

The Underappreciated Role of Product Support in Rapid Acquisition

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apid acquisition has been called the "Wild Wild West" of acquisition. Rapid procurements, urgently needed for current operations, tend to violate hard and fast rules of standard defense acquisition. The balanced cost-schedule-performance baseline governs the standard acquisition program, whereas the rapid acquisition paradigm prioritizes schedule and accepts greater program risk. The life cycle framework of the Defense Acquisition System (DAS), as outlined by DoD 5000 series policy, ensures that sustainment considerations are integrated into weapons system requirements and design, so that DoD acquires systems that are supportable and affordable throughout the life cycle. In rapid acquisition, however, the

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emphasis is on speed and capability rather than life cycle efficiencies and integrated approaches. Nevertheless, certain key elements of sustainment must be seamlessly delivered with rapidly fielded equipment or the warfighter will not be able to use it immediately and effectively. This article highlights the critical role of the life cycle logistician in helping meet emerging warfighter needs within the rapid acquisition process.

Rapid Acquisition Vs. Standard Acquisition

Rapid acquisition in this context is defined as the procurement of critical military capabilities in support of current operations, where those capabilities cannot be provided through standard "traditional" acquisition. This definition implies three general conditions. First, the warfighter has a crucial capability need in support of current operations. This capability gap is often due to the enemy having adapted or evolved their tactics, or the emergence of a new threat that must be countered. Secondly, a technological response or similarly appropriate solution is available. Third, standard acquisition (such as the DAS) cannot provide a timely solution to support current operations. For example, improvised explosive devices (IEDs) are a weapon of choice for enemy combatants in Afghanistan. Counter-IED capability immediately became a critical need and was acquired in various forms, ranging from the mine resistant ambush protected (MRAP) family of vehicles to detection systems and protective clothing.

The traditional DAS is designed to produce a highly integrated, highly effective, cost-efficient solution to an enduring military capability need, and sustain the solution over several decades. The broad scope of statutory and regulatory requirements, the push for transformational capabilities and the complexity of new systems often make the standard acquisition process lengthy. It can take as long as 12 to 25 years to move from concept to initial operational capability (IOC). In contrast, the rapid acquisition paradigm is intended to provide a "75-percent solution" within 2 to 24 months. The "75-percent solution" may sacrifice affordability, interoperability, and operational suitability in order to field an effective capability more quickly.

As a result, the life cycle logistician is often forced to plan and execute support for systems that would not be deemed suitable in a program of record (POR) environment. In fact, sustainment is generally not considered in the documented requirement. Nevertheless, the life cycle logistician is vitally important. In the reactive world of rapid acquisition, the logistician must never waiver from his proactive stance, yet must be agile enough to tailor his thinking to the near-term needs of the warfighter.

The Logistician's Priorities in Rapid Acquisition

The first thing the life cycle logistician must realize when supporting a rapid acquisition program is that there are no product support or sustainment mandates to drive organizational effort; his or her influence on sustainment planning and execution will be to enable the warfighter to use equipment sooner and more effectively. Some sustainment planning and logistics activities of traditional acquisition are not relevant because of the short life cycle or small number of end items. The priority is to ensure immediate product support is provided in the right place and at the right time. The second consideration is to ensure funding and processes are in place to maintain continuity of operations and support. Efficiency is a third consideration—one that is easily overlooked with the availability of supplemental funds.

The tenets of rapid acquisition sustainment underscore the priorities of the logistician when directly supporting a rapid procurement; the logistician's activities and decisions

- Must support the delivery schedule
- Must support or enhance delivered capability
- Should be prioritized by
 - —Delivery of operational capability to the need
 - —Delivery of sustained capability
 - —Delivery of cost-efficient product support

In order to be operational, the equipment must be delivered to the right place, with timely and effective training, operating facilities and initial supply support. Sustained capability requires basic logistics such as spares, maintenance manpower, operating and maintenance facilities, and basic maintenance processes. After basic product support is in place, the logistician should look at supportability and overall cost-efficiency. The life cycle logistician (and the program manager) should plan for "catastrophic success." The demand for an item may suddenly and exponentially increase if the demonstration of capability is successful, regardless of the O&S cost burden. But costly sustainment and a large footprint will diminish the utility of a rapidly fielded capability and may ultimately prevent a system or capability from transitioning to a Program of Record.

The Impact of the Logistician

The life cycle logistician will ensure that rapid acquisition sponsors incorporate the twelve integrated product support (IPS) elements. (See the Acquisition Community Connection IPS home page for a discussion of the 12 IPS elements.) However, when sustainment integration is not accomplished, the impact to the warfighter is immediately apparent in 7 areas of product support: delivery, training, manpower, facilities, maintenance planning, supply support and life cycle management.

Delivery to the right place in theater without delays can be a challenge. Initial transportation may not be well coordinated if the product manager does not have appropriate logistics expertise on staff. Some acquisition leads may employ a "fire and forget" acquisition process that procures and ships equipment but provides no coordination to ensure delivery. The logistician identifies and coordinates special transportation requirements, making use of military, commercial and self-deploy modes of transport, and confirms positive receipt of equipment by intended users. The life cycle logistician is most

valuable when he is able to proactively identify transportability problems and offer early solutions.

Immediate utility of delivered equipment is enabled by timely and effective training. This requires coordination of resources, end items and facilities for training, and a certain amount of technical data. Training must be prepared in advance of delivery. To illustrate the impact of training, consider a survivability upgrade to a weapon system. Proper use of survivability enhancements reduces combat casualties, whereas improper use negates the benefit and may cause additional, unforeseen issues. In other words, a life-saving system delivered without proper training and support is clearly not as effective. An urgently needed life-saving capability deserves full attention to training and continuity of sustainment.

Maintenance, manpower requirements, facilities and supply support must be implemented and coordinated so that the warfighter can continue to use the equipment after initial delivery. The logistician must determine the maintenance approach and repair strategy. Even though contractor logistics support (CLS) is widely used, the unit personnel must still be able to identify failed equipment, remove and replace if needed, and properly disposition a failed item. Absent maintenance planning, end users will not be able to process retrograde actions. Other times, failed items may be deprioritized for transport. The potential result is an "iron mountain" of failed parts that fills up storage facilities and further strains production lines to replace failed items rather than simply repair them. The logistician can monitor the equipment reliability and coordinate the retrograde of depot returns and failed items. This coordination may be underappreciated but is of tremendous benefit to the warfighter.

Special test equipment, support equipment, tooling and facilities requirements must be identified early because extensive coordination and lead time may be necessary. Some systems may need support from "contractors on the battlefield," requiring ancillary synchronization to ensure adequate housing, force protection and basic quality of life.

A good example of the importance of early sustainment planning comes from the area of animal handling. Any type of animal, such as military working dogs, requires specific facilities, special transportation and handling, trained personnel, special food (supply support) and many other unique support considerations. Poor sustainment planning will delay use and could result in loss of the animals. Emphasis on schedule and accelerated delivery vice logistics considerations increases the possibility this type of disconnect might occur. The acquisition lead and program manager must ensure rapid acquisition initiatives receive appropriate life cycle logistics support and may need to look outside their organization for sustainment expertise.

Typically, the acquisition lead includes training, training assets, spares and contractor logistics support as deliverables on the

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procurement contract, unless organic support is already available because of similarity to a fielded system. But this does not always happen. Consider the MRAP, for example, which has myriad configurations. Configuration management and technical data had to be rectified post-fielding at significant expense, and some technical data was permanently lost. This makes maintenance more difficult, creates supply chain inefficiencies and increases logistics footprint. Earlier influence from a corps of life cycle logisticians might have lessened the sustainment burden of current MRAPs.

Life Cycle Management in Rapid Acquisition

Life cycle planning ties together the elements of rapid acquisition sustainment. Managing the life cycle of a rapid acquisition solution is quite different from standard acquisition because the acquisition timeline and period of sustainment are compressed. The life cycle of a rapid acquisition solution may be only 2 to 6 years. Initial systems may or may not be evaluated formally by an operational tester, and suitability is deemphasized. (DoD 5000 series is being updated to include a rapid acquisition instruction that will better define general assessment and sustainment requirements.)

During its short life span, a system may be used by different Services and for varying missions. The scope of how many systems must be sustained and for how long is constantly in flux. The acquisition sponsor may not fund sustainment or may only partially fund it, expecting one of the Services or combatant commands to pick up the tab after fielding. Changes in ownership—much more common with Joint Urgent Operational Needs (JUONs) acquisitions because they are joint, with requirements not originating in a single Service—create potential funding gaps for sustainment.

Moreover, the Planning, Programming, Budgeting, Execution System (PPBES) doles out funds with almost a 2-year lead

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time (a 1-year lead time for supplemental funds). For example, a sponsor might provide a year of sustainment funding in addition to procurement funds to support its fielded solutions. While this should provide O&M funding continuity, product support funding runs out in the middle of the next fiscal year. The Service or sponsor might not be able to fund the remainder of that year and has nothing budgeted for the next year for procurement or O&M, creating a funding shortfall that may require emergency reprogramming action to continue operations. To avoid funding hiccups, the program manager and sponsor should map out the sustainment funding and execution responsibility for the anticipated life cycle of the system.

Ultimately, the life cycle logistician should be thinking long-term as a system begins to demonstrate its effectiveness in current operations. The prospect looms that irregular warfare will increasingly become the norm, and many of the capabilities provided by non-program of record, rapidly fielded systems in use today will be needed as an enduring part of our military capability. The reality is that less than 20 percent of rapid acquisition capabilities transition to programs of record, although this number may increase as supplemental funding decreases and programs are forced to transition to the normal budgetary process. Those rapid acquisition programs that transition will need product support manager (PSM) guidance to rein in O&S costs and determine appropriate supportability and sustainment requirements.

Transition to a program of record changes the product support game; now the paradigm moves into cost-efficiencies and long-term sustainment planning. One challenge is that the rapid acquisition process typically fields prototypes, not mature systems. In many cases the best long-term option will be to transition the next generation of a technology to a POR, rather than sustain what we have in the field. The PSM provides key insight into sustainment requirements and O&S cost drivers and has significant impact in shaping the acquisition baseline and requirements of the new program of record.

Conclusion

Rapid acquisition represents significant challenges for product support today and is an area of knowledge and experience that will increasingly be in demand as the DoD continues to drive a shift to a more rapid and agile acquisition paradigm. The day-to-day role of the life cycle logistician within programs continues to evolve. Nowhere is this more true than in the world of rapid acquisition, where the life cycle logistician's role is not always well defined, but nonetheless crucial. What a waste of precious resources it is to rapidly acquire and deliver to the warfighter an item that cannot be used right away because adequate product support was not delivered at the same time. The proactive and agile logistician is underappreciated but vitally important in the success of rapid fielding.

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