# IMPROVING DEFENSE ACQUISITION DECISION MAKING

*COL William R. Fast, USA (Ret.)*

This research investigates evidence and tests the hypothesis that the linkages between the defense acquisition management system, the requirements process, and the budgeting system are not sufficiently defined to enable the success of acquisition programs. These disconnects contribute to weapons systems cost overruns, schedule delays, and performance problems, and are exacerbated by the ever-changing global security environment and rapid pace of technological advancement. Through historical research, qualitative and quantitative analyses, and a comprehensive review of current policies and procedures, this research illuminates these areas of disconnect and proposes specific recommendations to fix them.

**Keywords:** *Acquisition, Budgeting, Decision Making, Programming, Requirements*

*image designed by Nina Costine »*

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# communication reconnect

The primary purpose of this research was to investigate how well the Defense Acquisition Management System interfaces with the *requirements* and *budgeting* systems of the Department of Defense (DoD). The United States of America possesses the finest weapons systems in the world. However, the same cannot be said for the systems that enable the Pentagon to acquire those weapons systems. Cost overruns, schedule delays, and operational test failures testify to numerous severed connections among the *acquisition* management, requirements, and budgeting systems (commonly referred to as the three decision support systems). The ever-changing global security environment and the rapid pace of technological change only serve to exacerbate these problems.

For the Pentagon to earn a reputation for excellence in acquiring weapons systems, these decision support systems must operate with far better coordination and demonstrate that they can procure the right equipment, within reasonable timeframes, and at affordable prices. This research began with an investigation into the intricacies of the acquisition management, requirements, and budgeting systems. Next, interactions between these three decision support systems were illuminated to uncover areas of misalignment and disconnect. Recent initiatives to correct these problems were also identified. Finally, solutions to resolve these disconnects were enumerated.

## Background

A January 2006 report of the Defense Acquisition Performance Assessment (DAPA) described the three decision support systems as:

> ...a highly complex mechanism that is fragmented in its operation. Further, the findings we developed indicated that differences in the theory and practice of acquisition, divergent values among the acquisition community, and changes in the security environment have driven the requirements, acquisition, and budget processes further apart, and have inserted significant instability into the acquisition system. In theory, new weapons systems are delivered as the result of the integrated actions of the three interdependent processes whose operations are held together by the significant efforts of the organizations, workforce, and the industrial partnerships that manage them. In practice, however, these processes and practitioners often operate independent of one another. Uncoordinated changes in each of the processes often cause unintended negative consequences that magnify the effects of disruptions in any one area.[1] (DAPA Panel, 2006, pp. 4–5)

**FIGURE 1. DoD DECISION SUPPORT SYSTEMS**

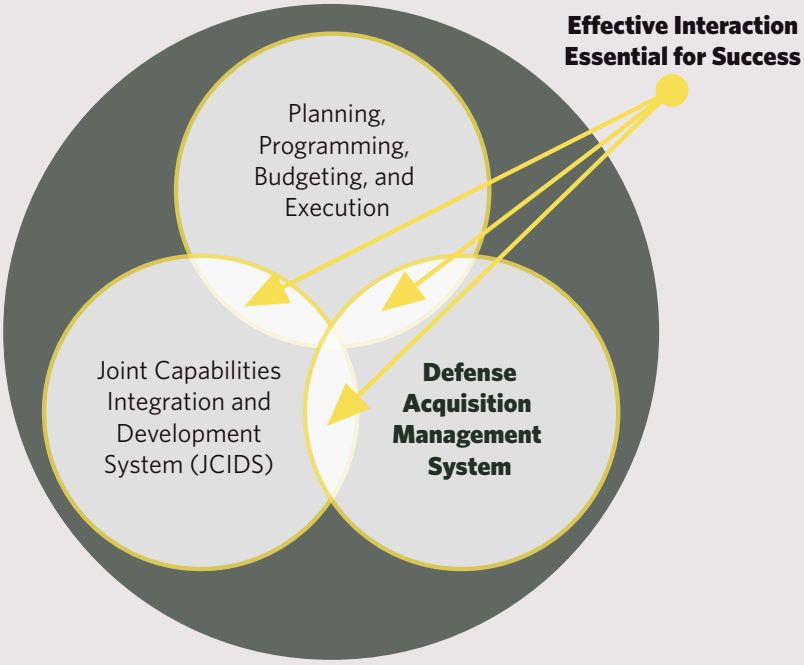
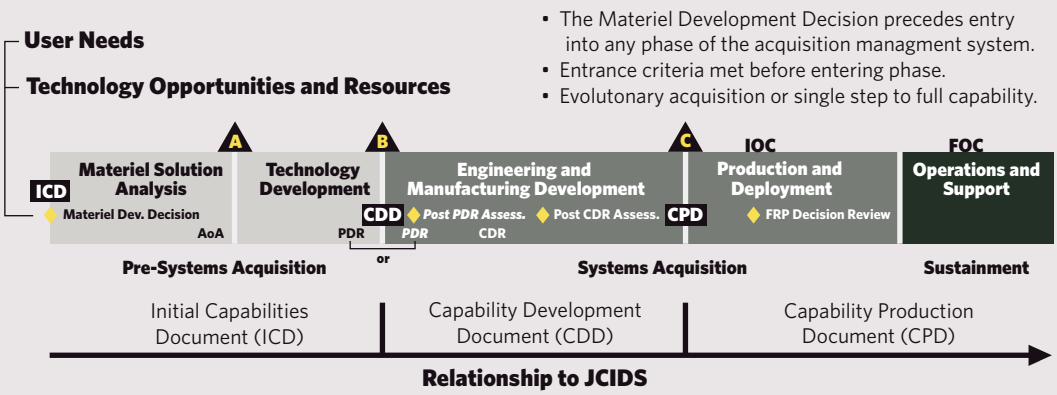



Figure 1 highlights the areas of interaction between the Defense Acquisition Management System, the Joint Capabilities Integration and Development System (JCIDS), and the Planning, Programming, Budgeting, and Execution (PPBE) system. Coordinated management decisions at these interfaces are essential for the success of any acquisition program. Thus, this research began by seeking to understand the reasons why these three decision support systems were first established and how acquisition programs are affected by the decisions made within and between these systems today.

## *DEFENSE ACQUISITION MANAGEMENT SYSTEM (DAMS): STRATIFIED DECISION MAKING*

*Decision making* in today's Defense Acquisition Management System (DAMS) can be traced to 1986. The late David Packard, then president of Hewlett-Packard, was selected by Ronald Reagan to lead the President's Blue Ribbon Commission on Defense Management. Better known as the Packard Commission, its interim report of April 1986 recommended the appointment of both DoD-level and Service Acquisition Executives (SAEs). The SAEs would appoint Program Executive Officers (PEOs) under their authority that would be responsible for a manageable number of acquisition programs and project managers. By design, the chain of authority from the

**FIGURE 2. THE DEFENSE ACQUISITION MANAGEMENT SYSTEM**




*Note. PDR=Preliminary Design Review; CDR=Critical Design Review; FRP=Full Rate Production; IOC=Initial Operating Capacity; FOC=Full Operational Capacity*

project manager, through the PEO, to the SAE was short. The basic premise was that defense acquisition needed to be streamlined to run in the same manner as a commercial venture (Butrica, 2001, pp. 212–213).

Another feature of the acquisition management system is that it classifies programs for higher levels of oversight based upon expected development or production expenditures. An Acquisition Category I (ACAT I) Major Defense Acquisition Program (MDAP), requiring oversight by the Defense Acquisition Executive (DAE) or DoD Component Acquisition Executive (CAE), if so delegated, is a program that is expected to require in excess of $365 million of Research, Development, Test, and Evaluation (RDT&E) funds and/or $2.19 billion of procurement funds (in fiscal year 2000 constant dollars) (DoD, 2008a, encl. 3, p. 33).

Unlike the PPBE process that is *calendar-driven* or the JCIDS which is *needs-driven*, the acquisition management system is *event-driven*. All acquisition programs are managed through a series of sequential phases and milestone reviews (Figure 2). To successfully move from one phase to the next, a program must have demonstrated or completed the program-specific exit criteria for the current phase and must also have met the statutory and regulatory entrance criteria for the next phase. The appointed Milestone Decision Authority (MDA) makes the "go/no-go" decision based on the evidence presented at the milestone review.

The effect of having a higher level decision maker for MDAPs is that 31 percent of the department's programmed Research, Development, and Acquisition (RDA) funds are under the authority of one decision maker—the Under Secretary of Defense for Acquisition, Technology and Logistics, who is the designated DAE. Yet, the remaining 69 percent of programmed RDA

funds are under the control of the Services and Defense Agencies.[2] The total number of decision makers with MDA for lower priority acquisition programs is over 40.[3]

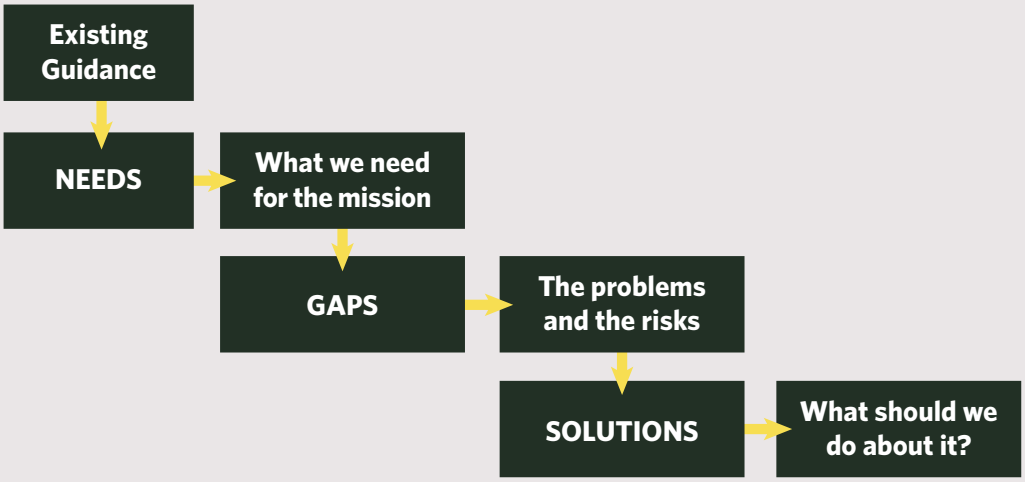
In addition, analysis of acquisition decision memoranda (ADMs) documenting the decisions of the DAE for MDAPs reveals that 36 percent of the ADMs contained language with impact on the requirements decision-making process, and 66 percent of the ADMs contained actions affecting decisions in the budgeting process.[4] Obviously, decisions made on the more numerous lower acquisition category programs also ripple into the requirements and budgeting processes at higher rates.

## *JCIDS: CENTRALIZING THE VALIDATION OF CAPABILITY DOCUMENTS TO ENSURE "JOINTNESS"*

Historically, the military services have had their own systems for the approval of weapons systems requirements. However, in 1976 the Office of Federal Procurement Policy published Circular A-109 that required a Mission Area Analysis to determine the need for a particular weapons system (OMB, 1976). In compliance with A-109, the Services were required to perform this analysis and prepare a mission needs statement to document the need at the front end of the acquisition process (Fox, 1988, p. 46). Eventually, to ensure that requirements were not duplicated between the Services and to prompt interoperability and joint operations, the Joint Staff got involved. In the early 1990s, they required the Services to adopt a single document format for the Operational Requirements Document (ORD). In 2003, the Joint Capabilities Integration and Development System (JCIDS) process was created to identify the capabilities and associated operational performance criteria required by the joint warfighter. JCIDS also supports the statutory responsibility of the Joint Requirements Oversight Council (JROC) to validate joint warfighting requirements.

Fundamental to JCIDS is Capabilities-Based Assessment (CBA) (Figure 3). Unlike the more predictable threats of the cold war that the Pentagon could anticipate and prepare for, threats today emerge on a daily basis, and are often asymmetrical to our existing capabilities. CBA seeks to find solutions to these emerging threats by changing Doctrine, Organization, Training, Material, Leadership and Education, Personnel, and Facilities (DOTMLPF) (Chairman of the Joint Chiefs of Staff [CJCS], 2009, p. GL-3). The CBA process produces initial capability, capability development, and capability production documents (ICD, CDD, and CPD). These documents guide the technology development, engineering and manufacturing development, and production and deployment phases of the acquisition framework, respectively (Figure 2).

**FIGURE 3. CAPABILITIES-BASED ASSESSMENT**

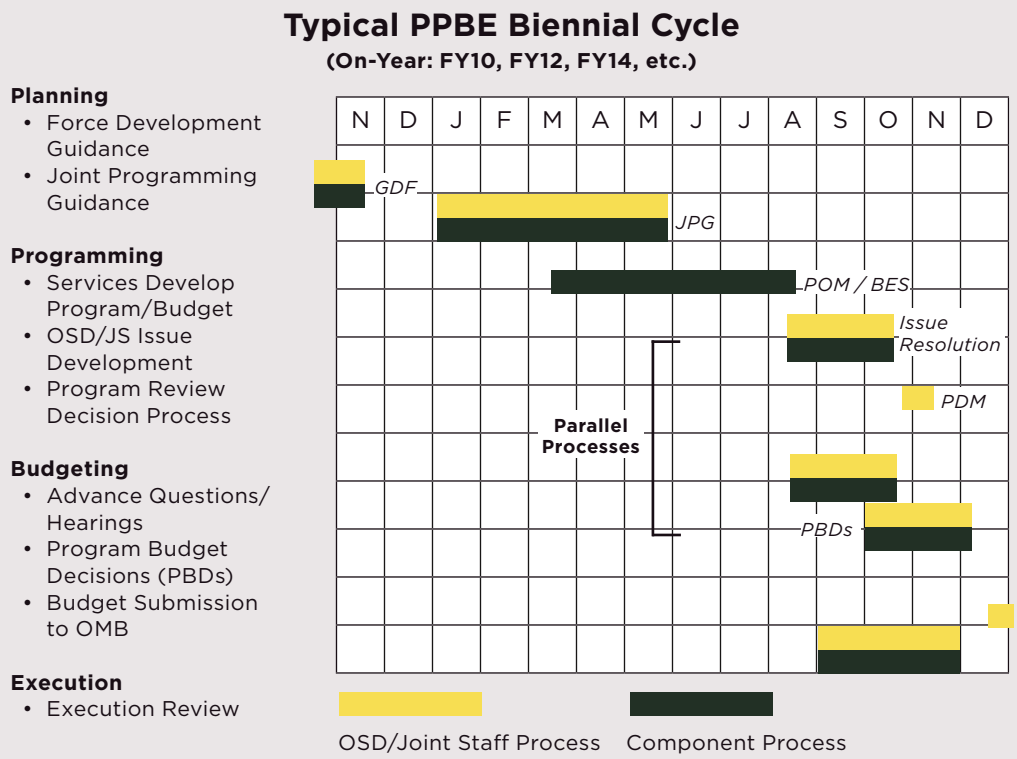



Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01G is explicit regarding how JCIDS interfaces with the two other decision support systems:

> The JCIDS process supports the acquisition process by identifying and assessing capability needs and associated performance criteria to be used as a basis for acquiring the right capabilities, including the right systems. These capability needs then serve as the basis for the development and production of systems to fill those needs. Additionally, it provides the PPBE process with affordability advice by assessing the development and production life-cycle cost. (CJCS, 2009, pp. A-1, A-2)

An approved ICD summarizes the CBA process, describes the capability gaps, and identifies potential solutions. The ICD is taken to a Materiel Development Decision (MDD) where it is reviewed and validated in order to start the acquisition process. A favorable MDD leads into the Materiel Solution Analysis phase, which is prior to Milestone A. In this phase, an Analysis of Alternatives (AoA) is prepared, based upon the broad type of materiel solution preferred in the ICD (i.e., information system, evolutionary development of an existing capability, or a transformational approach) (CJCS, 2009, p. A-3). Each alternative has an associated life-cycle cost that gives insight into the affordability of the program and provides linkage to the budgeting process. So, it is important to note that the information in the ICD drives the AoA process. The ICD also informs the technology development strategy, the test and evaluation strategy, and the

**FIGURE 4. PLANNING, PROGRAMMING, BUDGETING, AND EXECUTION**




systems engineering plan—all key documents for guiding the technology development phase prior to program initiation at Milestone B.

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***PPBE: THEN AND NOW***

In the spring of 2008, the American Society of Military Comptrollers (ASMC) surveyed 575 members of the defense financial management community about the PPBE process (Figure 4). Agreement was almost universal that PPBE was the best method to link performance and budgeting, "and a strong sentiment to fully implement the system as designed" (ASMC & Grant Thornton LLP, 2008, p. 1). So, just what was PPBE originally designed to do? And, has the DoD implemented PPBE in a way that allows it to do what it was designed to do? To find answers to these questions, one must go back to the beginnings of PPBE (then PPBS) during the era of Defense Secretary Robert S. McNamara.

In 1961, President Kennedy's initial instructions to McNamara were "to determine what forces were required and to procure and support them

as economically as possible" (McNamara, 1964, p. 14). Developed by cost analysts at the RAND Corporation during the 1950s, program budgeting was just what the Pentagon needed to link budget inputs to capability outcomes and to centralize long-range planning and financial decision making under the civilian Secretary of Defense. The system was originally called the Planning, Programming, and Budgeting System (PPBS), and its fundamental purpose was to unify annual budgets and nonfinancial longer range planning. In the age of the nuclear bomb, the task of long-range planning was to calculate the needed effects or outputs that had to be produced by military forces and weapons systems in order to prevail. Budgeted funds for these military forces and weapons systems came from the funding appropriations for military personnel, research and development, procurement, and operations and maintenance. Yet, budgets are resource inputs. Moreover, because of the long development cycles for modern weapons systems, annual budgeting was not a useful planning tool. The key for McNamara, and the objective of PPBS, was to link the planning outputs to the appropriated funds inputs through the construct of defined program elements within a 5-year force structure and financial program (Novick, 1962, p. 2).

As originally envisioned, planning within the PPBS was to be a comparative analysis of the projected costs and effectiveness of feasible alternatives. The example used by David Novick, one of the developers of program budgeting, is the comparison of the merits of buying more Polaris submarines versus Minuteman missile squadrons. Both systems could deliver nuclear warheads. The comparison between the two alternatives involved the methodical examination of the cost estimates for manpower, equipment, and facilities, and the expected military benefits (capability outcomes) derived from the systems (Novick, 1962, p. 6). Today, comparatively little analysis to this level of detail takes place in the planning phase of PPBE. Up until 2006, planning was simply an effort to turn the National Security Strategy (NSS), National Defense Strategy (NDS), National Military Strategy (NMS), and the Quadrennial Defense Review (QDR) into guidance from which the Services could develop their Program Objective Memoranda (POMs). Such a shallow planning effort resulted in guidance that was not specific enough, in terms of priorities and quantities, for the *programming* of adequate resources for weapons systems acquisitions. Here is but one of many examples.

The *National Security Strategy* (Clinton, 2000) was silent on the role of the military in finding and taking the fight to terrorists. While the document discusses the need for the military to help deter terrorism and respond in retribution to terrorist attacks, the mission of finding and destroying terrorist organizations is not mentioned. Thus, the FYDP for fiscal years 2002-2007, prepared by the Pentagon in fiscal year 2000, lacked a vision for the weapons systems and equipment necessary to prosecute an offensive global war on terror (Paparone, 2008, p. 157).[5] As the world changes at an

unprecedented pace, casting a meaningful strategic vision becomes more and more problematic. Without meaningful strategic vision, the acquisition management system may continue to acquire programs that will no longer be needed—and may fail to start programs that will be needed. The Obama Administration has yet to set clear national security priorities. As a result, the Pentagon began in early 2009 the planning phase for fiscal years 2012-2017 without the benefit of an NSS. Clearly, no one knows what the future will hold. However, planning for a future we cannot see and attempting to bring that illusion to the future fight, with all the associated weapons systems acquisition requirements, is clearly folly if not patently dangerous. Yet, this is the current planning process upon which the Pentagon justifies and builds its 6-year defense program.

The Government Performance and Results Act (GPRA) of 1993 requires that each government agency establish a results-oriented management approach to strategically allocate resources on the basis of performance (GPRA, 1993). In assessing the implementation of GPRA, the Government Accountability Office has criticized the DoD for not establishing goals or timelines for accountability and for the measurement of progress toward implementation. DoD implemented a risk management framework in its strategic plan—the 2001 QDR report (GAO, 2005, p. 8). However, it was not until 2003 that the DoD adopted the balanced scorecard approach to implement risk management. The GAO criticized the DoD for not integrating this framework with other decision-making support processes. Specifically, the GAO said that to be effective, risk-based and results-oriented management approaches have to be integrated into the usual cycle of agency decision making. The GAO presumed that without this level of integration, a mismatch between programs and budgets would continue, and a proportional rather than strategic allocation of resources would go to the Services.[6] In addition, the Congress would not have insight as to the risks and trade-offs made during the Pentagon's investment decision making (GAO, 2005, p. 5).

Chartered to examine how DoD develops, resources, and provides joint capabilities, the Joint Capabilities Study Team (also called the Aldridge Study) reported these findings to Defense Secretary Rumsfeld in 2004: "Services dominate the current requirements process…; Service planning does not consider the full range of solutions available to meet joint warfighting needs…; and, the resourcing function focuses senior leadership effort on fixing problems at the end of the process, rather than being involved early in the planning process." They also found that programming guidance exceeds available resources (DoD, 2004, p.iii). Others have also identified this programming guidance "gap" (Christie, 2008, p. 196; Church & Warner, 2009, p. 82; Johnson, 2003, p. 9).

The Aldridge Study proposed a four-step process: strategy, enhanced planning, resourcing, and execution and accountability. The strategy step involved the combatant commanders and answered the question: "What to

do?" The enhanced planning and resourcing steps answered the question: "How to do it?" The execution and accountability step answered the question: "How well did we do?" Formal process review points for the Secretary of Defense were proposed after each of the four steps (DoD, 2004, p. v).

Many of the recommendations from the Aldridge Study were implemented. Most notably, the Enhanced Planning Process (EPP) was made a phase of the Strategic Planning Process, and the EPP is to be approved by the Secretary or Deputy Secretary of Defense. Moreover, the Joint Programming Guidance is to document the decisions resulting from the EPP phase (DoD, 2006, p. 2). The Director of Program Analysis and Evaluation (PA&E) already had responsibility as the Office of the Secretary of Defense (OSD) lead for coordinating the program review of the PPBE process. The only problem with this new assignment is that it appears to conflict with the responsibilities of the Under Secretary of Defense (Policy), who has overall responsibility for coordinating the PPBE planning phase (DoD, 2003, p.5).

Another problem for PPBE is that developing and finally enacting the first year of the 6-year program takes a long time. The program (termed *Future Years Defense Program* or *FYDP*) is put together only once every 2 years, during even numbered years. For example, in calendar year 2010, the Pentagon will put together the 6-year program for fiscal years (FY) 2012 through 2017. However, the Services began working on their portions of that FY2012–2017 program in the middle of calendar year 2009—more than 3 years before the first year funds for FY 2012 will be appropriated by the Congress. The next opportunity to make major changes to the program is in calendar year 2012 when the program for FY 2014-2019 will be accepted by the Pentagon. Changes to the program are possible during the odd numbered years. However, these changes are usually limited to necessary fact-of-life adjustments. New starts (or stops) are generally not considered in the odd numbered years. Thus, the programming phase of the PPBE process suffers from *false precision*. Even if the vision of the future was correctly identified in the planning phase, programming for weapons systems new starts can only be done every other year. Moreover, funds requested are for use more than three or more years hence. Inevitably, projections for weapons systems costs that far in advance of execution are bound to be flawed. Yet, the process demands precision, whether or not that precision has any meaning (McCaffery & Jones, 2005, p. 159).

As originally envisioned, Secretary McNamara expected to conduct a continuous review of the entire defense program. In other words, he expected to have an up-to-date 5-year force structure and financial program at all times. McNamara's PPBS had a program change control system in which variations from approved cost estimates required advance authorization. Standard forms were established for research and development, investment, and operations—each relating to the key decision

points in the life of a weapon system. The program change control system was first applied to 200 of the most important material systems. Milestone schedules were prepared for these systems, and actual progress was reported on a monthly basis, including the need for corrective action or revision to the financial plan (Novick, 1962, pp. 7–10). Such is not the case today. The FYDP is open for changes only twice a year—in August when POMs (or changes to the previous POMs) are submitted by the Services to OSD, and at the end of the combined program and budget review once resource management decisions have been made and the defense budget is finalized for the Office of Management and Budget.

In his first year as Defense Secretary, McNamara was heavily involved in the cost-effectiveness and requirements studies of the planning phase of PPBS. Known as "McNamara's 100 Trombones," he assigned about 100 requirements projects to the Joint Chiefs of Staff, the Services, and various elements of OSD. These planning studies were truly participative in nature and required a significant time commitment from McNamara, but they resulted in detailed acquisition programming guidance for the Services. For example, in his first year McNamara made decisions on the number of strategic missiles and bombers for the next decade. He also decided on the airlift and sealift needed to support contingency war plans and the most cost-effective way of replacing worn out ground equipment for the Army (Hitch, 1965, pp. 74–75).

Senior leader involvement in today's PPBE process has typically been toward the end of the programming phase rather than in the earlier planning phase. This is not the optimum time for these senior leaders to enter the PPBE decision-making process. Moreover, failing to make the tough decisions up front in the planning phase only delays them into late in the programming phase (Johnson, 2003, pp. 10–11). Decisions become harder to make during the final stages of programming because less discretionary funding is available, and earlier decisions will need to be reconsidered. Such late decision making on weapons systems acquisition terminations was typical in past PPBE cycles. However, as demonstrated by Defense Secretary Gates during the 2010 budget deliberations, he may get more involved up front and make these types of decisions early in the planning phase of PPBE.

Today, PPBE fiscal and programming guidance is usually late in arriving to the Services. While no directive or instruction establishes a date for issuance of fiscal/programming guidance, issuance dates for the past two PPBE cycles were March 14, 2008, for POM 10-15; and May 7, 2009, for POM 11-15. Fiscal guidance refers to the total obligation authority, by fiscal year, available to the Services. Fiscal/programming guidance is used by the Services to develop their POMs, or changes to the previous POM, which are usually due in August. They begin development of their POMs in the last few months of the prior year (October–December timeframe). While draft fiscal/programming guidance is often released earlier, final fiscal/programming

guidance is usually issued too late to be useful. Today, fiscal/programming guidance is found in the "fiscally informed" Guidance for the Development of the Force (GDF) and the "fiscally constrained" Joint Programming Guidance (JPG) (Church & Warner, 2009, p. 84). The predecessor to the GDF was the Strategic Planning Guidance (SPG), and before the SPG, the Defense Planning Guidance (DPG). Originally envisioned to align strategy with investments, the GDF appears to have become a "wish list of programs and priorities for every constituency." Feedback from the Services on the usefulness of the GDF and JPG is mixed. As indicated, both documents, but especially the JPG, are issued well after the Services have completed the development of their POMs and decisions made to fund or not fund various weapons systems programs (Church & Warner, 2009, pp. 81-82).

Understandably, and working at a disadvantage with unclear programming guidance, the Service POMs are invariably criticized for failing to comply with the GDF/JPG. In addition, the POMs are faulted for underestimating technology risks associated with weapons systems investments (Christie, 2008, p. 212). As a result, the Services tend to *over program*, believing they can develop, produce, and place in operation many more programs than realistically possible (Christie, 2008, p. 196; Church & Warner, 2009, p. 82). In other words, their 6-year programs fail to consider the cost "tails" past the last year of the FYDP. This is particularly a problem with weapons systems production programs that build up to an unrealistically high "bow wave" of procurement funding beyond the FYDP that becomes unaffordable for the Service and DoD.

Per DoD Directive 7045.14, the official linkage between the PPBE and acquisition management systems is achieved by *designated membership* on the Defense Systems Acquisition Review Council (now the Defense Acquisition Board [DAB]), the Defense Resources Board (now the Deputy's Advisory Working Group [DAWG]), and the Senior Leader Review Group (SLRG); and the requirement to develop an acquisition strategy for all major systems (DoD, 1984, reissued 1987, p. 6). The DAB is chaired by the Under Secretary of Defense for Acquisition, Technology and Logistics, who is also a member of the SLRG and DAWG. The SLRG is chaired by the Secretary of Defense, and the DAWG is chaired by the Deputy Secretary of Defense, neither of whom sits on the DAB. In total, 11 senior leaders are members of both the DAB and the SLRG/DAWG.[7] The average tenure of the DAE is just 24 months.[8] Most MDAPs have development cycles that exceed the tenure of four or even five DAEs. Therefore, the effectiveness of having senior leaders serve as the linkage between the resourcing and acquisition management systems might be questioned, given their enormous responsibilities and brief tenures serving as the DAE. Certainly, 11 senior leaders cannot be held responsible for coordinating the multitude of interactions between the acquisition and budgeting systems.

## Recommendations

In 1979, the Defense Resource Management Study (DRMS) recommended to President Carter that the programming and budgeting phases of PPBE be combined into a single annual review. The DRMS also recommended that the time freed up by combining the two phases be used to "focus additional attention on the strategic and resource planning issues, including resolution of selected major issues prior to the program/budget review" (Rice, 1979, p. viii). This was the centerpiece of the DRMS proposal, and it was designed to open up a "broad planning window" that would include "an orchestrated OSD review and prioritization of the Defense Systems Acquisition Review Council-approved programs competing for segments of the planning wedge" (Rice, 1979, pp. 9, 16). These recommendations were not implemented. However, in 2003, Defense Secretary Rumsfeld did combine programming and budgeting phases, but not with the intention of freeing up time for better planning. Rather, Rumsfeld's Management Initiative Decision 913 specified that the freed up time would be used for an execution review (i.e., the new "E" in PPBE) to "make assessments concerning current and previous resource allocations and whether the department achieved its planned performance goals" (DoD, 2003, p. 7; Church & Warner, 2009, p. 81; Dawe & Jones, 2005, p. 49; Jones & McCaffery, 2005, p. 90). The Pentagon has yet to institutionalize this execution review. A recent survey of 575 professionals in the defense finance and accounting community found that, due to the wartime supplemental funding for operations in Iraq and Afghanistan, emphasis on execution had not made the relationship between budget execution and performance more visible, nor had it provided the data needed to make more timely decisions to improve the PPBE process (ASMC & Grant Thornton LLP, 2008, pp. 5-7). Perhaps, the "broad planning window" recommendation of the DRMS should again be considered, and this time implemented, to help resolve and clarify competing requirements and acquisition programs before the Services have to prepare their POMs.

In 2007, Capability Portfolio Management was introduced to the programming phase of PPBE. The official definition of Capability Portfolio Management is "the process of integrating, synchronizing, and coordinating DoD capabilities needs with current and planned DOTMLPF investments within a capability portfolio to better inform decision making and optimize defense resources" (DoD, 2008c, p. 8). The Capability Portfolio Management initiative seeks to place all current and proposed warfighting needs into logical, manageable functional categories. In an effort to minimize redundant capabilities, capability portfolios are joint, not Service-specific. Capability Portfolio Managers (CPMs) provide cross-Component alternatives and recommendations on current and future capability needs and investments. They are to work with the JROC and the JCIDS, and

develop capability planning guidance for inclusion in the GDF. Therefore, CPMs can impact capability portfolio composition, weapons systems acquisition, and weapons systems sustainment choices. In retrospect, the job of the CPMs is similar to the system analysts of the McNamara era. The systems analysts prepared "cost-effectiveness studies" and "requirements studies" at the request of the Secretary of Defense and the Joint Chiefs of Staff (Hitch, 1965, pp. 73-75). However, the advice of current day CPMs is officially sought only at the end of the programming phase of PPBE when they provide the DAWG with independent programmatic recommendations and cross-Component perspectives on planned and proposed capability investments (DoD, 2008c, p. 6). To have greatest influence, decision makers need to formally tap into the advice of these CPMs about 9 to 12 months earlier, during the planning phase of the PPBE process.

The deliberate, evolutionary pace of the cold war is long past. The challenges of an ever changing global security environment and the rapid pace of technological advancement represent a national imperative for the Pentagon to seek out and cultivate breakthrough ideas in the development and employment of defense systems (Johnson, 2003, pp. 6-7). To meet these challenges, the PPBE planning phase should be revitalized and extended to allow time for brainstorming and germination of innovative ideas, and for the analysis of the costs and effectiveness of various weapons systems alternatives.

## Conclusions

As implemented today, the PPBE process is far different from the PPBS established by Secretary of Defense McNamara in 1961. Over the course of nearly 50 years, changes have severely de-emphasized decision making in the planning phase. As a result, the department has had to establish a separate requirements analysis and approval system. The concept behind today's JCIDS was actually part of McNamara's long-range planning to determine the most cost-effective capability outcomes. Likewise, in McNamara's management system, weapons systems development and production decisions, along with necessary funding adjustments, were made in real time, and at the same time as requirements decisions. Today, the linkage between PPBE and weapons systems decisions suffers from the timing disconnect between a calendar-driven budget and event-driven acquisition programs. To improve acquisition decision making, the linkages between the requirements, budgeting, and acquisition decision-making systems must be reestablished. One solution is to reinvigorate the planning phase of PPBE and make the necessary decisions on weapons systems requirements, multiyear budgeting, and acquisition program continuation or termination, within the timeframe of that phase.

***Author Biography***

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## ENDNOTES

1. This problem has not been fixed. Writing in the January/February 2009 issue of *Foreign Affairs*, Secretary of Defense Robert M. Gates (2009) called for a reassessment of priorities within the Department of Defense:

> The defining principle of the Pentagon's new National Defense Strategy is balance. The United States cannot expect to eliminate national security risks through higher defense budgets, to do everything and buy everything. The Department of Defense must set priorities and consider inescapable tradeoffs and opportunity costs.
>
> The strategy strives for balance in three areas: between trying to prevail in current conflicts and preparing for other contingencies, between institutionalizing capabilities such as counterinsurgency and foreign military assistance and maintaining the United States' existing conventional and strategic technological edge against other military forces, and between retaining those cultural traits that have made the U.S. armed forces successful and shedding those that hamper their ability to do what needs to be done. (p. 28).

   How Gates will achieve this rebalancing of priorities is the essence of this research.
2. In Future Years Defense Program 2008–2013 (FYDP 2008–2013), the total obligation authority for RDT&E and Procurement was $1,154 billion. By virtue of the fact that the Under Secretary of Defense for Acquisition, Technology and Logistics is the MDA for MDAPs, the OSD has control over acquisition decisions totaling $362 billion, or about 31 percent of the total obligation authority in FYDP 08-13. On the other hand, the Services make decisions on about $792 billion, or about 69 percent of the total obligation authority for RDT&E and procurement in FYDP 08-13 (DoD, 2008d, Table 1-9, p. 13; DAMIR, n.d., MDAP/MAIS Selected Acquisition Report query, FYDP 08-13).
3. Each Service and Defense Agency has an Acquisition Executive (AE) with MDA. In addition, all PEOs have MDA. The total number of PEOs is 35 (Army-11; Navy-13; Air Force-11). (Source: Organizational charts of Army, Navy, and Air Force AEs. Retrieved November 14, 2009, from https://www.alt.army.mil/portal/page/portal/oasaalt, https://acquisition.navy.mil/rda/content/view/full/4539, http://ww3.safaq.hq.af.mil/organizations/index.asp)
4. The Defense Acquisition Management System (DAMS) uses ADMs as records of the decision made by the AE. For purposes of this research, ADMs for the following weapons systems were reviewed: Expeditionary Fighting Vehicle (6 ADMs); Future Combat System (10 ADMs); Global Hawk (12 ADMs); Joint Strike Fighter (13 ADMs); and Littoral Combat Ship (3 ADMs). In total, 44 ADMs were reviewed. Of these, 36 percent (16 ADMs) contained actions that would require involvement of the JCIDS. In addition, 66 percent (29 ADMs) contained actions that would impact upon the PPBE process (ADM, n.d.).
5. COL Christopher R. Paparone, USA (Ret.), makes an argument that the *Joint Vision 2020*, published in June 2000, focused on defensive force protection from terrorists, not on the use of military forces to combat terrorism in an offensive way, which was the case after September 11, 2001. While the *Joint Vision 2020* was not a PPBE document, per se, his point is applicable. Combating terrorists offensively is not seen in the National Security Strategy prior to 9/11. This is not the only failure on the part of past Presidential Administrations in providing meaningful strategic priorities. The *2002 National Security Strategy (NSS)* failed to envision the invasion of Iraq on March 20, 2003, the fall of Baghdad, and the associated requirements for nation building that were thrust onto the military. The *2004 National Military Strategy (NMS)* failed to envision the need for massive humanitarian aid in the wake of the Indian Ocean tsunami of December 24, 2004, and the associated requirements that the military would need for logistical

support across the shores of devastated islands and coastal regions. Similarly, the *2005 National Defense Strategy (NDS)* failed to envision that North Korea would test fire missiles over the Sea of Japan on July 4, 2006, and subsequently explode a nuclear device in the mountains on October 9, 2006. The 2005 NDS makes no mention of our nation's need to acquire an integrated missile defense capability.

6. The Government Accountability Office says that even though the DoD has adopted a risk management planning framework and balanced scorecard approach to programming for outcomes, the percentage of total obligation authority in the FYDP, by Service, has remained relatively unchanged. The GAO provided the following figures in its report, *Defense Management: Additional Actions Needed to Enhance DoD's Risk-based Approach for Making Resource Decisions* (GAO-06-13):

**TABLE. MILITARY SERVICE AND DEFENSE-WIDE PERCENTAGE OF THE 2005 AND 2006 FUTURE YEARS DEFENSE PROGRAMS**

| | 2005 Percentage of FYDP | 2006 Percentage of FYDP | Percentage Change by Department |
|---|---|---|---|
| Department of the Army | 24.23 | 24.63 | 0.40 |
| Department of the Navy | 29.75 | 29.47 | -0.28 |
| Department of the Air Force | 29.80 | 29.82 | 0.02 |
| Defense-wide | 16.22 | 16.08 | -0.14 |
| Total | 100.00 | 100.00 | |

*(Source: GAO, 2005, p. 16)*

7. The members of both the DAB and the SLRG/DAWG are: Under Secretary of Defense for Acquisition, Technology and Logistics; Vice Chairman of the Joint Chiefs of Staff; Secretaries of the Military Departments; Under Secretary of Defense (Policy); Under Secretary of Defense (Comptroller); Under Secretary of Defense (Personnel and Readiness); Under Secretary of Defense (Intelligence); Assistant Secretary of Defense for Networks and Information Integration/DoD Chief Information Officer; Director, Cost Assessment and Program Evaluation (DoD, 2008b, encls. 3 & 4; DoD, 2009, p. 10.2.1).
8. From Richard Godwin, the first Under Secretary of Defense (Acquisition) until Ashton Carter, the current Under Secretary of Defense for Acquisition, Technology and Logistics, average tenure has been 24 months. To date, the shortest service was by Godwin who served 12 months (September 1986–September 1987), and the longest service was by Jacques Gansler, who served 38 months (November 1997–January 2001) (Brown, 2005).

# APPENDIX

List of Abbreviations and Acronyms

| | |
|---|---|
| ACAT | Acquisition Category |
| ADM | Acquisition Decision Memorandum or Acquisition Decision Memoranda |
| AE | Acquisition Executive |
| AoA | Analysis of Alternatives |
| ASMC | American Society of Military Comptrollers |
| BES | Budget Estimate Submission |
| CAE | Component Acquisition Executive |
| CBA | Capabilities-Based Assessment |
| CDD | Capability Development Document |
| CDR | Critical Design Review |
| CJCS | Chairman of the Joint Chiefs of Staff |
| CJCSI | Chairman of the Joint Chiefs of Staff Instruction |
| CPM | Capability Portfolio Manager |
| DAB | Defense Acquisition Board |
| DAE | Defense Acquisition Executive |
| DAMS | Defense Acquisition Management System |
| DAPA | Defense Acquisition Performance Assessment |
| DAWG | Deputy's Advisory Working Group |
| DoD | Department of Defense |
| DoDD | Department of Defense Directive |
| DoDI | Department of Defense Instruction |
| DOTMLPF | Doctrine, Organization, Training, Material, Leadership and Education, Personnel, and Facilities |
| DPG | Defense Planning Guidance |
| DRMS | Defense Resource Management Study |
| encl. | enclosure |
| EPP | Enhanced Planning Process |
| FRP | Full Rate Production |
| FY | Fiscal Year |
| FYDP | Future Years Defense Program |
| GAO | Government Accountability Office |
| GDF | Guidance for the Development of the Force |
| GPRA | Government Performance and Results Act |
| ICD | Initial Capabilities Document |
| JCIDS | Joint Capabilities Integration and Development System |
| JPG | Joint Planning Guidance |
| JROC | Joint Requirements Oversight Council |
| JS | Joint Staff |
| MDA | Milestone Decision Authority |
| MDAP | Major Defense Acquisition Program |

| | |
|---|---|
| NDS | National Defense Strategy |
| NMS | National Military Strategy |
| NSS | National Security Strategy |
| OMB | Office of Management and Budget |
| ORD | Operational Requirements Document |
| OSD | Office of the Secretary of Defense |
| PA&E | Program Analysis and Evaluation |
| PBD | Program Budget Decision |
| PDM | Program Decision Memorandum |
| PDR | Preliminary Design Review |
| PEO | Program Executive Office or Program Executive Officer |
| POM | Program Objective Memorandum or Program Objective Memoranda |
| PPBE | Planning, Programming, Budget, and Execution |
| PPBS | Planning, Programming, and Budgeting System |
| QDR | Quadrennial Defense Review |
| RDA | Research, Development, and Acquisition |
| RDT&E | Research, Development, Test, and Evaluation |
| SAE | Service Acquisition Executive |
| SLRG | Senior Leader Review Group |
| SPG | Strategic Planning Guidance |