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DEPARTMENT OF DEFENSE

Introduction

This chapter provides a brief overview of the Office of the Secretary of Defense (OSD) and Joint Chiefs of Staff (JCS) organizations, processes and procedures that have the greatest effect on the Services' modification and upgrade programs. It describes the current

environment and furnishes some working definitions. Next it describes the impact by requirements generation and acquisition systems on modifications and upgrades. It concludes with a summary of recent policy changes that affect the Services' modification and upgrade programs.

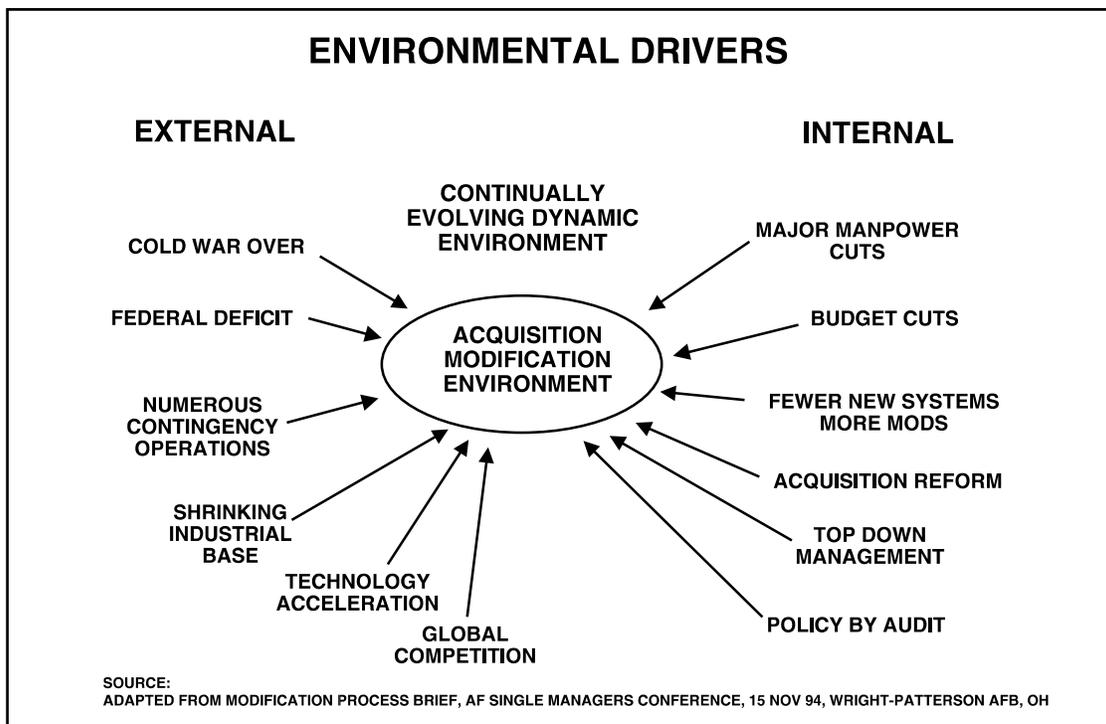


Figure 2-1. Environmental Drivers

Environment

The end of the Cold War was projected to usher in an era of greater worldwide stability; however, just the opposite seems true. The U.S. military is deployed in more places and involved in more conflicts now than at any time since World War II. Superimposing itself on a more demanding global environment, DoD itself is undergoing its widest breadth of change ever. The DoD force structure and budgets are down about 33 percent since 1985 and procurement is down 65 percent.¹ At the same time all Soldiers, Sailors, Marines and Airmen are facing greater demands. Concurrently, scrutiny and changes are occurring in investment and business practices. The U.S. military strategy of technological supremacy in arms is now challenged by the global marketplace. This suggests that, in the future, critical defense technologies may only be found outside the U.S. military industrial complex. What will be the U.S. access to these technologies? Quoting from General John Shalikashvili, Chairman of the JCS, "Today, those of us who serve in the Armed Forces are caught up in the coincidence of three revolutions...the end of the Cold-War...defense budgets are declining along with military resources...the military technical revolution..."² He makes the point that the loss of the U.S. preeminent threat, i.e., the Soviet Union, coupled with a defense budget that at the turn of this century will be half its 1988 high-water mark, and the acceleration of technology and its global availability, mean drastic changes to how the DoD plans, programs and executes its investments for the future.³ This is the context we found as we started to examine the business practices of how DoD does modifications and upgrades.

DoD Perspective

In the past, modifications and upgrades seemed to be of minor interest to the DoD leadership but that interest is markedly increasing. To illustrate the point, one of the most far reaching acquisition reforms that took place in the early 1990's, the issuance of the DoD 5000 series, did not specifically address modification or upgrades. A myriad of other policies, directions and instructions became obsolete with the February 1991 release of the DoD 5000 series. The idea was to put all the important top-level direction in one place, thus hopefully streamlining acquisition management. These documents detailed the department's overall strategy for acquiring or improving a weapon system by "...integrating the efforts and products of the Department's requirements generation; acquisition management; and planning, programming and budgeting systems."⁴ Still, by not containing specific instructions on modifications and upgrades the policy produced confusion among the components. The DoD attempted to clarify the series intent by adding definitions and acquisition process and procedure instructions in Change One to DoD Instruction (DoDI) 5000.2 (Part 3), February 1993, titled *Milestone IV Major Modification Approval*. For a complete review of this partial instruction see Appendix A.

DoDI 5000.2 Definitions

Modification: A modification is a change to a system (whether for safety, to correct a deficiency, or to improve performance) that is still being produced.⁵

Upgrade: An upgrade is a change to a system (whether for safety, to correct a deficiency, or to improve performance) that is out of production. Upgrades are part of

the Milestone 0 decision process.⁶

Major Modification: A modification that in and of itself meets the criteria of acquisition category I (ACAT I) or ACAT II or is designated as such by the milestone decision authority (MDA). Major modifications require a Milestone IV decision. Unless the decision to modify results from one of the alternatives, it is considered part of the Milestone I decision process.⁷

Implications

Adding these definitions for modifications, upgrades and major modifications did not allay all the components' concerns. Many of the interviewees felt the new instruction made doing upgrades too onerous. Since the upgrade definition does not distinguish between "major & minor", all upgrades regardless of size or complexity now have to start at Milestone 0. This seems odd at a time when the service life of more and more systems is being extended because no replacement systems are on the horizon. This "one size fits all" process for upgrades does not allow managers to use their common sense. It clearly adds administrative workload and delays the fielding time for upgrades.

Modifications and Upgrades, Part of the DoD Investment Strategy

Modifications and upgrades programs have always been an investment option available to DoD. The importance seems to ebb and flow in proportion to the strength of the DoD budget. In lean times, when investment dollars are scarce for major new programs, modifications and upgrades grow in precedence. Also, as defense dollars dry up, the military looks for low cost ways to extend the lives of existing systems. Today, DoD is spending a smaller portion of the budget on

investment with more dollars flowing into operations and readiness. Reducing the cost of operating existing force structures can turn this flow around. Dr. Paul Kaminski, Under Secretary of Defense for Acquisition and Technology (USD(A&T)), makes this point when he says, "...As we purchase new and modified systems, we will stress reduction of overall life-cycle cost [LCC].... To the extent DoD maintains systems longer, we must increase the focus on reducing the cost of ownership for the remaining service life of our current systems."⁸

Resource Allocation in DoD

The three key decision making processes that lead to or result in resource allocation for modifications and upgrades are Requirements Generation, the Acquisition System and the Planning Programming Budgeting System (PPBS). As the DoDD 5000.1 states an effective interaction of these systems is essential.

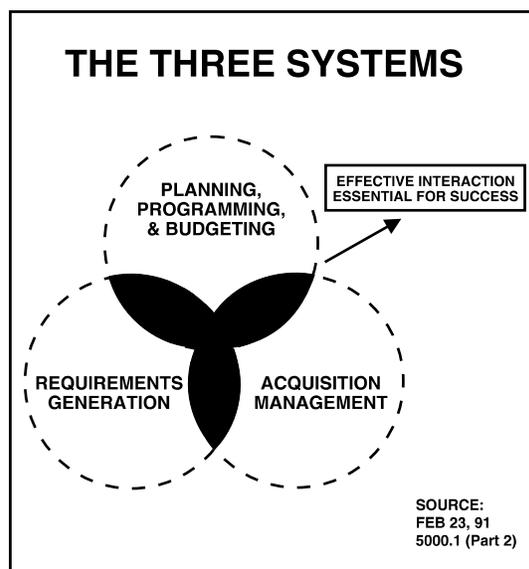


Figure 2-2. The Three Systems

Requirements Generation

At the top of the requirements generation process in DoD is the Joint Requirements Oversight Committee (JROC). The JROC membership includes the Vice Chairman, JCS and the Vice Chiefs of Staff from the Services. The JROC charter is to review all (ACATI, or potential ACATI) Mission Need Statements (MNSs) and review major programs prior to acquisition milestone decisions. Consequently, for the purposes of this report, JROC involvement or influence apply primarily to major modifications or ACATI upgrade MNSs. Until recently, this group met monthly and either approved or disapproved MNSs and sent them on to USD(A&T). If the JROC recommends approval the documents are forwarded with a joint priority designation. Ostensibly, the

JROC was a rubber stamp, it approved individual Service requests as long as the need could not be met with a non-material solution. This has changed.

Expanded JROC Duties

Recently, the Chairman, JCS (CJSC), charged the JROC with greater involvement in the resource allocation process. Specifically the JROC now includes recommendations that effect both planning and programming. The CJSC goal was to tap the corporate wisdom and expertise of the Senior Military Officers to find the best way to meet DoD's needs and to achieve a clearly expressed consensus about where DoD is going.⁹ The JROC responded by setting up a more structured review process for examining needs. By changing the structure, the

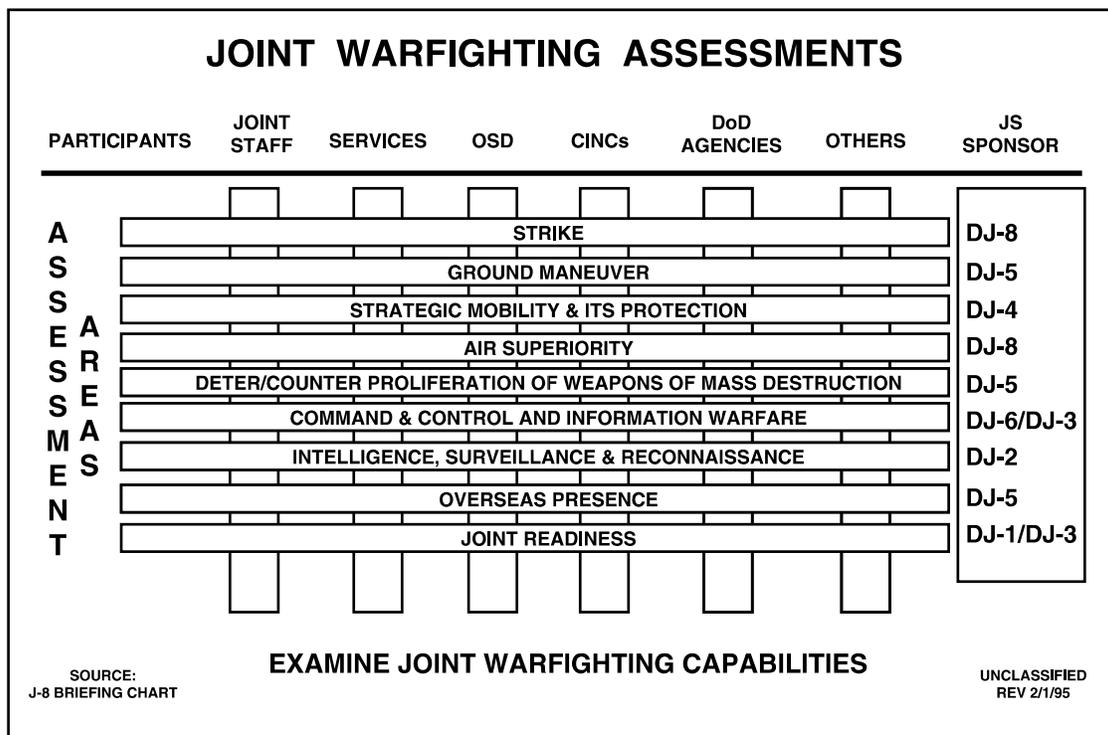


Figure 2-3. Joint Warfighting Assessments

JROC wants to cut down service rivalries, eliminate unnecessary duplication of effort and/or redundant systems and to bubble up the best possible requirements to meet current and future threats. The new structure divides military missions into nine Joint Warfare Capability Assessment (JWCA) areas. Each assessment area has a primary Joint Staff advocate/sponsor(s) (see Figure 5-3). It is the sponsor's job to, twice a year, draft the area's assessment issues and formulate options for meeting current and future needs. These issues and options are coordinated with the joint staff, services, OSD, and other defense agencies. Then briefings are presented to the Commander-in-Chief(s) (CINCs), specified commanders and service chiefs for feedback, revision and consensus. In one half of the cycle, the final product is submitted as the Chairman's Program Recommendation with a goal of influencing the Defense Planning Guidance (DPG). In the other half of the cycle the final product is submitted as the Chairman's Program Assessment (CPA) with a goal of influencing the President's budget submission. These agreed-to issues and options become the microscope through which new MNSs or operational requirements documents (ORDs) are examined. For example, now, before the JROC looks at a service MNS, the sponsor must have coordinated it with the other components and Joint Staff. For approval, it must clearly benefit DoD's overall warfighting capability and be affordable. The CJSC provides a good summary when he says, "...we have expanded the scope and significance of the JROC discussions and linked them to CPA which, in turn, will fulfill its Congressionally mandated destiny to articulate the joint, collective position of the Services with respect to joint requirements and readiness."¹⁰

The expanded JROC duties described above were a cause of concern to some of the people interviewed. One of their concerns was that the Joint Staff might start interjecting themselves into the decision making process for less than major programs. A consensus of feelings were the JROC involvement in less than ACAT I programs would slow down an already slow process and tend to centralize decision making when it should be further decentralized.

USD(A&T) responsibilities

The USD(A&T) receives the MNSs from the JROC and decides when to hold a Defense Acquisition Board (DAB) and whether to approve a Milestone 0 (Concept Studies decision), or a Milestone IV (Major Modification program). At Milestone 0, this decision marks the first interaction between requirements generation and the acquisition system.¹¹ Today, program affordability is a critical issue for a new start or major modification approval.

Acquisition System

Big changes are stirring in acquisition management policy and procedures. Modifications and upgrades use acquisition procedures, which will also change. It is easy to understand why, when one reads what the current Secretary of Defense (SECDEF), the Honorable William J. Perry, has to say about the DoD Acquisition System, "...DoD has been able to develop and acquire the best weapon and support systems in the world. DoD and contractor personnel accomplished this feat not because of the system, but in spite of it."¹² This indictment of the acquisition system has everyone in the DoD acquisition community scrambling to revisit their practices. The OSD reengineering method of choice for the acquisi-

tion system is the Process Action Team (PAT). These teams are comprised of a crossfunctional group of subject experts chartered to propose changes to reduce acquisition costs, streamline the acquisition process and/or eliminate non value added tasks. To date, there have been six SECDEF, USD(A&T) or Deputy Under Secretary of Defense, Acquisition Reform (DUSD(AR)) commissioned PATs, each looking at a different acquisition process. All PAT reviews have completed and some of the recommendations are being or will be implemented. The components are also using PATs to bubble up reform initiatives to OSD or to reform component processes. Still, the PAT process is only one tool necessary for reengineering. General (Retired) Bill Creech, a highly regarded military leader and business consultant, makes the point that to be a world-class organization requires excellence in the management of five interlocking areas (pillars): product, process, organization, leadership and commitment.¹³ The current emphasis on using process as the catalyst for reengineering DoD is a good starting point, but it will fail if the other elements General Creech talks about are not reengineered.

How will the implementation of the PAT recommendations affect modifications and upgrades programs? It is too early to tell. Still, one thing the components do not want is an increase in OSD oversight. In fact, most of the interviewees consider the current limited OSD involvement in ACAT II, III & IV modification and upgrade programs an advantage.

The OSD acquisition oversight of ACAT II, III & IV programs that does occur usually takes the form of budget reviews. The OSD comptroller's staff examines the obligations and expenditure rates for these programs

against the OSD goals. If either the obligation or expenditure rate is below the OSD goal, then the service must provide rationale and "get well" plans. Traditionally, modification and upgrade programs have done poorly in meeting the OSD goals. This puts modification and upgrade programs funds at risk because Congress takes a dim view of DoD not using the funds they have appropriated in a timely manner. If modifications and upgrade programs are to continue to be viewed as a cheaper, less risky and faster way to meet a deficiency, then the services need to improve the execution of funds.

Summary

During the writing of this chapter, DoD changed the key tenets of the policy that governs major modifications and upgrades. These changes are included in a Memorandum titled, *Reengineering the Acquisition Oversight and Review Process*, 28 Apr 95 (see Appendix B for a complete text). While the timing of these changes were inconvenient to the authors, they seem to offer some substantial benefits to the acquisition workforce in general over the previous policy. However, because this new policy is directly applicable to ACAT I programs, exactly how it will be implemented is a guess. Still, two changes pertinent to modifications and upgrades programs are worth mentioning. These changes are the deletion of Milestone IV, Major Modification Approval decision, and a flexible milestone starting point for modifications and upgrades, i.e., Milestone 0, I, II, or III depending on which milestone the MDA believes best fits the work to be completed.¹⁴ The impact of deleting Milestone IV decisions for "Major Modifications" per se seems minor, however, allowing the PM to recommend and the MDA to choose the right place (milestone) to begin an **upgrade** is

considerable. This change allows the services to cut significant amounts of administrative burden and time consuming workload by starting an upgrade at the “right place”. The interviewees describe many of the upgrade Milestones 0 and 1 efforts and deci-

sions as “paper chase” activities. They view the relative value of these activities as extremely low. Cutting low value workload is exactly what is needed as resources continue to decrease.

ENDNOTES

1. Kaminski, P. G. USD(A&T). (1995, Jan 27). Acquisition Challenge: Affordable Technological Supremacy. (Remarks at the Industrial College of the Armed Forces Fort McNair). Washington, DC.
2. Shalikashvili, J., Gen., CJCS. (1994-1995, Autumn/Winter). A Word From the Chairman. *Joint Force Quarterly*, 4-8.
3. Ibid.
4. DoDI 5000.1, p.3. (1991, Feb 23). Washington, DC.
5. DoDI 5000.2 Part 3, p. 28. (1993, February 26). Washington, DC.
6. Ibid.
7. Ibid.
8. Kaminski, P. G. USD(A&T). (1995, Jan 27). Acquisition Challenge: Affordable Technological Supremacy. (Remarks at the Industrial College of the Armed Forces Fort McNair). Washington, DC.
9. Shalikashvili, J., Gen., CJCS. (1994, Summer). JROC: Harnessing the Revolution in Military Affairs. *Joint Force Quarterly*, 55-57.
10. Ibid.
11. DoDI 5000.1, Part 2. (1991, Feb 23). p. 2-5
12. Perry, W. J., SECDEF. (1994, March 5). Acquisition Reform: A Mandate for Change. *Defense Issues*, 9, (10), 1-5.
13. Creech, B. (Gen. Ret.) (1994). *The Five Pillars of TQM: How to Make Total Quality Management Work for You*. Dutton, NY: Truman Talley Books.
14. Kaminski, P. G., USD(A&T). (1995, April 28). *Reengineering the Oversight and Review Process* (Office of the Under Secretary of Defense (Acquisition and Technology)). Washington, DC.

