PUBLIC AND PRIVATE PARTNERSHIPS IN SUPPORT OF PERFORMANCE-BASED LOGISTICS INITIATIVES— LESSONS LEARNED FROM DEFENSE LOGISTIC AGENCY PARTNERSHIPS

DR. GLENN L. STARKS

Per *Product Support for the 21st Century: A Program Manager's Guide to Buying Performance, November, 2001* published by the Defense Acquisition University, Performance-Based Logistics (PBL) is the preferred approach for implementing weapon system support. While PBL initiatives enhance weapon system support by employing best commercial practices in providing an integrated and performance-based supply chain, they often do not combine the best of government support with commercial support. This results in dual infrastructures, increased costs, and other disadvantages. This article addresses the advantages of combining public and private support by discussing lessons learned from two PBLs where the Defense Logistics Agency has become the source of supply to commercial vendors awarded PBL contracts by the Military Services.

Performance-Based Logistics (PBL) contracts enhance the support of Military Service weapon systems by employing the purchase of total or partial system support as an integrated performance package from a single source. Per the publication *Product Support for the 21st Century: A Program Manager's Guide to*

Buying Performance, November, 2001 published by the Defense Acquisition University, "Performance-Based Logistics (PBL) is DoD's [Department of Defense] preferred approach for implementing product support. The PBL is a strategy for weapon system life cycle support that brings higher levels of system readiness through efficient management and direct accountability" (p. 1-4). The majority of PBL initiatives are contracts to a single private company. The overall goal of PBLs is to optimize system readiness. The contractor is required to meet support goals for a weapon system by establishing a support structure based on performance metrics with clear lines of authority and responsibility. The contractor performs logistics functions that have been historically performed by government personnel while implementing best commercial principles and practices.

The inherent disadvantage of PBLs, as often implemented, is that they do not combine the support benefits already in place within DoD. PBL contractors are required to fully and independently develop a supply chain management network to support weapon systems without relying on current support systems already in place within the government. This often leads to the creation of dual support infrastructures, unnecessary costs being assumed by the contractor, and a negative impact on small businesses. These and other disadvantages are overcome by the development of public and private partnerships in the support of PBL contracts.

Therefore, in addition to maintaining a level of performance and implementing commercial supply chain management best principles and practices, the PBL contractor is also required to perform materiel management, distribution, technical data management, cataloging, and contracting functions in obtaining and providing parts support.

This article examines two PBL partnerships that have been developed between the Defense Logistics Agency (DLA) and two PBL contractors; whereby, DLA has become a source of supply for consumable parts in support of the weapon systems under each PBL contract. The lessons learned from these partnerships are presented to illustrate the resulting positive impact in improving weapon system readiness and in reducing overall costs. These reduced costs are ultimately passed on to the Military Service activity awarding the PBL contract.

TWO PBL EXAMPLES

While PBL contracts require contractors to perform an array of services to improve weapon system readiness, these services are often centered around providing materiel within specific timeframes to ensure parts are readily available to ensure weapon system performance. This materiel includes both reparable parts (historically managed by Military Service Inventory Control Points) and consumable parts (historically managed by DLA). Therefore, in addition to maintaining a level of performance and implementing commercial supply chain management best principles and practices, the PBL contractor is also required to perform materiel management, distribution, technical data management, cataloging, and contracting functions in obtaining and providing parts support. These later logistic functions are inherent in the mission of DLA. In the providing of consumable parts support, the contractor is required to both duplicate and improve support historically provided by DLA. Thus results the aforementioned disadvantages of PBLs by creating dual systems of management by ignoring the capabilities already available in the public sector. The two PBLs analyzed in this study illustrate how these disadvantages can be overcome.

From the Navy's standpoint, the contractor has the ultimate responsibility in providing total supply chain management support.

The Navy awarded a PBL contract to Lockheed Martin in support of the S-3 aircraft. Lockheed Martin subcontracted materiel support to Logistics Services International (LSI) as a third party logistics (3PL) parts provider. The Navy also awarded a repair contract to Pratt and Whitney in support of the J52 engine. Although repair contracts do not have requirements as extensive as PBLs, they share many of the similarities and require contractors to perform many of the same functions as PBL contractors. A full PBL contract is expected to be awarded for the J52 once the repair contract is completed, to include extended services and materiel support. In both examples, the Navy has transitioned its reliance on materiel support from historically governmental sources of supply (DLA and Navy organizations) to contractor support. Also in both cases, DLA has established partnerships with each PBL contractor to provide consumable parts. Under the S-3 PBL, DLA provides support for 1,087 items. The DLA conducted an initial supply screen of the items, and made advance buys where needed. The PBL vendor was advised of each item's price and stock position in relation to the forecast. Under the J52 PBL, DLA provides support for 161 items. The DLA competed to become a qualified source for the items based on

quality, delivery, and performance standards. In both cases, parts were prepositioned based on where the actual work was being performed by the PBL vendor.

Although each of these PBL contractors obtains consumable parts support from DLA, they are in no way relieved from the contractual performance requirements in their respective contracts with the Navy. From the Navy's standpoint, the contractor has the ultimate responsibility in providing total supply chain management support. They are also still held accountable for establishing the most effective and efficient cost structure to meet the needs of the government. The DLA must then compete as a source of supply and proves its ability to provide support to the PBL contractor that will fit within this efficient cost structure. Accomplishing this is a challenging task that has resulted in the Agency itself becoming more effective and efficient in performing its historical duties as a manager of consumable parts and providing services connected to providing materiel. The following eight lessons learned from both of these examples illustrate the advantages of DLA and PBL contractors establishing partnerships to support PBL initiatives. These partnerships are instituted via of Memorandums of Understanding (MOUs) or Performance-based Agreements (PBAs) that outline the terms and conditions that each party will adhere to (a sample is provided in Appendix A).

LESSONS LEARNED

1. **Creates Partnering versus Dual Infrastructures**—With PBLs where the vendor does not partner with DLA to obtain consumable support, the contractor must establish partnerships with other contractors to obtain parts, personnel to manage the acquisition process, and even a distribution network to store and move materiel. Under the S-3 and J52 PBLs, the vendors simple identify their requirements to DLA. DLA's personnel fill the requisitions, establish long-term agreements with commercial vendors, and DLA already has a worldwide storage and distribution network in place. To ensure that the contractor is able to meet the requirements outlined in the PBL contract, the contractor and DLA partner on sources of supply and forecasting, and DLA sets performance standards compatible with those in the PBL contract. While these performance standards vary per each PBL agreement, some examples include ensuring parts availability between 90 percent and 100 percent, ensuring 100 percent adherence to quality standards, and processing and shipping materiel within 24 hours.

2. **Reduces Materiel Costs**—Many of the items used on the S-3 and J52 are also used on other weapon systems, both within the Navy and on systems belonging to the Air Force and Army. Because DLA buys these parts in volume to support its customers across the Department of Defense, it can obtain much better prices than a single PBL vendor purchasing small quantities of materiel in support of a single PBL initiative. DLA is also able to obtain parts cheaper than PBL contractors because it has established long-term agreements in place with parts providers.

These agreements leverage the buying power of DLA across the entire population of National Stock Numbers (NSNs) on these long-term contracts, leading to cheaper prices for each individual item. Since these agreements are put in place for up to ten years, lower prices are maintained over long periods of time. For example, over the past year the total price for the items used on the J52 PBL has decreased by 4.78 percent. Lastly, DLA's price encompasses the entire cost of maintaining a complete supply chain, from initial cataloging through distribution. Unlike customers that rely on a single contractor for total support, DLA's customer are charged prices for materiel that are not affected by shifts in personnel or other changes in infrastructure due to varying customer demands because of DLA's ability to absorb these variations.

3. **Holds DLA More Accountable**—In supporting the S-3 and J52, DLA can be held to concrete parts support and performance requirements because the PBL vendor is required under the PBL contract to definitively define their requirements. In order to maximize efficiency and minimize costs, PBL contractors must only forecast and order what they actually need. Any overages will result in excess costs that cannot be recouped, and any forecasts below what is needed will result in the contractor not being able to meet the terms of the contract, thus being subject to monetary penalties from the Military activity that awarded the PBL contract. With more accurate forecasts, DLA is able to procure materiel in advance of the contractor's need and even preposition materiel at or near the point of use. The PBL contractor minimizes costs by not having to assume any costs until they actually requisition the materiel for point of use consumption.

4. **Enhances Commercial Partnerships**—The DLA has developed Strategic Supplier Alliances with both Lockheed Martin and Pratt and Whitney (copies of the *DoD Strategic Supplier Alliance Project Guidebook* and DLA Strategic Supplier Alliance (SSA) charters can be found at http://www.dla.mil/j-3/j-336/logisticspolicy/j-3312/webpage%20ssa.htm). These alliances are strategic partnerships whereby NSNs

TABLE 1. DEFENSE LOGISTICS AGENCY (DLA) STRATEGIC SUPPLIER ALLIANCE (SSA) PARTNERS

DLA Aviation Strategic Supplier Alliance (SSA) Partners	
Lockheed Martin	Moog Inc.
Pratt and Whitney	Aircraft Braking Sysytems
Boeing	Canadian Commercial
Hamilton Sundstrand	Eaton Corporation
Parker Hannifin	Rolls Royce
Goodrich Corporation	Sikorsky
Textron/Bell Helicopter	BAE Systems
Northrop Grumman	General Electric
Honeywell	

managed by DLA that are solely sourced from these vendors are placed on long-term corporate contracts with performance metrics. The Navy, Army, and Air Force may also join these partnerships and add their managed NSNs to the alliance as well.

For example, the Air Force has partnered with DLA in the SSA with Pratt and Whitney. By including PBL partnerships under the umbrella of the alliance, the partnership between the government and private enterprise is further strengthened by broadening the government's buying power with each alliance partner. Including Lockheed and Pratt and Whitney, DLA has established 17 SSAs with its top 20 Aviation suppliers (see Table 1 for complete list). Almost 30,000 items are under long-term contracts with these suppliers. These are the same vendors that are being awarded the majority of PBL contracts for aviation systems by the Military Services. These partnerships further enable DLA to leverage its buying power in support in PBL initiatives across all of these contractors and their individual divisions.

Of the 1,248 NSNs collectively being supported under the S-3 and J52 PBLs, almost 800 are provided by DLA's SSA partners.

Other alliances have been established for DLA's top suppliers of parts for its Land and Maritime customers. Of the 1,248 NSNs collectively being supported under the S-3 and J52 PBLs, almost 800 are provided by DLA's SSA partners. The remaining population of NSNs are predominantly competitive items (multiple sources) and thus cannot be added under SSA arrangements, but many are also supported by other types of long-term contracting arrangements.

5. **Gives Customers One Source of Supply**—As stated earlier, the PBL vendor is not relieved from the performance metrics outlined in the PBL contract, even when they use a government supplier to obtain materiel. Therefore, the Navy still ultimately obtains integrated support from one commercial entity, rather than a multitude of government and commercial sources. All of the benefits that are obtained from the PBL vendor using DLA as a source of supply are thus passed on to the Navy. If DLA cannot provide parts within the performance parameters, the PBL vendor is free to obtain these parts from commercial sources. This creates a financial incentive for DLA to have parts available to meet the PBL vendor's forecast within specified performance parameters in able to remain a viable source of supply. With the J52 PBL, DLA's performance in providing parts has surpassed the performance metrics outlined in the PBL contract.

6. **Increases Availability of Parts**—With DLA's SSAs, other long-term agreements and leveraged buying power, the instances of parts availability is greatly increased beyond the availability the PBL vendors would have obtained if they had sought to obtain the parts themselves from the commercial market. The DLA procures its parts from the sources the Military Services dictate. For the collective population of DLA NSNs under the S-3 and J52 PBL, there are over 100 individual sources for these NSNs. If these PBL contractors had not partnered with DLA, they would have had to develop individual partnerships with these vendors rather than simply obtaining support from just DLA.

   On other PBL contracts where vendors have declined to partner with DLA and strictly rely on commercial sources, there have been recurring cases of where they have been unable to obtain parts or have obtained them at prices far greater than DLA's. While these PBL vendors have experienced delays in obtaining parts, DLA has had the materiel readily available. Because the PBL vendor had initially declined to partner with DLA, the stock DLA did have available was procured to meet the demands of its other customers. Providing the materiel to the PBL vendor then creates overall support shortages because of a lack of the PBL vendor's continuous requirements.

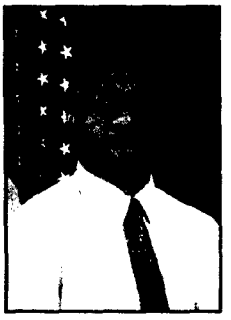
7. **Allows PBL Vendor To Focus on Services**—Since the vendors allow DLA to concentrate on providing consumable parts support for the S-3 and J52, they are then free to concentrate their energies on providing enhanced services in other areas. While these vendors have expertise in providing best commercial practices toward repairable parts supply chain management, DLA has expertise in providing consumable support gained from decades of experience. The net effect is utilizing the best of the private and public sector in developing a support system to enhance support to the Navy.

8. **Ensures Survivability of Small Businesses**—Many of the NSNs on the S-3 and J52 PBL have been historically provided by small businesses. Over the past two years, small businesses have been awarded $7.7 million in contracts from DLA from this population of items. While DLA is mandated to ensure that these items are procured from small businesses in order to ensure the survival of these businesses, PBL contractors are not held to the same federal small business requirements and goals as DoD agencies. Obtaining consumable parts support from DLA ensures that small businesses do not lose a substantial portion of their income, as has been the case with other PBLs where the vendor has declined to obtain parts from DLA. By ensuring these small businesses remain viable sources, DLA is also ensuring there is an active industrial base for future support.

SUMMARY

The above lessons learned outline the benefits of PBL vendors partnering with DLA in providing support to weapon systems under PBL contracts. The elimination of dual infrastructures, reductions in materiel costs, increased government accountability, enhanced commercial partnerships, a single source to the Military Service, increased parts availability, and increased focus by the PBL vendor and benefits to small businesses have all contributed to the success of enhanced support to the J52, S-3 and other PBLs where DLA has partnered with private companies.

The Military Services are also recognizing the benefits of these DLA/private company partnerships and are including DLA personnel on their Planning and Intergrated Process Teams as they expand the use of PBLs to enhance weapon system support. Weapon system Program Managers and acquisition personnel should engage DLA early in the planning process to fully understand what benefits DLA can offer. DLA is able to tailor many of its services to the individual needs of each PBL support program. The PBL contractors should also engage DLA early in the PBL process, and even to outline what support will come from DLA as part of their responses to PBL solicitations. As discussed in this article, integrating the best of the public and private sector produces benefits to all parties involved and specifically improves the ultimate support to the warfighter.



Glenn L. Starks, Ph.D., is Chief of the Planning and Requirements Division at Defense Supply Center, Richmond, VA. He has oversight of development and tracking of strategic initiatives that enhance support to the Aviation customers of the Defense Logistics Agency, including Performance-Based Logistics initiatives. He holds a bachelor's degree in business administration, a master's degree in management, a master's certificate in project management and a Ph.D. in public policy and analysis.

(E-mail address: glenn.starks@dla.mil)

AUTHOR BIOGRAPHY

APPENDIX A

SAMPLE MEMORANDUM OF UNDERSTANDING DEFENSE LOGISTICS AGENCY AND PBL VENDOR

This Memorandum of Understanding (this "MOU") is made and entered into as of the 1st day of _____ (the "Effective Date"), by and between **PBL VENDOR NAME** and the Defense Logistics Agency (DLA), either or both of which may be hereinafter referred to as the "Party" or the "Parties," respectively.

I. PURPOSE

In accordance with Contract _____ between **PBL VENDOR NAME** and the Military Service, **PBL VENDOR NAME** is authorized to obtain parts from DLA to support the **weapon system(s) name**. The purpose of this MOU is to confirm a basic understanding of the Parties regarding the process of **PBL VENDOR NAME** providing a forecast and ordering the parts and DLA providing the parts.

II. TERM

This MOU shall commence as of the **Effective Date** and terminate only at the convenience of both Parties or the expiration of Contract _____, whichever occurs first. Termination intent between DLA and **PBL VENDOR NAME** before the expiration of Contract _____ will be communicated in writing. Upon termination, both Parties unconditionally waive any charges against either Party because of termination of the MOU and release each other from all obligations under the MOU.

III. ORDERING

Per the terms of the Contract _____, all requisitions submitted to DLA will be done via Military Standard Requisitioning and Issue Procedures (MILSTRIP) or via the DoD Electronic Mall (EMALL). Requisitions may be submitted via automated requisitioning processing through DoD MILSTRIP automated routing, or directly to DLA Inventory Control Points (ICPs) via telephone, fax, or mail. DLA agrees to provide **PBL VENDOR NAME** any training needed on the DoD MILSTRIP or EMALL requisitioning process. A valid Department of Defense Activity Address Code (DoDAAC) will identify all requisitions submitted by **PBL VENDOR NAME** as identified for use by **PBL VENDOR NAME** from the Military Service(s). **PBL VENDOR NAME** agrees that all materiel provided by DLA to **PBL VENDOR NAME** in support of Contract _____ will only be used in the providing services and parts support under this bilateral basic ordering agreement. DLA will provide parts purchased from approved sources per the Military Service Engineering Support

Activity. DLA will process requisitions received in accordance with MILSTRIP prioritization policies with adherence to DoD's Uniform Material Movement and Issue Priority System (UMMIPS) timeframes based upon the requisition priority, at a minimum.

IV. PROCESSING ORDERS

DLA agrees to process all requisitions received in the most expeditious manner possible. DLA will track these requisitions from the date of submission to the date of shipment, and provide requested status of these requisitions within 24 hours. If stock is not immediately available to fill the requisition from stock on hand or via contract with another entity, DLA agrees to expedite delivery of materiel for delivery to meet Military Service requirements for materiel ordered under Contract _____ subsequent to a review and agreement on any additional charges that may result. DLA agrees, whenever possible and based upon cost and demands from other users, to position stock for the most expeditious delivery to the end user. This may involve positioning materiel from current depot locations or outlining shipping instructions in contractual agreement terms with vendors.

V. TRAINING

DLA agrees to provide **PBL VENDOR NAME** access and training to DLA inventory systems for the purposes of requisition submission, status, tractability, and inventory visibility. All access and training provided are subject to DoD security requirements.

VI. INFORMATION SHARING

In support of this PBL, **PBL VENDOR NAME** and DLA agree to share information to enhance the long-term support of the Military Service. **PBL VENDOR NAME** will provide a quarterly forecast (March, June, September, December) to DLA.

VII. CHANGES

Both Parties will review this agreement at least annually, and both Parties can make modifications at any time upon agreement. Any agreements made outside of the terms stated within this agreement are only effective upon modification, issuance, and signature of a revised MOU.

VIII. CONFIDENTIALITY

Any confidentiality obligation will be established in a separate Proprietary Information Agreement ("PIA"). The PIA shall survive any termination or expiration of this MOU and remain in full force and effect.

IX. RELATIONSHIP OF PARTIES; NO RIGHTS CONFERRED

Nothing in this MOU shall be construed as giving rise to a relationship among or between the Parties of prime contractor and/or sub-contractors, employer and employee, partners, agency, or joint venturers. Nothing contained in this MOU shall be construed as:

1. Granting or conferring any right to use any information or know how that a Party shall elect to furnish hereunder except as expressly authorized in this MOU; or

2. Conferring any license or right with respect to any trademark, trade or brand name, the corporate name of either Party hereto or the corporate name of a subsidiary of either Party hereto or of any other name or mark or any contraction, abbreviation, or simulation thereof.

X. COUNTERPARTS

This MOU may be executed in one or more counterparts, including by facsimile, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have caused this agreement to be duly executed by their authorized representatives.

PBL VENDOR NAME	Defense Logistics Agency
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

NEGOTIATE
CONTRACT
AGREEMENT