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The defense acquisition process is distressed by a complex mixture of many key stakeholders, complicated processes that need to be coordinated among those many stakeholders, multiple channels of communication, and, finally, the intellectual and analytic challenge of translating the nation's overall national security needs—the "inputs" of higher guidance—into "outputs" of fielded weapons systems and equipment in a timely and cost-effective manner. DOD continues to conduct studies and implement recommendations from previous studies that are bringing significant reforms to the acquisition process, but there are still much work to do. Particularly, determining how to implement some of the improved changes recommended from recent studies, such as transitioning the Defense Acquisition System from a "program-centric" model to a "portfolio management model" and/or fully implementing the Middle Tier Acquisition process.

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Improving Efficiency in the Department of Defense Acquisition System and Finance and Program Management Offices

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Executive Summary

Title: Improving Efficiency in the Department of Defense Acquisition System and Finance and Program Management Offices

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Thesis: The adaptation and expanded use of the interim Middle Tier Acquisition reform currently being tested can potentially provide significant improvements to the Defense Acquisition System (DAS) by removing overlapping layers of oversight, inflexible regulatory constraints and processes, and redundant performance and reporting requirements that will ultimately assist the Financial Management and Program Management Offices in executing tasks more timely and efficiently. This will result in the Department of Defense's (DOD) ability to keep pace with technological advances and field equipment to the military faster at less cost to the United States (US) taxpayer.

Discussion: The acquisition process is distressed by a complex mixture of many key stakeholders, complicated processes that need to be coordinated among those many stakeholders, multiple channels of communication, and, finally, the intellectual and analytic challenge of translating the nation's overall national security needs—the “inputs” of higher guidance—into “outputs” of fielded weapons systems and equipment in a timely and cost-effective manner. Each department in the DAS, along with its own set of complicated bureaucratic processes, are fused into an overall system. A change made by any one department affects the operation of the other two departments, and any change most likely affects cost (funding allocated to a particular program), schedule (aligned with funding goals, the time that is required to field a system) and performance (the key characteristics, specifications and parameters that a system must achieve).

In order for the system to be effective as designed, there has to be continuous interaction among stakeholders and timely flow of information from higher organizational levels, such as from the President and Congress to DOD, senior military leaders, and ultimately to the Finance Department (FD) and Program Management Office (PMO) that translates changes in strategies into the acquisition of equipment and the subsequent allocation of funding to the various military departments where equipment and services are acquired.

Conclusion: The interim Middle Tier Acquisition Reform currently being tested on smaller programs is showing improvement of some of the main challenges that affect the DAS, particularly, the PM has authority in the decision making process and helps to determine which regulatory documents and requirements are not necessary to achieve program success, saving laborious time on tasks that provide minimal benefit. Furthermore, rapid prototyping allows requirements to be better defined before they are finalized and submitted to the PM for execution; thereby, avoiding the need for additional funding often required due to ambiguous requirements, cost overruns, schedule delays and performance failures.

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1. Introduction

The DAS responds to the needs of the US President and military departments in the acquisition of equipment and services in order to accomplish the requirements mandated in the National Defense Strategy and National Military Strategy.¹

The DAS comprises three departments: 1. The Joint Capabilities Integration and Development System (JCIDS); 2. The Planning, Programming, Budgeting, and Execution (PPBE) System; and 3. The Defense Acquisition Management System.² Each department has its individual set of laws, policies and processes that must interact effectively throughout the acquisition process in order to successfully meet the needs of military users in the time requested based on an approved budget authorized and allocated by Congress. Figure 1 below is a depiction of how the three DOD Acquisition processes are interrelated.



Figure 1. Defense Acquisition System³

¹GAO-15-466, Weapon System Acquisitions: Opportunities Exist to Improve the Department of Defense's Portfolio Management, August 2015, <https://www.gao.gov/assets/680/672205.pdf>

²Moshe Schwartz, Specialist in Defense Acquisition Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process, May 23, 2014, 3.

³AcqNotes, Acquisition Process, <http://acqnotes.com/acqnote/acquisitions/acquisition-process-overvie>

Many recognize that DOD's acquisition process is flawed, and the stakes are higher as we enter great power competition and need to field better or new types of weapons (ballistic missiles, aircraft, submarine upgrades, etc.) in order to maintain our military technological advantage and to outpace rival nations' innovations. We can no longer afford to "admire the problem" of DOD acquisition. Reforms now are not just a matter of avoiding waste, but critical to the US military's ability to deter, and if necessary, fight peer competitors. This paper will focus on the acquisition of equipment, by first laying out an analysis that outlines some of the problems, finally, offering recommendations for improvements.

2. Background

With the end of World War II (WWII) and the challenges that it imposed on the separate US military forces, President Truman judged that the US military needed to be restructured as a united, standing force and as a unified department. A unified approach would avoid bureaucratic stove pipes and better prepare forces ready to deploy at any time.⁴ President Truman further realized that unification of the military departments was necessary to address some of the shortfalls in military operations that surfaced during WWII, while at the same time offer opportunities for reducing the defense budget.⁵ Thus, the National Security Act of 1947 was established to create the Department of Defense which replaced the War Department, and addressed the establishment of the new Air Force.⁶ In order to manage the multiplicity of equipment needed to equip and modernize the military for the atomic age, the new DOD

⁴Jan Goldman, "Establishing Deniability and the Signing of the National Security Act of 1947." *International journal of intelligence and counterintelligence* 32.3 (2019): 524–541. Web.

⁵Ibid, 527.

⁶Ibid, 527.

constructed the three departments (JCIDS, PPBE and DAS) to manage this complex workload and the processes under which they operate.⁷

Moving forward to recent history, each of the three department's processes are driven by guidance and instructions that further contribute to the complexity of synchronizing decisions from each department.⁸

According to the US General Accounting Office (GAO) report in 2015, "The DOD has 78 major weapon system programs underway with a total estimated acquisition cost of over \$1.4 trillion."⁹ The range of equipment needed to equip the military during peacetime and wartime can include everything from hypersonic missiles, cyber security systems, aircraft, armored trucks, and ships to artillery, non-lethal weapons, maintenance services, cold weather equipment and fuel.¹⁰ Oftentimes, while equipment is being procured through the various processes of the acquisition system, research and development efforts are ongoing for existing or future military needs.¹¹

Per the Section 809 Panel on the DOD, "This structure has produced an overall decision support system that is fractured, disjointed, unsynchronized, and stove-piped, with objectives based on individual stakeholder communities' equities."¹²

3. Acquisition Process

In most cases, the need for equipment is identified by the warfighter and validated through the JCIDS process. Once requirements are validated through the JCIDS process, the

⁷Moshe Schwartz, Specialist in Defense Acquisition Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process, May 23, 2014, 3.

⁸Ibid, 3.

⁹GAO-15-466, Weapon System Acquisitions: Opportunities Exist to Improve the Department of Defense's Portfolio Management, August 2015, <https://www.gao.gov/assets/680/672205.pdf>

¹⁰Ibid, 13.

¹¹Ibid, 28.

¹²Section 809 of the 2016 NDAA, Pub. L. No. 114-92, as amended by Section 863(d) of the FY 2017 NDAA, Pub. L. No. 114-328 and Sections 803(c) and 883 of the FY 2018 NDAA, Pub. L. No. 115-91.

requirement transitions to the PMO (the third phase of the acquisition process); however, the PMO begins to work with the Deputy Commandant, Combat, Development and Integration (DC CD&I) office and other stakeholders during the JCIDS requirements generation phase for a new weapon system or service long before receiving the requirement. The DC CD&I identifies performance criteria, measures of effectiveness, and other system attributes in the form of an Initial Capability Document, Capability Development Document and Production Development Document.¹³ The issuance of each document is dependent on the phase of the acquisition program managed by the PMO.

The FD and PMO works with the DC CD&I to develop budget requests that are submitted up the chain to military comptrollers, Chairman of the Joint Chiefs of Staff (CJCS), Secretary of Defense and ultimately Congress. After the President signs the annual Budget and Congress authorizes and appropriates funding through National Defense Authorization Acts (NDAA), funding is flowed down to applicable PMOs through the FD to acquire the equipment. Acquisition can involve research and development, design, modeling and simulation, prototyping, testing, production, training, safety assessments, information security, sustainment, disposal and the conduct and completion of various milestones and technical reviews. Each of these steps require continual coordination and funding through the PPBE process in order to be executed.

The timely management and coordination of funding requirements between the FD and PMO, such as the commitment, obligation, expenditure and reporting of funds are foundational in meeting cost, schedule and performance requirements. The Program Manager (PM) is mandated to execute programs in accordance with (IAW) statutory instructions in the DoD Directive 5000.01, The Defense Acquisition System and DoD Instruction 5000.02, Operation of

¹³Chairman of the Joint Chief of Staff Instruction, 5123.01H 31 August 2018, D-14.

the Adaptive Acquisition Framework.¹⁴ Under the DOD 5000.02 process, a program could take up to ten years to be fielded. The Acquisition Program Baseline (APB) is the Program Manager's "contract" with the Milestone Decision Authority (MDA) on estimated cost, schedule and performance targets. The PM must report breaches of the APB to the MDA as outlined in DOD 5000.02.¹⁵ The DoD 5000.02 further outlines the overall planning for how acquisition programs are conducted, such as the several milestones and step-by-step, extensive serial phases that each program will most likely advance through.¹⁶ The FD executes its roles and responsibilities IAW statutory instructions in DoD 7000.14-R, DoD Financial Management Regulation.

4. Challenges within the DAS

Just as the nature of great power competition and warfare is becoming more challenging, the US armed forces also face the daunting prospect of likely cuts in defense budgets. Together, these twin challenges place an urgent premium on changing our complex and, at times, wasteful and slow procurement processes. An extensive amount of research into this complex system that has been and continues to be studied by various scholars, businesses and government entities has identified several factors that likely affect cost, schedule and performance goals. Several legislative acts have also been enacted as a result of some of the findings.¹⁷

Some of the major factors that affect cost, schedule and performance are multiple layers of oversight, cumbersome reporting requirements, changes in requirements, priority of funding, budget cuts, rigid policies, requirements creep, lengthy contract awards and immature

¹⁴AcqNotes, Acquisition Process, <http://acqnotes.com/acqnote/acquisitions/acquisition-process-overview>.

¹⁵Ibid, 1.

¹⁶Ibid, 1.

¹⁷National Contract Management Association, *A Portfolio Management-Based Acquisition Model*, Brian Shultz, March 02, 2020, file:///C:/Users/1272290780/Documents/MMS/MMS%20Paper/Shultz_Portfolio%20Mgmt.pdf

technology, in addition to many more.¹⁸ These factors contribute to the complexity of managing the system (some more than others) at the higher level which significantly impact the FD and PMO keeping pace with these changes that affect planning, budgeting, obligation, and execution of funding at the working level where equipment is fielded. The disjointedness of the three organizations in the DAS due to their different policies and procedures contribute significantly to the myriad of challenges in the DAS, which ultimately impacts the military's readiness and ability to get the right weapons and equipment when needed, be trained effectively, sustain the equipment, and ultimately fight and win wars.

5. Shortfalls in Previous Reform Efforts

Before offering new ideas for improving the defense acquisition field, we first need to understand some of the reasons previous attempts fell short. This paper offers cautionary examples in its examination of the origins and execution of some programs studied by DOD in an effort to identify areas of improvement and implementation of those reforms. For example, the GAO submitted a report to the House of Representatives in 2001 on DOD's management of high risk contracts, specifically, the acquisition of the Standard Procurement System (SPS).¹⁹ The SPS was acquired as a commercial item to replace legacy contract management database systems with the goal of simplifying the contracts process.²⁰ Normally, commercial items do not have to meet many of the requirements of the DAS, specifically DOD 5000.02, and contract requirements under Federal Acquisition Regulation (FAR) Part 15, which has more stringent cost

¹⁸Section 809 of the 2016 NDAA, Pub. L. No. 114-92, as amended by Section 863(d) of the FY 2017 NDAA, Pub. L. No. 114-328 and Sections 803(c) and 883 of the FY 2018 NDAA, Pub. L. No. 115-91, Volumes 1-3. <https://section809panel.org/media/updates/>

¹⁹GAO, Report to the Chairman, Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform, House of Representatives, DOD Systems Modernization, *Continued Investment in the Standard Procurement System Has Not Been Justified*, July 2001

²⁰Ibid, 5.

²¹Ibid, 5.

reporting and documentation requirements.²¹ DOD prefers the procurement of commercial items, where the technology has been matured and used in the market, if they meet the needs of the requirement and FAR Part 12. Because the technology has been developed, matured, tested and produced, procurement of commercial items offer several benefits to both the Government and contractor, one in which the Government can avoid upfront research and development costs while the contractor does not have to comply with FAR Part 15, certification of cost and pricing data, which can be very costly and time consuming.²²

Although commercial procurement has many advantages, the SPS program continuously failed to meet cost, schedule and performance requirements which the GAO report attributes to several issues, particularly, the failure of management to identify the scope of work that would be required to meet the Government's needs and that the benefit of procuring the system would not outweigh the costs incurred.²³ Oftentimes, commercial items have to be modified to meet the Government's requirements, which could lead to the item costing more than it would have through the FAR Part 15 extensive research, development and procurement processes.²⁴ The PM blamed failures on poor requirements and increased scope (requirements creep), which led to several unplanned iterations and subsequent additional costs.²⁵ According to the Program Manager, ...“knowing whether SPS is producing such value is not the PMO's objective. Rather, its objective is to simply acquire and deploy the system.”²⁶

²²Acquisition.Gov, Federal Acquisition Regulation Part 15, <https://www.acquisition.gov/>

²³GAO, Report to the Chairman, Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform, House of Representatives, DOD Systems Modernization, *Continued Investment in the Standard Procurement System Has Not Been Justified*, July 2001.

²⁴Ibid, 2.

²⁵Ibid, 3.

²⁶Ibid, 21.

The PM's interpretation of who is responsible for the value of systems being acquired is a concern of other scholars as well. According to Brian Shultz, Professor of Program Management and an Executive Coach at the Defense Acquisition University states that, "Measures of success that focus on outputs (e.g., c/s/p) may indicate some level of efficiency but not the value provided."²⁷ Determining the value of success would require metrics to measure investment costs over the actual cost, capability utility and effectiveness; however, as of this date, JCIDS has not developed criteria for measuring value. This is a concern for DOD when equipment is procured at a high cost that offers minimal utility. To add to this concern, the FD and PMO are obligated to expend resources in these cases where resources could be more effective in other areas of acquisition.

For further clarification on value, the PM receives a requirement through the JCIDS process that identifies system capabilities, performance criteria, and other system characteristics. If the requirement does not reflect expectations on value (which most often it does not), then the PM has validity in his argument. There are several technical reviews and milestones that occur during development and acquisition of equipment where this issue could be discussed.²⁸ The sooner these discussions are communicated the better it is for the FD and PMO to understand where strategy, funding and focus should be directed to prevent schedule delays in fielding equipment to the warfighter in the time requested and the possibility of procuring ineffective equipment, resulting in additional funding and a continued gap in capability that the warfighter needs. In these instances, the additional funding needed to procure and field the system could have been used for innovative research for state of the art weapons and capabilities that give our military an advantage over peer competition.

²⁷National Contract Management Association, *A Portfolio Management-Based Acquisition Model*, Brian Shultz, March 02, 2020, file:///C:/Users/1272290780/Documents/MMS/MMS%20Paper/Shultz_Portfolio%20Mgmt.pdf

²⁸AcqNotes, Acquisition Process, <http://acqnotes.com/acqnote/acquisitions/acquisition-process-overview>.

6. More Recent Reform Proposals—Congress Asks for a New DOD Panel

The replacement of legacy systems, such as with the SPS and innovation of new systems are major challenges for DOD. The DOD recognizes the intricacies involved in the DAS and is constantly researching ways to standardize the processes. Another example of their work regarding acquisition reform is, Congress in a 2016 National Defense Authorization Act, Section 809, appropriated funding to the Secretary of Defense to establish a panel of acquisition experts to conduct research and make recommendations on streamlining the defense acquisition process and regulations.²⁹ Specifically, the Panel was requested to, “(1) review the acquisition regulations applicable to the Department of Defense with a view toward streamlining and improving the efficiency and effectiveness of the defense acquisition process and maintaining defense technology advantage; and (2) make any recommendations for the amendment or repeal of such regulations that the panel considers necessary, as a result of such review...”³⁰ The Act further directed the Panel to submit a report on its findings and recommendations no later than two years after it was formed, with interim reports submitted during specified times.³¹

The Panel submitted reports in three volumes, Volumes 1-3, over the course of two years, with the final Summary Report, Volume 3, submitted in January 2019.³² The Panel highlighted several areas to be revamped, to include policy, regulatory and statutory changes, if DOD plans

²⁹Section 809 of the 2016 NDAA, Pub. L. No. 114–92, as amended by Section 863(d) of the FY 2017 NDAA, Pub. L. No. 114–328 and Sections 803(c) and 883 of the FY 2018 NDAA, Pub. L. No. 115–91, Volumes 1-3. <https://section809panel.org/media/updates/>

³⁰Ibid, Volume 2, 509.

³¹ Ibid, Volume 2, 509.

³² Ibid, Volume 2, 1.

³³ Ibid, Volumes 1-3.

to streamline its Acquisition System.³³ The Panel also provided recommendations and implementation strategies for each area where changes were proposed.³⁴ One area of significance is the recommendation to change the DAS from the current “program-centric process” to a “portfolio management process.”³⁵

Under the program-centric process, each military department receives requirements and acquires equipment based on needs specific to that department as outlined in Paragraph 3 above. Under portfolio management, the PM is directly subordinate to the newly established Portfolio Acquisition Executive (PAE) which would allow a joint review of equipment needs, priority, investment decisions and effectiveness at the PAE level.³⁶ For the PM, this would offer flexibility in conducting trade-offs among cost, schedule and performance within his portfolio of equipment to cover shortfalls from other programs, instead of allocated resources being restricted to a specific program, and would streamline the decision making and approval process.

According to the Panel, “Portfolio management enables decentralization by pushing authority and decision making to the lowest level practicable to allow for better management and coordination of warfighting capabilities acquired and sustained by empowered portfolio managers aligned to capabilities. This approach would allow DoD to make smarter investment decisions and ensure warfighters achieve necessary outcomes.”³⁷ By involving decision making at the lowest level, the FD and PMO would have the flexibility of prioritizing and resourcing programs within the portfolio instead of resources being bound to a specific program and early insight and input into managing program tasks, contractor performance, risks and funding

³⁴ Ibid, Volumes 1-3.

³⁵ Ibid, Volume 2, 9.

³⁶ Ibid, Volume 2, 28.

³⁷ Ibid, Volume 2, 7.

impacts. Because the PM is directly linked to the PAE, this would streamline the decision-making process, minimize the layers of oversight and reduce the occurrence of military departments procuring some of the same or similar equipment already in military inventory that offers minimal capability; thereby, saving research and development dollars and procurement funding, which would ultimately reduce cost, schedule and performance.³⁸ This savings could potentially result in less funding cuts and provide the FD and PMO better efficiency in managing program and funding goals.

Brian Shultz agrees with the Panel that maybe the age-old DAS still in place today no longer meets the need of DOD to provide state of the art technology to the military at a much faster pace than the current process allows, and he further supports the transfer from programmatic management to portfolio management.³⁹ Shultz states, “This program-centric paradigm has been in place for decades and drives the behaviors in all aspects of defense acquisition, including requirements, funding, policy and acquisition decisions. Is this still the right model in today’s environment? Are we investing in the right things and reacting fast enough to change? The short answer is “no,” and it is imperative that we change to a portfolio-based acquisition model.”⁴⁰ Shultz further adds that, “To achieve faster cycle times and deliver better outcomes, some observers, including the Section 809 Panel on Department of Defense (DOD) market-based adaptability, have recommended a major acquisition reform known as “portfolio management.”⁴¹

³⁸Ibid, Volume 2, 23.

³⁹Brian Shultz, National Contract Management Association, *A Portfolio Management-Based Acquisition Model?* March 02, 2020, <https://www.ncmahq.org/news/magazine-details/a-portfolio-management-based-acquisition-model>

⁴⁰Ibid, 2.

⁴¹Ibid, 3.

7. Industry's Approach to Portfolio Management

Industry's approach to portfolio management is similar to DOD's but appears to offer three practices that merit consideration for folding into DOD: a) relevant experts and stakeholders are involved at the beginning of product definition; b) continual research and development is conducted throughout the program's lifecycle to keep pace with rapid technology advancements; and c) the team can specifically allocate research and development funding for innovation projects. An analysis of Envestnet, Inc.'s business practices shows that they use a management process similar to portfolio management. Specifically, Envestnet states that, "After meeting with clients to identify challenges inhibiting their growth, Envestnet assembles "swat teams" consisting of relevant subject matter experts from departments throughout the organization. The swat teams develop customized training programs for each participating client's advisors and leadership teams, and work with them to overcome obstacles to achieving scalable growth."⁴² Because these teams include experts from various positions throughout the organization, information on product changes, funding priorities and investment opportunities are shared early which allows product flexibility, risk aversion, speedy responses and actions that will promote innovation and product effectiveness.

R. G. Cooper from Research Technology Management also supports portfolio management and thinks that because management commits early during research and development to programs throughout their lifecycle, it promotes flexibility, innovation and efficiency.⁴³ His concern is that a significant amount of programmatic funding is used on smaller programs that offer little to no utility when the equipment is ready for release, as with the

⁴² Envestnet, Inc., Practice Management Experts Join Envestnet to Help Independent Wealth Managers Improve Business Operations, New York [New York], 15 Apr 2015, <http://www.envestnet.com>

⁴³R. G. Cooper, 'Where Are All the Breakthrough New Products? Research Technology Management, 56(5), (2013), pp. 25–33. doi: 10.5437/08956308X5605123.

Government when equipment is ready to be fielded, that there is very little funding left for innovation.⁴⁴ In the Government's case, because the process is so lengthy due to various programmatic, regulatory and statutory requirements, oftentimes the user's need has changed before the equipment is fielded. The FD and PMO can get bogged down with so many smaller programs that oftentimes share the same funding line and basically have the same (in some cases tailored) requirements, processes and management oversight that larger programs have. Tracking and reporting funding data is very challenging in this scenario. To minimize this problem, Cooper recommends that ideas are placed in "buckets" and research is conducted continually with funding contributed over time to identify cutting edge technology which will offer greater flexibility in the management of programs.⁴⁵ Cooper showcases a German company named Badische Anilin und Soda Fabrik (BASF) that uses the "bucket" management process to assist with innovation. An example of BASF's "buckets" are as follows:⁴⁶ "BASF's Crop Protection Division implemented strategic buckets to overcome the problem of "too many little projects and not enough high-value ones," as the firm's CTO told me. Five types of projects were defined for the business unit:

- Research projects (fundamental science)
- Truly new products (innovation projects)
- Defensive projects (projects designed to protect market share)
- Offensive projects (projects designed to increase market share)
- Global projects (products targeted at world markets, as opposed to regional/domestic projects)"⁴⁷

⁴⁴Ibid, 26.

⁴⁵Ibid, 27.

⁴⁶Ibid, 27.

⁴⁷Ibid, 27.

Cooper went on to add that, “At BASF the business unit management team makes strategic decisions in advance about where resources go. In this way, the right balance of projects is maintained, including a higher proportion of innovative developments. Because allocation decisions are made by the team, it is more difficult for individual managers to "game the system" or distort allocations to match their own priorities.”⁴⁸ The “bucket” concept is somewhat similar to portfolio management of equipment that is managed by a team of experts that includes industry partners for continuous innovation that can be prioritized based on customer (warfighter) needs, mature technology and available funding.

8. Tentative Way Ahead—Moving from a Program-Centric to Portfolio Management Model

Transitioning the DAS from a “program-centric” model to a “portfolio management model” appears to be a viable step toward reducing many of the challenges that plague the current age-old system. Requirements written as capabilities versus program-centric (system) and bringing industry in early in the requirements generation process would allow industry to be more innovative by responding rapidly to technology changes. Another significant improvement would be reduced oversight from the Office of Secretary of Defense and Service Acquisition Executive as stipulated in DOD 5000.02 guidance, and transfer of MDA authority to the PAE and PM.⁴⁹ The PM and his team would have direct input to critical decisions regarding management and funding of the portfolio of equipment and streamlined information flow up and down the channels of any changes that could affect cost, schedule and performance so that resources can be adjusted faster, with less funding needed to off-set delays. Lastly, a Sustainment

⁴⁸Ibid, 27.

⁴⁹Section 809 of the 2016 NDAA, Pub. L. No. 114–92, as amended by Section 863(d) of the FY 2017 NDAA, Pub. L. No. 114–328 and Sections 803(c) and 883 of the FY 2018 NDAA, Pub. L. No. 115–91, Volume 2, <https://section809panel.org/media/updates/>

Program Baseline (SPB) to measure operational and sustainment costs, similar to the statutory APB that measures the PM's cost, schedule and performance estimates would account for lifecycle costs early.⁵⁰ The down-side to this approach is that the current DAS organizational structure and statutory funding policies that require below and above reprogramming actions would need to be revised to include the PAE's organizational structure and funding authority, which to date DOD still has not defined the process for implementation, which might take years (if at all) to achieve.⁵¹

9. Most Promising Way Ahead—Middle Tier Acquisition

Another reform recommended by the Panel through Section 804 of the 2016 NDAA, Pub. L. No. 114–92 that is currently being tested is Middle Tier Acquisition (MTA). The Panel describes MTA as “...programs that are intended to be completed in a period of 2 to 5 years. MTAs cover two acquisition pathways: (1) **rapid prototyping** – to provide for the use of innovative technologies to rapidly develop fieldable prototypes to demonstrate new capabilities and meet emerging military needs with the objective to field a prototype that can be demonstrated in an operational environment and provide for residual capability within 5 years of the development of an approved requirement; and (2) **rapid fielding** – to provide for the use of proven technologies to field production quantities of new or upgraded systems with minimal development required with the objective to begin production within 6 months and complete fielding within 5 years of development of an approved requirement.”⁵² MTA varies significantly from the traditional DOD 5000 directives and offers major improvements over the standard,

⁵⁰Ibid, Volume 2, 15.

⁵¹Ibid Volume 2, 24.

⁵²DOD Instruction 5000.80, Operation of the Middle Tier of Acquisition (MTA), December 30, 2019, <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/500080p.PDF?ver=2019-12-30-095246-043>.

rigorous, time-consuming methodologies.⁵³ The DOD authorizes the suitability of programs under MTA.⁵⁴

Some major improvements under the MTA pathway are that all programs regardless of dollar amount are eligible for MTA (although sufficient data is not yet available to determine if this process is suitable for high dollar ACAT programs); programs under MTA are exempt from DOD 5000 and JCIDS governance; and the layers of oversight are reduced to the SAE and PM.⁵⁵ The PM, in conjunction with the SAE, determines the type of regulatory documents needed and what statutory documents can be tailored to ensure that acquisition legitimacy is maintained.⁵⁶ Documents that provide little to no value are excluded.⁵⁷ JCIDS does not have to provide the traditional requirements documents normally submitted at the different milestones throughout the acquisition process. Instead, JCIDS and the PM work together, along with industry partners on defining requirements six months after the program begins and refine requirements throughout the rapid prototyping process, resulting in stable requirements and funding estimates.⁵⁸ Identifying and refining requirements upfront before development and production begin will greatly reduce cost overruns due to performance challenges on the back end.

⁵³Ibid, 4.

⁵⁴Ibid, 6.

⁵⁵Ibid, 1-15.

⁵⁶Ibid, 6.

⁵⁷Ibid

⁵⁸Ibid, 3.

A total of 35 military departments have been using the MTA process for both rapid prototyping and fielding since March 2019.⁵⁹ The Air Force reports that they have shaved off over three years of the acquisition process for one of their programs using the MTA process.⁶⁰

10. Conclusion

DOD continues to conduct studies and implement recommendations from previous studies that are bringing significant reforms to the acquisition process, but there are still much work to do, particularly in determining how to implement some of the changes already identified.

Commercial procurements can save a tremendous amount of time to both the Government and Contractor and funding if no substantial modifications are required; however, the commercial regulation does not apply to higher dollar acquisitions.

As with the Portfolio Management approach, decentralizing oversight to the PAE would reduce document review cycles and decision time-frames, and most importantly, would give the PM and FD insight into the portfolio of programs, providing early awareness of resources required and any changes to resources that would have a direct impact on schedule execution; however, DOD has yet to establish implementation guidance which will include an organizational restructure. Another significant challenge to implementation would be revision of current statutory funding laws and policies from a program-centric model to a portfolio management model.

An assessment of the MTA shows that this reform offers the best benefit to the Government. Authority and oversight is at the SAE and PM level, and the PM and his team have greater influence on the types of documents, controls, and resources needed to manage the

⁵⁹GAO-19-439 DOD Acquisition Reform, Report to Congressional Committees, Leadership Attention Needed to Effectively Implement Changes to Acquisition Oversight, June 2019, file:///C:/Users/1272290780/Documents/MMS/MMS%20Paper/GAO%20DoD%20Acquisition%20Reform.pdf

⁶⁰Ibid, 65.

program, to include unnecessary test requirements, which will reduce the time needed for review and approval of complicated technical documents that add little value, and schedule and costs associated with testing. This will provide the PM more time to focus on and respond quicker to challenges that affect cost, schedule and performance instead of being bogged down with tasks that offer minimal benefit to the success of the program. In addition, requirements will be proven out more before being transferred to the PM for execution and sustainment costs will be tracked the same as cost, schedule and performance estimates, which will reduce the potential of procuring the wrong equipment, fielding schedule, costs associated with requirements creep and sustainment costs. It will also provide the PM more latitude on investing in programs that provide the greatest capability and rearrange or eliminate those that do not. Programs under MTA are not bound by the traditional DOD 5000 directives that are in place mainly as a risk aversion precaution, but have become so burdensome that they delay fielding of equipment and innovation which places our military at a disadvantage against countries such as China and Russia who are excelling in the development of innovative weaponry.

In addition, all of the military departments are currently testing programs under MTA, and at least one has reported a significant reduction in cost, schedule and performance. Because MTA is new, it is most likely that other departments do not have enough data at this point to determine its effectiveness. DOD, SAEs and PMs are still defining methods to measure performance, the suitability of programs under MTA and the level of oversight required as it pertains to which programs are appropriate for MTA. These ongoing actions are being coordinated among stakeholders for concurrence, resolution and implementation.

With a vigorous set of defense acquisition reforms centered on MTA, DOD and our operating forces will be better prepared and equipped to meet the daunting challenges of great power competition and deterrence.

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