Department of Defense
DIRECTIVE

NUMBER 5000.1
October 23, 2000

Administrative Reissuance Incorporating Change 1, January 4, 2001
USD(AT&L)

SUBJECT: The Defense Acquisition System

References: (a) DoD Directive 5000.1, "Defense Acquisition," March 15, 1996 (hereby canceled)
(b) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," October 23, 2000
(c) DoD 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs," March 15, 1996 (hereby canceled)
(d) Under Secretary of Defense (Acquisition, Technology and Logistics), Assistant Secretary of Defense (Command, Control, Communications, and Intelligence), and Director, Operational Test and Evaluation Memorandum, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs," October 23, 2000
(e) through (h), see enclosure 1

1. PURPOSE

This Directive:

1.1. Reissues reference (a).

1.2. Reauthorizes publication of reference (b).

1.3. Cancels reference (c).

1.4. Provides policies and principles for all Department of Defense (DoD) acquisition programs.

1.5. Describes management principles applicable to all DoD acquisition programs. Reference (b) describes a simple and flexible approach for managing all acquisition programs.

Reference (d) describes operating procedures that are mandatory only for major defense acquisition programs and major automated information systems, and for other programs as defined specifically in reference (d). The Chairman of the Joint Chiefs of Staff Instruction 3170.01A (reference (e)) establishes policies and procedures for the DoD requirements generation system.

1.6. This Directive and references (b) and (d) provide mandatory policies and procedures for the management of acquisition programs, except when statutory requirements override. If there is any conflicting guidance pertaining to contracting, the Federal Acquisition Regulation (FAR) (reference (f)) and/or the Defense FAR (DFAR) Supplement (reference (g)) shall take precedence.

2. APPLICABILITY

2.1. This Directive applies to the Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the Combatant Commands, Office of the Inspector General of the Department of Defense, the Defense Agencies, DoD Field Activities, and all organizational entities within the Department of Defense (hereafter collectively referred to as "the DoD Components").

2.2. The policies in this Directive are applicable to all on-going acquisition programs regardless of their stage of development.

3. DEFINITIONS

Terms used in this Directive are defined in enclosure 2.

4. POLICY

The following policies and principles govern the operation of the Defense Acquisition System, and are divided into five major categories.

4.1. Achieving Interoperability

4.1.1. Interoperability is the ability of 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 the data, information, materiel, and services so exchanged to enable them to operate effectively together. Interoperability within and among United States forces and U.S. coalition partners is a key goal that must be addressed satisfactorily for all Defense systems so that the Department of Defense has the ability to conduct joint and combined operations successfully. The use of standardized data shall be considered to facilitate interoperability and information sharing. To the extent possible, systems and software shall be designed, consistent with U.S. export control laws and regulations, to permit use in a multi-national environment with provision

made for current and future information disclosure guidance and constraints. The Department of Defense must have a framework for assessing the interrelationships among and interactions between U.S., Allied, and coalition systems. Mission area focused, integrated architectures shall be used to characterize these interrelationships. This end-to-end approach focuses on mission outcomes and provides further understanding of the full range of interoperability issues attendant to decisions regarding a single program or system. In order to foster interoperability with our Allies and coalition partners, consideration shall be given to procurement or modification of Allied systems or equipment, or cooperative development opportunities with one or more Allied nations to meet user needs.

4.1.2. The Defense Acquisition System shall emphasize acquisition judgment based on consideration of a relevant family-of-systems, including those that cross Component organizational boundaries. To that end, the requirements community shall specify key performance parameters and the acquisition and test and evaluation communities shall adopt a family-of-systems management approach to ensure that their reviews of individual systems include a thorough understanding of critical system interfaces related to the system under review and the flow of consistent and reliable data, information, and services among systems in the battlefield. The objective is an environment characterized by mutual understanding of key systems in a given mission area; shared decision making and close cooperation between the requirements, test and evaluation, and acquisition communities; and disciplined control over the development and introduction of acceptable interoperable systems.

4.2. Rapid and Effective Transition From Science and Technology to Products

4.2.1. The fundamental role of the DoD Science and Technology (S&T) program is to enable a technologically superior military force. The S&T program shall address user needs; maintain a broad-based program spanning all Defense-relevant sciences and technologies to anticipate future needs and those not being pursued by civil or commercial communities; preserve long-range research; and enable rapid transition from the S&T base to useful military products. S&T projects shall focus on increasing the effectiveness of a capability while decreasing cost, increasing operational life, and incrementally improving products through planned upgrades. S&T executives shall encourage the use of initiatives, such as advanced technology demonstrations, designed to accelerate the transition from the S&T base to useful military products. Basic and applied research are the foundation for equipping tomorrow's user. To protect and ensure the success of the warfighter on the battlefield, the protection of dual-use and leading-edge military technologies begins during research and development in the laboratories (whether Government or commercial) and extends through the acquisition life cycle. Thus it is imperative to maintain a strong technology base investment to develop options for the long term, beyond the threats, scenarios, and budgets that today's analysts can currently predict. Also, it is imperative that critical research and technology information be identified early in S&T activities and that decisions on critical program information protection be made early in the acquisition process and be reassessed at each major decision point.

4.2.2. Time-Phased Requirements and Communications with Users. Validated time-phased requirements generation is an evolutionary approach to specifying operational requirements in an incremental manner over time matched with projected threat assessments and

available technology. Time-phased requirements are essential to evolutionary acquisition strategies and are strongly encouraged as a preferred approach to establishing and documenting operational needs. The Defense acquisition and requirements communities shall maintain continuous and effective communications with each other and with the operational user. The objective is to gain a sound understanding of the users' needs and to work with them to achieve a proper balance among cost, schedule, and performance considerations.

4.2.3. Use of Commercial Products, Services, and Technologies. In response to user requirements, priority consideration shall always be given to the most cost-effective solution over the system's life cycle. In general, decision-makers, users, and program managers shall first consider the procurement of commercially available products, services, and technologies, or the development of dual-use technologies, to satisfy user requirements, and shall work together to modify requirements, whenever feasible, to facilitate such procurements. Market research and analysis shall be conducted to determine the availability, suitability, operational supportability, interoperability, and ease of integration of existing commercial technologies and products and of non-developmental items prior to the commencement of a development effort.

4.2.4. Performance-Based Acquisition In order to maximize competition, innovation, and interoperability, and to enable greater flexibility in capitalizing on commercial technologies to reduce costs, performance-based strategies for the acquisition of products and services shall be considered and used whenever practical. For products, this includes all new procurements and major modifications and upgrades, as well as the reprocurement of systems, subsystems, and spares that are procured beyond the initial production contract award. When using performance-based strategies, contractual requirements shall be stated in performance terms, limiting the use of military specifications and standards to Government-unique requirements only. Configuration management decisions shall be based on factors that best support implementation of performance-based strategies throughout the product life cycle.

4.3. Rapid and Effective Transition from Acquisition To Deployment and Fielding

4.3.1. Evolutionary Acquisition To ensure that the Defense Acquisition System provides useful military capability to the operational user as rapidly as possible, evolutionary acquisition strategies shall be the preferred approach to satisfying operational needs. Evolutionary acquisition strategies define, develop, and produce/deploy an initial, militarily useful capability ("Block I") based on proven technology, time-phased requirements, projected threat assessments, and demonstrated manufacturing capabilities, and plan for subsequent development and production/deployment of increments beyond the initial capability over time (Blocks II, III, and beyond). The scope, performance capabilities, and timing of subsequent increments shall be based on continuous communications among the requirements, acquisition, intelligence, and budget communities. In planning evolutionary acquisition strategies, program managers shall strike an appropriate balance among key factors, including the urgency of the operational requirement; the maturity of critical technologies; and the interoperability, supportability, and affordability of alternative acquisition solutions. To facilitate evolutionary acquisition, program managers shall use appropriate enabling tools, including a modular open systems approach to ensure access to the latest technologies and products, and facilitate affordable and supportable modernization of fielded assets. Sustainment strategies must evolve

and be refined throughout the life cycle, particularly during development of subsequent blocks in an evolutionary strategy.

4.3.2. Integrated Test and Evaluation. Test and evaluation is the principal tool with which progress in system development is measured. The complexity of modern weapon systems demands that test and evaluation programs be integrated throughout the defense acquisition process. Test and evaluation shall be structured to support the defense acquisition process and the user by providing essential information to decision-makers, assessing attainment of technical performance parameters, and determining whether systems are operationally effective, suitable, and survivable for intended use. Test and evaluation is conducted to facilitate learning, assess technical maturity and interoperability, facilitate integration into fielded forces, and confirm performance. Test and evaluation shall be closely integrated with requirements definition, threat projections, systems design, and development, and shall support the user through assessments of a system's contributions to mission capabilities. Test and evaluation planning shall begin early in the acquisition process. To the greatest extent possible, the DoD Components shall gather test data to identify the total cost of ownership, and at a minimum, the major drivers of life-cycle costs. Each Military Department shall establish an independent operational test and evaluation agency, reporting directly to the Service Chief, to plan and conduct operational tests, report results, and provide evaluations of effectiveness and suitability.

4.3.3. Competition. Competition is critical for providing innovation, product quality, and affordability. All DoD Components shall acquire systems, subsystems, equipment, supplies and services in accordance with the statutory requirements for competition. Competition provides major incentives to industry and Government organizations to reduce cost and increase quality. The Department must take all necessary actions to promote a competitive environment, including examination of alternative systems to meet stated mission needs; structuring Science and Technology investments and acquisition strategies to ensure the availability of competitive suppliers throughout a program's life and for future programs; ensuring that prime contractors foster effective competition for major and critical products and technologies; and ensuring qualified international sources are permitted to compete. Acquisition, technology, and logistics decisions shall be made with full consideration of their impacts on a competitive industrial base, including not only the prime contractor level but also the subcontractor level.

4.3.4. Departmental Commitment to Production. Milestone decision authorities shall not commit the Department to the initiation of low-rate initial production (or any production in the case of systems where low-rate initial production is not required) of an acquisition program unless and until certain fundamental criteria have been considered and evaluated. These criteria include, but are not necessarily limited to, demonstrated technology maturity; well-defined and understood user requirements that respond to identified threats; acceptable interoperability, affordability, and supportability; and a strong plan for rapid acquisition using evolutionary approaches as the preferred strategy, open systems designs, and effective competition.

4.4. Integrated and Effective Operational Support

4.4.1. Total Systems Approach. Acquisition programs shall be managed to optimize total system performance and minimize total ownership costs by addressing both the equipment

and the human part of the total system equation, through application of systems engineering. Program managers shall give full consideration to all aspects of system support, including logistics planning; manpower, personnel, and training; human, environmental, safety, occupational health, accessibility, survivability, operational continuity, and security factors; protection of critical program information through anti-tamper and other measures; and spectrum management and the operational electromagnetic environment.

4.4.2. Logistics Transformation. Logistics transformation is fundamental to acquisition reform. Decision-makers shall take all appropriate enabling actions to integrate acquisition and logistics to ensure a superior product support process. The Department shall strive for an integrated acquisition and logistics process characterized by constant focus on total cost of ownership; supportability as a key design and performance factor; logistics emphasis in the systems engineering process; and that meets the challenges of rapidly evolving logistics systems supporting joint operational forces.

4.4.3. Logistics trans formation shall be accomplished through:

4.4.3.1. Streamlined logistics infrastructure requirements.

4.4.3.2. Reduced logistics response cycle times.

4.4.3.3. Weapon system supply chains integrated with the Department of Defense and commercial logistics systems and focused on customer service and system readiness.

4.4.3.4. Use of competitive sourcing to select best-value providers from Government, industry, or public-private partnerships.

4.4.3.5. A support environment that maintains long-term competitive pressures; continuous improvement of weapon system reliability, maintainability, and supportability through technology refreshment and other means; and effective integration of weapon system-focused support to provide total mission logistics and optimum support to the user. Acquisition program managers shall focus on logistics considerations early in the design process to ensure that they deliver reliable systems that can be cost-effectively supported and provide users with the necessary support infrastructure to meet peacetime and wartime readiness requirements.

4.5. Effective Management

4.5.1. Tailoring. There is no one best way to structure an acquisition program so that it accomplishes the objectives of the Defense Acquisition System. Decision-makers and program managers shall tailor acquisition strategies to fit the particular conditions of an individual program, consistent with common sense, sound business management practice, applicable laws and regulations, and the time-sensitive nature of the user's requirement. Proposed programs may enter the acquisition process at various decision points, depending on concept and technology maturity. Tailoring shall be applied to various aspects of the acquisition system, including program documentation, acquisition phases, the timing and scope of decision reviews, and

decision levels. Milestone decision authorities shall promote flexible, tailored approaches to oversight and review based on mutual trust and a program's dollar value, risk, and complexity.

4.5.2. Cost and Affordability. Fiscal constraint is a reality that all participants in the acquisition system must recognize. Cost must be viewed as an independent variable, and the DoD Components shall plan programs based on realistic projections of funding likely to be available in future years. To the greatest extent possible, the DoD Components shall identify the total costs of ownership, and at a minimum, the major drivers of total ownership costs. Consistent with the Chairman of the Joint Chiefs of Staff guidance on requirements generation, the user shall treat cost as a military requirement and state the amount the Department should be willing to invest to obtain, operate, and support the needed capability over its expected life cycle. Acquisition managers shall establish aggressive but realistic objectives for all programs and follow through by working with the user to trade off performance and schedule, beginning early in the program (when the majority of costs are determined).

4.5.3. Program Stability. To maximize program stability, the DoD Components shall develop realistic program schedules, long-range investment plans, and affordability assessments, and shall strive to ensure stable program funding. The milestone decision authority shall determine the appropriate point at which to fully fund an acquisition program. This point shall be no later than entry into the systems demonstration and development phase, but may be earlier if warranted by the acquisition strategy and the timing of the decision relative to the programming and budgeting process. In general, full funding shall be required when there is a mature system concept and architecture (based on proven technologies). Full funding shall be based on the cost of the most likely system alternative. The acquisition community shall actively participate in the various phases of the Planning, Programming, and Budgeting System to ensure that acquisition management issues and full funding are properly addressed.

4.5.4. Simulation-Based Acquisition. Program managers shall plan and budget for effective use of modeling and simulation to reduce the time, resources, and risk associated with the entire acquisition process; increase the quality, military worth and supportability of fielded systems; and reduce total ownership costs throughout the system life cycle.

4.5.5. Innovation, Continuous Improvement, and Lessons Learned. The Department shall continuously focus on developing and implementing major initiatives necessary to streamline and improve the Defense Acquisition System. Through a commitment to reengineering, the Department shall increase its ability to fund warfighting requirements and continued research and development. Decision-makers at all levels shall encourage the continuous examination and adoption of innovative practices – including best commercial practices and electronic business solutions - that reduce cycle time and cost, and encourage teamwork, and shall provide meaningful incentives for innovation, such as reinvestment of cost savings and career recognition and advancement. In addition, decision-makers at all levels shall encourage and facilitate the documentation and institutionalization of lessons learned – both good and bad - from past experience. Proper incentives must be in place to encourage a culture friendly to the documentation of valuable lessons learned and the sharing of knowledge. The objective is a learning culture that embraces change and continuously adapts to new challenges.

4.5.6. Streamlined Organizations and a Professional Workforce. The Department shall use a streamlined management structure in the acquisition system characterized by short, clearly defined lines of responsibility, authority, and accountability. In general, the chain of command shall include the program manager, program executive officer, the Component Acquisition Executive (CAE), reporting through the Head of the Component, and the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) or the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C3I)). In all cases, no more than two levels of review shall exist between a program manager and the Milestone Decision Authority. The Department of Defense shall maintain a fully proficient acquisition, technology, and logistics workforce that is flexible and highly skilled across a range of management, technical, and business disciplines. To ensure this, the USD(AT&L) shall establish education, training, and experience standards for each acquisition position based on the level of complexity of duties carried out in that position. In addition, the USD(AT&L) shall encourage the use of cross-training programs to ensure that all disciplines and communities within USD(AT&L) have a full understanding of the overall system. Defense acquisition works best when all of the DoD Components work together as a team focused on the customer.

5. RESPONSIBILITIES

The Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)), the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (ASD(C3I)), and the Director of Operational Test and Evaluation (DOT&E) are key officials of the Defense Acquisition System. They may jointly issue DoD Instructions, DoD Publications, and one-time directive-type memoranda, consistent with DoD 5025.1-M (reference (h)), that implement the policies contained in this Directive. Any such issuance shall be jointly signed by the USD(AT&L), the ASD(C3I), and the DOT&E.

6. EFFECTIVE DATE

This Directive is effective immediately.

Rudy de Leon
Deputy Secretary of Defense

Enclosures - 3
- E1. References, continued
- E2. Definitions
- E3. Overview

E1. ENCLOSURE 1

REFERENCES, continued

(e) Chairman of the Joint Chiefs of Staff Instruction 3170.01A, "Requirements Generation System," August 10, 1999
(f) Federal Acquisition Regulation (FAR), current edition
(g) Defense Federal Acquisition Regulation (DFAR) Supplement, current edition
(h) DoD 5025.1-M, "DoD Directives System Procedures," August 1994

E2. ENCLOSURE 2

DEFINITIONS

E2.1.1. Acquisition Executive. The individual within the Department and Components charged with overall acquisition management responsibilities within his or her respective organization. The Under Secretary of Defense for Acquisition, Technology, and Logistics is the Defense Acquisition Executive responsible for all acquisition matters within the Department of Defense. The Component Acquisition Executives (CAE) for each of the Components are the Secretary of the Military Departments or Heads of Agencies with power of redelegation. The CAEs are responsible for all acquisition matters within their respective Component.

E2.1.2. Acquisition Program. A directed, funded effort designed to provide a new, improved, or continuing materiel, weapon or information system capability, or service, in response to a validated operational or business need. Acquisition programs are divided into categories, which are established to facilitate decentralized decision-making, execution, and compliance with statutory requirements.

E2.1.3. Automated Information System (AIS). An acquisition program that acquires Information Technology (IT), except IT that:

E2.1.3.1. Involves equipment that is an integral part of a weapon or weapons system; or

E2.1.3.2. Is a tactical communication system.

E2.1.4. 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.

E2.1.4.1. The term "equipment" means any equipment used by the DoD Component directly or used by a contractor under a contract with the Component that requires the use of such equipment, or the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product.

E2.1.4.2. The term "IT" includes computers, ancillary equipment, software, firmware, and similar procedures, services (including support services), and related resources. The term "IT" also includes National Security Systems. It does not include any equipment that is acquired by a Federal contractor incidental to a Federal contract.

E2.1.5. Milestone Decision Authority. The individual designated in accordance with criteria established by the Under Secretary of Defense for Acquisition, Technology, and Logistics, or by the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence for AIS programs, to approve entry of an acquisition program into the next phase of the acquisition process.

E2.1.6. National Security System (NSS). Any telecommunications or information system operated by the U.S. Government, the function, operation, or use of which:

E2.1.6.1. Involves intelligence activities;

E2.1.6.2. Involves cryptologic activities related to national security;

E2.1.6.3. Involves command and control of military forces;

E2.1.6.4. Involves equipment that is an integral part of a weapon or weapons system; or,

E2.1.6.5. Subject to the limitation below, is critical to the direct fulfillment of military or intelligence missions. This does not include a system that is to be used for routine administrative and business applications (including payroll, finance, logistics, and personnel management applications).

E2.1.7. Program Executive Officer (PEO). A military or civilian official who has primary responsibility for directing several major defense acquisition programs and for assigned major system and non-major system acquisition programs. A PEO has no other command or staff responsibilities within the Component, and only reports to and receives guidance and direction from the DoD Component Acquisition Executive.

E2.1.8. Program Manager (PM). The individual designated in accordance with criteria established by the appropriate Component Acquisition Executive to manage an acquisition program, and appropriately certified under the provisions of the Defense Acquisition Workforce Improvement Act (10 U.S.C. §1701 et seq.). A PM has no other command or staff responsibilities within the Component.

E2.1.9. Requirements Authority. The individual within the DoD Components charged with overall requirements definition and validation. The Vice-Chairman of the Joint Chiefs of Staff, in the role as Chairman of the Joint Requirements Oversight Council (JROC), is the requirements authority for all potential major defense acquisition programs and is responsible for all requirements policy and procedures, including Mission Need Statements, Capstone Requirements Documents, and Operational Requirements Documents. The Requirements Authority for other acquisition category programs is specified in reference (e).

E3. ENCLOSURE 3

OVERVIEW

The Defense Acquisition System exists to secure and sustain the nation's investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the United States Armed Forces. The Department's investment strategy must be postured to support not only today's force, but also the next force, and future forces beyond that:

E3.1.1. ACQUISITION. The primary objective of Defense acquisition is to acquire quality products that satisfy user needs with measurable improvements to mission accomplishment and operational support, in a timely manner, and at a fair and reasonable price. The Department of Defense shall use performance and results-based management to ensure an efficient and effective acquisition system. Successful acquisition programs are fundamentally dependent upon competent people, rational priorities, validated requirements, performance measurement, and clearly defined responsibilities.

E3.1.2. TECHNOLOGY. A robust Science and Technology program provides the essential foundation for a technologically superior military force. The Department's acquisition executives shall ensure that users have superior, supportable, and affordable technology to support their missions and give them revolutionary war-winning capabilities.

E3.1.3. OPERATIONAL SUPPORT. Effective operational support must provide for systems that are suitable, supportable, and survivable, and must utilize a total systems approach for the full range of system support considerations throughout the life cycle of the system.

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