

White Paper
on
The Product Support Integration Function in a Performance Based Logistics Strategy

by

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Purpose: The intent of this White Paper is to delineate the role, responsibilities, characteristics, skills, desired experience, and appropriate contracting strategy and incentives applicable to the function of the Product Support Integrator in a PBL support strategy.

Introduction

The fundamental tenet of Performance Based Logistics is buying outcomes – performance and/or support outcomes, defined as metrics, to deliver warfighter capabilities. DoD is moving away from transaction-based, functionally oriented weapon system sustainment towards obtaining desired operational objectives (i.e. readiness, reliability, maintainability) as a predetermined package. The DoD agent charged with developing and managing the PBL strategy is the Program Manager (PM), who is mandated by policy to assume Total Life Cycle Systems Management (TLCSM) responsibility. The PM, while charged with support responsibility, executes that responsibility through use of a range of support sources, public and private, to deliver a best value, operationally effective system to the warfighter. A critical objective in delivering effective support is the integration of the various sources of support so as to optimize operational outcomes for the performance-based end support item. The often multiple and varied support sources involved in the overall DoD support process inherently optimize for internal process efficiency aligned with their functional area of responsibility, whether it be repairing auxiliary power units for a range of aircraft or stocking consumable items in a warehouse that are used across hundreds of systems. The PM needs an agent, or entity, to ensure that the efforts of all support providers will align and optimize for the object of support, whether it be a platform level system such as the F-117 aircraft or a specific commodity in a common avionics suite. This focal point for support integration at the end item level is the Product Support Integrator (PSI), as shown in Figure 1, below.

The PSI Integrates System Support

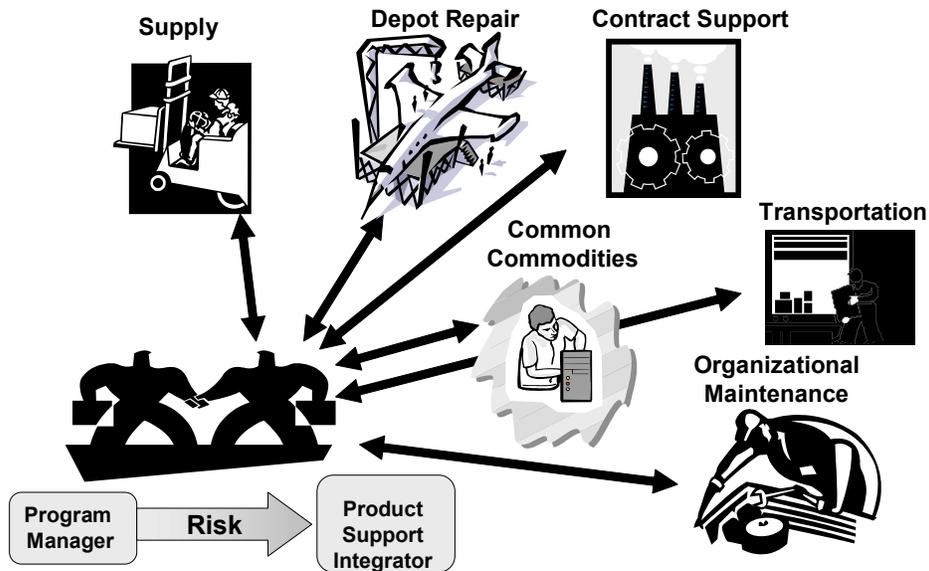


Figure 1

The PSI is an entity charged with integrating all sources of support, public and private, defined within the scope of PBL agreements to achieve the documented outcomes. The PM, while remaining accountable for system performance, effectively delegates responsibility for delivering warfighter outcomes to the PSI. In this relationship, and consistent with “buying performance”, the PSI has considerable flexibility and latitude in how the necessary support is provided, so long as the outcomes are accomplished.

The Defense Acquisition Guidebook defines the PSI as follows:

“The program manager's responsibilities for oversight and management of the product support function are typically delegated to a ‘product support manager’ (an overarching term characterizing the various Service function titles, i.e. Assistant Program Manager for Logistics, System Support Manager, etc) who leads the development and implementation of the product support and Performance Based Logistics strategies, and ensures achievement of desired support outcomes during sustainment. ***The product support manager employs a Product Support Integrator (PSI), or a number of PSIs as appropriate, to achieve those outcomes. The PSI is an entity performing as a formally bound agent (e.g. contract, MOA, MOU) charged with integrating all sources of support, public and private, defined within the scope of the Performance Based Logistics agreements to achieve the documented outcomes.*** The product support manager, while remaining accountable for system performance, effectively delegates responsibility for delivering warfighter outcomes to the PSI. In this relationship, and

consistent with "buying performance", the PSI has considerable flexibility and latitude in how the necessary support is provided, so long as the outcomes are accomplished.”

Source: Defense Acquisition Guidebook, Section 5.3.1.5

Scope of PSI Responsibility

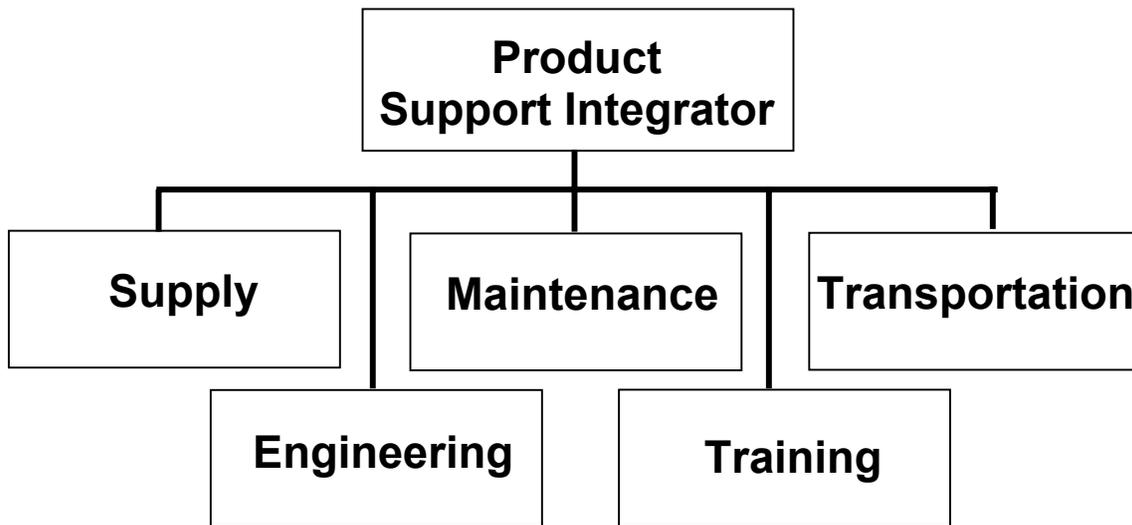
The scope of PSI responsibility is in direct relation to the scope of the PBL strategy. PBL strategies can be implemented across a range of alternatives as reflected in Figure 2, below. In general, PBL can be implemented at any level, from a single support process (e.g. wholesale supply) for a single component (a fuel control) all the way up to a wide range of support processes (materiel management, maintenance, transportation, technical support, training, etc.) for a complete system (e.g. the C-17 aircraft). In general, most PBL strategies will be implemented at various levels in between these two extremes, with the majority being implemented at the sub-system or major commodity level, due to relative ease of implementation as compared with the significant effort required to plan, develop, and implement a platform level Total System Support PBL strategy for a major weapon system. Both ends of the PBL implementation spectrum, from the component level to the platform level, are viable and effective, and the approach taken will be dependent upon a range of criteria including operational requirements, life cycle phase, available resources, current support infrastructure, Service guidance, and an accomplished Business Case Analysis (BCA).

PBL Implementation Matrix

	Logistics Support Elements		
	Single	Multiple	All
System Level	Single element for a entire system	Multiple elements for entire system	All elements for entire system
Sub-System Level	Single element for sub-system	Multiple elements for sub-system	All elements for sub-system
Component Level	Single element for a single component	Multiple elements for a single component	All elements for a single component

Figure 2

As previously mentioned, the PSI is charged with integrating all sources of support, public and private, *defined within the scope of the PBL agreements* to achieve the documented outcomes. The scope of support can be characterized as *vertical* or *horizontal*. A *vertical* scope of support is aligned along system platform lines, i.e. the broad range of support functions required to support a single weapon system “platform”, such as an aircraft, a tank, or other similar operational end item of tactical significance to the warfighter. For example, as depicted in Figure 3 below, a PSI may have responsibility for managing and integrating support functions across supply, maintenance, transportation, training, engineering, and other logistics elements of support for a single system.



“VERTICAL” PBL ORIENTATION

Figure 3

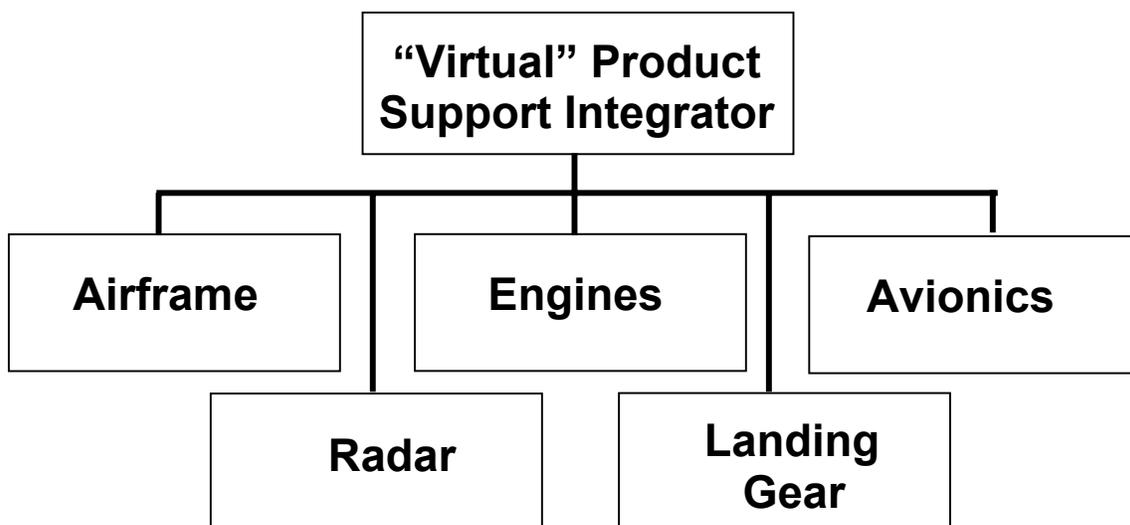
In this vertical approach, the PSI bears a significant portion of the risk, at the system level, for meeting the system performance outcomes, by virtue of either performing or managing the majority of the support functions directly contributing to the specific system performance objectives. This PSI orientation is most often used where there has been significant single source Prime Vendor/Original Equipment Manufacturer (OEM) oversight of design and manufacturing of the system. This orientation leverages significant Prime Vendor expertise, equipment, facilities, technical data, subcontractor resources, and supply chain efficiencies geared towards optimizing the objective weapon system.

Conversely, where any one or more of the following conditions exist a vertical PSI orientation PBL strategy may be less feasible:

- Lack of a clear, single Prime Vendor/OEM
- Significant use of common sub-systems, commodities, and parts

- Multiple variants of a single system with varying customers and performance outcomes
- A large, complex, “system of systems” enterprise
- An existing, large scale in-place support infrastructure with support source allocation, contracts, and organic workloads highly institutionalized

In these situations for a specific weapon system, or when a decision has been made to intentionally implement PBL at the sub-system or commodity level, a *horizontal* PSI approach may be the best strategy. As depicted in Figure 4 below, this approach is characterized by multiple sub-system or commodity level support strategies (either PBL or non-PBL), with an overarching Program Office team serving as a virtual PSI (also called a “Product Support Manager”, or PSM) to manage the integration of these horizontally-focused support strategies to optimize the vertical weapon system performance outcomes required by the warfighter. Each of the subordinate PBL support functions would have a PSI at that level with responsibility for integrating support within the scope of that support area to achieve performance outcomes commensurate with the support needed at that level. Also note that the range of support functions may involve multiple sources, public and private, with multiple contractors among the private sources, and a mix of PBL and traditional support strategies. While more complex in terms of oversight in achieving vertical, weapon system optimized performance outcomes, this strategy is generally easier to implement in an incremental approach, and may be more suitable for transitioning to PBL in legacy systems with existing support infrastructures, or very complex “system of systems” platforms with varying customer outcomes and related support strategies.



“HORIZONTAL” PBL ORIENTATION

Figure 4

Although the ideal PBL arrangement, in terms of creating a close link with warfighter operational requirements, is a single PSI for all elements of support for an entire system,

in actual practice most PBL strategies occur at the sub-system or commodity level, as previously mentioned. The Program Manager, charged with responsibility for supporting the entire system, may establish a Product Support Integrator function within the Program Management Office (PMO) as reflected above to provide top-level oversight and management of the various sub-system support arrangements, which may be a mixture of PBL and traditional support strategies, or a Third Party Logistics provider may assume an overall integration role while having little hands on support responsibility for the items managed.

The scope of support accountability for a PM never varies – they are responsible for supporting the entire system. The scope of accountability for a PSI, conversely, is predicated upon the scope of support elements for which they have been assigned responsibility. Figure 5, below, represents the range of potential PSI responsibility, dependent upon scope of the PBL strategy:

PSI Scope of Responsibility Varies

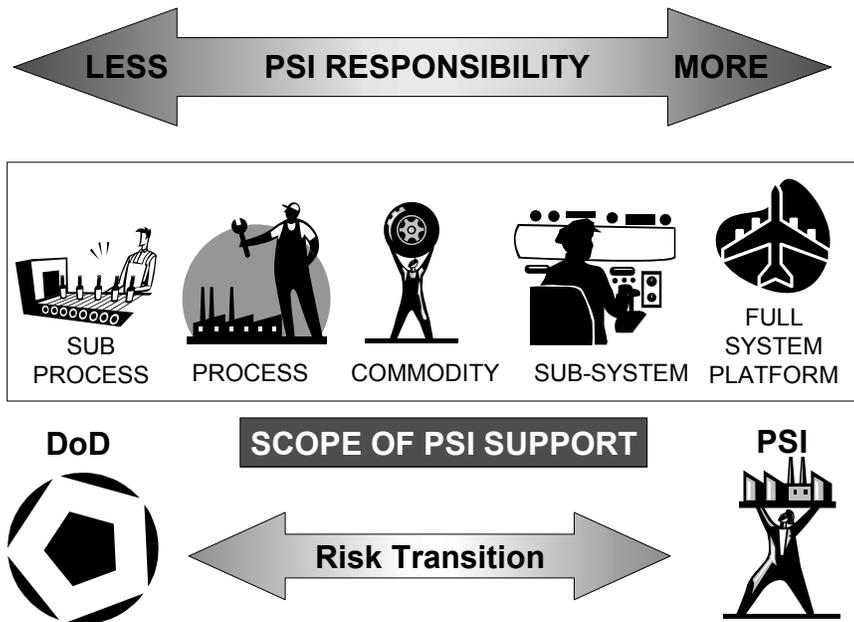
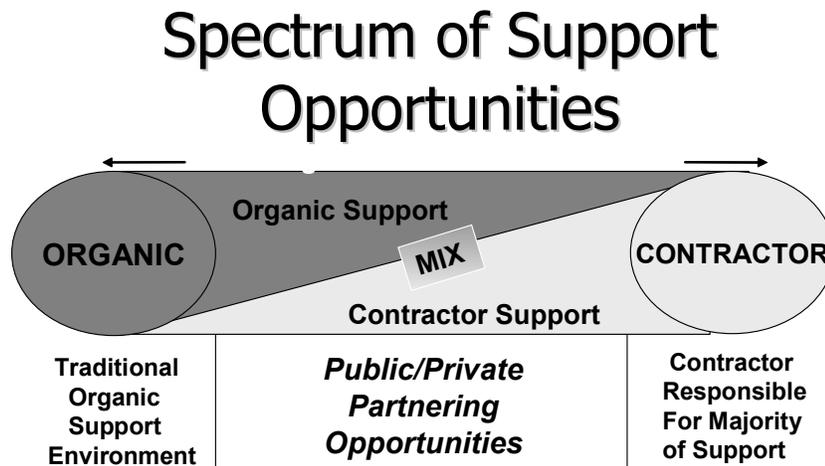


Figure 5

Almost all DoD support is comprised of a mix of commercial and organic sources. “All Organic support” or “All contract support” strategies are rare. DoD is directed by statute (Title 10 US Code: Section 2464 [Core], and section 2466 [“50/50”]), regarding the assignment of depot maintenance workloads, which generally dictate the percentage of depot maintenance workload that must be performed organically. In addition, Service policies and preferences for organic performance of other support functions such as in-theater distribution, retail supply, and organizational maintenance are additional factors affecting the allocation of workloads among public and private sources. Consequently, PBL strategies are predicated upon a “best value” assessment of source of support

options and consideration of Title 10 requirements and Service policies to achieve a mix of the best capabilities from organic and commercial sources to arrive at the optimum workload allocation strategy for the target system. Product Support Integrators, to the extent that they will assume responsibility for the integration of these sources of support, should be part of the PM team as it develops the workload allocation strategy. This concept of finding the best “mix” of public private capabilities is illustrated below in Figure 6.



- Few DoD support workloads are “All” organic or “All” contract – it’s a MIX
- PBL support strategies are no different – only the basis of the agreement
- The challenge in developing your strategy is to find that right “mix”

PBL is NOT Outsourcing!!

Figure 6

PSIs can either be commercial or organic entities. Commercial PSI arrangements are implemented as contracts, with included performance outcomes (target performance metrics) and incentives tied to achievement of those outcomes. Commercial PSIs can also be made responsible for all commercially provided support functions, either through direct performance of those functions or in the context of a Prime contractor-subcontractor relationship; an example would be direct performance of wholesale materiel management functions for unique reparable items, and management of a subcontractor for premium transportation (e.g. FEDEX, UPS) of those items as required. Currently, the only means by which a commercial PSI can “manage” organic support activity is through a formal public-private partnering arrangement, consistent with applicable sections of Title 10 USC. The basis of these partnering arrangements can encompass several cooperative relationships, listed below:

- Organic organization as sub-contractor: Authorized by various Title 10 sections, this relationship allows an organic agency (subject to compliance with specific statutory requirements) to act as a sub-contractor to a Prime contractor by “selling” goods and/or services to the prime. While the Prime does not directly pay the salaries of the organic personnel, it does provide work assignment and direction to the organic personnel in a management role.
- Work Share: Work share consists of a facility and equipment lease to a commercial contractor and splitting the total work package between governmental and contractor personnel
- Joint Use: Joint use consists of depot maintenance personnel working side by side with commercial contractors within a government facility
- Mixed Production: Mixed production consists of a single line producing a mix of products that include organic and commercial products

In summary, a PSI cannot, or will not, agree to be held responsible for performance outcome metrics, such as overall system availability, if they do not either perform or directly manage and control the support functions that produce that metric. The determination of PSI scope, through allocation of support workloads, is one of the most critical factors in building an effective PBL strategy.

Who is the PSI?

The candidates for assuming the PSI role are limited. They can, as previously mentioned, come from either the public (organic) or private (commercial) sector. While the requisite characteristics and capabilities of a PSI will be discussed later, the fundamental PSI attributes are knowledge about the item or system to be supported, expertise and experience in logistics support functions, and a willingness and capability to be responsible for integration of support within the scope of their negotiated responsibility for achievement of the PBL outcomes. PBL strategies are not “best effort” relationships; they are essentially warranties of performance, with commensurate rewards for achievement (via contractual incentives, discussed later), and sometimes sanctions for non-achievement. Commercial PSIs enter into PBL relationships at risk – most often the financial risk of their profit or gain from the relationship. With such risk, what are the offsetting benefits to PSIs for entering into PBL relationships? There are several:

- Stable workload and cash flow. In transaction-based (e.g. level of effort) relationships, the DoD workload required and financial resources available can vary significantly from year to year. PBL relationships are generally stable, with a predefined range of workload and commensurate income over time.
- Flexibility. In PBL support strategies DoD buys outcomes, without dictating “how to” accomplish those outcomes. This provides the PSI significant latitude to exercise a creative and entrepreneurial approach to not only meet, but often exceed, DoD requirements.
- Long Term Relationships. PBL relationships focus on continuity, as long as the desired outcomes are achieved. A common feature of these relationships is

“Award Term” contract incentives, where additional contract option years are awarded non-competitively based on continuing excellent performance.

- Mitigation of Government Oversight. Performance-based contracts are generally characterized by fewer administrative oversight requirements (e.g. government approved cost accounting systems and reporting requirements).

As mentioned, the viable candidates to assume the PSI function are limited, given the significant responsibility, risk, and range of management and integration functions inherent in the role. The Office of the Secretary of Defense (OSD) has consistently stressed that “PBL does not equal contracting out” – in other words, PBL is not just outsourcing workloads. It should be emphasized that selection of a private sector commercial PSI does not presuppose outsourcing workloads – the allocation of workloads in a PBL relationship will continue to be sourced in compliance with Title 10 and where it makes the best sense and provides best value given both public and private sector capabilities, infrastructure, personnel, and resources. The willingness of Congress to enact Title 10 changes to facilitate public private partnering is clear evidence that there is ample flexibility to maintain public sector workloads within the bounds of a contractor-PSI based PBL relationship. Listed below are the most common entities selected as the PSI in PBL relationships.

- Prime Vendor/Original Equipment Manufacturer (OEM). As discussed more thoroughly later, a prime prerequisite for successful PSI performance is in-depth system knowledge. The Prime Vendor/OEM, with responsibility for designing, producing, and successfully fielding a subject system has a vast array of system knowledge and corresponding robust infrastructure (equipment and facilities), along with in-place sub-contractor support, trained personnel, technical data, proprietary rights, and numerous other irreplaceable qualities and skills that make them eminently qualified to assume the PSI role.
- Third Party Logistics (3PL) Provider. The use of 3PLs is becoming more prominent in both the public and private sectors. 3PLs are attractive PSI candidates when they meet one or both of the following criteria:
 - Significant expertise in a Logistics functional area encompassed by the PBL relationship. For example, the PBL strategy may be limited to Supply Chain Management (SCM). As such a 3PL with significant expertise in SCM would be eminently qualified as a PSI.
 - Significant experience in integration management, especially when there is no clear “Prime” vendor/OEM. For some systems, there may be a range of suppliers, with no clear Prime vendor able to encompass the range of suppliers and support functions needed to effectively integrate support. In those situations, a 3PL with significant experience at integrating a range of support providers to achieve top-level outcomes may be the best candidate for the PSI role.
- Organic DoD Organization. For legacy systems with an existing organic support infrastructure in place, wholesale transition to a contractor PSI led PBL strategy is generally not possible, which promotes subsystem and component or process level PBL strategies as the most viable opportunities for performance based

support. For these systems, where PBLs will most often be initiated at “less than system” level, the overall PSI top-level integration function will usually be done organically, either directly through the Program Office, or in partnership with a key organic support organization, such as a Depot or Inventory Control Point. Organic agencies assuming a PSI role must be willing and able to execute binding performance agreements (e.g. Memorandums of Understanding, Memorandums of Agreement, and/or Service Level Agreements) to which they will be held responsible for achieving documented performance and support outcomes. This means that the organic agency leadership must ensure that management processes including resourcing and work prioritization are in place adequate to meet the needs of the PBL relationship.

- Program Management Office. As reflected under “Scope”, above, the Product Support Integration function may be accomplished within the PMO when a *horizontal* PBL strategy composed of both PBL and non-PBL discrete functional support strategies has been implemented.

PSI Risk in PBL Relationships

PBL support strategies inherently prompt a degree of “risk shift” from DoD to the Product Support Integrator. While DoD remains ultimately accountable in delivering operationally effective capability to its warfighters, the PSI assumes responsibility for delivering those performance outcomes as defined in Performance Based Agreements and PBL contracts. In traditional DoD support strategies, support is accomplished through a purchase, either organically or commercially, of support ‘transactions’. In simple terms, quantities of goods or services are purchased to keep DoD systems operational. The ‘goods’ may be simple piece parts or more complex repairable commodities, while the services may be maintenance or repair actions, engineering and other technical support services, or similar support activities. The basis on which these goods and services are acquired is predicated upon a DoD entity, such as an item manager, calculating a forecasted requirement of demand for an item, such as a fuel control, and initiating a “buy” of a determined quantity of the item. The focus of the process is not on the ultimate warfighter system (e.g. a tank), but rather on the multitude of components that make up the tank. If the forecast is incorrect, or there are difficulties in procurement, or resources are not available to buy needed quantities, then the result may be inadequate parts to repair the tank and a corresponding degradation in performance for the warfighter. In a PBL strategy, DoD purchases support in terms of performance outcomes, rather than discrete transactions. The PSI assumes responsibilities for “how to” achieve those outcomes, ranging from developing demand forecasts to repair forecasts to the actual procurement and delivery of same, as illustrated in Figure 7, below.

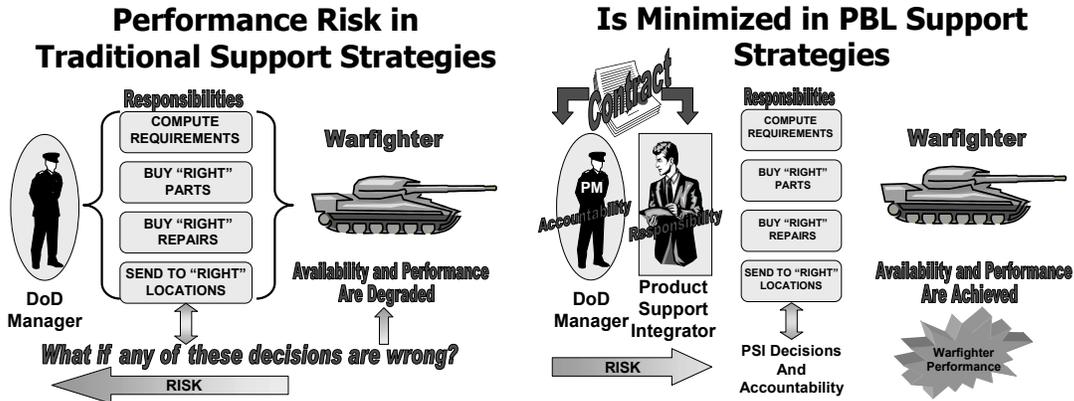


Figure 7

There are additional aspects to risk in DoD. In the traditional Acquisition assessment of risk, reference is usually made to Cost and Schedule risk. For example, what is the risk that cost will increase, or that the schedule will be delayed? Consequently, Program Managers make Risk Assessments and develop "Risk Mitigation" strategies to minimize risk. In PBL strategies, the risk factor encompasses whether or not the Performance Outcomes will be met. With responsibility for achieving metric outcomes that support the performance outcomes, the Product Support Integrator carries a high degree of this risk responsibility.

What is "Risk" for DoD?

- Dictionary Definition: A factor, thing, element or course involving uncertainty of negative consequences; also the "probability" of the negative consequences
- Assessment of risk: Assigning a probability (e.g. as a %) that consequences will occur
- Acquisition Risk: Cost, Schedule
- PBL Risk: The uncertainty as to whether desired performance outcomes will be achieved

PSI Knowledge, Skills, and Capabilities

The primary difference between commercial support providers in a PBL relationship versus a traditional contractual relationship is adopting a proactive, vice reactive approach to meeting the support requirements. In traditional DoD contracting, commercial providers react to detailed requirements specified by DoD in terms of specifications, quantity, and schedule. Their only responsibility is meeting the detailed requirements in return for a specified cost. They bear no risk for the accuracy of the DoD requirements, or the ultimate affect on weapon system performance. In a PBL relationship, DoD has shifted responsibility for determining the quantities, scheduling, and prioritization of goods and services to the PSI, along with much more flexibility in determining how the day-to-day detailed requirements will be met, as long as the top-level performance outcomes are achieved. This means that the PSI must be an active entity – conducting detailed and comprehensive analysis, planning, and forecasting to ensure that the myriad decisions about the timing and delivery of specific goods and services across the range of support providers will harmonize correctly to ensure success.

This proactive approach requires an intimate knowledge of the system being supported, either through internal resources (as a Prime Vendor/OEM) or managed resources (other commercial entities under contract, and/or organic support agencies). In order to be effective in a proactive mode, a PSI must possess management/integration and program/project management skills and experience. Desired experience requirements include Logistics/Sustainment and Acquisition in Defense systems, preferably in the DoD environment, commensurate with a working knowledge of Dod (and, further, specific Military Department) policies, practices, and weapon system support preferences. The following graphic illustrates these key PSI requirements.

The PSI Should Be:

- ✓ ***Knowledgeable* about the system**
- ✓ ***Accountable* for meeting performance metrics**
- ✓ ***Responsible* for integrating support sources**
- ✓ ***Incentivized* to continuously improve reliability, maintainability, and technology**
- ✓ ***Involved* early in the program life**

PSI Contracting

DoD support contracts fall into two broad categories – Cost Plus or Fixed Price, as shown below. PBL contracts can be of either type, but in general the objective is to work towards a Fixed Price contract, in conformance with the PBL concept of buying “defined” outcomes at a “defined” price.

Types of PBL Contracts

- **Cost Plus**
 - **CPIF** (Cost Plus Incentive Fee)
 - Objectively assessed performance metrics
 - **CPAF** (Cost Plus Award Fee)
 - ~Subjectively assessed performance metrics
- **Fixed Price**
 - **FPIF** (Fixed Price – Incentive Fee)
 - Objectively assessed performance metrics
 - **FPAF** (Fixed Price – Award Fee)
 - ~Subjectively assessed performance metrics
- **Award fee/Incentive Fee earned based on predetermined assessment of contractor performance against an award or incentive fee plan**

The major determinant factor in choosing between Cost Plus and Fixed Price contracts is the degree of “pricing risk” present in the support cost. In general, pricing risk is high during the early phases of program development and deployment; hence the use of Interim Contracting Support (ICS) contracts on a cost reimbursable basis. As costs become more stable, but still subject to pricing risk, a transition to a Contract Logistics Support (CLS) contract of a Cost Plus (CP) type is feasible, including the addition of either Incentive Fee (CPIF) or Award Fee (CPAF) features, or a combination of both (CPIF/AF).

PBL Contract Phasing



- **ICS (Interim Contractor Support)**
 - Generally the initial, level of effort Cost Plus) contract for support during SDD; produce and support IOT&E test assets, initial spares and maintenance training, etc.) **NON-PBL**
- **CLS (Cost Plus [Incentive Fee/Award Fee])**
 - Used for transitional support (LRIP through Production and Deployment) while cost and resource baselines are being tracked and defined. **PBL, Partial PBL, or NON-PBL**
- **CLS (Fixed Price [Award Fee/Award Term, etc.])**
 - Used when cost and resource baselines are well documented, cost and pricing risk are minimal, and both DoD and Contractor can define price, incentives, and performance outcomes with a high degree of confidence. **PBL, Partial PBL, or NON-PBL**

These types of Cost Plus contracts can be structured with cost targets, incentives, and other features that realize most, but not all, the price benefits of Firm Fixed Price contracts while still accommodating pricing risk. Again, the ultimate objective should be to convert to a long term Firm Fixed Price contract with appropriate incentive features (i.e. FPIF, FPAF, etc.). In a Fixed Price contract, a commercial PSI enters into a PBL contractual arrangement with the understanding that, for a specified fixed price, they will meet the performance outcomes, irregardless of the amount of resources or cost they contribute to the effort. This financial risk is a factor in their negotiation of both contract price and incentives (discussed later). The nature of the incentives will dictate the type of fixed price contract, such as Fixed Price – Award Fee, Fixed Price – Incentive Fee, or others as appropriate. The critical advantage to Fixed Price contracts is that they tend to be “self-motivating”; they motivate the contractor to do inherently “good” things such as procure ultra-reliable parts and perform high quality repair actions, since they ultimately benefit from less cost (and higher profit) resulting from fewer parts and repairs required over the long term. Development of a contracting strategy, encompassing the phasing and types of contracts is a critical factor in PBL strategy development. A notional example of PBL contract phasing is shown in Figure 8, below.

Notional PBL Contract Strategy

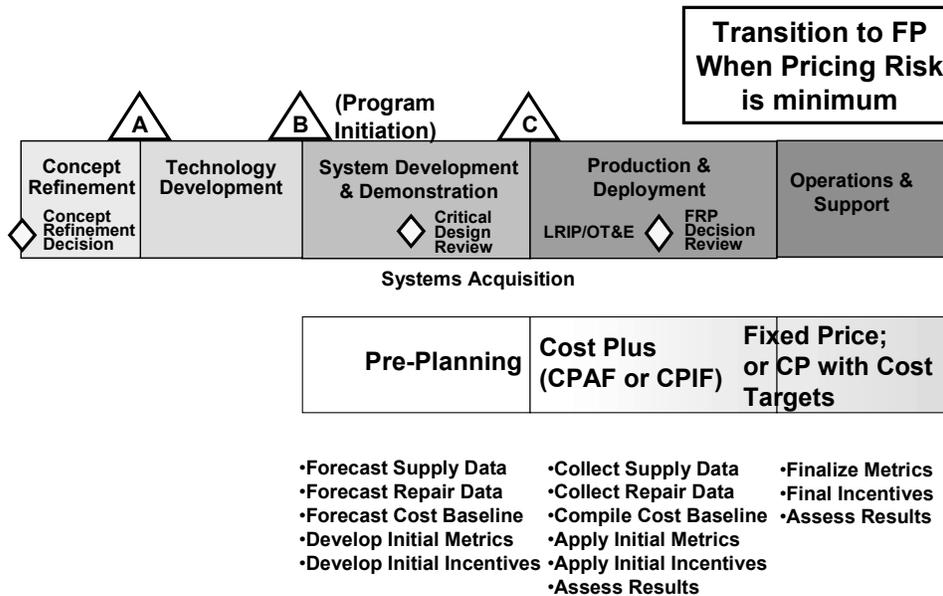


Figure 8

PSI Incentives

PBL has been described as a transition from “arms length” to “arm in arm” relationships between commercial providers and organic organizations. It requires open and honest communication, a commitment to team relationships that optimize system objectives over parochial interests, and long term success over short term gain. PBL contracts and formal agreements are, with intent, structured to produce win-win scenarios. For many years, DoD contracting had a strong “win” orientation – negotiating the best terms with little regard for the benefits or terms of the other party. In PBL, negotiations do not have to be mutually exclusive; it is possible to describe and document terms that optimize outcomes and objectives for both parties in the relationship.

One of the best ways to achieve this “win-win” scenario in PBL contracting is through the use of contractual incentives. One of the earliest DoD contracts, the purchase of the first military aircraft from the Wright Brothers in 1909, made use of contract incentives as illustrated in Figure 9, below.

PBL Contract Incentives

- The Government contracted for its first Aircraft with the Wright Brothers in 1909
 - Target price: \$25,000
 - Target speed: 40 MPH
 - Incentive:
 - For every MPH over the target, contractor receives an additional \$2,500
 - For every MPH under the target, contractor loses \$2,500
 - Minimum speed requirement: 36 MPH
 - *Final delivered MPH speed: 42 MPH*
 - *Incentive actually earned: \$5,000*



Figure 8

The most common PBL incentives are shown below.

- **Incentive Fee**
 - Most incentive contracts include only cost incentives, which take the form of a profit or fee adjustment formula and are intended to motivate the contractor to effectively manage costs. No incentive contract may provide for other incentives without also providing a cost incentive (or constraint).
 - Incentive contracts may include a target cost, a target profit or fee, and a profit or fee adjustment formula that (within the constraints of a price ceiling or minimum and maximum fee) provides that:
 - (1) Actual cost that meets the target will result in the target profit or fee;
 - (2) Actual cost that exceeds the target will result in downward adjustment of target profit or fee; and
 - (3) Actual cost that is below the target will result in upward adjustment of target profit or fee.
 - Performance incentives may be considered in connection with specific product characteristics (*e.g.*, a missile range, an aircraft speed, an engine thrust, or vehicle maneuverability) or other specific elements of the contractor's performance. These incentives should be designed to relate

profit or fee to results achieved by the contractor, compared with specified targets.

- **Award Fee**
 - An Award Fee plan is established
 - Can be a combination of Objective and Subjective assessments
 - Award fee (or portion thereof) is earned by meeting Award Fee plan performance goals
- **Award Term**
 - Additional (option) years are added to the original contract based on satisfactory contractor performance
- **Shared Savings**
 - Fixed Price – Contractor Costs = Contractor Profit
 - When a pre-negotiated maximum contractor profit increases (meaning costs decrease due to contractor achieved “savings”), DoD and contractor share the savings based on a percentage formula (e.g. 50/50)

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(NOTE: Contractor must also share in any cost OVER-RUNS!)

Earning of contractual incentives in PBL contracts is based on meeting the contractual metrics for performance and/or support. Although it will necessarily vary from contract to contract, the identified metrics should be structured such that there is room to earn a full incentive if the optimum metric is met or exceeded, and lesser portions of the incentives if the optimum metric is not fully met, with lesser amounts of incentive earned down to a metric floor at which point no incentives are earned. As an example, a PBL contract metric may be Non-Mission Capable Supply (NMCS), which measures the percent of time that a system is not Mission Capable due to lack of a critical part supplied

by the PSI. A typical percentage target for this metric would be 5%, meaning that the metric would be fully met if, for the weapon system fleet, the total non-Mission Capable percent attributable to critical parts supplied by the PSI does not exceed 5% for the measurement period (i.e. the PSI makes the part available 95% of the time). If fully met, the PSI would receive the full incentive. However, the contract should also identify a sliding scale of NMCS percentages, for example, from 6-10%, with an incentive amount (less than the full incentive amount) identified for each percentage point higher than 5% but not greater than 10%. For example, if the NMCS percentage for the measurement period was 6%, then the PSI would receive the incentive amount (again, less than the full 5% NMCS incentive amount) identified at that percentage level, and correspondingly decreasing incentives at 7, 8, 9, and 10% respectively. An NMCS percentage of 11% or higher would earn no incentive. This award fee structure is shown graphically in the table below.

Award Fee Table							
NMCS %	5%	6%	7%	8%	9%	10%	11 % >
Award Fee Points	100	80	60	40	20	10	0

Although the focus of PBL contracts is positive, through inclusion of incentives, it may be necessary to include disincentives, or sanctions, when the PSI does not achieve a minimum performance requirement. Although not earning an incentive should be adequate sanction, as described above, there may be circumstances where an actual reduction in the base contract amount, vice non-earning of an incentive, will apply. Use of sanction in PBL contracts should be rare and, as stated, will usually be suitable only for unusual, but highly mission critical, situations.

The Air Force F-117 “Nighthawk” stealth aircraft is supported by a PBL contract with a range of metrics and corresponding incentives earned under an award fee contract, where the PSI earns points towards the award fee payment through meeting target objectives for a range of seven critical operationally relevant support metrics, as shown in Figure 10, below.

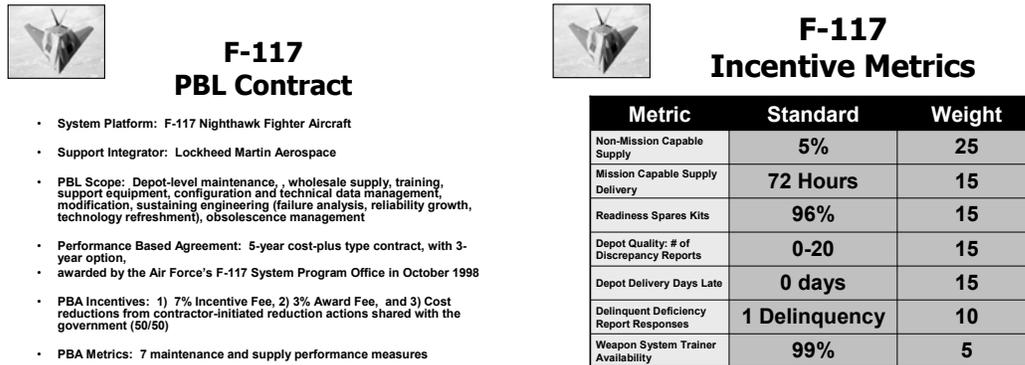


Figure 10

PSI Performance Assessment

For a commercial PSI contractor, the PBL contractual metrics and incentives are their lifeblood – they will make the difference between earning a reasonable profit and little or possibly no profit from the contract. Accordingly, it is critical to develop and include a comprehensive and detailed performance assessment plan. This plan must include, at minimum, the following information:

- The metrics to which the contractor will be held responsible (e.g. performance and support outcomes, such as system availability, reliability, process performance, etc.)
- The weighting (if used), prioritization, and range of metric values used to determine earning of contractual incentives
- The identification of the source of the data from which the metrics will be calculated, how frequently the data will be collected and calculated, how the metric values will be calculated, the period of performance assessment upon which incentive evaluations will be made, and who will collect, compile, calculate, and assess the metrics

Selection of a PSI

Although a formal (i.e. contractual) support relationship may not be enacted until late in the acquisition cycle (at commencement of Production and Deployment), it is not unusual to identify the PSI (or PSI candidates) much earlier in the program, either at program initiation or during the System Development and Demonstration phase. The rationale for

this early identification is predicated upon the principles of Total Life Cycle System Management (TLCSM), which stress the importance of early and strong emphasis on designing systems for supportability to facilitate operational readiness, minimize logistics footprint, and achieve best value operations and support cost after system deployment.

And, as mentioned, the importance of a close teaming relationship between the PSI and other program stakeholders is critical. During System Development and Demonstration (SDD - between Milestones B and C), when the details of the PBL strategy, including workload sourcing allocation, are accomplished, it is imperative that the PSI, who will be responsible for integrating the various sources of support, participate in the identification of best value and best capability workload sourcing decisions.

Summary

The importance of the PSI role cannot be overstressed. In a PBL strategy, DoD is empowering the PSI with the ultimate responsibility – producing warfighter operational effectiveness by ensuring a continuously available, reliable, and effective system. The concepts of PBL – buying performance outcomes, incentivizing the PSI, specifying “what”, not “how” those outcomes are achieved, all facilitate the tremendous success evident in PBL support strategies to date. By utilizing and applying the principles, criteria, and recommended actions noted in this white paper, a successful and effective DoD-PSI relationship can be structured that will achieve PBL objectives over the life of the system