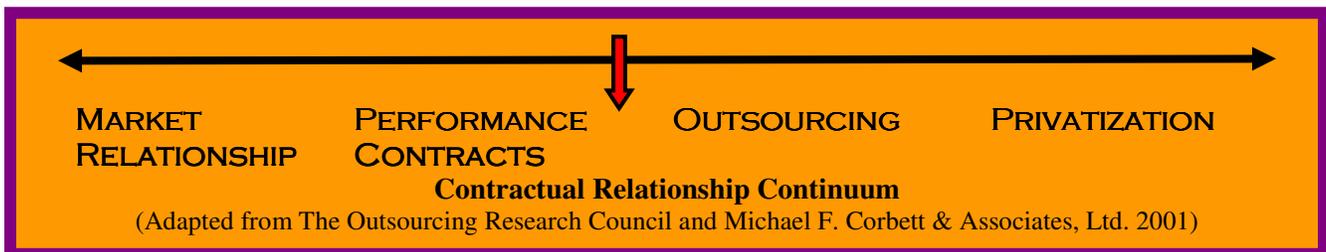


In this installment, Geary (2006) reminds us “performance-based logistics represents an entirely new way of thinking about the supply chain—one where the emphasis shifts to the customer’s needs, not the supply chain’s performance.”

### Part III — Performance-Based Logistics (PBL): The Next Frontier

*This publication is Part III of a 4-part series providing key insights into performance-based logistics (PBL). Part I of this series introduced us to key logistics concepts and an overview of supply chain management (SCM) supporting the rise and acceptance of PBL as a natural extension of SCM. Part II introduced the reader to the performance relationship shared between and among contracting and logistics, giving particular emphasis to performance-based contracting/acquisition. This installment is devoted to a review of performance-based logistics as a viable strategy that inherently employs industry best practices to achieve program cost, schedule, and performance improvements. This series closes with an eye on leadership’s role as change agents in the quest for continued improvements in both the public and private logistics sectors answering one of the most important questions of this series: How do leaders become a catalyst for change as their agencies move forward with the implementation of PBL?*

As you may recall in our latest installment, we introduced Carroll and Eger’s (2004) contractual relationship continuum (below), ranging from a market-type relationship to full privatization of public goods and services. Herein, the complexity of the relationship increases as the government-logistics contractor association moves from a market relationship toward privatization. Along that continuum, perhaps spanning the great gulf between performance contracts and outsourcing, we discover the contracting function collaborating in earnest as a key partner in the realm of performance-based logistics.



What we learn is that *relationships*, not terms and conditions, make contracts work effectively in the PBL environment. As a result, the importance of building long-term mutual relationships—partnerships—becomes increasingly crucial. Thus, moving

from a 'performance contract' relationship to 'outsourcing' requires the focus of the relationship shift from a set of contractual arrangements toward a mutual and trustful collaboration continually managed by both parties. It is this symbiotic relationship that forms the essence of performance-based logistics. It also represents one of the more challenging aspects of implementing a PBL arrangement given the government's propensity for strict adherence to fairness, which, in a somewhat ironic turn of events, prohibits such relationships from developing in the first place.

Simply put, a successful performance-based approach is predicated on a relationship, not a contract. Consequently, it is important for the public sector to adopt a new perspective as the primary focus shifts away from a transactional-based logistics approach to a long-term alignment of mutually-desired outcomes emphasized by the strength of connections between the government and logistics service providers; connections that require significant attention in order to be acquired, nourished, and sustained over time (Carroll and Eger, 2004). In its simplest terms, a successful performance-based logistics approach asks two basic questions: what am I buying (outcome), and how will I know if it is any good when I get it (quality assurance)? Enter performance-based logistics (PBL). Under PBL, private sector logistics contractors adapt their best commercial practices to large-scale program management, including risk mitigation and streamlining logistics chains (Blumberg, 2006b).

**What is performance-based logistics?** According to Mahon (2007), performance-based logistics (PBL) is "an innovative approach to acquisition that represents a cultural shift away from buying parts, to buying performance." In the March 2005 Defense Acquisition University (DAU) guidebook, entitled *Performance-Based Logistics: A Program Manager's Product Support Guide*, PBL is defined as:

the purchase of support as an integrated, affordable, performance package designed to optimize system readiness and meet performance goals for a weapon system through long-term support arrangements with clear lines of authority and responsibility.

Performance-based logistics represents an entirely new way of thinking about the supply chain—one where the emphasis shifts to the customer's needs, not the supply chain's performance (Geary, 2006). PBL is a new collaborative business model designed to align the interests of both the client (e.g., DHS) and the logistics service provider (Vitasek and Geary, 2007). It is about understanding the product performance your customer needs and coordinating with your supply chain partners to deliver that support

(Geary, 2006). A primary objective is to improve operational capability while reducing costs.

Performance-based logistics evolved from supply chain management concepts and practices now prevalent in many industries. *When effectively implemented, PBL provides a bridge between acquisition and supply chain management* [emphasis added] (HURST2006, 16). It gives the government the ability to obtain goods and services, while allowing partnerships to form and relationships to develop, without dictating the methods of performance. With PBL, traditional functions of the government are shifted to the contractor without giving up core capabilities, thereby allowing the government to maintain system capabilities while relinquishing the performance of the service to the contractor.

**Why PBL?** Leading military acquisition and logistics professionals—and the contractors that support them—believe in the PBL approach. On their terms, it creates a win-win situation for all concerned. For the contractor, Vitasek, Geary, Cothran, and Rutner (2006) maintain, “it is an opportunity to exercise greater flexibility in deciding how support is provided, ensure cash flow stability through long-term contracts, and increase revenue by rewarding contractor investment in improving support processes, rather than just selling individual parts or services.” For the government, Vitasek, et al (2006) suggest, “it is a chance to obtain guaranteed availability improvements while decreasing costs and logistics footprint through partnering with private business for complete program support.”

In the DoD, PBL is required. DoD Directive 5000.1, *The Defense Acquisition System*, stipulates program managers

shall develop and implement performance-based logistics strategies that optimize total system availability while minimizing cost and logistics footprint. Trade-off decisions involving cost, useful service, and effectiveness shall consider corrosion prevention and mitigation. Sustainment strategies shall include the best use of public and private sector capabilities through government/industry partnering initiatives, in accordance with statutory requirements (DoD, 2003a).

"The first PBL," Vitasek (2004) offers, was called the Total System Support Partnership (TSSP) program, “a landmark 1998 PBL agreement between Lockheed Martin and the U.S. Air Force to support the F-117 Nighthawk,” that included logistics support, material management, technical data, and depot repair for the aircraft (Blumberg, 2006b). This contract laid the foundation for many of the now standard components of PBL (i.e., the

use of relevant metrics to track performance and the assignment of contractor incentives for achieving the metrics' targets) (Vitasek, Geary, Cothran, and Rutner, 2006).

In the last seven or eight years, performance-based logistics support has expanded to provide wholesale, overhaul, modification, packaging, handling, storage, transportation, obsolescence management, and reliability improvements for aircraft or similar end items, as well as manage the entire supply chain, including transportation and warehousing (Blumberg, 2006b). Performance-based logistics makes sense. It takes full advantage of a holistic approach by making the best use of total system availability. As a result, life cycle costs are reduced and the logistics footprint is trimmed down. Time and time again, the DoD sings its praises with the implementation of a full array of integrated support and services for key programs (e.g., F/A-18E/F Integrated Readiness Support Teaming, the C-17 Globemaster Sustainment Partnership).

**What are some key PBL milestones?** In 1999, DoD issued *Product Support for the 21st Century*, announcing a re-engineered logistics strategy that stated “any new programs must have a PBL support agreement, unless there was a business case proving it was not the best method for the program” (DoD, 1999). Following Secretary of Defense Rumsfeld’s release of the *2001 Quadrennial Defense Review (QDR) Report*, implementation by the services was slow and without uniformity (Hurst, 2006). The QDR stated DoD would implement PBL to compress the supply chain and improve readiness of major weapons systems and commodities (DoD, 2001). In 2002, the Undersecretary of Defense (USD) for Acquisition, Technology, and Logistics (AT&L) tasked the services “to develop and submit a schedule to aggressively apply PBL to all new weapons systems and all acquisition category (ACAT) I and II legacy systems ...” (DoD, 2002).

In the May 2003, DoD Directive 5000.1, *The Defense Acquisition System*, codified PBL as the DoD’s favored approach to implementing product support. It requires program managers (PMs) to

develop and implement performance-based logistics strategies that optimize total system availability while minimizing cost and logistics footprint .... Sustainment strategies shall include the best use of public and private sector capabilities through government/industry partnering initiatives, in accordance with statutory requirements (DoD, 2003a).

In January 2004, USD (AT&L) issued “guiding principles” for conducting a PBL business case analysis (BCA) with the intent they support “best value assessments of product support strategies” (DoD, 2004a). Later, in March 2004, USD (AT&L) directed services

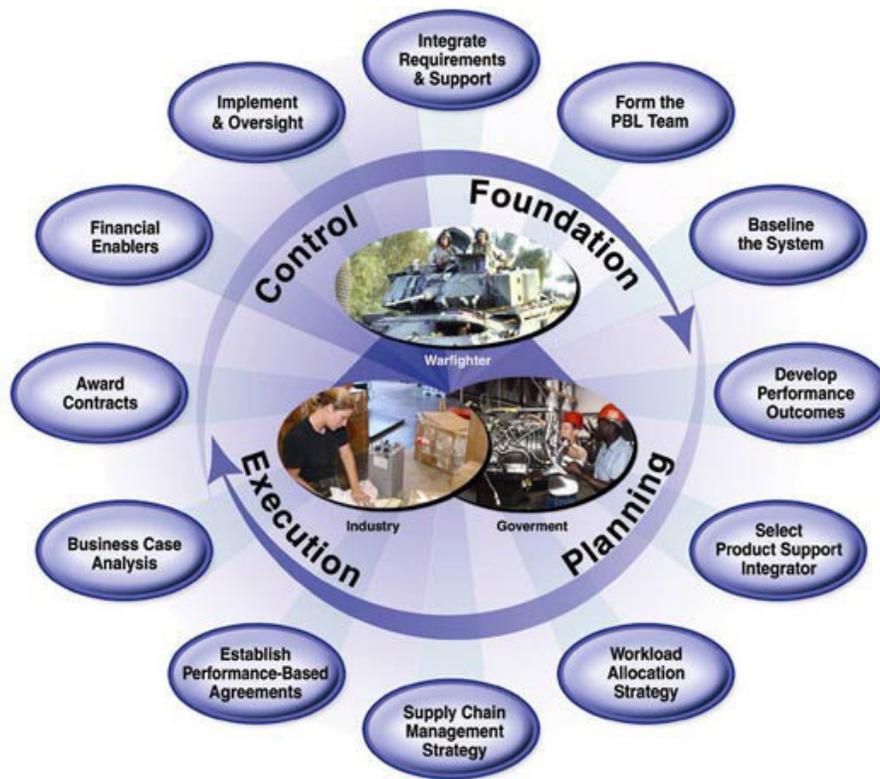
to assess all ACAT I and II programs for PBL implementation and conduct a formal business case analysis in accordance with recently released guidance, specifically as it related to their assessment of capabilities, cost, and risk (DoD, 2004b).

An August 2004 USD (AT&L) memorandum clarified the PBL role in purchasing weapon system logistics support (Blumberg, 2006a). It states, "The Defense Acquisition System requires program managers to develop and implement PBL strategies that optimize total system availability, while minimizing cost and the logistics footprint. PBL strategies can be applied at the system, subsystem, or major assembly level, depending upon program-unique circumstances and appropriate business case analysis. PBL arrangements will be constructed to truly purchase performance...." (DoD, 2004c). Moreover, the USD (AT&L) guidance defined performance criteria in terms of operational availability, operational reliability, cost, logistics footprint, and response time (Hurst, 2006; Mahon, 2007). The August 2004 memorandum also established PBL contracts as long-term, fixed-price contracts with incentives (DoD, 2004c). Guidance issued later that year established definitions and formulas for computing the performance criteria (DoD, 2005).

In March 2005, the Defense Acquisition University (DAU) released a guidebook, *Performance-Based Logistics: A Program Manager's Product Support Guide*, to serve as an anthology of DoD policy and guidance to assist program managers implementing PBL. The *2006 Quadrennial Defense Review Report*, published in February 2006, reiterates the Office of the Secretary of Defense's (OSD's) continued focus on PBL with its focus on "improving visibility into supply chain logistics costs and performance and on building a foundation for continuous improvements in performance" (DoD, 2006). Specifically, the review addresses DoD'S continued need to reshape the Defense Enterprise with a concerted effort to improve Defense acquisition performance, manage supply chain logistics, and

provide greater insight into the cause-and-effect relationship between resources and readiness [... using] fact-based insights, coupled with the implementation of continuous process improvement tools like Lean, Six Sigma, and *Performance Based Logistics* [emphasis added], [to] help optimize the productive output of the overall Department of Defense supply chain (DoD, 2006).

**Is there a process to help implement PBL?** Yes. The Defense Acquisition University teaches a twelve-step process (outlined below) it recommends for implementing PBL.



Performance-based logistics is at variance from the conventional acquisition model in a noteworthy way. Traditionally, the acquisition of a system was placed ahead of system sustainment, treating it as if it were a disparate, seemingly less important entity unto itself. Upon delivery of the system, sustainment effort was exerted to parse responsibility to ensure the systems' fielded, operational readiness; this responsibility fell predominantly among functional managers in the fields of materiel management, distribution, and maintenance. By integrating acquisition and sustainment early and simultaneously, PBL gives both program and logistics managers the ability to optimize system readiness and system availability while concurrently reducing costs and minimizing the logistics footprint.

**BARRIERS TO PBL IMPLEMENTATION**

**PUBLIC LAW  
CULTURE  
MULTIPLE FUNDING SOURCES  
TRAINING & EDUCATION  
RISK  
CONTRACTORS ON THE BATTLEFIELD**

**How does my agency go about enabling our PBL effort(s)?** A number of implementation enablers come to mind. For example, the alignment of incentives with performance expectations, supply chain management, and public-private partnerships to name a few. Taking the time to properly align incentives with performance goes a long way toward establishing the trust necessary to support the maximum integration between the government and logistics contractor(s). Successfully delivering the right product to the right place at the right time in the right condition at the right price says a lot about leveraging commercial best practices in supply chain management. Mahon (2007) develops this notion one step further, pointing out a unique, collaborative relationship between the government and logistics contractor(s) can significantly “reduce order to receipt time, repair time, and increase availability and readiness.” Because a PBL strategy can be a mix of organic and private entities, public-private partnerships join forces in a way that leverages the strengths of both. “PBL,” writes Mahon (2007), “offers a way to integrate acquisition and sustainment and leverage commercial best practices to reduce costs, improve performance, and ensure operational readiness.”

The performance-based logistics initiative is not a concept unique to the DoD’s weapons platforms. “Successful PBL programs,” says Vitasek (quoted in Blumberg, 2007), “exhibit some common factors for success:”

- A contracting strategy developed in partnership where the trend moves the partnership from a transactional base to a performance base
- Long-term contracts
- Few metrics
- Top-level support from both parties
- Leveraging the mix of where the work gets done

Vitasek, Geary, Cothran, and Rutner (2006) call attention to the fact benefits are increasing as the PBL methodology matures. “As the PBL strategy and partnership matures,” Vitasek, et al (2006) point out, “the scope of contractor management and performance of support functions is generally limited only by statute, policy, or the realities of the operational environment. In addition to significant roles in supply chain management and repair activities, the contractor can expect significant roles in training, configuration management, facilities, technical support, data systems, and related areas of support.”

**What are some of the challenges confronting agencies who wish to implement a successful PBL strategy?** Successfully implementing performance-based logistics presents many challenges. Significant challenges may include:

- Developing a collaborative environment among the stakeholders
- Overcoming organizational transformation issues
- Effectively implementing performance-based contracts in a highly regulated environment
- Government financial processes, particularly those that dictate the use of various 'colors' (appropriations) of money, are problematic (Vitasek, Geary, Cothran, and Rutner, 2006)
- Suboptimization. Lacking a fully integrated PBL, a contractor may optimize performance of a specific component resulting in sub-par performance at the overall system level. Conversely, thoroughly integrating systems-level PBLs create different challenges, especially over the long term. Determining—and planning for—precisely what kinds of engineering, buying, and decision-making expertise is needed in-house to manage logistics support providers, for example, poses a challenge of a different sort.
- The life expectancy of major systems can be decades. The government's practical ability to terminate and rehire logistics support providers remains elusive, irrespective of contractual language. To successfully do so requires, minimally, adequate technical data, an appropriate in-house skill mix, and someone else (a competent service provider) to do the job of the first provider.
- Due to the long-term nature of PBLs, must-pay commitments are created and carried from year to year
- Government management information systems and the requisite information technology to support the essence of performance measurement continue to mature
- Collaboration. The two parties have to agree on what the client's goals and objectives are and on what the logistics service provider's rewards should be when and insofar as the client achieves those ends; they also have to agree on what metrics will be used to assess compliance, who will measure them, and how they will be measured (Vitasek and Geary, 2007).
- Too many metrics. Vitasek (quoted in Blumberg, 2007) urges the client to use "five or less metrics. ... If you hit the desired outcomes, it's really not relevant measuring the micro process of how to get there. The contractor needs enough flexibility to invest in areas that have the best returns, and to adapt processes to meet the objective metrics."
- A PBL contract must align itself to readiness metrics, from the ultimate customer's perspective. As such, David V. Pauling, Undersecretary of Defense, Materiel Readiness and Maintenance Policy, says a PBL contract must address points such as: "How long does a system last before it fails? How long does it take to turn it around and get it working again? What can be done to improve it over time? How long before it goes out of commission permanently? And what is its ownership cost over its life cycle?" (quoted in Blumberg, 2007)
- Difficulty associated with quantifying *soft* characteristics (e.g., creativity, trustworthiness, innovation, communication, collaboration, operational agility, flexibility, and cultural fit) can prove to be the difference between extraordinary and substandard performance (Cottrill & Geary, 2005).

- “What gets measured gets done.” In all but the most progressive organizations, the measurements don't relate to the broader interest (Cooke, 2003).
- Using performance metrics to create a viable performance management process (Vitasek, 2004)

Aside from any number of inherent challenges, Vitasek and Geary (2007) have compiled several common mistakes that occur when private companies attempt to adopt a PBL business model:

- Failing to grasp that PBL represents a paradigm shift in the business model governing business operating procedures
- Failing to have the right stakeholders on the team from the start
- Failing to change the team's mindset to look at metrics from a “desired outcome” point of view versus a “service level” point of view
- Failing to prepare an adequate baseline of the current business

**Can you briefly describe what role metrics play in PBL?** Metrics—a performance management tool, evolved and refined over time to deliver increasing levels of performance and cost effectiveness—lie at the heart of PBL (Vitasek, Geary, and Quick, 2006). To enhance our understanding, perhaps it will help us to answer the question with some questions. Are the metrics quantitative, visible, and easy to understand? Do they involve contractor input, yet focus on customer needs and expectations? Are they multi-dimensional and process-focused, yet consistent with overall corporate strategy? Do they reflect a balanced approach where the benefits outweigh the costs? Are they accurate and do they use technology to improve measurement effectiveness? If you answered “Yes” to all of these questions, your agency probably has a firm understanding of the significant role appropriate metrics play. Under PBL, carefully reasoned metrics do more than simply establish acceptance performance of the system; they complement payment terms that reward the support provider for meeting the measured requirements of a successfully supported system. By aligning performance against a set of end-to-end performance measures, PBL reduces risk across the supply chain.

In your agency's quest to secure key enablers of a high performance supply chain (e.g., event managers (near-real-time alerts), balanced scorecards, and executive-level dashboards), care must be taken to avoid the trap of believing, “If you can measure it, you can manage it.” Instead, developing supply chain metrics that are aligned to your business strategy—metrics that are important to your agency with well-established definitions and reliable data sources to promote “one version of the truth”—should take

precedence. The first challenge is getting good, timely information with a high degree of integrity. The second challenge is being able to use that information to make better decisions. Only then can your agency begin to understand the supply chain's performance and be responsive when performance does not meet targets. Building a high performance supply chain organization is no easy task. Success depends largely on the answer to two key questions—What is important for the agency to measure? How do they align the key metrics with where the agency needs to go?

**Conclusion.** In closing, PBL is a proven concept that works. It is a journey where all parties now want the same thing: cost-effective, reliable system performance (Geary, 2006). Accordingly, the Department of Defense has instructed program managers “to develop and implement performance-based logistics strategies that optimize total system availability while minimizing cost and logistics footprint” (DoD, 2003a). “Maximizing PBL benefits,” according to the acting assistant deputy under secretary of defense for logistics plans and programs, “will continue to drive us to develop a more complete understanding of the risks and uncertainties that must be addressed in order to expand adoption and meet the requirements.” A PBL support strategy that properly aligns the incentives of the support provider with the performance requirements of the system is well on its way to establishing the requisite trust that forms the basis of a long-term, collaborative relationship between the government and logistics support provider. The final installment will help us answer one of the most important questions of this series: How do logistics leaders become a catalyst for change as their agencies move forward with the implementation of PBL?

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