

PBL Contracting Insights

Best Practices Elements in Performance-Based Logistics Contracts

Second Edition, June 2012



Copyright © The University of Tennessee, and Supply Chain Visions 2012. Some portions of these materials were funded by government contract FA7014-06-D-0019. No part of these materials may be reproduced, stored in a retrieval system or transmitted or distributed in any manner or form without the permission of The University of Tennessee, or as to agencies of the U.S. Government, permission from SAF/AQX-ACPO.

Table of Contents

Foreword.....	i
Introduction	1
PBL Contracting Insight.....	3
Why PBLs Work	3
Contract Length	4
What is the right contract term?	5
Pricing Model	7
Incentives.....	8
Metrics	8
Service versus Supply	9
PBL...Commercial (FAR Part 12) or Military Unique (FAR Part 15)	10
How the Tenets Build Strong PBL Programs	12

Foreword

Performance-based logistics (PBL) is the Department of Defense's preferred product support strategy to deliver improved weapons systems readiness at the same or lower total cost. Additionally, AFI 63-101 states, "A performance-based logistics (PBL) strategy shall be used in accordance with the PBL guidance section in this AFI". The cornerstone of PBL is the purchase of weapons system sustainment as an affordable, integrated package based on output measures such as weapons systems availability, rather than input measures such as parts and technical services. Simply put, performance-based strategies buy outcomes, not products or services.

Air Force program offices managing a weapons system have to make tradeoffs in the face of finite resources. On one hand, weapons systems should be designed, maintained, and modified to continuously reduce the demand for logistics; this requires investment. On the other hand, logistics support itself respects budgetary constraints; this often drives for postponement of expenditure, no matter how compelling the payback. To succeed at PBL, a program office must integrate these perspectives, investing in the future while providing current support, all the while staying within statutory and budgetary guidelines. And the program office must adopt the viewpoint of a life cycle strategy, in particular, providing to the maximum extent possible a stable funding environment, from program inception through retirement.

Using PBL creates a cost avoidance opportunity for Air Force program managers, which facilitates investments in affordability, reliability, and availability when Support Providers with system knowledge and investment-oriented business models innovate to convert cost avoidance into performance gains.

This guide is designed to be a tool for those who want or need practical guidance on developing contracts in line with a PBL approach to Product Support. There are a variety of factors that go into developing an Acquisition Strategy, but ultimately, for the strategy to be executed, a set or series of agreements, either contracts or MOU's, must be executed.

For an in-depth exploration of the topic by the Department of Defense, consult the Product Support Manager (PSM) Guidebook, signed and issued by the Assistant Secretary of Defense for Logistics and Materiel Readiness (L&MR) in April 2011, and available in .PDF on the DAU website www.acc.dau.mil .

Introduction

Too often the practical aspects of PBL contracts become lost in the proliferation of documents and program reviews. This guide is an attempt to cut through much of the murkiness that can surround the contract, and endeavor to provide practical guidance on how to implement effective and affordable PBL. Properly constructed and executed performance-based product support strategies deliver best-value weapon system support.”¹

While leaders who track PBL would all agree that the philosophical and intellectual foundation of the approach is solid—developing a win-win business model where both the government and the customer share common objectives and the support provider is incentivized to deliver the right things—almost all would agree that getting a contract to reflect that perspective can be a challenge.

Performance Management

Contract Structure

Alignment

(A foundation that solidifies both internal and external relationships and frames the Foundation for the Project)

Figure 1 Source: Supply Chain Visions

Research sponsored by the Air Force has identified three success factors that determine the success of PBL programs:

- Alignment: establish the foundation, aligning the business environment to deliver the desired outcomes
- Contract Structure: cementing the relationship and executing the necessary agreements
- Performance Management: on-going management of the outcome-based relationship

These three areas are depicted in Figure 1 above.

¹ Memo to Acquisition Executives, “Endorsement of Next-Generation Performance-Based Logistics Strategies,” Acting Assistant Secretary of Defense (Acquisition, Technology, and Logistics), May 14, 2012

This document focuses on the pragmatic aspects of contract implementation, the PBL Contract Structure Elements. Because PBL is not a traditional product support approach, and focuses on outcomes as opposed to items or activities, getting a PBL business relationship and associated interests seamlessly executed in an agreement structure can be a challenge. But, there are demonstrated techniques that work, and in subsequent sections, we will explore some of the practical implications of PBL contracts and agreements.

PBL Contracting Insight

One of the most challenging elements of a contracting strategy for PBL is to have a contract that supports the PBL business model and is also compliant with the myriad of statutes, regulations and policies that govern contracting efforts. During our research we were continuously told that contracting “rules” prevented the AF Teams from achieving their desired outcomes. The purpose of this section is to provide insight and advice on how contracting statutes and policy have been used to craft successful Performance-Based Logistics contracts. Within this section we will talk about how organizations that have had success in implementing PBLs dealt with the impediments highlighted during our research.

Because the section is about contracting, there will be a bias or focus on contracts with Industry; but, we feel much of the discussion could be applied in implementation of a work order or memorandum of understanding when dealing with an organic or public activity. When implementing the PBL model, it is critical for contracting personnel to understand some of the basic business practices that product support providers will employ in the execution of PBLs. Understanding why PBLs work is a critical factor in the development of a contracting support strategy that provides the incentives and flexibility necessary to motivate product support providers to change their processes, which is a key element of PBL. If you are looking for PBL type behavior from support providers, you cannot get it with a traditionally structured contract. PBL contracts need to push the envelope regarding contracting, supply management and financial statutes and policy. Optimal PBL implementation may require changes in processes and current procedures in these areas. In the discussion we will also use the Tenets to help facilitate some of the discussion and how they can support successful contracting for PBLs.

Why PBLs Work

Under our traditional inventory based systems our “response to failure” has often been to buy more inventory. Product support providers are not incentivized to do anything to improve the services provided or the performance and reliability of the components that they produce in response to this traditional business model. In fact, with traditional approaches, product support providers are incentivized to actually sell the government more inventory and components. PBL is about changing this relationship. We need to create a relationship where the product support provider is incentivized to reduce material consumption. Accordingly, if the product support provider can reduce consumption within the contract structure, we need to address the impact this will have on revenue and profit.

Properly constructed PBLs allow product support providers to rationalize economic decisions to create investment opportunities where they can obtain an appropriate return on their investment. Properly constructed PBLs will allow product support providers to change processes to become more efficient. High performing PBLs will actually drive innovation through product improvement strategies and/or incentives. This all leads to optimal readiness at an affordable cost.

Under PBL, the DoD pays for system performance and outcomes, not transactions, this shift in business strategy creates the opportunity for product support providers to evaluate their processes since under this model they can benefit from eliminating transactions or workload. In this vein, PBL incentivizes product support providers to LEAN processes to generate efficiencies thereby reducing workload as a mechanism to reduce costs. High performing PBLs move beyond spares and repair transactions to investments in reliability which can have a direct impact on affordability and availability. PBL allows product support providers with system knowledge and investment oriented business models to not only focus on innovations that convert to cost avoidance but to also provide performance gains to the weapon system.

In the PBL model, the aftermarket should not be considered in isolation. Rather it should be seen as closing the loop on the asset lifecycle. The Warfighter benefits when there is ability for the product support providers to introduce engineering changes into operational assets which help sustain the capability. This requires the ability to link back to engineering and manufacturing – which is only possible when product support providers approach the service aftermarket as an integrated part of the asset lifecycle.

PBLs that include multiple integrated logistics elements can create the opportunity to eliminate duplicate efforts, overlap and in some instances competing efforts. Additionally, it creates the opportunity to eliminate the “white space” that can be created with multiple providers. At the heart of why PBL works is a contract that supports the multiple year/long term product support strategy. The long term contract facilitates the techniques discussed above to generate cost avoidance and incentivizes investments in affordability, reliability, and availability as a mechanism to improve margins and profit.

Structuring contracts that create or drive new behavior is a key to successful PBL. Attempting to do PBL with a traditionally structured contract will eliminate any opportunities for success.

Contract Length

The keystone, or enabler, of developing a scenario where a product support provider will commit themselves to certain levels of performance is structuring a contract that has stability in performance requirements and no gaps in requirements acquisitions. This includes a pricing structure that is not reconstructed from year to year or even several times per year. This change to a long term relationship facilitates better service and service parts planning capabilities so that product support providers can optimize the supply chain and be incentivized to focus on product improvement. It also requires greater visibility across the supply chain to monitor, manage and improve asset performance and reduce downtime.

Product support providers will remain unwilling to take the risks associated with assuming the role of asset lifecycle owner, unless they see the long term commitment for the requirement. PBL simply cannot happen without product support providers stepping up to the plate.

PBL contract lengths are typically “longer term,” but what that means in practice varies. In guidance issued in September of 2010, the Under Secretary of Defense for

Acquisition, Technology, and Logistics said, “Single-award contract actions should be limited to three years (including options) unless, by exception, it is fully justified for longer periods by the senior manager for services. Contract length should be appropriate for the activity performed. Knowledge-based services readily meet the three-year limit.”

Often, individuals cite that policy as a rationale for believing that it implementation a PBL Strategy is done with contracts of a length at a maximum of 3 years. However, the sentences that follow in that policy memo are extremely important. “Other services such as Performance-Based Logistics (PBL), LOGCAP, and environmental remediation, as examples, may not. The intent is that each service requirement will be reviewed by the appropriate official and only those with a sound business rationale will contain longer contract performance provisions.”

In addition, PBL emphasizes long-term support arrangements as a fundamental part of the strategy: “Performance-Based Logistics (also commonly referred to as Performance-Based Life Cycle Product Support and PBL) is a performance-based product support strategy for the development and implementation of an integrated, affordable, product support package designed to optimize system readiness and meet the Warfighter’s requirements in terms of performance outcomes for a weapon system through long-term product support arrangements with clear lines of authority and responsibility.”

Longer-term contracts encourage long-term investments to improve product or process efficiencies—a key desired outcome of a PBL.

Within the 2005 Authorization Act, language was enacted to set limits on the length of delivery order type contracts as follows:

Multiple Year: SEC. 813. PERIOD FOR MULTIYEAR TASK AND DELIVERY ORDER CONTRACTS.

(a) REVISED MAXIMUM PERIOD- Section 2304a(f) of title 10, United States Code, is amended by striking ‘a total period of not more than five years.’ and inserting ‘any period up to five years and may extend the contract period for one or more successive periods pursuant to an option provided in the contract or a modification of the contract. The total contract period as extended may not exceed 10 years unless such head of an agency determines in writing that exceptional circumstances necessitate a longer contract period.’

If your effort requires a term longer than 10 years and you would intend to use a delivery order contract, this restriction will apply.

What is the right contract term?

The answer is, “It depends.” You need a long enough period of time to drive – to create the necessary incentives – to induce the change in behavior by the product support provider that is central to PBL. Inherently, longer term contracts are more conducive to effective PBL implementation; however, we believe that they do not have to be as long as many PBL experts suggest. Simple process changes can generate significant improvements and drive costs out compared to how support would have

occurred under the traditional approach. In addition to LEAN improvements, we have seen many significant changes that yielded major savings that were implemented in the first year of the PBL effort. As an example, for a major system a power supply was one of the highest demand items for the system. The government specification for the power supply specified a Mil-Spec potting material be used for sealing the power supply. The Mil-Spec potting material was considered to be an obsolete material when compared to current industry practices. One of the initial steps the product support provider took upon the PBL award was to request and implement an Engineering Change Proposal to replace the Mil-Spec potting material with a newer epoxy based sealer for the power supply in both manufacturing and repair. The epoxy was expected to never fail. As the power supplies in the inventory cycled through the repair process, this very simple, low to no cost, change completely redefined the demand for the item. What was a high demand, high cost item, driving significant down time for a key weapon system, became a low demand requirement with little or no weapon system impact. We could all argue that the product support provider should have introduced this change under the traditional contracting arrangements that had been in place before the PBL. The bottom line is they did not. The PBL model drove the change. Our research into why PBLs work has shown us every PBL has many similar occurrences of change which were simple and fast to implement resulting in immediate improvements.

The message here is that to achieve significant improvements, changes do not have to be major technology insertions or upgrades. Minor or non-complex steps can lead to major changes in support requirements and in the cost structure of the support. Contract pricing for 3 to 5 years in the initial term of a PBL may be appropriate. The 10 to 20 year terms sometimes advocated may be reasonable; but, we believe contract price adjustments need to be addressed at pre-defined timeframes allowing for the review of costs and potential re-pricing of the work. We need to have a strategy for “harvesting the savings” created by cost reductions and process improvements

There is much confusion and misperception surrounding the whole concept of contract length and term when it comes to establishing out year requirements and pricing. In performing our research we have found that when “PBL-like” efforts were being established with pricing being done on an annual basis, there can be a misperception that an absolute commitment of out year funding is required before the teams were willing to establish pricing for more than one year. Guaranteed funding for out years would be the ultimate situation; however, most funding is annually appropriated. This lack of funding “guarantee” has driven year-by-year “Traditional Contracting” behavior. The product support provider wants a guarantee but the Government is unable to make an absolute commitment.

This raises the question, “Absent this absolute guarantee, what needs to be done differently to change the product support provider’s behavior? Understanding that although there can be no guarantee for out year funding, for most weapon systems funding from year-to-year is fairly stable. We have seen within DoD numerous contracts that have established best estimated out year requirements that were used to perform pricing. Our research has shown, absent the desired guarantee, a stable program with a long term contract having out year pricing (priced options) results in PBL type behaviors by the product support providers. Whether in a competitive or

non-competitive environment, product support providers are able to understand and assess the risk.

This is not an easy task so, including Legal Counsel in discussions on this subject early in the process is a key to success. Although statutory limitations may exist that prevent the execution of what is viewed to be the optimum solution, we have found there are compromise contract relationships that can create the incentive structures that lead to the behavioral changes desired. Our Tenets follow this thinking.

Pricing Model

Pricing strategies that move away from transactions are a key element of creating PBL behavior. An area of focus in developing a high performing PBL is to structure the pricing to adapt to the level of performance being received. In other words, the pricing is able to be adjusted based on performance and changes in levels of requirements. An example would be pricing based on a cost per flight hour or steaming hour; another example is a cost per system per month. Each of these examples provides a “rheostat” to adjust total cost, based on increases or decreases associated with the requirement being supported. However, it must be understood that there are points or bands that need to be established and, if exceeded, will require you to make adjustments through another administrative means.

In addition to the ability to vary total cost, each of these pricing structures had an element that adjusted the price based on performance. For a critical intelligence system, the equipment needed to be operational 95% of the time. If the system operational availability fell below 92% there was a percentage adjustment from the negotiated support cost. In many cases, these adjustments could either increase the price for exceeding the baseline performance level or decrease the price based on the product support provider not achieving the baseline. These types of adjustments set up a pre-determined model to ensure the government only pays for the level of service it receives.

Although we have covered price adjustment under the pricing section, this approach could be viewed as an incentive provision as well.

The process of implementing a PBL strategy will require a significant exchange of data between the government and the product support provider. There is a direct correlation between the adequacy and accuracy of the data provided to the quality of the proposal by the product support provider. It is almost universal that the initial proposal for the product support provider will be much more expensive than the Business Case portrays or for the current costs to perform. This apparent disconnect can add large amounts of lead time to PBL implementation. Because the factors behind these disconnects seem to be unique to the individual PBL effort, discussing specific examples would likely not yield improvements or lower initial proposals. To address these disconnects, the government pricing team needs to be prepared to roll up their sleeves and work through the details of the proposal and the BCA. This effort requires the team have a clear understanding of the product support providers proposal, the government's costs and the BCA. Unfortunately, we have seen a number of instances where the BCA work has been done by another or outside organization with little or no involvement by the PBL team. We strongly advocate that

the PBL team do the BCA; but, if not, the PBL Team should at least manage or be heavily involved in overseeing the BCA process. There are occasions where final price agreements have only been achieved when there was a line by line price review and comparison to ensure that there is an apples-to-apples understanding of the requirements and corresponding costs.

Incentives

High performing PBLs have incentive structures that are tightly aligned to the key performance attributes. In developing financial incentives care needed to ensure that the incentive does not reward the product support provider for performance beyond required or budgeted performance levels which can create budget shortfalls where the government ends up paying for performance beyond their requirement.

Award Term extensions are very complex and we have seen instances where the award term language has raised issues regarding whether the award term is actually a guaranteed commitment when funding is not available. This could raise issues with Anti-Deficiency Act provisions. As with contract term discussions, including Legal Counsel in discussions on award term provisions early in the process is a key to success. Although statutory limitations may exist that prevent the execution of what is viewed to be the optimum solution considering award terms, we have found there are compromise award term type provisions that can create the performance levels desired by such an incentive. Our Tenets reflect support for award term and tightly aligned incentives.

Incentives = Continuous Investment = Better Performance & Lower Costs = Affordable Readiness

It is important to keep in mind that the government has wide discretion in assembling and blending contract types and incentive types, tailored to fit the circumstances of the program. There is no perfect, universally applicable template.

Metrics

A wise Flag Officer was quoted as saying, “What interests my boss really is interesting to me.” This is true with metrics for PBLs. If you measure something and review the results on a regular basis, people are going to pay attention to the effort.

Management under the PBL model: The contract is king. Without capabilities to meticulously manage key aspects of contract performance, it will be difficult to make the PBL model work. Therefore, it is important to ensure that there is a capability for obtaining the data required for key metrics. Being required to manually gather and manipulate data for PBL metrics will not work in the long run. In establishing key metrics ensure you already have or gather the data for the metrics for contract management; otherwise, personnel resource limitations can impact the ability to continue to manually gather the data rendering the metric meaningless and reducing your ability to perform contract management.

When good metrics are in place and we are paying close attention to performance, product support providers will look for ways to better plan programs and subcontracts to improve performance throughout the asset life cycle. We have seen instances

where product support providers run sophisticated what-if scenarios to decide actions to take to ensure success. Product support providers will also be motivated to better negotiate and manage complex subcontract relationships.

With the correct metrics, supply chain management by the product support provider becomes critically important for business success. After all, when network suppliers fail, the product support provider fails. Metrics and metric reviews ensure that product support providers and sub-suppliers collaborate more effectively to meet the supply network process demands implied by the PBL model.

Service versus Supply

There are 2 major contract types that can potentially be used to support PBL type contracts - supply contract and/or a service contract. As PBLs normally cover many ILS elements; and, can include the delivery of both supplies and services, this determination can be extremely complex. The following discussion is intended to provide some insight on the topic.

Supplies are broadly defined by FAR Part 2 to mean all property except land or interest in land. It includes (but is not limited to) public works buildings, and facilities; ships, floating equipment, and vessels of every character, type, and description, together with parts and accessories; aircraft and aircraft parts, accessories, and equipment; machine tools; and the alteration or installation of any of the foregoing.

A service contract means a contract that directly engages the time and effort of a contractor whose primary purpose is to perform an identifiable task rather than to furnish an end item of supply. [FAR Part 37] A service contract may be either a non-personal or personal service contract. It can also cover services performed by either professional or non-professional personnel whether on an individual or organizational basis.

According to FAR Part 37, service contracts can include the following:

- Maintenance, overhaul, repair, servicing, rehabilitation, salvage, modernization, or modification of supplies, systems, or equipment
- Routine recurring maintenance of real property.
- Housekeeping and base services.
- Advisory and assistance services.
- Operation of Government-owned equipment, facilities and systems.
- Communications services.
- Architect-Engineering
- Transportation and related services
- Research and development

Despite the apparent inclusion of maintenance, overhaul, repair, rehabilitation, salvage, modernization, or modification of supplies, systems, or equipment into the definition of a service contract, there are Department of Labor (DOL) regulations that provide the basis for distinguishing between supply and service contracts based on the nature of the repair- i.e. when remanufacturing or overhaul is involved. The Walsh-

Healey Public Contract Act generally applies to the remanufacturing and furnishing of supplies.

- The DOL's Field Operations Handbook Chapter 14 provides that Section 7(1) of the Service Contract Act **exempts** from its provisions "any work required to be done in accordance with the provisions of the Walsh-Healey Public Contract Act."
- DOL Regulations provide detailed guidelines for delineating when contracts for major overhaul of equipment would be considered "remanufacturing" subject to Walsh-Healey rather than the SCA.
- Complete or substantial teardown and overhaul of heavy construction equipment, aircraft, engines, etc. where the Government receives a totally rebuilt end item with a new (or nearly new) life expectancy resulting from processes similar to original manufacturing will normally be considered "remanufacturing" subject to Walsh-Healey. [DOL Field Operations Handbook 14d03(b)] **NOTE:** Air Force has taken the position that labor law does not determine whether a contract is for supplies or services. The Navy considers the DOL's interpretation of the statute to be significant factor.
- The Labor regulations and FAR 22.1003-6 guidance is consistent on viewing major overhaul of equipment as being the equivalent of remanufacturing of equipment.

How the performance characteristics of the requirement are described is less important than the actual requirement to be delivered in respect to the PWS/SOO. The basis of payment should also be a determining factor in whether a requirement is a Supply or Service. Potentially under a PBL achieving an outcome defined by the PWS/SOO can be a Supply contract. Within our research we have reviewed contracts that had performance outcomes i.e. availability and reliability metrics and were constructed as supply contracts based on the ultimate outcome being hardware delivered to the warfighter. The metrics are a measure of effectiveness of that delivery.

Based on the preceding, we believe PBL contracts can be either supply or services; and, the nature of the requirement should be the determining factor if a contract should be determined as a supply or service contract. We further believe that there should not be a pre-ordained determination that a PBL should be one or the other where the PBL SOO is then constructed to satisfy this determination. We feel this could sub-optimize the desired outcomes.

PBL...Commercial (FAR Part 12) or Military Unique (FAR Part 15)

There has been much written on the subject of whether PBL should be viewed as a Commercial Item/Service governed by FAR Part 12 or follow the requirements that govern military unique requirements in FAR Part 15. The arguments that have been offered are very compelling and place much of their focus on the fact that PBL type support is widely adopted as a commercial practice within many industries. The stated position on FAR Part 12 as the preferred contracting mechanism over Part 15, where appropriate, while often voiced has never been prevalent and, with the current emphasis on affordability, and the lack of actual cost information under a Part 12, it is becoming more and more difficult to execute a Part 12 contract for PBL. There is also

continuing debate on the advisability of tightening up the requirements for a commercial determination.

For the purposes of this discussion we do not intend to recreate the arguments being offered; nor, do we intend to offer a firm or final determination. Much like the decision for whether a contract requirement will be a supply or service type contract, the determination of whether a PBL is a Commercial effort or whether it cannot meet the commercial determination needs to be made on a case by case basis and follow the same sort of process followed for a supply versus service determination.

In making the determination as to whether a specific PBL effort can meet a commercial determination, we feel it is critical that the system or components along with the PBL support be evaluated as part of the determination of commerciality. It may not be well understood, that when you are accepting an effort as commercial you are agreeing to the product support provider owning/controlling the actual processes used in performing the services. For critical military applications this may not be acceptable from an engineering perspective. The question is, "Is the engineering authority willing to give process control to the product support provider for an item or system that has a military unique application?"

From our viewpoint, a commerciality determination for PBL is more about process control than it is a cost and pricing issue. When faced with such a situation, the engineering community needs to be a player and should be included early in determinations of commerciality.

How the Tenets Build Strong PBL Programs

The practical insights offered here describe proven techniques for getting from traditional product support contracts or agreements to robust PBL implementation. All successful organizations know the ins and outs of product support, but few know how to properly incorporate PBL mechanisms into agreements at the tactical level—the process that formally links the inputs and the outputs to arrive at the government’s objective of top-flight support at a lower cost.

The contract is, in effect, the codification of the business arrangements governing the execution of the processes need to deliver the required output. No two situations are identical, so creativity and innovation are necessary, but there are sets of proven techniques that allow for the execution of the PBL Tenets.

