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# CRS Report for Congress

## Defense Acquisition: Overview, Issues, and Options for Congress

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Stephen Howard Chadwick
Analyst in Defense Acquisition
Foreign Affairs, Defense, and Trade Division


Prepared for Members and
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# Defense Acquisition: Overview, Issues, and Options for Congress

## Summary

Department of Defense (DOD) activities to provide military capabilities for the defense of the nation are usually controversial and always complex. Those activities are generally referred to as defense acquisition. The structure DOD utilizes to plan, execute and oversee those activities is a highly intricate and multi-variate "system of systems" composed of the requirements, resource allocation and acquisition systems. This system of systems has evolved over time, its foundation being the report published by the Packard Commission in 1986, with many of those recommendations becoming part of the Goldwater-Nichols Department of Defense Reorganization Act of 1986. This evolution continued after the Goldwater-Nichols Act as the requirements system changed from a threat-based to a capabilities-based system; the resource allocation system added execution reviews and concurrent program and budget reviews; and the acquisition system changed from a structured, rigid process to a flexible, tailored process.

The complexity of this system of systems combined with the magnitude of personnel, activities and funding involved in its operation can result in problems, including inefficient operations, fraud/waste/abuse, and inadequate implementation or enforcement of the myriad laws and regulations that govern it. The Congress has tried to help mitigate these types of problems and accompanying issues over the years. Today, there are a number of challenging issues that Congress could consider to further improve the defense acquisition structure. Some of those issues include defense acquisition transformation, cost/schedule/performance problems in Major Defense Acquisition Programs (MDAPs), unacceptable outcomes of cost-reimbursement contracts, poor interagency and services contracting practices, and an insufficient defense acquisition workforce. To address cost overruns in MDAPs for example, Congress might consider establishing termination criteria if a program reaches an unacceptable cost level. Supporters might argue such criteria would help prevent "gold-plating" requirements and "low-ball" cost estimates since a program breach would guarantee termination. However, opponents might argue that program termination does not terminate the warfighter's requirement for fielding a necessary warfighting capability, and it could cause harmful delays by beginning a new program to deliver the capability.

Annual National Defense Authorization Acts (NDAAs) are the primary means by which Congress has addressed defense acquisition policies. For FY2008, as in previous years, both the House (H.R. 1585) and Senate (S. 567) have included a title in their versions of the bill dedicated to defense acquisition. Some examples of provisions in the House bill include a requirement for a variety of acquisition workforce studies and plans, a prohibition on procurements from sources that receive government subsidies and a prohibition on awarding future contracts to Lead Systems Integrators (LSIs). Some example of provisions in the Senate bill include a requirement to establish an acquisition workforce development fund, the appointment of a three-star military deputy to the service acquisition executives (SAEs), and the establishment of statutory guidelines for multi-year procurement (MYP) savings. This report will be updated as events warrant.

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# Defense Acquisition: Overview, Issues, and Options for Congress

## Introduction

Congress has been concerned with the defense acquisition structure-the requirements, resources and acquisition "system of systems" that provides warfighting capability-for many years. Congressional concern has ranged from "micro-level" practices, such as characteristics of a particular contract, to "macro-level" practices, such as DOD's management and execution of Major Defense Acquisition Programs (MDAPs).[1] In response to these concerns, Congress has legislated many changes to improve the defense acquisition structure and its practices. Despite these changes, concerns remain about the structure and its practices. One example of stated Congressional concern over the structure and its practices was included in the House Armed Services Committee's report on the FY2007 defense authorization bill:

> Simply put, the Department of Defense (DoD) acquisition process is broken. The ability of the Department to conduct the large scale acquisitions required to ensure our future national security is a concern of the committee. The rising costs and lengthening schedules of major defense acquisition programs lead to more expensive platforms fielded in fewer numbers. The committee's concerns extend to all three key components of the Acquisition process including requirements generation, acquisition and contracting, and financial management.[2]

The unparalleled complexity of DOD's defense acquisition structure lends itself to the continued emergence of many problematic issues. Some of the most significant issues involve defense acquisition transformation, cost/schedule/performance problems in MDAPs, the defense acquisition workforce, outcomes of cost reimbursement contracts, and, services and interagency contracting.

This report will provide an outline of DOD's defense acquisition structure followed by a discussion of the most recent major reports addressing defense acquisition and DOD's defense acquisition transformation efforts. This report also includes a description of some significant issues the 110th Congress might consider as well as some options to address these issues.

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[1] MDAPs are DOD acquisition programs whose value meets or exceeds $365 million of Research, Development, Test and Evaluation funding or $2.19 billion of Procurement funding in FY00 constant dollars, or are designated MDAPs by the USD (AT&L). MDAPs are statutorily defined at 10 U.S.C. 2430.

[2] Report 109-452. Report of the Committee on Armed Services, House of Representatives on H.R. 5122. May 5, 2006, p. 350.

# Background

## DOD Defense Acquisition Structure

**Origin.** DOD's defense acquisition structure evolved over a long period of time, since the founding of the nation.[3] During this time, the United States has fielded arguably the most technologically superior military force in the world. Fielding such a force has been difficult and costly however, evidenced by numerous reports of cost, schedule and/or performance failures in acquisition programs and practices along the way. These problems occurred despite efforts to mitigate them, such as revisions to DOD's defense acquisition policy documents, reports and recommendations of numerous Commissions, Studies and/or Panels, and efforts to simplify and streamline defense acquisition processes such as Congress' passage of the Federal Acquisition Regulation System in 1980 and Deputy Secretary of Defense Frank Carlucci's set of 32 initiatives introduced in 1981.

The ineffectiveness of previous efforts combined with public reports of DOD purchasing $600 toilet seats and $400 hammers[4] led President Reagan to sign Executive Order 12526, The President's Blue Ribbon Commission on Defense Management, on July 15, 1985. This Commission became known as the Packard Commission after the President designated David Packard as its chairman. The Commission was established to analyze and improve defense management practices, specifically including acquisition. The President directed that the Commission's first task was to "devote its attention to the procedures and activities of the Department of Defense associated with the procurement of military equipment and materiel."[5] After the Packard Commission's report was released in June of 1986, its recommendations had a high degree of policy significance. This was because many of the Commission's recommendations were included in the Goldwater-Nichols Department of Defense Reorganization Act of 1986, viewed by many as the most significant piece of defense legislation passed since the 1947 National Security Act. Examples of Commission recommendations included in Goldwater-Nichols, other related legislation, and presidential directives were the Undersecretary for

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[3] For a longer history of the evolution of the defense acquisition structure, see **Appendix B**.

[4] Reports later surfaced that the $600 toilet seat was in fact not a toilet seat, but a corrosion resistance shroud to cover the entire toilet system of a P-3 aircraft and the $400 hammer was a matter of an incorrect invoice that the government never actually paid. For additional detail, see the transcript of a Washington Post interview with President Reagan from February 1986, at [http://www.reagan.utexas.edu/archives/speeches/1986/21086d.htm].

[5] Executive Order 12526, [http://www.presidency.ucsb.edu/ws/index.php?pid=38892].

Acquisition position, the SAE-PEO-PM[6] structure, a simplified acquisition code, a more professional acquisition corps and baselining requirements.[7]

**Statutory Foundation.** Title 10 of United States Code governs the defense acquisition structure. Title 10 does not devote a specific chapter to "defense acquisition" but its tenets are spread throughout, including the responsibilities of many positions in Defense Acquisition's organization, procedures that must be followed in defense acquisition practices, provisions for different methods of acquisition and Congressional reporting requirements. Title 10 also requires DOD to use the Federal Acquisition Regulation (FAR) for its procurement (or contracting) practices via its inclusion of and reference to the definitions and requirements outlined in the Chapter 7 of Title 41 of the United States Code.[8] National Defense Authorization Acts enacted into law may add or modify sections of Title 10 which address the defense acquisition structure or its practices, or even assign unique statutory requirements above and beyond those prescribed within the title.

**The Structure.** DOD's defense acquisition structure consists of three interrelated and interdependent systems. The first system is the Joint Capabilities Integration and Development System (JCIDS), known as the requirements system. The second system is the Planning, Programming, Budgeting, and Execution System (PPBES), known as the resource allocation or budgeting system. The third system is the Defense Acquisition System (DAS), known as the acquisition or procurement system, also referred to as "little a" acquisition. These three systems do not report to or fall under an overarching "system", but they do operate in a manner similar to a "system of systems" (SOS)[9] and are referred to as "Big A" acquisition. DOD's defense acquisition structure is characterized in **Figure 1** below:

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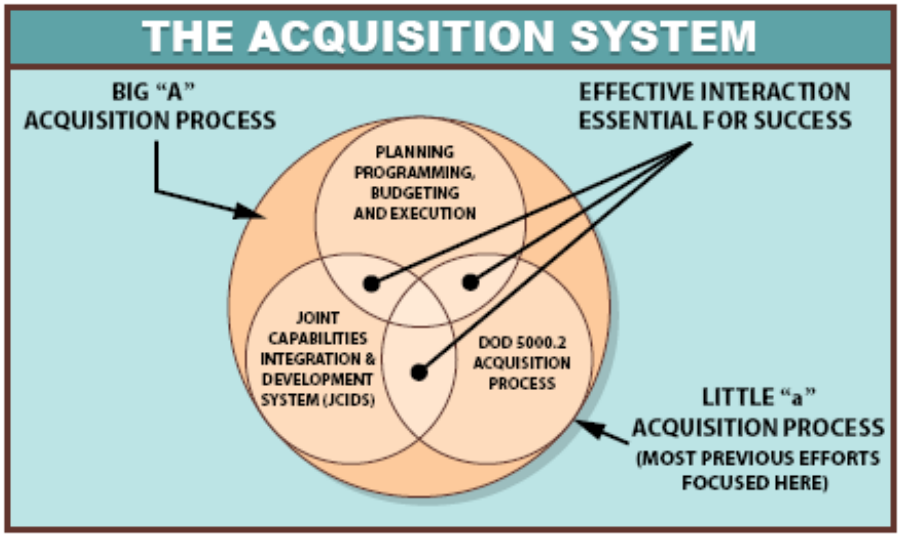
[6] SAE-PEO-PM stands for Service Acquisition Executive, Program Executive Officer and Program Manager, respectively. The SAE is a political appointee in the secretariat of the military department who it responsible for all acquisitions and acquisition programs within the Service as prescribed by Title 10. The SAE selects a number of PEOs who oversee some number of acquisitions and acquisition programs while PMs are responsible for all aspects of an individual acquisition or acquisition program. The Packard Commission recommended this acquisition chain-of-command.

[7] Murdock, Clark A., Flournoy, Michèle A., et al. "Beyond Goldwater-Nichols - Defense Reform for a New Strategic Era - Phase 2 Report." Center for Strategic and International Studies. July 2005, p. 90.

[8] DOD also issues a variety of Defense-unique supplements to the FAR which are referred to as "_FARS", the blank being a various designation depending on which DOD component issues and maintains the supplement (D would stand for DOD, AF for Air Force, etc.)

[9] Page GL-15 of Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01E defines a system of systems as "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 significantly degrade the performance or capabilities of the whole. The development of a SOS solution will involve trade space between the systems as well as within an individual system performance. An example of a SOS would be a combat aircraft. While the aircraft may be developed as a single system, it could incorporate subsystems developed for other aircraft. For example, the radar from an existing aircraft may be incorporated into the one being developed rather than developing a new radar. The SOS in this case would be the airframe, engines, radar, avionics, etc. that make up the entire combat aircraft capability."

**Figure 1. DOD's Defense Acquisition Structure**



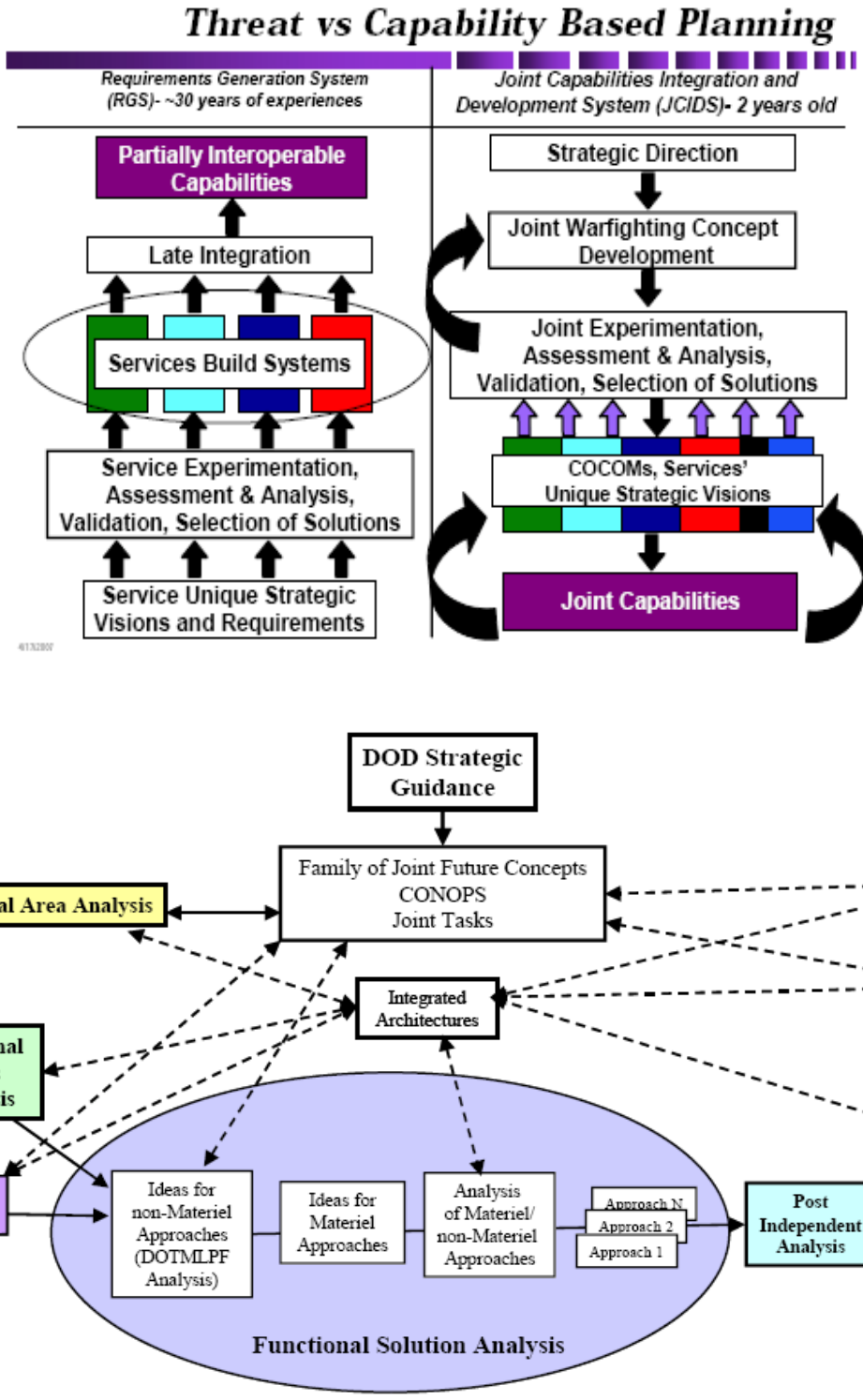

**Source:** Defense Acquisition Performance Assessment Report, February 2006, p. 4.

The three individual systems are described in more detail below.

***Joint Capabilities Integration and Development System (JCIDS).*** JCIDS is a system which is responsible for "identifying, assessing and prioritizing joint military capability needs as specified in title 10, United States Code, sections 153, 163, 167 and 181."[10] The JCIDS is governed by CJCSI 3170.01E and utilizes the procedures described in Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3170.01B. Created in 2003, this system replaced the Requirements Generation System (RGS), which has been the method for identifying warfighter requirements for the previous 30 years. The primary reason behind changing the requirements system from RGS to JCIDS was DOD's policy shift from a threat-based assessment of warfighter needs to a capabilities-based assessment of warfighter needs. In other words, instead of developing, producing and fielding systems based on perceived threats to the nation, DOD's policy is to develop, produce and field capabilities based upon strategic direction and priorities such as the National Military Strategy (NMS) and National Defense Strategy (NDS). **Figure 2** below illustrates the difference between the two systems and provides an overview of JCIDS:

[10] Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01E, current as of 16 March 2007, p. 1, at [http://www.dtic.mil/cjcs_directives/cdata/unlimit/3170_01.pdf].

**Figure 2. RGS vs. JCIDS and JCIDS Overview**

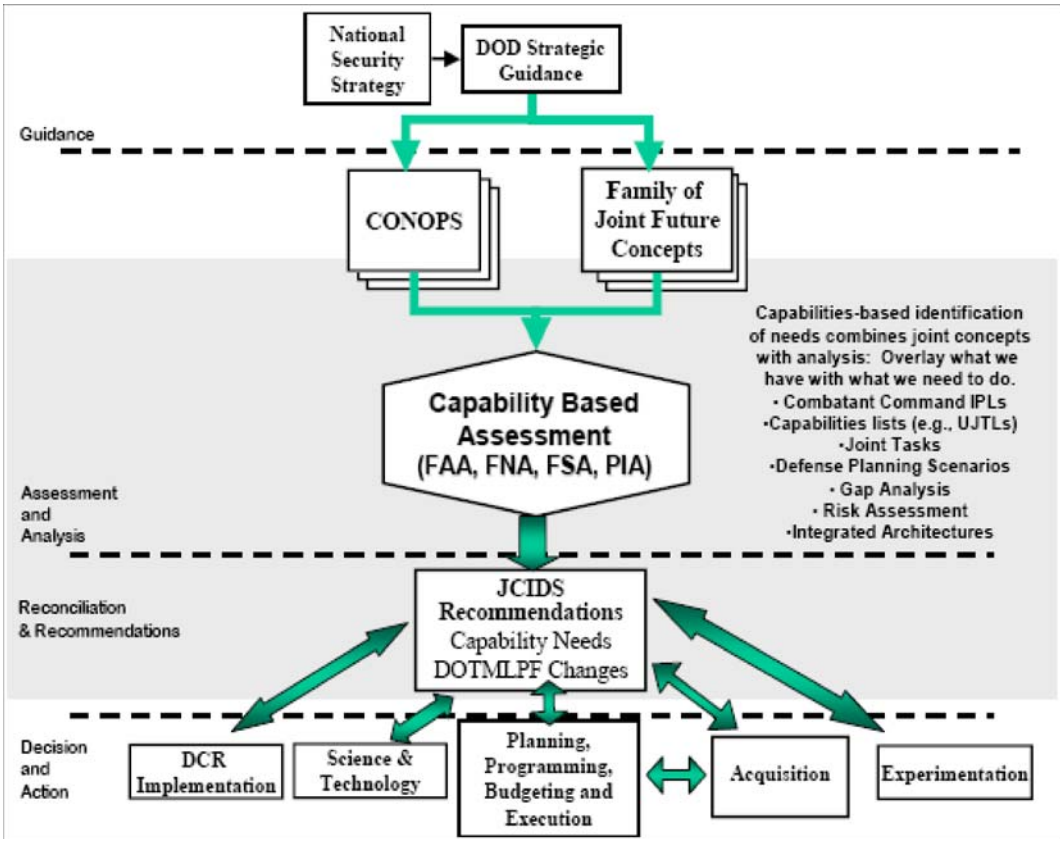



**Sources:** Contrast from brief by Major General Bromburg, USA, Deputy Director for Force Projection, J8. February 1, 2006, Overview from CJCSM 3170.01B, May 11 2005.

According to CJCSM 3170.01B[11], the JCIDS analysis process begins with a Functional Area Analysis (FAA). The outcome of the FSA is a list of capabilities and their respective attributes. After the FAA is complete, the next step is a Functional Needs Analysis (FNA). The FNA results in a list of capability shortfalls and/or overlaps, including consideration of Combatant Commander (COCOM) Integrated Priority Lists (IPLs) and issues. The FNA results will also prioritize the shortfalls and/or overlaps for resolution. The FAA and FNA results are captured in a Joint Capabilities Document (JCD) which lists and outlines the shortfalls and/or overlaps identified in the FAA and FNA. Once a JCD is approved, it is used as a baseline for the Functional Solutions Analysis (FSA). This analysis considers both material and non-material solutions to resolve capability shortfalls and/or overlaps to develop a range of alternative solutions to resolve capability shortfalls and/or overlaps. Once the FSA is complete, a Post Independent Analysis (PIA) is conducted by an independent group to assess and ensure that the FSA is complete, thorough and reasonable. If the PIA confirms the recommendations then one or both of two documents may be produced; an Initial Capabilities Document (ICD) for material solutions and a Joint Doctrine Change Request (Joint DCR) for non-material solutions. Once these actions are complete, any further material analysis or acquisition is performed under the DAS instead of JCIDS, though further JCIDS documents such as the Capability Development Document (CDD) and Capability Production Document (CPD) will use information gained from the DAS' efforts. **Figure 3** below illustrates the JCIDS analysis process:

[11] See [http://www.dtic.mil/cjcs_directives/cdata/unlimit/m317001.pdf].

**Figure 3. JCIDS Analysis Process**




**Source:** CJCSI 3170.01E, current as of March 16, 2007.

***Planning, Programming, Budgeting and Execution System (PPBES).***[12] According to the OSD Comptroller:

> The ultimate objective of PPBE is to provide Operational Commanders with the best mix of forces, equipment, and support attainable within fiscal constraints. Based on the anticipated threat, a strategy is developed. Requirements of that strategy are then estimated and programs are developed to execute the strategy. Finally, a budget is developed to pay for the programs.[13]

The PPBES was originally the Planning, Programming and Budgeting System (PPBS), first implemented in the early 1960s by then-Secretary of Defense Robert McNamara. The policy documents that govern PPBES are DOD Directive (DODD) 7045.14 and DOD Instruction (DODI) 7045.7 though neither document has been

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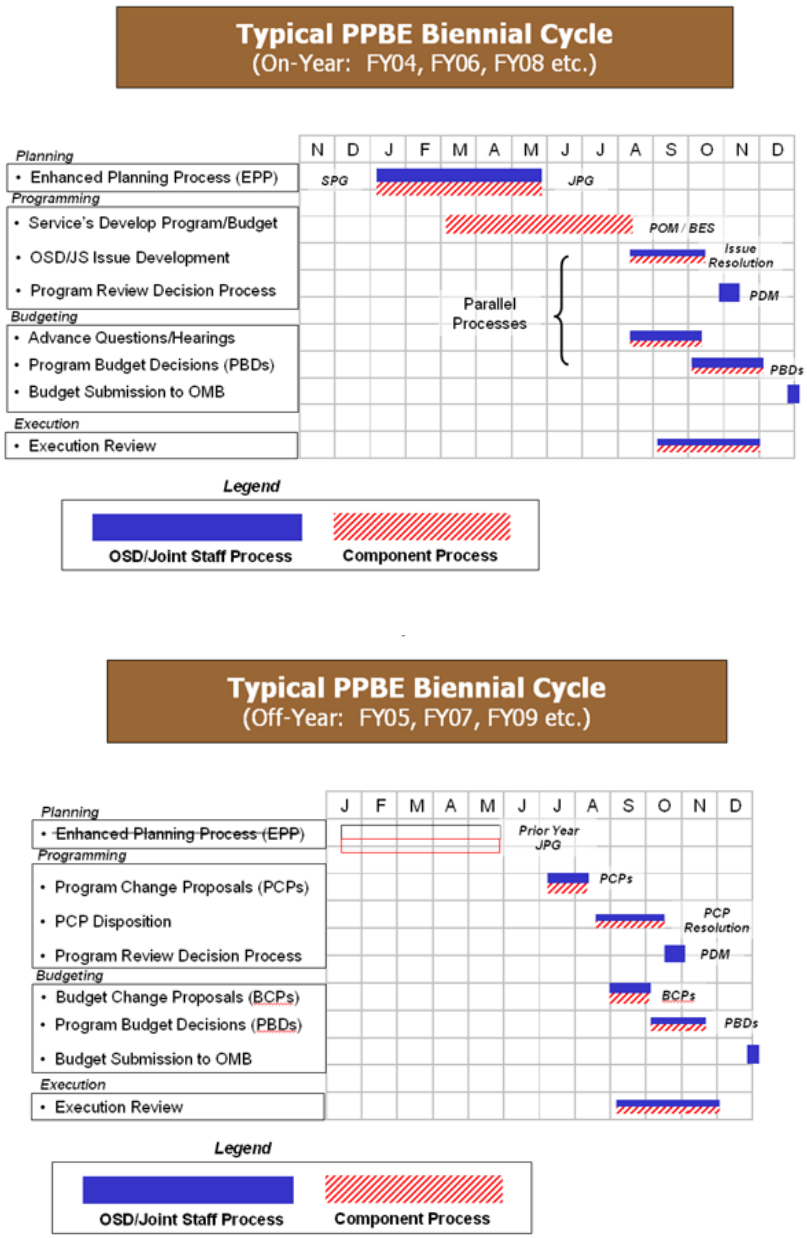
[12] For additional detail, see CRS Report RL30002, *A Defense Budget Primer*, by Mary T. Tyszkiewicz and Stephen Daggett and the OSD Comptroller's iCenter website at [http://www.defenselink.mil/comptroller/icenter/budget/ppbsint.htm]. Additionally, DAU offers an online course on PPBES at [https://learn.dau.mil/html/clc/Clc.jsp], Prefix (class number) CLB009.

[13] OSD Comptroller iCenter, at [http://www.defenselink.mil/comptroller/icenter/budget/histcontext.htm].

updated since PPBS was modified to become the PPBES via Management Initiative Decision 913 of 22 May 2003.. The PPBES process in its entirety is not exercised every year even though DOD must request funding from Congress annually. Planning and programming activities occur in even-numbered years (called "on-years") while budgeting and execution activities occur in both on-years and "off-years" (odd-numbered years). In the off-years, Budget Change Proposals (BCPs) can be requested by programs or result from DOD review of program execution metrics. **Figure 4** below illustrates the PPBES process:

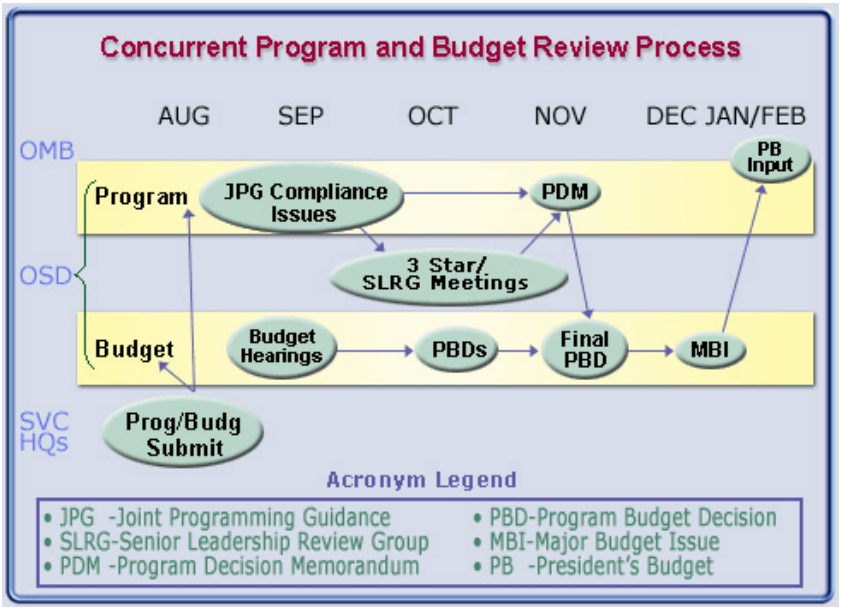
**Figure 4. PPBES Process Overview**




**Source:** Defense Acquisition Guidebook, Chapter 1.2, [http://akss.dau.mil/dag/DoD5000.asp?view=framework].

The PPBES process consists of four stages; planning, programming, budgeting, and execution. The planning stage includes analysis of COCOM issues and problems against the backdrop of the security and defense strategies of the nation. The planning stage results in the production of the Joint Programming Guidance (JPG) document, which guides DOD components'[14] preparation of proposed programs to meet criteria outlined in the JPG. The programming stage is when these proposed programs are constructed and the Program Objective Memorandum (POM) is submitted to propose these programs. If proposed programs do not meet established criteria in the JPG or other issues necessitate changes to proposed programs, Program Decision Memorandum (PDM) can be issued that direct what the programs will be. The next stage, budgeting, occurs concurrently with the programming phase and proposed budgets are reviewed in a different manner than proposed programs (see **Figure 5**). Upon issuance of PDMs and/or as a result of budgetary reviews, Program Budget Decisions (PBDs) are issued and once all PBDs are final the DOD components have a final opportunity to appeal decisions by submitting Major Budget Issues (MBIs) to the Secretary of Defense (SECDEF). The SECDEF may make a decision based on information presented or consult the President if significant issues remain between DOD's top line budget prescribed by the Office of Management and Budget (OMB) and DOD's required programs. The final phase, execution, begins once the President signs the annual appropriations bill for DOD. During this stage, programs are evaluated on their ability to meet established performance metrics, which can include funding obligations and expenditures.

**Figure 6. PPBES Concurrent Program/Budget Review**




**Source:** DAU PPBES Continuous Learning Course CLB009, [https://learn.dau.mil/html/clc/Clc.jsp].

[14] DOD Components include the Office of the Secretary of Defense (OSD); the Military Departments; the Chairman, Joint Chiefs of Staff (CJCS) and Joint Staff; the Unified Combatant Commands (UCCs); the Defense Agencies; and DOD field activities.

***Defense Acquisition System (DAS).*** The DAS is:

> the management process by which the Department of Defense provides effective, affordable, and timely systems to the users (and it) exists to manage the nation's investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the United States Armed Forces.[15]

This management process begins in acquisition program offices. The offices are headed by a Program Manager (PM) who is the single individual in the program office responsible for all facets of the office's operations. The PM is usually supported by a staff of engineers, logisticians, contracting officers and specialists, budget and financial managers, test and evaluation personnel, etc. who are responsible for their individual facets but also provide guidance and advice to the PM. PMs can be military officers or federal civil servants and usually report to a Program Executive Officer (PEO).[16] PEOs can have many PMs who report to them. PEOs can also be military officers or federal civil servants and report to a Component Acquisition Executive (CAE).[17] Most CAEs report to the Undersecretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)), who also serves as the Defense Acquisition Executive (DAE).[18] This PM-PEO-CAE-DAE organizational construct was one of the recommendations of the Packard Commission.

DOD uses decision milestones to oversee and govern the initiation and progress of acquisition programs, each of which have a specific set of statutory and regulatory criteria that must be met for approval by the Milestone Decision Authority (MDA). Formal initiation of acquisition programs[19] by the MDA occurs upon Milestone B approval except for ships which can occur upon Milestone A approval. **Figure 6** below illustrates this process:

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[15] Department of Defense Directive 5000.1. "The Defense Acquisition System." May 12, 2003, pp. 2-3.

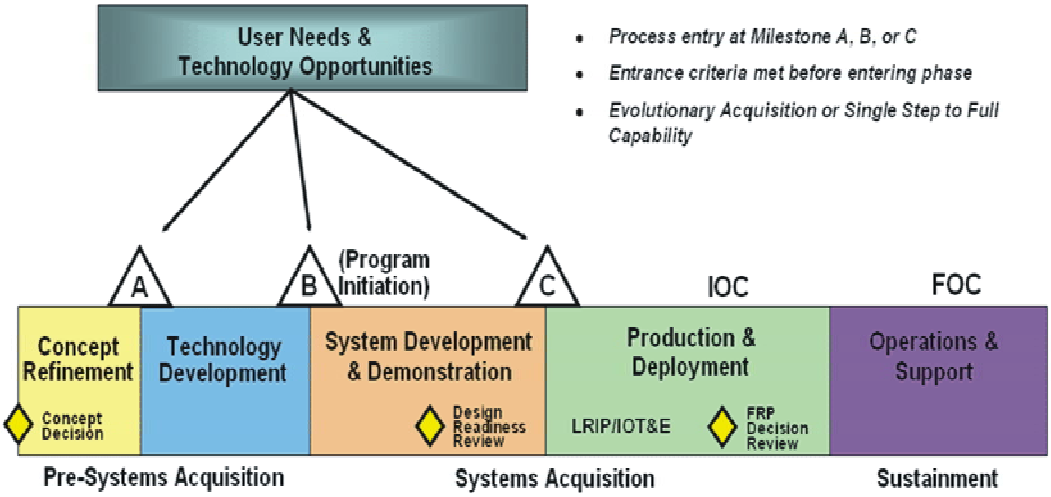
[16] Some PMs are labeled "Direct Reporting Program Managers" (DRPMs), who report directly to the Component Acquisition Executive or Milestone Decision Authority.

[17] A Service Acquisition Executive (SAE) is the CAE for a military department.

[18] DODD 5000.1 states that the DAE takes precedence on all acquisition matters after the Secretary and the Deputy Secretary of Defense. Examples of some other reporting chains include the Defense Information Systems Agency (DISA), who reports to the Director of DISA and the Special Operations Command (SOCOM) Acquisition Executive, who reports to the SOCOM Commander.

[19] Per the DAU Glossary of Defense Acquisition terms ([http://akss.dau.mil/jsp/Glossary.jsp]), at program initiation, a program must be fully funded across the Future Years Defense Program (FYDP) as a result of the Program Objectives Memorandum (POM)/budget process, that is, have an approved resource stream across a typical defense program cycle, for example Fiscal Year (FY) 2006-2011. Concept Refinement (CR) and Technology Development (TD) phases are typically not fully-funded and thus do not constitute program initiation of a new acquisition program in the sense of DODI 5000.2.

**Figure 7. Defense Acquisition Milestones**




**Source:** DODI 5000.2 from the Defense Acquisition Guidebook, [http://akss.dau.mil/dag/DoD5000.asp?view=document].

An acquisition program can enter the above framework at any one of the three milestones, depending on factors such as technological maturity, when the capability is required and resources available for the acquisition. Each stage of the framework has different purposes and entrance criteria, which can be regulatory or statutory. During concept refinement, an initial concept developed during JCIDS efforts is refined, an analysis of alternatives (AOA) is conducted and a Technology Development Strategy (TDS) is developed, based on results from the AoA. If a program receives Milestone A approval at the end of concept refinement, technology risk reduction efforts outlined in the TDS will be executed to determine what technologies are appropriate to be introduced into the intended system.

All technologies intended for the system are not required to be mature to proceed to Milestone B. Some technologies that may be appropriate but are immature may remain in technology development while others proceed to Milestone B as long as the technologies proceeding to Milestone B provide an affordable, militarily useful capability.[20] If a program receives a Milestone B approval, then the program proceeds to begin development of the capability and reduction of integration and manufacturing risk. This stage consists of two sub-stages, system integration and system demonstration. During system integration, the various subsystems that together will make up the entire system are integrated and a development model or prototype is produced. During system demonstration, the development model or prototype enters into developmental testing to demonstrate its military utility and identify/correct operational, logistical or manufacturing deficiencies. If demonstrated

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[20] DOD's approach to proceeding with detailed design and integration of mature technologies while continuing risk reduction of other less mature technologies that will be integrated later is called Evolutionary Acquisition. For additional information on Evolutionary Acquisition, see CRS Report RS21195, *Evolutionary Acquisition and Spiral Development in DOD Programs: Policy Issues for Congress*, by Gary Pagliano and Ronald O'Rourke.

performance and supportability are acceptable, manufacturing risks are not significant and other criteria are met, a program may receive a Milestone C approval.

Milestone C represents the beginning of low rate initial production (LRIP), which is intended to both prepare manufacturing and quality control processes for a higher rate of production and provide production-representative articles for operational test and evaluation (OT&E). Upon completion of OT&E and demonstration of adequate control over manufacturing processes, a full rate production decision may be granted, allowing the program to produce the remaining assets planned for the program. When enough systems are delivered and other pre-defined criteria are met, an Initial Operating Capability (IOC) can be attained, allowing for some degree of operations. Eventually, full operational capability (FOC) will be achieved when the system is ready to operate as much as required.

Management and oversight of acquisition programs increases as the value of the program increases. Programs are divided into acquisition categories (ACATs) based primarily on program value. The most significant DOD and Congressional oversight activities apply to MDAPs[21], which are categorized as ACAT I programs. **Figure 7** below illustrates the thresholds and decision authorities for all ACATs:

[21] A number of statutory reporting and oversight requirements applicable only to MDAPs are codified in Chapter 144 of Title 10 USC.

## Figure 8. Acquisition Categories

Table E2.T1. Desciption and Decision Authority for ACAT I- III Programs

| Acquisition Category | Reason for ACAT Designation | Decision Authority |
|---|---|---|
| ACAT I | • MDAP (10 USC 2430, reference (n))<br>o Dollar value: estimated by the USD(AT&L) to require an eventual total expenditure for research, development, test and evaluation (RDT&E) of more than $365 million in fiscal year (FY) 2000 constant dollars or, for procurement, of more than $2.190 billion in FY 2000 constant dollars<br>o MDA designation<br>• MDA designation as special interest | ACAT ID: USD(AT&L)<br>ACAT IC: Head of the DoD Component or, if delegated, the DoD Component Acquisition Executive (CAE) |
| ACAT IA | • MAIS: Dollar value of AIS estimated by the DoD Component Head to require program costs (all appropriations) in any single year in excess of $32 million in fiscal year (FY) 2000 constant dollars, total program costs in excess of $126 million in FY 2000 constant dollars, or total life-cycle costs in excess of $378 million in FY 2000 constant dollars<br>• MDA designation as special interest | ACAT IAM: ASD(C3I)/DoD CIO<br>ACAT IAC: CAE, as delegated by the DoD CIO |
| ACAT II | • Does not meet criteria for ACAT I<br>• Major system<br>o Dollar value: estimated by the DoD Component Head to require an eventual total expenditure for RDT&E of more than $140 million in FY 2000 constant dollars, or for procurement of more than $660 million in FY 2000 constant dollars (10 USC 2302d, reference (o))<br>o MDA designation4 (10 USC 2302(5), reference (p))<br>• MDA designation as special interest | DoD CAE or the individual designated by the CAE |
| ACAT III | • Does not meet criteria for ACAT II or above<br>• Less-than a MAIS program | Designated by the DoD CAE at the lowest level appropriate |

Notes:
1. In some cases, an ACAT IA program, as defined above, also meets the definition of an MDAP. The USD(AT&L) and the ASD(C3I)/DoD CIO shall decide who will be the MDA for such programs. Regardless of who is the MDA, the statutory requirements that apply to MDAPs shall apply to such programs.
2. An AIS program is an acquisition program that acquires IT, except IT that involves equipment that is an integral part of a weapon or weapons system, or is an acquisition of services program.
3. The ASD(C3I)/DoD CIO shall designate programs as ACAT IAM or ACAT IAC. MAIS programs shall not be designated as ACAT II.
4. As delegated by the Secretary of Defense or Secretary of the Military Department.

**Source:** DODI 5000.2, [http://www.dtic.mil/whs/directives/corres/pdf/500002p.pdf].

DOD procurement activities are governed by three sets of federal government regulations. The first set of regulations is which apply to the entire federal government (including DOD unless specifically noted otherwise) are outlined in the Federal Acquisition Regulation (FAR); the second set of regulations apply only to DOD and are outlined in the Defense Federal Acquisition Regulation Supplement (DFARS); the third set of regulations apply only to individual DOD Components are outlined in Component-unique FAR Supplements.[22] Procurement actions in DOD must adhere to the various regulations, including those executed as part of DOD's acquisition programs, and PMs must take the regulations into account during the planning and execution of their programs.

## Recent Analysis of Defense Acquisition

Despite the reforms generated by the Packard Commission's report and the Goldwater-Nichols Act, managing the implementation of these reforms historically has presented the greatest challenge for both DOD and Congress. This challenge was apparent when upon review the Packard Commission's recommendations were "a virtual mirror-image of the Fitzhugh Commission report"[23] of 1970. In 1989, the House Armed Services Committee held oversight hearings to determine what remaining work DOD had to fully implement the Commission's recommendations. It was found that important recommendations "such as the JRMB (Joint Requirements Management Board) and milestone budgeting were either never implemented or attempted but quickly abandoned."[24] Some believe that the Commission and Goldwater-Nichols efforts were very constructive, making major contributions in reforming DOD's acquisition structure and practices. Others argue however, that "(a) case can be made that Goldwater-Nichols never implemented the Packard Commission principles"[25] and that "Goldwater-Nichols reforms attempted, but ultimately failed, to get at the root of DoD's acquisition execution problems."[26] Today, DOD acquisition structure and practice challenges continue, as do efforts to improve them.

**Four Major Reports.** Four major reports were published between 2004 and 2006 that discuss the challenges facing defense acquisition and make

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[22] The Army, Air Force, Navy and Marine Corps, Defense Logistics Agency and US Special Operations Command each have unique supplements.

[23] Reeves, p. 16. The Fitzhugh Commission report was the result of a major examination of Defense Acquisition practices. It is both summarized and published in its entirety in CRS LTR 88-1399, available through request to CRS.

[24] Murdock, Flournoy, et al., p. 90.

[25] Murdock,, Flournoy, et al., p. 96.

[26] Scruggs, David, et al. "Beyond Goldwater-Nichols - An Annotated Brief - Department of Defense Acquisition and Planning, Programming, Budgeting and Execution System Reform - Phase III". August 2006, p. 19. Additionally former Senator Sam Nunn, who was instrumental in the formulation and passage of Goldwater-Nichols, states in the foreword of Locher's book that "Although the services now fight jointly, greater jointness may now be required in how the department 'organizes, trains and equips' - the title 10 U.S. Code, functions assigned to the separate services."

recommendations to mitigate them. These reports are the Quadrennial Defense Review (QDR)[27], the Center for Strategic and International Studies' (CSIS) Beyond Goldwater-Nichols (BGN) series volume two[28], the Defense Science Board's (DSB) Summer Study on Transformation: A Progress Assessment, volume one,[29] and the Defense Acquisition Performance Assessment (DAPA).[30]

The four major reports make many observations and recommendations on how to improve defense acquisition. Some in each report focused on common subject areas including the following:

- Recognize the interrelated nature of the military requirements, resource allocation and acquisition processes and view the defense acquisition structure in a similar manner.

- Change the roles and responsibilities of a variety of senior civilian and military officials within the Department, including the Combatant Commanders (COCOMs), OSD and the military departments.

- Implement specific reforms relating to the office of the USD(AT&L) such as elevating the role of the Director of Defense Research and

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[27] Within the QDR, Defense Acquisition is addressed in the section entitled "Reshaping the Defense Enterprise". There is only a brief subsection that is specifically titled Defense Acquisition which notes that "there are several ongoing reviews of defense acquisition improvements being conducted both within and outside the Department in an effort to address these issues. Their results will inform the Department's efforts to reshape defense acquisition into a truly 21st century process that is responsive to the joint warfighter." Many of the concepts presented in the QDR have the potential to impact Defense Acquisition in breadth and depth that may be dependent upon the specific reform proposals that are selected and implemented. See [http://www.defenselink.mil/qdr/report/Report20060203.pdf].

[28] Of the three volumes published in the BGN series, volume two includes the most focused analysis of defense acquisition, including a dedicated chapter. The chapter gives a brief history of acquisition reforms in the 1980s, an outline of current challenges and three recommendations for improving Defense Acquisition. The chapter also gives consideration to the "Big 'A'" and "little 'a'" definition of Defense Acquisition and also makes recommendations to improve the JCIDS and PPBES processes elsewhere in volume two and the annotated brief of volume three respectively. See [http://www.csis.org/media/csis/pubs/bgn_ph2_report.pdf].

[29] See [http://www.acq.osd.mil/dsb/reports/2006-02-DSB_SS_Transformation_Report_Vol_1.pdf].

[30] The DAPA report focused solely on Defense Acquisition as was clearly directed by the Acting Deputy Secretary of Defense Gordon England in his June 7, 2005 request for "an integrated acquisition assessment to consider every aspect of acquisition." The DAPA report contains six individual major elements; organization, workforce, budget, requirements, acquisition and industry. Each major element contains the panel's performance assessment, major findings, performance improvement and implementation criteria. See [http://www.acq.osd.mil/dapaproject/documents/DAPA-Report-web/DAPA-Report-web-feb21.pdf].

Engineering (DDR&E); requiring the USD(AT&L) to develop a multi-year business plan relating resources to mission purposes; or assigning execution responsibilities of a Joint Capabilities Acquisition and Divestment Plan.

- Change the military departments' acquisition structure. The principal recommendation is the reintroduction of the Service Chiefs of Staff into the Services' acquisition chain of command.

- Implement acquisition "best practices" including 1) risk-based source selection; 2) time certain development; 3) a return to spiral development; 4) using judgment-based instead of requirement-based execution and; 5) expanding and rationalizing the use of rapid acquisition.

- Improve the defense acquisition workforce by: 1) emphasizing the recruitment of the best technological leaders and specialists from industry; 2) creating a personnel float to afford personnel developmental opportunities; 3) creating a pool of pre-qualified executives to fill positions; 4) increasing the number of federal employees in critical skill areas and 5) establishing a consistent definition of the acquisition workforce.[31]

**Periodic GAO Reports.** The Government Accountability Office (GAO) regularly produces in-depth reports that address specific issues and make recommendations on those issues to improve the defense acquisition structure and practices. In one example, GAO report number GAO-07-235R, *Suggested Areas for Oversight for the 110th Congress,* the GAO makes the following recommendations:

- Require agencies with significant acquisition budgets, such as the Department of Defense (DoD) and the National Aeronautics and Space Administration (NASA), to better align requirements, budget, and acquisition processes to reconcile the differences between wants, needs, affordability, and sustainability, given current and future demands and resources.

- Monitor the implementation of agency action plans to address the GAO high-risk areas related to acquisition and contract management. These include contracting at DoD, the Department of Energy, and NASA, as well as interagency contracting practices through the General Services Administration and other means.[32]

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[31] This brief list may not be all-inclusive or as detailed as the individual reports themselves, but is meant to serve as a brief summary of the common themes of the reports. An additional source which compiled the recommendations of each of the reports was published by CSIS and can be delivered upon request.

[32] GAO-07-235R, p. 8, [http://www.gao.gov/new.items/d07235r.pdf].

In short, GAO recommends that better alignment among interrelated processes combined with resolution of high-risk areas[33] may result in improvements in how acquisition programs and individual procurements are executed in the federal government, including DOD.[34]

## DOD Efforts to Improve Defense Acquisition

DOD has begun experimenting with measures aimed at improving the defense acquisition structure and its practices. The USD(AT&L) published a broad set of goals and associated outcomes in 2006 to "help guide Acquisition, Technology and Logistics in adapting to (the new realities from the QDR) and to do our part to keep the Department on course...."[35] The goals and associated outcomes are part of the Strategic Goals Implementation Plan (SGIP), which has an internal oversight mechanism.[36] While the end results of these goals may not be evident for many years, DOD has designated a "Goal Champion" for each who will report in August 2007 on completed actions as part of an overall DOD assessment to ensure the goals are accomplished and aligned with other DOD Enterprise goals.[37]

Congress has acted in its oversight role to stay informed of the latest DOD efforts. Section 804 of the Fiscal Year 2007 National Defense Authorization Act (H.R. 5122/P.L. 109-364) requires DOD to submit biannual reports on the implementation of acquisition reform in DOD. The report is required to take into consideration the four major reports discussed earlier and must be submitted by January 1, and July 1 of each year until December 31, 2008 when the report requirement ends. DOD submitted their first report on February 8, 2007[38] which summarized the initiatives DOD is pursuing in six areas; workforce, acquisition,

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[33] Details of GAO's high-risk areas, including the acquisition and contract management ones described above, can be found in *High Risk Series: An Update*, GAO report GAO-07-310, January 2007. See [http://www.gao.gov/new.items/d07310.pdf]. The GAO describes their high risk series as an attempt to "focus on the need for broad-based transformations to address major economy, efficiency, or effectiveness challenges. Since 1990, GAO has periodically reported on government operations it has designated as high risk. In this 2007 update for the 110th Congress, GAO presents the status of high-risk areas identified in 2005 and new high-risk areas warranting attention by Congress and the executive branch. Lasting solutions to high-risk problems offer the potential to save billions of dollars, dramatically improve service to the public, strengthen confidence and trust in the performance and accountability of the U.S. government, and ensure the ability of government to deliver on its promises."

[34] A summary of GAO reports on various DOD challenges, including Defense Acquisition and related topics, can be found at [http://www.gao.gov/pas/2005/DoD.htm]

[35] "In the Line of Fire", remarks as delivered by the Under Secretary of Defense for Acquisition, Technology and Logistics Kenneth J. Krieg to the Contract Services Association, San Antonio, TX, March 21, 2006, p. 4, at [http://www.acq.osd.mil/usd/previous_krieg_speeches/03-21-06%20NR-ContractServicesAssoc.doc].

[36] See [http://www.acq.osd.mil/goals/ATL%20Implementation%20Plan.pdf].

[37] USD(AT&L) Strategic Goals Implementation Plan, pp. 6-7.

[38] See [http://www.acq.osd.mil/documents/804Reportfeb2007.pdf].

requirements, budget, industry, and organization. The initiatives were often linked to aspects of DOD's SGIP.

# Potential Issues and Options for Congress

Some in Congress believe that DOD can do more to better its acquisition structure and processes, which all admit is extremely complex taking into account that sometimes there exists conflicting objectives. For example, the highly publicized Mine Resistant Ambush Protected (MRAP) vehicle program has been accelerated to be able to field as soon as possible, filling an urgent warfighting operational need. The trade-off in executing an acquisition program on a highly accelerated basis however, is a reduced opportunity to minimize the life cycle costs of the vehicles through reliability, maintainability or production line enhancements. In the case of the MRAP, the urgent operational needs of operational commanders took precedence over the need of DOD to minimize the life cycle cost of the platform.

This section examines some major challenges and issues facing DOD to improve its acquisition structure and processes. One such challenge is in making changes through "transformation", a term inclusive of numerous initiatives to address a range of acquisition issues. Others include cost/schedule/performance problems in Major Defense Acquisition Programs (MDAPs), questionable outcomes of cost reimbursement contracts, poor interagency and service contracting practices, and an insufficient defense acquisition workforce. The challenges and issues are examined below along with potential options Congress could pursue to address them.

## Defense Acquisition Transformation

DOD's current defense acquisition transformation efforts are in their infancy. The Strategic Goals Implementation Plan (SGIP) was first produced in September 2006 and many of the dates associated with each initiative's measures of progress are between 12 and 24 months in duration, though some have been completed as of March 2007. Additionally, DOD submitted their first Section 804 report to Congress in February 2007. The infancy of DOD's acquisition transformation raises three questions Congress might consider: 1) When is it probable that acquisition transformation will succeed? 2) How will Congress know that acquisition transformation has succeeded? To help address those questions, Congress could consider the following options:

- **Establish a date to complete acquisition transformation.** Congress could require that all improvements DOD intends to make via its acquisition transformation efforts be accomplished by a prescribed date so that transformation's effectiveness may be captured and evaluated. Supporters could argue that defining a completion date will accelerate the pace of improvements and allow DOD to focus more quickly on promising initiatives and cancelling problematic ones. Supporters could also argue that establishing a timeline would allow for a before and after comparison to help

gauge effectiveness. Opponents could argue that setting a date could discourage or inhibit continuous improvement efforts as a way to constantly transform. Opponents could also argue that DOD may execute a lower number or less effective improvements than would be optimal so that the deadline could be met.

- **Establish performance criteria for DOD's entire acquisition structure.** Individual defense acquisition programs have cost, schedule and technical performance objectives and thresholds that collectively define program performance. However, DOD's defense acquisition structure does not appear to have a similar standard for performance. Congress could establish such a standard which DOD's acquisition structure must meet or operate within, so that transformation efforts have a defined goal to achiever. Supporters could argue that establishing such criteria or metrics may allow DOD to maintain tradeoff flexibility within the performance parameters. Supporters could also argue that such parameters could serve as a useful link between the defense acquisition structure and the warfighting capabilities of the nation. Opponents could argue that such parameters would add new and complex tracking, reporting, and management requirements that would impair structural performance. Opponents could also argue that criteria or metrics could either change so frequently or become obsolete due to many factors that DOD may never be able to meet targets or if DOD did that they would no longer be the best ones.

- **Require DOD to develop risk management techniques to help with its acquisition transformation.** Many programs and projects in both government and industry experience failure. Risk is a term often used to represent the chances that a program or project may fail due to any number of factors. DOD's approach towards acquisition transformation, arguably similar to a weapon system that attempts to concurrently develop and integrate a number of immature technologies, may have risks that necessitate the use of risk management to ensure success. To date, DOD has not published a risk assessment or risk management plan for its acquisition transformation efforts. Congress could require DOD to use this approach in its acquisition transformation efforts to ensure that mitigation plans exist if and when problems or challenges are encountered. Supporters could argue that requiring risk management will ensure that DOD develops alternatives to the initiatives currently being pursued in the event one or many of those initiatives fail. Supporters could also argue that risk management will ensure detailed planning and tracking of initiative and transformation progress. Opponents could argue that DOD must identify risks and obstacles before fully engaging risk management practices, which is why DOD is initially using experiments and pilots to pursue improvement. Opponents could also argue that risk management could impair the pace of improvement through additional tracking, reporting and management activities.

## Cost, Schedule, and Performance Problems in Major Defense Acquisition Programs (MDAPs)

Cost overruns, schedule slips and performance shortfalls have plagued large weapon system acquisition programs since World War II. Despite statutory reporting requirements on a regular basis and when cost or schedule problems occur, current MDAPs continue to experience overruns, slips and shortfalls during their execution.[39] Observers have identified a range of contributing factors to these problems including requirement and funding instability, less then optimal knowledge at decision points, and technology immaturity among others. Some may argue that some level of each problem is unavoidable due to DOD's longstanding practice of pursuing technological superiority over all potential threats. Some could also point out that even private industry experiences similar issues, such as the well publicized wiring problems with the Airbus A380 aircraft or component problems and shortages with Sony's Playstation 3 video gaming console.[40] However, others may argue that DOD has experienced the same problems for over 50 years and that controls should be in place by now to prevent more occurrences.

To address the challenges of reducing future MDAP execution problems, Congress might consider the following options:

- **Require DOD to send more information to Congress prior to MDAP initiation.** Currently, prior to the formal initiation of a MDAP, DOD performs a range of analyses, prepares related documentation, and holds a tiered series of reviews prior to initiation of an MDAP. DOD is not required to deliver that information to Congress, although a program summary and limited characteristics of the initiated program are outlined in the Selected Acquisition Reports (SARs). Congress could require DOD to "propose" MDAPs to Congress in a manner that is similar in detail as defense contractors who respond to "requests for proposals" (RFPs) so that Congress could openly discuss important programs early and make any potential necessary changes. Supporters could argue that such a construct would enhance program stability by making ensuring program changes in areas such as requirements or funding are only made when necessary. Supporters could also argue that poorly structured or high risk MDAPs would be prevented from initiation or at least monitored more closely. Opponents could argue that DOD best knows what it needs and how to manage it. Opponents

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[39] The GAO submits annual reports of many DOD MDAPs. The most recent report is GAO-07-406SP. See [http://www.gao.gov/new.items/d07406sp.pdf].

[40] For example, on problems with the Airbus A380, see Wall, Robert, "EADS Confirms Further A380 Delays", *Aviation Week*, September 24, 2006, at [http://www.aviationweek.com/aw/generic/story_generic.jsp?channel=awst&id=news/aw092506p3.xml]. Also for example on problems with the Sony PlayStation 3 gaming console, see the June 9, 2006 press release from Sony Computer Entertainment Europe regarding the European launch delay, at [http://www.scee.presscentre.com/Content/Detail.asp?ReleaseID=4268&NewsAreaID=2].

could also argue that the time necessary to initiate a MDAP may increase and therefore delay the timely fielding of necessary capability to the warfighter.

- **Establish Congressional MDAP termination criteria**. Neither statute nor policy requires the cancellation of a MDAP due to cost, schedule or performance problems. DOD is required to certify to Congress that a program needs to continue if the unit cost of a MDAP exceeds a certain threshold. Both DOD and Congress have the option of terminating programs that experience these problems, but have rarely done so.[41] Congress could establish MDAP termination criteria such that if a cost, schedule or performance measure met or breached the criteria the program would automatically cancel. Supporters could argue that such criteria could help prevent requirements "gold-plating" and "low-ball" cost estimates or proposals since a program breach would guarantee termination. Supporters could also argue that fiscal responsibility in DOD could be enhanced since moving funding around to new or re-prioritized programs could cause others to terminate. Opponents could argue that program termination does not terminate the requirement and the fielding of warfighting capability would be delayed due to the cancellation and start of a new program to deliver capability.

## Questionable Outcomes from Cost Reimbursement Contracts

The two types of contracts most commonly used for the procurement of goods and services in the federal government, including DOD, are cost-reimbursement and fixed-price.[42] Fixed-price contracts are typically used in procurements that are judged to have little or manageable risk whereas cost-reimbursement contracts are typically used in procurements that are judged to have more significant risk. History shows that developmental efforts procured for Major Defense Acquisition Programs (MDAPs) are among those procurements that are commonly judged to have the most significant risk and therefore justify the use of cost-reimbursement contracts.[43]

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[41] For example, data provided by DOD indicates that only three programs with Nunn-McCurdy unit cost breaches not caused by cancellation since 2000 have been cancelled by DOD; Air Force B-1 Defense System Upgrade Program (DSUP), Navy Area Theater Ballistic Missile Defense (TBMD), and Army Tactical Missile System-Brilliant Anti-Armor Submunition (ATACMS-BAT). Congressional cancellations in general are rare and are usually due to many issues which may or may not include cost, schedule and performance problems. Examples include the MEADS program in 1998, the Seawolf submarine program in 1996 and the XM-803 Main Battle Tank program in 1971.

[42] A matrix comparing characteristics of each contract type can be found at [http://www.acq.osd.mil/dpap/contractpricing/vol4chap1.htm#1.1].

[43] The Defense Federal Acquisition Regulation Supplement (DFARS) section 235.006 permits the use of fixed-price contract types for certain procurement types, including those typically associated with MDAPs. Such use requires the approval of the USD(AT&L). See (continued...)

Cost-reimbursement contracts have come under renewed scrutiny especially as a result of the Department of the Navy's termination of its cost-reimbursement contract for the third Littoral Combat Ship (LCS) that was being built by Lockheed-Martin.[44] This contract was terminated due to a significant escalation in the cost of the ship and the inability of the Navy and Lockheed-Martin to agree on a modification to change the contract from cost-reimbursement to fixed-price for the ship's completion in order to better control costs.

Many experts believe the desire for technological superiority in DOD weapon systems and military capabilities arguably necessitates the continued use of cost-reimbursement contracts because of the risks involved in developing such cutting edge technology. To improve the outcomes of such contracts, Congress could consider the following options:

- **Require congressional approval to use cost-reimbursement contracts.** Currently, DOD may not award a Multi-Year Procurement (MYP) contract that exceeds $500M unless certain statutory criteria are met and authority is provided in an Appropriations Act.[45] Congress could consider a similar construct for DOD's use of cost-reimbursement contracts which meet or exceed specific criteria and exceed a set threshold. Supporters could argue that with additional approval authority, Congress could gain additional insight into the details surrounding the cost-reimbursement contract. Supporters could also argue that an approval requirement could promote more technology demonstrations and other risk reduction activities by DOD. Opponents could argue that Congress already approves such contracts since DOD discloses certain contract information in the budget material delivered to Congress. Opponents could also argue that acquisition programs could be significantly delayed while waiting for Congressional approval or in the event of a disapproval.

- **Require cost-reimbursement contracts to convert to fixed-price contracts as risk is reduced.** When DOD awards a cost-reimbursement contract, the contract typically remains cost-reimbursement throughout its life even as efforts are completed. As these efforts are completed however, the uncertainty in a contractor's tasks is reduced and risk is lessened. Congress could require that upon accomplishment of certain events or criteria that remaining

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[43] (...continued)
[http://farsite.hill.af.mil/VFDFARA.HTM].

[44] For additional information on the LCS, see CRS Report RL33741, *Navy Littoral Combat Ship (LCS) Program: Oversight Issues and Options for Congress* by Ronald O'Rourke.

[45] 10 USC 2306b. A MYP is a particular type of contract where DOD agrees to buy many years of goods or services at once, committing future Congresses to fund the contract in the agreed-upon manner. This is different from a multiple year contract where the goods or services may be procured over multiple years, but only the first year is guaranteed to be bought while a MYP guarantees all years will be bought unless the contract is terminated.

effort be converted to a fixed-price to complete remaining efforts under the contract since the level of risk remaining may no longer support continued use of a cost-reimbursement contract. Supporters could argue that as a contract is performed, more knowledge is gained and eventually there is insufficient risk inherent in remaining performance to justify continuing the cost-reimbursement arrangement. Supporters could also argue that a conversion would better prepare contractors for fixed-price follow-on or development-to-production procurements. However, opponents could argue that funding regulations could prevent such a conversion as cost-reimbursement contracts may be incrementally funded while fixed-price contracts must be fully funded, which may force DOD to "guess" when the accomplishments may happen to ensure that full funding is available. Opponents could also argue that the costs in terms of time, complexity, and additional planning to segregate cost-reimbursement and fixed-price efforts would outweigh any potential benefits of such a conversion.

- **Require contractors to submit both a cost-reimbursement contract proposal and a fixed-price contract proposal to quantify contract performance risk.** When DOD determines the level of risk inherent in an effort, factors such as schedule requirements, level of detail in technical performance requirements and the technical maturity of the system and its components are typical considerations. However, quantifying those risks in terms of dollars can be nearly impossible without feedback from prospective contractors regarding what a contract's value would be for different contract types. To help quantify the difference between a cost-reimbursement development contract and a fixed-price development contract, Congress could require DOD to acquire proposals of both types when procuring developmental efforts. Supporters could argue that only a contractor's proposal offers sufficient data to measure how much risk is inherent in a particular effort. Supporters could also argue this approach could spur industry to identify other risks that may not have been apparent to the government and result in a better contract type selection. Opponents could argue that the costs and time associated with the preparation of two proposals and their evaluation outweighs the potential benefits of the additional information. Opponents could also argue that this may make competitive procurements impossible as it would be impossible to fairly evaluate multiple offerors on a standard set of criteria.

## Poor Interagency and Services Contracting Practices

Two particular types of contracting that have come under renewed scrutiny recently are interagency contracting and services contracting. Interagency contracting is a process where DOD uses the contracts of other federal agencies to procure goods or services from private industry. DOD typically uses these contracts to save time and/or money compared to using its own contract vehicles. DOD procures services from private industry when DOD does not have sufficient numbers or expertise

within its civil service staff to accomplish department needs, or believes time and/or money could be saved compared to using civil servants, or finally, if the need is temporary and does not justify hiring a permanent employee.

The GAO and Department of Defense Inspector General (DODIG) have published reports on the poor practices in DOD's interagency contracting and DOD services contracting as distinct from equipment contracting practices.[46] Some of the problems noted in the reports include:

- Circumventing numerous procurement and funding regulations; the GAO and DODIG reports cited examples including inadequate competition, issuing task orders outside the scope of the overarching contracts, inadequate justification of actions, and potential violations of the Anti-Deficiency Act (ADA).

- Insufficient management oversight capacity and practices; the GAO and DODIG reports cited examples such as some contracts not having oversight personnel assigned to them, some were without a quality assurance surveillance plan, and increased managerial difficulty in those contracts where the requiring agency (DOD) is not also the contracting agency.

While the problems raised by the GAO and DODIG reports can contribute to undesirable and costly outcomes in interagency and services contracting, it is unclear whether they directly or indirectly resulted in fraudulent, wasteful or abusive practices by government or contractor personnel.

In October 2006, DOD published a new acquisition of services policy[47] in response to Section 812 of the Fiscal Year 2006 National Defense Authorization Act (H.R. 1815/P.L. 109-163). This policy established new requirements for services acquisitions including:

- standards and procedures for all services acquisitions,
- a new management structure for services acquisitions,
- acquisition strategy requirements, and
- data collection requirements.

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[46] For example, see GAO report GAO-07-359T, *DEFENSE ACQUISITIONS DOD Needs to Exert Management and Oversight to Better Control Acquisition of Services*, [http://www.gao.gov/new.items/d07359t.pdf]; GAO-07-20, *DEFENSE ACQUISITIONS Tailored Approach Needed to Improve Service Acquisition Outcomes*, [http://www.gao.gov/new.items/d0720.pdf]; DODIG report D-2006-010, *Acquisition: Contract Surveillance for Service Contracts*, [http://www.dodig.mil/Audit/reports/FY06/06-010.pdf]; and DODIG report D-2005-096, *Acquisition: DoD Purchases Made Through the General Services Administration*, [http://www.dodig.mil/Audit/reports/FY05/05-096.pdf].

[47] DOD's policy can be found at [http://www.acq.osd.mil/dpap/Docs/new/10-02-06%20AT%26L%20812%20Acq%20of%20Services.pdf].

DOD has not published an interagency contracting or interagency acquisition policy similar to its acquisition of services policy, nor has it been required to do so. However, DOD has entered into a new memorandum of agreement (MOA) with the General Services Administration (GSA), which outlines 22 objectives to achieve acquisition excellence.[48]

It is currently unclear whether or not DOD's new acquisition of services policy or its MOA with the GSA will improve DOD's interagency and services contracting practices. In addition to congressional oversight on these new DOD initiatives, Congress could consider additional options to improve other aspects of these contracting practices including:

- **Establishing a services acquisition corps and training program.** The size and capabilities of the entire defense acquisition workforce is an issue Congress could consider and is discussed in a later section. However, services acquisition and oversight present unique size and capability challenges to the acquisition workforce responsible for such actions. DOD has training courses for services acquisition and oversight, but does not have a curriculum or program dedicated to producing services acquisition and oversight experts. Congress could consider establishing such a program that would produce certified services acquisition personnel. Supporters could argue that services acquisition is so complex that only a specialized, detailed training program with "graduation" criteria is adequate to ensure DOD has sufficient expertise to protect taxpayer and DOD interests. Supporters could also argue that the establishment and maintenance of such a cadre of experts is the only way to institutionalize services acquisition best practices. However, opponents could argue that most DOD services acquisitions are executed well, and current or emerging challenges can be addressed through updated training courses. Opponents could also argue that career opportunities for corps members could become limited due to the specialized nature of their work.

- **Require quantitative cost/benefit analysis for each services or interagency procurement action and establish minimum savings criteria.** One of the most common rationales used by DOD to procure a service or to use an interagency contract is the savings in time and/or dollars such use will generate for the requiring component compared to using internal resources to fulfill its requirements. DOD is not currently required to discretely estimate and capture these cost and/or schedule savings to support such a procurement decision. Congress may consider establishing minimum cost and/or schedule savings criteria and the documentation of specific cost/benefit analysis to ensure that those criteria are met to pursue a service or interagency contract. Supporters could argue that such a requirement is the only way for

[48] The MOA can be found at [http://www.gsa.gov/graphics/fas/DoD_GSA_MOA.doc].

Congress to ensure that DOD actually saves significant time or money through the use of such procurement actions. Supporters could also argue that this requirement will help ensure that thorough market research is performed for a procurement action. But, opponents could argue that the cost and time necessary to perform the analysis may consume any potential cost or schedule benefit from the procurement of a service or use of an interagency contract. Opponents could also argue that DOD may forego substantial savings in a procurement and cause a procurement to be unnecessarily expensive or lengthy only because it didn't meet a minimum savings criteria.

- **Limit the amount of funding that may be used for the acquisition of services and/or the use of interagency contracts.** Each services acquisition or procurement through an interagency contract can have its own sets of advantages and disadvantages. The advantages and disadvantages of an individual action, when weighed against each other, may not obviously indicate whether the action is prudent or not. To avoid questionable use of these actions, Congress could consider limiting the amount of funding used for them. Supporters could argue that such a restriction would incentivize DOD to only pursue those that produced the greatest benefit. Supporters could also argue and DOD would be incentivized to better plan and analyze potential actions to gauge advantages and disadvantages. Opponents could argue that such a restriction would limit the flexibility of Program Managers and Contracting Officers to meet component needs. Opponents could also argue that such a restriction could result in increased cost or time to DOD since some procurements may be forced into a costlier or more time-consuming vehicle or process to meet DOD requirements.

- **Require a DOD and/or GAO report on actual benefits of services acquisition and interagency contracting.** Despite the scrutiny that each of these practices has received, no data appears available to judge whether procuring services or using interagency contracts is actually saving DOD time or money compared to using comparable internal resources. Congress may consider requiring DOD or the GAO to investigate and report on whether savings in either category have been realized and if so quantify how much those savings were. Supporters could argue that legislative and/or policy actions to improve these practices could be better informed by a rigorous analysis of whether DOD has benefitted from their use. Supporters could also argue that such a study could be a good way to evaluate the effectiveness of current statute and policy. Opponents could argue that capturing such data may be prohibitively difficult given personnel turnover, trying to recreate assumptions or knowledge at the time an action was pursued, etc. Opponents could also argue that new policies in place for both the acquisition of services and interagency contracting would not be reflected in the data, therefore making the data set obsolete.

## Insufficient Defense Acquisition Workforce[49]

The size and capabilities of the defense acquisition workforce has been a subject of much debate for over 15 years. Some believe the defense acquisition workforce is undersized and incapable to do all that is asked by DOD, evidenced by poor performance in both acquisition programs and Iraq reconstruction efforts.[50]

The current Undersecretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) has made a "high performing, ethical, and agile workforce" his number one goal.[51] The AT&L Human Capital Strategic Plan (HCSP)[52] is the USD(AT&L)'s plan to achieve this objective. The HCSP consists of five goals, each of which are refined into enabling objectives, outcomes and measures. For example, one of the HCSP's goals is to establish a comprehensive, data-driven workforce analysis and decision-making capability. To achieve this goal, DOD is pursuing improvements in the metrics and data that quantify the capabilities, needs and characteristics of the acquisition workforce. DOD is also pursuing improvements in the information systems that capture and analyze the metrics and data along with making the metrics and data more transparent to enable workforce leadership to better plan and decide on departmental strategy.

The HCSP appears quite comprehensive and the linkage of goals all the way back to metrics appears sound. However, the details of how each link is measure appear vague and the HCSP does not appear to outline how these goals and supporting linkages will improve acquisition programs and practices.

Some options Congress may consider to improve the defense acquisition workforce include:

- **Increase the size of the defense acquisition workforce**. During the 1990s, Congress required DOD to reduce the size of its acquisition workforce as a result of a perceived "peace dividend" from the 1991 Gulf War. DOD's current operational requirements could compel Congress to take the opposite approach now and require DOD to increase the size of its acquisition workforce.

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[49] For additional information on the defense acquisition workforce, see CRS report 98-938, *Defense Acquisition Workforce: Issues for Congress*, by Valerie Grasso. Current defense acquisition workforce statistics from DOD can be found in the USD(AT&L) Human Capital Strategic Plan at [http://www.dau.mil/workforce/hcsp.pdf] and in a presentation made by Scott Ilg of the Defense Acquisition University at [https://acc.dau.mil/GetAttachment.aspx?id=120926&pname=file&aid=25176].

[50] For examples, see GAO report GAO-07-640R, *Defense Services Acquisition: Questions for the Record*, pp. 6-8, [http://www.gao.gov/new.items/d07640r.pdf]; GAO-06-1130T, *REBUILDING IRAQ: Continued Progress Requires Overcoming Contract Management Challenges*, [http://www.gao.gov/new.items/d061130t.pdf], pp. 8-10; GAO-07-730T, *SPACE ACQUISITIONS: Actions Needed to Expand and Sustain Use of Best Practices*, [http://www.gao.gov/new.items/d07730t.pdf], pp. 16-17; and p. 12 of the DAPA report.

[51] February 2007 Section 804 report, p. 7.

[52] See [http://www.dau.mil/workforce/hcsp.pdf].

Supporters of such a requirement could argue that the cost of the additional workforce would be outweighed by probable benefits such as reduced cost overruns on acquisition programs and more reasonable pricing and delivery on procured hardware and services. Supporters could also argue that a larger workforce could be better prepared to handle future unexpected contingency operations where demand on the acquisition workforce could spike. Opponents could argue that increasing the workforce would divert needed funding for operational and equipment requirements. workforce demands are already at an all-time high and increasing the workforce to meet that demand will result in excess workforce capacity and less money for operations and acquisition needs.

- **Specify a maximum level of contractor support allowed for acquisition or acquisition-related functions**. To better identify shortfalls or gaps in its acquisition workforce, Congress could specify a DOD-wide, DOD Component-specific or acquisition program-specific maximum level of contractor support for acquisition or acquisition related functions. Supporters could argue that holding contractor support levels constant will allow DOD to hire only the best and brightest contractor support for acquisition and acquisition-related functions. Supporters could also argue that a set maximum level could increase competition for available procurements and thereby reduce support costs. Opponents could argue that Program Managers would be unnecessarily restricted in their ability to staff their program offices in a manner they believe is best for their program. Opponents could also argue that the industrial base and level of qualified contractor support in the private sector may be diminished as fewer opportunities exist for procurements and employment.

## FY2008/2007/2006 Defense Acquisition Legislative Activity

The primary mechanism for which Congress has exercised its legislative powers to improve the performance of the defense acquisition structure on a recurring basis has generally been the annual National Defense Authorization Acts (NDAAs), though annual Appropriations Acts still exert significant influence via Congress' "power of the purse."[53] Sections of the acts have prescribed requirements applicable to both specific acquisition programs and the structure overall, the latter of which has typically been addressed in section VIII of the acts which is usually titled "Acquisition Policy, Acquisition Management, and Related Matters". Generally, the

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[53] For a brief overview of the Authorization and Appropriations processes, see CRS Report RS20371. For a history of Defense Authorization and Appropriations Bills from FY1970 through FY2007, see CRS Report RL33405, *Defense: FY2007 Authorization and Appropriations*, by Stephen Daggett and CRS Report 98-756, *Defense Authorization and Appropriations Bills: FY1970-FY2007*, by Thomas Coipuram, Jr.

requirements prescribed in this section have tended to be focused on specific issues rather than comprehensive reform of the defense acquisition structure.

## FY2008 National Defense Authorization Act (H.R. 1585/S. 567)

On May 17, 2007, the House passed their version of the FY2008 NDAA, H.R. 1585. Title VIII of the bill is a dedicated section on Acquisition Policy, Acquisition Management, and Related Matters was subdivided into five subtitles; Subtitle A - Acquisition Policy and Management; Subtitle B - Amendments to General Contracting Authorities, Procedures, and Limitations; Subtitle C - Accountability in Contracting; Subtitle D - Contracts Relating to Iraq and Afghanistan; and subtitle E - Other Matters. Each subtitle included a number of sections that addressed a variety of topics within each subtitle. Some of the most significant mandates proposed in the bill include a requirement for DOD to publish guidance on the use of interagency contracts (Section 803), a prohibition on procurement from sources that receive government subsidies (Section 804), a prohibition on new contracts being awarded to Lead Systems Integrators (Section 806), a provision making the United States Special Operations Command (USSOCOM)'s acquisition executive equivalent to the military departments' acquisition executives (Section 817), and a limitation on the length of non-competitive contracts (Section 821). The bill also includes three acquisition workforce provisions, one requiring a dedicated section in DOD's Strategic Human Capital Plan for the acquisition workforce including the identification of workforce needs (Section 802); a second as a requirement for DOD to develop a plan to establish the appropriate size of the acquisition workforce to accomplish inherently governmental functions on major weapons systems (Section 806); and a third requiring a study by the Administrator of Federal Procurement Policy on the composition, scope and functions of the workforce (Section 825).

The Senate version of the FY2008 NDAA (S. 567) also includes a title dedicated to Acquisition, Title VIII, which is organized in a similar manner to the House bill but excludes subtitles C and D of the House bill. On May 24, 2007 the Senate Armed Services Committee (SASC) passed S. 567, with a vote on the bill by the full Senate expected in June 2007. According to the SASC's press release, some of the most significant proposed mandates include the establishment of an acquisition workforce training fund, the appointment of three-star military deputies to each military service's acquisition executive, the establishment of statutory guidelines for savings to be achieved in multi-year procurements (MYPs), a strengthening of statutory criteria necessary for a Major Defense Acquisition Program (MDAP) to enter Systems Development and Demonstration (SDD), and a DOD re-examination of its MDAP investment strategy with a focus on the portfolio management pilot currently being executed by DOD.

## FY2007 National Defense Authorization Act (H.R. 5122/P.L. 109-364)

The FY2007 Defense Authorization Act's section on Acquisition Policy, Acquisition Management, and Related Matters was subdivided into five subtitles; Subtitle A — Provisions Relating to Major Defense Acquisition Programs; Subtitle B — Acquisition Policy and Management; Subtitle C — Amendments to General

Contracting Authorities, Procedures, and Limitations; Subtitle D — United States Defense Industrial Base Provisions; and subtitle E — Other Matters. Each subtitle included a number of sections that addressed a variety of topics within each subtitle. Some of the most significant mandates include a new requirement for the department to update Congress biannually on the implementation of acquisition reform in the department (Section 804), the establishment of a pilot program on time-certain development in acquisition of major weapon systems (Section 812), a requirement for the Milestone Decision Authority (MDA) of a Major Defense Acquisition Program (MDAP) to select the contract type used for development programs and document the rationale for that decision (Section 818), the establishment of a Strategic Materials Protection Board (Section 843) and the development of a strategy to enhance DOD Program Managers (PMs) in developing and carrying out Defense Acquisition programs (Section 853).

## FY2006 National Defense Authorization Act (H.R. 1815/P.L. 109-163)

The FY2006 Defense Authorization Act was organized in the same way as the FY2007 Defense Authorization Act to the level and nomenclature of the subtitles. Each subtitle in this act also included a number of sections that addressed a variety of topics within each subtitle. Some of the most significant mandates include a certification requirement prior to a MDAP proceeding to Milestone B (Section 801), revised guidelines for the department's reporting of programs that exceed baseline costs (otherwise known as Nunn-McCurdy reporting, Section 802) and the establishment of a management structure within the department for the procurement of contract services (Section 812).

# Appendix A. Selected List of Additional Defense Acquisition Information[54]

**Glossary of Defense Acquisition Acronyms and Terms**

[http://akss.dau.mil/jsp/Glossary.jsp]

***Defense Acquisition University Training and Continuous Learning***[55]

[https://learn.dau.mil/html/clc/Clc.jsp?BrowseCertCourses]
[https://learn.dau.mil/html/clc/Clc.jsp]

***DOD Policy Documentation***

DOD 5000 series[56]
[http://www.dtic.mil/whs/directives/corres/html/50001.htm]
[http://www.dtic.mil/whs/directives/corres/html/50002.htm]
[http://akss.dau.mil/dag/]
[http://akss.dau.mil/ifc/]

Chairman of the Joint Chiefs of Staff (CJCS) 3170 series
[http://www.dtic.mil/cjcs_directives/cdata/unlimit/3170_01.pdf]
[http://www.dtic.mil/cjcs_directives/cdata/unlimit/m317001.pdf]

Planning, Programming, Budgeting and Execution System (PPBES)
[http://www.dtic.mil/whs/directives/corres/html/704514.htm]
[http://www.dtic.mil/whs/directives/corres/html/70457.htm]
[http://www.DoD.mil/comptroller/icenter/budget/ppbsint.htm][57]

Financial Management Regulation (FMR)
[http://www.DoD.mil/comptroller/fmr/]

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[54] This list of information sources for Defense Acquisition is not comprehensive but focused on more significant and recent publications. However many of the sources listed also include additional references within their text that may be helpful. For additional historical references, see pp. 31-35 of the previously noted report by Edward Bair on Defense Acquisition at [http://stinet.dtic.mil/cgi-bin/GetTRDoc?AD=ADA288662&Location=U2&doc=GetTRDoc.pdf]

[55] The first link here is for DAU training curriculum, which covers a variety of acquisition functions such as program management, contracting, test & evaluation, etc. Users should begin with ACQ-101, the basics of Defense Acquisition. The second link is for continuous learning courses which can cover more specific topics. Both will allow you to browse courses without the need for testing or grading of progress.

[56] The first two links are the policy documents, the third is a guidebook to the documents and their concepts while the fourth is an integrated framework chart of the Defense Acquisition System.

[57] This is not policy documentation but is also helpful in understanding PPBES.

Federal Acquisition Regulation (FAR) and supplements
[http://farsite.hill.af.mil/]

Undersecretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) Strategic Goals Implementation Plan
[http://www.acq.osd.mil/goals/ATL%20Implementation%20Plan%20(Nov%2021%2006)%20rev1.pdf]

***Undersecretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) Human Capital Strategic Plan***
[http://www.dau.mil/workforce/hcsp.pdf]

***Major Reports***

February 2007 Section 804 Report
[http://www.acq.osd.mil/documents/804Reportfeb2007.pdf]

Quadrennial Defense Review (QDR) 2006
[http://www.defenselink.mil/qdr/]

Defense Acquisition Performance Assessment (DAPA)
[http://www.acq.osd.mil/dapaproject/]

Defense Science Board (DSB)
[http://www.acq.osd.mil/dsb/reports.htm]

Center for Strategic and International Studies (CSIS) Beyond Goldwater Nichols Series
[http://www.csis.org/isp/bgn/]

**Selected Government Accountability Office (GAO) reports**[58]

Major Management Challenges at the Department of Defense main site[59]
[http://www.gao.gov/pas/2005/DoD.htm]

*Assessments of Selected Weapons Programs*
[http://www.gao.gov/cgi-bin/getrpt?GAO-07-406SP]

*An Integrated Portfolio Management Approach to Weapon System Investments Could Improve DOD's Acquisition Outcomes*
[http://www.gao.gov/cgi-bin/getrpt?GAO-07-388]

*DOD Needs to Exert Management and Oversight to Better Control Acquisition of Services*
[http://www.gao.gov/new.items/d07359t.pdf]

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[58] Some links are to testimony given by GAO vice major reports.

[59] This will provide a list of various GAO reports on Defense Management challenges, including Defense Acquisition.

*Contracting for Better Outcomes*
[http://www.gao.gov/new.items/d06800t.pdf]

*DOD Faces Challenges in Implementing Best Practices*
[http://www.gao.gov/new.items/d02469t.pdf]

*Better Matching of Needs and Resources Will Lead to Better Weapon System Outcomes*
[http://www.gao.gov/new.items/d01288.pdf]

*Employing Best Practices Can Shape Better Weapon System Decisions*
[http://www.gao.gov/new.items/ns00137t.pdf]

*Improved Program Outcomes Are Possible*
[http://www.gao.gov/archive/1998/ns98123t.pdf]

*Eliminating Underlying Causes Will Avoid Billions of Dollars in Waste*
[http://www.gao.gov/archive/1997/ns97143t.pdf]

*High Risk Series: Defense Weapon Systems Acquisition*
[http://www.gao.gov/archive/1997/hr97006.pdf]
[http://www.gao.gov/archive/1995/hr95004.pdf]

*WEAPONS ACQUISITION: A Rare Opportunity for Lasting Change*
[http://archive.gao.gov/d36t11/148208.pdf]

**DSMC Comparisons of Foreign Acquisition Systems**
[http://www.dau.mil/pubs/misc/acq-comp-pac00.pdf]
[http://www.dau.mil/pubs/misc/acq-comp-euro00.pdf]

**CRS**
LTR 88-1399 available by request[60]

***Literature***

Jones Jr., Wilbur D. *Arming the Eagle: A History of U.S. Weapons Acquisition since 1775.* Defense Systems Management College Press. 1999.

Lederman, Gordon Nathaniel. *Reorganizing the Joint Chiefs of Staff - The Goldwater-Nichols Act of 1986.* Contributions in Military Studies, Number 182, Greenwood Press. 1999.

Locher III, James R. *Victory On The Potomac: The Goldwater-Nichols Act Unifies the Pentagon.* Texas A&M University Press. 2002.

[60] This CRS report includes a summary and full text of other major commission reports that address Defense Acquisition from 1949-1988.

# Appendix B. Evolutionary History of the Defense Acquisition Structure Prior to Goldwater-Nichols

The evolution of the defense acquisition structure can be generally categorized into three distinct periods; the Revolutionary War to World War II, World War II to The Goldwater-Nichols Act and The Goldwater-Nichols Act to the present. While each period experienced challenges unique to their times, each also exhibited some characteristics that one could argue are similar to varying degrees and are useful in consideration of defense acquisition issues today. The first two periods are discussed below while the third is discussed in the main body of this report.

## Revolutionary War to World War II

In comparison to the other two eras in the evolution of the defense acquisition structure, there is relatively little documented analysis or examination of the structure during this time period. Such limited information appears to have been due to four principal reasons; first was a political environment unfavorable to focused analysis of Defense Acquisition evidenced by:

> strong antimilitary sentiments (that) dominated public attitudes from the time of independence until Pearl Harbor (and) Americans focus(ing) on the military's technical skills, producing an overemphasis on engineering and science....[61]

Second, "(f)or most of our history prior to 1940, the federal budget was balanced, except in years of war or economic recession."[62] Third, and possibly as an acknowledgment of the shortcomings in engineering and science:

> Until World War II, weapons acquisition in the United States was more a political than a military problem. Shielded from large external threats, the country had no pressing need for sophisticated weapons; with few exceptions it was content to let European militaries take the lead in developing and fielding new weaponry.[63]

Finally, while there were instances of fraud and waste during the era, no occurrences of cost overruns or other poor performance in the execution of major programs as have been experienced since WWII appear evident. The lack of such instances of poor major program performance may be primarily due to the fact that prior to WWII, the US defense "industry" was made up of "a mix of public arsenals

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[61] Locher III, James R. *Victory On The Potomac: The Goldwater-Nichols Act Unifies the Pentagon.* Texas A&M University Press. 2002, p. 16.

[62] Cogan, John F. "Federal Budget". The Concise Encyclopedia of Economics. Indianapolis: Liberty Fund, Inc., ed. David R. Henderson, 2002, at [http://www.econlib.org/LIBRARY/Enc/FederalBudget.html].

[63] McNaugher, Thomas L. "Weapons Procurement: The Futility of Reform". *International Security.* Volume 12, No. 2 (Autumn 1987), p. 67.

and ad hoc private efforts to produce weapons systems."[64] The combination of the environmental characteristics described above gave the public (and therefore Congress) little reason to devote attention to the structure. However, that involatile mix did not completely stifle Congressional action. Despite such an environment:

> Legislators worried, on the one hand, that private industrialists would rob the federal treasury by charging high prices for shoddy weapons. Yet they sought, on the other, that the industrialists in their own states and districts got their fair share, or more, of the military contracts there were to be won.[65]

Congress appeared to have been aware of issues relating to such a basic conflict, but taking significant *action* appeared to require a significant *catalyst*, usually a time of war or national economic distress. In 1809, Congress first called for competition in government contracting; in 1861 the first commission to study defense acquisition fraud was formed (which was followed by numerous related commissions through the early 1900s); and the 1930s saw Congress focus intensely on the concept of government procurement for socioeconomic benefit.

The era prior to WWII was one of infancy for the defense acquisition structure. While there was little to distinguish the challenges of the structure with those of federal government acquisition overall, the structures's subsequent evolutionary eras would bring about significant change.

## World War II to the Goldwater-Nichols Act

Nearly every factor influencing and shaping the defense acquisition environment changed just after WWII. Not only were the nation's antimilitary sentiments reversed due to the attack on Pearl Harbor[66] but the existence of and potential for external threats to the nation became cemented. Additionally, the emergence of the Cold War presented the US with a persistent, international security threat. "(T)he 'real' enemy was always the spread of communism beyond the Soviet periphery. Likewise, weapons systems would now be developed almost exclusively against a Soviet 'threat' counterpart."[67] Not only did the US have a persistent, international enemy, but the enemy's characteristics forced weapons system development down a road in which "(t)he perceived Cold War imperative to attain qualitative superiority ensured that state-of-the-art technological advances would be applied rapidly to weapons systems capabilities"[68] in contrast with the previous defense acquisition landscape,

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[64] Bair, Edward T. "Defense Acquisition Reform: Behind the Rhetoric of Reform - Landmark Commissions Lessons Learned". The Industrial College of the Armed Forces, National Defense University. 1992, p. 5.

[65] McNaugher, p. 67.

[66] Locher notes that the antimilitary attitudes of the nation ended with the Pearl Harbor attack on pages 16 and 18.

[67] Reeves, p. 10.

[68] Bair, p. 5.

even "in 1947...(where) the emphasis was on simplicity, reliability and producibility."[69]

While just before this era "(d)eficits returned...and remained for the rest of the decade — due to the Great Depression and the spending associated with President Roosevelt's New Deal" it was "World War II (that) forced the Nation to spend unprecedented amounts on defense and to incur corresponding unprecedented deficits."[70]

Now, not only was the American public intensely interested in defense activities due to the Soviet threat but it also became interested in how the nation's resources were being applied, especially in the Defense sector of the economy. In fact the first of three questions one scholar notes regarding the resolution of budget deficits is "(h)ow much should we spend on national defense versus domestic programs?"[71] The "guns vs. butter" debate has been a significant political topic since the nation was founded and this very debate led to the beginning of the end of the Reagan administration's increases in defense spending as:

> [b]y the mid-1980s...Congress stopped the buildup. With the budget deficit soaring and with important domestic needs going unmet, members of Congress argued that the nations could no longer afford the Reagan administration's ambitious plans.[72]

One final contributing factor to the defense acquisition environment was the establishment and maintenance of a permanent domestic defense industrial base. However for this establishment to occur, there had to be a market for its products as a catalyst; this market was born when:

> the comparatively small and unsophisticated U.S. peacetime 'militia' envisioned by the Federalists and the U.S. Constitution was becoming a permanent, large peacetime force. Supporting this force was an even larger industry dedicated to developing and producing sophisticated, technologically superior weapons. These developments began the hothouse environment of military research and development that produced the international arms race, military-industrial complexes here and abroad, and the expansion of military interests into new realms such as computers, communications, spaceflight, microelectronics, astrophysics and a host of other fields.[73]

In sum, a number of factors contributed to the defense acquisition structure becoming a significant issue not just to those directly involved in its oversight or practice, but a significant issue in the nation's political landscape. Acquisition

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[69] Przemieniecki, J.S. *Acquisition of Defense Systems.* American Institute of Aeronautics and Astronautics. 1993, p. 13.

[70] See [http://www.whitehouse.gov/omb/budget/fy2002/guide04.html].

[71] Kettl, Donald F. *Public Budgeting In Its Institutional and Historical Context.* 1992, pp. 38-39.

[72] Kettl, p. 42.

[73] Reeves, p. 11.

programs and practices became more complex, more costly and more prominent than at any time in the nation's history. President Eisenhower recognized this development relatively early on and "warned of a military-industrial complex that would demand a huge share of America's wealth to perpetuate its power."[74]

The environmental factors discussed above, in combination with other factors such as the advent of joint military operations and organizational change within the military, thrust the defense acquisition structure into a greater role in national debate. The results of the defense acquisition structure appear to have served as a springboard for a characteristic of this era that has perpetuated into defense acquisition today; the use of Commissions, Studies and/or Panels to cure the ills of the defense acquisition structure. It was one of these Commissions, the Packard Commission, that helped thrust defense acquisition into its present era.

[74] Kettl, p. 39.