TRANSFORMATION OF NATIONAL DEFENSE BUSINESS MANAGEMENT: CURRENT INITIATIVES AND FUTURE CHALLENGES

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ABSTRACT

The major transformational challenge facing DOD in the period 2005-2008 is how to continue to re-capitalize and modernize the fighting forces while also pushing the pace of business transformation to increase efficiency. This must be accomplished while continuing to pay the high price of waging the war on terrorism. In essence, what DOD must fund and support in the short-term must be traded-off against longer-term investments to improve efficiency and force readiness. In this context, significant business management transformation challenges include:

- 1. How will DOD business transformation keep pace and be coordinated with the transformation of military affairs under conditions of limited resources?
- 2. How will DOD re-capitalize the force structure within limited budgets?
- 3. How can DOD acquisition and procurement incorporate new technologies while producing and fielding war fighting and support assets more quickly, especially given tight budgets in the foreseeable future?
- 4. How will new cyber-management technologies and methods (e.g., net-centric warfare systems) be advanced within the limits of resource constraints?
- 5. How will DOD manage the transition of logistics support (e.g., toward spiral logistics) to the new environment of the war on terrorism?
- 6. How will DOD improve its accounting and financial management systems to enable analysis of performance and results related to costs, and provide more accurate, reliable and timely information of better 'decision-quality' for DOD leaders?

This paper describes and analyzes defense business management transformation initiatives proposed and implemented under Secretary of Defense Donald Rumsfeld in the past three and one-half years. Transformation is defined through reference to DOD's own definition and recent transformation initiatives are reviewed including those in the areas of financial management, human resource management, and acquisition. In this context, the history of DOD requests for increased delegation of authority from Congress to pursue transformational change is assessed. Next, the paper addresses the recent transformation of the central resource planning and decision system used by DOD, now referred to as the Planning, Programming, Budgeting, Execution System (PPBES). Following this it investigates performance measurement and management, initiatives now in progress as part of the transformation in business affairs across the federal government and in DOD. Finally, it identifies some of the transformation challenges that must be addressed by defense business management decision makers in the next four years. As noted in the conclusions, leveraging

information technology innovation is a key element of transformation. Network centric combat information systems are under development in all of the military services. Such systems coordinate various types of data to a single command point in real time to improve the ability to see and manage military operations. Applications of network centric IT in the area of business management may be the next step, although it is costly. However, it is one approach to coordination of decision making in flatter, network types of organization rather than through traditional bureaucratic forms of organizing to solve complex and sometimes "wicked" problems of the type faced in national defense. Given the vital importance of information technology it is essential for DOD to address the knowledge, skills and abilities of its workforce to fully leverage the potential of IT and other business management methods. Virtually all DOD transformation is modeled on smart practice in the private sector.

INTRODUCTION

Transformation of the Department of Defense may best be understood in the context of reform of the federal government to introduce more efficient business management practices, improve financial and accounting procedures and systems, improve strategic planning and budgeting, and to manage more directly for performance and results. As explained subsequently, a considerable degree of transformational reform is under implementation in the Department of Defense. This paper attempts to explain the direction of management reform for defense that must be linked to support the transformation of forces on the military side of the Department of Defense with the understanding that all policy, organizational and resource process changes eventually have an impact on defense budgets and management. Additionally, the paper points out challenges to defense policy makers in implementing transformational changes in progress and those that may be anticipated as needed in the future. The first section of this paper describes and analyzes defense business management transformation initiatives proposed and implemented under Secretary of Defense Donald Rumsfeld in the past three and one-half years. In this context the paper assesses the history of DOD requests from Congress for increased delegation of authority to implement reform. Next, it addresses the recent transformation of the central resource planning and decision system used by DOD, now referred to as the Planning, Programming, Budgeting, Execution System (PPBES). Following this it investigates performance measurement and management initiatives now in progress as part of the transformation in business affairs across the federal government and in DOD. Finally, conclusions highlight additional transformation initiatives in progress and define some of the key challenges that need to be addressed by defense business management decision makers in the next four years.

WHAT IS TRANSFORMATION?

This paper focuses on the business side of DOD transformation and not on the transformation of the fighting forces. However, the premise throughout is that business management transformation must track, support and keep pace with the changes in the force structure and the needs of the fighting forces to respond to the threats posed in the

national security environment. One of the greatest challenges for leaders pursuing reform of defense management systems is convincing the warfighter that the cost of failing to invest in reform efforts is greater than the initial opportunity costs of such investments. This subject will be discussed in more detail subsequently in this paper.

The business transformation initiatives of the Bush administration should be viewed as a continuation, albeit at an accelerated pace, of many of the recommendations for federal government reform recommended by the Packard and Grace Commissions in the 1980s, and of the very ambitious changes in business practices instituted under the Defense Management Report/Review (DMR) under Secretary of Defense Dick Cheney and his staff including Deputy Secretary Donald Atwood, Comptroller Sean O'Keefe and Deputy Comptroller Donald Shycoff (Jones and Bixler, 1992; Thompson and Jones, 1994). Many of the DMR initiatives and programs were continued with success under Secretaries Aspin, Perry and Cohen during the Clinton administration, under the direction for part of this time of DOD Comptroller John Hamre and Under Secretaries of Defense for Acquisition and Technology Paul Kaminsky and Jacques Gansler among others. Some programs such as the Defense Business Operations Fund (DBOF) were discontinued when control of working capital funds were transferred from the Office of the Secretary of Defense back to the military departments and services from which they were consolidated under the Office of the Secretary of Defense by Shycoff. However, many DMR and related initiatives have transcended three Presidential administrations and have improved the efficiency of defense business management, e.g., the consolidated Defense Finance and Accounting Service (DFAS). Indeed, it is possible to trace the origins of defense business transformation back to the 1960s under the leadership of Defense Secretary Robert McNamara and DOD Comptroller Charles Hitch as detailed later in this paper. And, of course, realignment of the defense department after WW II under the Key West Accord laid the groundwork for significant reform over the next half century and longer, most of this under the pressure of the Cold War against the USSR. The competition for command of U.S. nuclear forces in the 1960s, passage of the Goldwater-Nichols Act in 1986, the end of the Cold War in 1989 are the only other events that have shaped the change of the Department of Defense (DOD) as significantly.

One observation of many that may be made about the succession of reforms in the Department of Defense is that comptrollers have been key players in implementation for decades. This is in part because of the simple fact that change requires money and authority, and DOD comptrollers control the former (as long as they make their peace with key congressional budget process participants) and have been given considerable latitude of the latter under most Presidential administrations. However, one may wonder whether DOD comptrollers are best suited to the task of business transformation given that they have plenty of other responsibilities managing the financial affairs of DOD. In this light, might transformation be better directed and orchestrated under a position of Deputy Secretary of Defense for Management or a similar title. We return to this issue subsequently, but it is important to note that such proposals have been advanced within DOD by those who have participated in numerous management reform programs across the years and by advisors to Congress. (GAO, 2004)

With respect to the continuing need for transformation throughout DOD, hastened by the attacks of 9/11/2001 and the demands of fighting the war on terrorism, Secretary of Defense Donald Rumsfeld has explained, "We're likely to face fewer large armies,

navies and air forces, and instead more adversaries who hide in lawless, ungoverned areas and attack without warning in unconventional ways. Our challenge is not conventional, it's unconventional." (Rumsfeld as cited by OFT, 2004) Recently, Deputy Secretary of Defense Paul Wolfowitz approved the 2004 DOD Training Transformation Implementation Plan (IP) to better enable joint operations. This replaces the 2003 plan as a result of the department's experience in transforming the force and from lessons learned during operations in the Global War on Terrorism. (OFT, 2004)

Given the demands of the war on terrorism, Rumsfeld's comment identifies the essential dilemma facing DOD in recruiting, training and equipping the fighting force under a different doctrine of war. Transformation of business affairs in DOD has to support the transformation of the fighting forces.

Given this reality, how may defense business transformation be defined? According to Arthur K. Cebrowski (Vice Admiral, USN ret.), Director of the Office of Force Transformation in the Office of the Secretary of Defense, transformation may be defined in the following way. The mission of OFT is to stimulate transformation initiatives throughout the Department of Defense. This statement is taken verbatim from the OFT website (OFT, 2004).

There are many different definitions being bantered about in government, in Congress and in the public over what specifically does transformation mean? What is it really all about? What is the process for getting there? Some say it is about injecting new technology into the military. Others believe transformation is about new ways of buying weapon systems. Still others hold that transformation is about the wholesale change of organizations. Many say the term has been so overused that it has lost significant meaning and it is simply now the status quo in government and especially DOD. Frankly, we don't care which definition is used so long as any transformation process contains certain key, immutable elements. Transformation is foremost a continuing process. It does not have an end point. Transformation is meant to create or anticipate the future. Transformation is meant to deal with the co-evolution of concepts, processes, organizations and technology. Change in any one of these areas necessitates change in all. Transformation is meant to create new competitive areas and new competencies. Transformation is meant to identify, leverage and even create new underlying principles for the way things are done. Transformation is meant to identify and leverage new sources of power. One aspect of transformation that appears indisputable to most if not all DOD leaders as reformers and change advocates is that organizational culture is something that must necessarily be addressed, and carefully managed, if transformational change efforts are to prove successful. The overall objective of these changes is simply—sustained American competitive advantage in warfare.

One lens that might prove helpful in understanding transformation is through that of a commercial corporate strategy for innovation. While there are obvious and fundamental differences between corporations and the Department of Defense, nevertheless certain basic elements are germane to both types of organizations. Any good corporate innovation strategy, according to Eric Beinhocker, at MIT's Sloan School of Management, has three distinct parts.

Focus on Core Missions—This is the bread and butter of any organization and the main point of any corporate effort. This is where modernization, recapitalization, and

taking care of the capital plant occur. This is basic stuff. This is the realm of evolutionary changes where an organization simply tries to get better at what it is already doing. It should be emphasized that transformation and modernization are not in competition. They are different things and any organization must undertake both processes to be successful.

A Series of Small Exploratory Jumps—This is where an organization pushes out the boundaries of a core competency and tries to create something new. Changes in this category are within the existing paradigm. An example of this is the U.S. Navy pursuing unmanned underwater vehicles for shallow water mine hunting and antisubmarine warfare. Those missions are already core competencies for the Navy. But, insofar as using this technology in new ways makes it possible to do something that Navy could not do before; it is transformational. Note that this change will involve doctrine and organization as well as technology. Another example related to transformation of DOD business systems is what has historically been the most common practice; integrating existing systems that previously could not share data for which there is a common need. Although this may seem transformational to the system users because it, at least in theory, reduces or eliminates the need for manual system entries, it most often results in maintaining the unreliable and costly legacy systems that are in such great need of replacement.

Placing a Few Big Bets—These are big jumps. These are the things that will change a military service, change the Department of Defense and maybe even change the world. Some might argue that this is not what the DOD does, but they are wrong because the organization has already done this in the past. Global Positioning System satellites are a prime example. Its advent changed the military, changed the department and changed civil society. Another is the American military's ability, led by the U.S. Army, to "own the night." It changed the character of land warfare. That was a big bet. Yet another example is putting nuclear ballistic missiles to sea in submarines.

The problem with these examples is they are rearward looking. The question is what is a possible big bet for today? There are a few examples that spring forward, but the department must still see how these play out after they are assessed and experimented with by the active forces. One is the transition to speed of light weapons. The development of such weapons could change the relationship between offense and defense.

Space is another area where a new business strategy combining new technology with new operational concepts can have profound impact on how information energy can be applied on the battlefield. This may involve capabilities to generate very small payloads, very quickly on orbit. Robotics is another avenue that could prove fruitful, since relocating the human on the battlefield could change everything.

An example related to DOD business systems is Enterprise Resource Planning (ERP) systems. Although there are clearly examples of failed ERP initiatives in both the public and private sectors, there is great support throughout the government and within DOD for reducing what some say may be as many as 5,000 systems to several ERP systems, or taken to the extreme even one large system, that use more advanced technology and share common data. With the investment required for such 'big bets' in technology it is argued that the return on investment would be quick and substantial.

Transformation is not an impossible task. Given the leadership and support from Defense Secretary Rumsfeld, and the service secretaries and military chiefs of staff, significant progress is being made. When you have that kind of support and commitment it is truly amazing what can be accomplished." (Cebrowski, 2004)

THE DEFENSE TRANSFORMATION ACT INITIATIVE

Although only part of the Defense Transformation legislation detailed in this section was adopted by Congress, and given that the proposal had some flaws, to grasp how DOD has characterized the need for transformation in its business practices, We draw on the statement supporting the enactment of the Defense Transformation Act for the 21st Century (DTA) delivered by Deputy Secretary of Defense Paul Wolfowitz to the House Government Reform Committee on May 6, 2003 (Wolfowitz, 2003). Wolfowitz indicated the desire of the Bush administration and Secretary Rumsfeld to continue to implement broad management, financial and budgetary reform in DOD. Subsequent to this presentation, Congress passed significant portions of the DTA as part of the Defense Authorization Act of 2003, but was reluctant to give DOD certain broad discretionary powers that it had sought in certain areas.

The Defense Transformation Act for the 21st Century represents comprehensive reform to address serious problems in DOD management systems. The Act was intended to provide the military departments and services greater flexibility to respond effectively to changing threats and the ability to move resources more rapidly, and to put new weapons systems in the field more quickly. The Act includes more flexible rules for managing the flow of money and personnel in DOD to facilitate response to threat requirements. Prior to submission of DTA to Congress in final form on April 10, 2003 in the months leading up to its formal delivery, DOD convened more than 100 meetings with members and staff to develop and debate its various provisions.

The provisions of the DTA approved by Congress in the Defense Authorization Act of 2003 are highly detailed and only a summary of the changes requested and authorized is provided here. The DTA as passed by Congress includes authority for DOD to create a new personnel system for all DOD civilian employees and to move some non-military functions assigned to DOD over the years to other, more appropriate departments. The DTA authorizes elimination of regulations that make it difficult for small firms to do business with DOD. It includes expanded authority for competitive outsourcing to move military personnel out of non-military jobs. It also included several measures to preserve military training ranges necessary to assure force readiness.

Wolfowitz cited the following problems that required transformational reform:

- Inability to put civilians into hundreds of thousands of jobs that do not need to be performed by military personnel places great stress on uniformed personnel and their availability for combat duty. Approximately 320,000 uniformed personnel perform essentially non-military jobs in DOD, but DOD has had to call up Reserve forces to serve in the war on terrorism.
- Inefficiency in DOD management systems means that taxpayers are not getting best value from their defense dollars. Further, military forces are not well

- supported. For example, despite 128 acquisition reform studies, DOD operates an acquisition system that since 1975 has doubled the time needed to produce a new weapons system in an era when technologies in the private sector are arriving in years and months rather than decades.
- Encroachment of the ability of military forces to train adequately in an era when training represents the most important edge the U.S. military has over real and potential adversaries. Curtailment of the capacity to train adequately threatens military capability.
- Limited flexibility to manage the DOD civilian work force makes it difficult to compete with the private sector for the specialized skills that an information-age military needs for support.
- Inability to push new ideas through cumbersome DOD acquisition management processes means that the equipment the military uses in the field now is a generation or two or more behind feasible technology. In both Afghanistan and Iraq, qualitative weapons system superiority saved lives, but far more could have been the done with better technology. The need is great for the U.S. military to respond better and more rapidly to defeat interests that threaten the security of the United States. In this regard Wolfowitz said, "Our objective is not merely to achieve victories, but to have the kind of decisive superiority that can help us to prevent wars in the first place, or if they must be fought, that can enable us to win as quickly as possible with as little loss of life as possible." (Wolfowitz, 2003: 2-3)

Wolfowitz cited the fact that DOD was already engaged in substantial transformation that included reducing management and headquarters staffs by 11 percent. The acquisition process had eliminated hundreds of pages of unnecessary rules and DOD regulations. In addition, a new financial management structure was under implementation to integrate all DOD financial systems into a single system. He added:

But these internal changes are not enough. DOD needs legislative relief to ...help transform how we manage people, how we buy weapons and how we manage our training range...One of the key areas...is in transforming our system of personnel management so that we can gain more flexibility and agility in how we handle the more than 700,000 civilians who provide the Department such vital support -- or to deal efficiently with those who don't. The ability to do so is nothing less than a national security requirement because it goes straight to how well we will be able to defend our country in the years to come... In truth, this is neither a new nor a partisan issue. No less than three administrations have tried to fix a system that is, by most accounts, seriously broken. In an age when terrorists move information at the speed of an e-mail, money at the speed of a wire transfer and people at the speed of a commercial jet liner, the Defense Department is still bogged down, to a great extent, in the micromanagement and bureaucratic processes of the industrial age, when the world has surged ahead into the information age. (Wolfowitz, 2003: 1)

To illustrate his points with respect to personnel administration Wolfowitz cited the example of the Defense Information Systems Agency that found it difficult to recruit candidates critical to doing business in the information age, e.g., in telecommunications,

information technology and professional engineering and science. This was because federal and DOD employment and recruitment rules are inflexible and time-consuming. Industry offers the best and brightest candidates jobs on the spot at job fairs, while DOD must compete for these same individuals using a hiring process that requires months to navigate. Equally reprehensible, this same system that is slow in hiring talent is equally slow to unload people with proven problems. In one case the Defense Logistics Agency took nine months to fire an employee with previous suspensions and corrective actions who was found repeatedly sleeping on the job.

Wolfowitz explained that in other federal government agencies major portions of the workforce had already been "...freed from archaic rules and regulations." (Wolfowitz, 2003: 4) He explained:

We realize that achieving the goal of reforming the Defense Department's civil service system requires some bold moves to constitute real transformation. We are asking you now to help us take such a bold step. That we are fighting a difficult war on terrorism that promises to be of some duration only makes the need to reform our personnel system even more pressing. We must fix this system now. We cannot afford to wait. (Wolfowitz, 2003: 4)

In support of the DTA, Secretary Rumsfeld made a plea for greater delegation of authority and freedom from micromanagement from Congress (Rumsfeld, 2003: 35). Rumsfeld noted that:

- The defense authorization bill had grown from only one page in 1962 to a "whopping" 534 pages in 2001.
- DOD is required to prepare and submit some 26,000 pages of justification and more than 800 required reports to Congress each year -- many of marginal value, most probably not read. Since 1975, the time it takes to produce a new weapons system has doubled, even as new technologies are arriving in years and months, not decades. (Rumsfeld, 2003: 35)

THE QUEST FOR INCREASED DELEGATION OF AUTHORITY FOR TRANSFORMATION

The possibility of obtaining increased delegation of authority from Congress to DOD has captivated defense budget analysts and reformers since the late 1960s. Prior to the 1960s the defense program and budget was approved in a far less controversial manner than the way the process has operated since "hawks" and "doves" began a protracted battle in the halls of Congress over the Vietnam war. Objections to the Vietnam War and the spending plans of President Lyndon Johnson caused an increase in congressional authorization and appropriation detail and specificity, and greater budget execution oversight. The need for more managerial flexibility and delegation of authority from Congress in budget execution has been supported by critics of congressional defense budgeting and management for decades (Jones and Bixler, 1992; Gansler, 1989; Fox, 1988; Kanter, 1983, Augustine, 1982; Luttwak, 1982).

Delegation of budget execution authority is an important issue because it is highly relevant to (a) the assessment of defense budget process reform, (b) analysis of proposals to reformulate defense priorities, and (c) changes in defense spending. This fact has not been lost on DOD leadership. For example, former Defense Secretary Frank Carlucci asked Congress for increased managerial powers at the end of the Reagan administration in 1988. Former Defense Secretary Dick Cheney proposed six acquisition programs in the 1991-1994 time frame for execution without congressional oversight as a test of the DOD ability to operate efficiently independent of external micromanagement. Congress did not approve this request (Jones and Bixler, 1992).

Some elements of the change proposed in the DTA in the acquisition area were designed to formalize procedures preferred and already practiced by Secretary of Defense Donald Rumsfeld. One such change was to bring decisions on major acquisition buys up to The Secretary of Defense more quickly, before final decision were, in effect, already made elsewhere in the Pentagon. This change was proposed in the DTA to allow any The Secretary of Defense to make such decision outside of the formal PPBES and acquisition cycle processes. Obviously, this might be an advantage as long as the Secretary of Defense wished to make such decisions, and were good at it. This approach appealed to the centralized decision making style of Donald Rumsfeld.

For example, cancellation of the Army Crusader heavy-artillery system is an example of a transformation decision Secretary Rumsfeld made and won out on over institutional opposition, but it was a close-run struggle. If all major acquisition negotiations are this hard, and there is no reason to expect them to be easier, then such successes for future Secretaries of Defense will have their price and will be few in number. Just as with any strong leader, Secretary Rumsfeld made enemies within the defense establishment by this decision, in the Pentagon and Congress and in industry. Not everyone wants to be transformed.

Secretary Rumsfeld took it upon himself to fix a number of problems with DOD management including changing the acquisition process so that weapons buys could be decided upon and weapons fielded more quickly; to fix the planning and strategy focus from geography to capabilities; to repair inter-service gaps in function and performance so that the military services might interact more smoothly. This transformation was accomplished by strengthening the decision making authority of theOffice of the Secretary of Defense relative to the power of the military departments and services, the Joint Chiefs of Staff and other DOD entities, and by holding the reins of power tightly himself. However, winning wars, military or bureaucratic, requires soldiers as well as leaders. In a speech to the Naval War College in January 2002, Secretary Rumsfeld commented that nothing was more important to the success of his transformational reforms than the people who would be appointed to leadership positions in the next couple of years in the Pentagon (Rumsfeld, 2002). This did not play out smoothly in 2003 as Rumsfeld clashed with Army leaders over transformation issues (Schlesinger, 2003: 1). In short, all of this indicates the relationship between style and substance in management reform. More on this issue is provided subsequently in this paper.

With respect to the battle to enact the DTA, prior to a vote in the House of Representatives on the Defense Transformation Act (as part of the Defense Authorization Act of 2003), in May 2003 a letter criticizing the proposed initiative was sent to Speaker of the House Rep. Dennis Hastert (R-IL) from the ranking members (Democrats) of two important budget committees of the House, Rep. David Obey (WI)

of the Appropriation Committee, and Rep. John Spratt (SC) of the Budget Committee (Obey and Spratt, 2003). The letter illustrates the parameters of the debate on the DTA. The authors argued that the changes requested by DOD in the Defense Transformation Act would impede the ability of Congress to perform the oversight responsibilities vested in it by the Constitution in Article 1, Section 9, Clause 7, "No money shall be drawn from the Treasury, but in consequence of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published from time to time." (Obey and Spratt, 2003: 2) The letter admitted there were weaknesses in federal personnel practices, but opposed the changes requested by DOD because no new DOD system had been brought forward for review and the grant of authority requested would leave the Secretary of Defense free to rewrite the rules governing 700,000 DOD civilian employees with, "...absolutely no consultation with Congress." (Obey and Spratt, 2003: 4)

The DTA also proposed eliminating 100 reports to Congress and proposed eliminating the remaining reporting requirements after five years. In the acquisition area, the Selected Acquisition Reports would no longer be provided Congress. The Obey-Spratt letter argued these were critical to Congress and its agent GAO obtaining information to discharge its oversight responsibilities. In particular, they indicated that the Selected Acquisition Reports (SARs) provided information about cost overruns, technical failures and schedule delays in weapons development. The authors argued that the DTA as proposed resulted in an "...unprecedented reduction in congressional oversight and accountability, and in some cases unlimited increases in the powers of the Secretary of Defense." (Obey and Spratt, 2003: 2)

In conclusion, Representatives Obey and Spratt asked why Congress should, "...rush to overhaul an organization that has yet again demonstrated its ability to perform to the highest standards on the battlefield." (Obey and Spratt, 2003: 12) While Republicans generally supported the Wolfowitz DTA proposal, the argument went beyond party lines as serious questions were raised about the potential of the reforms to endanger congressional ability to fulfill its constitutionally mandated oversight role. History indicates that Congress moves slowly, or not at all, in delegating its prerogatives with respect to defense. However, in one major area Congress was willing to authorize DOD to completely transform its civilian personnel system as explained subsequently.

It may be noted that many of the defense transformation reforms proposed and some implemented in the early 2000s do not require congressional approval, unless Congress specifically deems otherwise, e.g., members can call for *ad hoc* or standing committees to hold hearings on virtually any topic as they please. In the past, most changes in PPBS have been accomplished without explicit congressional approval. However, in some cases DOD initiatives have been quashed quickly, e.g., DOD Comptroller Robert Anthony's Project Prime in the 1960s (Jones and Thompson, 1999; Jones, 2001). Alteration of the PPBE system in 2001-2003 from a linear decision profile to one that is clearly linked to the Presidential electoral cycle did not require congressional approval. PPBES is a DOD internal resource management system and traditionally DOD has been free to restructure it as desired.

Because the 2001-2003 PPBES reforms were made without explicit congressional approval, we may ask what this means with respect to the desirability of further delegation of authority from Congress to DOD. From my view, the PPBES cycle timing

changes were sensible given that new administrations rarely have the people in place or the insights necessary to put programs in place and prepare budget initiatives in the first year (the administration of Ronald Reagan is a notable exception). Thus, designating the first year for review of national security strategy and the work on the Quadrennial Defense Review sets the scene for a complete budget build in the second year. Designating the off years as years of minimal change, but allowing mechanisms for changes that do need to be made separately in program change proposals and budget change proposals also seems sensible and should cut down the turmoil involved in a complete POM-Budget rebuild each year. Therefore, we conclude that in this case, DOD change initiatives moved in the right direction without any supervision or oversight from Congress. In fact, if Congress had been involved one wonders whether any change would have taken place at all. Issues that seem non-partisan from the perspective of the Executive branch almost always become partisan when they reach the Hill.

In summary, the sweeping grants of power proposed in the Defense Transformation Act provoked another round in a long running series of debates over delegation of congressional authority. Critics asked important questions including: Does a Secretary of Defense really need complete power over 700,000 civilians? Do all congressional reporting requirements need to be waived? Does DOD need a waiver of all environmental protection laws for training areas as was requested? The obvious danger for DOD in advancing comprehensive initiatives such as the DTA to Congress is that the collection of opponents will overwhelm the supporters. Thus, for example, opponents of the DTA in Congress found support from labor unions and civil service representatives, environmentalists, some senior uniformed military leaders (those not selected for promotion?), and virtually all parties lining up to oppose the reelection of George W. Bush in 2004. These and other groups banded together to delay reforms until the next administration arrived or a new the Secretary of Defense was appointed.

History teaches us about management reform cycles. As explained later in this paper, just as the centralized management style of Secretary of Defense Robert McNamara (Thompson and Jones, 1994) was eventually followed by the decentralized style of Melvin Laird (Armed Forces Management. 1969; Laird, 2003), the centralized style of Donald Rumsfeld may be followed by a defense secretary with a different approach in the future. This fact provides a cautionary note about the future of defense transformation initiated under the Bush/Rumsfeld administration. From our view, the fact that Rumsfeld, Wolfowitz et. al. proposed comprehensive transformation of DOD was positive. Most changes proposed seem to be needed in my view. And the part of transformation related to PPBES was off to a reasonably good start by 2003. particularly those elements that could be executed within the jurisdiction of the Pentagon. As far as changes in defense budgeting and DOD oversight in Congress are concerned, less rather than more change may be expected. When the DOD budget is passed on to Congress in the President's budget, it still will be considered and passed in annual appropriation bills. However, new approaches to DOD planning, programming and processes or a renewed emphasis on budget execution will proceed.

Many other elements of the DTA that would appear to be absolutely necessary, e.g., speeding up the acquisition process and ensuring acquisition of products that equip forces to operate jointly, might move more quickly as incremental and internal DOD initiatives rather than as elements of comprehensive reform packages such as the DTA

that must be approved by an inevitably partisan and divided Congress reluctant to surrender additional decision authority to DOD.

STATUS OF DOD BUSINESS TRANSFORMATION

In assessing the accomplishments to date of DOD business transformation generally, and more specifically in the area of financial management, Lawrence J. Lanzillotta, then Acting Under Secretary of Defense (Comptroller), made the following comments in his testimony to the House Government Reform Committee, Subcommittee on Government Efficiency and Financial Management, Subcommittee on National Security, and Subcommittee on Technology on July 7, 2004:

Led by Secretary Rumsfeld, transforming DOD business management has been a top priority. The overarching aim has been achieving an integrated environment of DOD business processes -- supported by systems that efficiently deliver relevant decision-making information to DOD leaders and fulfill all financial management requirements. The Department of Defense has undertaken an unprecedented, comprehensive, and visionary transformation to achieve this aim. We are making progress to correct weaknesses and control business system investments. Strong and consistent Congressional support of this transformation is vital to sustaining our progress (Lanzillotta, 2004).

Lanzillotta outlined what he characterized as a "Three-Pillar Strategy" for transformation of DOD business management:

- 1. Overhaul and integrate DOD business processes and systems through the Department's Business Management Modernization Program (BMMP).
- 2. Refine and advance the financial improvement plans of the military services and defense agencies to enable them to produce auditable financial statements resulting in clean (unqualified) audit opinions.
- 3. Audit line items on financial statements as they become ready for such an audit.

He noted that accomplishment of each of these goals was "essential" and that they needed to be "advanced simultaneously." Each must not be halted or delayed "without hurting the progress of the entire transformation." (Lanzillotta, 2004). Further, he explained that transformation would improve DOD business and financial management and enable DOD leaders to make resource decisions based on the best information and data obtainable. Further, these initiatives would enable DOD to comply with the requirements of the Chief Financial Officers (CFO) Act, including the production and issuance of "satisfactory financial statements." (Lanzillotta, 2004).

In terms of specific accomplishments in transforming DOD Business Management over a three years period, Lanzillotta cited the following:

- Established a progressively more comprehensive inventory of all DOD business systems. (Total is currently over 4000 systems, and more systems are expected to be identified.)
- Began to build a blueprint, or architecture, to guide the transformation from the current, stove-piped conglomeration of DOD business systems into an integrated environment of overhauled systems and processes. [The initial architecture has been developed for DOD by a consortium of contractors led by IBM]
- Designed an incremental strategy to achieve our transformation goals and defined the focus for each increment.
- Developed a governance process to provide strategic direction to oversee the transformation of business process and systems so they will transcend organizational boundaries and become integrated.
- Organized all major DOD business activities into six areas or domains, and designated an Under Secretary of Defense (USD) as a Domain Owner to oversee each business area – for example, the USD for Acquisition, Technology and Logistics to oversee all logistics business activities.
- Established a portfolio management process by which Domain Owners will oversee investments in information technology to ensure full integration of all DOD business processes and systems.
- Established the DOD Audit Committee to provide a concerted senior leadership focus to produce auditable financial statements resulting in clean audit opinions.
- Developed for individual reporting entities improvement plans that show planned improvements and milestones.
- Implemented additional discipline in our quarterly reporting processes that have accelerated the preparation of financial reports and elevated our commitment to quality. (Lanzillotta, 2004).

Lanzillotta also explained that "Domain Owners" have become responsible for overseeing the transformation of business activities managed by the Military Services and other DOD components. "This governance plan has already demonstrated that it can work, and we are continuing to strengthen and expand it. He noted that some observers do not believe that DOD was moving fast enough, but perhaps they did not appreciate that, "DOD is one of the world's largest and most complex organizations, with a huge business transformation challenge. The Department of Defense is in business transformation for the long-term. It will take years to fix our systemic problems, which evolved over several decades." He also was careful to point out that DOD accomplishments have "significantly benefited from both Congressional and GAO support of our comprehensive transformation initiative. The Department of Defense is

in business transformation for the long-term. It will take years to fix our systemic problems... (Lanzillotta, 2004).

In this regard he expressed concern over the "apparently contradictory direction" provided by Congress in the House and Senate FY 2005 defense authorization bills in that the legislation reduced funding, "essential to achieving the transformation" that was necessary and understood by all parties. He speculated the cuts were made based upon the perception that, "progress has been too slow, yet the funding cuts will make continued progress more difficult." (Lanzillotta, 2004). In addition, the authorization bills propose radical changes in the roles of "Domain Owners" -- changing them from oversight of business systems to responsibility for "virtually all aspects of business systems." He explained that, "To date, the DOD approach has been to give Domain owners oversight responsibility using our prescribed architecture standards and business rules. This structure will enable Domain Owners to control business-related investments, ensure that standards are adhered to, and move DOD business systems and processes toward full integration. The complimentary nature of the domain process to traditional acquisition management enhances our ability to meet Service unique war fighting needs while implementing business standards across the Department... we should be careful about derailing this governance structure. It promises to overhaul and integrate DOD business activities – ultimately saving billions of dollars. Changing this governance structure could prevent us from eliminating stove-pipe systems or create new stove-pipe problems... we should resist centralizing all business system decisions and losing this expertise and perspective. " (Lanzillotta, 2004)

In closing, he asked that Congress and DOD continue to cooperate in efforts to transform DOD business management, noting that, "Our business transformation progress is consistent with U.S. industry standards and it is all the more remarkable that our accomplishments have occurred while we fight the global war on terrorism and advancing bold initiatives to transform America's military capabilities." (Lanzillotta, 2004)

The FY05 National Defense Authorization Act (NDAA) resulted in the following changes that will directly impact the goals and objectives cited above by Lanzillotta. Perhaps the biggest change was the direction to establish a Defense Business Systems Management Committee or DBSMC, to be chaired by the Deputy Secretary of Defense DEPSECDEF, now Gordon England. The DBSMC is the highest authority providing the top level, essential governance means to directly link improvements in business capability to warfighter needs and guide Defense business systems transformation. The FY05 NDAA established the DBSMC, with core responsibilities stated in the law. To implement the DBSMC, the Secretary of Defense approved a charter, which established the membership, roles and responsibilities of the DBSMC. (BMMP web site)

As presented on the BMMP web site, the vision of the DBSMC is:

To advance the development of world-class business operations in support of the Warfighter, the Defense Business Systems Management Committee (DBSMC) is established. The DBSMC will recommend policies and procedures required to integrate DoD business systems transformation and to review and approve the defense business enterprise architecture and cross-Department, end-to-end interoperability of business systems and processes, as outlined in the attached charter.



Figure 1: BMMP Governance Structure

Source: BMMP web site http://www.dod.mil/comptroller/bmmp/pages/governance.html

As shown in figure 1 above, the DBSMC, Certification Authorities (CA) and associated Investment Review Boards (IRB) provide governance and oversight authority for the respective business areas. One should note that the responsibility for review, approval, and oversight of the planning, design, acquisition, deployment, operation, maintenance, and modernization of specific defense business systems is delegated to DOD Principle Staff Assistants (PSA) as Certification Authorities (CAs). Under NDAA, the following Certification Authorities have been designated:

- The Under Secretary of Defense (USD) (AT&L) shall be responsible and accountable for any defense business system that supports acquisition activities, logistics activities, or installation and environment activities of the DoD.
- The Under Secretary of Defense (Comptroller) (USD(C)) shall be responsible and accountable for any defense business system that supports financial management activities or strategic planning and budgeting activities of the DoD.
- The Under Secretary of Defense (Personnel and Readiness) (USD (P&R)) shall be responsible and accountable for any defense business system that supports human resource management activities of the DoD.
- The Assistant Secretary of Defense (ASD) (NII) and the DoD CIO shall be responsible and accountable for any defense business system the primary purpose of which is to support information technology infrastructure or information assurance activities of the DoD.
- The DepSecDef or an USD, as designated by the Secretary of Defense, shall be responsible for any defense business system that supports any activity of the DoD not covered by the established four CAs. (BMMP, http://www.dod.mil/comptroller/bmmp/pages/govern aas.html)

Given the recent direction to restructure provided by law in the NDAA, we must wait to see how this new governance structure plays out in transforming defense

business systems. The GAO is certain to continue its vigilant watch dog role to ensure the DOD carefully manages the costs-to-benefit ratio of BMMP and other reform initiatives and programs.

In related testimony before the Senate Committee on Governmental Affairs Subcommittee on Financial Management, the Budget, and International Security on July 8, 2004 the DOD Inspector General Joseph Schmitz made the following observations:

Thank you for the opportunity to discuss...the status of progress in achieving an unqualified (clean) audit opinion for the Department of Defense and, second, other areas of financial management...The Department's financial statements are the most extensive, complex, and diverse financial statements in the Government. The Department faces financial management problems that are long-standing, pervasive, and deeply rooted in virtually all operations. These financial management problems have impeded the Department's ability to provide reliable, timely, and useful financial and managerial data to support operating, budgeting, and policy decisions. The problems have also prevented the Department from receiving an unqualified opinion on its financial statements. To address these issues, the Department has undertaken the ambitious task of overhauling its financial management systems and business processes. Although DOD has initiated a process to improve the reliability of its financial reporting and actions to correct previously reported weaknesses, most financial statements today remain unreliable and much work needs to be done. However, we are encouraged by the many current initiatives led by the Office of the Under Secretary of Defense (Comptroller/Chief Financial Officer) and senior financial managers within the DOD Components to correct long-standing problems in order to achieve a favorable audit opinion by FY 2007. We believe there is a chance of reaching this goal; however, what is most encouraging is the effort being expended to correct the Department's problems...to adequately support the Department's goal of an unqualified audit opinion by FY 2007, we in the Office of the Inspector General put in place plans and actions to increase our financial auditing staff during the next three years. We also plan to issue several contracts with independent public accounting firms for financial and systems audit work as management asserts that their financial data is reliable and ready for audit. Over the next three years, the Department has reported that they could assert as being ready for audit over 100 lines, systems, or audit opinions. If the funding for our buildup and contracting efforts is delayed until the Department asserts that the entire financial statements are reliable and ready for audit, it will be impossible to complete necessary audit work in a timely manner-thus further delaying a favorable audit opinion on the U.S. Government Annual Financial Report (DODIG, 2004).

It is clear that congressional views about the progress or lack thereof have been influenced by information provided to members and staff by the General Accounting Office (GAO), the audit arm of Congress. Commenting on the topic specifically, GAO representatives reported the following to Congress in early July 2004:

DOD's leadership remains committed to transforming the department's business operations...DOD's financial and business management weaknesses have resulted in billions of dollars in annual wasted resources in a time of increasing fiscal constraint. These weaknesses exist despite DOD requesting approximately \$19 billion in fiscal year

2004 to operate, maintain, and modernize its reported 2,274 nonintegrated business systems. At a March 2004, hearing, DOD's Comptroller stated that the actual number of systems could be twice the number reported...the Department of Defense's (DOD) financial management and business related problems and key elements necessary for successful reform. Although the underlying conditions remain fundamentally unchanged, DOD continues to be confronted with pervasive problems related to its systems, processes (including internal controls), and people (human capital). (GAO, 2004)

The GAO report detailed background on DOD reform efforts in progress for Congress and GAO criticisms. GAO reiterated its position that the primary impediments to reform are absence of sustained Defense Department leadership and management accountability, deeply embedded cultural resistance to change, including military service parochialism and "stovepiped" operations, lack of results-oriented goals and performance measures and monitoring (an issue addressed later in this paper), and inadequate incentives and accountability mechanisms for business transformation. Additionally, GAO continues to recommend the establishment of the position of DOD Chief Management (or Operating) Officer (CMO). During a November, 2004 Senate Hearing on financial practices at the Defense Department, the Comptroller General of the United States, David M. Walker, strongly advocated for establishment of a CMO. He stated that the position should be encumbered by a level-two political appointee whose term should be a minimum of five years to ensure proper continuity. Walker further suggested that this person be someone dedicated to reform with a strong track record, perhaps from the private sector. He finished by saying that if the DOD fails to establish this position transformation of their financial systems is bound for failure in his opinion. While GAO clearly wants DOD business transformation to succeed, its advice to Congress may be viewed by some as inhibiting the achievement of this goal, as suggested by the DOD Comptroller in his testimony to Congress.

At a recent conference titled: *Defense Finance 2005*, Dr. Dov Zakheim, the former DOD Comptroller, offered support for Walker's position by saying that "a CMO is critical...(and) the only way to ensure momentum." Zakheim went on to say; "if (the CMO) term is four years or less, it's a waste of time." Finally, in his presentation, he suggested that he sees the GAO as "a co-conspirator of the comptroller in FM (financial management)." It is worth noting that Zakheim was relentless in his efforts to lead the transformation of business systems in the Department of Defense during his tenure and, as a Vice President for a prominent consulting firm, he remains an important and influential voice for reform (Zakheim 2005).

One point that is noteworthy in comparing the DOD Comptroller's statement, the testimony from GAO, and action by Congress in Fiscal Year 2005 Defense Authorization legislation is the issue of stove-piped or disconnected military department and service organizations and business improvement initiatives. Both DOD and GAO identify this as a problem yet Congress appears willing to delegate more authority to these semi-autonomous organizations within DOD (what Office of the Secretary of Defense staff refers to as "DOD Components") in implementation of business management transformation. One wonders how much that lobbying by the military departments and services might have influenced congressional action that the DOD Comptroller found objectionable.

As understood by most insiders, external observers and some members of Congress, successful transformation of DOD business practices and systems will take much time and money (Jonas, 2002; Lanzillotta, 2002, 2004). However, a significant amount of transformation has taken place in DOD that neither the DOD Comptroller nor GAO identified. In this light we now turn to evaluation of recent transformation of the major resource planning and decision systems used by DOD.

THE NATIONAL SECURITY PERSONNEL SYSTEM

Exploring briefly DOD human resource transformation, the DOD Civilian Human Resources Strategic Plan begins, "There is a civilian human resources dilemma in the Department of Defense." (DOD, 2004a) This dilemma results from the confluence of several factors: the transformation of the operational side of the department, the downsizing of the department since the end of the Cold War, outmoded civil service laws and regulations, and changes in public management principles. The size of the DOD civilian workforce evolved in an under-managed fashion in the past 15 years. The post-Cold War "peace dividend" resulted in a 36% decrease in the size of the civilian workforce of from 1989-2001 - over 375,000 employees. Because of civil service rules that favor seniority over performance, the majority of those retained were older and more senior employees. In 1989, 46% of DOD employees had less than 10 years service, by 2001 that figure fell to 23%. Concurrently, the proliferation of desktop computing and the adoption of public management reform principles (especially outsourcing) resulted in a shift away from blue collar and clerical work (51% of the workforce in 1989) towards white collar and professional work (65% of the workforce in 2001). The average pay grade of a DOD civilian rose as did their education level. These changes were not all intentional.

The dilemma is that the civil service rules that resulted in the current status are inadequate to adapt the workforce to meet the challenges posed by operational transformation. Civil Service reform in the United States has been episodic and in 2004, the Department is in the midst of shaping the next episode (OPM, 2004). It is important that the design of new human resource management systems is well designed to provide flexibility and control for the future. As David Walker, Comptroller General of the United States recently testified, "...strategic human capital management must be the centerpiece of any serious government transformation effort. The federal personnel system is clearly broken in critical respects – designed for a time and workforce of an earlier era and not able to meet the needs and challenges of our current rapidly changing and knowledge-based environment." (Walker, 2003)

This current opportunity for HR transformation is embodied in the emerging design and implementation of the National Security Personnel System (NSPS). NSPS is the legislated result of the Defense Transformation for the 21st Century Act legislative proposal offered by the Department of Defense in April 2003. The proposal is based largely on the results of the Best Practices Initiative that studied the Demonstration Projects at various DOD laboratories. The Demonstration Projects began in 1980 at the Naval Weapons Center in China Lake, California under the authority of the Civil Service Reform Act of 1978. The project used pay-banding and performance measures as alternative management tools over those available under Title V of the U.S. Code.

Over the years, legislative authority has spread the use of these demonstration projects to several other DOD activities.

When Congress authorized NSPS, it did not legislate a new personnel system (U.S. Congress, 2003). Rather, Congress delegated the authority to DOD to design a new system. The department planned to implement a new system within months of approval, but critical stakeholders (primarily labor unions, but also other government agencies¹) slowed progress and the implementation timeline now extends to 2009 (DOD, 2004b). This delay provides an opportunity for greater study and more deliberate design grounded in the operational transformation of the department.

NSPS includes the authority to change staffing practices: hiring, assignment, advancement, and removal. It includes the authority to change job classifications, pay, and performance management. It includes changes to labor relations and the processes for discipline, adverse actions and appeals. New authorities include permanent direct hire ability for people with special skills. These authorities are broad and can have a significant and lasting impact on the department. Their design must consider that which is required to develop a workforce with the knowledge, skills and capabilities that operational transformation demands.

On the other hand, law outside of Title V (USC) remained largely unchanged. Merit system principles (such as veterans' preference provisions) remain intact. Rules against unlawful personnel practices (e.g., nepotism) and unlawful discrimination remain. These provisions should not detract from the design and implementation of a robust system. Leave, travel, health benefits and safety programs remain to be transformed.

Walker (2003) has recommended an institutional infrastructure with the following elements: (a) a human capital planning process which integrates policies and strategies with programs and desired outcomes, (b) capabilities to develop and implement a new human capital system, and (c) a modern, effective performance measurement system with reasonable transparency and accountability.

At this point the development of the NSPS is underway and it is too soon to evaluate changes that are proposed but not yet implemented. One evident question beyond the NSPS is whether Congress would be willing to delegate similar authority to DOD to transform its military personnel systems, given that DOD proposed to take on this formidable task.

Finally, to add to what is noted elsewhere in this paper, it is crucial for DOD to increase emphasis on education and training of its civilian and military workforce to keep pace with the technological transformation of the Information Age and to understand and apply smart practice business management methods in defense organizations. It is also imperative for DOD to reconsider how it educates its workforce in the management of change in complex organizations and act proactively to redress shortcomings in knowledge, skills and abilities.

ACQUISITION CHANGE IN THE PAST DECADE AND CURRENT TRANSFORMATION

Considering the difficulty of providing technologically advanced systems in a costeffective manner in a highly political environment, one might expect that our acquisition system would be an easy target for criticism and reform. Indeed, calls for acquisition reform characterize the history of DOD management reform in the entire post-WW II period. The pattern of evolutionary change during the past decade has been continuous as fiscal pressures, downsizing trends, technological advances, and emergent and diverse threats have led policy makers to promote a number of major initiatives. Some of these reforms, embodied in legislation, in regulation, and in DOD policy statements, reflect a preference for commercial products and processes as means for controlling costs and incorporating new technology, as well a move toward more flexible and adaptive acquisition management procedures.

Significant acquisition reform legislation from Congress has included the Federal Acquisition Streamlining Act (FASA) of 1994. FASA stimulated the procurement of commercial items rather than government sponsorship of production, authorized simplified purchases of less than \$2,500 through purchase cards, streamlined purchases between \$2,500 but not exceeding \$100,000, reserving these for small businesses, made electronic commerce the desired method of procurement, and promoted use of multiple awards of task and delivery order contracts. Additionally, Section 845 of the National Defense Authorization Act of 1994 provided for the use of what are termed "other transactions" (OTs) for contracting actions authorized outside the normal specified authority of the Federal Acquisition Regulations (FAR), e.g., for development of prototype equipment suitable for joint military and commercial use.

Two years later, the Federal Acquisition Reform Act (FARA) gave contracting officials increased discretion in competition decisions and simplified acquisition procedures for commercial items up to \$5 million. The Information Technology Management Reform Act (ITMRA), which together with FARA became known as the Clinger-Cohen Act, focused on efficient management of government information technology (IT). It repealed the Brooks Act, thereby removing from the General Services Administration the exclusive authority for procurement of IT and vested that authority in agencies. It also led to creation of agency Chief Information Officer positions and, in DOD, the combining of acquisition management policies and procedures for both weapon systems and IT systems.

With respect to Federal Acquisition Regulation changes, major reforms were embodied in the 1997 re-write of Part 15 that governs the conduct of competitive negotiations. The purpose of this initiative was to reengineer the processes used to contract by negotiation, with the intent of reducing the resources necessary for source selection and reducing time to contract award. The rewrite formalized the "best value" goal in acquisition, and promoted more open exchanges between the negotiating parties, allowing industry to better understand government requirements and the government to better understand industry proposals. (Federal Register, 1997)

A flurry of far-reaching reform-oriented DOD acquisition management policies emerged during the mid-1990s stimulated by Vice President Al Gore's National Performance Review. In 1994 Secretary of Defense William Perry directed DOD to decrease reliance on military-unique specifications and standards and instead to promote use of performance and commercial specifications and standards. The reform largely freed contractors from complying with often outdated military specifications and standards, thereby decreasing costs and improving access to state-of-the-art technology. Perry followed this directive with another only a few months later in 1995 when he ordered, "a fundamental change in the way the Department acquires goods and services" in a move to Integrated Product and Process Development (IPPD) in

acquisition. This management technique, used successfully by many private sector firms, simultaneously integrates all essential acquisition activities through the use of multidisciplinary teams (so-called Integrated Product Teams, or IPTs) to optimize design, testing, production, and logistics processes. Interestingly, Perry's directive called for the use of IPPD not only in weapon system design and production, but also in Pentagon review and oversight of acquisition programs.

Later in 1995, Paul Kaminsky, Under Secretary of Defense for Acquisition and Technology, introduced the concept of "cost as an independent variable" (CAIV) in response to the constrained fiscal environment for national defense see more below). CAIV entails performing cost-performance trades early in acquisition programs to set cost objectives at affordable and efficient levels, and then aggressively managing programs to meet those objectives. Cost thus becomes a major driver in a program, even to the extent that weapon system performance improvements may be traded off to meet cost targets. Kaminsky termed CAIV "DOD's equivalent of best commercial business practices" viewing it as consistent with commercial practices in new system development where market forces would drive the price of new systems. Following this change Kaminsky established the Single Process Initiative (SPI) to give defense firms opportunities to implement single manufacturing or management processes at their facilities to replace the multiple processes often required by existing contracts (see also below). This provided firms the flexibility to use the most efficient business and manufacturing processes in their facilities and products. SPI was intended to reduce costs associated with doing business with the government by eliminating the need for firms to maintain different manufacturing and management processes to comply with contractual requirements.

DOD Directive 5000.1 initiated cost as an independent variable (CAIV) as an improvement in development and performance of acquisition program cost analysis. System performance and target costs are to be analyzed on a cost-performance tradeoff basis. The CAIV process is intended to make cost a more significant constraint as a variable in analysis of effectiveness and suitability of systems. CAIV is intended to reduce acquisition costs. CAIV also is intended to make cost a stronger driver in system design in response to restricted budgets. Such an approach also was consistent with commercial practices in new system developments, where market forces drive the price of new systems.

CAIV has been intended to help program managers recognize that the majority of costs are determined early in a program life cycle. Consequently, the best time to reduce life-cycle costs is early in the acquisition process. Cost reductions are accomplished through cost and performance tradeoff analysis, to be conducted before a specific acquisition approach is selected. Incentives are applied to both government and industry to achieve the objectives of CAIV. Awards programs and "shared savings" programs have been used creatively to encourage generation of cost-saving ideas for all phases of life-cycle costs. Incentive programs have targeted individuals and government and industry teams. The program manager (PM) works closely with the user to achieve proper balance among cost, schedule, and performance while ensuring that systems are both affordable and cost-effective. The PM, together with the user, propose cost objectives and thresholds for Milestone Decision Authority approval, which will then be controlled through the acquisition project baseline process (Lifecycle Costs). The PM searches continually for innovative practices to reduce life-cycle costs and liabilities.

However, because of problems related to DOD surrendering responsibility for original design to private sector contractors, where problems are designed into programs in the beginning and are not caught, costs become more difficult to control. This has led some observers complaining that specification of program requirements has been outsourced and is beyond the control of DOD. And this is in spite of the comment allegedly made by Secretary Rumsfeld that, "It isn't a requirement until I say it is a requirement."

The Single Process Initiative (SPI) was given added impetus in 2002 when Secretary of Defense Rumsfeld directed DOD to change the management and manufacturing requirements of existing contracts to unify them within one facility, where appropriate (Rumsfeld, 2002). This initiative also is referred to as the block change program. Program managers are tasked to ensure that SPI reduces weapon acquisition costs. Allowing defense contractors to use a single process in their facilities is a natural progression from the contract-by-contract process of removing military-unique specifications and standards initiated by DOD in response to the Federal Acquisition Streamlining Act of 1994. Under SPI contractors are supposed to incur additional transition costs equal to or exceeding savings in the near term. Moving to common, facility-wide requirements is intended to reduce government and contractor costs in the long term.

Acquisition reform has also extended to the way in which war fighting needs and requirements are developed to justify new acquisition programs. The new Joint Capabilities Integration and Development System (JCIDS) is intended to move this process away from a threat-based, service-centric approach and more toward one that evaluates existing and proposed capabilities in light of their contribution to future joint concepts.

The overall trend of resource constraints in the acquisition arena in the past decade, combined with threat driven changes and new technologies have increased acquisition costs and have increased pressures for greater reliance on private sector products and processes to improve performance. As noted in the above, the movement to adopt better acquisition management practices is part of a trend of Defense Department initiatives instituted under the administrations of George H. W. Bush and continued under the administrations of Bill Clinton and George W. Bush. The Transformation in Business Affairs of the current administration has four primary goals in the area of acquisition according to DOD. First, it intends to stimulate the production of high quality defense products. Second, it is supposed to reduce average acquisition systems cycle time for all major acquisition programs by 25 percent (from 132 months to 99 months). Third, DOD wants to lower total ownership costs (TOC) of defense products, with the goal of minimizing cost growth in major acquisition programs to no more than 1 percent annually. The fourth goal is to reduce overhead costs to provide less expensive weapons platforms. In some cases, these goals may be achieved by purchasing assets (typically components of, or support items for, weapons and systems) manufactured by the private sector for general (non-defense specific) markets. Given the size of the annual federal budget deficit for 2003 and beyond, constrained budgets for defense may be anticipated. However, the mission of DOD continues to expand as the U.S. faces new, more diverse, terrorist threats. Consequently, acquisition, procurement and contracting processes must become more efficient and focus on cost control.

Other acquisition transformation initiatives emphasizing continuous reform include revision of the DOD 5000-series of acquisition rules and guidelines, spiral acquisition (continuous and simultaneous program and project research, development, test, evaluation and procurement rather than serial/sequential processes), commercial off the shelf procurement (COTS), and the Director of Acquisition program initiative and (McCaffery and Jones, 2004).

During the past decade the DOD 5000-series has been continuously revised as Presidential administrations changed and in response to the reforms described above. In 2002 Secretary Rumsfeld directed that DOD 5000.2R would be converted from a regulatory tool to a more functional and flexible policy guidance document. The 5000series had in the past been regarded as administrative law. It demanded user requirements including the preparation operational requirements documents (ORD) and estimation of initial operational capability. The 5000.2R acquisition requirements had been firm and not subject to modification without specific waivers. However, Rumsfeld and staff, the services, and program managers recognized the need for greater flexibility to manage acquisition. The new DOD 5000.2-R document promises to piggy-back on other recent acquisition reforms, allowing greater flexibility and control for acquisition leadership. DOD 5000.2-R was revised to recommend that integrated process teams (IPT) be used during program definition to improve the specification of requirements and system supportability. In addition, program structure changes are directed to include an acquisition strategy of open systems. To maximize program effectiveness, the program manager is directed to use commercial sources, risk management, and CAIV. Reforms direct Program Managers to use program designs incorporating integrated product and process development (IPPD) and place system engineering emphasis on production capability, quality, acquisition logistics, and open system design.

Although previous versions of the 5000-series documents have always acknowledged the desirability and need for flexible management approaches, administrative discretion, and sound business judgments in acquisition, many in DOD have tended to a more bureaucratic mindset of strict adherence to these documents, thereby providing them the virtual status of administrative law. The revision of May 12, 2003, approved by Deputy Secretary of Defense Paul Wolfowitz, continued to attack this mindset by promoting flexibility, responsiveness, innovation, and streamlined decentralized management as governing acquisition policies. Further, the framework for managing acquisition programs under the current 5000-series emphasizes evolutionary and incremental strategies rather than "grand strategies" that may tend to limit flexibility, change, and innovation.

The Director of Acquisition Program Initiative is another element of acquisition reform. Annually, the Director of Acquisition Program Integration determines if each Major Defense Acquisition Program (MDAP) has reached 90 percent or more of cost, schedule, and performance parameters when compared to acquisition program baseline thresholds. The appropriate decision authority must make a similar determination for non-major acquisition programs. If ten percent or more of program parameters are missed, a timely review is required. The review addresses any breaches in cost, schedule, and performance and recommends suitable action, including program termination.

Major acquisition defense program baselines must be coordinated with the DOD Comptroller before approval. Cost parameters are limited to RDT&E, acquisition, the

costs of acquisition of items procured with operations and maintenance funds, total quantity, and average unit acquisition cost. As a program progresses through later acquisition phases, acquisition costs are refined based on contractor actual costs from Program Definition and Risk Reduction (PDRR), engineering, manufacturing and development, or from initial production lots. Cost, schedule, and performance objectives are used in application of the Cost As an Independent Variable (CAIV) process to set the Acquisition Program Baselines. Cost, schedule, and performance may be traded-off by the PM, within the range between the objective and the threshold without obtaining Milestone Decision Authority (MDA) approval. This initiative is intended to improve executive level oversight and program management reporting. In addition, it may enhance executive and PM flexibility in the best use of available funding.

The reforms noted above have open a wide range of new possibilities for acquisition which DOD is only now beginning to explore. Stimulated under the leadership of former Under Secretary of Defense for Acquisition Jacques Gansler in the 1990s and continued under the Bush administration, these new approaches are pursued reflecting fundamentally different configurations of government-contractor relationships in acquisition. The initiatives increased outsourcing, competitive sourcing, privatization initiatives, public-private partnerships, and franchising. The outcomes of such programs remain to be assessed, but they indicate the environment of tremendous potential (and uncertainty) that now exists for acquisition policy-makers and managers.

In mid-2004 Deputy Under Secretary for Defense (Acquisition, Transportation and Logistics) John Young requested that service acquisition system commands reorganize themselves to create and clarify ownership and accountability for weapons platform and systems development and execution to eliminate poor management practices and overlapping, unclear lines of authority and responsibility characteristic of many of these commands. While this is an enormous undertaking, the commands have complied with significant redesigns of their structures and staffs. While the proof of this latest transformation effort in the acquisition commands is still in progress, many observers note that this type of change to clarify managerial and control responsibility and accountability is a long-needed improvement. However, whether the redesigned organizations will accomplish the desired objective remains to be evaluated.

To move focus briefly to the related area of contracting reform (much change has occurred in the contracting arena that is beyond the scope of this paper), recent trends reflect a significant increase in DOD contracting for services, as in the rest of the federal government. Many functions that had been viewed in previous years as properly provided by government are now provided by private sources. While holding promise for increased efficiency and lower costs in service delivery, this trend raises numerous questions, e.g., how to best determine the proper definition and extent of "core" government competencies, how to design appropriate contracting mechanisms, and how to provide adequate oversight and contract management. Significant reform in education and training has been implemented in the past decade to upgrade the management capability of the DOD workforce, but large challenges remain and new problems have emerged as contractor replace military and DOD employees in commands at home and abroad in the war fighting environment.

In some cases, the appropriateness and wisdom of the roles of contractors working in military operations has provided high visibility material for the media. Some number of highly trained special forces and other military personnel have left the services to become much more highly paid contractors, as the scope of their duties also has been the subject of scrutiny from Congress. Further, the deaths of forty-two Halliburton/KBR employees (as of July 2, 2004) in support of the war in Iraq raise numerous contracting and logistics issues too complex to be explored here. It may be expected, however, that these issues will remain to be resolved as U.S. forces continue to employ contractors in trouble spots around the world to perform, via the private sector, what are quasi-military functions and duties. Some critics ask whether this is the front-end phase of the privatization of the U.S. military to cope with high deployment and operating tempo requirements.

In summary, many of the issues and initiatives identified above have much to do with the evolution of public-private relationships and partnerships that is a world-wide trend. New institutional arrangements have emerged in virtually every area of provision of services to the public at all levels of government. The basic challenges in weapon system development and procurement remain, as evidenced in results, e.g., continuing management and technical problems in major acquisition programs including the F-22 Raptor and V-22 Osprey. Further, the effects of defense industry consolidation on weapons development and production remain unclear. The overall challenge to DOD is how to re-capitalize an aging force structure where costs are high and RDT&E and procurement budgets do not match projected requirements and military service recapitalization plans and schedules. Changes in the defense industry in many cases confound the problem of attempting to use the market to achieve greater efficiency in theory supposed to result from competition. Both the theory and the arguably partisan rhetoric about the advantages of market pressures are fine, but where there is no market and, therefore, no competition, few if any advantages may be found.

The initiatives explicated here are but a few of the many acquisition changes currently under implementation as under the defense business transformation flag. Issues that have been raised about the wave of continuous reform include whether there is too much change taking place at once to be fully assimilated by a defense acquisition workforce that has been reduced in size and has lost some critical expertise due to budget and staff reductions -- and whether new processes have resulted in excessive centralization of authority in the Office of the Secretary of Defense at the expense of efficiency, effective communication and program management and, in some cases, common sense (Dillard, 2003).

EVOLUTION OF THE PLANNING, PROGRAMMING, BUDGETING, EXECUTION SYSTEM

Since the 1960s the Department of Defense has prepared its plan and budget using the Planning, Programming, Budgeting System, or PPBS, which was renamed PPBES in 2003 with the added E for execution. This section of the paper reviews and evaluates the evolution of this system over that past fifty years. Description and analysis of the transformation to PPBES then follows.

While PPBS was discontinued for the federal government as a whole 35 years ago, it has continued to be employed by the DOD because it meets the policy development and participatory demands of multi-service budget advocacy while also providing a

long-term perspective on programs and spending. While DOD manages its internal resource management systems, this is done under the watchful eyes of Congress. Consequently, in resource planning and in budget preparation and execution, DOD continually searches for a greater delegation of authority from Congress to permit the exercise of greater managerial discretion to improve efficiency and respond to contingencies. Recent reforms in through the Defense Transformation Act to increase such delegation were requested by DOD in 2003 before Congress.

A number of issues related to planning and budgeting for national defense confound DOD and congressional decision makers annually. Among these are how to perform effective and competent threat assessment and the consequences of doing this job well or poorly. Another issue is how much to spend on national defense. This is determined in large part by the perceived threat. The perception of threat also must be interpreted in the dynamics of the politics of budgeting for defense. Numerous variables affect public opinion about threat and spending. Debate and consensus building for national defense budgets is part of our democratic political tradition. Budgeting for national defense is always complicated by conflicting political opinion and information, and also the need for selective degrees of secrecy with respect to identifying and evaluating the threat and budgetary responses to it. These conditions make marketing the need for national defense spending an inevitable task and part of the obligation of defense advocates working in an open political system.

Because so much of the policy framework and budget of the Department of Defense is determined by Congress, which under the U.S. Constitution has sole power to tax and spend, analysis of resource allocation for defense cannot ignore the political context within which decisions are made and executed. Policy development and resource planning for defense is inextricably linked to constituent politics in defense budgeting. National security policy choice and implementation is made more difficult by the highly pluralistic nature of the resource allocation decision environment (Wildavsky 1988: 191-193; Adelman and Augustine, 1990). Still, disagreements over policy and resource allocation should be anticipated and, indeed, welcomed in a democracy.

Policy development, planning, and resource-allocation decision making for the U.S. Department of Defense is a task of enormous complexity due to the nature and size of the Defense Department and the highly differentiated nature of its mission and activities. The Department of Defense plans, prepares, negotiates, and makes decisions on policy, programs, and resource allocation using the Planning, Programming, and Budgeting System.

PPBS was implemented in DOD originally by Defense Secretary Robert McNamara and by Charles Hitch, Robert Anthony, and others during the administrations of Presidents Kennedy and Johnson in the 1960s (Thompson and Jones, 1994). Prior to 1962, the DOD did not have a top-down coordinated approach for planning and budgeting (Puritano, 1981; Korb, 1977; Korb, 1979; Joint DOD/GAO Working Group on PPBS, 1983). Until this time, the Secretary of Defense had played a limited role in budget review as each military service developed and defended its own budget. McNamara had used PPBS when he was the President of the Ford Motors Corporation and he and Hitch, his Comptroller, had confidence that the system would be valuable for long-range resource planning and allocation in DOD. McNamara wanted PPBS to become the primary resource decision and allocation mechanism used by the DOD. McNamara implemented the system after President John F. Kennedy tasked him to

establish tighter control by the Secretary of Defense, a civilian, over the military departments and services. As a former member of Congress, Kennedy was highly distrustful of the military service planning and budgeting. He ordered McNamara to take control of DOD planning and budgeting away from the military and put it in the hands of civilian leadership. Consequently, the initial motivation for establishing PPBS had as much to do with control and politics as it did with rational resource planning and budgeting. By June 30, 1964, PPB was operational within the Department of Defense (Thompson and Jones, 1994; Feltes, 1976; Korb, 1977; Korb, 1979).

Hitch implemented PPBS and systems analysis throughout DOD, but most of the program analysis was done by his "whiz kids" in the Office of the Secretary of Defense (OSD) under the Comptroller and the office of Program Analysis and Evaluation. The military departments were not anxious to implement PPBS, but had to do so eventually to play in the new planning and budgeting game run and orchestrated by Hitch and his staff. After a few years, the military departments were fully engaged in learning how to compete in the new PPBS process. However, as noted, PPBS was not just budget reform – it was a new approach to analysis and competition between alternative programs, weapons systems and, ultimately, multi-year programmatic objectives. Additional reforms beyond PPBS were to be proposed by DOD under the Johnson administration.

Charles Hitch was followed as DOD Comptroller by Robert N. Anthony, a professor of management control on loan from Harvard University's School of Business, who proposed an ambitious set of changes to DOD budgeting and accounting in 1966 in what was termed Project Prime. Among other things, Project Prime would have divided all parts of DOD into mission, revenue, expense and service centers, consistent with management control theory according to Anthony, and required accrual accounting with reimbursable fee-for-service internal transactional payments (using negotiated or shadow prices) throughout DOD (Thompson and Jones, 1994: 66-68). What Anthony envisioned was a reimbursable accounting process similar to what was implemented in much of DOD by Comptroller Sean O'Keefe and Deputy Comptroller Donald Shycoff as part of the Defense Management Report initiatives of 1989-1992 under the Bush administration and Defense Secretary Dick Cheney (Jones and Bixler, 1992). Project Prime also included accrual accounting and budgeting for DOD. Accrual accounting is required now under the Chief Financial Officers Act of 1990, which DOD has been unable to implement successfully. Clearly, Anthony was ahead of his time in his vision of how DOD accounting and budgeting should be organized (Thompson and Jones, 1994: 67-68).

Congress did not support Anthony's proposed changes. Key members of the appropriations committees refused to allow the change to accrual accounting and rejected Project Prime, probably because they thought it would reduce their leverage to micromanage DOD through the budget. Opposition was so strong that it was suggested Anthony should be asked to resign. Anthony was not asked to do so, but chose to return to Harvard and the experiment was ended (Jones, 2001b). Not until 2003 did DOD return to Congress with such a sweeping reform proposal – the Defense Transformation Act.

The post-WWII sequence of budget reforms that led to PPBS in the 1960s started with performance budgeting in the 1950s. In essence, performance budgeting (Burkhead, 1959: chapters 6-7, and 133-181) attempts to connect inputs to outputs. As implemented by the President's Bureau of the Budget (BOB) under the Eisenhower

administration, performance budgeting (PB) in the 1950s was characterized by indicators of cost per unit of work accomplished, focusing on workload measures rather than outputs or outcomes. The history of performance budgeting includes the Taft Commission of 1912 which recommended it be implemented and its implementation in the Department of Agriculture in 1934 and the Tennessee Valley Authority in the later 1930s, as well as having been strongly recommended by the Hoover Commission in 1949 (McCaffery and Jones, 2001: 69).

In 1949, Congress required that the budget estimates of the Department of Defense be presented in performance categories. Performance budgeting was an executive branch managerial budget tool. During the 1950s under the leadership of Bureau of the Budget Director Maurice Stans and others, executive budgeting was transformed somewhat radically through the institution of performance measures into budgets. Many of the measures had already been in use for decades as proxies that facilitated and simplified negotiations between the Executive and Congress. However, in this first wave of performance budgeting (the second wave would hit in the 1990s) great effort was exerted to develop measures of performance and relate these to appropriations and spending. In fact, many of the measures developed in this era did not measure performance. Instead, because it was easier (and perhaps the only approach possible), workload and input cost data were used in place of real measures of performance. Still, budgeting in this era moved far from the simple line-item formats of the past. Formulae and ratios between proposed spending and actions were integrated into the Executive budget along with explanations of what the measures demonstrated and how they related to justifications for additional resources. (McCaffery and Jones, 2001: 69)

The emphasis of budget reform shifted in the early 1960s to what was termed "program budgeting." Program budgeting (Mosher, 1954; Novick, 1969) was and is a variation of or evolution from performance budgeting in which information is collected by program categories, without much of the detail of the performance-budget construction. These categories of spending are tied to specific objectives to be achieved. Activities are grouped by department, agency, and then by mission objective and sometimes by function and projected for a five-year period. Program budgeting was experimented with in the Department of Agriculture in the early 1960s as reported by Wildavsky and Hammond (Wildavsky and Hammond, 1962) and later adopted throughout the entire federal government through Executive Order by President Lyndon Johnson in 1966.

The Programming, Planning, Budgeting System (Lee and Johnson, 1983; Hinricks and Taylor, 1969; Merewitz and Sosnick, 1972; Schick, 1966; Schick, 1973; McCaffery and Jones, 2001: 70) was intended to be a thorough analysis and planning system that incorporated multiple sets of plans and programs. Under Secretary of Defense Robert McNamara and DOD Comptroller Charles Hitch, PPBS drew upon methods from various disciplines, including economics, systems analysis, strategic planning, cybernetics, and public administration to array and analyze alternative means and goals by program and then derive benefit/cost ratios intended to indicate which means and ends to choose. Budgeting under this system was to become a simple matter of costing out the goal chosen.

In theory, the program budgets that resulted from PPBS were supposed to provide the Executive and Congress information on what the federal government was spending for particular categories, e.g., health, education, public safety, etc. across all departments and agencies. Program budgets may best be understood as matrices with program categories on one axis and departments on the other. Thus, in the fully articulated program budget Congress could determine how much was spent on health or education in total in all departments and agencies and this would promote deliberation over whether this was enough, too much or too little.

President Lyndon Johnson thought that PPBS was so successful in DOD that in 1966 he issued an executive order to have it implemented throughout the federal government. Regrettably, although Executive branch departments prepared their program budgets and related spending to objectives, Congress largely ignored what it was presented, preferring to stick with the traditional appropriations framework for analysis and enactment of the budget. (Schick, 1973) Why was this the case? Perhaps program budgets presented too much information to be used and understood by Congress. Alternatively, and as likely, perhaps Congress perceived that program budgeting would reduce the power of members of appropriations committees because the budget in this format would be determined too much by formula, thus decreasing the political spending discretion of Congress (Jones and Bixler, 1992). Although the government-wide experiment with PPBS was suspended by President Richard Nixon in 1969, this was done more for political than efficiency reasons. However, PPBS was perceived in much of the Executive branch and Congress as paper-heavy and consuming too much staff time for preparation and analysis (Schick, 1973). Still, the system continued to be used in the Department of Defense, in part because DOD purchases substantial long-lived capital assets and since PPB requires long-range planning as its first component, it suited the needs of the Defense Department.

Thus, despite criticism that PPBS was a failure in the federal government, the process remained in use by the DOD and has been modified incrementally so as to operate effectively despite some evident flaws (Wildavsky 1988: 186-202; Puritano, 1981, McCaffery and Jones, 2001). While the manner in which PPBS operates has varied under different Presidents and Secretaries of Defense, the basic characteristics of the system have remained in place for more than 40 years. During this period, three significant reform initiatives have influenced the PPB system: the Laird reforms, the Goldwater-Nichols Act, and the Rumsfeld transformation in 2001-2003.

Laird Reforms

In 1969, Melvin Laird was appointed Secretary of Defense by President-elect Richard Nixon to succeed McNamara. Laird brought a different management orientation to the Defense Department, one more in keeping with its historical predilections, emphasizing decentralization and military service primacy. If McNamara increased scientific decision making in the Pentagon, he also installed a centralized management approach. Systems analysis, top-down planning, and benefit/cost analysis supported this centralized focus. One of the key bureaucratic players was the Office of Policy Analysis, which made use of the tools cited above to help McNamara centralize decisions in the Office of Secretary of Defense (Thompson and Jones, 1994: 68-73). Laird's methods ran counter to this approach, emphasizing participatory management and decentralization of power. Beginning in 1969, Laird shifted decision making power away from the DOD staff agencies to the Military Department Secretaries, because there were, "...many decisions that should be made by the Services Secretaries and they should have the responsibility for

running their own programs. I have no business being involved in how many 20mm guns should go on a destroyer. That is the Secretary of the Navy's business. I must let the Services take a greater role." (Feltes, 1976) Laird also pursued a process of participatory management, in which he hoped to gain the cooperation of the military leadership in reducing the defense budget and the size of the forces.

During Laird's four-year tenure, U.S. troop strength in Vietnam fell from 549,500 persons in 1969 to 69,000 in May of 1972. (Laird, 2003). Laird was preoccupied with disengaging from Vietnam, but not to the exclusion of other issues, such as burden-sharing costs with other nations, maintaining technological superiority (e.g., B-1 bomber, Trident submarine), improved procurement, enhanced operational readiness, and strategic sufficiency and limitations on the nuclear build-up (Feltes, 1976; Armed Forces Management, 1969). He ended the selective service draft in January of 1973 and was persistent in his efforts to secure the release of American POWs.

Laird spent a lot of time preparing for and testifying in Congress and improved DOD relations with Congress. On the management side, Laird gave the military department secretaries and the JCS a more influential role in the development of budgets and force levels, but he also returned to the use of service program and budget ceilings (fixed shares) and required services to program within these ceilings. This concept of ceilings or "top-line" endured for most of the next 40 years and still influences DOD budget requests today, as services are expected to balance their program and budget against the total obligational authority they are given at various stages in the planning and budget process.

Laird sought to provide a better balance between military and civilian judgment in the defense decision-making process by providing better and earlier strategic and fiscal guidance to the services and the Joint Chiefs of Staff. Feltes suggests that the result of Laird's emphasis on decentralized management was that responsibility for military planning was shifted back to the military services, and the role of OSD Systems Analysis was de-emphasized. While no abrupt shifts were made, the Laird era was marked by a steady and persistent shift away from McNamara's emphasis on centralization of DOD decision making under the Secretary of Defense (Feltes, 1976; Armed Forces Management. 1969).

The Goldwater-Nichols Act of 1986

It may be argued that the creation of the defense department in 1947-49 never really took hold in that, by and large, the military departments continued to go their separate ways within the envelope of the Department of Defense until the reforms of the 1960s and, to some extent, until implementation of the Goldwater-Nichols Act of 1986 (Thompson and Jones, 1994: 78-79, 246). In the 1950s, Presidents Truman and Eisenhower both fought arguably losing battles to strengthen the role of Chairman of the Joint Chiefs of Staff and the JCS (Thompson and Jones, 1994: 51-53).

By 1981, the sitting JCS Chairman, USMC Gen. David Jones was writing that the system was broken and asking Congress to fix it (Jones, 1982). The fact that Gen. Jones as CJCS was voicing such criticisms was in itself very significant (Chiarelli, 1993:71). In 1982, Gen. David C. Jones (1982) suggested that because of the decentralized and fragmented resource allocation process driven by parochial service loyalties, there was always more program than budget to buy it; that the focus was always on service programs; that changes were always marginal when perhaps better analysis would have led

to more sweeping changes; that it was impossible to focus on critical cross-service needs; and the result was that an amalgamation of service needs prevailed at the Joint Chiefs of Staff level.

General Jones argued that staff to the Chairman of the JCS was so small that the Chairman could focus only on a few issues. The result was that the defense budget was driven by the desires of the services (usually for more programs and money), rather than by a well-integrated JCS plan. In addition, he argued that all of this undercut the authority of not only the JCS but the entire unified command structure established in the Defense Reorganization Act of 1958 (Thompson and Jones, 1994: 51-53). General Jones noted this was particularly evident in acquisition, where weapons systems met performance goals 70% of the time, but schedules 15% of the time, and cost goals 10% of the time. General Jones later explained:

The lack of discipline in the budget system prevents making the very tough choices of what to do and what not to do. Instead, strong constituencies in the Pentagon, Congress, and industry support individual programs, while the need for overall defense effectiveness and efficiency is not adequately addressed." (Jones, 1996: 27).

In 1986 Congress passed a sweeping reform plan, commonly referred to as the Goldwater-Nichols Act (for its congressional sponsors), over the ardent objections of many in the Pentagon, including Secretary of Defense Caspar Weinberger (Locher, 1996: 10; Locher, 2002) who thought it would break apart the DOD management system. The legislation is too complex to detail here, but among other things it strengthened the hand of the Chairman of the Joint Chiefs of Staff as chief military advisor and spokesman to the Secretary of Defense and to the President, provided the CJCS with a larger staff and identified important phases in the PPBS process where the JCS would play in setting requirements and reviewing the plans of other players. It established the national command authority to run from the President to the Secretary of Defense to the unified commanders in chief (CINCs). This increased their formal authority so that rather than using whatever forces the military services would allow them to use in their geographical area, the unified CINCs had war fighting and command responsibilities and the military service roles were to provide them with the wherewithal to do so (Thompson and Jones, 1994: 51-53, 79, 223-224). This distinction clearly put the military services in the role of training people and providing personnel and equipment for the warfighting missions of the geographically based unified command CINC's. Goldwater-Nichols also created the position of Vice-Chairman of the Joint Chiefs of Staff. Generally, the officers who have served in this spot have been strong innovators and, through various committee structures, have had a substantial impact on the resource planning process within DOD.

Goldwater-Nichols also emphasized the requirement for joint command officer duty assignment. Before Goldwater-Nichols, JCS and joint command assignments were viewed as almost career-ending assignments, thus many of the best officers tried to avoid them. CJCS Jones observed that people serving joint tours did less well in the promotion process than those who had not served such tours (Jones, 1996: 28). While implementing it has been an evolutionary process, Goldwater-Nichols has changed this perspective – such assignments now may be career enhancing. The Act also required all officers to pass certain levels of joint proficiency and upwardly mobile officers now believe a joint tour is a must.

Most importantly, Goldwater-Nichols changed the caliber of advice given to the President and Secretary of Defense by the JCS. Former CJCS Army General Shalikashvili praised this part of the Act, "...we have broken free from the 'lowest common denominator' recommendation that so often plagued us in the past." (Roberts, 1996: 1) Shalikashvili indicated there was still room for smoothing the role of the JCS in the planning and budgeting cycles, in the national military planning process, and in management of officers into joint billets. Nonetheless, it is clear that Goldwater-Nichols is a success, as Secretary of Defense Perry noted in 1995, "It dramatically changed the way that America's forces operate by streamlining the command process and empowering the Chairman and the unified commanders. These changes paid off in....Desert Storm, in Haiti, and today in Bosnia." (Locher, 1996:15)

On the resource allocation side, Goldwater-Nichols provides two classes of organizations, those who do the warfighting, under the unified command, and those who support them, the military departments and services and their own CINCs. The military department secretaries hold most of the DOD budget authority, while the service CINCs play key roles in programming, with less leverage in budgeting. Most of the combatant commands, the unified CINCS, do not have their own budgets (except for their staffs). Rather, they use the personnel and weaponry provided them by the military departments and services. However, the military CINCs must pass their budget requests through the unified command CINCs before they move upward in the budget chain of command to the Pentagon. Prior to the mid-1990s this review by the unified command staffs used to be *pro forma* but it has become a real review in many unified commands, e.g., CINCPAC review of CINCPACFLT budget proposals. The Special Operations Forces command, headquartered at McDill Air Force base in Florida, has its own sizable (and increasing) budget, but SOF budgets still are small compared to the military department budgets.

The unified CINCs also have had an opportunity to identify requirements in the PPBS process and the Chairman of the Joint Chiefs of Staff has the responsibility to advise the Secretary of Defense to certify the merit of these requirements as well as how well the budgets of the military departments satisfy the unified CINC needs. The JCS Chairman also can submit alternative recommendations to the Secretary of Defense to meet unified CINC needs in the budget. In this matter, the Secretary of Defense is the final arbiter of what the military departments get in their budgets. The unified and service CINCs both have opportunities to give input to the Chairman of the Joint Chiefs in the PPBES planning process for development of the National Military Strategy, and in the final draft of the defense guidance which leads to the POM process. In the POM process, the service CINCs make inputs by providing their Integrated Priority Lists (IPLs) that indicate their top war fighting needs (important information for the JCS and unified CINCs). Military service CINCs may indicate program deficiencies that exist and make recommendations to fix deficiencies to both the JCS and the military service chiefs. The IPLs are a part of the programming and budgeting process and are duly considered in several venues in OSD and the military departments. More detail on this is provided subsequently in this paper.

An unresolved tension is evident here as the unified and service CINCs both have been criticized as sometimes tending to focus on short-term operational needs, war fighting issues, and the O&M accounts that support readiness. Simultaneously, the military departments have to keep an eye not only on the short-term, and immediate items and issues, but also weapons procurement and re-capitalization issues, such as modernizing the aircraft or fleet inventory. Some players in the PPBES process believe this is a healthy

tension. Others worry that immediate issues, and some long-term needs, may be slighted. DOD is currently in the middle of another significant change as Secretary Rumsfeld pursues his goal of transforming both military and business affairs while actively employing some part of the operating force in combat situations. This reform is somewhat of a return to a more centralized pattern of operations, as explained further below.

TRANSFORMATION OF PPBES: THE NEW PROCESS

The purpose of PPBES is to provide a systematic and structured approach for allocating resources in support of the national security strategy of the U.S. The ultimate goal of the entire PPBES process is to provide the military Commander-in-Chiefs with the best mix of forces, equipment and support attainable within resource constraints. Given a basic understanding how of PPBES operates in general, we move to a review of changes initiated in the period 2001-2004 to significantly modify PPBS into what is now PPBES - the result of reforms authorized by Defense Secretary Donald Rumsfeld under the administration of President George W. Bush.

Figure 2: Summary of New PPBES Cycle

Year 1: Review and Refinement	Year 3: Execution of Guidance
Early National Security Strategy	
Restricted fiscal guidance	• Restricted fiscal guidance
Off-year DPG, as required (tasking studies indicative of new Administration's priorities; incorporating fact-of-life acquisition changes, completed PDM studies, and congressional changes)	Off-year DPG, as required (tasking studies; incorporating fact-of-life acquisition program changes, PDM studies and congressional changes)
Limited Changes to Baseline Program	• Limited Changes to Baseline Program
 Program, Budget, and Execution Review initializes the on-year DPG 	Program, Budget, and Execution Review initializes the on-year DPG
President's Budget and Congressional Justification	President's Budget and Congressional Justification
Year 2: Full PPBE Cycle - Formalizing the Agenda	Year 4: Full PPBE Cycle - Ensuring the Legacy
• Quadrennial Defense Review	
Fiscal guidance issued	Fiscal guidance issued
On-year DPG (implementing QDR)	On-year DPG (refining alignment of strategy and programs)
• POM/BES submissions	• POM/BES submissions
• Program, Budget, and Execution Review	Program, Budget, and Execution Review
President's Budget and Congressional Justification	President's Budget and Congressional Justification

Source: Secretary of Defense, Management Initiative Decision 913, 2003: 3.

PPBES has four distinct phases, with each phase overlapping the other phases (Jones and Bixler, 1992: 19-31). Planning and assessing, for example, are continuous and all players in the process understand that decisions made in these phases will affect other phases. Because the interrelationships are so complex, players in each phase attempt to stay informed on issues in their respective phase as well as issues in other phases affecting them. However, the size of DOD and the complexity of the PPBES process render this virtually impossible. It is difficult enough for the participants in one military service to keep abreast of what is happening in their own process, much less what is done in other branches of the military.

In 2003, the DOD announced significant changes to the PPB system, renaming it the Planning, Programming, Budgeting and Execution System or PPBES (Secretary of Defense, 2003a). While the basic structure of PPBS remains, it was changed in three important ways. First, the reform merged separate programming and budget review into

a single review cycle. Second, it incorporated a biennial budget process. Third, it changed the cycle for Office of the Secretary of Defense (OSD) provision of the top level planning information to the military departments and services. The Defense Planning Guidance (DPG) that had been issued annually will now become a biennial guidance. The Office of the Secretary of Defense will no longer provide the military services and defense agencies an annual classified planning document designed to help them develop their budget and program requests for the upcoming fiscal year. The move away from developing the top-level Defense Planning Guidance each year is part of the OSD move toward two-year budget cycles. OSD may prepare "off-year" guidance documents reflecting minor strategy changes, according to Management Initiative Decision No. 913, issued May 22, 2003 by Deputy Secretary of Defense Paul Wolfowitz (Secretary of Defense, 2003a).

The essence of the reform is to place the biennial issuance of the DPG document in a two-year cycle within the four years that a Presidential administration has to develop its national defense objectives and strategy. A series of documents has in the past guided this process, including the annual DPG, the Future Years Defense Program, the issuance of each new President's national security strategy, and development of the Quadrennial Defense Review for use by DOD and for reporting to Congress. The QDR consists of a comprehensive analysis of military readiness, capabilities and force structure that helps to provide a reporting framework to permit a newly elected administration to develop its spending plan and budget. Since the early 1990s, the QDR has become the primary external and one of the major internal statements of policy by the Secretary of Defense.

On February 3, 2003, DOD Comptroller Dov Zakheim presented the new DOD biennial budget part of the reform with the release of the President Bush's Fiscal Year 2004 defense budget request. Zakheim indicated that DOD would use the off years when budgets would not be prepared from scratch to examine how well DOD was executing its programs and dollars (Zakheim, 2003; Secretary of Defense, 2003a). He noted that as of this budget (FY 2004) FY-05 would be an "off year" in which only significant revisions to the budget would be requested from Congress. This meant that the budget process conducted during the summer and fall of 2003 to prepare the FY2005 budget would be significantly changed. For example, DOD will not prepare the Program Objective Memoranda (POM) or budget estimates for FY-05. Instead, OSD will use estimates for FY 2005 as they were estimated in the FY 2004 budget and Future Years Defense Program (FYDP), which covers FY 2004 to FY 2009. An updating mechanism has been created for the off-years, e.g. FY05.

Military Departments and CINCS may create Program Change Proposals (PCPs) to affect the POM and Budget Change Proposals (BCPs) to speak to new budget needs. The PCPs allow for fact of life changes to the previous year's POM; they are meant to be few and of relatively large size. Guidance for 2003 indicated the PCPs had to exceed a set dollar threshold or have serious policy and programmatic implications. For example, in 2003 the Navy submitted only three PCPs, one worth \$100 million that involved 450 line items. The Navy would submit only three PCP's in 2003. For all of DOD the number of PCPs was estimated to be about 120. For the CINCs, the PCPs are a new tool provided them in the PPBE process, but like the military departments, they have to suggest offsets. For example, if a CINC wants to increase force protection in one area at a certain cost, he has to suggest weakening force protection in another area

as an offset for the increase. This is meant to be a zero-sum game. Changes have to be accompanied by offsets or bill-payers. As is usual with any offset procedure, claimants who submit either PCPs or BCPs take the risk that the offsets they suggest will be accepted, but the accompanying change proposals the offsets were intended to fund might not be. In such cases, the offset reveals a pot of money for a lower priority item that might be directed to another area. The budget change proposals were expected to be more numerous but smaller. They too would be largely fact of life changes (e.g. cost increases, schedule delays, new congressional directives) and would have to be paid for by offsets. Although the individual BCP need not be offset, the package of offsets provided by a Military Department has to be offset and provide a zero balance change. The FY 2006 budget request will be prepared completely anew, marking the first biennial POM and budget in the new two-year cycle. A Defense Planning Guidance will be prepared by OSD to guide the FY 2006 process.

In April 2003 Defense Secretary Donald Rumsfeld canceled the 2005 DPG due to the budget process changes announced in February by DOD Comptroller Zakheim to concentrate Pentagon analytical resources on determining whether Saddam Hussein's ouster and the progression of the war on terrorism had mandated additional changes in the Bush administration national defense strategy. In addition to prioritizing how OSD believes military dollars should be spent in upcoming years, the DPG typically calls for studies on top issues and indicates new strategies to be undertaken. Rumsfeld's action violated no rules, as the Secretary of Defense is not legally required to prepare an annual Defense Planning Guidance.

PPBES: Year One

Management Initiative Decision 913 sets out a two-year budget and planning cycle within the framework of the four years in a Presidential administration. Year one requires "review and refinement" of the previous President's strategy and plans, including only limited changes in programs and budgets, an early national security strategy, and an "off-year DPG." As stated in MID-913, "The off-year DPG will be issued at the discretion of the Secretary of Defense... The off-year DPG will not introduce major changes to the defense program, except as specifically directed by the Secretary or Deputy Secretary of Defense... However, a small and discrete number of programming changes will be required to reflect real world changes and as part of the continuing need to align the defense program with the defense strategy," (Secretary of Defense, 2003a: 5). A major objective of the off-year guidance will be to provide the planning and analysis necessary to identify major program issues for the next DPG. One of the benefits of the new four-year cycle is that it fits the PPB process into the electoral cycle. Incoming administrations usually struggle to get their people on board in the first year and significant defense policy changes usually do not come until later. The new cycle recognizes this reality. Significant events do happen in year one. The National Security Strategy is issued at about mid-year and the Quadrennial Defense review begins shortly thereafter and is issued early in Year Two. These provide significant guidance for defense strategy and resource allocation.

PPBES: Year Two

Year two in the new four-year framework is more intense in that the military departments and services and OSD will conduct full program, planning, budget and execution reviews to formalize the President's defense posture and strategy, including the resource portion of the strategy. In addition to a Quadrennial Defense Review issued early in the year, the second year will include a full, "on-year" Defense Planning Guidance (DPG), issued in May and designed to implement the QDR results. Previously, the QDR had been issued on 30 September in the first year of a Presidential administration. However, in the FY 2003 Defense Authorization Act, Congress changed the QDR reporting requirement to the second year to provide new DOD leadership more time for analysis and preparation. Senior defense officials had argued to Congress that the requirement to submit a QDR in the first year was too much to ask of a new administration barely through the rigorous congressional process for confirmation of presidential appointees to head the DOD and military departments. Year two will see then a full POM and a full budget build. These result in a full FYDP build.

PPBES: Year Three

The new planning and budget process specifies that year three be used for "execution" of the President's defense plan and budget agenda as provided in the QDR and the previous year's DPG. Year three corresponds with FY 2005 in the budget cycle and could include an "off-year" DPG if so desired by the Secretary of Defense. This off-year guidance could task new studies, or incorporate fact-of-life changes in acquisition programs including increased costs or schedule delays as well as congressionally mandated changes. In May 2003, Zakheim indicated that no 2005 DPG was to be prepared under the Bush administration and Rumsfeld. However, the Presidential elections of 2004 could change this plan. Year three is a year of refinement of objectives and metrics with only the most necessary program or budget change proposals considered.

Careful examination of DOD execution of dollars and plans is a critical part of the new planning and budgeting process. Traditionally, budget execution has been left primarily to the military departments. However, the revised process provides OSD with greater opportunity to examine and critique the budget execution decisions of the military departments and services. Zakheim reported in February a widespread agreement in the DOD not to return to a comprehensive annual budget and program review; rather the intent was to use the off year to measure the "burn rate" (rate of spending) in an execution review (Zakheim, 2003). To this end, the comptroller said the review would include asking questions such as how money is being spent, if it should be moved to other areas and accounts, and the results achieved from execution.

An important budget changed initiated by the Bush administration announced in February 2003 and subsequently by the DOD Comptroller is implementation of "performance-based budgeting," to focus more on the costs of achieving desired military and programmatic outcomes, rather than concentrating budget review on the details of program administration and production. The driving military concept behind performance-based-budgeting (PBB) is the concept of "effects-based capabilities" for war fighting. The effects-based approach focuses on desired end results from a military action rather than the military action itself. Under this concept, military commanders

specify the results, such as capture of territory, in addition to the amounts and types of forces needed to achieve the outcome.

PPBES: Year Four

Year four in the budget and planning cycle is characterized in MID-913 as the point where the achievements of a four-year Presidential administration are assessed. This year will include preparation of a full DPG to refine the alignment between Presidential strategy and the DOD program and budget. As usual, the DPG will initiate and guide the cycle of military department and service POM and budget preparation, review and submission (for FY 2006). Then, the next full PPBES cycle will encompass Fiscal Years 2006 to 2011.

Part of the 2003 reform was intended to accelerate and improve the acquisition process. In April 2002, Defense Planning Guidance study #20 (Secretary of Defense, 2002b) concluded that the resource requirements process frequently produced stovepiped systems that were not necessarily based on required capabilities and incorporated decisions from a single service perspective. The study found that the acquisition process did not necessarily develop requirements in the context of how the joint force would fight. Rather, requirements tended to be more service-focused. Moreover, duplication of efforts was apparent in the less visible and smaller acquisition programs. The study observed that the current culture aimed for the 100% (perfect) solution and this resulted in lengthy times to field weapons. In addition, the process was still found to lack prioritization of joint war fighting demands. Ongoing reform here resulted in reshaping of the JROC process so that decisions would be better set up for JROC to make its decision by two new oversight committees reporting to it, headed by flag officers and focused on functional areas. This is an on-going part of the 2003 reform and is indicative of Secretary Rumsfeld's interest in joint operations, joint war fighting, and a quicker acquisitions process.

In summary, the programming-budgeting changes that constituted a redesigned PPBE system began in August of 2001 when Secretary of Defense Rumsfeld announced that the POM and Budget cycle would be operated contemporaneously to speed up the review and decision process (Rumsfeld, 2001). Further reforms were announced by DOD in February and May of 2003. By this time, military departments had already begun to transform their planning and budgeting systems. It may be observed that the comprehensiveness of the changes will take several years to implement throughout DOD. However, the cycle for adopting the innovation is likely to be shorter for military departments and services that already had begun reforms on their own, e.g., the Navy.

TRANSFORMATION OF PPBES AND INCREASED CENTRALIZATION OF AUTHORITY: ISSUES AND CONSEQUENCES

The PPBES and budget changes implemented under the Bush administration in 2003 are the most comprehensive since the system was established in the early 1960s. The drive to move to a refined system was impelled by many of the factors analyzed subsequently in this paper. In short, for years the PPBS process had been criticized as duplicative, unnecessarily complicated, and wasteful of staff time and energy (Jones and Bixler, 1992, Puritano, 1981). The administration of George H. W. Bush (1988-1992)

seriously considered reform of PPBS in the period 1990 and 1991 as part of its Defense Management Report initiative, but the challenge to realign defense strategy and the overall confusion caused by the end of the Cold war understandably took precedence over these reforms. It would take a decade for a Presidential administration to come back to the issue of PPBS reform. Subsequently, we delve more deeply into the rational for performance-based budgeting (PBB) and how it is intended to operate.

With respect to long-range DOD planning in the first phase of PPBES, we may observe that during the 1990s it was clear from the beginning that the shift from a Cold war mentality to a new framework was preceding slowly. The gist of what was necessary in the post-Cold war world did not ever seem clear, despite all the discussion of asymmetric threat and successive preparation and reviews of the QDR. The terrorist attack of September 11, 2001 ended this period of doubt and confused reflection.

It is routinely acknowledged that the planning component has been the weakest part of PPBS for decades. Part of this is due to the contingent nature of threat assessment while other impediments include the sheer volume of information and absence of data coordination. In order for DOD to plan to counter threat effectively, it seems to us that a capabilities-based planning process within PPBES, rather than a theater-based approach, is one way to tear loose from the old bipolar geographic analyses that focused on the USSR, potential enemies in Asia or elsewhere. Instead, it is critical to ask what capabilities the U.S. needs to meet threats wherever they occur, especially given that the terrorist threat has a personal or group basis less geographically bound.

The deployment of U.S. forces since September 11, 2001 illustrates new concepts in joint operation, the use of Special Forces and the application of joint forces in unique ways, supported by traditional forces using traditional doctrines. Nonetheless, it is a new mix. Much of the transformation in military affairs that has been ongoing since the mid-1990s is driven by new threats that seem to emerge almost daily. All this points to the ties between changes in military war fighting and PPBES planning.

It is obvious that important changes have been made in the DOD planning and budgeting process. The simultaneous execution of the POM and budget review and its consolidation into one data base is an important change. In the old system, a good POM could still be lost on the way to the final budget. In addition, sometimes the budget process ended up doing a lot or reprogramming and re-making of decisions that would have been better done in a POM exercise. For example, the 2003 POM process started by doing a pricing review of the shipbuilding budget. This is a budget drill and in the old PPB system would have been done in the budget process long after the POM had been completed. Observers comment that when such drills (re-pricing the shipbuilding account for inflation etc.) result in a big bill that has to be paid, it is good to have that bill considered and paid up front at the beginning of the process in the POM where large dollar changes can be made more easily. They also felt that doing the POM and budget simultaneously should result in fewer surprises and less re-programming of changes to the POM in the budget process than there used to be. They felt that the process should be quicker, but less linear, a layered process rather than a sequential process. The routing of all products of the POM and the budget into one database was seen to be a significant move to help resolve some of this added complexity.

Secondly, the outcome focus of the process is an important change. Secretary Rumsfeld has emphasized outcomes and the Navy approach illustrates this concern in two ways. The procurement accounts are focused around the outcomes each weapon

system bought will provide and the performance models for steaming hours and flying hours are also outcome focused. As has been stated above, this covers almost 90% of the Navy budget. Nevertheless, Congress still appropriates by line item and DOD has to be able to translate capabilities into budget items and make winning arguments for those translations. The fact is that budget lines (line-items) make it easy for Congress to buy things and what has not changed is where the power of the purse is located. In the words of one DOD budget player, "...there are a lot of changes, but what has not been changed is the Constitution. Changes will end when they bump into things that are Constitutional. The appropriation process is still a congressional process and changes in the pentagon process have to be responsive to the needs of Congress. The menu of changes the pentagon can pursue is not unlimited."

Thirdly, the new model put the Secretary of Defense into the process at the early stages, "in the driver's seat," in the words of one budget official. Decisions in the new PPBES are intended to reach the Secretary before the decision has become a foregone conclusion, while options are still open, and while important and large-scale changes can still be made. When the Secretary of Defense inputs come at the end of the stream of decisions, some decisions that could be taken get pre-empted simply because they might cause too much breakage in other programs or because everyone has already become committed to the likely outcomes of the decision. Secretary Rumsfeld had a clear interest in transformation, but not all communities within the defense establishment were equally committed or committed at all to Rumsfeld's vision. As we have noted, inserting the Secretary of Defense in the decision process early stands up so long as history proves the decisions the Secretary of Defense make are right. While this is true whether the Secretary of Defense input is early or late, inserting the Secretary of Defense early in the PPBES process puts a larger burden of proof on the Secretary of Defense. Veteran observers see these changes as an evolving process, cautioning officers bound for the pentagon in a couple of years not to bother memorizing the new process until they get there since it has changed significantly since 2001 and will continue to change.

Lastly, the new emphasis on execution seems an important change, but it is too early to speculate on how this will turn out. It seems clear that no one wants to be viewed as decreasing military effectiveness in the name of saving dollars. Through 2003 a continuing theme of administration critics was that the U.S. was trying to do Iraq "on the cheap" with not enough troops and not enough of the right kind of troops. If the new emphasis on execution becomes a code word for efficiency and this is parsed into "doing things on the cheap," then the emphasis on execution will not have important or long lasting effects. As we have indicated in analysis of the durability of defense financial management problems, this is a difficult problem to resolve, but one that must be addressed.

The 2003 budget process within DOD was dramatically changed. The 2003 process exemplifies incrementalism triumphant. Only changes to the POM and the budget were brought forward in 2003. This is a dramatic change from past. Renown budgetary expert Aaron Wildavsky developed the concept of incrementalism in the 1960s (Wildavsky, 1964) but ignored defense budgeting, but DOD appears to have gone to school on Wildavsky. The result of the 2003 budget process is that unless a budget change proposal is explicitly approved, then a unit's budget is the same as it was the previous year; in Wildavsky's terms, the base is re-appropriated. Thus, if a unit does well in the

on-year cycle (second and fourth year), it may carry some 'fat' through the off-years. This would seem to intensify the struggles during the on-year processes, making the stakes higher. Success is rewarded for two years and failure is doubly penalized, i.e., remember to change in the off year, off-sets have to be offered up, so the only way to get better in the off-year is by giving up something else. In the off-year cycles, only changes to the base are explicitly considered, both in the Program Change Proposals for the POM (big dollar numbers, but fewer of them) and Budget Change Proposals for the budget (more, but smaller dollars). However, there is an interesting twist to this. Changes may come from anywhere someone has an issue, e.g. the military services, combatant commanders, and Assistant and Undersecretaries of Defense.

We have explained that reform of PPBES has been in progress in DOD for a long time, most recently since 2001. Defense Secretary Donald Rumsfeld changed the process in August 2001 and appointed committees to recommend further changes. Changing the PPB system is not a new idea. One change recommended by PPBS observers for more than a decade has been to simplify the process (Jones and Bixler, 1992; Joint DOD/GAO Working Group on PPBS, 1983; Puritano, 1981). Other options have included increasing the assets and time devoted to threat assessment, improving the quality of integration of threat information, and reducing the time devoted to programming so that this cycle consists of essentially the "end game" of the current programming process, and multi-year budgeting. While the 2001 transformation to merge POM and budget review represented a laudable incremental reform, changes made in 2001 and 2003 are far more sweeping.

The rational for combining POM and budget review was essentially that too much time was being spent on POM preparation and approval than was worth the effort. Placing more emphasis on the "end game" of programming seemed a good idea. The end-game is the phase in programming at which major decisions are made, e.g., about weapons systems acquisition and force structure changes. Shortening the programming phase was recommended to the Rumsfeld study committees to eliminate the time consuming process of preparing the POM de novo for each POM cycle from the field level up. Not only had so much time been devoted to POM preparation in the past, but critics also felt that this time was, essentially, wasted because most of the POM was composed of virtually the same information used for previous POM submissions. The criticism was that, much like zero-based budgeting, building the POM from the bottom up for each cycle created great workload without producing much that was new for decision makers.

The key to effective programming is to make the right decisions on major asset acquisition and force structure changes. The other important task accomplished by programming is to align the various assets, including manpower, so they are budgeted in a coordinated way, making assets available together, coinciding with the time they are needed for war fighting. As of 2002, this important part of programming was essentially merged with the budget review phase of PPBES so that budgeting has become a longer-range process, focusing more on a multiple year period rather than the one year cycle that is used by Congress with considerable inefficiency. Problems may be anticipated with any comprehensive change in PPBES or other major system directed from the level of the Office of the Secretary of Defense. The lag time for full and satisfactory implementation of DOD-level macro changes in planning, programming and budgeting is probably two to four years, although many wrinkles will be worked out by the military departments after the first new cycle has been completed. However, it is

understood by seasoned observers of such change that the solutions and new processes developed by the military departments will differ by service and therefore some degree of incompatibility between different service solutions is inevitable despite the intention of DOD decision makers to prevent this from happening. DOD prefers uniformity but this is not possible, and probably not desirable, given the highly differentiated resource management systems and processes used by the respective military departments and services. In defense of diversity it may be observed that any system developed by DOD should serve the needs of its constituents, i.e., the military departments and services. From the view of the Office of the Secretary of Defense, diversity in implementation of reform is an annoyance at best, and a direct violation of authority at worst, to be illuminated and eliminated. However, the power of OSD is not such that it can mandate what the military departments and services, as semi-autonomous operating entities, will do in implementation of any DOD directed reform, or congressionally mandated reform for that matter, e.g., the CFO Act or the Government Performance and Results Act.

This observation is not based on examination of reforms (e.g., Management Initiative Decision 913) in formal lines of authority and management control in the Department of Defense, nor on how differences in old and new systems are depicted in highly detailed, multi-colored graphics and tabular "wiring diagrams" of the type typically used in Pentagon-level briefing slides. Rather, it is based upon examination of how process changes actually are incorporated into existing systems in the real world of comptroller-based financial management in a highly decentralized and diverse organization – the U.S. Department of Defense. It is axiomatic to observe that no matter what reforms successive Defense military department secretaries wish to implement change, what will be done in reality is more likely to be a matter of evolution of existing military department and service-based systems rather than transformation to a single centralized system. In practice, DOD cannot be centrally managed and controlled, and any assumption that such control is possible is a combination of wishful thinking and fantasy.

In conclusion, the PPBS process has been employed by Presidential administrations served by Defense Secretaries from McNamara in the 1960s, Laird in the 1970s, Caspar Weinberger and Frank Carlucci in the 1980s, to Dick Cheney, Les Aspin, William Perry, William Cohen and Donald Rumsfeld in the 1990s and into the new millennium. DOD has managed the constant evolution of PPBS while keeping its basic structure relatively stable. However, the pace of evolutionary change quickened under Secretary Rumsfeld as a part of the overall DOD transformation in business affairs initiative.

THE PUSH FOR PERFORMANCE AND RESULTS-ORIENTED TRANSFORMATION FOR DOD AND THE FEDERAL GOVERNMENT

Significant management reform has been undertaken over the past fifteen years under the administrations of President George H.W. Bush in the period 1988-1992, the Clinton administration from 1993 to 2000, and the administration of George W. Bush beginning in 2001. Reform also has been sponsored by Congress. The Chief Financial Officers Act (CFO Act) was passed by Congress in 1990. The most important pieces of legislation related to performance management arguably are the Government Performance and Results Act (see GPRA, 2003) passed by Congress in 1993 followed by the Government

Management Results Act (see GMRA, 2003). GPRA as implemented in the executive branch under the direction of the President's Office of Management and Budget (OMB) has driven performance management reform for a decade. A little known fact about GPRA is that while it was enacted by Congress, it was written in final form before passage by OMB staff (Breul, 2004a; see also 2003; 2004b).

During the Clinton administration the National Performance Review (NPR) called for performance-oriented organizations and mission-driven, results-oriented budgets. In August 2001 President George W. Bush introduced the initial management and budget reforms of his administration, among these was linking performance to budgets. The Government Performance and Results Act authorized pilot experimentation with what is referred to here as responsibility budgeting and accounting and reporting (RBA) by all departments and agencies of the federal government. The Office of Management and Budget developed means for accumulating results from these pilot cases during the 1990s and OMB and the agencies reported these outcomes to the oversight committees of Congress.

The Defense Management Report Initiatives under President George Bush and Secretary of Defense Dick Cheney undertaken from 1989 to 1992, and the NPR both stimulated considerable effort aimed at accounting, financial management and performance measurement reform in the Department of Defense. Greater progress was made in DOD under Bush and Cheney in the early 1990s (e.g., introduction of reimbursable transaction accounting and budgeting) than during the Clinton administration, but both successes and failures resulted from these initiatives. It is clear that government-wide progress has not been rapid. As with most large and complex organizations, the U.S. federal government has been slow to change. The impetus to change presently emanates from a combination of the CFO Act, the GPRA and Presidential initiatives.

The CFO Act requires double-entry bookkeeping and accrual accounting, neither of which are standard practice in the U.S. federal government. To receive a clear audit report from the Inspectors General who perform CFO audits, these accounting changes need to be implemented in federal department and agency accounting systems. However, few federal agencies can comply with either the double-entry or accrual requirements, and there is resistance to investing to do so given that the federal budget and congressional appropriation accounting is done primarily on a single entry and cash basis. Changes in federal appropriation law and congressional appropriation procedures, at minimum, appear to be required to push federal agencies further toward CFO Act compliance. Some knowledgeable critics contend that the CFO Act and its implementation are flawed and that Congress should start over with it. (Anthony, 2002)

The GPRA requires strategic planning (SP) and the development of performance measures, which have been implemented throughout the government, and linkage between SP and resource planning and budgets, which has been tried in DOD with varying success. Further, GPRA invited agency experimentation with performance budgets on a voluntary basis, to be evaluated by Congress. To date, the results from these experiments have not persuaded Congress or the President's Office of Management and Budget (OMB) that broad application of performance budgeting, using an agency theory-oriented contracting system of the type employed in New Zealand and elsewhere, is worth the effort. Conversely, agencies report that their own ability to plan and execute programs and to justify budgets has been in some instances enhanced as a result of SP and performance

measure development -- as required by OMB.

Few agencies and no departments in total have the capacities in their accounting systems and procedures that permit accurate and reliable (or in some cases any) linkage between performance or results data and costs or budgets. Consequently, whether the task required is reporting costs related to organizational units, functions, accounts and sub-accounts or workload for the CFO Act, or cost related to performance (e.g., for results) for GPRA, there has been little broad-scale success in the short-term for most of the federal government, including the Department of Defense. However, as a result of OMB use of the Performance Assessment Rating Tool (PART) in program and budget review starting in 2001 and the better business practice initiatives in DOD, progress may be more rapid in the mid-2000s (see OMB, 2001a; 2001b; 2002a; 2002b; 2003a; 2003b; 2003c).

A significant recent transformation initiative in DOD is the Defense Enterprise Accounting Management System (DEAMS); a joint transformation project between the U.S. Air Force, Defense Finance and Accounting Service (DFAS) and the U.S. Transportation command. This aggressive program promises to deliver on many of the needed shortfalls in the sponsoring organizations and, if successful, may be considered as the common finance and accounting system for the entire DOD. During a recent conference (*Defense Finance 2005*) attended by many key DOD and government financial leaders DEAMS was heralded as a leading-edge model for reform. That said, we are a year or two from clear determination of whether or not this program will deliver as promised.

As provided on the DEAMS website (http://deams.transcom.mil/), the following description suggests the scope and breadth of the program's objectives:

DEAMS is a financial management initiative that will transform business and financial management processes and systems to provide accurate, reliable, and timely business information to support effective business decision making for U.S. Transportation Command, Defense Finance and Accounting Service (DFAS), the U.S. Air Force and eventually, other agencies within the Department of Defense.

Performance-Oriented Budgeting, Budget Caps and Multiple Year Financing

Under the administration of George W. Bush there has been increased emphasis on performance and results-oriented program and budget review, and this has implications for DOD in that defense programs have been pressed by DOD leadership to demonstrate results relative to costs, or what may be termed "value for money." This emphasis is likely to become more pronounced in the next few years under any Presidential administration.

Budget reform initiatives were announced by President George W. Bush with support from his Office of Management and Budget (OMB) in the FY 2003 President's Budget delivered to Congress in February 2002. This budget introduced "performance-based budgeting" to link funding to performance measures and accomplishments for federal departments and agencies. The Office of Management and Budget targeted review to improve performance in five areas of management: human resources management productivity, competitive sourcing (i.e., contracting out), financial management, e-government, and integration of performance measurement and budgets.

In initiating performance-based budgeting for the federal government, the Bush administration has attempted to bring the U.S. into line with many of the more progressive national practices around the world. Other nations including New Zealand, Australia, Canada, Switzerland and the United Kingdom have employed performance and output or results-oriented budgeting practices over the past decade or more (Jones, 2002a; 2002b; 2003). Furthermore, in testimony before the Senate Armed Services Committee on February 5, 2002, then OMB Director Mitchell Daniels noted that the reform interests of the Bush administration were not limited to performance budgeting. While stressing the importance in evaluating programs on the basis of achievements, Daniels also expressed approval with members of the committee who asked him about other budget reforms (Daniels, 2002).

The first issue addressed was whether there was a need for new budget "caps" or spending ceilings given that the caps previously enacted in the early 1990s and reendorsed in the Balance Budget Act of 1997 had expired. Also mentioned was the fact that Congress often exceeded the caps even when they were in force. Daniels agreed with some members of the committee that new caps should be enacted to control congressional proclivities to spend (Daniels, 2002).

A second and related issue was whether new spending caps should include a ceiling for national defense spending. Daniels indicated the strong preference of the administration against a cap on national defense appropriations in a period when the nation was at war with the forces of terrorism around the globe (Daniels, 2002). In rejecting the idea of a cap for defense spending, the testimony of Director Daniels conformed to the views expressed by Chairman of the Federal Reserve Bank Alan Greenspan in testimony to Congress in the same week. (Greenspan, 2002) When asked directly by members of the House Budget Committee whether caps should be reinstated for the discretionary (non-entitlement) portion of the federal budget, Greenspan responded that he believed new caps were needed in all areas but national defense. Both Greenspan and Daniels reflected the priorities of the Bush administration in placing the war on terrorism as the highest priority in policy and budgeting.

In response to questions from congressional members, Daniels also expressed the interest of the administration in exploring biennial budgeting and budgeting by results contracting (Daniels, 2002). While the biennial budget initiative was not an element of the President's 2003 budget, the fact that the Bush administration expressed interest in biennial budgeting appeared to open the door to discussion of even more ambitious reform, e.g., with multi-year budgets similar to the types of budget processes in use in the United Kingdom, where budgets are enacted for a three-year period and reviewed biennially, and in Australia, where three year "running cost" budgets were used in the 1990s with some success. Australia has, as of this writing, shifted to an even longer five-year cycle of budget enactment and review. Budget critics have long argued the inefficiency of the annual budget cycle (McCaffery and Jones, 2001: 87-90).

Annual budgeting satisfies congressional preferences for a cycle that provides maximum opportunity to reward constituents with spending largess. In fact, as political scientists have observed for decades, virtually all-congressional politics is local politics, i.e., driven by the need to satisfy the special interests of members' districts or states. And while this opportunity provides the benefits of democratic representation and responsiveness, it does not lend itself well to expenditure control, fiscal discipline, or efficiency in either spending or program performance. Rather, annual spending

encourages the behavior well known to both budget officials and academics, i.e., spend it or lose it. Further, because the problems that governments face are never constrained to periods of one year, spending demand is, given the nature of service demand, always multi-year in character. The annual budget cycle produces all kinds of perversities and strategic misrepresentation in budgeting. (Jones and Euske, 1991) Perhaps the best recognized is the end of year spend-out phenomenon where real spending priorities often are ignored in the rush to spend or obligate every dollar available, regardless of whether the items purchased or the services provided are really needed.

Unfortunately, the annual spending cycle encourages exactly the types of behavior that Congress, the Executive and various audit agencies of the federal government, including the General Accounting Office, indicate is abhorrent. The incentives implicit in the spend it or lose it approach to budgeting push otherwise prudent budget executors to the brink of Anti-Deficiency Act violations, including spending for things not authorized or appropriated by Congress, or spending from budget accounts dedicated to one purpose for other purposes not authorized by law. And the obvious incentive from annual spendouts is to over-spend rather than under-spend if what is not expended is likely to be lost in the next budget. During *Defense Finance 2005*, when Dov Zakheim was asked what he thought could be done to change this perceived 'spend it or lose it' culture in DOD, the former Comptroller suggested that it was much more than just culture and in fact he would argue for a two year appropriation.

For these and other reasons nations, including those mentioned above, have moved to multi-year budget appropriations and execution, providing programs the authority to over or under-spend in any one particular year so long as spending conforms to totals appropriated for the longer term period of years. This provides greater opportunity for budget and program managers to execute budgets more efficiently, with greater attention to management "steering" to achieve desired results and increased flexibility to adjust short and medium spending plans to fit the demands of efficient budget execution.

Moving to multi-year budgeting would not represent a radical change to DOD for two reasons. First, as explained in this paper, DOD and the military departments and services already manage at least three budget years simultaneously. Second, because many budget accounts for national defense already are funded on a multiple year basis (RDT&E, and weapons acquisition accounts for example), moving all of them to a multiple year structure does not require serious change in the way that DOD budgets for national defense. The degree of change required of Congress is another matter. While it would be desirable to have Congress move to a multi-year budget process for defense, this was not a necessary condition for change to PPBES by DOD. DOD can move to multi-year budgeting and Congress can continue to appropriate annually portions of the multi-year budget it receives from DOD. The point is that DOD can and has decided to reform PPBES itself, and then attempt to gain congressional support and approval for the change by demonstrating that the reform produces better decisions and reduces the costs of decision making.

Related to multi-year budgeting for results is the issue of contracting for results. Contracts for results written into budgets in other nations have included agreements between legislative bodies and program agencies to produce a set amount of outputs or outcomes (e.g., in New Zealand) or contracts within the Executive Branch between control agencies such as OMB and departments and agencies. In the UK, the

Department of the Treasury engages in such contracting under the oversight of the Prime Minister and Cabinet and Parliament. However, officials of the Treasury do the real work of holding service providing agencies to their contracts (Jones, 2001a). There are other examples of contracting for results in budgeting in Australia, Switzerland, Sweden, Denmark and elsewhere (Wanna et al, 2003).

It is not yet possible to evaluate comprehensively the success achieved in performance-based budget review under the Bush administration in DOD and elsewhere. However, there is some evidence to assess the efforts and success of OMB with this approach given that by 2003 more than 20% of federal programs and virtually all departments and agencies were complying with OMB budget submission requirements. As noted, for FY 2004, 231 programs were graded using the Program Assessment Rating Tool (PART) system. However, whether and to what extent the PART review improved department efficiency and effectiveness is uncertain. What can be said is that OMB used PART to attempt to reduce budgets in some instances, which is not surprising given this is standard practice as an element of most management and performance review techniques employed by executive budget control agencies (McCaffery and Jones, 2001: 203-224, 281-320; Jones, 2001a; Wanna et. al., 2003).

Performance assessment under the Bush administration continued in preparation of the FY 2003 and FY 2004 President's Budgets. Performance review under the Bush administration may be viewed as a continuation of a trend begun in the 1990s in OMB (Rodriquez, 1996, Daniels, 2001). Budgets have been prepared and analyzed using what may be termed performance-based budget review to link funding to performance measures and accomplishments for federal programs within departments and agencies. The Program Assessment Rating Tool was used by OMB in analysis of 67 programs included in the FY 2003 President's Budget. PART was employed to score performance in 231 programs (about 20% of total on-budget federal programs) for the President's FY 2004 Budget. An additional 20% were to be reviewed by OMB in preparation of the FY 2005 Budget.

PART scores programs using multi-variable criteria set of approximately 30 variables that initially (for FY 2003) culminated in what was characterized as a "stop light" system: red for failing performance, yellow for marginal performance, and green for good performance. For FY 2004 the system expanded the range of grading options to five categories: effective, moderately effective, adequate, results not demonstrated, and ineffective. For FY 2004 14 programs were rated as effective, 54 moderately effective, 34 adequate, 11 ineffective and 118 results not demonstrated. The large number in this last category indicates that many programs have not attempted or have been unable to develop useful measures of performance. Reporting of the results is provided in a separate volume of the President's budget (OMB, 2003a; 2003c). Programs are rated in four areas of performance: program purpose and design, strategic planning, program management, and program results.

The overall objectives of PART are (1) to measure and diagnose program performance, (2) to evaluate programs in a systematic, consistent and transparent manner, (3) to inform agency and OMB decisions for management, legislative or regulatory improvements and budget decisions, (4) to focus on program improvements and measure progress against prior year ratings. OMB intends to extend the application of PART to all programs in the budget in future budget review. If this is done, it will be a time consuming effort for the reviewers who are line budget examiners. Budget

analysts are tasked to review specific program, i.e., they assume some degree of ownership of the budgets they examine (McCaffery and Jones, 2001: 203-224). Consequently, there always is a problem of consistency in application of evaluative criteria with executive control agency review of budgets and performance.

Given this circumstance, the executives and budget staff of programs under review would be wise to take Wildavsky's advice (Wildavsky, 1964: 20-31) to be sensitive to the signals about priorities provided to it by budget analysts. Typically, after one or two budget reviews by the same analyst, agency budget officials should become attuned to the preferences of the analyst and administration he or she serves. To fail to read such feedback is to lose competitive advantage in the budget game. The advantage of the PART system over previous methods of budget review is that it provides more feedback, i.e., more signals on how to achieve a higher rating. Indeed, by 2003 PART had become sufficiently institutionalized so that consulting firms inside the beltway were offering courses to teach program staff how to improve their scores. With this much feedback and assistance it is surprising how many programs were rated for the FY 2004 Budget as ineffective or results not demonstrated categories (129 or roughly 56% of the 231 programs reviewed).

For FY 2003 and FY 2004 many programs received failing scores -- but improvements in some programs were reported for FY 2004. Departments and agencies invested staff time and energy to achieving improved ratings in attempt to be rewarded in the President's Budget. The key incentive supporting the PART system is the intent of OMB directors and staff to integrate performance-scoring with OMB budget review. Presumably, programs that improve their ratings are to be rewarded in the budget. The advantages of the PART approach appear to be two-fold. First, the scoring is relatively easy to understand because it is simple - there are only five categories. Second, PART scores are scaled relative to a set of variables that represent the strategic and annual planning, management and execution performance by programs according to data developed and reported to OMB by agencies. OMB does not provide the data for PART reviews. Thus, the opportunity is ever present for programs to score better if they want to, and if they are able to measure and quantify results. However, two biases are built into any performance rating system in addition to the inevitable issues concerning interrater reliability noted above. First, some program performance results (or outputs) are easier to measure and report than others. The second is uncertainty about the relationship between achievement on measures and budget decisions. For example, if programs solve some of the problems faced by their clientele group (Wildavsky's term), should your budget be increased or reduced? On one hand the argument is to reward improvement, but if clientele needs have been satisfied does this indicate a decrease in demand for program services and therefore a budget cut?

Review of the PART system by departments and agencies that have been rated by OMB indicated several recurrent criticisms (Jones, 2003). The PART questionnaire instrument requires yes or no answers to a number of questions about performance. It has been suggested that a better system would have departments and agencies rate their answers on a scale, e.g., 1 (lowest) to 5 (highest). Scaled data are more amenable to analysis than yes/no responses. A second criticism concerned the way OMB defined the units of analysis -- as programs instead of departmental or agency administrative entities. Some programs defined by OMB were not administered as such by departments and agencies (many programs cross agency jurisdictions), thus making performance

reporting more difficult. In this regard there is incompatibility between PART and GPRA. PART evaluates programs while GPRA assesses agencies – and these entities are defined in different ways. This is confusing to those under evaluation. A third criticism was that while OMB provided some feedback on their assessment of questionnaire responses and desired improvements in program performance, more information of this type was needed. Further, some program officials indicated they wished to collect more data but were prevented from doing so by various rules, including the requirements of the Paperwork Reduction Act, and OMB insistence that they cut down the number of different data elements to be measured and reported. Finally, program staff reported the appearance of an inverse relationship between effectiveness ratings and budget decisions, i.e., better was not necessarily richer.

Testimony to Congress by David Walker, the Controller General of the U.S. government, and comments by representatives of the General Accounting Office, the Offices of the Inspectors General and members of Congress indicate that important institutional observers, including the key oversight committees of Congress, have reviewed OMB assessment of executive programs and management practices for the FY 2003 and 2004 budgets. Through FY 2003 numerous entities, including the U.S. Comptroller General, were cautiously supportive of administration efforts (Walker, 2001, 2002).

GAO was very specific in stating that it had reviewed favorably the criteria supporting PART and OMB evaluation of department and agency performance (Posner, 2002). As noted in the dialogue above, Christopher Mihm of GAO stated that in his view the approach and its execution were methodologically sound (Mihm, 2002a/b). GAO reviews of performance management from the late 1990s through 2002 have been supportive (GAO, 1996a; 1997a; 1998; 1999; 2000a; 2000b, 2001; Mihm, 2002a/b). GAO has favored performance measurement to the extent that it recommended in 2002 that Congress adopt a "Performance Resolution" process to measure and report annually on executive agency progress. This approach would function in a manner similar to the Budget Resolution process (Posner, 2002). Such support for performance budget review (as distinct from broad-scale performance budgeting) may change, but it is clear that virtually everyone in the nation's capitol took serious notice of and responded to the Bush administration OMB initiatives with performance measurement and results reporting linked to budgets. And, it may be anticipated that Congress and the Executive branch will continue to be concerned with implementation of the Government Performance and Results Act.

OMB has not used PART to review DOD programs and performance due to the fact that it does not conduct an independent analysis of DOD budget requests. Rather, OMB shares this task with the Office of the Secretary of Defense. However, what the use of PART combined with the requirements of the CFO Act, GPRA, GMRA and other similar requirements means for DOD is that increasingly there is a need for measurement and management of performance relative to costs and a greater responsibility to achieve improved transparency in internal financial information systems and external reporting to the President, OMB and Congress.

FUTURE CHALLENGES FOR DOD TRANSFORMATION

It may be observed that no Secretary of Defense can alone manage an enterprise as complex as the Department of Defense. And in fact, it is important to point out that in the past and presently, input to program and budget decisions in DOD is provided by the Deputy Secretary of Defense and staff, the position in DOD that bears a large part of the responsibility for actually attempting to manage the DOD. In addition, the Under Secretary Comptroller, the Under Secretary for Acquisition, Transportation, Logistics, and Assistant Secretaries for other OSD functional areas including program analysis and evaluation, policy, force management and personnel, legislative affairs, health, reserve affairs and others, all provide views and analyses to guide program and budget decision making.

Regarding the future of PPBES as an element of DOD business transformation, despite some apparent weaknesses in application, and given the promise of the reforms implemented in 2001-2004, it is likely that the system will continue to produce budget requests for defense on a regular and reliable schedule. It will continue to provide a structured context for policy negotiation and decision making for the service branches and the Office of the Secretary of Defense. It will supply the framework for integrating the views of the Joint Chiefs of Staff and the military departments and services and a template against which the assessments and recommendations of other defense and security agencies may be compared, e.g., those of the National Security Council, the Defense Intelligence Agency, the State Department, the Central Intelligence Agency and others.

Analysis of the manner in which PPBES operates provides a basis for assessing criticisms of defense policy setting and budgeting/resource management as well as policy and process reform proposals such as those implemented by the Bush administration in the early 2000s. We may ask whether the most recent reforms will be permanent and will be taken up by succeeding presidential administrations, whether and the extent to which they improve planning and budgeting, and what the likelihood is for further PPBES reform. Any administration in office in 2005 and beyond will need to have confidence that the defense resource decision system used by DOD can match the requirements of an environment in which the U.S. continues to wage a long-term world war on terrorism while responding to the inevitable contingencies that arise continuously to confront national defense resource planning and budgeting.

While Secretary of Defense Rumsfeld and his staff, and the military department secretaries have made significant PPBES changes, much of the process still operates now as it did under previous administrations. However, because the new processes authorized in 2003 are still under implementation, we must wait to see whether this most recent round of change may be termed comprehensive rather than incremental as has typified reform under various administrations prior to 2001.

From this perspective it must be observed that the task of defense resource planning and budgeting is part managerial and part political. Thus, from our perspective, no amount of budget process, PPBES or business process transformation reforms will reconcile the different value systems and funding priorities for national defense and security represented by opposing political parties, nor will it eliminate the budgetary influence of special interest politics. Value conflict was evident in the early 1980s when public support combined with strong Presidential will and successful budget strategy produced unprecedented peacetime growth in the defense budget. And despite the implementation of deficit control reforms since 1985, constituent and special interest pressures made it difficult for Congress and the DOD to realign the defense budget. While we applaud the

changes made in 2001-2004, reform of defense budgeting process does not necessarily mean that producing a budget for national defense politically will be much easier in the future than it has been in the past. Threat perception and assessment, and politics drive the defense budget, not the budget process itself (McCaffery and Jones, 2004).

We also may observe that a sequence of annual budget increases for national defense in the early and mid-2000s have not brought relief to many accounts within the DOD budget. At the same time, requirements of fighting the war on terrorism have intensified the use of DOD assets and the costs of military operations. Because the need for major asset renewal (reconstitution) has been postponed for too long, new appropriations have gone and will go in the future largely to pay for new weapons system acquisition, and for war fighting in battles against terrorism. What this means is that accounts such as those for Operations and Maintenance for all branches of the armed services will continue to be under pressure and budget instability and restraint will remain a way of life for much of DOD. This places a heavy burden on DOD leadership, analysts and resource process participants to achieve balance in all phases of defense budgeting and resource management. It is exactly such pressure that leads to one of the most challenging barriers to transformation; convincing the warfighter that it is worth his or her time and precious appropriated funds to invest in transformation of financial management systems. Most warfighters simply do not have the time, or inclination, to focus on reforming their business systems and the argument must be compelling and in terms of impact on their operations. Mr. Jimaye Sones, Comptroller of the Defense Information Systems Agency (DISA), may have stated it best when saving "five dollars saved by cleaning up the accounts payable system (for example), means five (additional) dollars that goes to the warfighter (Defense Finance 2005). That said, it becomes clear that while many defense and government officials publicly state there are hundreds of millions of dollars that can likely be saved annually by reforming our finance and accounting systems, the warfighter simply can no longer ignore or fail to support such transformation efforts. They must however, also ensure they no longer continue to support the thousands of duplicative and unreliable 'legacy' systems that still exist throughout the department. That's not to say, as some have advocated, that the DOD should create a single defense-wide system. What we suggest here is that there is clearly low-hanging fruit that, when harvested, will result in better funding on the front lines and ultimately improved support to the warfighter. In fact general John W. Handy, USAF, (former) Commanding General of the U.S. Transportation Command captured the situation most clearly when saying "there's rotting fruit on the ground that must first be addressed." Handy is a well-known transformational leader within the DOD who aggressively went after systems redundancy within his world-wide command.

With respect to transformation initiatives beyond improved financial management systems and processes and PPBES implementation, considerable change is in progress as explained in this paper. In the area of acquisition and logistics, transformation to what is termed spiral (continuous and simultaneous) and "sense and respond logistics" processes is underway. Improving information technology for management of inventory systems in real time to permit managers to know how much and where material is located on a worldwide basis also has been undertaken and is fully operational in the Air Force. In information technology, network centric combat information systems are under development in all of the military services. Such systems coordinate various types of data to a single command point in real time to improve the ability to see and manage military operations.

Applications of network centric IT in the area of business management may be the next step, although it is costly. However, it is one approach to coordination of decision making in flatter, network types of organization (i. e., hyperarchies) rather than through traditional bureaucratic forms of organizing to solve complex and sometimes "wicked" problems (Jones and Thompson, 1999; Roberts, 2000). Given the vital importance of information technology it is essential for DOD to address the knowledge, skills and abilities of its workforce to fully leverage the potential of IT and other business management methods.

These and the other initiatives identified in this paper are only a sample of the many transformational measures currently under some degree of implementation and experimentation in DOD. Given the progression from the industrial age to the age of technology in an increasingly global commercial marketplace, capitalization on new technologies is a key part of transformation to create "knowledge warriors" for significant battlefield advantage. Most of these initiatives are not under implementation independent of budgets and cost accountability -- virtually all are expected to reduce costs while cutting cycle time with either no diminution of quality of service to customers or improvement of quality. The business models and plans developed for these initiatives are mirrored on business processes tested and used in the private sector. Transformation also stresses continuous learning and the creation of self-learning organizations that can observe and orient themselves more quickly to new threat environments, then make decisions and take action to learn more quickly by trial and error in a cycle of restructuring, reengineering, reinvention, realignment and rethinking both means and objectives (Jones and Thompson, 1999). Further, critical issues related to change management, organizational culture, organizational design and appropriate institutional alliances are raised whenever DOD reform is significant.

Overall, the major challenge facing DOD in the period 2004-2008 is how to continue to modernize the fighting forces and continue the pace of business transformation while paying the high price of waging the war on terrorism. In essence, what DOD must fund and support in the short-term must be traded-off against longer-term investments to improve both business management efficiency and force readiness. Given this dilemma, key business management challenges faced by DOD leadership in the next decade include the following:

- How will DOD business transformation keep pace and be coordinated with the transformation of military affairs?
- How will DOD re-capitalize the force structure within limited budgets?
- How can DOD acquisition and procurement incorporate new technologies while producing and fielding war fighting and support assets more quickly, especially given tight budgets in the foreseeable future?
- How will new cyber-management technologies and methods (e.g., net-centric warfare systems) be advanced within the limits of resource constraints?
- How will DOD manage the transition of logistics support (e.g., toward spiral logistics) to the new environment of the war on terrorism?
- How will DOD improve its accounting and financial management systems to enable analysis of performance and results related to costs, and provide the basis for better internal and external reporting?

These and other challenges face DOD officials in the next four years.

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NOTES

1. DOD is the largest government employer except for the Postal Service. Changes to HR practices in defense are observed critically throughout the federal government for potential government-wide applicability. In addition, personnel system reform authority similar to that authorized for DOD was provided by Congress to the Department of Homeland Security and is under wide scrutiny.

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