.

(2) Findings from continuous process improvement initiatives.

(3) Technology assessments.

(4) Business case analysis.

y. Ensure that PBL is considered as a support alternative and used if it is determined to be economically and operationally feasible in accordance with AR 700–127.

z. Document and retain the methodology used to determine the direct maintenance man-hours such as direct maintenance man-hours from previous or like-item equipment, and any adjustments. Ensure that maintenance supportability is considered throughout the MDR process.

aa. Establish a continuing relationship with the PM, MEP throughout the acquisition life cycle for all mobile electric power generating sources (excluding batteries).

ab. For IUID—

(1) Ensure that PM, J–AIT is used as a central source for AIT products and technical expertise.

(2) Provide planning guidance, direction, control, oversight, and support necessary to ensure that IUID is implemented throughout the life cycle for assigned programs (new acquisitions and legacy).

(3) Develop IUID implementation plans that align with the HQDA IUID Implementation Plan and obtain approval from the assigned MDA within 90 days of program initiation.

(4) Develop updates to IUID implementation plans at least annually and obtain approval from the assigned MDA within 90 days of the anniversary date of the prior year's plan.

(5) Provide IUID implementation status at program reviews.

(6) Ensure that Clause 252.211–7003, Defense Federal Acquisition Regulation Supplement is incorporated in all new contracts and existing contracts where items acquired are subject to IUID criteria. (See para 6–15, below.)

(7) Identify IUID resource requirements in the POM, PBRs, and WSRs.

(8) Coordinate requirements and process development with applicable government activities to ensure that designated IUID marking activities can support implementation of IUID during marking trigger events.

(9) Ensure that the unique MDAP tooling required for production hardware is DOD serially managed and requires IUID.

ac. Provide a MATDEV representative to the TRADOC Director of ARCIC-chartered ICDTs.

ad. Provide planning guidance, direction, control, oversight, and support necessary to ensure that quality is implemented throughout the life cycle for assigned programs (new acquisition and legacy) in accordance with AR 702–11.

Section II
Headquarters, Department of the Army Elements

2–4. The Chief of Staff, Army

The CSA—

a. Serves as the decision authority for clothing bag, mess, dress, service, and optional purchase uniform items.

b. Approves Army warfighting requirements (may be delegated to the VCSA) per AR 71–9.

2–5. The Vice Chief of Staff of the Army

The VCSA—

a. Convenes and chairs the AROC.

b. Serves as the Army's representative on the JROC.

c. Co-chairs the Army science and technology advisory group with the ASA (ALT).

2–6. Assistant Secretary of the Army for Acquisition, Logistics and Technology

The ASA (ALT) has overall supervision of acquisition, technology, and logistics matters of the Department of the Army pursuant to 10 USC 3016. The ASA (ALT) will—

a. Upon direction of the Secretary of the Army, serve as the Army Acquisition Executive, the Senior Procurement Executive, the Science Advisor to the Secretary of the Army, and the senior research and development (R&D) official for DA. The ASA (ALT) also has the principal responsibility for all DA matters and policy related to acquisition, logistics, technology, procurement, the industrial base, and security cooperation (that is, security assistance and armaments cooperation).

b. Be responsible for overall supervision of DA acquisition, technology, and logistics matters.

c. Oversee the DA's procurement and contracting functions, including the exercise of the authority as agency head for contracting, procurement, and acquisition matters pursuant to laws and regulations; the delegation of contracting authority; and the designation of contracting activities.

d. Oversee ILS, materiel readiness, supply, services, maintenance, transportation, and related automated logistics systems management.

(1) Manage materiel readiness through the integration of logistics supportability throughout the acquisition life cycle management process for new and current systems.

(2) Ensure integrated logistics support requirements are validated and included in the materiel acquisition process to support type classification, full materiel release, and total package fielding of systems and equipment.

e. Manage the Army Acquisition Corps and the Army Acquisition Workforce.

f. Chair the Army Systems Acquisition Review Council (ASARC).

g. Co-chair the Army science and technology advisory group with the VCSA.

h. Serve as the Systems Architect of the Army.

i. Coordinate with the Office of the DCS, G–3/5/7 and the Office of the Assistant Chief of Staff for Installation Management (ACSIM) to prepare the modernization portion of the POM.

j. Execute the research and development function, including scientific and technical information, domestic transfer, advanced concepts and assessments, basic and applied research, and nonsystem-specific advanced development.

k. Manage the DA Competition Advocate Program.

l. Ensure the production readiness of weapon systems.

m. Formulate Armywide technology base strategy, policy, guidance, and planning.

n. Oversee the development, coordination, negotiation, and implementation of policy and programs associated with the Army's security cooperation activities, namely:

(1) *Armaments cooperation.* International cooperative science and technology (S&T), RDT&E, acquisition, and life cycle logistics programs. This includes the execution of information exchanges; acquisition workforce exchanges or assignments; international cooperative research, development, and acquisition (ICRDA) agreements with allies and coalition partners, and participation in international forums concerning the aforementioned subjects in accordance with AR 70–41.

(2) *Security assistance.* Foreign military sales, foreign military training, allocation of excess defense articles to foreign countries, related logistics, technology transfer, direct commercial sales, munitions case in accordance with AR 12–1.

o. Serve as the Secretary of the Army's (SA's) single executive for providing export policy oversight-providing policy direction and oversight to the DCS, G–2 on technology transfer. Chair and direct the Technology Transfer Security Assistance Review Panel, which serves as the executive decision authority for Army export control.

p. Review, approve, and publish broad strategies for leveraging international S&T, RDT&E, acquisitions and life cycle logistics for Army programs.

q. Conclude (sign) international agreements as delegated signature authority on behalf of the U.S. Government, the DOD, and/or DA for S&T, RDT&E, acquisitions, and/or life cycle logistics cooperation.

r. Serve 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 technical controlled unclassified information. (See disclosure procedures in DA Pam 70–3.) Disclosure of such information is frequently necessary to facilitate security cooperation (that is, armaments cooperation and security assistance).

s. Develop, defend, and direct the execution of the Army's acquisition policy, as well as legislative and financial programs and the budget.

t. Establish policies and strategies for implementing and evaluating the effectiveness of acquisition initiatives within the Army.

u. Develop, manage, and approve the long-range acquisition investment analysis.

v. Establish and maintain the Environmental Support Office (ESO) within ASA (ALT) in cooperation with the commanding general, U.S. Army Materiel Command (CG, AMC) to provide direct support to the Army Acquisition Community, PEOs, DRPMs, and PM environmental and affirmative procurement initiatives, issues, and concerns. The ESO will provide recommendations to the AAE or another decision authority on environmental issues associated with materiel and ASA (ALT) missions and functions. The ESO will be the ASA (ALT) single point of contact for coordinating environmental issues related to materiel development, logistics, and technology for HQDA component organizations in coordination with the Office of the Assistant Secretary of the Army (Installations, Energy, and Environment) (OASA (IE&E)). The ESO will ensure execution of environmental policy by acquisition managers.

w. Serve as the functional chief (FC) for career program (CP) 14 contracting and acquisition. (See AR 690–950.) Appoint a functional chief representative (FCR) for CP–14 to represent the contracting career programs.

x. Establish life cycle logistics policy and provide guidance for integrated logistics support and related acquisition-logistics policy, processes and functions.

(1) Oversee the development and execution of logistics management programs.

(2) Oversee logistical acceptability and supportability of materiel systems to include acquisition logistics, in coordination with the DCS, G–4.

(3) Establish the DA logistics position on acceptability, deployability, and supportability of all acquisition programs.

(4) Ensure that logistics considerations are incorporated into the warfighting analysis, in coordination with the DCS, G–4.

(5) Ensure that the sustainment functions and related automated logistics systems management are integrated fully and balanced properly between acquisition and logistics.

(6) Integrate MANPRINT, HSI, and acquisition logistics into the materiel acquisition process.

(7) Establish an ILS office to serve as the Army acquisition logistician for all ACAT level programs. The ILS office will—

(a) Serve as the Army proponent for TLCSM and PBL.

(b) Be responsible for policies and oversight of integrated logistics support programming, planning, and execution, to include total life cycle systems management and performance based logistics.

(c) Ensure that PEOs have incorporated and programmed supportability requirements into the acquisition and fielding requirements for new systems.

(d) Oversee logistics operations associated with security cooperation and other ASA (ALT) staff.

y. Exercise direct tasking authority over the Army's designated executive agents as they carry out their delegated security-cooperation responsibilities.

z. Provide the Army policy representative to the Defense Acquisition Regulatory Council.

aa. Direct the Army Science Board.

ab. Designate the Army corrosion executive, who will establish policies, review strategies, and approve funding to implement corrosion prevention and control within the Army and evaluate their effectiveness. Oversee execution of the Army Corrosion Prevention and Control Program, in cooperation with the CG, AMC, and the Assistant Secretary of the Army (Installations, Energy and Environment) (ASA (IE&E)).

ac. Promulgate policy and guidance for corrosion prevention and control for weapon systems and industrial base installations.

ad. Provide oversight and guidance to PEOs, DRPMs, and PMs to ensure compliance with approved Army initiatives for fielding and maintaining interoperable systems, as well as other policies or directives that affect interoperability. Assess SoS or FoS synchronization and interoperability at each MDR and major program review.

ae. Develop policies and guidance to institutionalize the use of IUID throughout the life cycles of programs.

af. Provide policy and oversight of the Chemical Demilitarization Program.

ag. Serve as the Army proponent for integrated SoS engineering to ensure that SoS, FoS, and interoperability design considerations are synchronized across PEOs.

ah. Develop policies and guidance to institutionalize the integration of quality throughout program life cycles.

2–7. Assistant Secretary of the Army for Civil Works

The ASA (CW) has the principal responsibility for overall policy direction and supervision of the DA functions relating to all aspects of the DA Civil Works Program, including all reimbursable work performed on behalf of Federal and non-Federal entities. Among the responsibilities, the ASA (CW) will—

a. Provide advice and assistance to the AAE on acquisition matters relating to the DA Civil Works Program.

b. Manage the DA Civil Works Program for conservation and development of the national water resources, including flood damage reduction, river and harbor navigation, environmental restoration, and related purposes.

2–8. Assistant Secretary of the Army (Financial Management and Comptroller)

The ASA (FM&C) will—

a. Direct and manage the DA's financial management activities and operations.

b. Execute the DA's planning, programming, budgeting, and execution (PPBE) process, including oversight of Army program development, preparation of budget estimates, and otherwise implementing the functions specified for the Under Secretary of Defense (Comptroller) in 10 USC 135 for the DA.

c. Establish and maintain DA financial management systems (including accounting systems, internal management control systems, and financial reporting systems) in accordance with 10 USC 3022.

d. Establish Army finance and accounting policies, practices, and procedures in coordination with the Defense Finance and Accounting Service. Coordinate and oversee finance and accounting policy related to Army classified programs. Implement plans to review and oversee the tactical finance and accounting network. Provide assistance and support to the Auditor General of the Army.

e. Maintain the DA's future year plan, describing the activities the department proposes to conduct to improve financial management.

f. Oversee implementation of the Chief Financial Officers Act and related financial management legislation.

g. Establish policy and direct DA internal review and audit compliance; the Internal Management Control Program; the Travel Charge Card Program; and the Fraud, Waste, and Abuse Program. Serve as the DA's focal and coordinating point for Government Accountability Office and DOD Inspector General policy matters involving these programs.

h. Oversee productivity and management programs.

i. Oversee Armywide cost and economic analysis functions and activities. Supervise, direct, and develop Army cost estimates in support of systems acquisition and PPBE.

j. Provide oversight responsibility for technical aspects of all cost and economic analyses in the Army, to include establishing cost and economic policies, personnel career development, personnel staffing, and cost and economic analysis methods and procedures through the Deputy Assistant Secretary of the Army for Cost and Economics.

k. Direct the cost and economic analysis program as it relates to all financial management activities, to include establishing cost and economic analysis policies, methods, and procedures.

l. Develop statutory independent cost estimates and component cost analyses in accordance with DODI 5000.02. Chair and oversee the Army Cost Review Board and approve the Army cost position for all major acquisition programs. Develop cost estimates for contingency operations and deployment options for various force sizes.

m. Oversee the conduct of independent resource analysis to enhance management of DA assets.

n. Oversee and provide technical guidance and support for the Army Cost Management/Activity Based Costing program. Conduct cost control and budget-execution analysis of operating and investing accounts. Oversee and provide technical guidance for commercial activity and outsourcing studies.

o. Provide policy and oversight for military and civilian comptroller career program development matters.

p. Develop the ASA (FM&C) position for selected acquisition report reviews.

q. Transmit to the SA a report each year on the activities of the ASA (FM&C), including a description and analysis of the status of Army financial management during the preceding year.

r. Review and approve financial and nonfinancial provisions of proposed international cooperative research, development, and acquisition (armaments cooperation) agreements to ensure that funds are available and the agreement is equitable overall. (See AR 70–41.)

2–9. Deputy Assistant Secretary of the Army for Cost and Economics

The DASA–CE is the principal advisor to the ASA (FM&C) on all Army cost and economic analysis activities. The DASA–CE will—

a. Develop and promulgate Army policy on cost analysis, economic analysis, and cost risk.

b. Publish Army cost and economic analysis regulations, pamphlets, and manuals.

c. Develop independent estimates of the full life cycle cost of programs and manpower estimates in accordance with 10 USC 2434, DODI 5000.02, and AR 11–18.

d. Develop cost estimates for contingency operations and deployment options for various force sizes.

e. Approve the Army cost position for milestones A, B, C, and FRP decision reviews for all MDAPs, MAIS, and other programs where the AAE is the MDA.

f. Develop and maintain standard Army cost and economic analysis systems, models, and databases. Develop and maintain cost factors for installation base operations, civilian personnel, and operating tempo in support of the program development, budget development, and program and budget execution processes.

g. Provide cost and economic analysis support to the Army planning, PPBE, and other Army decision-making processes.

h. Manage the Army's implementation of the DOD Visibility and Management of Operating and Support Cost Program.

i. Administer the Army's centrally funded Cost Research Program.

j. Serve as executive secretary of the Cost Review Board.

k. Serve as Army administrator for the Office of the Secretary of Defense (OSD) Director of Cost Assessment and Program Evaluation (DCAPE) independent cost analysis process.

l. Serve as Army administrator for the OSD Cost Benefit Review.

m. Represent the ASA (FM&C) at ASARC and PPBE program reviews. Ensure that cost estimates are available for review by major program councils.

n. Provide policy and support on implementation of the Cost and Software Data Reporting system.

o. Develop and maintain annual inflation indices for all Army appropriations.

p. Estimate the fully burdened cost of energy for analysis and evaluation of alternatives.

2–10. Assistant Secretary of the Army (Installations, Energy and Environment)

The ASA (IE&E) has the principal responsibility for all DA matters related to installations; real estate; and ESOH. The ASA (IE&E) also sets the strategic direction, determines objectives, establishes policy, sets standards, and approves programming and funding for these programs. The ASA (IE&E) will—

a. Provide recommendations to a milestone decision authority regarding environmental quality, safety, occupational health, and installation concerns during a system's milestone review process.

b. Provide policy, programming, and oversight of installation and housing programs for active Army and reserve components, including the following:

(1) Facilities design, construction, maintenance, physical security, and repair of buildings and utilities.

(2) Real property acquisition, management, disposal, condemnations, exchanges, public domain withdrawals, out-leasing (enhanced use leasing), and real property donations to the Army.

(3) Installation management improvement, energy management, and homeowners' assistance.

(4) Base closures, realignments, stationing, planning and utilization, reuse, and economic adjustment programs.

c. Provide policy, programming, and oversight of installation privatization efforts, such as utilities, housing, competitive sourcing, and historic properties.

d. Develop overseas military construction agreements in support of U.S. military forces overseas, including overseas military construction, environment, safety, occupational health, and engineering services in support of U.S. military forces and other DOD-sponsored initiatives.

e. Provide policy, programming, and oversight of the Army ESOH programs including—

(1) Protection of air, water, and training lands; pollution prevention, compliance, and cleanup of all Army properties; and natural and cultural resources management.

(2) The HQDA arms-control treaty compliance review.

(3) Developing ESOH policies and standards for Army explosives, biological defense research, and chemical agent programs.

f. Establish and maintain an organization that will—

(1) Provide an independent environmental quality impact analysis for all major decision reviews for Army weapon systems to the ASA (IE&E) and others, as directed.

(2) Provide technical support to ASA (FM&C) for the development and validation of environmental quality life cycle cost estimates as part of the Army cost review process, as required.

(3) Assist program managers with the integration of environmental quality considerations into all aspects of their programs upon request.

g. Provide technical support to the ASA (ALT) in implementing green procurement programs.

h. Participate in cost-performance tradeoff studies to ensure installation and environmental considerations and readiness issues are addressed adequately.

i. Assist in developing the Army cost position.

j. Recommend materiel requirements and the associated priorities for ESOH considerations for system acquisition programs to the DCS, G–3/5/7.

k. Ensure that ESOH considerations are incorporated into warfighting analyses and provide recommendations to the ASA (ALT); the DCS, G–3/5/7; and the DCS, G–4 regarding environmental security and force protection issues.

2–11. Assistant Secretary of the Army (Manpower and Reserve Affairs)

The ASA (M&RA) has the principal responsibility for setting the strategic direction and providing the overall supervision for manpower, personnel and reserve affairs across the Army. The ASA (M&RA) will—

a. Advise the SA on all matters relating to human resources and reserve affairs matters.

b. Ensure MANPRINT and HSI is considered and executed in the materiel acquisition process.

c. Oversee the current and future personnel readiness and well-being of the Army through the development and integration of human resources policies and programs across the Army.

d. Provide military and civilian human resources policy, programming, and oversight.

e. Oversee personnel security, corrections, discipline, Office of the Special Counsel investigations, law enforcement, and military justice matters in coordination with the Army General Counsel.

f. Oversee and review all policies and programs pertaining to readiness resourcing, training, force structure, and professional and leader education and development.

g. Provide guidance and direction to the Army Reserve Forces Policy Committee.

h. Provide policy and oversight of Army manpower requirements determination and resource allocations. Provide oversight to the Army Directed Military Over Strength Program and serve as Army proponent of military manpower requirements outside the DOD. Is responsible to the SA for all manpower management policies and the development and publication of all manpower reports to Congress.

i. Approve manpower estimate reports.

j. Provide guidance and direction for using contractor manpower in theaters of operation.

k. Provide policy, programming, and oversight of Army organization and force structure, to include the Army force management initiatives that affect the operating and generating forces (active, guard, and reserve). Responsible for the execution of the Army Management Headquarters Account.

l. Integrate resourcing initiatives into the budget and POM processes. This includes the oversight of the organizing, manning, and training program evaluation groups (PEGs), the synchronization of manpower initiatives addressed in the manning PEG, and the synchronization of programs and initiatives affecting reserve components in all appropriate PEGs.

m. Provide policy, programming, and oversight of all Army workforce mix initiatives for active military personnel, Army civilian personnel, Army National Guard military and civilian personnel, Army Reserve military and civilian personnel, and Army contractors. This includes the policy, challenges and appeals, exemption approval, and reporting requirements under Sections 1 through 6, Federal Activities Inventory Reform Act of 22 October 1998, Public Law 105–270; oversight and management of contractor manpower reporting requirements; oversight and management of core competencies and workforce mix in relation to inherently governmental and outsourcing requirements; oversight and management of military to civilian conversions; and the oversight of workforce mix documentation in both the operating and generating forces.

2–12. Director, Test and Evaluation Office

The Director, T&E Office will—

a. Serve as the Army T&E executive advising the CSBs, AROC, ASARC, the Army and OSD's overarching integrated product teams (OIPTs), and study advisory groups on T&E-related matters.

b. Serve as the Chemical and Biological Defense Program T&E executive.

c. Establish, review, and enforce Army T&E policy and procedures to include integration of M&S in T&E.

d. Oversee all Army T&E associated with system research, development, and acquisition of all materiel, IT, and NSS systems.

e. Provide staff management of all test programs of interest to the Office of the Secretary of the Army.

f. Approve test-related documentation for the SA and forward to the OSD, as appropriate.

g. Manage the staffing and approval process for test and evaluation strategies (TESs) and test and evaluation master plans (TEMPs) requiring HQDA approval.

h. Consult with OSD on development of the annual OSD T&E oversight list on behalf of HQDA by recommending candidate systems for developmental test, operational test, and/or live fire test.

i. Provide HQDA oversight on the funding of the Army Threat Simulator Program, Army Targets Program, and Army Instrumentation Program.

j. Ensure that threat-representative targets and threat simulators are validated to support accreditation of each specific application by chairing the Army Threat Validation Working Group and approving Army threat validation reports for targets and threat simulators or simulations.

k. Serve as the Acquisition Workforce T&E FC for the acquisition workforce test and evaluation career field.

2–13. The General Counsel

The General Counsel will—

a. Provide legal advice to the Secretary of the Army; Under Secretary of the Army; AAE; ASA (ALT); Army CIO; Director, Small Business Programs; PEOs, DRPMs, and PMs; ASARC; Army OIPTs; CSBs; and other DA forums, with respect to DA acquisition, logistics, technology matters, and major systems and services acquisitions.

b. Advise the Army Acquisition Career Program Board on legal issues concerning acquisition workforce management.

c. Exercise technical supervision over all attorneys providing legal advice concerning programs managed within the Army CIO, AAE–PEO, and DRPM program management structure and coordinate with the Office of The Judge Advocate General, as necessary.

d. Provide legal advice on all aspects of international cooperative RDA programs.

e. Provide legal advice on acquisition policies and Army acquisition workforce management policies.

2–14. Chief Information Officer/G–6

The CIO/G–6 has the principal responsibility for the Army's information management functions pursuant to 10 USC 3014(c)(1)(D) and is responsible for setting the strategic direction, determining objectives, supervising the DA's C4 and IT functions, and certifying IT expenditures for the Army. The CIO/G–6 reports to the SA and will provide the CSA such staff support as the CSA considers necessary to perform CSA duties and responsibilities. The CIO/G–6 will—

a. Serve as the Army CIO. In this capacity, confirm Title 40 and CCA compliance of all programs that acquire IT, including an NSS, at any ACAT level, prior to the MDA initiating a program or an increment of a program; approving entry into any phase of the acquisition process; or awarding a contract for the acquisition of IT.

b. Serve as the Assistant Chief of Staff for Signal (G–6) for information and signal operations, network and communications security, force structure, equipping, and employment of signal forces.

c. Serve as the pre-certification authority for all Army IT investments prior to review by the Defense Investment Review Board or the Defense Business System Management Committee.

d. Advise and assist the ASA (ALT) on all matters relating to the acquisition of IT and NSS.

e. Develop policy and guidance on information management and IT and NSS (including automation, telecommunications, visual information, and related activities, services, and programs).

f. Develop, coordinate, and implement Army knowledge management, AEA, the total AEI, and the Army online portal.

g. Provide functional policy and guidance on IT systems and networks.

h. Serve as the Army's technical infrastructure architect. Ensure that relevant technical standards are included in the DISR; ensure that all Army IT is developed in compliance with the current technical architecture interfacing with DOD and other Service command, control, communications, computers, and intelligence (C4I) architectures; and ensure that the mandated technical architecture is included in all procurements.

i. Integrate the budget, program management, and acquisition decisions affecting IT and NSS to promote Army efficiency and productivity in all of its activities.

j. Develop, coordinate, and implement a C4 information management capital planning and investment strategy (including investment policies, oversight, and control) and the planning, programming, budgeting, and execution of all IT and NSS resources.

k. Provide CIO validation of requirements for warfighting, base operations, and administrative and other mission-related processes associated with an IT or NSS impact.

l. Provide guidance and validation for business process initiatives and programs with a C4 information management impact.

m. Develop and implement a C4 information management human capital strategy and related programs.

n. Develop policy and provide oversight for Army information assurance, and provide centralized management for the Army's Information Systems Security Program.

o. Provide policy, guidance, and oversight of the public key infrastructure, common access card, and other enabling technology programs.

p. Develop policy and provide oversight of the Army Spectrum Management Program.

q. Develop policy and provide oversight of visual information.

r. Provide oversight of joint military satellite communications programs and projects.

s. Develop policy, provide oversight, and provide program direction for the Army Electronics Business Program.

t. Oversee the Army's Record Management program and the Freedom of Information and Privacy Act Programs.

u. Serve as the Chair of the Army CIO Executive Board.

v. Represent the DA on the Federal CIO Council, the DOD CIO Executive Board, the Military Communication-

Electronics Board, the National Security Telecommunications and Information Systems Committee, and the Defense Senior Communicators Committee.

w. Serve as the Army interoperability certification authority. Ensure compliance with policies impacting interoperability through the Army interoperability certification process. (See para 7–4, below.)

x. Serve as the Army approval authority for Information Support Plans.

y. Develop, coordinate, and implement the Networthiness Certification Program. (See AR 25–1.)

z. Provide policy, oversight, and program direction to the U.S. Army Network Enterprise Technology Command/9th Signal Command (Army). The commanding general, NETCOM/9th SC (A) will—

(1) Serve as the single authority to operate, manage, and defend the Army's infrastructure at the enterprise level for collateral-and-below infrastructures.

(2) Ensure Army IT systems are designed for survival and recovery; and support reconstitution for continuation of operations support requirements.

(3) Provide technical support and evaluation to the CIO/G–6 during requirements processing.

(4) Conduct Army infrastructure architecture and systems design review.

(5) Provide operational review and coordination authority for any standard architecture design or device that impacts the AEI.

(6) Provide support to the CIO/G–6 networthiness process.

(7) Execute other responsibilities as outlined in AR 25–1 and AR 25–2.

2–15. Chief of Public Affairs

The CPA will—

a. Serve as the Army MATDEV and be responsible for RDT&E functions for public affairs materiel.

b. Articulate the user requirements for public affairs equipment for field and installation use.

c. Prepare requirements documents for public affairs-peculiar equipment.

d. Be responsible for the overall design and selection of equipment that has application in public affairs operations and activities.

e. Coordinate with CG, TRADOC; CG, Network Command; Director, Armed Forces Information Service; Office of the Chief, Army Reserve; and the National Guard Bureau (NGB), on requirements for tactical and standard equipment with public affairs applications.

f. Provide the planning, guidance, direction, control, oversight, and support necessary to ensure systems are developed in accordance with the AEA to meet military public affairs support mission requirements and interface with other Army and Service systems. Minimize life-cycle cost and field systems within cost, schedule, and performance baselines.

g. Develop policy for acquisition of military public affairs support systems; manage, execute, and coordinate planning, programming, and budgeting for public affairs programs and projects.

h. Serve as the CAPDEV, trainer, and user representative for Army Public Affairs.

i. Formulate concepts; identify requirements for future doctrine, training, leader development, and organizations; recommend priorities for public affairs materiel needs.

2–16. Director, Small Business Programs

The Director, Office of Small Business Programs will—

a. Advise the AAE and ASARC concerning small business issues that arise during the acquisition of weapon, information, or materiel systems.

b. Provide policy and program advice to the ASA (ALT) to support implementation of statutory and regulatory responsibilities.

c. Develop a strategy concerning small business program goals.

d. Advise the SA regularly on small business issues arising out of paras *a*, *b*, and *c*, above.

2–17. Assistant Chief of Staff for Installation Management

The ACSIM will—

a. Identify to the ASA (ALT) and DCS, G–3/5/7 any long-range environmental and/or installation infrastructure issues associated with the proposed fielding of acquisition products and systems.

b. Serve as the Army's CAPDEV for installation environmental quality RDT&E, to include generating, validating, and prioritizing those RDT&E requirements.

c. Serve as the technical advisor to ASA (IE&E) for all environmental matters impacting installation sustainment and materiel operation and support.

d. Be responsible for installation environmental quality programs that support system fielding, operations, and maintenance.

2–18. Chief of Engineers

The COE will—

a. Participate with the Army staff on deciding battlefield requirements and modernizing the force, to include providing an engineering perspective on RDA and the distribution of systems and materiel.

b. Review all emerging Army digital terrain and geospatial data requirements and provide technical guidance and support to Army developers regarding digital terrain and geospatial data in coordination with DCS, G–2 and TRADOC.

2–19. The Surgeon General

TSG will—

a. Serve as the Army medical MATDEV and be responsible for medical RDA functions, to include health facility planning. Advise the AAE and ASARC concerning medical and health hazard issues during systems acquisition.

b. Appoint the CG, U.S. Army Medical Research and Materiel Command (USAMRMC) to serve as the deputy for medical systems for the ASA (ALT), responsible for assisting the AAE with medical issues, health hazards, and human implications of nonmedical systems acquisitions.

c. Provide the planning, guidance, direction, control, oversight, and support necessary to ensure systems are developed in accordance with the AEA; minimize life-cycle cost; and ensure systems are fielded within cost, schedule, and performance baselines.

d. Develop implementing policy and conduct program oversight for the acquisition of combat medical systems, medical readiness, health care programs, and health facility planning and other assigned Army and joint Service requirements.

e. Formulate, justify, defend, and execute all appropriation program requirements and funds in support of combat medical systems acquisition programs.

f. Recommend materiel capabilities and associated priorities for medical readiness and health care programs to the DCS, G–3/5/7.

g. Exercise primary responsibility for the Army's Health Hazard Assessment Program. (See AR 40–10.) Budget and fund ESOH hazard assessments of Medical Department acquisition programs throughout the acquisition process.

h. Evaluate medical-related ACAT III programs for compliance with statutory and regulatory acquisition requirements articulated in the most recent CIO Assessment Criteria.

i. Develop and manage medical acquisition and career positions and personnel to meet Defense Acquisition Workforce Improvement Act (DAWIA) standards.

j. Establish and oversee policies concerning use of humans as volunteers. (See AR 70–25.)

k. Develop occupational health standards and medical support policies for the Biological Defense Program and the Army Chemical Agent Safety Program. (See AR 385–10.)

2–20. Chief, National Guard Bureau

The CNGB will—

a. Appoint an NGB CIO.

b. Serve as the program director for that portion of the dedicated procurement program pertaining to the National Guard and other programs as designated.

c. Plan, program, and budget for operational support of systems that have been removed from the active Army but remain in the National Guard, or for systems designated to provide strategic defense.

d. In support of the AAC—

(1) Formulate and administer acquisition career management policy with the Director, Acquisition Career Management that is consistent with the DAWIA.

(2) Provide recommendations on the identification and designation of acquisition and critical acquisition positions (CAPs) within the NGB and Army National Guard (ARNG).

(3) Advise the AAE on ARNG acquisition personnel matters and acquisition position management concerns.

e. Establish and maintain an acquisition career management program within the existing ARNG members of the AAC and AL&T workforce.

2–21. Chief, Army Reserve

The CAR will—

a. Serve as the program director for that portion of the dedicated procurement program pertaining to the U.S. Army Reserve (USAR).

b. Plan, program, and budget for operational support of systems that have been removed from the active Army, but remain in the Army Reserve.

c. Provide Active Guard Reserve support to active Army programs in support of the AAC.

(1) Formulate and administer acquisition career management policy with the Director, Acquisition Career Management that is consistent with DAWIA.

(2) Provide recommendations on the identification and designation of acquisition and CAPs within the USAR.

(3) Ensure that the allocations of individual mobilization augmentee Soldiers filling acquisition positions are consistent with established DA priorities.

(4) Manage acquisition-related personnel qualifications, selection, training, utilization, and reporting requirements within the existing USAR personnel system to support the accession, career development, and promotion of USAR members of the AL&T workforce.

2–22. Chief of Chaplains

The CCH will—

a. Serve as the Army chaplaincy MATDEV and be responsible for the chaplaincy RDT&E functions.

b. Appoint the Command Chaplain, U.S. Army Materiel Command (USAMC), as the Director of Ecclesiastical Logistics, Chaplaincy Materiel Acquisition, and Technology.

c. Provide the planning, guidance, direction, control, oversight, and support necessary to ensure systems are developed in accordance with AEA. Ensure the systems meet military religious support mission requirements and interface with other Army and Service systems. Minimize life-cycle cost and field systems within cost, schedule, and performance baselines.

d. Develop policy for acquisition of military religious support systems. Manage, execute, and coordinate the planning, programming and budgeting for chaplaincy programs and projects. Assign staff oversight for the capabilities development and materiel acquisition process to the Director, Plans, Policy Development, and Training, Office of the Chief of Chaplains.

e. Assign staff oversight for planning, programming, and budgeting related to chaplaincy materiel development projects and activities to the Director, Information, Resource Management, and Logistics, Office of the Chief of Chaplains.

2–23. Director of Army Safety

The DASAF will—

a. Develop, coordinate, and disseminate system safety program policies.

b. Manage the Army System Safety Program and its interface with MANPRINT, HSI, and other disciplines.

c. Coordinate system safety issues with HQDA agencies, PEOs, DRPMs, ACOMs, ASCCs, and DRUs.

d. Establish, coordinate, and publish annual system safety objectives for implementation by DA organizations.

2–24. Deputy Chief of Staff, G–1

The DCS, G–1 will—

a. Develop, coordinate, and disseminate MANPRINT and HSI program policy and guidance to the Army. Ensure that MANPRINT and HSI are integrated into the materiel systems requirements, development, acquisition, and modification processes.

b. Exercise primary staff responsibility for MANPRINT, to include MANPRINT assessments and domain assessments.

c. Be responsible for policy on the wear and appearance of Army uniforms.

d. Program the active Army initial, supplemental, and clothing replacement allowances as part of the Military Personnel, Army budget; and the Reserve Officers' Training Corps (ROTC) uniform allowances as part of the Reserve Personnel, Army budget.

e. Oversee and execute the Army Soldier-oriented research and development (R&D) program and supervise human performance RDT&E efforts.

f. Establish and maintain a capability through the U.S. Army Human Resources Command to centrally manage the AL&T workforce, AAC, and acquisition career programs for the military workforce.

2–25. Deputy Chief of Staff, G–2

The DCS, G–2 will—

a. Be responsible for intelligence, counterintelligence, and security policy supporting the systems acquisition process.

b. Provide policy oversight of personnel, industrial, communications, and information security; and intelligence systems that process sensitive compartmented information in support of the RDA process. This includes intelligence and counterintelligence activities.

c. Establish and implement threat support and documentation policy for force, combat, and materiel development activities.

d. Establish and implement the Army Foreign Materiel Program policy.

e. Validate and approve threat documentation.

f. Ensure counterintelligence support to HQDA and the MATDEVs for materiel acquisition.

g. Serve as the coordinator for the development of threat M&S. Develop threat M&S consistent with available resources. When resources are not available, oversee the PM's process for obtaining the necessary threat M&S.

h. Serve as the single Army point of contact for establishing and granting the necessary delegated disclosure authority to disclose classified military information to facilitate cooperative R&D and security cooperation (that is, security assistance and armaments cooperation).

i. Serve as Army staff lead for intelligence, surveillance, and reconnaissance integration issues.

j. Operate an Army Research and Technology Protection Center to—

(1) Integrate and synchronize security, intelligence, counterintelligence, foreign disclosure, and security countermeasure support to research and technology protection activities Armywide.

(2) Lead the technology and program-protection-planning support to Army laboratories, engineering centers, and acquisition programs in coordination with ASA (ALT) and USAMC.

(3) Develop and implement a standard methodology for indemnification of critical program information (CPI) and the development and implementation of program protection plans (PPPs) in coordination with ASA (ALT) and USAMC.

(4) Lead the DCS, G–2 review of PPPs at milestone and other applicable reviews.

k. Provide policy formulation, oversight, staff supervision, and evaluation of security, intelligence, counterintelligence, foreign disclosure, and security countermeasure support to research and technology protection planning.

2–26. Deputy Chief of Staff, G–3/5/7

The DCS, G–3/5/7 will—

a. Develop Army policy and guidance for materiel requirements and capabilities development programs, to include the development and integration of capabilities documents and horizontal requirements integration processes.

b. Validate and integrate a DOTMLPF review and evaluation of materiel requirements and critical operational issues and criteria (COIC) for all ACAT programs.

c. Approve or disapprove all waiver requests for nuclear effects survivability and CBRN survivability criteria in accordance with AR 70–75.

d. Define and validate capability goals, materiel objectives, and overall force structure design.

e. Support the Army's CIO in validating requirements and resources and prioritizing IT programs.

f. Establish Army priorities throughout PPBE, including priorities among RDA programs and other solutions to mission needs.

g. Coordinate force modernization activities, develop modernization plans, and monitor the impact of force modernization planning and execution for the total Army with the assistance of the DCS, G–8.

h. Conduct force integration analyses to assess supportability and affordability for structure, manpower, equipment, fiscal resources, facilities, and training.

i. Develop training policy and serve as the Army staff proponent for training and the Training Support System modernization (system and nonsystem training aids, devices, simulators, and simulations (TADSS)) programs.

j. Perform cost-and-performance tradeoff studies, and work with the MATDEV and the CAPDEV to establish new system cost targets.

k. Provide operations security support to HQDA, ACOMs, ASCCs, and DRUs for materiel acquisition.

l. Develop Army policy and guidance for the development and documentation of minimum mission-essential combat, combat support, combat service support, medical, special operations, intelligence, and security organizational wartime requirements.

m. Approve tables of organization and equipment and BOIPs.

n. Co-establish Army-level policy and guidance with the OASA (ALT) for conducting analysis of alternatives (AoAs).

(1) Approve AoA study guidance prior to an Army-level materiel development decision (MDD) review for potential ACAT II and III programs.

(2) Coordinate the AoA study plan with the appropriate MDA prior to approval by DCS, G–3/5/7.

(3) Designate the Army command(s) or agency(ies) responsible for performing operational analyses and requirements tradeoff analyses before—or in support of—AoAs.

(4) Specify the date by which the AoA report must be provided to HQDA. This date is determined in order to meet acquisition review time lines.

(5) Ensure that the AoA report is provided to members participating in acquisition reviews prior to the actual review (for example, results to ASARC member offices before the Army OIPT).

(6) Ensure that materiel alternatives identified in the AoA are synchronized with the competitive prototype strategy included in the TDS in coordination with ASA (ALT).

(7) Accommodate specific requirements for DAB and ITAB review of managed systems—

(a) Submit the approved AoA through the VCSA and the AAE to OSD's DCAPE. The DCAPE assesses the

adequacy of the AoA for the DAB or ITAB review. (The final AoA will be provided to the DCAPE no later than 60 days before the DAB or ITAB milestone reviews.)

(b) Submit the AoA report in draft form, if necessary, to the DCAPE before AAE approval in order to meet DAB or ITAB time lines.

o. Serve as functional CIE proponent for operation and maintenance, Army (OMA) and RDT&E budget appropriations related to CIE, including the following:

(1) Programming and funding for active Army trainee organizational clothing and individual equipment (OCIE) requirements and authorized alterations of personal clothing as a part of the OMA budget.

(2) Senior ROTC cadet OCIE requirements as part of the OMA budget.

(3) The OMA procurement of CIE items for central funding and fielding.

p. Perform Army staff oversight and prioritization of the Army's operational architecture and requirements development, and use the capability-set framework strategy for enterprise architecture and required capability implementation and integration.

q. Ensure joint and selected allies and/or coalition partners' interoperability requirements are prioritized for consistency with approved Army initiatives for fielding and maintaining interoperable systems.

r. Chair the Battle Command General Officers' Steering Committee.

s. Execute biometrics executive manager responsibilities in accordance with enclosure 4 to DODD 8521.01E.

2–27. Deputy Chief of Staff, G–4

The DCS, G–4 is responsible for providing advice and assistance to the ASA (ALT) in addition to the responsibilities and authorities as DCS, G–4 on the Army staff. As the responsible official for sustainment the DCS, G–4 will serve as the principal military advisor to the ASA (ALT) for the logistics functional area. The DCS, G–4 will—

a. Establish sustainment policies and provide guidance that ensures responsive, flexible, and effective logistics support to the Army.

b. Exercise responsibilities and authorities in the logistics area.

c. Represent Army logistics in joint concepts.

d. Chair the Army uniform board (AUB).

e. Participate in cost-performance tradeoff studies to ensure logistics considerations and readiness issues are addressed adequately.

f. Ensure that deployed equipment is sustained in compliance with the approved Army initiatives for fielding and maintaining interoperable systems and other policies or directives that impact interoperability.

g. Manage the Army's logistics transformation program.

h. Serve as the lead proponent agency within the Army staff for AIT and serialized item management (SIM).

2–28. Deputy Chief of Staff, G–8

The DCS, G–8 is responsible for programming, materiel integration, DA studies and analyses, and externally directed reviews. The DCS, G–8 will—

a. Develop, independently assess, integrate, and synchronize The Army Program in support of The Army Vision.

b. Serve as the principal advisor to the CSA on joint materiel requirements, DOTMLPF integration, COIC, and the materiel program execution over their life cycles.

c. Serve as the SoS manager in execution of Army transformation.

d. Be responsible for moving approved Army requirements from the planning to the programming phase of the PPBE.

e. Develop and defend the Army POM; the Future Year Defense Program; and the independent assessment, integration, and synchronization of the Army Program Objective.

f. Provide analytic support for HQDA.

g. Ensure that equipment is budgeted, integrated, and synchronized in compliance with approved Army interoperability initiatives, policies, and directives.

h. Serve as vice-chair of the Army Modeling and Simulation Executive Council.

i. Serve as HQDA proponent for policies to support the M&S communities.

Section III
Commanding Generals of Army Commands and Heads of Other Army Elements

2–29. Commanding General, U.S. Army Materiel Command

The CG, USAMC will—

a. Plan and provide essential logistical, system, and other functional support for deployed equipment, coordinating with (and backing up) any PM-contracted support.

b. Provide logistical and functional area matrix support as requested by PEOs, DRPMs, and PMs.

c. Collaborate with PEOs and PMs, TRADOC, and the Defense Logistics Agency (DLA) to develop potential product support strategies.

d. Support PEOs and PMs by overseeing the USAMC life-cycle management commands' development and submission of sustainment funding requirements during the Army's planning, programming, budgeting and execution system activities.

e. Execute USAMC's science and technology base through its laboratories and research, development, and engineering centers.

f. Be responsible for the logistics support of assigned materiel in response to approved requirements.

g. Prepare, review, and approve threat documentation and disseminate intelligence to contractors through subordinate intelligence offices in support of materiel development as a matrix support function in accordance with AR 381–11.

h. Integrate and synchronize security, intelligence, counterintelligence, foreign disclosure, and security countermeasure support to research and technology protection activities across USAMC.

i. Design and establish safeguards for newly developed and existing technologies through the development of effective technology protection planning and execution in coordination with ASA (ALT) and TRADOC.

j. Provide science and technical intelligence as well as program protection support to RDA in coordination with ASA (ALT).

k. Maintain ESOH expertise to provide direct environmental functional support to the Army acquisition community in coordination with ASA (ALT) ESO.

l. Promulgate and manage technical data policy to include formulating and implementing strategies to evaluate and improve the effectiveness of technical data management and the integrated digital environment within the Army. This includes tasking authority throughout the acquisition and logistics communities.

m. Manage the Army's standardization program (domestic and international) and appoint the Army's standardization executive.

n. Provide an Army repository for reusable software components. Provide domain analysis, source code, modeling, and reuse classes to DOD development teams.

o. Participate in the DLA Weapon Systems Support Program as outlined in AR 711–6.

p. Serve as the FC for CP–16, engineers and scientists (non-construction). Appoint an FCR for CP–16 to represent the program for engineers and scientists (nonconstruction).

q. Serve as the FC for CP–15, quality and reliability assurance. Appoint an FCR for CP–15 to represent the Q&RA career programs.

r. Provide management oversight and direction to corrosion prevention and control initiatives for weapon systems and special installations in coordination with the Army corrosion executive, who is the Deputy Assistant Secretary of the Army (Acquisition Policy and Logistics). The DASA (APL) falls under ASA (ALT). The oversight and direction includes—

(1) Providing technical guidance and support to PMs, vendors, and field Army commands on the application of corrosion prevention and control.

(2) Establishing teams of corrosion prevention and control experts to provide on-site assistance and interact with PM engineering personnel.

(3) Assisting in the requirement generation process to ensure technical quality of specifications.

(4) Preparing, submitting, and defending resource requirements for the Army's program for corrosion prevention and control.

(5) Providing training programs.

(6) Providing technical leadership to all levels of Army maintenance.

(7) Maintaining a library of corrosion impact data to allow identification of materials and items that are susceptible to corrosion, predict service life, and evaluate life-cycle cost in terms of equipment readiness and maintenance.

s. Provide survivability, vulnerability, and lethality analysis to ATEC for Army materiel programs through the U.S. Army Research Laboratory.

t. Provide industrial base and diminishing manufacturing sources and materiel shortages resourcing and support to ASA (ALT) and the PEOs, DRPMs, and PMs in accordance with AR 700–90.

u. Ensure that USAMC industrial facilities develop IUID marking capabilities in coordination with applicable PMs. (See para 6–15, below.)

v. Assist in preparing and providing a recommendation for all core depot assessments to the MDA.

w. Serve as the Army's primary point of contact for quality matters. Develop and implement guidance and procedures for effective implementation of the Army's quality program. (See AR 702–11.)

x. Manage and oversee assigned value engineering programs and initiatives by providing integrated technical and analytic support throughout the acquisition process.

y. Provide policy, oversight, and program direction to the military Surface Deployment and Distribution Command (SDDC).

z. Ensure the Commander, SDDC—

(1) Provides transportability engineering and deployability advice and analysis to the CAPDEV, MATDEV, tester, and evaluator.

(2) Approves transportability of materiel, or identify corrective actions required to obtain approval.

(3) Serves as MATDEV for assigned transportation common-user AISs; ensure assigned systems are developed in accordance with the AEA.

(4) Evaluates transportation common-user transportation-related ACAT III AIS programs for compliance with statutory and Army regulatory acquisition requirements articulated in the most recent CIO Assessment Criteria.

aa. Ensures the Director, U.S. Army Fuze Management Office—

(1) Provides oversight management of all fuze and safety and arming (S&A) device programs, programs involving fuzes and S&A devices, and components performing fuzing and S&A functions.

(2) Chairs the U.S. Army Fuze Safety Review Board.

(3) Manages fuze and S&A device programs as directed by higher headquarters or as requested by MATDEVs.

(4) Acts as the Army's focal point for fuzes and S&A devices and related matters.

2–30. Commanding General, U.S. Army Space and Missile Defense Command/Army Strategic Command

In this capacity, the CG, USASMDC will—

a. Provide matrix support as requested by PEOs, DRPMs, and PMs.

b. Be a principal assistant and staff advisor for all matters pertaining to RDT&E, fielding, and logistics support of space, high altitude, and missile defense programs.

c. Execute technology based R&D for future space, high altitude, and missile defense concepts and other assigned technologies.

d. Serve as the primary point of contact for Missile Defense Agency oversight; be the executing agent for the Missile Defense Agency for assigned technology base activities and other assigned projects.

e. Manage the development, acquisition, and support of nonsystem and system TADSS related to space, high altitude, and missile defense systems, as requested by PEOs, DRPMs, and PMs.

f. Develop and acquire targets, threat simulators, and unique test instrumentation for DT and OT, related to space and missile defense systems.

g. Manage and operate the U.S. Army Kwajalein Atoll Ronald Reagan Ballistic Missile Defense Test Site and the High Energy Laser System Test Facility.

h. Lead ICDTs to identify desired future warfighting and training capabilities for space, high altitude, and missile defense.

i. Identify requirements and formulate concepts, analysis, and operational architectures for future space, high altitude, and missile defense DOTMLPFs.

j. Serve as CAPDEV and force developer for programs where USASMDC is assigned proponency for the Army. Work through TRADOC and HQDA (Office of the DCS, G–3/5/7) to formulate Army positions.

k. Support research and development, concept development, experimentation, CAPDEV, and force development activities in support of strategic space, high altitude, cyber, and integrated missile defense missions as the Army service component command to the U.S. Strategic Command and the U.S. Army Forces Command.

l. Conduct experiments to assess the feasibility, utility, and limits of new and innovative concepts and DOTMLPF proposals in the areas of space, high altitude and missile defense.

m. Conduct studies, analysis and war games to support space, high altitude, and missile defense capabilities.

2–31. Commanding General, U.S. Army Corps of Engineers

The CG, USACE will—

a. Execute policy and oversee the development and execution of the Civil Works Program, as directed by ASA (CW).

b. Establish and execute acquisition, technical, and general policy independently for all civil emergency management activities.

c. Execute Army Corps of Engineer RDA missions through USACE laboratories and centers.

d. Provide the planning guidance, direction, control, oversight, and support necessary to ensure systems are developed in accordance with the AEA; minimize life-cycle cost; and are fielded within cost, schedule, and performance baselines.

e. Supervise, evaluate, and exercise program direction and control over PMs of assigned programs.

f. Evaluate ACAT III programs for compliance with statutory and Army regulatory acquisition requirements articulated in the most recent CIO Assessment Criteria.

g. Coordinate the development of digital terrain and geospatial databases for use in modeling and simulation with the experimentation, requirements, acquisition, and testing communities.

h. Analyze all emerging Army systems for digital terrain data and geospatial requirements and environmental effects in coordination with the DCS, G–2 and TRADOC. (Environmental effects include climate, terrain, noise, and minimizing toxic and hazardous wastes associated with normal systems test, operation, use, and maintenance.)

i. Develop or test emerging construction technologies for U.S. Army use in the provision of facilities.

j. Maintain Theater Army Facilities standards.

k. Be the DOD contract construction agent (under DODD 4270.5).

l. Acquire and dispose of real estate in support of contingency operations under the Field Force Program. Responsibilities include—

(1) Contingency master planning and design for base camps, support bases, and facilities.

(2) Contingency contract award and administration of facilities construction.

(3) Contracting for technical engineering services in support of military infrastructure requirements.

(4) Providing technical engineering review and contract administration support to USAMC for facilities provided through Logistics Civil Augmentation Program.

2–32. Commanding General, U.S. Army Criminal Investigation Command

The CG, U.S. Army Criminal Investigation Command will—

a. Articulate user requirements for criminal investigative equipment in field and laboratory use.

b. Be responsible for the overall design of equipment that has application in criminal investigations.

c. Coordinate with CG, U.S. Army Intelligence and Security Command (INSCOM) and CG, TRADOC on requirements for tactical and standard equipment with law enforcement applications.

d. Provide investigative support to HQDA and MATDEVs for acquisition-related issues for highly sensitive or classified programs.

2–33. Commanding General, U.S. Army Intelligence and Security Command

The CG, U.S. Army INSCOM will—

a. Serve as a CAPDEV for signals intelligence (SIGINT), information security (INFOSEC), offensive cyber, and INSCOM intelligence and electronic warfare systems.

b. Prepare capability documents and serve as the Army representative during development and fielding of new SIGINT, offensive cyber, and INFOSEC systems that are under the purview of the National Security Agency and have application solely to U.S. SIGINT and INFOSEC systems.

c. Coordinate with the MATDEV on matters pertaining to acquisition of INSCOM SIGINT, offensive cyber, and intelligence, security, and electronic warfare (ISEW) systems.

d. Conduct developmental and operational T&E for assigned classified or secure systems as specifically designated by HQDA (Office of the DCS, G–3/5/7) and in coordination with ATEC.

e. Coordinate with the CG, TRADOC on capabilities development for INSCOM ISEW systems, and conduct capabilities development for these systems when directed by HQDA.

f. Provide counterintelligence support to HQDA and the MATDEVs for Army acquisition programs.

2–34. Commanding General, U.S. Army Medical Command

The CG, U.S. Army Medical Command will—

a. Oversee the Army's Health Hazard Assessment Program development on assigned programs.

b. Provide support to DOD components through CAPDEVs mission area interface for capabilities and materiel development on assigned programs.

c. Organize and develop information management strategic plans, policies, and assessment criteria for Army Medical Department (AMEDD) information systems management, as assigned by the Army CIO in accordance with the AEA.

d. Execute the Army medical RDA missions through the U.S. Army Medical Department Center and School and the USAMRMC.

2–35. Commanding General, U.S. Army Special Operations Command

The CG, U.S. Army Special Operations Command will—

a. Serve as the CAPDEV, trainer, and user representative for Army special operations forces (SOF).

b. Prepare capability documents for SOF-peculiar equipment.

c. Conduct operational test and evaluation of SOF-peculiar systems and support ATEC through coordination at the test schedule and review committee (TSARC).

2–36. Commanding General, U.S. Army Training and Doctrine Command

The CG, U.S. Army TRADOC will—

a. Serve as the primary Army capabilities developer.

b. Develop and manage the Army Concept Strategy Framework; ensure the integration of land force capabilities in the development of joint, interagency, and coalition operating, and integrating concepts; recommend priorities for force modernization changes; and represent the Soldier in the acquisition process.

c. Lead Army requirements determination; integrate DOTMLPF developments to support required capabilities; and coordinate, synchronize, and integrate Army capabilities development with other ACOMs, Army CAPDEVs, the combatant commanders, the joint staff, and other military departments.

d. Develop and update capability documents and crosswalk the subsystem capability documents with other required supporting documents in accordance with CJCSI 3170.01-series and the online Manual for the Operations of the JCIDS. Ensure capability documents include SoS, joint, and coalition interoperability requirements, and architecture artifacts are developed to support the Army initiatives for fielding and maintaining interoperable systems.

e. Provide TRADOC DOTMLPF representatives to acquisition IPTs as required.

f. Ensure training requirements are adequately identified and documented in appropriate capability documents. Develop system training plans (STRAPs) in support of program capability documents in accordance with AR 350–1.

g. Support T&E programs and ensure availability of COIC to support TEMP approval, and ensure test participants are trained in accordance with applicable doctrine.

h. Develop and validate operational architectures for all systems, SoS, and FoS architectures.

i. Perform AoAs as required.

j. Participate with MATDEVs in conducting cost-performance trade studies and establishing cost targets. Update capability documents with cost and performance changes when appropriate.

k. Approve Army M&S requirements and serve as the M&S planning and prioritization proponent within the Army.

l. Support PMs by providing the data necessary to ensure life-cycle support for modernization, sustainment, and for ESOH.

m. Conduct experiments to assess the feasibility, utility, and limits of new and innovative concepts and DOTMLPF proposals, prototypes, and technology demonstrations.

2–37. Commanding General, U.S. Army Public Health Command

The CG, U.S. Army Public Health Command will—

a. Serve as TSG's Health Hazard Assessment Program lead agent, implementing the program on behalf of TSG.

b. Develop and maintain a database of system assessments for use in completing health hazard assessment (HHA) reports and providing program management information.

c. Prepare and submit HHA reports upon request to support MDRs and materiel releases.

d. Maintain liaison with T&E agencies, MANPRINT domains, and other Army medical department agencies to encourage the exchange of technical information and process improvements within the HHA domain of MANPRINT.

e. Provide on-site HHA support, to include IPT participation and technical services when requested and funded by MATDEVs.

f. Complete toxicity clearances on new chemicals and material before accepted for Army use. (See AR 40–5.)

2–38. Commanding General, U.S. Army Medical Research and Materiel Command

The CG, USAMRMC will—

a. Serve as the medical MATDEV, logistician, and technical and developmental tester for TSG, and act as MDA responsible for RDA and logistical support for ACAT II and III medical materiel programs.

b. Serve as the Deputy for Medical Systems to the ASA (ALT), and advise the AAE and ASARC concerning medical and health hazard issues during system acquisition.

c. Supervise, evaluate, and exercise program direction and control over program PMs.

d. Conduct developmental tests, evaluations, and assessments for medical materiel systems and support operational tests.

e. Act as chief technology officer to maintain and manage the medical science and technology base.

f. Support the Army HHA program per AR 40–10.

g. Develop POM and fund requirements in support of medical RDT&E acquisition and logistics programs, and manage resources in accordance with AMEDD investment strategy.

2–39. Commanding General, U.S. Army Medical Department Center and School

The CG, USAMEDDC&S will—

a. Serve as the medical combat, doctrine, and training developer and operational tester and evaluator.

b. Develop capability needs, doctrine, and organizations, within the guidelines established by the CG, TRADOC, and in accordance with Army health care standards established by TSG. (See AR 40–60.)

c. Support the Army HHA program per AR 40–10.

d. Support the MANPRINT program per AR 602–2.

2–40. Commanding General, U.S. Army Combat Readiness Center

The CG, USACRC will—

a. Assist the DASAF in developing system safety policies, objectives, and evaluation standards.

b. Develop and maintain an Army hazard-based accident database for use in risk assessment decisions.

c. Provide an independent safety assessment for ACAT I and II programs, in coordination with the MATDEVs.

d. Identify, establish, and maintain a DA generic system safety program.

e. Develop and disseminate improved system safety engineering techniques.

2–41. Commanding General, U.S. Army Test and Evaluation Command

The CG, USATEC will—

a. Serve as the Army's independent operational test activity.

b. Support systems acquisition, force development, and experimentation processes through overall management of the Army's test and evaluation programs.

c. Plan, conduct, analyze, and report the results of DTs and OTs, including live-fire testing.

d. Provide survivability, vulnerability and lethality analyses and survivability enhancement assessment expertise for Army materiel programs.

e. Manage OSD-directed joint T&E.

f. Chair and manage the TSARC.

g. Review and provide input to the TES and TEMP to ensure test planning and resources are adequate to evaluate operational effectiveness, suitability, and survivability.

h. Ensure that a specific analysis of safety considerations is included in the test design.

i. Address safety issues in the independent evaluation through the safety release and safety confirmation processes.

j. Provide safety releases before any testing, demonstration, or pre-test training using troops. This includes tests with type-classified materiel used in a new or innovative manner.

k. Make optimum use of M&S, combined DTs and OTs, and alternative test events using results of cost performance tradeoff analysis conducted prior to OT.

l. Ensure M&S used in T&E events and procedures are integrated throughout requirements generation, training, and other acquisition functions. Accreditation will be conducted for all M&S used by the command.

m. Provide the independent assessments or evaluations (including safety release and safety confirmations) for MDRs and materiel release decisions (under AR 700–142) and at other points in the acquisition cycle.

n. Provide T&E representation to working-level IPTs as required.

o. Provide medically related support to U.S. Army Medical Research and Materiel Command for the development, testing, evaluation, and readiness of CIE.

p. Develop nonmajor instrumentation for testing. Non-major is defined as projects costing under $1 million per year or under $5 million over the life of the project. For major instrumentation, the PM for instrumentation, targets, and threat simulators is ATEC's MATDEV and ATEC is the CAPDEV.

2–42. Commandant, U.S. Army Chaplain Center and Schools

The Commandant, USACHCS will—

a. Serve as the chaplain combat, doctrine, and training developer for the CCH.

b. Coordinate the development of concepts, programs, experiments, and initiatives that identify, prioritize, and integrate DOTMLPF-based requirements with guidance from the Chief of Chaplains, and under the guidelines established by the CG, TRADOC.

2–43. Director, U.S. Army Materiel Systems Analysis Activity

The Director, USAMSAA will—

a. Provide integrated analytical support to DA, USAMC, and other Army agencies throughout the entire acquisition process and, as appropriate, integrate acquisition program T&E data in the following areas:

(1) Performance data development and certification.

(2) Performance and effectiveness analyses.

(3) Reliability and maintainability standards development and updates.

(4) Production readiness reviews and producibility reviews.

(5) Value engineering.

(6) Industrial base capability studies.

(7) Program risk assessments.

b. Provide logistics analysis support to DA, USAMC, and other Army agencies throughout the life cycle of Army materiel and systems, to include—

(1) Wholesale and retail supply and maintenance analyses.

(2) Field exercise and sample data collection.

(3) War reserve and contingency package analyses.

(4) Industrial base sustainment studies.

c. Exercise HQDA responsibility for verification, validation, and accreditation of item-level performance M&S for combat effects, including the development and maintenance of common data formats.

d. Develop, maintain, improve, verify, validate, and accredit item-level performance M&S for combat effects and logistics.

e. Develop, maintain, and improve industrial base Web-based automated tools.

f. Exercise HQDA responsibility for Army reliability methodology development.

g. Exercise HQDA responsibility for the Joint Technical Coordinating Group for Munitions Effectiveness.

h. Perform management-engineering analyses for USAMC and DA to support the development and justification of manpower requirements for acquisition organizations and to help integrate those requirements with the POM and the total Army analysis process.

2–44. Director, U.S. Army Nuclear and Combating Weapons of Mass Destruction Agency

The Director, USANCA will—

a. Establish nuclear survivability criteria and CBRN contamination survivability criteria for Army materiel.

b. Monitor the Army's nuclear survivability and CBRN contamination survivability programs.

c. Assist MATDEVs and CAPDEVs with the application of nuclear effects and CBRN contamination survivability criteria for systems, and assist in evaluating system-survivability shortfalls.

Chapter 3
Army Acquisition Management Process

3–1. Overview of the acquisition management process

a. The acquisition process consists of sequential DOD- or Army-level management reviews and decisions. The process begins with an MDD. At the MDD, the MDA authorizes the program's entry into the acquisition management system at a point where phase-specific entrance criteria and statutory requirements can be accommodated. The program proceeds through a series of decision reviews that occur in accordance with event- or schedule-based criteria. The reviews are structured in logical phases, separated by major decision points called milestones. They are accomplished as a program evolves from an approved materiel capability requirement, through development, to an operational and sustainable system in the field.

b. The materiel acquisition process is divided into three distinct activities, which are pre-systems acquisition, systems acquisition, and sustainment. The three activities are subdivided into five phases— materiel solution analysis; technology development; engineering and manufacturing development; production and deployment; and operations and support. The five phases contain six work efforts— integrated system design; system capability and manufacturing process demonstration; low rate initial production (LRIP); FRP and deployment; sustainment; and disposal.

c. Figure 3–1, below, illustrates the Defense Acquisition Management System. The materiel solution analysis phase begins with the MDD review. As stated above, entry into the acquisition process begins with the MDD; however, entry into the process does not mean that a new program has been initiated. The technology development phase follows the materiel solution analysis phase and begins with a milestone A decision. Once again, however, this does not constitute program initiation. The engineering and manufacturing development (EMD) phase follows the technology development phase and begins with a milestone B decision. milestone B is the point of program initiation for the Army, unless the maturity of the program justifies entry into the Defense Acquisition Management System at a later milestone. The production and deployment phase begins with milestone C and authorizes entry into LRIP (for ACAT I and ACAT II programs), into production or procurement (for nonmajor programs that do not require LRIP), or into limited deployment in support of operational testing (for MAIS programs or software-intensive systems with no production component). The operations and support phase follows the production and deployment phase. In the operations and support phase, the program meets materiel availability and operational support performance requirements, and is sustained and disposed of cost-effectively.

d. The defense acquisition management system and the terms of reference apply to all acquisition programs, regardless of ACAT.

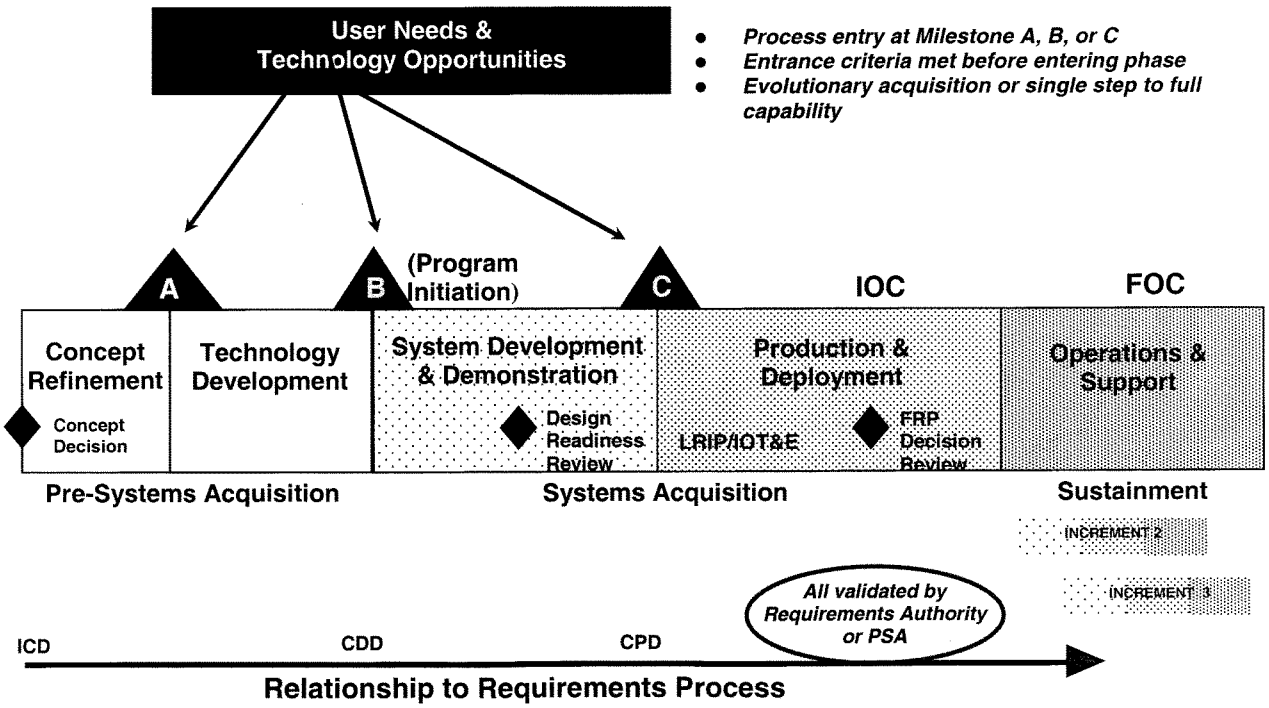

Figure 3–1. The defense acquisition management system

3–2. Acquisition program categories and milestone decision authority levels

All Army acquisition programs, except highly sensitive classified programs, will be placed into one of three ACATs. (See table 3–1, below.) The ACAT determines the level of MDA. There is only one MDA for each acquisition program. All MDAs must be at the general officer or senior executive service (SES) level and meet the statutory and regulatory requirements for education, training, and experience that apply to CAPs. (See 10 USC 1735, DODD 5000. 52, and DA Pam 70–3.)

Table 3–1
Categories of acquisition programs and milestone decision authorities

Program category	Program management	Primary criteria ($=fiscal year 2000 constant)[1]	Milestone review forum	Milestone decision authority
ACAT I				
ACAT ID	PEO, DRPM, or PM	Dollar values estimated to require an eventual total expenditure of: - more than $365 million RDT&E; or - more than $2.19 billion in procurement. MDA designation as special interest	DAB	DAE (USD (AT&L))
ACAT IC	PEO, DRPM, or PM	Dollar values estimated to require an eventual total expenditure of: - more than $365 million RDT&E; or - more than $2.19 billion in procurement. MDA designation as special interest	ASARC	AAE (not further delegable)
ACAT IA				

Table 3–1
Categories of acquisition programs and milestone decision authorities—Continued

Program category	Program management	Primary criteria ($=fiscal year 2000 constant)[1]	Milestone review forum	Milestone decision authority
ACAT IAM	PEO, DRPM, or PM	Estimated to exceed: - $32 million incurred in a single fiscal year for all expenditures, for all increments, regardless of the appropriation or fund source, directly related to the AIS definition, design, development, and deployment; or - $126 million incurred from the beginning of the materiel solution analysis phase through deployment at all sites for all expenditures, for all increments, regardless of the appropriation or fund source, directly related to the AIS definition, design, development, and deployment; or - $378 million from the beginning of the materiel solution-analysis phase through sustainment for the estimated useful life of the system for all expenditures, for all increments, regardless of the appropriation or fund source, directly related to the AIS definition, design, development, deployment, deployment, and operations and maintenance. MDA designation as special interest	ITAB	DAE unless delegated to the DOD CIO (ASD (NII))
ACAT IAC	PEO, DRPM, or PM	Estimated to exceed: - $32 million incurred in a single fiscal year for all expenditures, for all increments, regardless of the appropriation or fund source, directly related to the AIS definition, design, development, and deployment; or - $126 million incurred from the beginning of the materiel solution-analysis phase through deployment at all sites for all expenditures, for all increments, regardless of the appropriation or fund source, directly related to the AIS definition, design, development, and deployment; or - $378 million from the beginning of the materiel solution-analysis phase through sustainment for the estimated useful life of the system for all expenditures, for all increments, regardless of the appropriation or fund source, directly related to the AIS definition, design, development, deployment, and operations and maintenance. MDA designation as special interest	ASARC	AAE (not further delegable)
ACAT II				
ACAT II	PEO, DRPM, and PM	Dollar values estimated to require an eventual total expenditure of: - more than $140 million RDT&E; or - more than $660 million in procurement. MDA designation	ASARC	AAE[2]
ACAT III				
ACAT III	PEO, DRPM, or PM	Non-major systems, including IT and NSS. (No fiscal criteria; does not meet criteria for ACAT II or above.)	ASARC	AAE[2]

Notes:
[1] The dollar values used to determine ACAT status are based in statute and represent estimates of expected total program expenditure (in other words, the sum of expected expenditures across the POM and extended planning period for all defined previous, current, and planned increments).
[2] The AAE may delegate the MDA to the PEO or DRPM level, in which case an ASARC is not required. The PEOs or DRPMs conduct in-process reviews (IPRs) for program reviews. Where applicable, the commander of a systems or materiel command in the areas of medical research and development, Army chaplaincy, or public affairs, may be the MDA for ACAT II and III programs.

a. Pre-acquisition category technology projects. General science and technology development and maturation projects (that is, advanced technology objectives, Army technology demonstrations, joint warfighting experiments, and joint capability technology demonstrations) are efforts that occur before an acquisition program is initiated. These efforts may also continue after program initiation to support subsequent increments of the program.

b. Acquisition category I programs. Program classified as ACAT I are MDAPs or programs that are designated ACAT I by the DAE, as a result of the DAE's special interest. The ACAT I programs have two subcategories: ACAT ID and ACAT IC.

(1) An ACAT ID program is an MDAP whose milestone decision authority is the DAE—that is, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)). These programs receive a DAB review and require a decision by the DAE at each decision point and milestone in the Defense Acquisition Management System. Before the DAB, the Army OIPT will review the program's status and documentation to ensure it is ready for a DAB review. Formal ASARC meetings occur for ACAT ID programs only if issues remain unresolved after the Army OIPT. Refer to DA Pam 70–3 for a detailed description of the ASARC process.

(2) An ACAT IC program is an MDAP where the DAE has designated the Army Acquisition Executive as the MDA; this authority cannot be further delegated. These programs receive an ASARC review and require a decision by the AAE at each decision point and milestone in the Defense Acquisition Management System.

c. Acquisition category IA programs. The ACAT IA programs are major automated information systems, or programs that are designated ACAT IA by the Defense Acquisition Executive as a result of the DAE's special interest. In some cases, an ACAT IA program also meets the definition of an MDAP. The Defense Acquisition Executive is the milestone decision authority for these automated information system programs, unless this authority is delegated to the AAE; this authority cannot be further delegated. Statutory requirements that apply to MDAPs and MAIS shall apply to these automated information system programs. The ACAT IA programs have two subcategories— ACAT IAM and ACAT IAC.

(1) The ACAT IAM programs are MAIS programs where the MDA is the DAE, unless delegated to the Assistant Secretary of Defense (Networks and Information Integration) (ASD (NII))/DOD CIO.

(2) The ACAT IAC programs are MAIS programs where MDA has been designated by the DAE as the AAE; this authority cannot be further delegated.

d. Acquisition category II. The ACAT II programs do not meet the criteria for ACAT I programs; they are major systems or are designated ACAT II by the AAE as a result of the AAE's special interest. The MDA for ACAT II programs is the AAE or an individual designated by the AAE. An ACAT II program undergoes ASARC reviews when the AAE is the MDA. An AIS program is never designated ACAT II.

e. Acquisition category III. The ACAT III programs do not meet the criteria for an ACAT I, ACAT IA, or ACAT II category. The AAE or an individual designated by the AAE is the MDA. This category includes AIS programs that are not MAIS.

f. Delegation of milestone decision authority and changes in acquisition category level.

(1) *Delegation of milestone decision authority level.*

(a) The AAE may delegate the MDA for ACAT II and ACAT III programs on a case-by-case basis.

(b) All requests for delegation of MDA for ACAT II and III programs will be submitted to the AAE through the Director, Acquisition and Industrial Base Policy (SAAL–PA), under the ASA (ALT). The director will staff the request with appropriate HQDA organizations and update the ACAT database accordingly.

(2) *Changes in acquisition category level.* The AAE will approve all changes to ACAT II or III levels. The AAE will review changes from previously lower ACATs to ACAT I or IA before forwarding to the DAE for approval.

(a) The DAE may reclassify any acquisition program at any time. The AAE has similar authority to reclassify ACAT II and III programs if they do not exceed the ACAT I threshold dollar values depicted in table 3–1.

(b) All ACAT-level changes will be reported to the AAE as soon as the PEO, DRPM, or PM is reasonably confident that the program is within 10 percent of the next ACAT level. Programs are considered to be within 10 percent of the next ACAT level when the PEO, DRPM, or PM's current estimate indicates the program has exceeded or will require an eventual total expenditure that is equal to or greater than 90 percent of the RDT&E or procurement dollar values of the next higher ACAT (as depicted in table 3–1, above).

(c) The PEOs or DRPMs will request in writing a reclassification of an acquisition program to a higher or lower ACAT. The request will be submitted to the AAE through the Director, Acquisition and Industrial Base Policy (SAAL–PA). The request must identify the reason(s) for the requested change and be accompanied by the justifying documentation. The change becomes effective upon approval by the AAE or DAE as appropriate. The program's revised ACAT will then be posted to the ACAT database by ASA (ALT) through the Director, Acquisition and Industrial Base Policy.

(d) The DODI 5000.02 provides further information on changes in ACAT-level for ACAT I or IA programs.

g. Highly sensitive, classified programs. Highly sensitive, classified programs will comply with the policies and procedures specified in DODI 5000.02 and this regulation based on program equivalent dollar value. The ASA (ALT) Systems Special Programs Directorate (SAAL–SSP) serves as the Army focal point for all highly sensitive, classified

program acquisition matters including programmatic, resourcing, technology integration, and policy. This directorate ensures highly sensitive, classified acquisition programs adhere to AR 380–381 with regard to sensitive activities.

3–3. The approval process for a new program start

a. Initiating a new program start. Acquisition programs are established to provide intensive, centralized management. The MDD is the formal entry into the acquisition management system and will be mandatory for all programs. (See fig 3–1, above.) Congressional notification of a new program start is also required. The AAE shall chair the MDD for potential ACAT II and III programs unless delegated as noted in *b* and *c*(6), below. The DAE will chair MDDs for potential ACAT I and IA programs, unless delegated.

(1) The basis for requesting a new program start is an approved ICD or other approved capability requirement (for example, capability development for rapid transition action). When a need for a materiel solution is identified, the DCS, G–3/5/7 for potential ACAT II or ACAT III programs—or JROC for potential ACAT I or ACAT IA programs—shall recommend that the appropriate MDA consider potential materiel approaches. These potential approaches will provide a baseline for selection of alternatives for the program AoA.

(2) For all potential ACATs, the Deputy for Acquisition and Systems Management (DASM) (SAAL–ZS), under the ASA (ALT), shall conduct a DASM Review (meeting forum), to determine if statutory and regulatory requirements have been met to proceed with an MDD. Prior to the DASM Review, the DCS, G–3/5/7 will conduct a series of reviews before an ICD-derived materiel solution can be brought before the MDA. The AAE will assign a lead PEO or DRPM, who will have oversight responsibility, beginning with the MDD, for each phase and review of the acquisition management system. The appropriate PEO or DRPM lead will be based on the materiel gap(s) identified in the approved ICD or other capability requirement.

b. Blanket milestone decision authority delegation. The following authorities may conduct MDDs as specified:

(1) The commanding general, USAMRMC is responsible for RDA and logistical support for assigned medical materiel capabilities.

(2) Joint PEO Chemical and Biological Defense for ACAT II and III chemical and biological defense program systems.

Note. Results of MDDs conducted by these authorities will be provided to the ASARC Executive Secretary (SAAL–ZSA) and the Director, Acquisition and Industrial Base Policy (SAAL–PA).

c. Conducting the Army-level review by the Deputy for Acquisition and Systems Management.

(1) The DCS, G–3/5/7 will notify the ASARC executive secretary that a DASM Review is required. The executive secretary will coordinate with the DASM; the DCS, G–3/5/7; and the appropriate PEO or DRPM to determine when to conduct the initial MDD review.

(2) The DASM Review will be a small group meeting tailored to the situation, and conducted on a periodic, as-needed basis. The DASM Review membership will include general officer or SES level representatives from:

(a) Office of the DASM (Chair).
(b) The designated PEO or DRPM.
(c) DCS, G–3/5/7.
(d) CIO/G–6.
(e) DCS, G–8.
(f) ASA (FM&C).
(g) Office of the Chief, Army Reserve.
(h) Office of the Chief, National Guard Bureau.
(i) USAMC.
(j) TRADOC.
(k) Office of the Army Test and Evaluation Executive.
(l) DASA (APL).
(m) Deputy Assistant Secretary of the Army (Plans, Programs and Resources) (DASA (PP&R)).
(n) Deputy Assistant Secretary of the Army (Research and Technology).
(o) Office of the General Counsel (OGC).

(3) The DCS, G–3/5/7 representative shall be the lead briefer at the review. The briefing will cover the operational gap, the operational risk associated with not mitigating the gap, the preliminary concept(s) of operations for mitigating the gap, a description of the needed materiel solution(s), potential alternative solutions, and the basis for determining that nonmateriel approaches will not sufficiently mitigate the capability gap. The DCS, G–3/5/7 representative shall present the AoA study guidance.

(4) The PEO or DRPM and/or a MATDEV in the organization will brief whether there is sufficient analysis completed to proceed to an MDD. The briefing will cover topics such as how many acquisition programs are necessary to satisfy the materiel need, time required to prepare for a MDD, an early estimate of the funds required to complete

the first acquisition phase and funds availability, and any additional information that will help the AAE decide whether to proceed or whether additional study is required.

(5) The DCS, G–8 representative will discuss the Army funding strategy, and the ASA (FM&C) representative will discuss a strategy to fund near-term bills associated with the program, if such bills exist.

(6) The DASM shall inform the AAE of the DASM Review results. There are three potential outcomes—

(a) The DASM determines that additional study is required, or all conditions for a successful MDD have not been met. The ASARC Executive Secretary shall then prepare, and the AAE shall approve, guidance to ensure sufficient information is available to support the MDD. The MATDEV and Department of the Army Systems Coordinator (DASC) must coordinate with the DCS, G–3/5/7 and ASARC Executive Secretary to support the satisfaction of any outstanding requirements, and preparation of the staffing package for another review.

(b) The DASM determines that a potential ACAT II or III program is ready for an MDD. The DASM may recommend to the AAE delegating MDD authority to the lead PEO. The ASARC Executive Secretary shall then prepare an acquisition decision memorandum (ADM) for the AAE's signature, which documents the DASM Review decision and includes delegation of MDA. The PEO designated as MDA shall then be responsible for program execution, beginning with an MDD.

(c) The DASM determines that a program is ready for an AAE-level MDD. The MATDEV and DASC must then coordinate with the DCS, G–3/5/7 and ASARC Executive Secretary to prepare for the Army MDD. The ASARC Executive Secretary captures DASM Review meeting minutes, outlining any areas that must be addressed and selects a date for the Army MDD.

d. Conducting the Army-level materiel development decision.

(1) Based on the time lines approved at the DASM Review, the ASARC Executive Secretary will coordinate with the DASM (SAAL–ZS); the DCS, G–3/5/7; and the appropriate PEO or DRPM to schedule the MDD. When delegated, the appropriate MDA will be responsible for scheduling the MDD meeting.

(2) The AAE-level MDD panel is chaired by the AAE. The MDD membership includes the following:

(a) AAE (Chair).

(b) Designated PEO or DRPM.

(c) DCS, G–3/5/7.

(d) CIO/G–6.

(e) DCS, G–8.

(f) ASA (FM&C).

(g) Chief, Army Reserve.

(h) Chief, National Guard Bureau.

(i) USAMC.

(j) TRADOC.

(k) Army Test and Evaluation Executive.

(l) Army General Counsel.

(3) The DCS, G–3/5/7 or designee will present the ICD, preliminary concept of operations, a description of the needed capability, the operational risk, and the basis for determining that nonmateriel approaches will not mitigate the capability gap.

(4) As part of the MDD review, the DCS, G–3/5/7 shall present the approved AoA study guidance. The AAE shall direct initiation of the AoA in the MDD ADM and attach the AoA study guidance.

Note. Before approving, the DCS, G–3/5/7 submits the AoA Study Plan for AAE coordination.

(5) The appointed MATDEV shall present the planned acquisition management structure for the proposed materiel solution. The plan shall include the proposed acquisition phase entry point for the new program, funding requirements, and time line to complete phase requirements leading to the initial review milestone (for example, when planning for entry into the Technology Development phase, present the time line necessary to prepare appropriate statutory and regulatory documents that will lead to the milestone B review).

(6) The MDA's decision from the MDD shall be documented in an ADM.

e. Defense Acquisition Executive-level materiel development decision. Potential ACAT I or IA programs will undergo an Army review (DASM Review and ASARC) prior to the DAE-level MDD. The office of the USD (AT&L) directs potential ACAT I or IA new-start OSD-level MDD procedures.

3–4. Assignment of program managers

a. Acquisition PM positions (project managers at the O–6/GS–15 or broadband/pay band equivalent and product managers at the O–5/GS–14 or broadband/payband equivalent) are a definitive list of CAPs approved annually by the AAE. These positions are also designated as CSL-key billet positions and filled via the HQDA CSL selection board and slating processes. The title "PM" will only be used to identify those persons who are CSL PMs. The designation of a PM will be made before milestone A or, if there is no milestone A, no later than program initiation (that is usually

milestone B). Additionally, PMs must execute a tenure and program management agreement with and receive a formal charter from the AAE.

b. The PEOs and DRPMs submit their requests for PM designation through the annual CSL review. Human and financial resources for the new program must be identified by using the criteria sheets provided in the Acquisition Workbook Analysis and Readiness Evaluation software program.

3–5. Transfer, mergers, and disestablishment or termination of programs

a. Transfer. The AAE is the approval for transfer of management responsibility for acquisition programs between PEOs, DRPMs, and PMs.

b. Mergers. The AAE reviews and approves the merger of program or project management offices (PMOs) for acquisition programs between PEOs, DRPMs, and PMs.

c. Termination or disestablishment.

(1) Termination of a PMO or a program occurs after PM management responsibility for all assigned programs has been completed satisfactorily or when directed by the DAE or the AAE. The PM will prepare the termination plan. The AAE's approval is mandatory to terminate an acquisition program.

(2) A PMO may be terminated or disestablished when—

(a) Presidential, Congressional, DOD, or Army leadership's decision is to terminate.

(b) Program management objectives have been achieved and the system is removed from inventory, thereby absolving the PM of life-cycle management responsibility.

(c) Program objectives cannot be achieved or no longer meet the threat or the desired capabilities.

(d) Technology no longer meets operational requirements or is no longer suitable.

(e) Funding for the program is withdrawn.

3–6. Recapitalization

Recapitalization is a key element in the modernization and sustainment of the Army's current force. The goals of recapitalization are to extend service life, stabilize the rate of growth of operating and support costs, improve reliability, maintainability, safety, and the efficiency of recapitalized systems. Further, recapitalization is expected to reduce the logistics footprint, as well as enhance warfighting capabilities for selected recapitalized systems.

a. 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 as an end item total tear down and replacement of all expendable components, all aged components, reconditioning of structural components, and the procedures identified for overhaul of end items. Rebuild results in a system with the same model and a new life.

(2) A selected-upgrade-program increment rebuilds the system, significantly increases operational capability and/or addresses capability shortcomings, and meets an ACAT threshold specified in table 3–1, above. A selected upgrade program increment results in a system with a new model and significantly improved warfighting capability.

(a) Selected upgrade program increments will not be initiated unless they are supported by an approved capabilities document in accordance with the JCIDS. The capabilities document will reflect the required warfighting capability that the selected upgrade program increment will provide.

(b) Systems designated for a selected upgrade program increment shall follow the criteria set forth in the DODI 5000.02 and this regulation. If the program is out of production, follow program restart policies per paragraph 3–7, below.

b. The MDA will approve all recapitalization efforts and document decisions in an ADM.

c. The PMs, with support from USAMC, will develop, review, and execute depot or industry partnership plans for rebuilding and selected upgrade program increments.

3–7. Restarting terminated acquisition programs

A restart program is a program previously terminated for which an enduring need has been identified to restore the program to its intended capability with no change to the program's approved capability document (for example, CDD, CPD). This includes programs that were terminated while the system was still in development or still require additional development effort. A stand alone request to re-procure an additional quantity of a terminated program is not considered a restart but rather requires an amended termination plan that will be submitted to the DASA (PP&R) office at SAAL–ZR.

a. Criteria for restarting a terminated program.

(1) Program restarts must occur within 2 years of the program termination date, must be based on an approved capability requirement for which the source is a previously terminated program, and must have the required funding. Program funding must be identified in the POM or available through reprogramming of current funds. Resuming effort on a program after 2 years from termination is considered a new-start, and the PM must comply with the provisions of paragraph 3–3, above, and DODI 5000.02.

(2) The Army staff element sponsoring a program restart will submit the requirement to the DCS, G–3/5/7, for validation and prioritization through the AROC, Army Requirements and Resourcing Board, or JROC, as appropriate.

Any required change to the program's previously approved capability document necessitates a change from restart to new-start provisions.

(3) The Army staff element sponsoring a program restart will also coordinate funding through the PPBE process, as required.

b. Steps for restarting a terminated program.

(1) After requirements validation and prioritization and funding is identified for a possible terminated program restart, the previously assigned PEO, DRPM, or program office if still active, shall prepare and coordinate an AAE review with appropriate stakeholders (for example, ASA (ALT); DCS, G–3/5/7; DCS, G–8; OGC, and so forth). The AAE shall determine if it is appropriate to continue the restart process, begin as a new acquisition program, or designate appropriate organizations for additional analysis or study.

(2) When the AAE decides to continue with restart, the assigned PM shall update the cost and schedule information in the applicable program documentation, and decisions at the time of termination (for example, acquisition strategy (AS), APB, LCSP, and so forth). As appropriate, the program's PEO or PM shall evaluate existing and pending contract actions with a contracting officer to determine what modifications or re-competition is necessary.

(3) The restart acquisition strategy is prepared and submitted to the DASA (PP&R) (SAAL–ZR) for coordination within ASA (ALT); DCS, G–3/5/7; DCS, G–4; DCS, G–8; ASA (FM&C); and OGC (at a minimum). Based on the coordination, program complexity, and ACAT level, DASA (PP&R) shall determine the type of review by the appropriate MDA (AAE or DAE). The review may range from a program briefing to the AAE, a full ASARC, or a DAB review. The MDA shall document approval to restart a program and designate the milestone entrance point in an ADM. Before approving a restart program, the MDA shall ensure that Army has provided appropriate Congressional notification of program restart and obtained proper funding approval (for example, approval of funding reprogramming action).

(4) After restart approval, the assigned PM shall coordinate with the U.S. Army Acquisition Support Center (USAASC) to document required program office staffing. The staffing request will be submitted to USAASC as an out-of-cycle program start using the Military Deputy Review software application.

c. Common acquisition program restart provisions.

(1) Restarted programs inherit the costs, documentation, and decisions of the terminated program. The restarted program's ACAT level shall be assessed to determine if a category change is appropriate based on any increased funds. Adjusting to a higher ACAT level may change the MDA review level (for example, an existing ACAT II program changing to ACAT I based on adjusted funding).

(2) Once an acquisition program is approved for restart, it must be managed in accordance with DOD 5000-series, this regulation, and other applicable Army regulations. The PM shall update appropriate program documentation based on the MDA's decision.

(3) A program restart requires advance notification to the Congressional defense committees and OSD. The ASA (FM&C) prepares and submits notification of the Army's intent to restart the program. This may require formal briefings to OSD, the Office of Management and Budget, and Congress. Congress has 30 days to comment on the action, and Congressional approval should not be assumed. A reprogramming request submitted to Congress provides sufficient restart notification under the DOD Financial Management Regulation. Provided Congress and OSD do not object to the restart, the ASA (FM&C) reprograms or transfers the required funds to restart the program if the funds are required during the current budget year, based on coordination with ASA (ALT) to provide an offset.

3–8. Assignment of popular names

a. A popular name will be assigned to a major item of equipment for use in publicizing the item and for ready reference identification.

b. Popular names should reflect functional characteristics and the DA's progress toward modernization of its concepts of warfare. Criteria and categories for consideration during selection of popular names are covered in DA Pam 70–3. The AAE can approve exceptions to the suggested criteria or categories.

c. Popular names for Army equipment and aerospace vehicles should be requested when the system reaches production or has immediate prospects of going into the inventory. Approved popular names are changed only under compelling reasons (conformance with this guidance is not a compelling reason).

d. See AR 70–50 for aerospace vehicle designation and naming policy. Final approval authority for assignment of popular names for military aerospace vehicles is OSD Public Affairs. Approval authority for other Army major items of equipment is the AAE.

Chapter 4
Acquisition Strategy

4–1. General considerations for the acquisition strategy

a. An AS is a business and technical management approach designed to achieve program objectives within imposed resource constraints. It is the framework for planning, directing, contracting for, and managing a program. It provides a master schedule for research, development, modeling and simulation, test and evaluation, production, fielding, modification, post-production management, and other activities essential for program success. The AS is the basis for formulating functional plans and other strategies (for example, the TEMP, the Acquisition Plan, competition, and prototyping). The AS is based upon time-phased operational requirements contained in the program's approved capability document. At a minimum, the AS addresses the core management issues outlined in paragraph 1–4*d*, above, and includes a formalized DMS that details the system's data deliverables and government technical data rights.

b. In planning evolutionary acquisition strategies, PMs will strike an appropriate balance among key factors, including the urgency of the operational requirement; system-of-systems operational and technical factors; the evolution of mature critical technologies; and the interoperability, supportability, and affordability of alternative acquisition solutions.

c. Each PM shall develop and document an AS to guide program execution from initiation through the re-procurement of systems, subsystems, TADSS, components, spares, and services beyond the initial production contract award into post-production support. The MDA shall approve the AS. The strategy must address the PM's total life-cycle management responsibility, including demilitarizing and disposing of the system. A primary goal of the AS will be to minimize the time and cost it takes to satisfy approved needs, and to maximize affordability throughout a program's useful life cycle, consistent with sound business practices. The need for the PM to perform detailed domestic and foreign market research is essential to the development of an AS. The Defense Acquisition Guidebook contains details about the contents of the AS.

d. The AS will be developed early in the life of the program. The AS should be updated for all subsequent major decisions and program reviews, and whenever the approved strategy changes.

e. The PM shall ensure the MDA has approved the AS before release of the final request for proposal (unless waived by the MDA).

f. The AS is coordinated with agencies that support the PM and agencies that will use and support the system when it is fielded. The PMs must coordinate acquisition strategies with the CAPDEVs, facility developers, testers and independent evaluators, logisticians, life cycle software engineers, ESOH staff, HSIs, joint coordination boards (for joint programs), and other matrix support organizations. Other system-specific considerations may make further coordination advisable. These considerations include, but are not limited to, advanced technologies; night-vision and electro-optical devices; smart sensors or weapons system signatures; standard auxiliary power units; batteries; environmental control units; shelters; and modeling and simulation. Coordination must also occur with the joint acquisition community when other Services and joint programs may be affected. See DA Pam 70–3 for additional information on AS coordination.

4–2. Documenting prototyping and competition strategies

All pending (pre-milestone B) and future Army weapon system initiatives will formulate acquisition strategies and funding that require two or more competing teams to produce prototypes of the system or key system elements before milestone B. Information technology initiatives shall prototype subsets of overall functionality, using one or more teams, with the intention of reducing enterprise architecture risks, prioritizing functionality, and facilitating process redesign.

a. The PMs shall document their competitive prototyping approach in a TDS for approval by the MDA, working in collaboration with CAPDEVs and ASA (ALT) (SAAL–ZT). Project managers will use information from an approved ICD and AoA results as sources for identifying key system elements when preparing the TDS. The options identified in the TDS shall be synchronized with the alternatives evaluated in the program AoA. At milestone A, the MDA shall review the proposed materiel solution and the draft TDS. Requests for proposals for the technology development phase shall not be released, nor shall any action be taken that would commit the program to a particular contracting strategy for Technology Development, until the MDA has approved the TDS.

b. The AS prepared in support of milestone B shall document the competitive prototyping strategy and technical maturity attained for key system elements.

c. The PM shall submit a written waiver request when analysis indicates that the production of prototypes by two or more competing teams would not be advisable. The MDA is the waiver approval authority.

4–3. Independent management reviews ("peer reviews")

Per DODI 5000.02, peer reviews shall be conducted on all supplies and services contracts. Pre-award reviews shall be conducted on supplies and services contracts; post-award reviews shall be conducted on services contracts.

a. The Director, Defense Procurement, Acquisition Policy, and Strategic Sourcing, in the office of the USD (AT&L), conducts peer reviews for contracts with an estimated value of $1 billion or more (including options).

b. All Army procurements with an estimated value of $50 million or more shall be approved at the contracting activity by a solicitation review board and a contract review board. This applies to all contracts, including the exercise of options and award of delivery or task orders.

c. The principal assistants responsible for contracting (PARCs) shall establish internal policies and procedures to execute independent, multifunctional pre-award reviews of contractual actions with an estimated value less than $50 million.

d. Post-award peer reviews for contracts valued less than $1 billion shall be conducted for services contracts approved by the Army Services Strategy Panel.

e. Contact the Deputy Assistant Secretary of the Army (Procurement) (SAAL–ZP) for additional peer review information.

4–4. Intelligence and security support

Army RDA programs will incorporate validated multi-discipline intelligence and security (MDI&S) and research and technology protection (RTP) support at the earliest opportunity and throughout the acquisition life cycle. Army RDA programs must remain informed of changes to the threat and security posture that could have significant impact on their programs. Army organizations with organic or intelligence and security matrix assets will provide the MDI&S and RTP to those RDA programs they support per AR 381–11 and the AR 380-series.

4–5. Transportability considerations affecting the acquisition strategy

Efficient and economically transportable equipment and combat resources are critical to enhancing the Army's warfighting capability. All new systems, major modifications, upgrades to current systems, nondevelopmental items, commercial items, and re-procurements designated as transportability problem items must obtain transportability approval from the Commander, SDDC, in accordance with DODI 4540.07 and AR 70–47. The transportability of the item and the deployability of the force will be evaluated throughout the acquisition cycle as follows:

a. The CAPDEV and MATDEV will include SDDC in all concept studies of transportability problem items. The SDDC provides transportability and deployability assessments that determines the impact of proposed design characteristics on the unit or force's ability to meet current and future deployment criteria using existing and future deployment assets.

b. Transportability and deployability will be considered for all decision reviews of transportability problem items.

c. The PMs must obtain a transportability and deployability assessment of transportability problem items from SDDC before milestone B.

d. Transportability approval from SDDC will be required before milestone C.

4–6. Interoperability and program integration considerations

The development of interoperable systems must be an integral part of all acquisition programs. This applies to all systems exchanging information, regardless of their place in the life cycle. This includes systems in development, being modified, under PDSS, or in post-production software support (PPSS). Synergistic operational interoperability must be a key factor in all phases of a system's development. System acquisitions must be crafted from a system-of-systems perspective in accordance with DODD 5000.01 and approved Army initiatives for fielding and maintaining interoperable systems.

4–7. Supportability

Supportability is a design characteristic, which fundamentally impacts the scope of required sustainment of a system (maintenance burden, infrastructure, and footprint) and the total ownership costs. Supportability analyses are an integral part of the systems engineering process. The PM will ensure that supportability is given equal consideration with the other program design considerations of cost, schedule, and performance in all acquisition decisions.

a. Integrated logistics support. The technical and management activities conducted to ensure supportability, engineering, and sustainment implications are called ILS. They are considered early in the development process, and executed throughout the acquisition process to minimize support costs and to provide the user with the resources to sustain the system in the field.

(1) The CAPDEV will initiate ILS efforts during pre-systems acquisition as part of the materiel solution analysis. The CAPDEV will designate an integrated logistics support manager (ILSM) to oversee the ILS activities through their participation in the IPT, as outlined in AR 700–127.

(2) At program initiation (or earlier) where appropriate, the PM will establish an ILS program to continue the work of the IPT.

(3) The PM will establish a working integrated product team (WIPT) called the supportability integrated product team (SIPT). The SIPT is the organization that oversees ILS efforts and makes recommendations for planning, programming, and execution of ILS responsibilities to the PM.

(4) The PM will designate an ILSM before milestone A to chair the SIPT and oversee the ILS program.

(5) The product support integrator identified by the PM will co-chair the SIPT.

(6) The ILSM, product support integrator, and the SIPT members will use the LCSP (formerly the Supportability Strategy) as a record of the planning, programming, and execution of the ILS program. This includes defining how systems analyses will be used throughout systems engineering to gather data, assess alternative logistics support concepts, make decisions, and coordinate planning and execution of the selected logistics support alternative, and to record the actions taken.

(7) The PMs will use the 10 logistics support elements identified in AR 700–127 and DA Pam 700–56 as tools to ensure that all supportability considerations are addressed and integrated when conducting supportability analyses during the systems engineering process.

b. Life cycle sustainment plan (formerly the Supportability Strategy).

(1) The PM will prepare a LCSP, in accordance with AR 700–127. The LCSP documents the PM's plan for formulating, implementing and executing the sustainment strategy so that the system's design as well as the development of the product support package (including PBL) are integrated and contribute to the warfighter's mission requirements by achieving and maintaining the Sustainment KPP and key system attributes. The LCSP is a living document describing the approach and resources necessary to develop and integrate sustainment requirements into the system's design, development, T&E, fielding and operations. Instructions for preparing a LCSP and a suggested outline can be found in DA Pam 700–56.

(2) The PM must provide access to data throughout its life cycle through formal delivery at Army repositories or through fully funded "formal access" protocols (under para 6–3*f*(1)(a)2), below) required for competitive sourcing of systems support.

(3) The LCSP is a standalone document which is submitted for MDA approval along with the Acquisition Strategy beginning with milestone B. The PM will include an executive summary of the LCSP in the body of the Acquisition Strategy that includes, but not be limited to—

(a) Key sustainment milestones, for example key LCSP actions, activities, and required decisions (including planned ILS assessments) relative to the PDR; CDR; milestones B and C, and FRP Decision Reviews; initial operational test and evaluation (IOT&E); IOC; and full operational capability.

(b) A broad description of the logistics support concept, to include an indication of the amount of support to be provided organically, by contract, or through public private partnership arrangements.

(c) A description of who the principal parties are in identifying and preparing logistics related acquisition documents, to include a description of the roles and responsibilities of each.

(d) A description of the logistics related information to be obtained from market investigation and market research.

(e) A description of how supportability analyses will be applied to the systems engineering process and contracts.

(f) A description of the logistics functions and tasks to be conducted under contract and how PBL business practices will be applied to those contracts. This includes, but is not limited to, the identification of incentives and penalties to be applied to contract performance.

(g) A description of how a competitive base for acquiring logistics support will be maintained.

(h) A listing of the commercial standards or specifications to be used in acquiring logistics products and services.

(i) A listing of the waivers to be obtained for use of other standards and specifications (that is, Government and military).

(j) A description of how a reduction in total ownership cost will be addressed in contracts.

(k) A description of how the selected logistics support concept will interface with the National Maintenance Program and Single Stock Fund initiatives.

(l) A description of how the Common Logistics Operating Environment (CLOE) enablers, (for example, embedded prognostics and diagnostics, and equipment or system health management) and the Army integrated logistics architecture (AILA) will be addressed in the system acquisition and support contracts.

(m) A description of how the CBM+ concepts and technologies will be addressed in the system acquisition and support contracts.

(n) A description of how embedded prognostics and diagnostics, data collection and transmission, embedded training, and training systems will be incorporated into the system acquisition and support contracts.

(o) A description of how component breakout, standardization, and interchangeability will be addressed in the system acquisition and support contracts.

(p) A description of how AIT and IUID will be addressed in the system acquisition and support contracts.

(q) A description of how acquisition and cross-servicing agreement planning will be, or has been, implemented in system acquisition and support contracts.

(r) A description of the core depot maintenance (hardware and software) analysis and the schedule for depot maintenance transition plan for weapon systems designated as core.

(s) A description of how the packaging, storage, and handling will be developed and executed.

(t) High risk areas that could impact system sustainment.

c. Total Systems Approach. Project managers will manage their acquisition programs to optimize total system performance and reduce total ownership costs. The total system includes, but is not limited to—

(1) The end item.

(2) The associated support items of equipment.

(3) The personnel to operate and maintain equipment identified in the BOIP feeder data.

(4) The system's training subsystem, including TADSS, integration, and life cycle support.

(5) Technical data, including—but not limited to—operations and maintenance manuals, standards, specifications, field manuals, engineering drawings, and software documentation.

(6) Transportation equipment.

(7) C4I equipment.

(8) Logistics processes and procedures.

(9) Physical security.

(10) Storage, maintenance, and training facilities.

(11) Industrial base capability.

(12) Support equipment and TMDE.

d. Logistics enablers to perform system health and usage monitoring, prevent failures, and improve maintenance. The PMs will strive to improve systems reliability, availability, and ease of maintenance to minimize the footprint of U.S. forces. The PMs will consider the following logistics enablers during system development:

(1) *Condition-based maintenance plus.* The PEOs, DRPMs and PMs will require that CBM+ capabilities be designed into all new equipment and upgrades of existing equipment where feasible and cost-effective. The CBM+ requirements are identified in the system's capability documents.

(2) *Remotely accessible embedded system prognostics and diagnostics capabilities.* The PEOs, DRPMs and PMs will consider system designs incorporating remotely-accessible embedded system prognostics and diagnostics capabilities in accordance with approved capability requirements, as cost effective technology allows. Key components or line replaceable units will have self-diagnostics and fault isolation capabilities. The PMs using embedded diagnostics and prognostics will ensure electronic linking to automated information systems. Embedded diagnostic and prognostic tools will be addressed in the LCSP (formerly the supportability strategy).

(3) *Intelligent software to automatically compensate for detrimental, environmental, and operational conditions.* The PMs developing systems will consider, as cost effective technology allows, system designs incorporating technological innovations to allow equipment to monitor the environment continuously and make automatic adjustments to support efficient operations.

e. Fuel standardization. The PMs will implement the provisions of AR 70–12 to standardize fuel requirements and reduce logistic burdens of fuel storage and control. This action will be taken consistent with the requirement to estimate the fully burdened cost of energy (fuel) prescribed by paragraph 6–9, below.

4–8. Acquisition of training devices

a. System TADSS (including other training technologies such as gaming technologies) and training support requirements to be procured as part of the acquisition program will be documented within the appropriate capabilities document and STRAP (required through TRADOC).

b. System PEOs, DRPMs, and PMs will coordinate their system TADSS acquisition strategy with PEO Simulation, Training and Instrumentation (STRI) to ensure compliance with established joint live, virtual, constructive (LVC) training architectures and network environments.

c. The PEO STRI will support the system PEO, DRPM, PM and USAMC in formulating the concept of all required TADSS, on a cost reimbursable basis. This includes-but is not limited to-the development of the TADSS acquisition strategy and life cycle cost estimate, considering common and reuse components, LVC integration, interoperability requirements and post-fielding activities upon transferring TADSS into sustainment.

d. The system PEO, DRPM, PM, USAMC, and PEO STRI will work together efficiently and effectively to execute TADSS acquisition and sustainment for each specific system.

e. Nonsystems TADSS will be procured as a materiel system in accordance with AR 350–38.

f. See additional requirements in paragraph 8–5*b*, below.

4–9. Warranties

a. A warranty exists in a Government contract to delineate the rights and obligations of the contractor and the Government for defective items and services, and foster quality performance.

b. The use of warranties is not mandatory. All Army acquisition organizations that wish to use a warranty will institute procedures to determine the cost-effectiveness (under AR 11–18) of warranties and to comply with FAR Part 46.7, DFARS Subpart 246.7, and Army warranty policy outlined in AR 700–139. Before negotiating a warranty, a business case is required to determine the value of the warranty's potential benefits as compared with the warranty's contract cost, including administration and execution. See the warranty management control evaluation checklist in AR

700–139 for additional information. The PEOs, DRPMs, and PMs are required to report results of the execution of the warranty during quarterly weapon system reviews. The PM should report on the achievement of the expected return on investment as determined by the business case analysis.

4–10. Electronic and information technology accessibility

Section 508 of the Rehabilitation Act of 1973 requires Federal agencies to procure electronic and information technology (EIT) equipment that is accessible to persons with disabilities. The law requires that EIT equipment and systems procured on or after June 21, 2001, comply with standards written by the Architectural and Transportation Barriers Compliance Board (Access Board). These standards were published December 21, 2000, in the Federal Register. Equipment that falls under the term EIT includes technology such as Web pages, software applications, computers, self-contained kiosks, copiers, multimedia, and telecommunications systems. These standards are intended to make these technology products more accessible to individuals with disabilities. (See FAR Subpart 39.201(a).)

Chapter 5
Test and Evaluation

5–1. Overview of test and evaluation

a. Planning for T&E begins with the development of user needs and continues throughout the acquisition processes. Early M&S informs and influences T&E planning. Robust M&S and T&E must work together to realize cost-avoidance and risk-reduction potentials. System evaluators participate in IPTs throughout the acquisition process.

b. Specific T&E responsibilities, organizations, policies, and procedures are identified in AR 73–1 and DA Pam 73–1.

5–2. Test and evaluation in support of systems acquisition and development

The primary purpose of T&E is to support system development and acquisition.

a. Army T&E provides information to the following individuals:

(1) The MATDEV and PM for identifying and resolving technical and logistical issues.

(2) Decisionmakers responsible for procuring operationally effective, suitable, and survivable systems.

(3) Operational users (CAPDEV, trainers, and logisticians).

b. The T&E strategies will integrate all testing and M&S activities as an efficient continuum. Developmental and operational testers will assist the MATDEV and CAPDEV in developing an integrated T&E strategy, with the system evaluator.

c. All acquisition programs will be evaluated continuously. Continuous evaluation is a strategy that ensures responsible, timely, and effective assessments of the status of a system's performance throughout its acquisition process. For materiel systems, it begins as early as the capabilities-based assessment in the JCIDS process. For IT and NSS systems, it begins as early as the information management plan development. For both, it continues through system post-deployment activities. The continuous evaluation process includes system evaluation and system assessment.

5–3. Test and evaluation integrating modeling and simulation

Modeling and simulation will be an integral part of T&E planning and will be used to reduce time, resources, and risk to the T&E programs.

a. Verified, validated, and accredited M&S will be applied as appropriate through the system life cycle to support efficient test planning and supplement actual T&E, especially to accommodate test and resource limitations.

b. A system's TES and TEMP will provide a roadmap for integrated M&S, T&E plans, schedules, and resource requirements necessary to accomplish the T&E program. All relevant information of the test and simulation strategy will be described in the TEMP in accordance with DA Pam 73–1.

c. Validated empirical test data will be applied to improve the model-test-model process for the PM, USAMC, HQDA, and other Army agencies.

5–4. System evaluation

Independent system evaluations and assessments are designed to provide unbiased advice of system development to the Army or DOD decisionmaker. The system evaluator, who is separated organizationally from the MATDEV and CAPDEV, ensures an independent perspective.

a. Evaluation process. The evaluation process consists of early and frequent assessments of system performance and safety during development. The purpose of an evaluation is to ensure that only operationally-effective, operationally-suitable, and survivable systems are delivered to the users.

b. System evaluation. System evaluation integrates experimentation, demonstration, and M&S information with available test data to address evaluation issues (that is, COIC and additional evaluation focus areas). Through the

system evaluation plan, the need for testing is determined, and unnecessary testing eliminated. As the system approaches an acquisition milestone or the FRP decision review, the system evaluator will produce a system assessment and/or evaluation to advise the decision review principals and MDA on the system's operational effectiveness, operational suitability, survivability, and the adequacy of testing. Additionally, the evaluator will recommend future T&E and system improvements. The system evaluation supporting the FRP decision review will use data from the initial operational test (when conducted) as a major data source, integrated with other credible data sources as defined in the system evaluation plan.

5–5. The test and evaluation working integrated product team

The MATDEV will form a T&E WIPT. The T&E WIPT's primary objective is to develop and document the T&E strategy in the TEMP. An integrated test and evaluation strategy can include separate DTs and OTs, combined DTs and OTs, M&S, and other events that generate credible data.

a. The MATDEV, PEO, DRPM, or PM will charter the T&E WIPT as soon as the materiel need is identified for all systems regardless of ACAT level (including IT and NSS).

b. The T&E WIPT will optimize the use of appropriate T&E expertise, test assets, targets, instrumentation, facilities, simulations, and models to achieve test integration, thereby reducing costs to the Army and decreasing acquisition cycle time.

c. The T&E WIPT resolves issues and assists the PM or MATDEV in developing and coordinating the TES and TEMP.

5–6. Test and evaluation review and reporting requirements

During the system acquisition process, T&E reviews are conducted, and reporting documents are published that describe how the T&E requirements will be (or were) satisfied. Submission of T&E documentation (that is, plans, results, and reports) to OSD will comply with the policies and procedures in DODI 5000.02.

5–7. Test and evaluation strategy

The PM shall submit a TES at milestone A that describes the approach for integrating developmental, operational, and live-fire T&E and addresses test resource planning. The TES shall include a test plan that addresses Technology Development phase activity, including the identification and management of technology risk, and the evaluation of system design concepts against the preliminary capability requirements identified in the AoA. Test planning shall address T&E aspects of competitive prototyping, early demonstration of technologies in relevant environments, and the development of an integrated test approach. The milestone A test plan will rely on the ICD as the basis for the evaluation strategy.

5–8. Milestone B and post-milestone B test and evaluation documentation

The PM has the overall responsibility to develop the TEMP. When approved, the TEMP serves as a contract between the acquisition, requirements, and the T&E communities for executing the T&E strategy. The TEMP provides key management controls for T&E in support of the acquisition process.

a. The test and evaluation master plan. The TEMP is the basic planning document for a system life-cycle T&E. The acquisition and T&E communities use the TEMP to generate detailed T&E plans and to ascertain schedule and resource requirements associated with the T&E of a given system. The TEMP provides the road map for integrating modeling, simulation, testing, evaluation plans, schedules, and resource requirements.

(1) Every nonmedical Army acquisition program will have a TEMP. Medical programs under a Food and Drug Administration investigational new drug or investigational device exemption do not require TEMPs. The TEMP is updated for each MDR (beginning with milestone B), acquisition program baseline breach, or significant change to the CDD, CPD, or information support plan (ISP).

(2) Army TEMPs will comply with the format and content identified in DA Pam 73–1.

(3) There will be one TEMP per system; however, a capstone TEMP is required for a program consisting of a collection of individual programs. (See DA Pam 73–1.)

(4) An Army-approved TEMP is required before committing T&E resources via the TSARC process.

(5) The PM shall attempt to resolve open issues before submitting a TEMP into the formal review process. If not possible, the PM will highlight the issue and provide a recommendation to the appropriate decisionmaker before submitting the TEMP.

b. System evaluation plan. The system evaluation plan documents the integrated T&E strategy. It consists of the evaluation strategy of the test and simulation execution that will be used throughout the system acquisition life cycle. The system evaluation plan addresses system COIC and additional evaluation focus areas, identifies data needs and sources, describes the approach to be used for system evaluation, specifies the analytical plan, documents required threat representations and major instrumentation, and identifies program constraints.

c. Operational test readiness statements. As specified in the Test Resource Plan (TRP) milestone schedule, an operational test readiness statement (OTRS) is provided before the start of the OT by: the capability developer; the

PEO, DRPM, or MATDEV; the training developer and trainer; the test unit commander; and the functional proponent. The OTRSs are presented during the Operational Test Readiness Review, preceding the start of the OT, to certify the readiness of the system for testing in each area of responsibility. An OTRS may also be required for some force development T&E and will be specified in the TRP (or Resume Sheet), if required.

d. Live fire test and evaluation documentation.

(1) A live fire test and evaluation (LFT&E) strategy will be developed for each program designated for LFT&E. The LFT&E strategy is approved as an integral part of the TEMP.

(2) The LFT&E test plan and detailed test plan documents satisfy the DOD requirement for a detailed T&E plan for LFT&E.

(3) The live fire test (LFT) results are contained in the final test report(s) that are provided through the Army T&E executive to the DOT&E. If the DOT&E approves the detailed test plan, then the Army T&E executive will approve the final test report for that LFT phase. For other LFT phases, the testing agency approves the report. The live fire evaluation findings and recommendations are contained in the system assessment and evaluation. The system assessment and evaluation is approved by the ATEC Commander (or designee) and is submitted through the Army T&E executive to the DOT&E.

5–9. Test and evaluation budget and financial considerations

a. The Army RDT&E appropriation will fund testing for a system before the full rate production decision. An Army procurement appropriation and/or OMA appropriation will fund testing conducted after the FRP decision. The MATDEV who is developing the system changes will fund testing of those changes using the same appropriation that funds the development. The IT and NSS will be funded from OMA or RDT&E, depending if the system is general purpose or developmental, respectively. The MATDEV will determine which appropriation to use.

b. The Director, T&E Office will provide the HQDA oversight of the funding for the Army T&E infrastructure. The MATDEV will plan, program, budget, and allocate appropriate levels of test funding for all system DT and OT (to include follow-on operational test and evaluation), as identified in the TEMP. The ATEC will plan, program, budget, and allocate test funding for joint T&E and multi-Service operational test and evaluation when there is no PM. The MATDEV will identify funding associated with specific system T&E (including instrumentation, targets, and threat simulators) in the system life-ycle cost estimates and the TEMP. The MATDEV will develop estimates of costs associated with replacement, repair, or refurbishment of tested equipment and other resources used during testing. Cost estimates will include the cost of test assets disposal, shipping, demilitarization, and environmental repair. Cost estimates will be recorded in the program office estimates. “Common” threat representations and major instrumentation items needed to support T&E that will be funded from sources outside of the program will be footnoted. Costs associated with damage to test equipment or facilities resulting from improper test procedures will be the responsibility of the test organization.

c. Instrumentation required or consumed in a particular test or used solely to support testing a particular item will be considered test-specific, and will be charged to the funds financing the conduct of the test. The MATDEV will identify costs associated with system-specific instrumentation items (including interface devices to provide connectivity to generic instrumentation systems) in the initial system acquisition cost analysis and resource requirements addressed by the T&E WIPT. Funding for the instrumentation will be carried in the system acquisition costs and provided to test organizations in advance of scheduled tests to ensure that instrumentation is available.

d. See AR 73–1 for a detailed discussion on T&E funding.

Chapter 6
Program Design

6–1. The program design purpose

Good program design requires a complex integration of processes, disciplines, and skills. This chapter discusses Army-unique policy applicable to Army programs. The Defense Acquisition Guidebook contains detailed information for program design.

6–2. Acquisition program baseline

a. In accordance with 10 USC 2435 and 2220, and DODI 5000.02, every Army acquisition program shall establish an APB. There is only one APB per program. For unit cost reporting purposes, ACAT ID and IC programs are measured against both the original baseline and the current baseline. The original baseline description (original APB) is the first APB prepared at program initiation (generally milestone B). The current baseline description—the current APB—is the latest approved APB. The original and current APB may be one and the same until the first APB revision. The program’s MDA is the APB approval authority.

b. The APB shall document objectives and thresholds for program performance, schedule, and cost. The PM bases the APB on users’ performance requirements, schedule requirements, estimated total acquisition cost, and total

sustainment costs. Performance shall include interoperability, supportability, survivability, net readiness, and, as applicable, environmental requirements.

c. The PMs shall emphasize RAM during the EMD phase. The threshold RAM value(s) shall be approved as part of the TEMP and recorded in the APB at milestone B. (See para 6–8 for additional RAM policy.)

d. The current APB shall be revised at milestone decisions and at full rate production. Revising an APB at milestones and at full rate production highlights cost and schedule deviations during the current phase, thereby enabling actions that may prevent more serious deviations.

(1) A current APB shall be revised only following a major program restructure that is fully funded and approved by the MDA or as a result of a program deviation (breach), if the breach is primarily the result of external causes beyond the PM's control. In all cases, the MDA will determine whether the APB should be revised. (See the information on the Army Configuration Steering Board in para 8–2, below.)

(2) The MDA will not authorize multiple current-APB revisions, or revisions to the current APB if proposed merely to avoid a reportable breach.

e. The PM shall notify the MDA immediately of all program deviations (cost, schedule, and performance). The PM will provide the MDA reasons for the deviation and planned actions within 30 days of the deviation occurrence. Within 90 days of the deviation occurrence, the PM shall—

(1) Submit a revised APB for approval (changing only those parameters that have breached).

(2) Conduct a program review at an appropriate level (for example, an Army OIPT review for an ACAT IC program or an IPR for an ACAT III program when the PEO or DRPM is the MDA).

f. Significant and critical unit-cost growth measurements against the approved APB that are applicable to ACAT ID and IC (MDAP) programs are found in 10 USC 2433.

(1) A significant unit-cost breach to the current baseline is greater than, or equal to (≥) 15 percent program-unit-cost growth. A significant unit-cost breach to the original baseline is represented by ≥30 percent program-cost growth. In the case of a program deviation that is a "significant" unit-cost breach to the current baseline, only the current APB shall be revised. In the case of a significant breach to the original baseline, the APB is not revised, but remains in place to measure ongoing unit-cost status compared with the original baseline. In both instances, the SA must notify Congress that a significant breach has occurred.

(2) A critical unit-cost breach to the current baseline is represented by ≥25 percent program-unit-cost growth. A critical unit-cost breach to the original baseline is represented by ≥50 percent program-unit-cost growth. For a program deviation that is a critical unit-cost breach, the SA must notify Congress that a critical breach has occurred. The USD (AT&L) must then certify the program to Congress and will direct the program structure to be reflected in a revised APB. The new APB will reset both unit-cost measurements against the original and current baselines in the APB to zero.

g. See DA Pam 70–3 for additional APB information.

6–3. Systems engineering

a. Regardless of the acquisition category, all programs shall develop and follow a systems engineering plan (SEP) to execute and manage a disciplined systems engineering process supporting the acquisition strategy adopted by the program. An evolutionary process supporting the acquisition strategy is preferred.

b. The Assistant Deputy for Acquisition and Systems Management, in the Office of the ASA (ALT), will chair an Army Systems Engineering Forum to institutionalize effective SE practices across the workforce and programs, and promote collaboration across the requirements, acquisition, logistics and testing communities.

c. Each PEO, DPRM, and PM shall appoint a Chief Systems Engineer and subordinate Chief Software Architect (CSWA) to guide and implement SE for the program. Hardware programs without software do not require an architect.

d. Systems engineering (SE) shall be the technical basis shaping the cost, schedule, supportability and performance objectives for the acquisition program. The SE process shall be integrated into the practices and processes followed by the acquisition PMO and contractors. Software acquisition risks, processes, and products shall be highlighted and addressed as a distinct entity within SE. (See paras 6–6, and 7–11 through 7–17, below.) Effective SE practices must support and be integrated into the following PMO key process areas:

(1) System and technical requirements development and management.

(2) Project technical planning.

(3) Project technical monitoring and control.

(4) Integrated project and team management.

(5) Measurement and analysis.

(6) Process and product quality assurance.

(7) Configuration management.

(8) Risk management.

(9) Solicitation and contract management.

(10) Transition to operations and support.

(11) Product validation (T&E).

(12) Product verification (track to requirements).

(13) Product integrations.

(14) Supportability, planning, analysis, and tradeoffs.

e. The PMs are responsible for developing and implementing the SEP for their programs. The Director of Systems Engineering (within the Office of the USD (AT&L)) shall be the SEP approval authority for MDAPs. For all other programs, the PEO or DRPM will be the approval authority. The SEP is required for all milestones (beginning with milestone A) and is updated whenever a significant program restructure, or APB breach occurs.

f. The systems engineering program will ensure the consideration and implementation of—

(1) A data management program that assures the availability of data and documentation configuration management (that is, performance specifications, detailed design packages, commercial item descriptions, 3–D models) that will be necessary to support testing and evaluation, production, competitive re-procurement, training, maintenance and repair, and recapitalization throughout the life cycle of the item.

(a) Regardless of the planned sustainment approach, ACAT I and II PMs shall assess the long-term technical data needs for their systems and reflect that assessment in a DMS, which is first required at milestone A. While not specifically required, ACAT III programs are strongly encouraged to assess technical data needs due to the influence of data management and technical data rights on the ability to produce, operate, sustain, and dispose of equipment and software. The DMS shall—

1. Be integrated with other life-cycle sustainment planning and included in the program's AS. The DMS shall be approved in the context of the AS before issuing a contract solicitation.

2. Assess the technical data rights and data required to design, manufacture, and sustain the materiel and software systems, and support re-competition for production, sustainment, modification, or upgrade. The results of these assessments shall be described in the DMS section of the AS. The assessment results shall include the costs, benefits, risks, and impacts of acquiring and not acquiring the rights to use the technical data, and delivery of the technical data to a Government location or through formal access at a non-Government location. "Formal access" is access to data delivered contractually that the Government has an enforceable right to access, copy, and use consistent with the terms of the contract (such as data at a non-Government location). The assessment shall explain the rationale for the approach taken toward accessing and delivering data, and describe the planned approach to acquire, safeguard, and maintain the technical data and data rights.

3. Address the merits of including a priced contract option for the future delivery of technical data and associated license rights that were not acquired upon initial contract award. Data is acquired normally with unlimited rights or Government Purpose Rights, and it is the contractor's responsibility to verify any assertion of restricted use and release of data.

(b) The PARCs supporting PEOs, DRPMs, and PMs in the acquisition and sustainment of ACAT I and II programs shall ensure that PEOs, DRPMs, and PMs are advised appropriately on the Government's technical data rights and their responsibilities under 10 USC 2320 and 10 USC 2321 as amended by Section 802, Defense Authorization Act of 17 October 2006, Public Law 109–364.

(c) The PEOs, DRPMs, PMs, and PARCs will ensure that the provisions of FAR Subpart 12.211, FAR Subpart 27.4, and DFARS Section 207.106 and Subpart 227.7103–1 and 227.7203–1 are appropriately applied to contracts in keeping with their DMS and acquisition strategy.

(d) With each contract, the assertions to rights in data must be solicited, reviewed, and challenged. The PEOs, DRPMs, and PMs shall leverage the automatic or standard data rights provided in 10 USC and the DFARS by challenging invalid data assertions and unjustified data delivery costs. The initial Government position on the rights to data issues or disagreements and the proposed resolutions should be established prior to contract award.

(2) An integrated digital environment, using interoperability standards for data exchange, to allow every activity involved with the program to create, store, access, manipulate, and/or exchange data digitally and cost effectively for all areas of systems engineering.

(3) A configuration management process for establishing and maintaining consistency of a product's performance, and functional and physical attributes with its requirements, design, and operational information throughout its life cycle. The PM shall assume control of Class 1 configuration changes to the initial product baseline after system-level CDR.

(4) The use of performance specifications (that is, DOD performance specifications, commercial item descriptions, and performance-based non-Government standards) when purchasing new systems, major modifications, upgrades to current systems, and commercial and nondevelopmental items for programs in all acquisition categories, where practicable.

(5) Value engineering on projects and programs as required by Section 4306, Public Law 104–106; 41 USC 432; and Office of Management and Budget (OMB) Circular A–131. The value-engineering methodology will be used in problem-solving, cost-containment, and cost-reduction efforts.

(6) A product-definition data process for acquiring product data on contract, and controlling and monitoring the delivery of that data over the system life cycle.

(7) The use of standardization documentation (for example, military standards, military specifications, and performance specifications) to reduce life-cycle costs, schedules, and risks significantly, while improving reliability quality and logistics support.

(8) System safety risk management into the systems engineering process to facilitate ESOH risk decisions, provide a means to alert users of residual hazards, and protect the force.

(9) Parts management in accordance with MIL–STD–3018, to reduce the logistic footprint and lower total life-cycle costs.

g. Systems engineering must be accomplished from a system-of-systems perspective. Systems engineering will be integrated fully with other systems that have an interoperability requirement. This includes technical, operational, and schedule synchronization among interoperable systems; logistics considerations; diminishing manufacturing sources and materiel shortages; and industrial base life-cycle impacts.

h. The PM will ensure that ESOH considerations are included in the systems engineering process.

(1) The MATDEVs develop and update a PESHE periodically (regardless of ACAT level) that includes ESOH responsibilities, the strategy including ESOH in the systems engineering process, identifying and mitigating ESOH risks, identifying hazardous materials, and an overall management plan and completion schedule for National Environmental Policy Act (NEPA) documentation. The NEPA compliance schedule should be provided in the PESHE and the AS. The ESOH section of the AS summarizes the PM's strategy for identifying and managing ESOH risks and the requirements for establishing the organization, responsibilities, milestones, and budget estimates for the overall ESOH program.

(2) The MATDEV will establish programs to address system safety, hazardous materials management, and pollution prevention, including plans for minimizing and eliminating all system-related materials, and disposing of them safely.

(3) The PM shall document that ESOH risks are being managed and mitigated in accordance with MIL–STD–882. The PM will have system safety programs to meet the safety risk management requirements of this regulation. The safety risk management process contains five steps: identify hazards, assess risk, make risk decisions, implement, and supervise. The system safety function supports the MATDEV's risk management process. The system safety management plan documents how the MATDEV will identify, track, and manage system hazards. If the PM has tailored the program's risk decision authority matrix, changing the levels of decision authority from MIL–STD–882, the change(s) must be documented in the AS and submitted for approval to the highest affected level of authority. The PM will report the status of ESOH risks and acceptance authority decisions at technical program reviews.

(4) The PMs shall conduct NEPA analyses when they are action proponents. The intent of NEPA is to identify and mitigate potential environmental impacts associated with system-related activities before initiating those actions. The Army implementation of NEPA is codified in 32 CFR 651. A NEPA compliance schedule must be prepared and documented in the PESHE and AS for program activities such as the design, production, manufacture, test, live fire test, maintenance, operation and disposal of the system.

(5) The Army Health Hazard Assessment Program assists the PM in meeting health hazard risk management requirements of DODI 5000.02 and AR 40–10. The health hazard risk management process, like the safety risk management process above, includes hazard identification, risk assessment, risk decisions, control implementation and evaluation, and supervision. Health hazards are routinely included in safety hazard tracking systems to ensure that they are adequately addressed by the PM's ESOH hazard risk management process. These risks will be documented and tracked in the overall ESOH risk management program and summarized in the PESHE.

(6) The PM will use the Army toxicity clearance process that provides approval and guidance for the safe use of new materials and chemicals. The PM will identify technically feasible materials proposed for specific Army use and request a toxicity clearance as detailed in DA Pam 70–3. Based on the PM's request, the U.S Army Public Health Command's Toxicity Evaluation Program then develops the toxicity clearance that approves or disapproves the specific use, and any safety requirements.

6–4. Environmental disposal costs

a. The PMs will develop and maintain an estimate of hazardous waste generated at the time of disposal. This estimate will facilitate environmental liability reporting at disposal, which supports the Army's financial reporting requirements. Most hazardous waste generated at decommissioning; shutdown; or disposal of equipment or other property, plant, and equipment assets is the same (from an environmental regulatory perspective) as hazardous wastes generated routinely from daily operations.

b. The costs associated with disposal of hazardous wastes generated routinely are classified as an operating expense not reported within the disposal liability. Hazardous waste disposal that does not occur in normal operations and maintenance that exceeds a materiality threshold of $25,000 per item will be considered an environmental disposal liability.

c. As an exception, all costs of wastes from nuclear operations and disposal are captured and reported as an environmental disposal liability.

d. See DOD 7000.14–R, volume 4, chapter 13, for additional information.

6–5. Modeling and simulation planning

a. The PMs will incorporate M&S in their acquisition strategies, as prudent, to reduce cost and accelerate decision cycles in system engineering and test and evaluation activities throughout the acquisition process. The M&S planning should be documented in the SEP, TES, and TEMP. The M&S solutions should be considered as options to support training requirements when deemed appropriate.

b. The PMs will work through the ASA (ALT) System of System Engineering (SoSE) M&S representative to identify and address M&S issues. The SoSE M&S representative will work with the PM and the M&S community to identify resident M&S capabilities and potential gaps in solutions. The SoSE M&S representative and the PM must maximize the use of existing M&S solutions, not build new or add unique capabilities or functionality that become the PM's responsibility to resource.

c. In planning for M&S throughout the acquisition life cycle, the PM shall identify and fund required M&S resources early in the life cycle.

6–6. Software engineering

A system's software engineering process will fully integrate programs of other systems that have an interoperability requirement with it. This includes technical and operational synchronization and schedule coordination. Software engineering must be conducted from a system-of-systems perspective in accordance with approved Army initiatives for fielding and maintaining interoperable systems (for example, the Army Net-Centric Data Strategy).

a. Chief Software Architect. The PEO or DRPM CSWA shall be responsible for oversight and management of software development within the PEO's portfolio. The CSWA shall provide guidance for software architecture design and reviews to ensure consistent implementation of best practices and standards. The PM's SEPs should reflect consideration of appropriate software engineering processes as described in the International Standardization Organization's ISO/IEC 12207.

b. Independent expert program reviews. An independent expert program review (IEPR) is mandatory for all ACAT I software intensive programs. The IEPR will be conducted after milestone B and before the post-CDR assessment. The PM or other acquisition officials in the program's chain of authority (up to the AAE) should consider using IEPRs for all acquisition programs. The IEPR findings will be reported directly to the PM.

c. Software process improvement program. The Army's SPIP establishes continuous improvement in software development capability within Army software organizations.

(1) The SPIP will be based on an initial self-assessment of existing software processes, resulting in the identification of activities and resources necessary to achieve established goals within 6 years of the initial assessment.

(2) Army software organizations (including those at remote sites) having a minimum staff of 20 in-house software personnel, or an annual software development or maintenance budget of more than $2 million will establish an SPIP.

(3) The MATDEVs will encourage the identification and reuse of—

(a) Successful operational and reprogramming media and media support methods.

(b) Common software development, test, operating, maintenance, and support environments.

d. Software capability evaluations. A software capability evaluation (SCE) will be conducted to establish a prospective contractor's software development capability and process maturity. A goal for contractors participating in software development on all acquisition programs is compliance with Software Engineering Institute (SEI) level three (or its equivalent). If prospective vendors do not meet full level three equivalence, a risk mitigation plan is required to remedy deficiencies within 1 year of contract award. The SCE will be used in accordance with the Army Software Improvement Policy in any solicitation for a system that contains computer software if four or more of the following conditions exist:

(1) The acquisition is part of a multiphase program, as defined in the Defense Acquisition Guidebook, and is expected to proceed beyond milestone B.

(2) The estimated size of the developed software to be delivered is at least 50,000 source lines of operational code and has 150,000 source lines of code for all delivered software (operational, nonoperational support and test, nondevelopmental items, and commercial-off-the-shelf software). Code that is not to be delivered or maintained, such as temporary prototype code or test, is excluded from these estimates.

(3) The solicitation includes mission critical software components.

(4) The total estimated cost of the acquisition, including hardware, software, and all options, exceeds $10 million.

(5) The contract duration, including options, exceeds 2 years.

(6) The software development schedule is on the critical path, as defined by the PM.

(7) Any portion of the software could be subcontracted. (The strong likelihood that software will be subcontracted, based upon knowledge of prospective offers before receiving proposals, is sufficient to meet this criterion.)

e. Post-production software support.

(1) The PM is responsible for all software support throughout the life cycle of the system for mission critical computer resources (MCCR). The responsibility for preparing the input for the PPBE normally shifts from the PM to a software support activity (SSA). The PM shall define the criteria for selecting an SSA in the LCSP. An MCCR system

will make the transition into the PPSS phase of its life cycle the first full fiscal year after the weapon system's hardware production is complete. The PM will plan, program, budget, and execute all MCCR weapon system software support requirements until the transition of PPBE responsibilities from the PM to the designated SSA is complete. The PM will develop a memorandum of agreement with the SSA outlining the funding and support requirements. After PPBE duty transition is complete, the SSA will assume all PPBE responsibilities for the PPSS of the weapon system. Although PPBE responsibilities have shifted to the SSA, the PM is responsible for the system throughout its life cycle. After the PM concurs with the submission, the PPSS requirements and funding data will be submitted by individual system to HQDA. The PPBE data submissions for organically supported systems will be in accordance with the depot maintenance OP–29 process (per AR 750–1). Prioritization guidance issued by DCS, G–3/5/7 governs PPSS funding. The HQ, TRADOC will review the DCS, G–3/5/7 prioritization guidance and recommend adjustments to PPSS priorities based on near-term battlefield requirements.

(2) The PM is responsible for PPBE activities for assigned programs until the system is moved to the designated SSA for AIS. The PM will use the Management Decision Process to program and budget all PPSS before the transition to the SSA. The PM will develop a memorandum of agreement with the SSA outlining the funding and support requirements. After the PM concurs, the PPSS requirements and funding data will be submitted in accordance with the CIO process for AIS funding and prioritization. Although PPBE activities have moved to the SSA, the PM retains overall responsibility for the system.

(3) Procurement and RDT&E funds will be used for all software support requirements until weapon system hardware production is complete or to support significant modifications. However, OMA dollars will be used for software support after the weapon system hardware production is complete.

(4) The PPSS requirements will be categorized for prioritizing and funding as follows:

(a) Minimum essential. Correct operational defects and maintain minimum-battlefield functionality.

(b) Must fund. Changes required to—

1. Comply with the DISR or

2. Support OMA-funded weapons and AIS-system modifications and conversions.

6–7. System of system and family of system synchronization

a. System of system and family of system synchronization applies to all systems that exchange information, whether in development, production and deployment, or sustainment. All PEOs, DRPMs, and PMs will ensure system acquisition strategies incorporate an SoS and FoS perspective (Army and joint).

b. A fully coordinated synchronization encompasses more than technical considerations. It also involves the budgetary execution process. The timing and outlay of funds for each respective program are planned, approved, and integrated—particularly with the contracting process.

c. At each program milestone and major program review (to include PDR, CDR, and TRR), the PEO, DRPM, and PM shall—

(1) Identify and assess risk to achieving SoS and FoS synchronization requirements.

(2) Identify the data exchange requirements with other systems needed to achieve SoS and FoS interoperability requirements.

(3) Report system performance against SoS and FoS interoperability and interface requirements resulting from DT and OT.

6–8. Reliability, availability, and maintainability

a. The RAM requirements ensure an acquisition program is ready operationally when needed, will perform assigned functions successfully, and is economic to operate and maintain. The RAM programs are applicable to materiel systems; TMDE; training devices; and facilities developed, produced, maintained, procured, or modified.

b. The PMs for all programs shall formulate a viable RAM strategy that includes a reliability growth program integral to design and development, and initiate RAM engineering activities upon entering the acquisition life cycle. These activities will influence the investment in design, engineering, manufacturing, and testing necessary to meet established requirements. All RAM programs will be structured to demonstrate RAM performance before the FRP decision.

c. The RAM engineering activities also influence tradeoffs to keep within established targets. The PM should work with Army analytical and T&E organizations to ensure that RAM tradeoff and feasibility analyses include emerging best practices and comparisons to RAM performance of previous systems. The PM will optimize the balance between RAM investment, operational performance, and support cost throughout development and system operation.

d. Reliability, availability, and maintainability shall be integrated within the systems engineering processes, documented in the program's SEP and LCSP, and assessed during technical reviews, T&E (DT and OT), and program support reviews.

e. The RAM system (technical) requirements will be stated in quantifiable and measurable terms. Capability developers are responsible for defining critical operational issues and criteria, reliability, and maintainability information for capability documents and the TEMP. The operational mode summary/mission profile (OMS/MP) provides

expected life-cycle usage by type of operation and under what conditions. The failure definition/scoring criteria (FD/SC) provides reliability failure definitions and functionality thresholds applied during failure assessments; they are used as the basis for assessing RAM.

f. The RAM requirements placed in solicitations should include quantified RAM requirements and allowable uncertainties (such as statistical risks), the FD/SC, and the OMS/MP. Solicitations should require access to information adequate for evaluating the source data, models and modeling assumptions, methods, results, and risks. Solicitations should not require particular models or statistical test plans. Solicitations should not cite any language, specification, standard, or handbook that specifies "how to" design, manufacture, or test for reliability. Military Handbook 217 (MIL–HDBK–217) or any of its derivatives are not to appear in a solicitation.

g. The PMs are encouraged to use Government Electronics and Information Technology Association Standard 0009 (GEIA–STD–0009), and its associated contractual language.

h. The Reliability Program Scorecard should be used to evaluate contractor reliability proposals.

i. The PMs will maximize the use of M&S to demonstrate RAM and reduce testing costs. The ATEC shall use M&S to evaluate the level of sustainment KPP achievement based on RAM estimates from testing.

j. An EMD reliability test threshold will be established when a program's capabilities document includes the sustainment KPP (IT programs without hardware development are exempt).

(1) The RAM subgroup of the PM's test and evaluation WIPT will develop the reliability test threshold in coordination with ATEC and the user. The reliability test threshold shall be established before milestone B, incorporated into EMD solicitations, approved as part of the TEMP, and recorded in the APB at milestone B. The TEMP will describe T&E planning for evaluating the reliability test threshold.

(2) Programs are expected to meet or exceed the reliability test threshold in EMD. Multiple DT events may be necessary to surface failure modes that are difficult to identify with reliability M&S. The ATEC, with support from AMSAA, will review the materiel developer's reliability case documentation and available test data periodically to determine if the system is on a path to achieving the reliability threshold. Findings are reported to the T&E working integrated product team RAM subgroup. The program is expected to meet or exceed the reliability test threshold at the end of the first full-up, integrated, system-level DT event in EMD. The subgroup will define this DT event.

(3) Achieving the reliability test threshold will be a major focus during CDRs. The ATEC will conduct an analysis and evaluation of the system-level DT event used to demonstrate the reliability threshold value. If a reliability threshold breach occurs, ATEC will convene an in-process review to address the items listed in *(a)* through *(d)*, below. After the ATEC in-process review, the CG, ATEC will provide a recommendation through the Army T&E executive to ASA (ALT), along with the above-described supporting documentation. Coordination with the PEO or DRPM will occur before submitting the threshold breach report and recommendations to ASA (ALT). The following items are reviewed if a reliability threshold breach occurs:

(a) The PM's planning and implementation of corrective actions (CAs), the projected reliability as the CAs are implemented, and the programmatic impacts.

(b) The Army Evaluation Center's assessment of the PM's CA plan, system limitations, and capabilities—given the current level of reliability maturity, the projected system reliability, and the risk of the program getting back on track.

(c) The Army Evaluation Center's estimate (developed with support from the PM and AMSAA) of ownership cost impacts of the current reliability maturity level.

(d) The TRADOC assessment of the system's utility given its current level of reliability maturity.

k. A RAM scoring conference will be held to review, classify, and charge test data from system-level tests planned for assessing RAM requirements. A RAM scoring conference may be held following any test event where RAM data are collected. A RAM assessment will be held before each milestone to determine the impact of validated CAs on RAM estimates. System contractor personnel who participate in system development, production, or testing may not be involved in any way with establishing criteria for data collection, performance assessment, or evaluating operational test and evaluation results. (See 10 USC 2399.)

l. The PMs will track failure and repair histories for fielded systems, beginning with the first unit equipped. Tracking should focus on the identification of operating and support cost drivers and lead to cost-effective improvements. The level of data collected should be sufficient to detect component and system aging, identify components that repeatedly fail, and assess individual component reliability. The PMs should consider incorporating appropriate data collection capabilities as an integral (that is, embedded) part of their systems design, to collect this information cost effectively and unobtrusively.

6–9. Fully burdened cost of energy

a. All new Army acquisition programs (including new program starts and increments) with end items that consume energy shall include the fully burdened cost of energy needed to operate the system in their total ownership cost analysis. This applies to all ACATs, including information systems.

b. The fully burdened cost of energy will be estimated by DASA–CE for the analysis and evaluation of alternatives. Paragraph 3.1.6 of the Defense Acquisition Guidebook, and the associated paper, describe the estimating concept and methodology.

c. The PMs will use the results of the analyses in IPTs to determine expected SoS energy requirements, as appropriate, to support acquisition program design trades.

d. The PMs will include energy productivity considerations in the TDS, AS, SEP, LCSP, and in ownership costs.

6–10. Standardization in support of the warfighter

a. The Army Standardization Program is conducted under the authority and scope of the Defense Standardization Program as established by 10 USC 2451–2454 and 10 USC 2456–2457; DODI 4120.24, DOD 4120.24–M, DODD 5000.01; and the Defense Acquisition Guidebook. A senior official within USAMC will serve as the Army Standardization Executive with responsibility and authority for organizing, overseeing, and directing the Army Standardization Program. A senior official will be appointed as the standards executive within each Army acquisition organization to assist the Army Standardization Executive.

b. Standardization is an enabling strategy designed to help program offices and buying activities provide the warfighter with equipment that is reliable, technologically superior, safe, supportable, sustainable, and interoperable with other U.S. Services and coalition and multinational partners. Materiel developers will weigh decisions to standardize materials, parts, components, and other items needed to meet performance requirements against specific mission requirements, technology growth, and cost effectiveness.

c. Materiel developers will comply with DOD policy to use performance-based specifications or non-Government standards for all acquisition purposes. This includes re-procuring existing systems, subsystems, components, spares, and services not requiring detailed designs for repair, overhaul, rebuild, or recapitalization. Materiel developers may define an exact design solution with military specifications and standards only as a last resort.

d. Materiel developers will comply with initiatives requiring standardization to ensure digital interoperability and commonality through digital architectures. Standardization is implicit within initiatives that require systems under development to meet criteria for digital interoperability, such as CLOE and AILA.

e. Materiel developers will identify applicable ratified international standardization agreements early in the design process to ensure interoperability with the systems and equipment of the United States; American, British, Canadian, Australian (and New Zealand); and North Atlantic Treaty Organization partners.

f. The DA Pam 70–3 provides additional information concerning Army standardization program procedures.

g. Standardization for Army and DOD medical products is accomplished through the Defense Medical Standardization Board.

6–11. Acquisition business environment

a. The PEOs, DRPMs, and PMs will support the development and maturation of an acquisition business environment that enables the execution of documented business processes and provides decision makers with a common operational picture. The common operational picture is tailored to each level of management and portrays the health and status of the programs, projects, and systems managed by ASA (ALT). The acquisition business environment relies on data transparency to drive process effectiveness and efficiency; it makes reliable, relevant, and timely information available across the acquisition community.

b. Evolution of this environment will be guided by documented and managed business processes that are linked through enterprise architecture to their enabling IT systems, services, and data. The acquisition business environment will be supported by a managed process for identifying, maturing, and providing timely resolution to requirements for new or modified IT capabilities.

c. The PEOs, DRPMs, and PMs will support the integration and absorption of existing integrated digital environments into the acquisition business environment.

6–12. Records retention

System owners must schedule their automated information systems (to include systems in steady state (operational) and mixed life-cycle stage (under OMB Circular A–11, para 300.4)) for records retention in accordance with AR 25–400–2.

6–13. Privacy impact assessment

a. A privacy impact assessment (PIA) analyzes how personal information is handled and conforms to applicable legal, regulatory, and policy requirements regarding privacy. A PIA determines the risks and effects of collecting, maintaining, and disseminating information in identifiable electronic form. The PIAs examine and evaluate protections and alternative processes for handling information to mitigate potential privacy risks. (See the Terms section for a definition of personally identifiable information (PII).)

b. Section 208, E–Government Act of 2002, Public Law 107–347, requires agencies to conduct PIAs for all information systems that collect, maintain, or disseminate PII. The DODI 5400.16 states that PIAs are performed when PII about the public, federal personnel, contractors, and foreign nationals employed at U.S. military facilities internationally is collected, maintained, used, or disseminated in electronic form. A PIA is required—

(1) For existing DOD information systems and electronic collections where a PIA has not previously been completed.

(2) For new DOD information systems or electronic collections.

(3) Before developing or purchasing a new system.

(4) When converting paper-based records to electronic systems.

c. A PIA is not required when the DOD information system or electronic collection—

(1) Does not collect, maintain, or disseminate PII.

(2) Is an NSS (including systems that process classified information).

d. The MATDEVs shall complete PIAs using DD Form 2930 (Privacy Impact Assessment (PIA)) and submit them to the CIO/G–6 via e-mail to CIO_G6PIA@conus.army.mil.

6–14. Unplanned stimuli

a. The reactive nature of munitions makes them susceptible to degradation and destruction when exposed to stimuli, such as bullet impacts, fragment impacts, fires (fast cook-off), heating (slow cook-off), shaped charge jets, and explosions (sympathetic detonation). These reactions may cause significant damage or injury to weapons, crews, equipment, and storage and transportation systems. Insensitive munitions enhance system survivability by minimizing the likelihood and extent of potential damage from unplanned munitions reactions. The DODD 5000.01 requires that all systems containing energetic materials (for example, explosives, propellants, pyrotechnics) comply with insensitive munitions criteria. To be fully IM compliant, systems must pass MIL–STD–2105c tests for their reaction to unplanned stimuli.

b. All munitions developers will apply survivability design features and materials in munitions and integrate them with program planning and execution. The Army lead agent for insensitive munitions (ASA (ALT) (SAAL–ZS)), which was formerly referred to as the "Army Executive Agent for Insensitive Munitions," will develop procedures to execute this mandate. This includes establishing regulations and guidance and assisting MATDEVs and CAPDEVs in providing munitions and weapon systems that can withstand unplanned stimuli. The Army Insensitive Munitions Board completes technical assessments of IM program compliance to inform PMs and the acquisition community. The PEOs or DRPMs responsible for systems that contain energetic materials develop and submit insensitive munitions strategic plans (IMSPs), for the lead agent's review before submission to the office of USD (AT&L) and the joint staff. The IMSPs include information about IM status of all systems with energetic materials in the PEO's or DRPM's portfolio, including non-IM-compliant items, with plans of action and milestones (POA&M) for complying with IM. The JROC's approval of the IMSP enables continued procurement of non-IM-compliant items. Items not covered in an approved IMSP require an out-of-cycle waiver. The Army Insensitive Munitions Board reviews the IMSP and POA&M to assess the feasibility of IM technical approaches.

6–15. Item unique identification

Item unique identification (IUID) is the process of physically marking personal property items in inventory and operational use with unique item identifiers (UIIs). "Personal property" is all property (systems, equipment, materials, and supplies). Real property (land and improvements to land or facilities) and records of the Federal Government are excluded. (See DODI 5000.64.) Unique item identifiers are unique, unambiguous, and permanent. The IUID process supports multifaceted business applications: IUID provides the Army standard data key (the UII) to enable SIM; integrates with the DOD-unique identification policy that aligns acquisition, maintenance, financial, and logistics processes and associated information systems; and provides a cornerstone for life-cycle traceability. (See DODI 8320. 04 for additional IUID policy.)

a. Item unique identification is required for all items delivered to the Government under contract, in inventory, in-use, or legacy items, when one or more of the following criteria apply:

(1) The Government's unit acquisition cost is $5,000 or more.

(2) The Government's unit acquisition cost is less than $5,000, when identified by the requiring activity as a DOD serially managed, mission-essential, or controlled inventory. Unique MDAP tooling designated for preservation and storage in the LSCP, or prior to milestone C in the SEP, are considered DOD serially managed and require IUID.

(3) The Government's unit acquisition cost is less than $5,000, and the requiring activity determines that permanent identification is required.

(4) A parent item contains an embedded DOD serially managed subassembly, component, or part within the parent item, regardless of value. (Both the parent item and the embedded item must be marked.)

b. The PMs will—

(1) Develop IUID requirements for their assigned systems using a systems engineering approach compliant with IUID policy and Army priorities.

(2) Develop IUID implementation plans that are aligned with the HQDA IUID Implementation Plan and in accordance with ASA (ALT) (SAAL–LP) guidance. The IUID implementation plans are summarized in the SEP for milestone A and are an appendix to the SEP for milestones B and C.

(3) Update IUID implementation plans annually, and obtain assigned MDA approval within 90 days of the anniversary date of the previous year's plan.

(4) Coordinate requirements and process development with applicable Government activities to ensure designated marking activities can support IUID implementation during marking-trigger events.

(5) Establish clearly defined milestones for implementing IUID; conduct quarterly reviews of IUID planning, implementation, and contractor compliance to assess progress; and establish corrective action plans to correct deficiencies found during these reviews.

(6) Ensure new and existing contracts incorporate DFARS 252.211–7003.

(7) Submit IUID resource requirements with POMs, PBRs and WSRs, and maintain internal records sufficient to support return on investment analyses.

(8) Use the PM, J–AIT as a source for AIT products and technical expertise.

(9) Provide IUID implementation status at program reviews.

(10) Incorporate IUID planning within SIPTs.

(11) Provide support to the Army IUID IPT.

Chapter 7
Information Superiority

7–1. Overview of information superiority

Information superiority is the key enabler for achieving network-centric warfare.

a. It is characterized by—

(1) A robust assured network that exhibits secure and seamless interoperability;

(2) Awareness of friendly and nonfriendly forces and situations;

(3) The fighting force's logistical status;

(4) The capability to improve information through correlation, fusion, and analysis on the move; and

(5) The capability to gain and exploit the information advantage on the battlefield.

b. The Army's enterprise-wide information architecture enables information superiority by connecting Soldiers from "space-to-mud" and "factory-to-foxhole." It enhances battlefield and sustaining base information systems, improving battle space awareness, command and control, performance based logistics, and Soldier readiness. This enterprise-wide information architecture requires management oversight and a system-of-systems acquisition discipline.

7–2. Intelligence support

If acquisition programs are initiated in response to a military threat, users will base them on authoritative and projected threat information. For production requirements and threat intelligence support to the U.S. Army, see AR 381–11.

7–3. Information interoperability

a. The CAPDEV characterizes information interoperability within an SoS or FoS, a mission area, and with other IT systems (and NSS) in capability documents. The CAPDEV also develops high-level operational graphics that depict information exchange requirements to achieve interoperability. The policies in the CJCSI 6212.01 series and the CJCSI 3170.01 series apply.

b. The PM and Life Cycle Software Engineering Centers will coordinate with the central technical support facility to address Army interoperability requirements before releasing hardware and software to the field. This applies to Army operational- through tactical-level C4I systems (regardless of ACAT).

7–4. Army interoperability certification

The CIO/G–6 is the Army's interoperability certification authority. The CIO/G–6 will make an interoperability determination for all Army IT and NSS systems before fielding, training, or materiel release. Certification testing in accordance with Army interoperability certification testing will be conducted by a CIO/G–6 approved test agent and will be conducted at a CIO/G–6 accredited site. The PM, system manager, or Life Cycle Software Engineering Center will coordinate with the central technical support facility to address Army interoperability requirements. Systems that require joint certification by the Joint Interoperability Test Command will coordinate with CIO/G–6, per AR 73–1. Certifications requirements follow:

a. The PMs or system managers will program and budget funding for interoperability testing. Army interoperability testing and certification will be addressed in the program's TEMP or in a test concept document.

b. The IT and NSS testing that supports Army interoperability certification will be addressed post-milestone C in operational test readiness reviews. Certification is an entrance criterion for decision reviews, operational evaluation and testing, and materiel release. The PM or system manager must submit any modifications that impact interface requirements to fielded systems for re-certification before materiel release approval.

c. A system is considered a baseline system when certified as interoperable. The PM or system manager will make no unilateral changes to the baseline system that have the potential to affect interoperability, unless approved by CIO/

G–6. The PM or system manager must bear the re-certification cost of all affected systems within 12 months from the date of approval.

d. The PM or system manager will coordinate with the CIO/G–6 to address all joint interoperability requirements with the other combatant commanders, Services, and agencies.

e. The PMs will adhere to the requirements of the Army Data Management and Standards Program as stated in AR 25–1.

7–5. Information support plan

The PM will develop ISPs for all programs when connected to the communications infrastructure. Developing a technical architecture and system architecture is part of the PM's ISP submission. The policies in DODI 5000.02 apply. Information regarding ISPs (including recommended procedures and formats) can be found in chapter 7 of the Defense Acquisition Guidebook. The ISP should provide the identification and documentation of information needs, infrastructure support, interface requirements, and dependencies focusing on net-centric, interoperability, supportability, and sufficiency concerns per DODI 4630.8

7–6. Electromagnetic environmental effects and spectrum supportability

The PM will design all electric or electronic systems and equipment to be compatible with other electric or electronic systems and equipment and the operational electromagnetic environment. The statutory and regulatory requirements of DODI 5000.02 for spectrum certification compliance apply. The PM will comply with statutory and regulatory requirements of DODI 5000.02, DODI 4650.01, and AR 5–12 for spectrum certification, supportability, and risk assessment. The PMs must submit a preliminary request for projected frequency use to the Army Spectrum Management Office that adhere to the capabilities in the ICD. The request should be updated before milestone B.

7–7. Information assurance

a. All MATDEVs will integrate information assurance (IA), communications security, supply chain risk management, and telecommunications electronics materiel protected from emanating spurious transmissions into the entire information system life cycle. A risk management and mitigation strategy will be integrated throughout the system's life cycle. All IA-related commercial items and Government off-the-shelf software, hardware, firmware, and software components required to protect information systems will be acquired.

b. All information systems will be certified and accredited in accordance with AR 25–2 and identified with a specific mission assurance category and confidentiality level. They will comply with DODI 8500.2 IA controls and be certified and accredited according to a type accreditation or a site-based accreditation process. The information system being accredited may be a single system, SoS, enclave, or network.

c. All MATDEVs will address and include the addition of any IT and IA personnel (such as system administrator or network security manager(s) necessary to operate the new or expanded system or network) or access requirements and responsibilities for patch management and system administration as part of the development cost of the system or network.

7–8. Technology protection

The PMs will identify critical elements of their programs (referred to as CPI). The PMs with CPI will state the CPI in the TDS and develop a PPP before milestone B. See DA Pam 70–3 for details regarding CPI and the PPP.

7–9. Information technology registration

a. All IT systems, including pre-IT system acquisition projects and IT systems in sustainment, must be registered in the APMS with the correct mission criticality designation. The designations are mission critical or mission essential (MC/ME), or Other. The CIO/G–6 will use APMS to register fielded IT systems and MC/ME systems with the DOD CIO/G–6 per DODI 5000.02, enclosure 5.

b. The referenced regulation permits using appropriated funds for registered MC/ME IT systems, and prohibits DOD from awarding contracts for unregistered MC/ME IT systems or approving milestones for unregistered MAIS programs.

7–10. Defense Business System Management Council certification

The PMs will ensure that IT business system development and modernization investments that exceed $1 million have Defense Business System Management Council certification before obligating any funds. Additional Defense Business System Management Council certification information and requirements are documented in the CIO/G–6 IT investment certification and annual review standard operating procedure, at https://www.us.army.mil/suite/doc/10877079. The PMs can contact ASA (ALT) (SAAL–RB) for assistance.

7–11. Programming languages

The PM will select the programming language that best supports a program's life-cycle cost, quality, performance,

schedule, interoperability, and supportability goals. The selection of an appropriate programming language(s) and supporting rationale are subject to review during the milestone and system approval process.

a. Approved programming language standards for third generation languages are designated in the DISR.

b. There are no restrictions on the use of fourth-generation languages unless specifically addressed in the DISR.

7–12. Modular open systems architecture

Government software and hardware standards for modular open systems architecture (MOSA) shall be leveraged, matured, and developed to facilitate reuse and portability of software and hardware. In addition, MOSA will be used to reduce DOD-wide system development and maintenance costs by combining a common open systems interface software layer with an associated modular, standards-based hardware architecture.

7–13. Software risk plans and evaluations

a. Army ACAT I and II PMs will select organizations (either contractor or Government) that have domain experience in developing comparable software systems, a successful past performance record, and demonstrated mature software development capabilities and processes. As part of every contracting process, the organization will provide a software risk-mitigation plan and schedule for the PM's approval.

b. The risk-mitigation plan will include a copy of Standard Form 328 (Certificate Pertaining to Foreign Interests) executed by the vendor for a determination of foreign ownership, control, or influence within the vendor's organization.

c. The plan will describe risks associated with technology, complexity, defect prevention, interoperability, integration, information assurance, testing, and scheduling. The plan will also describe deficiencies and risks determined in a Government-led software risk evaluation. This evaluation will use SCE tools developed by the SEI, or those approved by the Deputy Under Secretary of Defense for Science and Technology. Although independent certification is not required, the Army's goal is full compliance with level three SEI Capability Maturity Model Integration. For organizations not at that level, the risk mitigation plan will also describe actions to ensure evolution to level three.

d. The plan will describe how, and when, it will be reviewed and revised during the life of the contract. The risk plan and evaluation will apply to each business unit(s) proposed to work under the contract. Reusing evaluation results within a 2-year period before the date of the Government solicitation is encouraged.

e. Using the Unified Modeling Languages and System Modeling Language to reduce software development risks is recommended.

f. The PM for ACAT III programs will require software risk mitigation plans; however, a full SEI SCE is not required.

7–14. Software testing

The PM will base software testing on defined test processes, procedures, and best practices against system requirements for all software products to be fielded. This includes new development software, commercial and nondevelopmental items, and reused software. Software changes to releases already fielded will go through a level of testing appropriate for the risk of the change failure. Guidelines for determining the appropriate level of testing for software changes are described in AR 73–1 and DA Pam 73–1. Interoperability testing of software with other systems (intra-Army and joint) is an essential software testing procedure. All software testing will use appropriate software metrics to assess software quality.

7–15. Software metrics

The PMs will negotiate software metrics with the software developer to affect the necessary discipline in the software development process and to assess the maturity of the software product. At a minimum, the metrics should address—

a. Schedule and progress toward work completion.

b. Growth and stability regarding delivery of the required capability.

c. Funding and personnel resources regarding the work to be performed.

d. Product quality regarding delivered products to meet the user's need without failure, as reflected in associated requirements documents.

e. Software development performance to meet documented program capability requirements.

f. Technical adequacy of software reuse, programming languages, and standard data element uses.

7–16. Software acquisitions through modular contracting

The PMs will apply software design, development, and budgeting, and conduct program implementation that permits using modular contracting for major information technology acquisitions, as described in 41 USC 434. They will ensure acquisition strategies for software development acquisitions incorporate:

a. Modularity in contract structures and deliverables.

b. Development processes that support the PM's strategy and objectives preferably using an evolutionary acquisition strategy.

c. A requirements baseline for each succeeding contract increment.

d. Processes for keeping cost, schedule, and functionality aligned—that is, for making tradeoffs that recognize the cost implication of changes.

e. Appropriate contract types, incentives, and award fees.

7–17. Software support for life-cycle responsibilities

a. The PMs are responsible for the post-production support plan for system software support throughout the life cycle of the program.

b. The PMs may transfer system software support to a sustaining command when—

(1) A transition plan is negotiated among the PM, the prospective sustaining command, and the assigned software engineering center (when different than the sustaining command). The negotiated transition date must occur after the requirements for system software support funding have been documented in the POM. (This generally equates to no less than 2 years before the anticipated transition date.)

(2) The first full fiscal year after the hardware production line closes.

(3) The first full fiscal year after completion of software fielding for systems using the Common Hardware System.

c. The PPSS applies only to system software support for systems that have completed the transition to sustainment and the depot maintenance OP–29 process.

d. The currently transitioned front line systems software that requires PPSS will continue to use established processes for funding and will be prioritized to retain minimum essential capabilities. If a PM selects an existing front-line system as a materiel solution, the PM is responsible for coordinating the extension of life-cycle duration and associated funding changes. The PPSS activities must maintain the capacity to be responsive to warfighter high priority problem reports and enhancements as approved by appropriate configuration control boards.

7–18. Software authorization

The acquirer of any software product will ensure that the acquisition, use, reproduction, distribution, or transmission of computer software does not violate applicable copyright laws and licensing agreements. Only authorized and properly licensed computer software will be used on Army computers. See AR 25–1 for additional information.

7–19. Technology programs supporting administrative, work-related processes

Sponsors and MATDEVs of all IT programs that support administrative, work-related processes will comply with the following general design and development principles:

a. Ensure a process improvement analysis is performed and implemented for underlying processes before undertaking system development activities.

b. Incorporate appropriate authentication and confidentiality features.

c. Protect intellectual property rights adequately.

d. Protect individuals' privacy rights adequately.

e. Incorporate appropriate security safeguards as identified by DOD and Army policies.

f. Comply with appropriate Federal and Army technology standards.

g. Develop and maintain appropriate system documentation suitable for training system administrators and users.

h. Incorporate appropriate features to preserve data integrity.

i. Develop and maintain contingency plans to use when the system is unavailable, in accordance with DA Pam 25–403.

j. Incorporate effective and efficient record management and archival functions.

k. Incorporate training support based upon distance learning or computer-based training as appropriate.

l. Ensure the support infrastructure is sufficient for the resulting IT and NSS solution without significant degradation of other services provided through the host infrastructure.

m. Ensure that software has received required IA and Army interoperability certification documentation before fielding.

n. Establish appropriate administrative, technical, and physical safeguards to protect personally identifiable information in IT systems.

7–20. Purchasing commercial information technology

a. The primary source for commercial IT purchases is the Army Computer Hardware, Enterprise Software Solutions (CHESS) program under PEO Enterprise Information Systems. The CHESS contracts provide IT products and services that comply with NETCOM/9th SC (A), Army, and DOD policy and standards.

b. Purchasers of commercial hardware and software must satisfy their IT requirements by using CHESS contracts and DOD Enterprise Software Initiative agreements first, regardless of dollar value. Any purchase made outside of CHESS contracts requires a waiver issued by CHESS. A complete list of CHESS contracts and the online waiver process can be found at https://chess.army.mil.

c. When procuring IT services, consideration must be given to setting aside requirements for small businesses and other small business categories, in accordance with FAR Part 19. In order to assist the U.S. Army in achieving the statutory goal of service disabled veteran-owned small businesses (SDVOSB) in all prime and subcontract awards, use of non-DOD contract vehicles such as the General Services Administration's SDVOSB Government-Wide Acquisition Contract should be considered. If no small business capability exists, CHESS contract vehicles are the preferred source for acquisition of IT services.

d. Waivers from CHESS are not required when procuring IT services. However, if IT hardware and software are required as part of a non-CHESS IT services contract, a waiver for the hardware and software is required.

7–21. Army Knowledge Management waiver

a. Army Knowledge Management (AKM) is the Army's strategy to transform into a net-centric, knowledge-based force and is integral to achieving the Future Force. Army Knowledge Management's "Goal 1" is to adopt governance and cultural changes to become a knowledge-based organization.

b. Organizations using non-IT programmed funds in excess of $25,000 OMA and $100,000 RDT&E on an IT system will submit a request for an AKM Goal 1 waiver to CIO/G–6 for all IT expenditures.

c. See AR 25–1 for additional AKM information. See DA Pam 25–1–1 for waiver instructions.

7–22. Computer hardware re-procurement

a. The MATDEVs are responsible for planning, programming, and budgeting for re-procurement of computer hardware within their NSS until the system completes the transition to the sustaining command. The recommended review cycle for re-procuring computer hardware is 3 years from the initial date of installation, depending on individual system requirements, obsolescence, and fiscal constraints. The system review will be the basis for determining whether computer hardware re-procurement is appropriate. The initial fielding date of the system to the unit will be the baseline for the review to determine whether the computer hardware has reached obsolescence. The 3-year review cycle may be modified based on the following conditions:

(1) The computer hardware is no longer supported or maintained by the vendor.

(2) The computer hardware's functional capability no longer supports system software requirements.

(3) The computer hardware no longer supports information assurance requirements.

b. Serviceability, maintainability, and utility will also be considered in specific life cycle replacement decisions.

c. The MATDEVs will negotiate the system transition with the prospective sustaining command to ensure availability of logistics support and configuration management. Once the system has shifted to the sustaining command, the owning unit will be responsible for maintaining the equipment in accordance with appropriate TMs. The replacement of components will follow the procedures identified in the TMs. Systems or components with additional or enhanced capabilities will be re-procured in accordance with AR 700–127, AR 750–10, and standard configuration management practices for authorized levels of computer hardware.

Chapter 8
Army-Unique Policies

8–1. Milestone decision review forums

At each milestone review, the MDA must have a balanced assessment of a program's readiness to proceed into the next acquisition phase. Review forums may be formal or informal at the discretion of the MDA.

a. Army Systems Acquisition Review Council. The ASARC is the Army's senior-level review body for Army acquisition programs when the DAE, DOD CIO, or AAE is the MDA. The ASARC makes recommendations to the AAE. The ASA (ALT) chairs the ASARC. It is convened at formal milestones to determine a program's readiness to enter the next phase in the materiel acquisition cycle.

(1) An ASARC may also convene at any time to review the status of a program. The ACAT ID and ACAT IAM programs are subsequently reviewed by the DAB and ITAB, respectively.

(2) The ASARC executive secretary (SAAL–ZSA), is responsible for the administrative aspects of the meeting. After an ASARC, the executive secretary prepares an ADM for AAE review and approval.

(3) The ASARC executive secretary will also coordinate Army participation in DOD OIPT meetings.

b. Council membership. Members of the ASARC include—

(1) ASA (ALT) (Chair).

(2) VCSA.

(3) ASA (FM&C).

(4) ASA (IE&E).

(5) ASA (M&RA).

(6) Commander, USAMC.

(7) Commander, TRADOC.
(8) Army General Counsel.
(9) Director, Army Test and Evaluation Office.
(10) DCS, G–1.
(11) DCS, G–2.
(12) DCS, G–3/5/7.
(13) DCS, G–4.
(14) Army CIO/G–6.
(15) DCS, G–8.
(16) Director, Small Business Programs.
(17) Chief, Army Reserve.
(18) Chief, National Guard Bureau.
(19) Commander, ATEC.

c. Army overarching integrated product team. Army OIPT forums are conducted before CSBs and ASARCs. When the AAE or DAE is the MDA, the DASM (SAAL–ZS) chairs OIPTs for ACAT ID, IC, II, and III weapon systems; and the CIO/G–6 Principal Director for Governance, Acquisition, and Chief Knowledge Officer chairs OIPT forums for ACAT IAM, IAC, and III automated information systems. The Army OIPT will—

(1) Determine that issues should continue to be resolved at a lower level forum (for example, a WIPT).

(2) Recommend a "paper" ASARC, issuing an ADM without convening a formal ASARC. (A formal CSB is always convened.)

(3) Decide that unresolved issues require high-level review and recommend a CSB or ASARC, as appropriate. Under this structure, the CSB or ASARC will focus on the issues presented by the Army OIPT chair, and not conduct a full program review.

d. Army overarching integrated product team membership. The Army OIPT membership includes the following:

(1) ASA (ALT) DASM (SAAL–ZS), (Chair for ACAT I, II, and III weapon systems).

(2) CIO/G–6 Principal Director for Governance, Acquisition, and Chief Knowledge (Chair for ACAT IAM, IAC, III automated information systems).

(3) ASA (ALT) DASA (APL) (SAAL–ZL).
(4) Commander, ATEC.
(5) ASA (FM&C) Director for Army Budget.
(6) ASA (FM&C) Deputy for Cost and Economics.
(7) Director, Army T&E Office.
(8) Office of the ASA (IE&E).
(9) Office of the ASA (M&RA).
(10) Army Materiel Command.
(11) Training and Doctrine Command.
(12) Office of the General Counsel.
(13) DCS, G–1 MANPRINT Directorate.
(14) Office of the DCS, G–2.
(15) DCS, G–3/5/7 Capability Integration, Prioritization, and Analysis Directorate (DAMO–CI).
(16) Office of the DCS, G–4.
(17) DCS, G–8 Force Development.
(18) DCS, G–8 Program Evaluation and Analysis.
(19) Office of the Chief, Army Reserve.
(20) Office of the Chief, National Guard Bureau.
(21) ASA (ALT) Deputy for Plans, Programs and Resources (SAAL–ZR).
(22) ASA (ALT) Deputy for Research and Technology (SAAL–ZT).
(23) ASA (ALT) Deputy for Procurement (SAAL–ZP).
(24) ASA (ALT) Deputy for Defense Export and Cooperation (SAAL–ZN).
(25) Commander, U.S. Army Combat Readiness Center.
(26) Office of Small Business Programs.
(27) Additional participants as required.

e. In process review. The IPR is the review forum for ACAT II and III programs when the AAE delegates MDA responsibilities. General policies for reviewing IPR programs are the same as ACAT I and II programs when the AAE is the MDA. Reviews will be conducted at milestones and when the MDA deems necessary. The MDA will chair the IPR. Agency and command members will provide a representative with authority to act on behalf of the organization.

(1) The MDA shall document IPR decisions in an ADM.

(2) The MDAs will ensure that a reproducible record (hard copy or electronic media) is kept on all nonmajor systems within their mission areas, including a listing of systems, scheduled milestone reviews, an audit trail of IPRs conducted, and documentation of results.

f. In process review membership. The IPR membership includes the following:

(1) Functional support organizations.

(2) The CAPDEV (proponent and ARCIC CAPDEV—to include training representative—and system support organization).

(3) Logistician.

(4) Trainer (if different from CAPDEV).

(5) Independent evaluators.

(6) Others (as determined by the IPR chair).

g. Estimated termination costs.

(1) The PMs shall brief estimated program termination costs at every program milestone review and at the FRP Decision Review. The PM's information will focus on termination costs associated with active contracts and international agreements, and sustainment costs for any systems to be retained in Government inventory until demilitarization and disposal.

(2) For all ACAT I and IA programs, and for ACAT II and III programs when the AAE is the MDA, PMs shall brief estimated termination costs during Army OIPTs before ASARCs. The Army OIPT Chair will determine whether to brief estimated termination costs at ASARCs.

(3) When conducting special ASARCs for program terminations or baseline breaches, the PM shall cover potential liabilities in detail. At a minimum, PMs will include the termination liability strategy; personnel impacts; and impact to other intra-Army, joint, and cooperative allied or coalition acquisition programs. The PMs will also discuss termination costs associated with active contracts and ICRDA agreements and sustainment costs. The PMs should use program termination guidance contained in DA Pam 70–3 for briefings to the special ASARC.

8–2. Army Configuration Steering Board

A DOD goal is to develop and procure systems at or below the approved baseline cost estimate. Army acquisition policy is to adjust technical content and requirements to deliver as much of the planned capability as possible within the approved and budgeted program.

a. Applicability. Army CSB policy applies to all ACAT I and IA programs. Programs in FRP may be reviewed by the Army CSB because of a potential significant deviation from the approved APB cost, schedule, or performance parameters.

b. Membership includes the following:

(1) AAE (Chair).

(2) VCSA.

(3) Senior representative from the Office of the USD (ATL).

(4) Senior representative from the Office of the Joint Staff.

(5) ASA (FM&C).

(6) Army General Counsel.

(7) DCS, G–3/5/7.

(8) DCS, G–4.

(9) DCS, G–8.

(10) Chief, Army Reserve.

(11) Chief, National Guard Bureau.

(12) Director, Army T&E Office.

(13) Commander, ATEC.

(14) Commander, TRADOC.

(15) ASA (ALT) Principal Military Deputy.

(16) PEO or DRPM from the MDAP or MAIS program under review.

(17) Other senior Service representatives, as appropriate.

(18) Other functional organizations as needed.

c. Types of Configuration Steering Board meetings. There are two types of Army CSB meetings—the "trigger event" CSB meeting and the annual descoping CSB meeting.

(1) *Trigger event Configuration Steering Board.*

(a) A trigger event significantly impacts a program's APB-approved cost, schedule, or performance and shall be reviewed by the Army CSB before implementation. The following situations are considered trigger events:

1. Change to the TEMP.

2. Change to the POM.

3. Change to approved capabilities documents (for example, CDD or CPD).

4. Program failure or operational immaturity.

5. Proposed technology insertion.

6. Global war on terrorism requirements.

7. Army Requirements and Resources Board requirements.

8. Overseas contingency operations funding.

9. Change in strategic guidance.

10. Any program change (actual or proposed) that significantly impacts other programs.

(b) Trigger event changes will generally be rejected or deferred to future increments, and shall not be approved until funds are identified and schedule impacts mitigated.

(c) An ACAT I or IA PM, PEO, or DRPM shall promptly notify the CSB executive secretary (SAAL–ZSA) whenever the program's current estimate indicates that a performance, schedule, or cost threshold value in the approved APB may not be achieved or when the PM, PEO, or DRPM becomes aware that a trigger event may significantly impact a program's APB-approved cost and schedule.

1. The CSB executive secretary notifies the ASA (ALT) DASM (SAAL–ZS), who shall determine if an Army CSB review is required.

2. The trigger event CSB meeting shall occur within 90 days of notification to the CSB executive secretary.

(d) Any program experiencing changes that necessitate a trigger event CSB meeting shall undergo the CSB meeting before taking contract action related to the trigger.

(e) If the PM, PEO, or DRPM initiate a trigger-event change, the PM, PEO, or DRPM organization shall prepare the briefing and justification for presentation to the trigger event CSB meeting.

(f) If the trigger event change is initiated outside the PM, PEO, or DRPM organization (for example, by the Army staff), the CSB executive secretary shall schedule the trigger event CSB meeting and notify the PM, PEO, or DRPM. The staff element whose action leads to a trigger event CSB meeting justifies the action, prepares the majority of the information, and presents it to the trigger event CSB meeting. The PM, PEO, or DRPM shall provide an assessment of the impact of the proposed change to the baseline program.

(2) *Annual descoping Confiiguration Steering Board meeting.* The PEOs, DRPMs, and PMs present options to reduce program cost or moderate requirements at descoping CSBs. Annual descoping CSBs shall be held for those programs that did not undergo a trigger event CSB meeting during the calendar year. The CSB executive secretary shall schedule descoping CSBs and the PEO, DRPM, or PM prepares and presents the briefing. The descoping CSB shall determine which option(s), if any, should be implemented.

d. Army Confiiguration Steering Board decisions. For ACAT IC and IAC programs, the AAE shall issue an ADM documenting the CSB decision. The Army CSB decision shall be documented as a recommendation to the appropriate OSD MDA for an implementation decision regarding ACAT ID and IAM programs.

8–3. Type classification

Type classification (TC) is the process used to establish the degree of acceptability of materiel for Army use.

a. Type classification—

(1) Implements DOD 5000-series milestone C, FRP, and post-full operational capability life-cycle decisions and documentation discussed in chapter 3, above.

(2) Documents and provides data for authorization, procurement, logistics support, asset visibility, maintenance, and readiness reporting.

(3) Satisfies the Army acquisition management process to determine that materiel is "acceptable for Army use" prior to spending procurement funds.

(4) Integrates the acquisition process with standard Army logistics processes that lead to production and deployment (materiel fielding) of the materiel.

b. See AR 700–142 for TC policy details.

8–4. Sustainment readiness review

a. Sustainment readiness reviews (SRRs) are post-deployment reviews. They assess the performance of the support system of a weapon system or an equipment item. There are three types of SRRs—fielding, post-fielding, and WSR.

b. A fielding SRR is a formal after action review of a system fielding conducted by the PM.

c. A post-fielding SRR reviews the performance of the support system for all ACAT programs. It is conducted by the PM or responsible sustainment agency, chaired by the DASA (APL).

d. The WSR is the forum for presenting life-cycle weapon system and equipment fielding requirements for cross-PEG review and integration when preparing to develop the POM and program budget review. The WSR is quad-chaired at the O–6, GS–15, YA–03 (or equivalent)-level representatives from the DASM (SAAL–ZS); DCS, G–8, Force Development; DCS, G–4; and the DCS, G–3/5/7.

e. See AR 700–127 for detailed SRR policies.

8–5. Fielding issues and considerations

a. Supportability.

(1) Supportability will be addressed at all program reviews. Supportability is a critical element of all ACAT-level programs and is crucial to reducing life-cycle cost.

(2) Supportability factors should be stated as performance requirements that relate to a system's operational effectiveness, operational suitability, and life-cycle cost projections. Supportability planning affects a balance between program resources and schedule so that systems are acquired, designed, and introduced that meet defined capabilities, APB performance design criteria, and are supportable in the field.

(3) Supportability planning and analysis will be conducted as an integral part of the systems engineering process throughout program development. Supportability analyses will form the basis for related design requirements included in the system specifications and for subsequent decisions concerning how to support the system over its entire life cycle cost effectively. Supportability analyses will determine the optimum support strategy by comparing contractor and organic support alternatives to determine the life-cycle support that achieves best value while meeting the user's requirements.

(4) The AR 700–127 provides detailed policy for supportability.

(5) The PM will incorporate embedded training and the CLOE (including the AILA and CBM+), which uses embedded diagnostic and prognostic maintenance techniques to enhance user capability and reduce life-cycle costs.

(6) Commercial support resources should be used when they are available, cost effective, and can readily meet the user's requirements. The AR 715–9 provides additional policy considerations for contractors accompanying the force on the battlefield.

b. Training devices.

(1) The PEOs, DRPMs, and PMs shall establish a continuing relationship with PEO STRI throughout the acquisition life cycle of system TADSS. The PEO STRI will work with all PEOs, DRPMs, and PMs as they ensure effective and cost efficient execution of TADSS acquisition programs. System PEOs, DRPMs and PMs retain authority and responsibility for the procurement and life-cycle management of their system TADSS and must collaborate with PEO STRI during concept formulation of all future system TADSS on a reimbursable basis, unless released of the requirement by the AAE. Exceptions will be granted only when supported by a business case analysis that considers all performance, interoperability, operations, and sustainment requirements and identifies significant cost savings or avoidance over the projected system's life cycle.

(2) The acquisition of a training system will have the same priority as supported (parent) system or equipment. It will be developed concurrently with the supported system and will be available when the supported system is fielded. Systems will not be fielded without training subsystems.

(3) The PEOs, DRPMs, and PMs will develop TADSS that are interoperable across the LVC training environments, and support operational, institutional, home station, Combat Training Center, and deployed training.

(4) The MDA will ensure total system supportability before approving a system for FRP. Systems that do not consider full supportability will not be fielded.

(5) The PEOs, DRPMs, and PMs will ensure that programs can provide the requisite training aids and devices, and that the programs can be supported fully before granting approval to field the system.

(6) The PEOs, DRPMs, and PMs will ensure that all TADSS requirements (including training development, infrastructure upgrades, and integration of the system into fielded or developmental live, virtual, and constructive simulation and instrumentation systems) to support new or modified equipment acquisitions are planned, programmed, and budgeted in all POMs and budget processes. They will capture and include all system and system-support costs related to new or modified equipment acquisitions (including those system-support costs incurred by other than the program managers) in the system's management decision package for the related acquisition.

c. Materiel release.

(1) Materiel release (MR) is the process used to ensure materiel—

(a) Is safe for Soldiers when operated within stated parameters.

(b) Is suitable, has been fully vetted, and meets operational performance requirements.

(c) Can be supported logistically in its intended operational environment.

(2) The AR 700–142 and DA Pam 700–142 provide detailed policy, guidance, and procedures for MR.

d. Total package fielding.

(1) Total package fielding is the Army's primary fielding process. It is used to ensure that materiel systems and support are provided to the units using them, with minimal disruption. The materiel developer and fielding command will determine all requirements upfront; fund and requisition all needed items; consolidate the support items into unit level packages; and coordinate distribution of the major system, its associated support items of equipment, and the support packages to a central staging site or to the unit.

(2) The AR 700–142 and DA Pam 700–142 provide detailed total package fielding policy, guidance, and procedures.

e. Source of repair.

(1) Both U.S. law and DOD policy is to maintain adequate organic core depot maintenance capabilities to provide effective and timely response to surge demands, ensure competitive capabilities, and sustain institutional expertise. The PMs will conduct a core logistics analysis (CLA) and subsequent core depot assessment, based upon the results of the CLA, to meet 10 USC 2464 requirements.

(2) A DOD and Army mandated logical decision process (under AR 750–1) supports source of repair analysis (SORA). According to DODD 4151.18 and AR 700–127, MATDEVs should use a logical decision process to determine source(s) of depot-level repair. The MATDEV will consider maintaining essential core capabilities, assessing private sector risk, and obtaining the best value maintenance services—whether by contractor or organic depots. Core capabilities and related workloads must be reviewed at least every 2 years. Core capabilities to repair new weapon systems will be established within 4 years of IOC.

(3) The decision to use contractor support should be based upon analyses of alternative support concepts and supportability analyses performed early in the acquisition process. Before selecting contractor support, the analyses must show that the support will be provided in both peacetime and wartime, is the most cost-effective method, and is in the Government's best interest.

(4) The CLA must be a part of the acquisition strategy approved at milestone B (or at milestone C if no milestone B). A core depot assessment and SORA will be accomplished at milestone C.

(5) The AR 700–127 provides detailed Army policy and guidance on SORA.

8–6. Software blocking

a. Software blocking (SWB) is a process for synchronizing the development, testing, and delivery of a software intensive SoS (for example, Battle Command, Enterprise Business, and Generating Force systems). The SWB process is the mechanism that provides the necessary oversight and guidance needed to ensure SoS interoperability.

b. The SWB oversight enables interoperability between systems in blocking through synchronization, coordination, and facilitation of their software deliveries from interface definitions through successful Army interoperability certification testing, including subsequent release of maintenance updates and approved capability insertions through the tri-annual process. The SWB process has been adjusted to meet the LandWarNet/Battle Command capability set life-cycle time line.

8–7. Clothing and individual equipment

a. Explanation. Clothing and individual equipment items are relatively low-cost items that are worn and used by the individual Soldier in accordance with AR 670–1. They are part of the Soldier's equipment and integral components of the Soldier System. Therefore, they must be functionally compatible. Included in CIE are the following:

(1) *Clothing bag and dress uniform items.* This includes all Army uniforms in the initial and supplemental clothing allowances contained in CTA 50–900 for enlisted Soldiers; mess, dress, and service uniforms for officers; and optional purchase uniform items for all Soldiers. (See AR 670–1.)

(2) *Optional purchase uniform items.* This includes clothing bag and dress uniform items that officers and enlisted personnel may procure from Army military clothing sales stores with personal funds.

(3) *Organizational clothing and individual equipment.* The OCIE category includes items issued to enlisted and officer personnel in accordance with CTA 50–900, CTA 50–909, or CTA 50–970. These items are usually issued from central issue facilities and remain the property of the U.S. Army. These items include, but are not restricted to, ballistic and personal protection clothing and equipment; tactical and environmental clothing; nuclear, biological, and chemical clothing and equipment; and individual Soldier and unit equipment.

b. Decision authority for clothing and individual equipment. The decision authority for clothing bag, mess, dress, service, and optional purchase uniform items is the CSA.

(1) The AUB is the primary review forum for clothing bag, mess, dress, service, and optional purchase uniform items. The AUB resolves issues and makes recommendations to the CSA. The CSA approves the initiation and adoption of these items. The AUB will—

(a) Conduct reviews on new or improved items and make recommendations to the CSA for decision.

(b) Review policies for the wear of new or improved clothing items.

(2) The AUB meets as required, usually upon receipt of documentation from the PEO Soldier requesting a review.

(3) The AUB is chaired by DCS, G–4. Membership includes the following:

(a) ASA (ALT).

(b) ASA (FM&C).

(c) DCS, G–1.

(d) Director of Requirements, Office of the DCS, G–3/5/7.

(e) Director of Manpower and Force Analysis Division, Office of the DCS, G–8.

(f) Deputy Inspector General.
(g) Director, Army National Guard.
(h) Chief Army Reserve.
(i) Army Capabilities Integration Center, TRADOC.
(j) PEO Soldier.
(k) Senior female officer on the Army General or Special Staff.
(l) Sergeant Major of the Army.
(m) A senior female representative from the OASA (M&RA).
(n) A senior female noncommissioned officer (NCO).
(o) A junior enlisted female Soldier.
(p) A junior enlisted male Soldier.

(4) The DCS, G–4 is authorized to appoint an Associate Army Uniform Board composed of officers and NCOs to provide advice on uniform matters.

(5) Technical advisors normally invited to the AUB are ATEC independent evaluators; the Chief, Army Nurse Corps; Public Affairs Office staff members; and others at the request of the Chair, AUB.

c. Clothing and individual equipment basis of issue documentation. The DA Form 5965 (Basis of Issue for Clothing and Individual Equipment (CIE)) will be used to coordinate and document the BOI for new CIE items.

d. Procurement agencies. The DLA Troop Support, DLA Aviation, and General Services Administration procurement agencies provide CIE support by—

(1) Executing full-scale production procurement in support of CIE.

(2) Executing distribution of CIE items in accordance with Army plans and priorities.

(3) Preparing specifications for CIE items in coordination with the PEO Soldier.

8–8. Joint programs

a. A joint program is any acquisition system, subsystem, component, or technology program with a TDS or acquisition strategy that includes funding by more than one DOD component during any phase of a system's life cycle.

b. Joint program managers will develop memorandums of agreement (MOAs) with their participating program components and memorandums of understanding (MOUs) with international participants.

c. The MOA and MOU will specify the relationship and respective responsibilities of the designated lead executive component and participant and the other participating components and participants. The MOA and MOU will address (at a minimum) technology and system requirements, funding, manpower, capability documents, approval processes, and other supporting program documentation. Every joint program is different; each MOA and MOU will be tailored to allow maximum program operational flexibility. The Defense Acquisition University's (DAU's) Joint Program Management Handbook; the USD (AT&L) Director, International Cooperation's International Armaments Cooperation Handbook; and the international agreements generator software program provide excellent, in-depth explanations of joint program MOAs and MOUs.

d. When the Army is designated by OSD as the lead component for a joint program, the Army joint PM will develop and staff an MOA and MOU that are approved by the MDA.

e. See DA Pam 70–3 for additional information on joint program management in the Army.

8–9. International cooperative programs

a. An international cooperative program is any technology development or acquisition program that includes participation at any time by one or more allied, coalition, or friendly foreign nations through an ICRDA agreement. Acquisition-related agreements may use the streamlined procedures for review and approval in AR 550–51 and AR 70–41.

b. Program managers and MATDEVs will use the appropriate ICRDA agreement in accordance with AR 70–41 and the DOD international agreements generator. Each agreement will be supported by a Summary Statement of Intent, a Delegation of Disclosure Authority Letter, and any documentation required by the type of agreement. Each agreement will be tailored to allow maximum program flexibility.

c. See DA Pam 70–3, chapter 8, for additional information.

8–10. Development, acquisition, and fielding of weapon and information systems with batteries

The Army's objectives include decreasing the number and types of batteries, increasing their power and longevity, and reducing new systems' and equipment's power needs.

a. The Army will—

(1) Design equipment to use battery power more efficiently.

(2) Consider power management techniques such as the use of power conserving software and more energy efficient circuitry and components in all acquisitions.

(3) Design equipment that uses military or commercial standard rechargeable and reusable batteries for training and garrison operations, where feasible.

(4) Field new equipment using military or standard commercial rechargeable and reusable batteries with an initial issue quantity and their associated charger(s).

(5) Use military preferred or commercial batteries that will satisfy the above objectives when military or commercial standard rechargeable and reusable batteries are not practical.

b. The U.S. Army Communication-Electronics Command's Power Sources Center of Excellence (PSCOE) will maintain a current military preferred battery listing (available at http://www.monmouth.army.mil/cecom/lrc/lrc.html) and model statement of work for commercial batteries. The PSCOE will ensure the military preferred battery list encompasses the various requirements for functional areas (for example, communications-electronics, aircraft, ground vehicles, watercraft, and generators).

c. The PMs will coordinate system battery requirements with the PSCOE and obtain AAE approval before using batteries not recommended by the PSCOE.

d. These requirements do not apply to batteries used in equipment designed for disposal after one-time use, or in mines, munitions, and missile applications that are embedded, nonreplaceable, and used one time (for example, when a missile is fired).

8–11. Development, acquisition, and fielding of weapon and information systems with mobile electric power generating requirements

a. The PM, MEP is the U.S. Army's SoS integrator for battlefield electric power (BEP). The DODD 4120.11 requires all DOD components to maximize use of the DOD standard family of MEP generating sources or obtain the PM, MEP's approval before procuring a generating source outside the standard family.

b. The PM, MEP is responsible for integrating SoS BEP generation, consumption, and demand sources used to develop a BEP architecture. The PM, MEP—

(1) Provides technical and programmatic advice to development and acquisition programs.

(2) Assists (on a reimbursable basis) all PEOs, DRPMs, and PMs in developing effective, cost efficient, standardized electric power generating sources.

(3) Collects power consumption data, develops power metrics, and maintains a database of BEP consumption, demand requirements, and generating sources.

(4) Monitors waivered, nonstandard Army power sources. This includes power sources below 0.5 kilowatts (kW) and above 750 kW.

(5) Maintains a comprehensive database of BEP-generating sources.

c. The PEOs (to include subordinate PMs), DRPMs, and all other Army organizations will—

(1) Establish a continuing relationship with the PM, MEP throughout the acquisition life cycle for all mobile electric power generating sources (excluding batteries).

(2) Collaborate with the PM, MEP to ensure optimal power solutions and effective, cost-efficient development using standardized power-generating sources.

(3) Identify and report all standard and nonstandard power-generating sources (including exportable vehicle power) and electric power consumption or demand requirements.

(4) Collaborate with the PM, MEP (on a reimbursable basis) when developing acquisition strategies for electric power-generation sources.

(5) Use the PM, MEP as a technical and programmatic advisor for development and acquisition programs when using approved (waivered) nonstandard electric power-generation sources.

(6) Retain authority and responsibility for the procurement and life-cycle management of nonstandard electric power-generating sources (when granted a waiver by the PM, MEP).

8–12. Development, acquisition, and fielding of unmanned ground systems and integration of mission capability packages

a. The Robotic Systems Joint Project Office (RSJPO) PM is responsible for the acquisition life cycle for unmanned ground systems. The RSJPO will coordinate, manage, and integrate unmanned system life-cycle activities. This includes budgetary and POM execution, identification of all milestone and master program activities, integration interfaces (to include an open system architecture), and responsibility for all program acquisition strategies.

b. The PM RSJPO will establish MOAs with each PEO; the rapid equipping force; the Joint Improvised Explosive Device Defeat Office; and U.S. Research, Development and Engineering Command to ensure implementation of this policy.

c. The PEOs (to include subordinate PMs) and DRPMs will establish a continuing relationship with the PM RSJPO.

d. Unmanned ground systems include—

(1) Any robotic platform (regardless of size or mission) characterized by a ground mobility platform with sensors, computers, software (including modules for perception, navigation, learning, adaptation, behaviors, and skills), human-

robot interaction, communications, power and a separate mission package depending on the unmanned systems mission role.

(2) Any robotic appliqué kit applied to a manned combat support, combat service support, tactical wheeled vehicle or ground combat system.

e. The responsible TRADOC organization will develop and coordinate all requisite DOTMLPF considerations with the PM RSJPO. This includes working together early in the requirements definition process and throughout the JCIDS process.

8–13. Development, acquisition, and fielding of weapon and information systems with geospatial information and services requirements

a. The Army's focal point for GI&S is the GIO, U.S. Army Corps of Engineers. The GIO, working in concert with the LandWarNet/Battle Command Office, DCS, G–3/5/7, works with PEOs and PMs to ensure effective and cost efficient integration of enterprise GI&S capabilities.

b. The PEOs and PMs must integrate and execute the development and fielding of GI&S technologies and capabilities as an integral component of every system.

c. The PEOs (to include subordinate PMs) and DRPMs will—

(1) Establish a continuing relationship with the GIO throughout the acquisition life cycle for all programs requiring GI&S.

(2) Work concept formulation of all future system GI&S requirements with the GIO, unless released of this requirement by the AAE.

(3) Determine funding required for GI&S capabilities acquisition.

(4) Retain authority and responsibility for the procurement and life-cycle management of their respective system GI&S capabilities.

(5) Coordinate GI&S acquisition strategies with GIO to ensure compliance with established joint GI&S architectures and network environments.

d. The GIO will—

(1) Establish enterprise GI&S policies; programs; production requirements and priorities; and strategies.

(2) Support PEOs (to include subordinate PMs), DRPMs, and the USAMC in concept formulation of all required enterprise GI&S capabilities. This includes, but is not limited to, acquisition strategy development, program cost estimates, consideration of common and reuse components, integration and interoperability requirements, and post fielding activities for GI&S sustainment.

(3) Certify the net readiness and enterprise synchronization of GI&S data between systems. Certification tests will be funded by programs and will be shown on program schedules prior to milestone B.

e. See AR 115–11 for additional information.

8–14. Remote weapons stations development and production

a. The Soldier weapons (SW) PM is the Army's designated lead for development and production of all remotely operated conventional small arms weapons stations. The PM SW is responsible for consolidating and managing all RWS acquisitions.

b. Any platform manager that requires an RWS will coordinate the acquisition with the PM SW, who is responsible for integration of capabilities to RWS. Integration of RWS, and RWS capabilities and configuration-control responsibilities of specific platform items, remains with assigned platform PMs and PEOs.

8–15. Continuous technology refreshment

a. Continuous technology refreshment is the intentional, incremental insertion of newer technology into existing systems to improve reliability, and maintainability, or reduce cost—typically in conjunction with normal maintenance.

b. The OMA funds may pay for continuous technology refreshment only if it is classified properly as an expense under expense or investment threshold criteria in accordance with 10 USC 2245a, annual DOD appropriation acts, and the DOD Financial Management Regulation.

c. Continuous technology refreshment cannot be OMA funded when—

(1) It is properly classified as an investment under expense or investment threshold criteria in accordance with 10 USC 2245a, annual DOD appropriation acts, and DOD 7000.14–R;

(2) The spares or components used in refreshment are centrally managed;

(3) The end item to be refreshed has not been produced and fielded;

(4) The changes are part of a Service Life Extension Program; or,

(5) The changes are made to increase the performance envelope or mission capability.

d. If any criteria in paragraph *c*, above, apply, then RDT&E funds or procurement funds, as appropriate, will be used in accordance with normal funding criteria.

8–16. Army responsibilities as the Department of Defense's executive agent for the Chemical and Biological Defense Program

a. Title 50, United States Code, Section 1522, designates the Army as the DOD executive agent (EA) to coordinate and integrate research, development, test, and evaluation requirements of the military departments for chemical and biological defense programs of the DOD.

b. The ASA (ALT) and the VCSA co-chair an Army EA Secretariat in order to accomplish the DOD Chemical and Biological Defense Program (CBDP) EA responsibilities. In coordination with the Services, the Army EA Secretariat shall review CBDP funding requirements, recommend approval, or propose alternatives to the CBDP POM, and serve as the focal point for other issues requiring EA input.

c. The Army DCS, G–8, Director of Force Development shall provide resources to support the Army EA Secretariat. This support shall include program analysis and integration for all CBDP elements.

d. The Joint PEO, Chemical and Biological Defense shall serve as the joint service MATDEV to coordinate and integrate CBDP acquisition programs. The Joint PEO, Chemical and Biological Defense also serves as the MDA for ACAT II and III CBDP systems, and reports to the DAE through the AAE.

e. The Army Chemical School shall serve as the joint CAPDEV for the CBDP, working through the Joint Requirements Office for Chemical, Biological, Radiological and Nuclear Defense, under the Chairman of the Joint Chiefs of Staff, J–8.

f. The CBDP T&E executive shall establish common processes and standards for conducting CBDP T&E policy, oversight, infrastructure, and issue resolution.

8–17. Army responsibilities as Department of Defense's executive agent for biometrics

a. Under DODD 8521.01E, the Secretary of the Army is designated as the EA for the DOD Biometrics Program. As the EA, 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.

b. The PM for the DOD Biometrics Program is responsible for developing, acquiring, and fielding common biometrics enterprise systems to support common, Service, and joint requirements.

c. The TRADOC capability manager for biometrics and forensics shall serve as the Army's CAPDEV for the DOD Biometrics Program.

d. The ASA (ALT) and the DCS, G–3/5/7 co-chair an Army Board of Directors. The Army EA Biometrics Board of Directors shall review funding requirements for the DOD Biometrics Program, recommend approval or propose alternatives to the biometrics POM, and serve as the focal point for any other issues requiring EA input.

e. The Army DCS, G–8, Director of Force Development shall program and budget resources to support—

(1) The Army Biometrics Board of Directors. This support shall include program analysis and integration for the Biometrics Program.

(2) Common enterprise requirements documentation, architecture development, materiel development, test and evaluation, life-cycle management, prototyping, exercises, records management, demonstrations, and evaluations.

(3) Common biometric data management, training, operations, and life cycle support.

f. The Army T&E executive shall establish common processes and standards for conducting Biometrics Program T&E policy, oversight, infrastructure, and issue resolution.

Chapter 9
Career management for Army acquisition, logistics, and technology workforce

9–1. Acquisition, logistics, and technology workforce

The AL&T workforce includes civilian and military professionals with common core acquisition and functional competencies who occupy designated acquisition, technology, and logistics positions within DOD. The DAWIA requires that the Secretary of Defense establish education, training, and experience requirements for all acquisition positions based on the complexity of the duties associated with the position. Designated DOD acquisition functional leaders coordinate with associated functional IPT representatives to establish position and certification requirements.

a. Army acquisition, logistics, and technology workforce. The Army's AL&T workforce is defined as individuals who occupy acquisition, technology and logistics positions within HQDA. Each command or organization determines the certification level and the specific acquisition career field category the position requires. The workforce members must be certified at the appropriate acquisition career level and in the acquisition category required of the position they occupy or are selected to fill.

b. Director, Acquisition Career Management. The AAE appoints a Director, Acquisition Career Management (DACM) to manage the accession, training, education, and career development of the Army AL&T workforce. The DACM assists the AAE in implementing the DAWIA and DOD regulations.

c. Army Acquisition Corps. The AAC is a subset of the Army AL&T workforce. It is comprised of civilian and

military personnel who apply for membership, are accepted, and accessed into the AAC. Army Acquisition Corps members must meet all grade, education, training, and experience requirements before being accepted (under 10 USC 87). The AAC membership is mandatory for all Army AL&T workforce members who occupy CAPs or key leadership positions (KLPs). There are two ways to become an AAC member: request membership after meeting the requirements in (1) through (4), below, or enter the AAC from another military department. The DOD reciprocity policy allows the Army to accept Acquisition Corps members who provide appropriate documentation from other military departments or DOD agencies. The AAC membership requirements are—

(1) *Training.* Level II certification in any acquisition career field (ACF). (See paras *d* and *e*, below.)

(2) *Education.* A baccalaureate degree from an accredited educational institution and one of the following:

(a) Twenty-four semester credit hours from among the following disciplines: accounting, business, finance, law, contracts, purchasing, economics, industrial management, marketing, quantitative methods, and organization and management (courses must be on a transcript); or

(b) Twenty-four semester credit hours in the current ACF or the ACF tentatively selected for AND 12 semester credit hours in business related disciplines; or

(c) At least 10 years of experience in acquisition positions as of 1 October 1991, thereby being exempt from the education requirement.

(3) *Experience.* Four years of service in an acquisition position (government or industry equivalent). To determine months of creditable acquisition experience use—

(a) The acquisition career record brief and a resume for the Army AL&T workforce and National Guard Bureau community.

(b) The officer record brief for active Army officers.

(c) The Army Reserve Acquisition Career Management Information System for Reserve officers.

(d) The enlisted record brief for NCOs.

(4) *Grade or rank.*

(a) All NCOs must be in the grade of E–8 or above.

(b) Commissioned officers must be serving in the grade of O–4 or above.

(c) General schedule (GS) civilian employees must be grade 13 or above.

(d) Broadband and payband civilian employees must occupy a position that requires Level III certification or the highest certification level identified for the ACF; or earn a base salary, not including locality pay, equivalent to a GS–13, step one employee.

d. Certification. Each Army command or organization determines the certification level and the specific ACF category required by the position. Once in an acquisition position, a workforce member has 24 months to meet the position's certification requirements or obtain a waiver.

e. Army Acquisition Corps positions. Statutory and DOD requirements for acquisition positions are established in DAWIA, DODIs, and related documents. Waiver authority and guidance for tenure, CAP, and position-specific requirements are established in DODI 5000.66.

f. Army Acquisition Corps position waiver. Individuals who are not AC members must obtain approval of a position requirements waiver to occupy a CAP, using the DD Form 2905 (Acquisition, Technology, and Logistics (AT&L) Workforce Position Requirements or Tenure Waiver). This waiver does not grant membership into the AC but allows the individual to occupy a CAP for a specific period of time. The waiver is position-specific and must be approved prior to the individual being assigned to the position. This waiver does not transfer to future assignments or to future incumbents of the position.

g. Critical acquisition positions. The CAPs are senior-level acquisition positions occupied by officers in grade O–5 and above, NCOs in the grade of E–9, or civilians usually in grades GS–14 and 15 (broadband and payband equivalent) and above. (Changes to DAWIA eliminated civilian grade requirements for CAPs.) The CAP positions may be filled only by acquisition corps members.

(1) The AAE has designated the following as CAPs:

(a) All Army acquisition senior executive service membership positions.

(b) All Army acquisition CSL positions.

(c) Deputy project managers, deputy product managers, project directors, deputy project directors, product directors, and deputy product directors.

(d) All acquisition officers in grade O–5 and above.

(e) All supervisory Army acquisition civilians at the levels of GS–14 or 15 (or the equivalent broadband and payband).

(2) Army organizations may designate additional CAP positions if they are no lower than grade GS–14 (or the equivalent broadband and payband).

(3) Commands and organizations that identify positions as CAPs must change the "acquisition position type" code within the Defense Civilian Personnel Data System to reflect a CAP.

(4) Organizations may request position designation changes via the Defense Civilian Personnel Data System; however, the AAE retains overall responsibility for the Army's designation of AL&T workforce positions.

(5) Personnel filling CAPs must—

(a) Be members of the AAC.

(b) Achieve Level III certification within 24 months of filling a CAP. If the individual is not Level III certified within 24 months, the individual's supervisor must submit a position requirements waiver to the respective regional director. The waiver does not grant certification, but it allows the individual to continue to occupy the position for a maximum of 12 additional months while pursuing certification. The individual and the supervisor shall document in the individual development plan (IDP) how—and when—certification requirements will be met. The individual's supervisor must ensure that certification is achieved, or the individual will be moved to a non-CAP.

(c) Execute a 3-year tenure agreement, using DD Form 2888 (Critical Acquisition Position Service Agreement).

(d) Obtain approval of a position requirements waiver to occupy a CAP if not an AAC member, using DD Form 2905. This waiver does not grant membership into the AAC, but it allows the individual to occupy a CAP for a specific period. The waiver is position-specific and must be approved before the individual is assigned to the position. This waiver does not transfer to future assignments or future incumbents.

h. Key leadership positions. A subset of CAPs, KLPs have significant levels of responsibility and authority. They are vital to the success of a program (or effort), and warrant special management attention to qualification and tenure requirements. The KLPs are designated by the AAE and approved by the USD (AT&L).

9–2. Acquisition, logistics, and technology workforce career development policy

a. Selecting and placing civilians in acquisition, logistics, and technology workforce positions. Army and DOD policy applies to civilians seeking selection to permanent, temporary, or term positions in the AL&T workforce, including CAPs that require AAC membership. The policy does not cover selection to the SES membership or to AAC central selection programs (such as those for PMs).

b. Career development program. Leaders of organizations with acquisition missions will specify requirements for work assignments, experience, education, and acquisition training. They must plan and facilitate their workforce personnel's attendance at training required for acquisition certification.

c. The acquisition career development model. The acquisition career development model was developed to help civilian and military AL&T workforce members focus on the skills, knowledge, experience, and competencies needed to be competitive and progress to leadership positions within the Army. The AL&T workforce members should build leadership skills and meet certification requirements while serving. They are encouraged first to achieve expertise in a single ACF and meet AAC membership requirements. Next, they should build multiskilled and leadership competencies through education, training, and experience. Finally, they should apply the acquired leadership and functional competencies to senior leadership positions—CAPs—at the strategic level.

d. Military leader development model. The acquisition career development model also applies to AAC officers, and is defined further in DA Pam 600–3. This is the authoritative source for information on AAC officer entry qualifications, accession procedures, assignments, training, and education.

e. Individual development plan. All military and civilian members of the AL&T workforce shall develop and maintain an IDP. The IDP identifies an acquisition professional's career objectives in the areas of experience, education, and training. Supervisors and managers will review, discuss, and update the IDP with each assigned civilian and military AL&T workforce member during the initial performance review, interim review, and end of cycle review (at a minimum).

f. Training, leadership, experiential, and other career-development opportunities. The Army offers training, leadership, experiential, and career development opportunities to assist acquisition workforce members in meeting DAWIA requirements and their professional career objectives. These include—

(1) *Continuous learning points.* To comply with USD (AT&L) continuous learning policy, acquisition personnel will obtain 80 continuous learning points (CLPs) in a 2-year period, which are 40 CLPs a year. Supervisors will award CLPs using the IDP tool.

(2) *Acquisition education, training, and experience program.* Acquisition education, training, and experience (AETE) opportunities include senior Service schools, degree completion, leadership development, and developmental assignments. Selection boards select qualified applicants based on workforce members' and Army needs. Applicants must meet prerequisites outlined in the current edition of the USAASC AETE Catalog and provider requirements, must obtain supervisory approval, and should reflect the AETE planning in the IDP.

(3) *The Competitive Development Group and Army Acquisition Fellowship program.* This 3-year leadership development program provides assignments in PEO and PM offices, and attendance at carefully selected leadership courses. It offers board-selected AL&T workforce members Level III certification status through expanded training, leadership, experiential, and other career development opportunities. The Competitive Development Group (CDG) and Army Acquisition Fellowship (AAF) fellows assigned to the program management track may apply for the acquisition key billet O–5/GS–14 Product Manager board in the second and third years of their CDG and AAF program.

(4) *The mandatory acquisition-career management, course-fulfillment program, and competency standards.* This

DOD program allows AL&T workforce members and non-AL&T workforce personnel who meet required competency standards to receive credit for certain mandatory DAU courses.

(5) *Army Acquisition Corps regionalization program.* The Army acquisition regionalization program provides officers with professional development opportunities through multiple assignments within a region. It supports diversification and professional development while broadening acquisition experience. The program applies primarily to AAC O–4s with more than a year before entering the primary zone for O–5. Once assigned to a regionalized area, officers can expect to be stabilized up to 48 months. The USAASC is the program proponent.

(6) *Acquisition Tuition Assistance Program.* The Acquisition Tuition Assistance Program (ATAP) is available to civilian AL&T workforce members who wish to complete an associate's or bachelor's degree, or meet the business hour requirement for Army Acquisition Corps membership. The AL&T workforce members with Level II certification in their current ACF may use ATAP for graduate study in an acquisition related subject. The ATAP is not authorized for study beyond a master's degree, and must be used for study at accredited colleges or universities within the workforce member's local commuting area.

(7) *Defense Acquisition University.* The DAU provides mandatory, assignment-specific, and continuing learning modules for civilian and military AL&T personnel within DOD. It provides the mandatory training required for certification in each ACF.

Appendix A
References

Section I
Required Publications

AR 73–1
Test and Evaluation Policy (Cited in paras 1–6*j*, 2–2*m*, 5–1*b*, 5–9*d*, 7–4, 7–14, table B-1, and terms.)

CJCSI 3170.01 Series
Joint Capabilities Integration and Development System (Cited in paras 1–6*a*, 2–36*d*, and 7–3*a*.) (Available at https://www.intelink.gov/wiki/JCIDS.)

CJCSI 6212.01 Series
Interoperability and Supportability of Information Technology and National Security Systems (Cited in para 7–3*a*.) (Available at http://www.dtic.mil/cjcs_directives/.)

DODD 5000.01
The Defense Acquisition System (Cited in paras 1–1, 4–6, 6–10*a*, and 6–14*a*.) (Available at http://www.dtic.mil/whs/directives.)

DODI 5000.02
Operation of the Defense Acquisition System (Cited in paras 1–1, 1–6*b*(1), 1–6*i*, 2–1*o*, 2–2*t*, 2–8*l*, 2–9*c*, 3–2*f*(1)(d), 3–2*g*, 3–6*a*(2)(b), 3–7*a*(1), 4–3, 5–6, 6–2*a*, 6–3*h*(5), 7–5, 7–6, 7–9*a*, D–2, and E–2.) (Available at http://www.dtic.mil/whs/directives.)

ISO/IEC 12207
Systems and Software Engineering-Software life cycle processes (Cited in para 6–6*a*.) (Available at http://www.iso.org/iso/home.html.)

Section II
Related Publications
A related publication is a source of additional information. The user does not have to read a related publication to understand this regulation. Unless otherwise stated, all publications are available at: http://www.apd.army.mil/. The Defense Federal Acquisition Regulation Supplement is available at http://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html/. The Federal Acquisition Regulations are available at http://www.arnet.gov/far/. Public Laws are available at: http://thomas.loc.gov/bss/. All U.S. Codes are available at http://www.gpoaccess.gov/uscode/index.html/.

AR 5–12
Army Management of the Electromagnetic Spectrum

AR 11–2
Managers' Internal Control Program

AR 11–18
The Cost and Economic Analysis Program

AR 12–1
Security Assistance, Training, and Export Policy

AR 25–1
Army Knowledge Management and Information Technology

AR 25–2
Information Assurance

AR 25–400–2
The Army Records Information Management System (ARIMS)

AR 40–5
Preventive Medicine

AR 40–10
Health Hazard Assessment Program in Support of the Army Acquisition Process

AR 40–60
Policies and Procedures for the Acquisition of Medical Materiel

AR 70–12
Fuel and Lubricants Standardization Policy for Equipment Design, Operation, and Logistic Support

AR 70–25
Use of Volunteers as Subjects of Research

AR 70–41
International Cooperative Research, Development, and Acquisition

AR 70–47
Engineering For Transportability

AR 70–50/AFJI 16–401/NAVAIRINST 8800.3B
Designating and Naming Defense Military Aerospace Vehicles

AR 70–75
Survivability of Army Personnel and Materiel

AR 71–32
Force Development and Documentation-Consolidated Policies

AR 115–11
Geospatial Information and Services

AR 350–1
Army Training and Leader Development

AR 350–38
Training Device Policies and Management

AR 380–10
Foreign Disclosure And Contacts With Foreign Representatives

AR 381–11
Intelligence Support to Capability Development

AR 385–10
The Army Safety Program

AR 550–51
International Agreements

AR 602–2
Manpower and Personnel Integration (MANPRINT) in the System Acquisition Process

AR 670–1
Wear and Appearance of Army Uniforms and Insignia

AR 690–950
Career Management

AR 700–90
Army Industrial Base Process

AR 700–127
Integrated Logistics Support

AR 700–139
Army Warranty Program

AR 700–142
Type Classification, Materiel Release, Fielding, and Transfer

AR 702–11
Army Quality Program

AR 711–6
Army Participation in the Defense Logistics Agency Weapon System Support Program

AR 715–9
Contractors Accompanying the Force

AR 750–1
Army Materiel Maintenance Policy

AR 750–10
Army Modification Program

CTA 50–900
Clothing and Individual Equipment (Available at: http://armypubs.army.mil/doctrine/cta_1.html/.)

CTA 50–909
Field and Garrison Furnishings and Equipment (Available at: http://armypubs.army.mil/doctrine/cta_1.html/.)

CTA 50–970
Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items) (Available at: http://armypubs.army.mil/doctrine/cta_1.html/.)

DA Pam 25–1–1
Information Technology Support and Services

DA Pam 25–403
Guide to Recordkeeping in the Army

DA Pam 70–3
Army Acquisition Procedures

DA Pam 73–1
Test and Evaluation in Support of System Acquisition

DA Pam 385–16
System Safety Management Guide

DA Pam 600–3
Commissioned Officer Professional Development and Career Management

DA Pam 700–56
Logistics Supportability Planning and Procedures in Army Acquisition

DA Pam 700–142
Instructions for Materiel Release, Fielding, and Transfer

Defense Acquisition Guidebook 3.1.6
"Fully Burdened Cost of Delivered Energy-Methodological Guidance for Analyses of Alternatives and Acquisition Tradespace Analysis" (Available at https://acc.dau.mil/fbcfmethod. Other areas of the guidebook are available at https://acc.dau.mil/dag.)

Glossary of Defense Acquisition Acronyms and Terms
Defense Acquisition University Press (Available at http://www.ceros.org/documents/Glossary.pdf.)

DFARS 207.1
Defense Federal Acquisition Regulation Supplement-Acquisition Plans

DFARS 227.71
Rights In Technical Data

DFARS 227.72
Rights In Computer Software and Computer Software Documentation

DFARS 246.7
Warranties

DFARS 252.211–7003
Item Identification and Valuation

DOD 4120.24–M
DOD Standardization Program (DSP) Policies and Procedures

DOD 4140.1–R
DOD Supply Chain Materiel Management Regulation

DOD 5000.4–M
Cost Analysis Guidance and Procedures

DOD 7000.14–R
DOD Financial Management Regulation

DODD 4120.11
Standardization of Mobile Electric Power (MEP) Generating Sources

DODD 4151.18
Maintenance of Military Materiel

DODD 4270.5
Military Construction

DODD 5000.52
Defense Acquisition, Technology, and Logistics Workforce Education, Training, and Career Development Program

DODD 5400.11
DOD Privacy Program

DODD 8521.01E
Department of Defense Biometrics

DODI 4120.24
Defense Standardization Program (DSP)

DODI 4630.8
Procedures for Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)

DODI 4540.07
Operation of the DOD Engineering for Transportability and Deployability Program

DODI 4650.01
Policy and Procedures for Management and Use of the Electromagnetic Spectrum

DODI 5000.64
Accountability and Management of DOD–Owned Equipment and Other Accountable Property

DODI 5000.66
Operation of the Defense Acquisition, Technology, and Logistics Workforce Education, Training, and Career Development Program

DODI 5200.39
Critical Program Information (CPI) Protection Within the Department of Defense

DODI 5400.16
DOD Privacy Impact Assessment (PIA) Guidance

DODI 8320.04
Item Unique Identification (IUID) Standards For Tangible Personal Property

DODI 8500.2
Information Assurance (IA) Implementation

FAR Part 2.101
Federal Acquisition Regulation - Definitions

FAR Part 7.1
Acquisition Plans

FAR Part 12.211
Technical Data

FAR Part 19
Small Business Programs

FAR Part 23.4
Use of Recovered Materials and Biobased Products

FAR Part 23.7
Contracting for Environmentally Preferable Products and Services

FAR Part 27.4
Rights in Data and Copyrights

FAR Part 39.2
Electronic and Information Technology

FAR Part 46.7
Warranties

GEIA–STD–0009
Reliability Program Standard for System Design, Development, and Manufacturing (Available at https://acc.dau.mil/CommunityBrowser.aspx?id=219127.)

Handbook
International Armaments Cooperation Handbook (Available at http://www.acq.osd.mil/ic/handbook.pdf.)

Handbook
Joint Program Management Handbook (A Defense Systems Management College document) (Obtain from Defense Acquisition University (CDSC–PM), Fort Belvoir, VA 22060–5565.)

MIL–HDBK–217
Reliability Prediction of Electronic Equipment (Available at https://assist.daps.dla.mil/quicksearch/.)

MIL–STD–882
System Safety (Available at https://assist.daps.dla.mil/quicksearch/.)

MIL–STD–2105c
Hazard Assessment Tests for Non-Nuclear Munitions (Available at https://assist.daps.dla.mil/quicksearch/.)

MIL–STD–3018
Parts Management (Available at https://assist.daps.dla.mil/quicksearch/.)

OMB Circular A–11
Preparation, Submission, and Execution of the Budget (Available at http://www.whitehouse.gov/omb/circulars_default.)

OMB Circular A–131
Value Engineering (Available at http://www.whitehouse.gov/omb/circulars_default.)

Public Law 104–106, Section 4306
Value Engineering for Federal Agencies (Available at http://thomas.loc.gov/.)

Public Law 105–270, Sections 1–6
Federal Activities Inventory Reform Act of 1998

Public Law 107–347, Section 208
Privacy Provisions

Public Law 109–364, Section 802
Additional Requirements Relating to Technical Data Rights

10 USC 135
Under Secretary of Defense (Comptroller)

10 USC 1735
Education, Training, and Experience Requirements for Critical Acquisition Positions

10 USC 2220
Performance Based Management: Acquisition Programs

10 USC 2245a
Use of Operation and Maintenance Funds for Purchase of Investment Items: Limitation

10 USC 2320
Rights in Technical Data

10 USC 2321
Validation of Proprietary Data Restrictions

10 USC 2399
Operational Test and Evaluation of Defense Acquisition Programs

10 USC 2433
Unit Cost Reports

10 USC 2434
Independent Cost Estimates: Operational Manpower Requirements

10 USC 2435
Baseline Description

10 USC 2451
Defense Supply Management

10 USC 2452
Duties of Secretary of Defense

10 USC 2453
Supply Catalog: Distribution and Use

10 USC 2454
Supply Catalog: New or Obsolete Items

10 USC 2456
Coordination with General Services Administration

10 USC 2457
Standardization of Equipment with North Atlantic Treaty Organization Members

10 USC 2464
Core Logistics Capabilities

10 USC 2466
Limitations On The Performance of Depot-Level Maintenance of Materiel

10 USC 3014
Office of the Secretary of the Army

10 USC 3022
Financial Management

32 CFR 651
Environmental Analysis of Army Actions (AR 200–2)

40 USC Subtitle III
Clinger-Cohen Act of 1996

41 USC 432
Value Engineering (Available at http://thomas.loc.gov/.)

41 USC 434
Modular Contracting for Information Technology

50 USC 1522
Conduct of Chemical and Biological Defense Program

Section III
Prescribed Forms

This form is available on the Army Publishing Directorate Web site (www.apd.army.mil).

DA Form 5965
Basis of Issue for Clothing and Individual Equipment (CIE) (Prescribed in para 8–7*d*.)

Section IV
Referenced Forms

DA forms are on the Army Publishing Directorate Web site (http://www.apd.army.mil). DD and SF forms are available from the OSD Web site (http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm).

DA Form 2028
Recommended Changes to Publications and Blank Forms

DD Form 2888
Critical Acquisition Position Service Agreement

DD Form 2905
Acquisition, Technology, and Logistics (AT&L) Workforce Position Requirements or Tenure Waiver

DD Form 2930
Privacy Impact Assessment (PIA)

Standard Form 328
Certificate Pertaining to Foreign Interests

Appendix B
Status of Policy Statements

B–1. Incorporated and rescinded policy statements

Policy statements incorporated within this regulation and policy statements rescinded are listed below.

Table B–1
Status of incorporated and rescinded policy statements

Policy statement: SARD–DO, 20 September 1996 memorandum **Subject:** Modeling and Simulation Support of the Army Acquisition Process **Status:** Rescinded with this publication
Policy statement: SARD–PR, 29 April 1997 memorandum **Subject:** Management of the Total Life Cycle for Acquisition Category (ACAT) Systems **Status:** Rescinded with this publication
Policy statement: SARD–ZA, 12 January 1998 memorandum **Subject:** Implementation of Army Strategy for Modernization Through Spares (MTS) (co-signed by the Commander, U.S. Army Materiel Command and the Assistant Secretary of the Army (Research, Development and Acquisition)) **Status:** Rescinded with this publication
Policy statement: SARD–SI, 29 January 1998 memorandum **Subject:** Centralized Management Policy for Integration of Thermal Technology into Army Systems **Status:** Rescinded with this publication
Policy statement: SARD–SI, 29 January 1998 memorandum **Subject:** Horizontal Technology Integration (HTI) Participation at the Army Systems Acquisition Review Council (ASARC) **Status:** Rescinded with this publication
Policy statement: SARD–SI, 29 January 1998 memorandum **Subject:** Implementation of Reconnaissance, Surveillance, and Target Acquisition System and Subsystem Commonality **Status:** Rescinded with this publication
Policy statement: SARD–RP, 4 May 1998 memorandum **Subject:** Total Ownership Cost Reduction **Status:** Rescinded with this publication
Policy statement: SARD–ZS, 30 September 1998 memorandum **Subject:** Fielding of Equipment Without Proper Training Devices **Status:** Rescinded with this publication
Policy statement: SARD–SI October 30, 1998 memorandum **Subject:** Project Managers Supporting the Fielding Process **Status:** Rescinded with this publication
Policy statement: SAAL–ZL, 29 July 1999 memorandum **Subject:** Depot Maintenance Policy **Status:** Rescinded with this publication
Policy statement: SARD–RP, 7 September 1999 memorandum **Subject:** Support Concepts for Acquisition Category Programs **Status:** Rescinded with this publication
Policy statement: SAAL–RP, 30 September 1999 memorandum **Subject:** Army Guidance Regarding Appropriation Sources for Continuous Technology Refreshments Spares Initiatives **Status:** Rescinded with this publication
Policy statement: SAAL–RP, 25 October 1999 memorandum **Subject:** Basis of Issue Plan Feeder Data **Status:** Rescinded with this publication
Policy statement: SAAL–RP, 4 January 2000 memorandum **Subject:** Development, Acquisition and Fielding of Weapon and Information Systems with Batteries **Status:** Rescinded with this publication
Policy statement: DAPR–FDH, 12 April 2000 memorandum **Subject:** Army System of Systems and Unit Set Fielding Directive. **Status:** Incorporated into this publication
Policy statement: SAAL–SI, 18 August 2000 memorandum **Subject:** Managing Acquisition Programs as Families of Systems **Status:** Rescinded with this publication

Table B–1
Status of incorporated and rescinded policy statements—Continued

Policy statement: The Chief of Staff, 19 March 2001 memorandum
Subject: Approval of Army Warfighting Requirements
Status: Incorporated into this publication

Policy statement: SAAL–RP, 10 April 2001 memorandum
Subject: The New Defense Acquisition Policies and Army Positions
Status: Rescinded with this publication

Policy statement: SAAL–RP, 18 July 2001 memorandum
Subject: Army Joint Program Policy
Status: Rescinded with this publication

Policy statement: DAPR–FDT, 18 September 2001 memorandum
Subject: Army Software Blocking Policy
Status: Rescinded with this publication

Policy statement: USD (ATL), 19 January 2002 memorandum
Subject: Cost-as-an-Independent Variable (CAIV) and Spiral Development Implementation Plans
Status: Incorporated with this publication

Policy statement: SAAL–PC, 28 January 2002 memorandum
Subject: Contractor Systems Support During Contingency Operations
Status: Incorporated with this publication

Policy statement: SAAL–RP, 17 June 2002 memorandum
Subject: Milestone decision authority (MDA) for Acquisition Category (ACAT) II and III Programs and Upgrade to the ACAT Database
Status: Rescinded with this publication

Policy statement: SAAL–PS, 11 June 2002 memorandum
Subject: Contractor Support Restrictions
Status: Incorporated with this publication

Policy statement: SAAL–RP, 2 October 2002 memorandum
Subject: Fielding Systems With Complete Training and/or Unit Support Systems
Status: Rescinded with this publication

Policy statement: SAAL–ZP, 20 December 2002 memorandum
Subject: Army Staff Proponent for Contractors on the Battlefield (CoB).
Status: Incorporated with this publication

Policy statement: USD (ATL), 7 March 2003 memorandum
Subject: Total Life Cycle Systems Management and Performance Based Logistics
Status: Incorporated with this publication

Policy statement: ASA (ALT)/Deputy Under Secretary (Operations Research), 13 October 2004 memorandum
Subject: Test and Evaluation Master Plan (TEMP) Approval Process Improvement
Status: Incorporated with this publication and AR 73–1

Policy Statement: SAAL–ZSA, 21 April 2005 memorandum
Subject: Army Systems Acquisition Review Council (ASARC)
Status: Incorporated with this publication

Policy statement: SAAL–SSI, 13 June 2005 memorandum
Subject: Army Systems Engineering Policy
Status: Incorporated with this publication

Policy statement: DALO–SMM, 17 August 2005 memorandum
Subject: Condition-Based Maintenance Plus (CBM+)
Status: Incorporated with AR 750–1

Policy statement: SAAL–PA, 18 April 2006 memorandum
Subject: Briefing Estimated Termination Costs During Program Milestone Reviews and Termination/Breach Army Systems Acquisition Review Councils (ASARCs)
Status: Incorporated with this publication

Policy statement: SAAL–ZL, 12 July 2006 memorandum
Subject: Impact of Warranties on Weapon Systems
Status: Incorporated with this publication

Policy statement: SAAL–SSI, 11 December 2006 memorandum
Subject: U.S. Army Policy On The Acquisition Of System Training Devices
Status: Incorporated with this publication

Policy statement: SAAL–ZL, 6 December 2007 memorandum
Subject: Reliability of U.S. Army Materiel Systems
Status: Incorporated with this publication

Table B–1
Status of incorporated and rescinded policy statements—Continued

Policy statement: SAAL–SSI, 21 Dec 2007 memorandum **Subject:** U.S. Army Policy for Army Geospatial Enterprise Services **Status:**Incorporated with this publication
Policy statement: SAAL–PA, 2 January 2008 memorandum **Subject:** Army Prototyping and Competition **Status:**Incorporated with this publication
Policy statement: SAAL–PA, 2 January 2008 memorandum **Subject:** Army Configuration Steering Board (CSB) **Status:**Incorporated with this publication
Policy statement: SAAL–PA, 1 April 2008 memorandum **Subject:** Data Management and Technical Data Rights **Status:**Incorporated with this publication
Policy statement: SAAL–SC4, 22 May 2008 memorandum **Subject:** U.S. Army Policy for Battlefield Electric Power Integration **Status:**Incorporated with this publication
Policy statement: SAAL–ZL, 3 October 2008 memorandum **Subject:** Common Logistics Operating Environment **Status:** Incorporated with this publication
Policy statement: SAAL–SSI, 26 May 2009 memorandum **Subject:**Appointment of a Chief Software Architect (CSWA) at the Program Executive Officer (PEO) Level **Status:**Incorporated with this publication
Policy statement: SAAL–PA, 8 January 2010 memorandum **Subject:** Data Management, Technical Data Rights, and Competition **Status:**Incorporated with this publication

B–2. Source of statements

Policy statements listed in paragraph B–1 can be found through access to the Acquisition Business Enterprise Web site at: https://im.altess.army.mil/asso/. (Once logged in, look for the “ASAALT Digital Library” under the “Applications” tab.)

Appendix C
Program Manager's Bill of Rights

C–1. Program manager rights

Program managers have the right to—

a. A single, clear line of authority from the DAE.

b. Authority commensurate with their responsibilities.

c. Timely decisions by senior leadership.

d. Be candid and forthcoming without fear of personal consequences.

Speak for their program and have their judgments respected.

f. The best available training and experience for the job.

g. Adequate financial and personnel resources.

C–2. Post-milestone B authorities

After milestone B, authorities available to the project manager include—

a. The authority to object to the addition of new program requirements that would be inconsistent with the parameters established at milestone B and reflected in the performance agreement, unless such requirements are approved by the appropriate CSB (under para 8–2); and

b. The authority to recommend to the appropriate CSB reduced program requirements that have the potential to improve program cost or schedule in a manner consistent with program objectives.

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

D–1. Function
The function covered by this evaluation is the acquisition of non-major defense acquisition programs (ACATs II and III).

D–2. Key internal controls
The key internal controls for this function are the milestone documentation requirements specified in DODI 5000.02, as tailored and documented by the MDA.

D–3. Internal control evaluation process
These key internal controls must be evaluated using the MDR process. These internal control evaluations should be included in the PEO, DRPM, or MAT command CDR or PM's 5-year Internal Control Plan. (See AR 11–2.) Because these internal control evaluations are conducted as part of MDRs, they will follow the schedule established by each program and not the uniform fiscal year schedule used normally in internal control plans. The Acquisition Decision Memorandum will serve as the documentation for the evaluation. All documentation required by the milestone decision authority for each MDR must be retained on file in the program office for the life of the program.

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

E–1. Function
The function covered by this evaluation is the acquisition of MDAPs (ACAT I) and MAIS (ACAT IA).

E–2. Key management controls
The key internal controls for this function are the milestone documentation requirements specified in DODI 5000.02.

E–3. Internal control evaluation process
These key internal controls must be evaluated using the MDR process. These internal control evaluations should be included in the PEO, DRPM, or PM's 5-year Internal Control Plan. (See AR 11–2.) Because these internal control evaluations are conducted as part of MDRs, they will follow the schedule established by each program and not the uniform fiscal year schedule used normally in internal control plans. The Acquisition Decision Memorandum will serve as the documentation for the evaluation. All documentation required by the milestone decision authority for each MDR must be retained on file in the program office for the life of the program.

Glossary

Section I
Abbreviations

AAC
Army Acquisition Corps

AAE
Army acquisition executive

AAF
Army Acquisition Fellowship

ACAT
acquisition category

ACF
acquisition career field

ACOM
Army command

ACSIM
Assistant Chief of Staff for Installation Management

ADM
acquisition decision memorandum

AEA
Army Enterprise Architecture

AEI
Army Enterprise Infrastructure

AETE
acquisition education, training, and experience

AILA
Army integrated logistics architecture

AIS
Automated Information System

AIT
automatic identification technology

AKM
Army Knowledge Management

AL&T
acquisition, logistics, and technology

AMEDD
Army Medical Department

AMSAA
Army Materiel Systems Analysis Activity

AoA
analysis of alternatives

APB
acquisition program baseline

APMS
Army Portfolio Management System

AR
Army regulation

ARCIC
Army Capabilities Integrated Center

ARNG
Army National Guard

AROC
Army Requirements Oversight Council

AS
acquisition strategy

ASA (ALT)
Assistant Secretary of the Army (Acquisition, Logistics and Technology)

ASA (CW)
Assistant Secretary of the Army for Civil Works

ASA (FM&C)
Assistant Secretary of the Army (Financial Management and Comptroller)

ASA (IE&E)
Assistant Secretary of the Army (Installations, Energy and Environment)

ASA (M&RA)
Assistant Secretary of the Army (Manpower and Reserve Affairs)

ASARC
Army Systems Acquisition Review Council

ASCC
Army service component command

ASD (NII)
Assistant Secretary of Defense (Networks and Information Integration)

ATAP
Acquisition Tuition Assistance Program

ATEC
U.S. Army Test and Evaluation Command

AUB
Army uniform board

AWCF–SMA–OSCR
Army working capital fund-supply maintenance, Army-operation supply cost reduction program

BEP
battlefield electric power

BOI
basis of issue

BOIP
basis of issue plan

C4
command, control, communications, and computers

C4I
command, control, communications, computers, and intelligence

CA
corrective action

CAP
critical acquisition position

CAPDEV
capability developer

CBDP
Chemical and Biological Defense Program

CBM+
condition-based maintenance plus

CBRN
chemical, biological, radiological, and nuclear

CCA
Clinger-Cohen Act

CCH
Chief of Chaplains

CDD
capability development document

CDG
Competitive Development Group

CDR
critical design review

CFR
Code of Federal Regulations

CG
commanding general

CHESS
Computer Hardware, Enterprise Software Solutions

CIE
clothing and individual equipment

CIO
chief information officer

CJCSI
Chairman of the Joint Chiefs of Staff Instruction

CLA
core logistics analysis

CLOE
Common Logistics Operating Environment

CLP
continuous learning points

COIC
critical operational issues and criteria

CP
career program

CPC
corrosion prevention and control

CPD
capabilities production document

CPI
critical program information

CSA
Chief of Staff, Army

CSB
Configuration Steering Board

CSL
central select list

CSWA
Chief Software Architect

CTA
common tables of allowances

DA
Department of the Army

DAB
Defense Acquisition Board

DACM
Director, Acquisition Career Management

DAE
Defense Acquisition Executive

DASA (APL)
Deputy Assistant Secretary of the Army (Acquisition Policy and Logistics)

DASA (PP&R)
Deputy Assistant Secretary of the Army (Plans, Programs and Resources)

DASAF
Director of Army Safety

DASC
Department of the Army Systems Coordinator

DASM
Deputy for Acquisition and Systems Management

DAU
Defense Acquisition University

DAWIA
Defense Acquisition Workforce Improvement Act

DCAPE
Director, Cost Analysis and Program Evaluation

DCS
Deputy Chief of Staff

DFARS
Defense Federal Acquisition Regulation Supplement

DISR
DOD Information Technology Standards Registry

DLA
Defense Logistics Agency

DMS
data management strategy

DODD
Department of Defense directive

DODI
Department of Defense instruction

DOT&E
Director, Operational Test and Evaluation

DOTMLPF
Doctrine, organizations, training, materiel, leadership and education, personnel, and facilities

DRPM
direct reporting project manager

DRU
direct reporting unit

DT
developmental test

EA
executive agent

EIT
electronic and information technology

EMD
engineering & manufacturing development

EOD
explosive ordnance disposal

ESO
environmental support office

ESOH
environment, safety, and occupational health

FAR
Federal Acquisition Regulation

FC
functional chief

FCR
functional chief representative

FD/SC
failure definition/scoring criteria

FoS
family of systems

FRP
full-rate production

G-6
Assistant Chief of Staff for Signal

GEIA
Government Electronics and Information Technology Association

GI&S
geospatial information and services

GIO
Geospatial Information Officer

GS
general schedule

HHA
health hazard assessment

HQDA
Headquarters, Department of the Army

HSI
human systems integration

IA
information assurance

ICD
initial capabilities document

ICDT
integrated capabilities development team

ICRDA
international cooperative research, development, and acquisition

IDP
individual development plan

IEPR
independent expert program review

ILS
integrated logistic support

ILSM
Integrated Logistics Support Manager

IM
insensitive munition

IMSP
insensitive munitions strategic plan

INFOSEC
information security

INSCOM
U.S. Army Intelligence and Security Command

IOC
initial operational capability

IOT&E
initial operational test and evaluation

IPR
in-process review

IPT
integrated product team

ISEW
intelligence, security and electronic warfare

ISP
information support plan

IT
information technology

ITAB
information technology acquisition board

IUID
item unique identification

J–AIT
joint-automatic identification technology

JCIDS
Joint Capabilities Integration and Development System

JROC
Joint Requirements Oversight Council

KLP
key leadership position

KPP
key performance parameter

kW
kilowatt

LCSP
life cycle sustainment plan

LFT
live fire testing

LFT&E
live fire test and evaluation

LRIP
low rate initial production

LVC
live, virtual, constructive models and simulations

M&S
modeling and simulation

MAIS
major automated information system

MANPRINT
manpower and personnel integration

MATDEV
materiel developer

MC
mission critical

MCCR
mission critical computer resources

MDA
milestone decision authority

MDAP
Major Defense Acquisition Program

MDD
materiel development decision

MDI&S
multi-disciplined intelligence and security

MDR
milestone decision review

ME
mission essential

MEP
mobile electric power

MIL–STD
military standard

MOA
memorandum of agreement

MOSA
modular open systems architecture

MOU
memorandum of understanding

MR
materiel release

NCO
noncommissioned officer

NEPA
National Environmental Policy Act

NETCOM/9th SC (A)
U.S. Army Network Enterprise Technology Command/9th Signal Command (Army)

NGB
National Guard Bureau

NSS
National Security System

OCIE
organizational clothing and individual equipment

OGC
Office of the General Counsel

OIPT
overarching integrated product team

OMA
operation and maintenance, Army

OMB
Office of Management and Budget

OMS/MP
operational mode summary/mission profile

OSD
Office of the Secretary of Defense

OT
operational test

OTRS
operational test readiness statement

Pam
pamphlet

PARC
principal assistant responsible for contracting

PBL
performance based logistics

PBR
program budget review

PD
product director

PDR
preliminary design review

PDSS
post deployment software support

PEG
program evaluation group

PEO
program executive officer

PESHE
programmatic environment, safety and occupational health evaluation

PIA
privacy impact assessment

PII
personally identifiable information

PIR
post-implementation review

PM
program, project, or product manager

PM, MEP
Project Manager, Mobile Electric Power

PMO
program or project management office

POA&M
plans of action and milestones

POM
program objective memorandum

PPBE
planning, programming, budgeting, and execution

PPP
program protection plan

PPSS
post-production software support

PSCOE
power sources center of excellence

R&D
research and development

RAM
reliability, availability, and maintainability

RDA
research, development, and acquisition

RDT&E
research, development, test, and evaluation

ROTC
Reserve Officers' Training Corps

RSJPO
Robotic Systems Joint Project Office

RTP
research and technology protection

RWS
remote weapon stations

S&A
safety and arming

S&T
science and technology

SA
Secretary of the Army

SCE
software capability evaluation

SCN
statement of continuing need

SDDC
Surface Deployment and Distribution Command

SDVOSB
service disabled veteran-owned small business

SE
system engineering

SEI
Software Engineering Institute

SEP
systems engineering plan

SES
senior executive service

SIGINT
signal intelligence

SIM
serialized item management

SIPT
supportability integrated product team

SOF
special operations forces

SORA
source of repair analysis

SoS
system of systems

SoSE
System of System Engineering

SPIP
software process improvement program

SRR
sustainment readiness review

SSA
software support activity

STD
standard

STRAP
system training plan

STRI
simulation, training and instrumentation

SW
Soldier weapons

T&E
test and evaluation

TADSS
training aids, devices, simulators, and simulations

TC
type classification

TDS
technology development strategy

TEMP
test and evaluation master plan

TES
test and evaluation strategy

TLCSM
total life cycle systems management

TM
technical manual

TMDE
test, measurement, and diagnostic equipment

TRADOC
U.S. Army Training and Doctrine Command

TRP
Test Resource Plan

TRR
test readiness review

TSARC
test schedule and review committee

TSG
The Surgeon General

UII
unique item identifier

USAASC
U.S. Army Acquisition Support Center

USACE
United States Army Corps of Engineers

USAMC
U.S. Army Materiel Command

USAMRMC
U.S. Army Medical Research and Materiel Command

USAR
United States Army Reserve

USASMDC
U.S. Army Space and Missile Defense Command

USC
United States Code

USD (AT&L)
Under Secretary of Defense (Acquisition, Technology and Logistics)

USF
unit set fielding

VCSA
Vice Chief of Staff of the Army

WIPT
working integrated product team

WSR
weapon system review

Section II
Terms

Acquisition function
A group of related acquisition workforce activities having a common purpose within the DOD acquisition system (under DODI 5000.66).

Acquisition Plan
A formal, written document reflecting the specific actions necessary to execute the approach established in the approved acquisition strategy and guiding contractual implementation. Refer to FAR Subpart 7.1 and DFARS Subpart 207.1.

Acquisition position
A designated civilian or military billet that is in the DOD acquisition system, has acquisition duties, and falls in an acquisition position category established by the Under Secretary of Defense for Acquisition and Technology (under DODI 5000.66).

Acquisition position categories
Functional subsets of acquisition positions. There are 14 position categories: acquisition logistics; auditing; business, cost estimating, and financial management; communication-computer systems; contracting; education, training and career development; industrial property management; manufacturing and production; program management; program management oversight; purchasing; quality assurance; systems planning, research, development and engineering; test and evaluation engineering.

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

Army Acquisition Corps (AAC)
A subset of the Army Acquisition Workforce composed of acquisition professionals in the grade of O–4 or YA–02 and above.

Army acquisition objective
The quantity of an item of equipment or ammunition required to equip the U.S. Army approved force and to sustain that force, together with specified allies, in wartime from D–Day through the period prescribed and at the support level directed in the latest Office of the Secretary of Defense Consolidated Guidance.

Army Acquisition Workforce
The Army Acquisition Workforce is the personnel component of the acquisition system. The acquisition workforce includes permanent civilian and military members who occupy acquisition positions, are members of the AAC, or are in acquisition development programs.

Army Civilian Training, Education, and Development System
The Armywide training and career management system that develops technical, professional, and leadership knowledge, skills, and ability in civilian members as they progress from entry level to supervisory, managerial, and executive positions.

Army Enterprise Architecture (AEA)
The AEA is a disciplined, structured, comprehensive, and integrated methodology and framework that encompasses all

Army information requirements, technical standards, and systems descriptions, regardless of the information system's use. The AEA transforms operational visions and associated requirement capabilities of the warfighters into a blueprint for an integrated and interoperable set of information systems that implement horizontal information technology insertion, cutting across the functional "stovepipes" and Service boundaries. Among other uses, this architectural blueprint is the basis for an information technology investment strategy that ensures a consistent and effective design and evolution of the Army's information systems. The AEA is the combined total of all of the Army's operational, technical, and system architectures.

Army Enterprise Strategy
A single unified vision for the Army IT/NSS community to strengthen combat, combat support, and combat service support objectives.

Army 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.

Army quality program
Army quality management through an integrated process where all Army activities responsible for the business areas of acquiring products and services in support of acquisition, logistics, and technology missions will have quality programs consistent with AR 702–11 and comprised of repeatable, reproducible processes. The quality concept recognizes that failure to establish a quality program to maintain oversight of specified quality requirements for an acquisition program can result in increased acquisition and life-cycle costs due to added testing, schedule delays, and necessary corrective actions.

Army Systems Acquisition Review Council (ASARC)
Top level DA review body for ACAT programs where the AAE or DAE is the milestone decision authority. It is chaired by the ASA (ALT) and convened at formal milestone or other program reviews to provide information and develop recommendations for decisions by the AAE.

Army transformation
Army transformation combines objective forces, modernized and recapitalized legacy forces, and interim forces for full spectrum contingencies to assure the United States land combat dominance. Army transformation seeks to produce a general-purpose objective force capable of meeting all these operational demands through an operational and organizational concept that reconciles the unchanging nature of war and the changing conduct of war. The concept recognizes that Soldiers and leaders, enabled by technology, remain the foundations of the Army's ability to fight and win wars decisively.

Basis of issue (BOI)
The BOI is 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.

Battle damage assessment and repair
A wartime procedure to return disabled equipment to the operational commander rapidly by expediently fixing, bypassing, or modifying components to restore the minimum essential components required for performing a specific combat mission or to enable the equipment to self-recover.

Battlefield Development Plan
A TRADOC product that provides a prioritized list of needs, based on an analysis of battlefield functions and tasks required to accomplish future Army missions.

Capability developer (CAPDEV)
The CAPDEV is the command or agency that formulates warfighting requirements for DOTLMPF. The acronym CAPDEV may be used generically to represent the user and user maintainer community role in the materiel acquisition process (counterpart to generic use of MATDEV).

Capability development document (CDD)
A document that captures the information necessary to develop a proposed program(s), normally using an evolutionary acquisition strategy. The CDD outlines an affordable increment of militarily useful, logistically supportable and technically mature capability.

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

Career field
A career field is one or more occupations that require similar knowledge and skills. A comprehensive list of acquisition career fields can be found at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

Career level
A career level is a grouping of education, training, and experience standards that provide the framework for progression within a career field. There are three career levels: (I) entry or basic; (II) intermediate; and (III) senior.

Career program (CP)
Specified occupational series and functional fields grouped on the basis of population, occupational structure, grade range, and commonality of job and qualification characteristics as designated by AR 690–950.

Certification
A process that determines that an individual meets all education, training and experience standards established for a given acquisition career field or position or for membership in the AAC.

Chief information officer (CIO) assessment
An established matrix of criteria used to evaluate program compliance with statutory and regulatory acquisition requirements.

Clothing and individual equipment (CIE)
The acronym CIE is used as a collective term that includes personal clothing, optional clothing, organizational clothing, and individual equipment items that are not an integral part of the design of the individual Soldier as a weapons platform.

Combined DT/OT testing
A single event that produces data to answer developmental and operational system issues. A Combined DT/OT process is usually conducted as a series of distinct DT and OT phases at a single location using the same test items. For the case where a single phase can be used to simultaneously meet developmental and operational issues, this testing will be referred to as Integrated DT/OT. Combined DT/OT and Integrated DT/OT are encouraged to achieve time, cost, and resource savings. However, they should not compromise DT and OT objectives in the Defense Acquisition Guidebook. (See AR 73–1.)

Commercial Item
A commercial item is 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's Glossary of Defense Acquisition Acronyms and Terms. See also FAR Part 2.101.)

Concurrent engineering
A systematic approach to the integrated current design of products and their related processes, including manufacturing, test, and support. This approach is intended to cause the developers, from the outset, to consider all elements of the product life cycle, from conception through disposal, including quality, cost, schedules, supportability, and user requirements.

Continuous evaluation
A process that provides the continuous flow of information regarding system status to include planning, testing, data compilation, analysis, evaluation, conclusions, and reporting to all acquisition team members from drafting the ICD through deployment reviews and assessments. All members of the acquisition team will perform the continuous evaluation.

Critical Operational Issues and Criteria (COIC)
Decision-maker key operational concerns with bottom line standards of performance that signify the system is operationally ready to proceed during the production decision review.

Critical program information (CPI)
Elements or components of an RDA program that, if compromised, could cause significant degradation in mission effectiveness; shorten the expected combat-effective life of the system; reduce technological advantage; alter program direction significantly; or enable an adversary to defeat, counter, copy, or reverse engineer the technology or capability. Includes information about applications, capabilities, processes, and end-items. Also includes elements or components critical to a military system or network mission effectiveness and technology that would reduce the U.S. technology advantage if it came under foreign control. (See DODI 5200.39.)

Developmental Acquisition Position
A position designed and used to provide a period of supervised acquisition experience or training. Such positions may be at any grade level; if a developmental position is a CAP, then assignment of a person who is not a member of AAC requires a waiver. Specifically excluded from being designated as a developmental acquisition position are the positions of PEO, DRPM, PM, deputy PM (positions in which the duties involve managing or supervising acquisition personnel) and other positions that are essential to the acquisition process.

Diminishing Manufacturing Sources and Materiel Shortages (DMSMS)
The DMSMS is the loss or impending loss of manufacturers of items or suppliers of items or raw materials.

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

DOD Information Technology Standards Registry (DISR)
A compilation of the standards, protocols, and technical specifications that enable Army systems to exchange information efficiently with other systems and take advantage of common system components.

Domain
For purposes of the AEA, a group of systems—or system of systems—of a similar nature or focused on satisfying similar objectives. Domains are primarily used within the DISR. There are four domains: command, control, communications, and intelligence; weapon systems; modeling and simulation; and sustainment.

Embedded training
A functional capability hosted in hardware or software that is integrated into the overall equipment configuration. Embedded training supports training, assessment, and control of exercises on operational equipment with auxiliary equipment and data sources as necessary.

Explosive ordnance disposal (EOD)
The detection, identification, field evaluation, rendering-safe, recovery, and final disposal of unexploded explosive ordnance. It may also include the rendering safe or disposal of explosive ordnance that has become hazardous by damage or deterioration when the disposal of such explosive ordnance is beyond the capabilities of personnel normally assigned the responsibility for routine disposal. In this case, this includes applicable weapon systems, all munitions, all similar or related items or components explosive, energetic, or hazardous in nature. This includes explosive ordnance training aids, items that could be misidentified as explosive ordnance or bombs, remotely piloted vehicles, and Army aircraft and vehicles.

Facility(s)
Includes the permanent, semipermanent, or temporary real property assets required to operate and support the materiel system, including conducting studies to define types of facilities or facility improvements, locations, space needs, utilities, environmental requirements, real estate requirements, and equipment. One of the traditional elements of logistics support. (See DAU's Glossary of Defense Acquisition Acronyms and Terms.)

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.

First unit equipped (FUE)
The date when a system or end item and its agreed upon support elements are issued to the designated IOC unit and training specified in the new equipment training plan has been accomplished.

Foreign ownership, control, or influence (FOCI)
A U.S. company is considered to be under foreign ownership, control, or influence whenever a foreign interest has the power, direct or indirect, whether or not exercised and whether or not exercisable, through the ownership of the U.S. company's securities by contractual arrangements or other means, to direct or decide matters affecting the operations of that company in a manner that may result in unauthorized access to classified information or unnecessary access to proprietary information, sensitive but unclassified information, and information regarding the operation, management or defense of the AEI.

Functional area
A grouping of officers by a career field that possesses an interrelated number of tasks or skills that require specific education, training, and experience.

Functional chief (FC)
An Army leader, normally an Army staff member, a ACOM commander, or a Secretariat member, who is designated by the ASA (M&RA) to carry out career management responsibilities for assigned career program(s), according to AR 690–950.

Functional proponent
The HQDA agency responsible for the subject area in which the resources are being used (for example, DCS, G–1 for personnel; DCS, G–4 for logistics; or DCS, G–2 for intelligence).

Functional requirement
Administrative requirements, reports, and plans that do not directly prescribe the operational performance of a system but are used to support a program. These fall into two general categories: those that are generated by statute (the FAR, with supplements) and DOD directives and those that are generated by Army regulation, handbooks, pamphlets, or local policy. The second category, those generated by DA and below, may be exempted. The term does not include the operational requirements established by the CAPDEV.

Fuze (fuzing system)
A physical system designed to sense a target or respond to one or more prescribed conditions such as elapsed time, pressure, or command that initiates a train of fire or detonation in a munition. Safety and arming are primary roles performed by a fuze to preclude ignition of the munition before the desired position or time.

Headquarters, Department of the Army (HQDA)
Term used in this regulation to include the Secretariat and DA staff activities.

Health hazard assessment (HHA) (AR 40–10)
The application of biomedical knowledge and principles to document and quantitatively determine the health hazards of Army systems. This assessment indentifies, evaluates, and recommends controls to reduce risks to the health and effectiveness of personnel who test, use, or service Army systems.

Heraldic items
Insignia (including, but not limited to, branch, grade, unit, and shoulder sleeve insignia), appurtenances, medals and decorations, and other awards required or authorized for uniform wear.

Human Systems Integration (HSI)
A comprehensive management and technical strategy to ensure that human performance (the burden the design imposes on manpower, personnel, and training), and safety and health aspects are considered throughout the system design and development processes. The Army accomplishes the HSI goals through the MANPRINT program.

Individual equipment
Individual equipment is designed to protect or support the Soldier in battlefield situations; for example, load bearing equipment, helmets, skis, and canteens. The essential characteristic of individual equipment is suitability for the

function or intended use; appearance is a lesser priority. Individual equipment is requisitioned, issued, repaired, cleaned, and replaced using OMA funds based on allowances related to the organizational mission and environment.

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

Infrastructure
The 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 supporting Information Technology or National Security Systems as defined in the Clinger-Cohen Act of 1996.

Initial capabilities document (ICD)
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 analysis and describes why nonmateriel changes alone have been judged inadequate in fully providing the capability.

Initial operational capability (IOC)
The criteria and schedule for when a program must attain initial operational capability is defined the program's CDD and CPD. 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. This designation is usually applied at a point in the Defense Acquisition Model that is after the full-rate production decision review and implies that the unit is combat ready.

In-process review (IPR)
Review body for ACAT III programs. Convened at each formal milestone and at other critical points to evaluate status and make recommendations to the MDA.

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 architecture
An architecture consisting of multiple views or perspectives (operational view, systems view, and technical standards view) that facilitates integration and promotes interoperability across capabilities and among related integrated architectures.

Integrated logistics support (AR 700–127)
A unified and iterative approach to management and technical activities to—

a. Influence operational and materiel requirements, system specifications, and the ultimate design or selection (in the case of NDI or commercial item).

b. Define the support requirements best related to system design and to each other.

c. Develop and acquire the required support.

d. Provide required operational phase support for best value.

e. Seek readiness and cost improvements in the materiel system and support systems throughout the operational life cycle.

Integrated product/process team (IPT)
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.

International 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.)

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.

Item unique identification (IUID)
A system of marking and registering items delivered to DOD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items.

IUID marking trigger event
A marking trigger event is when an opportunity to mark exists through a maintenance action at marking activities (depot, National Maintenance Point, Reset, and so forth) sites, or other planned event such as a mobile marking team site visit. All legacy items are to be marked and registered when a trigger event occurs. The trigger events are determined by the PM, who coordinates requirements with applicable legacy marking activities.

Life-cycle management
A management process, applied throughout the life (systems development, production, delivery, sustainment, and disposal) of a system (products, processes and/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.

Low rate initial production (LRIP)
The first effort of the Production and Deployment phase. The purpose of this effort is to establish an initial production base for the system, permit an orderly ramp-up sufficient to lead to a smooth transition to FRP, and to provide production representative articles for IOT&E, and full-up live fire testing. This effort concludes with a FRP Decision Review to authorize full-rate production and deployment. The minimum number of systems (other than ships and satellites) to provide production representative articles for IOT&E, to establish an initial production base and to permit an orderly increase in the production rate sufficient to lead to FRP upon successful completion of operational testing. For MDAPs, LRIP quantities in excess of 10 percent of the acquisition objective must be reported in the SAR. For ships and satellites, LRIP is the minimum quantity and rate that preserves mobilization.

Manpower and personnel integration (MANPRINT)
The process of integrating all relevant information and considerations regarding the full range of manpower, personnel, training, human factors engineering, system safety, health hazards, and Soldier survivability into the system design, development and acquisition process to optimize total system performance and minimize ownership costs over the life of the program.

Market research
A process for gathering data on product characteristics, suppliers' capabilities, and the business practices that surround them, plus the analysis of that data to make acquisition decisions. Market research has two phases: market surveillance and market investigation.

Materiel developer (MATDEV)
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).

Matrix support
All categories of functional support provided to the MATDEV necessary to execute and attain the acquisition objective, excluding the core office capability.

Milestone decision authority (MDA)
The person vested with the authority to make milestone decisions. This may be the DAE, the component acquisition executive (for the Army, this is the AAE), or the PEO.

Mission critical computer resources (MCCR)
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.

Mission Critical Information System
A system that meets the definitions of "information system" and "national security system" in the CCA, the loss of which would cause warfighter operations or direct mission support of warfighter operations to stop.

Mission-critical system
A system having operational effectiveness and operational suitability that are essential to the successful completion or outcome of the current or subsequent combat action. A system used by Soldiers on the battlefield to perform their primary or secondary functions. Loss of the system could result in an unfavorable outcome of the combat action. Army Unit Status Reporting identifies the system with equipment readiness code P or A in the requirements document of one or more type units.

Mission Essential Information System
A system that meets the definitions of "information system" and "national security system" in the CCA and that the acquiring component head or designee determines is basic and necessary for accomplishing the organizational mission. The definition of "the organizational mission" is one of the organizational missions of the Army, not just a single ACOM, ASCC, DRU, or DA functional proponent.

Modeling and simulation (M&S)
The development and use of live, virtual, and constructive models (including simulators, stimulators, emulators, and prototypes) to investigate, understand, or provide experiential stimulus to either (1) conceptual systems that do not exist or (2) real life systems that cannot accept experimentation or observation because of resource, range, security, or safety limitations. This investigation and understanding in a synthetic environment will support decisions in the RDA domains and in advanced concepts and requirements or will transfer necessary experiential effects in the training, exercises, and military operations domain.

Multi-disciplined intelligence
All source intelligence, derived from all intelligence disciplines (including those falling under the classic counterintelligence discipline), that could present a threat to a system or systems-development process, technology-based effort, nondevelopmental-item, or commercial-item procurement.

Multi-disciplined intelligence and security (MDI&S)
The application of multi-disciplined intelligence and multi-disciplined security to ensure that threats to a system are identified and said system has appropriate security countermeasures identified during the research, development, and acquisition life cycle.

Multi-disciplined security
The application of all facets of security to include, but not limited to, information security, industrial security, foreign disclosure, and security management, to ensure a comprehensive approach to security countermeasures implementation throughout the research, development and acquisition process.

National technology and industrial base (NTIB)
The NTIB is comprised of the persons and organizations that are engaged in research, development, production, or maintenance activities conducted within the United States and Canada.

Nondevelopmental item (NDI)
An NDI is 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 United States 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 in order to meet the requirements of the processing department or agency. (See DAU's Glossary of Defense Acquisition Acronyms and Terms. See also FAR Part 2.101.)

Non-government standard
A national or international standardization document (standard, specification, or hand book) developed, established, or coordinated by a private- sector association, organization, or technical society. This term does not include standards of individual companies. Non-government standards adopted by the DOD are listed in the Acquisition Streamlining and Standardization Information System database. (See DOD 4120.24–M.)

Operational architecture
A description (often graphic) of the operational elements, assigned tasks, and information flows required to accomplish or support a warfighting function. It defines the type of information, the frequency of exchange, and the tasks supported by the information exchanges.

Operational- through tactical-level information systems
These are C4I information systems designed to support Army Forces headquarters down to the squad level.

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

Organizational uniforms, clothing, and 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, and cold-weather clothing.

Personal clothing
Military-type clothing, clothing of a personal nature, and component items listed in CTA 50–900, table I, that are provided to enlisted personnel (specifically, the initial clothing bag issue).

Personally identifiable information (PII)
Information which can be used to distinguish or trace an individual's identity, such as their name, social security number, date and place of birth; mother's maiden name, and biometric records. Also, PII includes any other personal information that is linked or linkable to a specific individual. (See DODD 5400.11.)

Post-production software support (PPSS)
The sum of all activities required to ensure that the implemented and fielded software system continues to support its original operational mission and subsequent mission modifications once production of the system is completed or when it finishes a transition to functional management.

Privacy impact assessment
A PIA addresses privacy factors for all new or significantly altered information technology (IT systems or projects that collect, maintain, or disseminate personal information from or about members of the public—excluding information on DOD personnel).

Program, project, or product manager
An HQDA CSL 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. As a general rule, a program manager is a general officer or SES member; a project manager is an O–6, a GS–15, or the broadband or payband equivalent; a product manager is an O–5, a GS–14, or the broadband or payband equivalent.

Program protection plan (PPP)
The PPP is a risk-based, comprehensive, living plan to protect CPI that is associated with an RDA program. The PPP is used to develop tailored protection guidance for dissemination and implementation throughout the program for which it is created. The layering and integration of the selected protection requirements documented in a PPP provide for the integration and synchronization of CPI protection activities throughout the DOD. (See DODI 5200.39.)

Re-procurement
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. Re-procurement should not require any RDT&E funds other than budget activity 6.5 RDT&E funding for market surveys and associated testing.

Research, Development, and Acquisition Plan
The Research, Development, and Acquisition Plan is the HQDA long-range plan to develop and produce technology and equipment to continue the Army's modernization program. It is the starting point for the POM process.

Reusability of software modules
The extent to which a program unit that is discrete and identifiable with respect to compiling, combining with other units, and loading and which can be used as source code in multiple applications (for example, a message parsing module or mathematical equation module).

Reusable software asset
A software element, including requirements, designs, objects, code, and test data capable of being used by a software development effort other than the one for which it was originally developed. A synonym for reusable software component.

Reuse
The application of reusable software assets, with or without adaptation to more than one software system. Reuse may occur within a software system, across similar software systems, or in widely different software systems.

Robust design
A design that is optimized to be reliable through insensitivity to any manufacturing or any in-use environmental variability.

Safety confirmation
A formal document that provides the MATDEV and the decision-maker with the test agency's safety findings and conclusions and that states whether the specified safety requirements have been met. It includes a risk assessment for hazards not adequately controlled, lists technical or operational limitations, and highlights safety problems requiring further testing.

Safety release
A formal document issued by ATEC before any hands-on testing, use, or maintenance by Soldiers. A Safety Release is issued for a specific event at a specified time and location under specific conditions. It is a stand-alone document that indicates the system is safe for use and maintenance by Soldiers and describes the specific hazards of the system based on test results, inspections, and system safety analysis. Operational limits and precautions are included. The Safety Release must be available before start of testing or Soldier familiarization events to include new equipment training.

Security assistance
Security assistance is a subset of a larger, more general category called security cooperation and consists of a group of programs, authorized by law, which allows the transfer of defense articles and services, including training, to friendly foreign governments or international organizations. The statutory authority for security assistance is provided primarily under the Foreign Assistance Act of 1961 as amended and the Arms Export Control Act of 1976 as amended. The Security Assistance Program is an important instrument of U.S. foreign and national security policy. (See AR 12–1.)

Serialized item management
A program established by DOD where the Military Departments and Defense Agencies identify populations of select items (parts, components, and end items); mark all items in each population with a UII; and generate, collect, and analyze maintenance, logistics, and usage data about each specific item.

Software
A set of computer programs, procedures, data, and associated documentation concerned with the operation of a data processing system (for example, compiler, library routines, manuals, circuit diagrams); usually contrasted with hardware.

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

Special tools
A special tool is a tool designed to perform a specific task for use on a specific end item or a specific component of an end item and is not available in the common tool load that supports that end item or unit. It is authorized by the repair parts and special tool list located within that end item's TM.

Supply chain management and vulnerability
Supply chain management is the cross-functional approach to procuring, producing, and delivering products and services to customers. The broad management scope includes subordinate suppliers, suppliers, internal information, and funds flow according to DOD 4140.1–R. Vulnerability involves conducting an assessment of the supply chain related to CPI to determine if an adversary has the capability and intent to affect it in a manner that compromises the military effectiveness of the given platform, weapon system, or network (under DODI 5200.39).

System of systems (SoS)
A set or arrangement of interdependent systems that are related or connected to provide a given capability. The loss of any part of the system will degrade the performance or capabilities of the whole. An example of an SoS could be interdependent information systems. While individual systems within the SoS may be developed to satisfy the peculiar needs of a given user group, the information they share is so important that the loss of a single system may deprive other systems of the data needed to achieve even minimal capabilities.

System of systems 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 war fighter.

Systems architecture
Systems architecture is a description, including graphics, of the systems and interconnections providing for or supporting a warfighting function. The system architecture defines the physical connection, location, and identification of the key nodes, circuits, networks, and warfighting platforms, and allocates system and component performance parameters. It is constructed to satisfy operational architecture requirements in the standards defined in the technical architecture. The system architecture shows how multiple systems within a domain or an operational scenario link and interoperate and may describe the internal construction or operations of particular systems in the system architecture.

System training plan (STRAP)
The STRAP is the master training plan and training tool for a new or modified system. It is prepared to support a Training Support System that meets the training requirements of the warfighter. It outlines the development of the total training concept, strategy, and training support system estimates for integrating the system or family of systems into the operational, institutional, and self development domains. The STRAP will be an extension of the training information contained in the CDD and CPD, and will provide additional training support details (under TRADOC Reg 71–20).

Technical architecture
A technical architecture is the minimal set of rules governing the arrangement, interaction, and interdependence of the parts or elements which ensure that a conformant system satisfies a specified set of requirements. The 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.

Test, measurement, and diagnostic equipment (TMDE)
Any system or device used to evaluate the operational condition of an end item or subsystem thereof or used to identify or isolate any actual or potential malfunction. The TMDE includes diagnostic and prognostic equipment, semi-automatic and automatic test equipment (with issued software), and calibration test and measurement equipment.

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 item(s), 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.

Total ownership cost
Defense systems' total ownership cost is defined as life-cycle cost. Life-cycle cost (per DOD 5000.4–M) includes not only an acquisition program's direct costs but also the indirect costs (that is, costs that would not occur if the program

did not exist) attributable to the acquisition program. For example, indirect costs would include the infrastructure that plans, manages, and executes a program over its full life, and common support items and systems.

Training aids, devices, simulators, and simulations (TADSS)
A general term that addresses equipment and associated hardware and software developed, fabricated, or procured specifically for improving the training and learning process. Justified, developed, and acquired to support training of designated tasks. The TADSS are categorized as system (supported by the PEO, DRPM, and PM) or nonsystem (supported by the training PEG). System devices are designed for use with a specific system, family of systems 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. Nonsystem TADSS are designed to support general military training and nonsystem specific training requirements. Both system and nonsystem TADSS are required for operational and unit readiness. Both types of TADSS are therefore considered integral parts of weapons, weapon systems, and SoS.

Transportability
The inherent capability of materiel to be moved by towing, by self-propulsion, or by carrier via railways, highways, waterways, pipelines, oceans, and airways utilizing existing equipment or equipment that is planned for the movement of the item being considered.

Unique item identification/unique item identifier (UII)
A system of marking items delivered to DOD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items. For items that are serialized within the enterprise identifier, the unique item identifier includes the data elements of the enterprise identifier and a unique serial number. For items that are serialized within the part, lot, or batch number within the enterprise identifier, the unique item identifier includes the data elements of the enterprise identifier; the original part, lot, or batch number; and the serial number. "Enterprise" means the entity (such as, a manufacturer or vendor) responsible for assigning unique item identifiers to items. "Enterprise identifier" means a code that is uniquely assigned to an enterprise by an issuing agency (under the Defense Federal Acquisition Regulation Supplement, Subpart 252.211–7003).

Section III
Special Abbreviations and Terms
This section contains no entries.

USAPD

ELECTRONIC PUBLISHING SYSTEM
OneCol FORMATTER WIN32 Version 271

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TIME:	15:33:23
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DOC STATUS:	REVISION