



Increasing the Effective Use of Performance Based Logistics



"Appropriate use of Performance-Based Logistics (PBLs) will help to achieve affordable sustainment strategies and is a method for achieving our Better Buying Power "

-- Frank Kendall, Under Secretary of Defense for Acquisition, Technology and Logistics (AT&L).

- **Why PBL?**
- **Success Factors and Tenets**
- **How to Make it Happen**
- **How to Measure Success**



PBL is Required

- "Program Managers (PMs) shall develop and implement performance-based product support strategies that optimize total system availability while minimizing cost and logistics footprint. Sustainment strategies shall include the best use of public and private sector capabilities through government/industry partnering initiatives, in accordance with statutory requirements." (Source: DoD Directive 5000.01, Enclosure 1, Para E1.1.17)
- The Program Manager will develop and implement an affordable and effective performance-based product support strategy. The product support strategy will be the basis for all sustainment efforts and lead to a product support package to achieve and sustain warfighter requirements." (Source: Interim DoDI 5000.02, Enclosure 6, Para 2.a.(1))



PBL is Required

- "CAEs, PEOs, and PMs will **emphasize** through appropriate communication vehicles the **importance of pursuing performance based product support strategies and the beneficial role of PBL arrangements**. This communication must draw on the PBL definition listed in this memorandum to promote a common understanding among the acquisition workforce and industry." (Source: ASD (L&MR) (Acting) "Performance Based Logistics Comprehensive Guidance" Memorandum, DTD 22 Nov 13)
- "Components will continue to provide **sustainment quad charts** for Defense Acquisition Board (DAB) and Defense Acquisition Executive Summary (DAES) reviews per Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) memorandum, "Strengthening Sustainment Governance for Acquisition Program Reviews," April 5, 2010 and **ensure that PMs (Program Managers) list specific PBL arrangements**, if appropriate, in the product support strategy section of the chart. (Source: ASD (L&MR) (Acting) "Performance Based Logistics Comprehensive Guidance" Memorandum, DTD 22 Nov 13)



PBL is Required

- "The Program Manager **will employ effective Performance-Based Logistics planning, development, implementation, and management in developing a system's product support arrangements.** Performance-Based Logistics (also known as performance-based life-cycle product support) ties objective metrics delivered logistical system performance to incentives that will motivate the support provider." (Source: Interim DoDI 5000.02, Enclosure 6, Para 2.a.(2))

Will Vs. Shall

- *Will* can imply volition or intention, while *shall* can imply necessity:
 - *I will scale Mount Everest.* (“and no one can stop me!”)
 - *You shall take the garbage out before you do anything else.* (“You have no choice, Junior!”)

A foreign tourist was swimming in an English lake. Taken by cramps, he began to sink. He called out for help:

“Attention! Attention! I will drown and no one shall save me!”

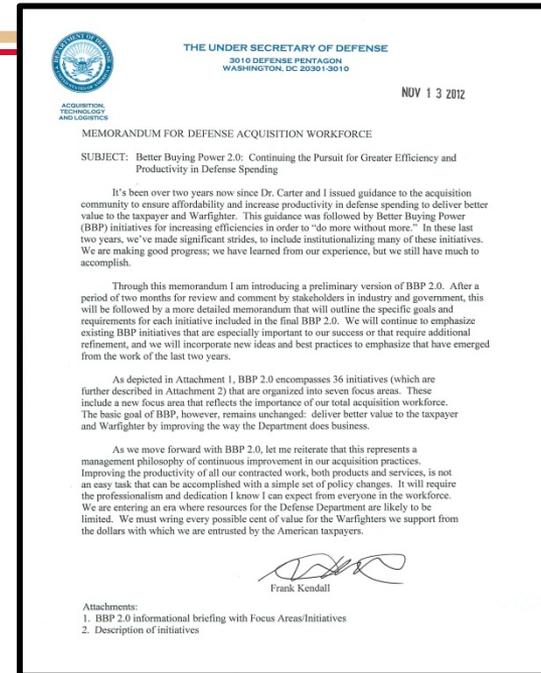
Many people were within earshot, but, being well-brought up Englishmen and women, they honored his wishes and permitted him to drown.



Better Buying Power 2.0 & PBL

- Achieve Affordable Programs
- Control Costs Throughout the Product Lifecycle
- **Incentivize Productivity & Innovation in Industry and Government**
 - Increase effective use of Performance-based Logistics

“There is sufficient data on the effectiveness of PBL at reducing cost and improving support performance to conclude that if it is effectively implemented and managed, **PBL yields significant benefits**. Key activities include increasing the knowledge base of PBL through standard processes, tools, and training”



- Eliminate Unproductive Processes and Bureaucracy
- Promote Effective Competition
- Improve Tradecraft in Acquisition of Services
- Improve the Professionalism of the Total Acquisition Workforce

- “Project Proof Point” Analyses provided conclusive evidence that:
 - Properly **structured** and **executed**, PBLs reduce Services’ cost per unit-of-performance while simultaneously driving up absolute levels of system, sub-system and component readiness
- Savings potential
 - Average annual savings for programs with generally sound adherence to PBL tenets is **5-20% over the life** of the PBL arrangement compared to transactional support
- USD AT&L 14 May 12 “Endorsement of Next-Generation Performance-Based Logistics Strategies” Memo
 - “Appropriate use of Performance-Based Logistics (PBLs) will help to **achieve affordable sustainment strategies** and is a method for achieving our Better Buying Power (BBP) goals...”
 - “I will closely track our progress toward the goal of **aggressively implementing PBLs** and solicit your endorsement, commitment of resources, and active support.”

Performance Based Logistics and Project Proof Point
A Study of PBL Effectiveness

John Byrne • Allen Bonghart

There has been much debate recently about performance based logistics (PBL) as a sustainment strategy. Claims about the strengths and weaknesses of PBL have usually been based on emotionally charged anecdotal evidence and opinions, rather than facts.

To address this, the principal deputy assistant secretary of Defense for logistics and material readiness (oversees a staff) to perform an independent, fact-based assessment of PBL product support strategies. Called Project Proof Point, the analysis is intended to provide credible evidence of the relative pros and cons of PBL strategies. A subject matter expert report.

Byrne, John P. "Project Proof Point: A Study of PBL Effectiveness." Defense Acquisition University (DAU). 2012. Available at: www.dau.edu/Portals/0/PBL_Study_of_PBL_Effectiveness.pdf. Accessed 14 May 2012.

“PMs shall develop and implement performance-based logistics strategies that optimize total system availability while minimizing cost and logistics footprint.”
—DoD Directive 5000.01

THE UNDER SECRETARY OF DEFENSE
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WASHINGTON, DC 20301-3010

MAY 14 2012

MEMORANDUM FOR SERVICE ACQUISITION EXECUTIVES

SUBJECT: Endorsement of Next-Generation Performance-Based Logistics Strategies

Operations and Support (O&S) costs comprise 60 to 70 percent of total ownership cost. We must find ways to lower our O&S expenditures while maintaining the right readiness for our Warfighters. A key method to lowering O&S costs is the implementation of sustainment strategies that optimize readiness at best value. Appropriate use of Performance-Based Logistics (PBLs) will help to achieve affordable sustainment strategies and is a method for achieving our Better Buying Power (BBP) goals.

PBLs can be an effective method of achieving notable cost savings while improving readiness and should be broadly applied across the Department. A recently completed study by the Office of the Assistant Secretary of Defense for Logistics and Material Readiness (ASDL&MR) provided compelling evidence that properly constructed and executed performance-based product support strategies (commonly referred to as PBLs) deliver best-value weapon system support.

ASDL&MR is spearheading an effort focused on enabling broader, more effective implementation of PBLs across the inventory of DoD platforms, sub-systems, and components as appropriate based on business case analysis results. The Next-Generation PBL Integrated Product Team will provide effective policies, processes, tools, and training across all functional communities engaged in structuring and executing PBLs.

Developing correctly structured, priced, and executed PBLs is often a more complex task than initiating a standard transactional arrangement. It requires a combined and focused effort by the Program Manager, the Product Support Manager, and the Contracting Community, among others. However, the ability to more affordably support the Warfighter at a greater level of readiness is worth the effort.

I will closely track our progress toward the goal of aggressively implementing PBLs and solicit your endorsement, commitment of resources, and active support.

Frank Kendall
Acting



Comprehensive Guidance From ASD (L&MR) (Acting) "Performance Based Logistics Comprehensive Guidance" Memorandum, DTD 22 Nov 13

- Reiterates “**PBL is synonymous with performance based product support**, where outcomes are acquired through performance based arrangements that deliver Warfighter requirements and incentivize product support providers to reduce costs through innovation.”
- Emphasizes that PBL “arrangements are **contracts** with industry or **inter-governmental agreements**”, reiterating that PBL is neither outsourcing nor contractor logistics support (CLS).



Comprehensive Guidance From ASD (L&MR) (Acting) "Performance Based Logistics Comprehensive Guidance" Memorandum, DTD 22 Nov 13

- Identifies a series of “attributes of effective PBL arrangements” as well as providing examples of what PBL arrangements do not incentivize
- Identifies circumstances when PBL arrangements should be considered and when they may not in fact be appropriate
- States that “effective PBL arrangements involve more than the expertise and authority of the Life Cycle Logistics functional area
 - Program Management
 - Contracting
 - Engineering,
 - Business – Cost Estimating
 - Business – Financial Management”



Comprehensive Guidance From ASD (L&MR) (Acting) "Performance Based Logistics Comprehensive Guidance" Memorandum, DTD 22 Nov 13

- "CAEs and Logistics and Materiel Readiness (L&MR) will review Departmental policy causing **barriers** (both intended and unintended) to adopting PBL arrangements and take steps to **mitigate these barriers or revise policy**, as appropriate
- If there are constraints to using PBL arrangements when compared to other product support arrangements, **the rationale should be determined and corrected** where warranted."



Comprehensive Guidance From ASD (L&MR) (Acting) "Performance Based Logistics Comprehensive Guidance" Memorandum, DTD 22 Nov 13

- "CAEs and the Defense Acquisition University (DAU) will continue to support L&MR efforts to develop and maintain a PBL **Best Practices Guidebook**.—due out early 2014
- "Components should include **metrics-based assessments** of PBL arrangements as part of program sustainment reviews (National Defense Authorization Act for Fiscal Year 2012, Section 832(10)).



Comprehensive Guidance From ASD (L&MR) (Acting) "Performance Based Logistics Comprehensive Guidance" Memorandum, DTD 22 Nov 13

- "DAU will maintain a PBL Community of Practice (CoP) to provide a **repository of lessons learned** from material generated during PBL implementations across the Department."
- "CAEs should **encourage** members of these career fields (Life Cycle Logistics, Program Management, Contracting, Engineering, Business – Cost Estimating, and Business – Financial Management) to **pursue PBL training** through DAU as part of their continuing education requirements.
- "CAEs will **provide a summary of their PBL implementation efforts to the Business Senior Integration Group (B-SIG) on an annual basis**. They should consider including the current use of PBL arrangements, achieved savings, lessons learned and future opportunities."

- New Interdisciplinary *Performance Based Logistics Community of Practice (PBL CoP)*
- Shortcut Link: <https://acc.dau.mil/pbl>
 - Key Tenets, Enablers & Stakeholders
 - Definition & Overview
 - Value Proposition & Benefits
 - Policy & Guidance
 - Award Winning Programs
 - Project Proof Point & BBP 2.0
 - Proven Practices & Service Initiatives
 - Tools & Training and Reference Library





The Value of PBL

- Aligns long-term product support **planning** and sustainment activities directly to operational **outcomes**
- Support providers are incentivized to deliver more **effective** and **affordable** material support solutions
- Ensures **resources** are used to their **best advantage**
- When implemented with a commercial counterpart, PBL **transfers** some of the performance **risk** from the government to the provider since they are no longer rewarded for selling parts or services but instead are rewarded for delivering an outcome.
- PBL business model **incentivizes** the provider to affordably deliver the **required level** of war fighting readiness, even **without external competition**.

Government, commercial and academic research all support the benefits of PBL in terms of reduced life cycle costs and reliability improvements



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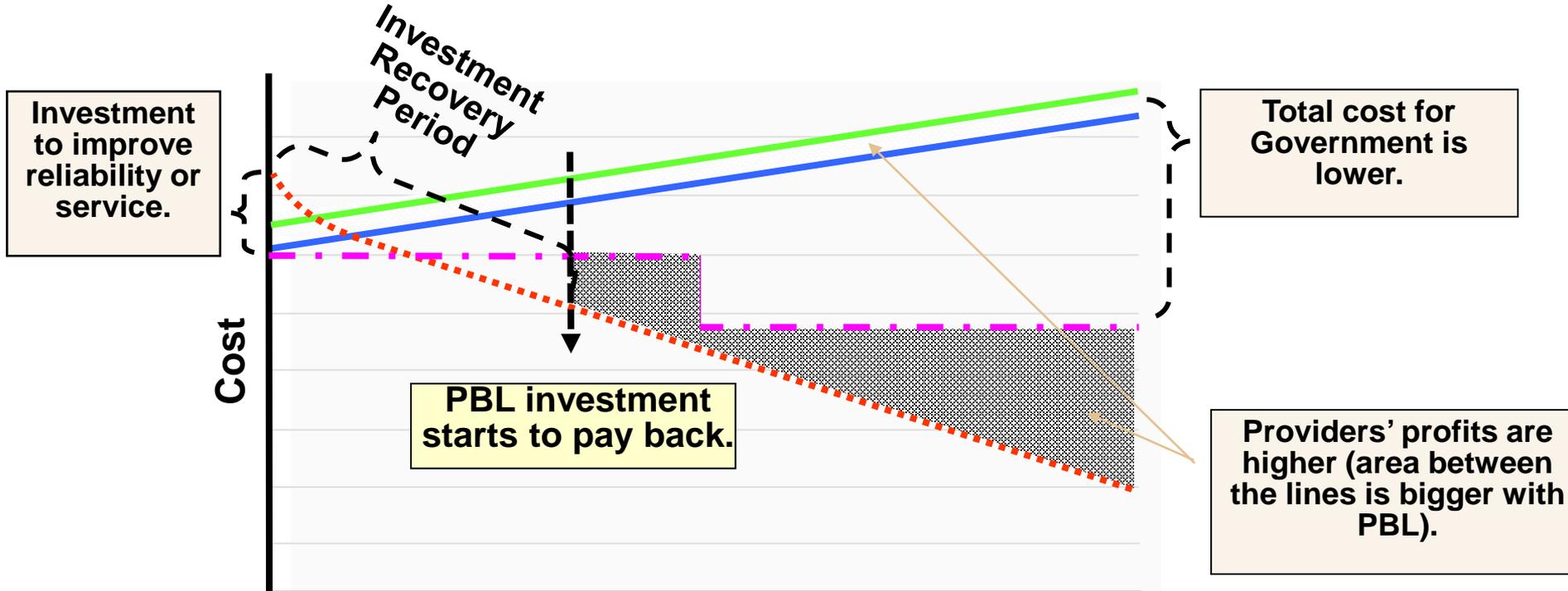
- **Weapon System Platform and Major Component Issues**
 - ❑ **Availability** of assets generally **dismal** across the Department
 - Reliability & maintainability impacted
 - ❑ **Costs** to sustain **high** and **out of control**
 - Transactional sustainment
 - Financial incentives not aligned to life cycle affordability for DoD or industry
 - ❑ **Disjointed Metrics**
 - ❑ **Risks borne** almost exclusively **by DoD**

- **Proposed answer: Embrace Performance Based Logistics sustainment strategy**

- **Deliver performance** versus services and material
- **Incentivize** desired PBL provider **behavior**:
 - Align DoD and PBL providers interests
 - Drive risk down -- share risk with PBL providers
 - Drive performance up - Drive cost down

Tie Providers' Performance To Warfighter Mission Effectiveness

Traditional vs. Performance-Based Contract



- Traditional Industry Price
- Traditional Industry Cost
- - - PBL Industry Price
- PBL Industry Cost
- Industry Profit

Contract duration incentivizes investment in reliability and service

**Notional Example*



Why PBL Works

- **DoD obtains comprehensive performance package**
 - Not individual parts, transactions, or “spares & repairs”
- **Approach totally reverses vendor incentive**
 - Fixed price **“pay for performance”** arrangements motivate vendor to reduce failures/ consumption
 - Incentivizes **“less I use, the more profit I can make”** vice a “more spares and repairs I can sell, the more profit I can make” mentality
 - Long term commitment enables vendor to balance risk vs. investment
- **Improves Parts Support**
 - Materiel availability increases + Logistics Response Time (LRT) decreases resulting in Improved Readiness
- **Optimizes Depot Efficiency**
 - Repair Turn Around Time (RTAT), Awaiting Parts (AWP), & Work in Process (WIP) decrease
- **Incentive to Invest in Reliability**
 - Mean Time Between Failure (MTBF) improves
- **Incentive to Invest in DMSMS & Obsolescence Mitigation, Improve Repair Processes, Reduce Costs, and Support the Warfighter**

Focus on the Performance “End-State” ... NOT the “How To”



Dispelling the Myths

Myth - PBL and Contractor Logistics Support (CLS) are synonymous:

- *Reality - PBL is not synonymous with CLS (or outsourcing). This is clearly articulated in the new December 2008 DoD Instruction 5000.02 Operation of the Defense Acquisition System: "PBL offers the best strategic approach for delivering required life cycle readiness, reliability, and ownership costs. Sources of support may be organic, commercial, or a combination, with the primary focus on optimizing customer support, weapon system availability, and reduced ownership costs."*

Dispelling the Myths

Myth - PBL at the Platform/System level is the first and best option for support:

- *Reality* – The scope of Product Support Integrator (PSI) responsibility is directly related to **the scope of the PBL strategy, and can be implemented at any point on a continuum**. At one end of the continuum, the PSI could be responsible for a single support process (such as wholesale supply) for a single component (a fuel control, for example). At the other end, the PSI could be responsible for a complete platform, such as the F-117 Nighthawk stealth fighter, including the entire range of support processes (such as materiel management, maintenance, transportation, technical support, and training).

Dispelling the Myths

Myth - The government relinquishes configuration control to the PBL provider:

- *Reality* - A basic principle of management is that, unlike authority, you cannot delegate responsibility. In the DoD, configuration managers are responsible for ensuring the correct configuration of hardware, software, and the information needed to employ them effectively for the operating forces and supporting activities. Some of these **tasks may be performed by a commercial contractor** as part of a PBL arrangement. However, regardless of the acquisition or support concepts employed, the **DoD does not abdicate its responsibility** for ensuring proper configuration control.



Dispelling the Myths

Myth - PBL circumvents 10 U.S.C. § 2464 Core requirements and the depot selection process:

- *Reality – DoD Directive 5000.01 requires that "sustainment strategies shall include the best use of public and private sector capabilities through government/industry partnering initiatives, **in accordance with statutory requirements.**"* Therefore, developing the workload allocation strategy is the "heart" of implementing a PBL support strategy. Determining where, how, and by whom workloads will be accomplished is a significant and critical task to achieve an optimum, best value support plan.

Dispelling the Myths

Myth - PBL drives a two-level maintenance concept:

- *Reality* - While many successful PBL arrangements leverage, facilitate, or encourage a two-level maintenance strategy, a two-level maintenance strategy is not a requirement for, a definition of, or synonymous with a PBL support strategy. In fact, many PBLs effectively sustain and enhance systems supported with three levels of maintenance. A PBL strategy is designed to incorporate the outcome of other support analyses. For example, reliability and other variables in a **Level of Repair Analysis (LORA) drive the maintenance concept; the PBL is tailored** accordingly, not the other way around. This is particularly true for PBL strategies implemented for previously fielded legacy systems, which were very often developed years or even decades ago with a three level maintenance strategy that included an intermediate level shop maintenance requirement.

Dispelling the Myths

Myth - PBL is more expensive than traditional support:

- *Reality* – As reported in the Defense AT&L: Product Support Issue of March-April 2012 entitled *Performance Based Logistics and Project Proof Point, A Study of PBL Effectiveness* by John Boyce and Allan Banghart, “PBL arrangements which substantially adhere to generally recognized PBL tenets **reduce DoD cost per unit of performance** while simultaneously driving up the absolute levels of system, sub-system, and major component readiness/availability when compared to non-PBL arrangements.”

Dispelling the Myths

Myth - PBL is a panacea that will correct all issues across the Integrated Product Support spectrum including reliability:

- **Reality - PBL will not overcome a lack of sustainment planning, make up for an absence of effective program systems engineering, succeed with inadequate funding, mitigate the effects of poor leadership, or deliver instantaneous results.** By identifying targeted metrics and incentives that focus on performance outcomes such as readiness, reliability, availability, maintainability, cost, and obsolescence/Diminishing Manufacturing Sources and Material Shortages (DMSMS) mitigation, it is often possible to improve system, equipment or component performance. It is not guaranteed, however, particularly for legacy systems with a history of existing performance problems.

1. Alignment

- PBL Knowledge and Resources
- Organizational Support
- Cross Cutting Integration
- Workload Allocation and Scope
- Supply Chain Integration

2. Contract Structure

- Appropriate Risk and Asset Management
- Contracting Environment
- Funding

3. Performance Management

- Establishing and Aligning Top Level Outcomes
- Performance Reporting and Continuous Improvement Focus



Resources on the CoP

- Product Support Manager (PSM) Guidebook
- Life Cycle Logistics section of the PM eToolkit
- CLL 011 Performance Based Life Cycle Product Support (PBL)
- Performance Based Logistics (PBL) ACQuipedia article
- CLL 001 Life Cycle Management & Sustainment Metrics
- CLL 005 Developing a Life Cycle Sustainment Plan (LCSP)
- CLL 006 Depot Maintenance Partnering
- CLL 011 Performance Based Life Cycle Product Support (PBL)
- CLL 015 Product Support Business Case Analysis (BCA)
- CLL 036 Product Support Manager (PSM)
- LOG 235 Performance Based Logistics (PBL)
- LOG 340 Life Cycle Product Support
- And Much More.....



Public Law 109-364
“John Warner National Defense
Authorization Act for Fiscal Year 2007

SEC. 820. GOVERNMENT PERFORMANCE OF CRITICAL ACQUISITION
FUNCTIONS

<http://www.govtrack.us/congress/billtext.xpd?bill=h109-5122>

(a) GOAL.—It shall be the goal of the Department of Defense and each of the military departments to ensure that, within five years after the date of the enactment of this Act, for each major defense acquisition program and each major automated information system program, each of the following positions is performed by a properly qualified member of the Armed Forces or full-time employee of the Department of Defense:

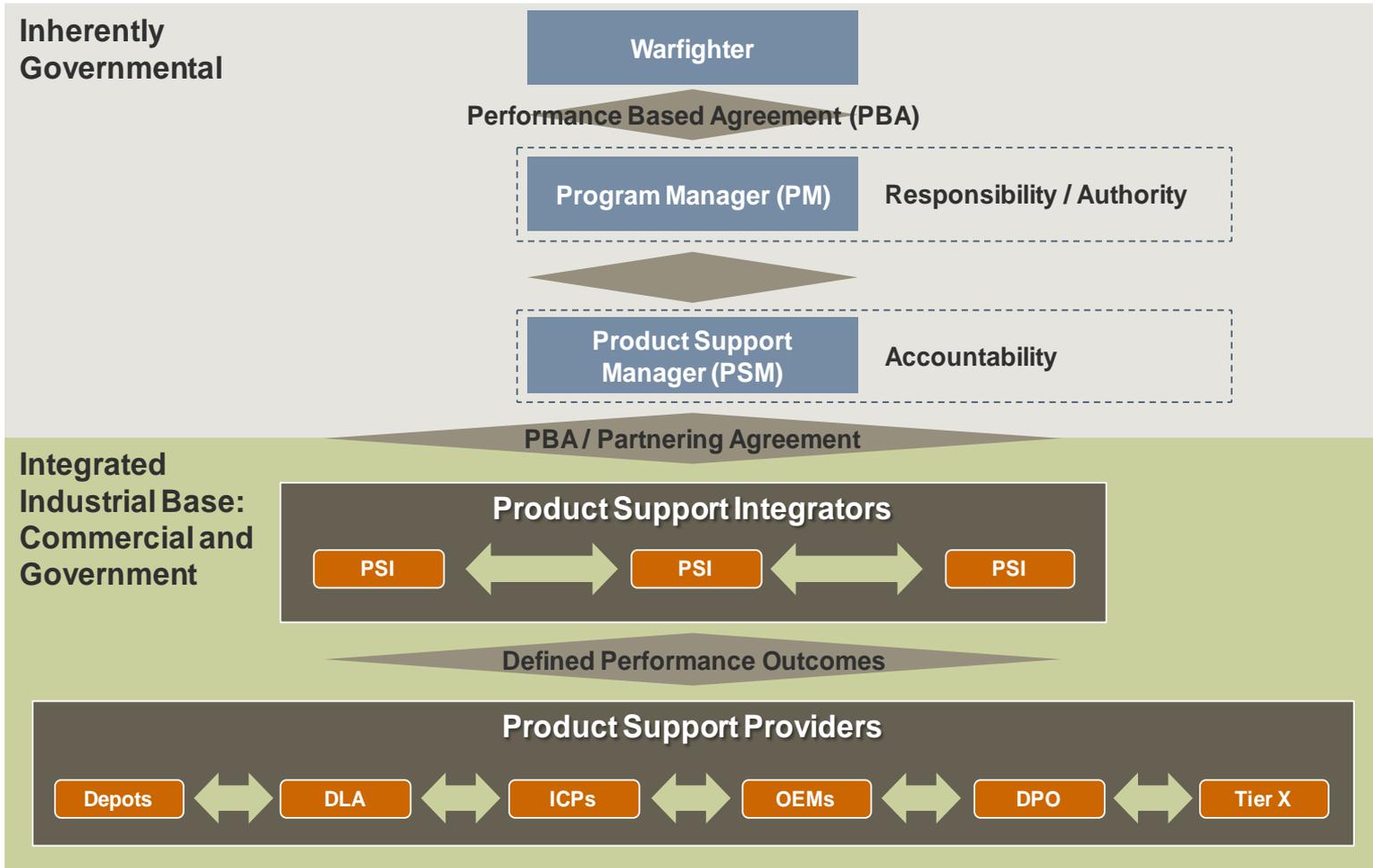
- (1) Program manager.
- (2) Deputy program manager.
- (3) Chief engineer.
- (4) Systems engineer.
- (5) Cost estimator.

- Develop & implement a **comprehensive product support strategy** for the weapon system;
- Use appropriate predictive analysis and modeling tools that can improve materiel **availability and reliability**, increase operational availability rates, **and reduce operation and sustainment costs**;
- Conduct appropriate cost analyses to **validate the product support strategy**, including cost-benefit analyses as outlined in Office of Management and Budget Circular A-94;
- Ensure achievement of desired product support outcomes through development and implementation of **appropriate product support arrangements**;
- Adjust performance requirements & resource allocations across product support integrators & product support providers as necessary to **optimize implementation of the product support strategy**;
- Periodically review **product support arrangements between product support integrators and product support providers** to ensure the arrangements are consistent with the overall product support strategy;
- Prior to each change in the product support strategy or every five years, whichever occurs first, **revalidate any business-case analysis** performed in support of the product support strategy; and
- Ensure that the product support strategy **maximizes small business participation** at the appropriate tiers.





Product Support Business Model



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Contracts

- 10 United States Code (USC) §2304a. paragraph (f) reads as follows: “(f) Contract Period.-The head of an agency entering into a task or delivery order contract under this section may provide for the **contract to cover 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.**”

Contracts

- Federal Acquisition Regulation (FAR) §17.204(e) reads as follows: "(e) Unless otherwise approved in accordance with agency procedures, **the total of the basic and option periods shall not exceed 5 years in the case of services, and the total of the basic and option quantities shall not exceed the requirement for 5 years in the case of supplies.** These limitations do not apply to information technology contracts. However, statutes applicable to various classes of contracts, for example, the Service Contract Act (see 22.1002-1), may place additional restrictions on the length of contracts."

- Defense Federal Acquisition Regulation Supplement (DFARS) 217.204(e)(i) states that “notwithstanding FAR 17.204(e), the ordering period of a task order or delivery order contract (including a contract for information technology) awarded by DoD pursuant to 10 U.S.C. 2304a— (A) May be for any period up to 5 years; (B) May be subsequently extended for one or more successive periods in accordance with an option provided in the contract or a modification of the contract; and (C) Shall not exceed 10 years unless the head of the agency determines in writing that exceptional circumstances require a longer ordering period.”

- Defense Procurement & Acquisition Policy (DPAP) 18 Feb 2009 policy memo "Review Criteria for Acquisition of Services" states "**Service contract length should typically be 3-5 years *with certain exceptions (e.g. performance-based logistics and energy-savings performance contracts).***" (emphasis added)
- USD(AT&L) 14 Sep 2010 policy memo "Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending" states "Contract length should be appropriate for the activity performed. Knowledge-based services readily meet the three-year limit. *Other services such as Performance Based Logistics (PBL)...as examples, may not.*" (emphasis added)

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How Do You Measure Success?

- KPP's, KSA's, and other derived Requirements
- The 12 Elements
- Sources of metrics



Appropriations	Unit Personnel	Unit Operations	Maintenance	Sustaining Support	Continuing Support	Indirect Support
MILPER	Military Personnel in Operating Units		Military personnel in Intermediate or Depot Maintenance Units	Replacement Training	Simulator Operations	Base Operations
O & M	Civilians and Contractors working in Units	Fuel, purchased services, TDY/TAD	Consumable Supplies, Depot Level Repairables, Civilians, Contractors, Contract Services, Transportation	Replacement Training	Simulator Operations	Base Operations, Medical
Procurement		Training Ammo, Rockets, Bombs, Missiles		Replacement Support Equipment	Modification Kit Production	Base Operations
RDT&E					Software Updates, New subsystem	
MILCON						Base Operations



Institutionalizing What Good PSMs Know about PBL

- **Bring In ALL Stakeholders Early in the Process**
- **Empower your Product Support Manager (team) to Develop & Execute**
- **Strategy Must be (Re)validated by an Iteratively Performed BCA**
- **Get Senior Level Sponsorship and Establish an IPT with Empowered Members**
- **Understand the Requirement and Develop a Few, Simple Metrics With Dependable Measurement Tools**
- **Establish Trust and Eliminate Adversarial Relationships Between Government and Industry**
- **Leverage Public-Private Partnerships (PPP)**
- **Don't Take No for an Answer – be Persistent**