

LESSONS LEARNED FROM RAPID ACQUISITION: BETTER, FASTER, CHEAPER?

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This paper examines the impacts of wartime acquisition initiatives on the acquisition system. In particular, it focuses on the systems and processes developed and utilized during the past nine years to rapidly acquire and field systems for the operational force, contrasting these processes with those of traditional acquisition. It then provides an in-depth look at one rapid acquisition system, the Mine Resistant Ambush Protected (MRAP) vehicle, and determines the reasons for its success and identifies lessons learned. Finally, the paper provides recommendations for a “way ahead” for acquisition that incorporates the requirements for rapid acquisition while retaining the long term life cycle considerations typically associated with traditional acquisition processes.

LESSONS LEARNED FROM RAPID ACQUISITION: BETTER, FASTER, CHEAPER?

If there is one constant in the military's Acquisition system, it is that the system is continuously under reform. The much maligned acquisition process for our military weapon systems is seemingly so broken that hardly a year goes by without a new and improved acquisition reform initiative that our nation's acquisition professionals must learn, absorb and implement. Most recently, the Honorable Ashton B. Carter, Under Secretary of Defense for Acquisition, Technology & Logistics (USD (AT&L)), stated:

It has taken years for excessive costs and unproductive overhead to creep into our business practices, but over the coming years we can surely work them out again. Those who hesitate to go down the road of greater efficiency must consider the alternative: broken or cancelled programs, budget turbulence, uncertainty and unpredictability for industry, erosion of taxpayer confidence that they are getting value for their defense dollar and, above, all, lost capability for the warfighter in a dangerous world. Not only can we succeed: we must.¹

In the context of a learning organization, defined as one that is "continually expanding its capacity to create its future"², this constant state of reform may be viewed as positive and adaptive change. However, the perception of the Defense Acquisition System is that it is anything but a learning organization. Yet, despite the negative aura surrounding these processes, the Department of Defense (DoD) has still provided the materials and systems that make the United States Military, arguably, the best equipped fighting force in the world.

Over the past decade as our military has fought in multiple countries against highly adaptive insurgency forces, the Defense Acquisition System has quietly adapted to the rigors of a fast-paced war. The implementation of wartime acquisition initiatives decreased, in many cases, the amount of time required to produce and field critical systems. As an example, the rapid fielding process for the Mine Resistant Ambush

Protected (MRAP) vehicle is estimated to have shaved as much as six years off the typical acquisition timeline.³

With a “give the Soldier what he wants” mentality, the Defense Acquisition System developed processes and stood up organizations that provide new methods for acquiring capabilities or different inject points for acceleration into the traditional acquisition framework. Supported by generous Congressional supplemental funding, these new processes provide unprecedented procurement flexibility to support urgent warfighter requirements. However, it is clear that future funding will not approach the levels seen during early years of the Global War on Terrorism and supplemental funding will soon be a thing of the past as Congressional and public pressure continues to build to cut overall spending.⁴ As spending decreases and DoD is forced to live within the traditional budgeting process, several questions arise. What does the military do with systems that were procured with supplemental funding but did not have the supporting logistics tail properly factored into the resourced amount? Can DoD maintain rapid fielding processes to shorten time to field systems, and at what long term cost?

This paper examines the impacts of wartime acquisition initiatives on the acquisition system. In particular, it focuses on the systems and processes developed and utilized during the past nine years to rapidly acquire and field systems for the operational force, contrasting these processes with those of traditional acquisition. It then provides an in-depth look at one rapid acquisition system, the Mine Resistant Ambush Protected (MRAP) vehicle, and determines the reasons for its success and identifies lessons learned. Finally, the paper provides recommendations for a “way ahead” for acquisition that incorporates the requirements for rapid acquisition while

retaining the long term life cycle considerations typically associated with traditional acquisition processes.

Traditional Acquisition Process and Issues

The Defense Acquisition System exists “to manage the nation's investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the United States Armed Forces.”⁵ It is governed by a series of directives and instructions at the DoD level. The top level directive, DoD Directive 5000.01, describes this system through policies that describe and encourage flexibility, responsiveness, innovation, discipline and streamlined and effective management. At a cursory glance, these terms and descriptions set the right tone for successful procurement. These policies are typically executed at the program management level and exist within the overall phases of the acquisition process. Figure 1 highlights the phases of the DoD acquisition process from user need through operations and support/sustainment of the procured item. Three primary milestones in the system (A, B and C) account for the major phases of a major acquisition program's life cycle and also allow for potential inject points into the overall system. If a potential technology exists to meet a capability requirement, for example, a program may be initiated at Milestone B versus pre-Milestone A. This does allow for some flexibility and for potentially decreased time requirements for fielding a system to the warfighter.

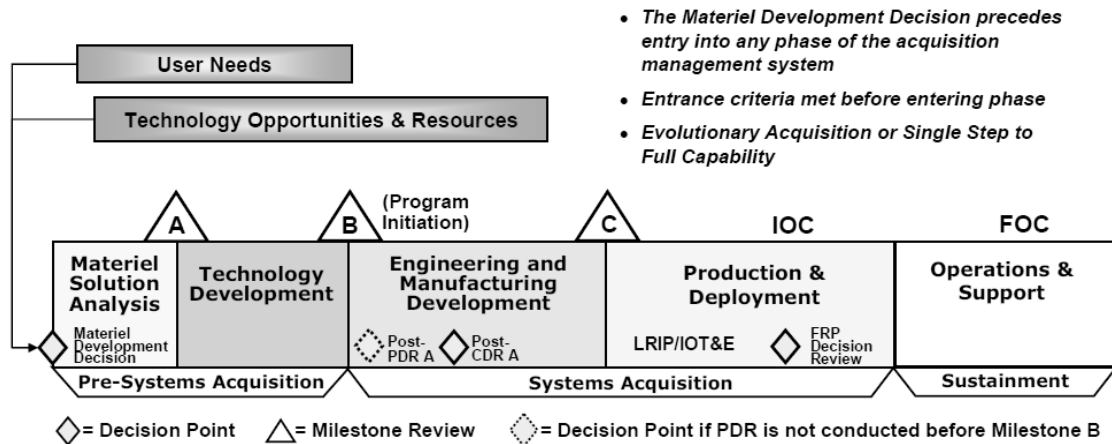


Figure 1. The Defense Acquisition Management System⁶

The phased acquisition approach is a logically stepped process that starts with a required capability or need from the user. Through a series of analytical and developmental phases, punctuated with prescribed higher authority decision points acting as checks and balances, the process leads to production, deployment and sustainment of an item or system. What is missing from Figure 1, however, is the massive assortment of rules, regulations, and oversight at multiple levels, to include Congress, that require the constant attention of the acquisition system personnel chartered with the responsibility to manage the processes. As systems become more complicated, the required oversight and documentation increases commensurately. Program management teams must account for environmental considerations and waivers, testing requirements, decision briefs to Milestone Decision Authorities, earned value management charts, integration and interoperability requirements, the constant threat of budget decrements, and most importantly, open and honest dialog with the end user, the warfighter. This process can take a decade or more for major systems such as

the Army's new Ground Combat Vehicle, which is expected to have its first prototype available in seven years (which is between Milestone B and C in Figure 1).⁷

The requirements of the Planning, Programming, Budgeting, and Execution (PPBE) process, how DoD allocates resources, further complicates the issue. This budgeting process provides proposed funding for DoD efforts which is then submitted for inclusion in the President's budget and includes budget recommendations for acquisition programs through submission of the Program Objectives Memorandum (POM)/Budget Estimate Submission (BES). This recommendation is inclusive of budgets six years ahead of the current year of execution.⁸ As the budget is approved, resource amounts and resource classifications (appropriation types) are locked in. This effectively ensures that the monies are used exclusively for the purposes allocated by Congress and also has the effect of removing much of the potential flexibility for funding reallocation as requirements change or as new requirements emerge.

Systems that make it through the traditional acquisition process are designed to be capable, sustainable systems that will be in service for an extended period. The rigor in system specification and testing results in effective, but often expensive warfighting systems. The process also takes many years to execute. DoD has attempted to counter the long timeframe of traditional procurement by recommending the utilization of an evolutionary acquisition strategy whenever possible. This evolutionary approach "delivers capability in increments, recognizing, up front, the need for future capability improvements."⁹ By providing the capability in increments, some capability is fielded to the end user earlier in the process, while other capabilities are matured in parallel and delivered with later versions. There are several variants of evolutionary acquisition, and

studies have shown that a single evolutionary acquisition approach does not work. In fact, a recent study by DOD Systems Engineering Research Center has brought up some of the valuable lessons learned for evolutionary acquisition.

For rapid-fielding situations, an easiest-first, get something working, evolutionary Systems engineering (SE) approach is best. But for enduring systems, an easiest-first evolutionary SE approach is likely to produce an unscalable system whose architecture is incompatible with achieving high levels of safety and security... The study also found that many traditional acquisition practices are incompatible with effective SE of evolutionary acquisition. These include assumptions that full-capability requirements can be specified up front along with associated full-capability plans, budgets, schedules, work breakdown structures, and earned-value management targets; that most systems engineers can be dismissed after Preliminary Design Review (PDR); and that all forms of requirements change or “creep” should be discouraged.¹⁰

These lessons highlight the significant challenges that face our mainstream acquisition programs today. What happens when operational forces need things even quicker? How can the Defense Acquisition System equip a military to face an adaptive enemy whose tactics change from month to month? That is the situation that faced the Military after September 11, 2001 as the United States went to war.

Wartime Acquisition Initiatives

Over nearly a decade of conflict, the acquisition system has evolved to rapidly provide critical capabilities to warfighters. This evolution stemmed from an acknowledgement that traditional acquisition was unresponsive in meeting emerging requirements for a new type of war, highlighted by Congressional inquiries and a concerned population as stories of under-equipped Soldiers reached the newspapers. Unfortunately, this evolution, although undertaken for the best intentions, was not necessarily coordinated within and amongst the Services. A recent study found “over 20 different ad hoc organizations within the Joint Staff, the Office of the Secretary of

Defense, and each Service”¹¹ that utilize “urgent need” processes. Variations of procedures and regulations are not necessarily coordinated or synchronized, so there is assumed to be considerable overlap and redundancy amongst organizations.¹² Of these various organizations and processes developed as part of wartime acquisition initiatives, the Joint Rapid Acquisition Cell (JRAC), Rapid Equipping Force (REF), Rapid Fielding Initiative (RFI), and the Capabilities Development for Rapid Transition (CDRT) warrant further review for their significance in supporting current operational requirements or their unique approach to the problem of “how do we get stuff faster to the Soldier?”. All four of these efforts initiated in the post-9/11 time period. The first three were designed specifically to expedite the process of getting equipment in the hands of the end-user. The fourth process, CDRT, is different in that it is a process that specifically looks at the larger issue of sustaining the rapidly fielded products once supplemental funding ceases.

Joint Rapid Acquisition Cell (JRAC). Formed in September 2005, the JRAC is an Office of the Secretary of Defense (OSD) level organization designed to provide rapid response to the Joint Urgent Operational Needs Statements (JUONS) provided by Combatant Commanders. With a goal of providing initial response within 48 hours of receipt of a JUONS, typically delivered via classified email, the organization strives to have capabilities fielded within four months if the capabilities already exist.¹³ The JUONS are limited to needs that fall outside established Service processes and that will, if not immediately addressed, “seriously endanger personnel or pose a major threat to ongoing operations”. Additionally, they should not require development of a new capability.¹⁴

JRAC and the JUONS process stands apart from traditional acquisition processes in several ways. As JUONS are not used for capabilities requiring development, the acquisition processes prior to Milestone C are ignored in many instances. If the capability exists within a commercial-off-the-shelf (COTS) system or with an existing military capability, the JRAC organization simply contracts out for the capability. This cuts out a significant amount of testing and requirements maturation associated with traditional acquisition and can reduce near-term costs and time associated with fielding significantly. There is risk, however, in fielding systems in this manner. The testing and requirements specifications for traditional acquisition are designed to help contain long-term operating and support costs which typically makeup approximately 70% of a program's life cycle costs.¹⁵ Without the rigor of these previous steps, that percentage would potentially be higher. So, if the up-front procurement costs of these items only make-up approximately 30% of the total lifecycle cost of the item, where do the remaining 70+% of required resources come from? As these items are procured with Congressional supplemental dollars versus dollars programmed through the PPBE process, the logistics tail of life cycle support may not be completely considered, thus creating considerable future budgetary impacts on DoD. Additionally, each Service has its own unique variation of the JUONS. The Army uses Operational Need Statements (ONS), while the Navy uses Urgent Operational Need Statements (UONS). The Marine Corps adds the Urgent Universal Need Statement (U-UNS), while the Air Force uses a Rapid Response Process (RRP) to meet their urgent needs.¹⁶ All Services have their own unique organizations to administer and oversee these processes. Although our warfighters have certainly benefited from these processes,

these shortcuts may create long term costs that are currently unaccounted for in future budgets.

Rapid Equipping Force (REF). The Army utilizes REF to provide COTS and government-off-the shelf (GOTS) capabilities for a specific unit need or for a specific theater. REF has a stated goal to provide a 51 percent solution for the doctrine, organization, training, materiel, leadership, personnel, and facilities (DOTMLPF) issues associated with equipping.¹⁷ The office provides an interactive portal capability that enables users to submit requests and potential solutions and emphasizes that REF delivers “limited quantities of the BEST technologies available.”¹⁸ The organization initiated from a Vice Chief of Staff of the Army directive in 2002, and is considered successful in its ability to provide the right equipment to the Soldiers in the field. With REF personnel located in the field close to the units, the interactions between Soldiers and REF personnel allows for a solid understanding of the requirements.¹⁹

REF’s greatest strength in providing responsive capabilities to our Soldiers in the field also leads to its greatest weakness in terms of traditional acquisition processes and the ability to project long term sustainment costs. By providing limited amounts of potentially unique products to a single unit in theater, which is certainly not unexpected given the stated mission of REF, the possibilities of interoperability issues, the inability to provide the same capability at a later date as commercial providers companies frequently drop product lines, and unknown sustainment costs all loom large. Even if items are considered disposable with no long term sustainment costs, the ability to purchase additional amounts for follow-on units with similar requirements is questionable. If tactics, techniques and procedures (TTPs) are developed that are

dependent on the REF equipment, significant future costs may be expected in the future as traditional acquisition aspects of data rights, long term procurement options, etc. have been ignored. The government is at a severe negotiating disadvantage when dealing with a contractor that knows DoD needs the contractor's unique capability.

Rapid Fielding Initiative (RFI). Established in 2002, the Army's RFI effort receives praise for its ability to provide equipment in a timely manner to operational Soldiers. The RFI effort initiated from actions of the Product Manager for Clothing and Individual Equipment (PM-CIE), who primarily procures and distributes personal items such as boots, helmets, ballistic glasses, and gloves for Soldiers. The initial effort involved distributing items from a warehouse at Fort Bragg to deploying Soldiers. Since then, the effort has grown and is now managed by a separate RFI team with oversight and support from a General officer level Program Executive Office (PEO). To date, this program has equipped over 1,000,000 Servicemen and women. Additionally, the RFI program has evolved into an enduring capability which has dramatically changed the way individual equipment is distributed to Soldiers. Currently, there are 14 distribution stations to support fielding.²⁰ As the system has matured, the efficiencies developed into the process currently provide almost 98% of individual equipment fieldings at home station prior to Soldier deployment.²¹

In comparison to the traditional acquisition process, RFI provides a tremendous amount of focus on lean distribution principles applicable to the tail-end of the traditional acquisition system (post Milestone C). These principles involve scheduled coordination efforts to reduce duplicative fielding of items and to allow leadership of deploying units to control "what and how" items are fielded to their Soldiers. Many of the items

distributed are items that were previously distributed or COTS items that meet a specific requirement at the individual Soldier or small unit level; thus the early requirements, development and testing phases of traditional acquisition do not necessarily apply. RFI is the result of creative thinking and initiative applied within the traditional acquisition framework in order to meet a time critical requirement. This wartime initiative has forced change in how the Army funds, assesses, adjusts and sustains our Soldiers with the proper equipment.²² However, the ability to transfer the positive lessons learned from this effort across the acquisition system is somewhat limited. The unique aspects of the products this effort supplies - individual equipment, disposable items, large quantities - does not necessarily apply to most other acquisition efforts, which field in much smaller numbers and require extensive training and maintenance support.

Capabilities Development for Rapid Transition (CDRT). “The CDRT is a process to identify and approve tactical nonstandard equipment (NS-E), commercial or government-produced, in use in current operations to become sustained Army equipment or compete to become an Army acquisition program.”²³ It is an Army unique process that is coordinated between Army Training and Doctrine Command (TRADOC) and the Army G3/5/7. The CDRT process attempts to get ahead of the pending issue caused by a decrease in funding, particularly in the wartime supplemental funds that were used to procure capabilities designated as urgent for the deployed forces.

The CDRT process involves an in-depth look at a capability currently procured outside of standard acquisition processes and categorizes the capability into one of three possible classifications. First, the capability may be deemed an “enduring” capability for the Army. In this case, the capability has been deemed not only suitable

for current operations, but also for future force consideration. In this case, it is entered into the Joint Capabilities Integration and Development System (JCIDS) at Milestone B or C or it is merged into an existing program of record. The second category would be as a “sustained” capability. This categorization is for capabilities that have demonstrated acceptable performance in theater, fill a current gap, and should be sustained during continued operations with supplemental funds. However, they have not shown potential for long term utility in the force and therefore are scheduled for termination at completion of operations. The third category is “terminate”. Simply put, terminate means the capability should not be endured as it does not fill a gap or its performance is deemed inadequate. In this case, the Department of the Army will no longer sustain the capability with Army resources, supplemental or not.

To date, the Army has conducted eight iterations of the CDRT process and has conducted analysis of 340 materiel systems and 12 non-materiel capabilities. Of these, only 28 materiel systems and 9 non-materiel capabilities were classified as enduring and submitted in the Joint Requirements Oversight Council (JROC) process.²⁴ This relatively low percentage demonstrates due-diligence in the process of determining which systems will become long-term consumers of Army resources.

The CDRT cannot be easily compared to the traditional acquisition process. Instead, it provides another pathway into the traditional process and in many ways provides a needed filter to begin the process of slowly weaning the Army off of Congressional supplemental funding. Hard decisions must be made during the CDRT process, and even for those capabilities that are deemed “enduring”, difficult decisions must be made with regards to bill-paying. Even if a system is considered enduring, it

takes time to get the system formally recognized in the budget process. So, in the near term, existing longer term programs are decremented or cut to pay near term sustainment costs. This puts a strain on existing programs that are often already within tight margins of meeting cost, schedule and performance aspects of their programs. However, this strain is somewhat typical for acquisition program management offices as historically, programs must always plan for decrements due to a fluid procurement and resourcing environment. The CDRT process is undergoing formalization with its inclusion in Army Regulation 71-9, Warfighting Capabilities Determination, dated 28 December 2009. This action highlights the learning that has occurred within the overall acquisition system and demonstrates recognition that processes must grow and evolve to meet the current operational realities of the 21st Century.

Mine Resistant Ambush Protected (MRAP) Vehicle: An Example

No acquisition program within DoD has received more public attention over the past few years than the Mine Resistant Ambush Protected (MRAP) vehicle program. It has been lauded as an example of successful rapid acquisition and one that should be studied as a possible blueprint for future acquisitions.²⁵ During early days of the insurgency in Iraq, the requirement for better protection for our servicemen and women was highlighted daily on the news. Casualty numbers from Improvised Explosive Devices (IEDs) and stories of units' up-armoring their vehicles and purchasing their personal protective vests with their own money cast a negative light on DoD acquisition. How could a nation with the wealth of the United States fail to properly equip its service members for this new type of war?

The original requirement for an armored tactical vehicle came from the Marine Corps in February 2005.²⁶ Marines, operating in hazardous fire areas, needed better protection for vehicle crews and dismounted Marines against IEDs, rocket propelled grenades (RPGs) and small-arms fire. The original requirement was met with a plan to up-armor the current vehicle, the High-Mobility Multi-purpose Wheeled Vehicle (HMMWV). This solution did not meet field requirements and in November 2006 the Marine Corps awarded a contract for an initial set of vehicles to meet the new requirement while beginning a competitive acquisition for the remaining vehicles. The first vehicles were delivered in February 2007, two years after the initial requirement, and a little over a year after initial contract award, almost 7,000 vehicles had been received.²⁷ This shaved approximately six years off traditional timelines associated with acquisitions of this type.²⁸ How was this possible?

The MRAP acquisition certainly benefited from several positive conditions that allowed for rapid acquisition. These conditions were not just circumstantial in nature, but were also indicative of a clear and focused leadership approach to acquisition. First and foremost, the effort benefitted from stable requirements. A strict policy of senior-level approval for changes prevented much of the “requirements creep” associated with traditional acquisition efforts.²⁹ Second, the program stuck with proven technologies. MRAP was not a Research and Development (R&D) effort. Proven technologies were identified and evaluated. Potential contract bidders were forced to demonstrate their capabilities during an open-competition. This eliminated some companies that did not possess road-ready solutions.³⁰ Finally, strong leadership support from DoD set the companies delivering the product up for success. The Secretary of Defense formally

declared MRAP to be DoD's most important acquisition program and approved a DX designation status which prioritized it over other efforts.³¹ This provided confidence to the vendors that the effort had longevity and provided a level of risk-mitigation for them as they began procuring material and equipment to manufacture the vehicles.

Additionally, the Secretary of the Army waived the armor plate steel restriction "which expanded the countries from which DoD could procure steel."³² Given the success of the MRAP from a rapid acquisition perspective, and certainly from the perspective of saving lives, what are the impacts of the shortcuts taken in this successful program?

Although it is undisputed that MRAPs have saved countless lives, there are long term concerns regarding the MRAP program and its role within the DoD portfolio. These concerns can be explicitly tied back to steps in the traditional acquisition process that were eliminated or abbreviated due to the rapid pace of MRAP procurement. The long term costs associated with the MRAP program is the most significant issue. Through 2009, almost \$27 billion was spent on MRAP procurements across DoD. A majority of these resources came from supplemental funds, with the balance from reprogramming of other budget funds. Through 2010, no dollars for MRAP were requested within the base budget for DoD.³³ This lack of funding requests in the budget brings into question the long term DoD ambitions for the MRAP vehicle, but also highlights the number one concern with many rapid acquisition efforts: the lack of programmed dollars to support long term operational and maintenance costs. The 2011 Defense Budget includes, for the first time, a request of \$3.4 billion for MRAP which will hopefully begin to address this issue, although at a large cost.³⁴ Even if initial procurement is successful with supplemental wartime dollars, this typically only accounts for 30% of the life cycle cost

of equipment. The remaining 70% of the total life cycle costs of equipment in the operating and supporting areas must come from other sources.³⁵ Long term costs for MRAP will probably be higher as there are multiple variants of MRAP vehicles purchased from multiple vendors. This situation leads to multiple suppliers for repair parts and potential mismatches of part availability based on specific vehicle models. Considerable effort has gone into simplifying this effort for the future as common components and parts have been achieved for certain areas of the vehicle.³⁶ Regardless, common component issues are typically addressed prior to fielding for systems that follow the traditional acquisition process. These issues are discovered during reliability, availability and maintainability testing aimed to provide significant cost savings and ease of maintainability after systems are fielded. A second concern is the long term suitability of the MRAP for terrains other than Iraq. Vehicle rollovers in Iraq highlighted a big issue for MRAP early on during fielding in theater. This issue is only made worse when contemplating use of the MRAP vehicles in more mountainous terrain, such as the terrain in Afghanistan which will not only stress the vehicles more from a rollover perspective, but also creates more maintenance stress on the vehicles.³⁷ Again, traditional acquisition processes should have uncovered these issues.

The rapid acquisition and fielding of the MRAP vehicle, overall, is a success for DoD and the acquisition community. It demonstrated that creative solutions and strong leadership can work through the traditional bureaucracy of the acquisition system and provide a working product that can save lives. It does not, however, necessarily demonstrate a new way for acquisition. It has become conventional wisdom in the area of acquisition that in the talk of “better, faster, cheaper” for systems, one can truly only

have two out of three. In studying the pieces and parts of the MRAP program, it appears that traditional wisdom holds true. Tradeoffs are made based on prioritization. In the case of the MRAP, faster was the priority. As a result, in some aspects it will be more expensive, because of long term maintenance requirements, and in some aspects it will lack for performance, due to a lack of suitability for diverse terrain. This is highlighted not to ascribe fault, but to simply demonstrate inherent limitations of rapid acquisition.

Recommendations

If no other lessons are learned from the past nine years of conflict, the one enduring lesson for acquisition should be that there is not a “one solution” answer for the best way to acquire capabilities for the warfighter. Many attempts in the past to apply cookie-cutter solutions across DoD based on the success of one or two programs have not typically succeeded. This explains why again and again, there are constant calls for acquisition reform. Over the past nine years, it is clear that traditional acquisition processes are not necessarily conducive to rapid acquisition. This has resulted in a variety of solutions implemented by different services, often with similarly confusing names, but subtly different processes. Lessons learned across these various ad hoc agencies and process teams also seem to highlight that rapid acquisition comes with a price. Shortcuts taken in the name of speed sometimes result in unintended consequences. Many of these consequences may be unknown for years, but could have long term impacts on system maintainability and DoD budgets.

Dual Acquisition Path. There needs to be formal acknowledgement and recognition of an alternative acquisition path. There is goodness associated with the much maligned traditional acquisition process. As an institution, we focus on failures in that process, but the bottom line is that systems that successfully make it through the

traditional acquisition process are typically systems that are well understood, maintainable, and will sometimes last decades past their initial expected utility based on the thoroughness of development and testing associated with the item. This provides a high return on investment over the life cycle for the item. At the same time, the need for a rapid acquisition path exists. In July 2009, the Defense Science Board task Force provided support for this recommendation in its report titled *Fulfillment of Urgent Operational Needs*, where it called for the Secretary of Defense to “formalize a dual acquisition path”³⁸ Having a dual approach for acquisition would allow for an upfront categorization of the initial path a system should undertake. Criteria for path determination would include complexity of requirement, current state of technologies to meet the requirement, and long term outlook for the requirement.

Highly technical or complex requirements are not necessarily suited for rapid acquisition. The ability to clearly understand the tradeoffs associated with various potential solutions cannot easily be sidestepped in the essence of saving time, unless there is only one clear solution. Even in that case, a complex or highly technical solution warrants extended testing for reliability, availability and maintainability aspects. To be considered for the rapid acquisition path, clear and consistent requirements should be a necessity as any other case will not allow the requirement to be rapidly met.

To be considered for rapid acquisition, the capability must not require extensive development. Preferably, there should be government off-the-shelf (GOTS) or commercial off-the-shelf (COTS) solutions available. The use of available solutions implies that testing at some level has already been conducted and documentation on

known capabilities and limitations should exist. Additionally, if new development is required, the odds of the effort being “rapid” drop considerably.

Finally, the case where there were no long term prospects for the requirement should be a potential exception to the above two rules. If it is determined that a requirement is for limited duration or utility, the rapid acquisition path may be possible as long term maintainability is not an issue of concern. If an item is considered a “throw away”, testing for long term sustainment may not be a justifiable investment.

Propagating Rapid Acquisition Ideas. The Defense Science Board report recommends that a new organization, the Rapid Acquisition and Fielding Agency (RAFA), oversee all rapid acquisition efforts.³⁹ According to the report, this agency would report to USD (AT&L) and would be resourced through absorption of current service rapid acquisition organizations and their funds. The result of creating such an organization is an added high level layer of bureaucracy on a process that should ideally be streamlined for speed. Therefore, an alternative recommendation to the Defense Science Board’s solution would be to approach the problem utilizing a “Tiger Team” approach to the problem.

A “Tiger Team” approach implies a small, agile, but highly capable team approach to problem solving. In this case, the problem is “rapid acquisition”. This team would still report to the higher levels of DoD as this provides a direct route to decision makers that can overcome obstacles with a single directive. However, this organization would not take on responsibility of executing rapid acquisition efforts, but would instead provide a fall-in expertise capability to support execution at the lower levels of acquisition program management within the Services. The role of this team would be to

help determine which existing service program management office should take ownership of the rapid acquisition effort, and then provide the resources, both monetary and expertise, to allow the organization to complete the effort. Since many acquisition mistakes occur due to requirements definition errors, low level execution at an organization that executes similar requirements with high level top cover support lessens the potential for mistakes.⁴⁰

Finally, as a learning organization, utilizing a Tiger Team approach for rapid acquisition, with hands on interaction with service acquisition program management offices, allows the entire acquisition community to become involved and to embrace rapid acquisition processes when applicable. The Defense Science Board report noted that “the current defense acquisition workforce is rewarded for following complex procedures with accuracy and precision and is punished for bypassing them.”⁴¹ By pushing execution of rapid acquisition processes to the lowest levels and rewarding successes, over time, a more flexible, innovative workforce should evolve that is capable of independent thinking within the acquisition framework. This has the potential to initially change the internal culture of the acquisition community and ultimately change the outsider perceptions of our acquisition system, commonly viewed as slow, cumbersome and unresponsive.⁴²

Budgeting. The DoD budgeting framework and processes are not conducive to rapid acquisition. Defense appropriations are inflexible by design to allow oversight of defense expenditures by Congress. Even when approved, a system can wait for up to two years before dollars actually make it through the budgeting process and are available to expend. As a point of comparison, a financial advisor for an individual would

advise that a responsible person should maintain a checking account for near term recurring expenses, a savings account for unexpected emergencies, and investments for long term financial security. The current DoD budgeting and acquisition budgeting processes are missing the savings account part of this example. DoD is typically successful in maintaining the recurring expenses of operating the force and certainly plans ahead for long term acquisition systems to transform and modernize the force; however, there is very limited flexibility for the unexpected emergency. Instead, DoD is overly reliant on supplemental dollars for emergencies, which as previously illustrated, may solve the initial procurement aspect, but more than likely will not support the longer term logistics costs. DoD should work with Congress to allow for some aspect of flexibility in budgeting for emergencies, similarly to how the Overseas Contingency Operations Transfer Fund currently works, but on a larger scale, and a more permanent basis as part of the annual DoD budget request. Concerns of allocation for an emergency fund could be addressed through Congressional oversight of the fund throughout the year and a cap on the amount that can be accrued in such a fund. Even tagging 0.5 percent of the budget for this type of activity, as recommended in the Defense Science Board report, could provide the needed flexibility in meeting the unexpected requirements typically seen during conflict.⁴³

Maintaining a funding line with flexibility for expending appropriated dollars for rapid acquisition eliminates some of the need for Congressional supplemental funds and also decreases risks for longer term traditional acquisition programs that are currently forced to provide resources for near term operational needs. DoD cannot afford to continually mortgage its future to pay for current needs any more than it can

ignore current needs in the interest of future transformation and modernization. More flexibility in funding and establishment of a budgeted emergency fund with proper oversight is a step in the right direction. This step must be followed by a process similar to the Army's CDRT process for providing long term determination of a capability's real utility. This identifies the long term funding requirements up front and helps the services determine the best path forward for a particular system or capability and the corresponding tradeoffs associated with its procurement.

Conclusion

The acquisition community has responded surprisingly well to the requirements levied upon it through almost a decade of war. Rapid acquisition successes have saved numerous lives and have demonstrated creative thinking and innovative processes needed to work through a bureaucratic system designed and refined through the Cold War years of our nation, where systems were developed for future and not necessarily immediate use. As a community of acquisition professionals, it is time to capture the lessons learned from current rapid acquisition efforts and determine the best ways ahead for applying them across DoD. Care must be taken, however, to ensure that we do not overstate the value of lessons learned as successful acquisition always involves humans and their ability to establish effective teams and relationships to solve difficult problems. Processes and frameworks exist to provide structure and guidance for acquisition teams, but cannot be substituted for positive leadership at the point of execution. Efficiencies in our systems and acknowledgement of multiple paths to include documented paths for rapid acquisition must be part of the solution. As the

Honorable Ashton B. Carter, Under Secretary of Defense for Acquisition, Technology & Logistics recently stated: “Not only can we succeed: we must.”⁴⁴

Endnotes

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