Performance Based Life Cycle Product Support

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Date: 24 Jan 2018
AGENDA

- Life Cycle Product Support
- Product Support Strategy
- Affordability
- Product Support Management
- Performance-Based Logistics (PBL)
- PBL Success Stories
“Traditionally, development and procurement have accounted for about 20-30 percent of a weapon’s total ownership cost, while costs to operate, maintain, and dispose of the weapon system account for about 70-80 percent of the total.”
SO WHAT...WHY DO I CARE?

IT’S POLICY....

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

“The Program Manager, with the support of the Product Support Manager (PSM), 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.”

“Employ effective Performance-Based 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.”

*DoDI 5000.01 E1.1.17. & 5000.02 Encl 6: 2.a.(1) & (3)*
SO WHAT...WHY DO I CARE?

The LAW....

Life Cycle Management:
“(1) maximize competition and make the best possible use of available Department of Defense and industry resources at the system, subsystem, and component levels; and
(2) maximize value to the Department of Defense by providing the best possible product support outcomes at the lowest operations and support cost.”

PSM:
“(D) ensure achievement of desired product support outcomes through development and implementation of appropriate product support arrangements
(E) adjust performance requirements and resource allocations across product support integrators and product support providers as necessary to optimize implementation of the product support strategy;”

10 U.S.C. 2337.
What is Product Support?...System Sustainment

**Product Support Strategy (PSS) Objective:** Achieve and sustain operational readiness outcomes

- Dependent on optimizing integrated product support elements that constitute the support strategy

**PSS should support and/or improve product’s:**

- Availability
- Reliability
- Affordability
- Supportability

- The strategy describes the supportability planning, analyses, and trade-offs
- The support strategy should address how oversight of the fielded system will be maintained
- **Documented in the LCSP** and must be updated every 5 years or at a major programmatic change

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Package of support functions required to field and maintain readiness and operational capability of major weapon systems, subsystems, and components, including all functions related to weapon system readiness *(10 U.S.C. § 2337)*
Product Support Guiding Principles

Implementation Guidelines
- Ruthlessly separate needs from appetites
- Understand portfolio of alternatives
- Tie metrics directly to Warfighter outcomes

Implementation Guidelines
- Govern sustainment as part of the life cycle
- Design for sustainability, and integrate acquire-to-retire processes
- Manage predictable costs throughout the life cycle
- Integrate human capital planning into life cycle focus

Aligned and synchronized operational, acquisition, and sustainment communities working together to deliver required and affordable Warfighter outcomes

Implementation Guidelines
- Exhaust opportunities for joint economy and reduce unnecessary redundancy
- Build the capability to make good enterprise decisions
- Enforce consistency in product support processes and infrastructure

Implementation Guidelines
- Optimize public and private product support capabilities
- Leverage core competencies
- Partnerships are effective, equitable, transparent, bilateral, and long term

What is PBL?

• PBL is synonymous with performance based life cycle product support
  – Outcomes are acquired through performance based arrangements
  – Deliver Warfighter requirements and incentivize product support providers to reduce costs through innovation
  – Arrangements are contracts with industry or intra-governmental agreements

Includes both the design and implementation

Think “Design the Support” and “Support the Design”
# Key Fundamental PBL Tenets

<table>
<thead>
<tr>
<th>Tenets of PBL</th>
<th>Description</th>
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<tbody>
<tr>
<td>Tenets Tied to Arrangements</td>
<td>1. Acquire clearly defined Warfighter relevant outcomes</td>
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<td>2. Use measurable and manageable metrics</td>
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<td>3. Provide significant incentives</td>
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<td>4. Firm Fixed Price contract is generally preferred</td>
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<td></td>
<td>5. Provide sufficient contract length</td>
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<td>Tenets Tied to Organization</td>
<td>6. PBL knowledge and resources are maintained for the government team and product support providers</td>
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<td>7. Leadership champions the effort throughout their organization(s)</td>
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<td>8. Everyone with a vested interest in the outcome is involved</td>
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<td></td>
<td>9. Supply chain activities are aligned to the desired PBL outcome versus disparate internal goals</td>
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<td></td>
<td>10. Risk management is shared between customer and support provider</td>
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Source: ODASD(MR) PBL Guidebook.

*It is NOT outsourcing — it is not synonymous with CLS nor does it require a private-sector integrator*
Cost-Value Benefits of PBL

Contract duration incentivizes investment in reliability and service.

**Traditional vs. Performance-Based Contract**

- **Investment to improve reliability or service.**
- **Total cost for Government is lower.**
- **Providers’ profits are higher (area between the lines is bigger with PBL).**

<table>
<thead>
<tr>
<th>Term</th>
<th>Traditional Industry Price</th>
<th>PBL Industry Price</th>
<th>PBL Industry Cost</th>
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<tbody>
<tr>
<td></td>
<td>Traditional Industry Cost</td>
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PBL investment starts to pay back.

Cost-Value Benefits of PBL

*Notional Example*
Why Performance-Based?

- 5000.02 states “The PM shall employ effective Performance-Based Life-Cycle Product Support (PBL) planning, development, implementation, and management”
- **Addresses risk**
- Enduring capability requirement and/or the system is experiencing
  - Unsatisfactory Reliability
  - Unsatisfactory Availability
  - **Unsatisfactory O & S Costs**

*Incentives = Continuous Investment = Better Performance & Lower Costs = Affordable Readiness*
Product Support Decision Matrix

1.1 Industry-Centric Platform Strategy
   (Example: C-12 Huron)

1.2 Blended DoD-Industry Platform Strategy
   (Example: Stryker)

1.3 DoD-Centric Platform Strategy
   (Example: Common Ground Station)

2.1 Industry-Centric Subsystem Strategy
   (Example: HIMARS)

2.2 Blended DoD-Industry Subsystem Strategy
   (Example: APU)

2.3 DoD-Centric Subsystem Strategy
   (Example: M119-A2 Howitzer)

3.1 Industry-Centric Component Strategy
   (Example: Military Tires)

3.2 Blended DoD-Industry Component Strategy
   (Example: USAF IPV)

3.3 DoD-Centric Component Strategy
   (Example: War Reserve, Contingency Stock)
Why Transactional?

• Short Life-Span support requirement
  – Item’s expected requirement expires in 3 years

• High Demand/low cost items with stable demand
  – Consumables

• Low or unstable Demand/high cost
  – Flux Capacitor

• Commercial Items?
## Transactional vs. Outcome Based

<table>
<thead>
<tr>
<th>Traditional/Transactional-Based Logistics</th>
<th>Performance Based Logistics (PBL)</th>
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<tbody>
<tr>
<td>Often separately organized support organizations</td>
<td>Support organizations linked via Product Support Arrangements (PSA)/Performance Based Agreements</td>
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<tr>
<td>Lack of top-level system integration function</td>
<td>Single PSM and PSI(s) provides integrating function</td>
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<tr>
<td>Work often under ID/IQ contract or T&amp;M</td>
<td>Leverage fixed price or CPIF contracts</td>
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<tr>
<td>Transaction-based</td>
<td>Outcome-based</td>
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<tr>
<td>“More is better”</td>
<td>“Appropriate is better”</td>
</tr>
<tr>
<td>“Spares &amp; repairs”</td>
<td>“Reliability, availability, maintainability &amp; supportability”</td>
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<tr>
<td>Focus on discrete and potentially stove-piped performance, modifications, &amp; modernization efforts risks sub-optimal support posture</td>
<td>Product &amp; process improvements reduce demand, increase time-on-platform, decrease response time, and mitigate DMSMS &amp; obsolescence risk</td>
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<tr>
<td>Risks facilitating adversarial “win-lose” focus</td>
<td>PSM-PSI-PSP alignment &amp; partnerships facilitate synergistic “win-win” focus</td>
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<tr>
<td>Shifting priorities can drive risk-adverse behaviors</td>
<td>Clear metrics &amp; incentives drive best-value outcomes</td>
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<tr>
<td>Near-term, budget-driven thinking</td>
<td>Long-term, warfighter-driven thinking</td>
</tr>
<tr>
<td>Transactional logistics risks incentivizing “more parts/repairs I sell, more profit I can make”</td>
<td>PBL support reverses vendor incentive, facilitating “less parts/repairs needed, more profit I can make”</td>
</tr>
<tr>
<td>Parts/Repair = Provider Revenue</td>
<td>Parts/Repair = Provider Cost</td>
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<tr>
<td>Leveraging existing infrastructure</td>
<td>Optimized affordable readiness</td>
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Spectrum of Support Opportunities

Determining factors:
- Partnering Opportunities
- Title 10
- Service Policies
- OSD/Service Guidance
- Existing Infrastructure
- Best Competencies
- Operational Mission
- Best-Value Analysis
Success is Tied to Metrics

✓ Tied to Arrangements
  • Measurable and manageable metrics linked to outcomes
  • Appropriate contract type, length, and incentives

✓ Tied to Organization
  • Leadership champion
  • Shared risk management

It is NOT outsourcing — it “is not synonymous with CLS nor does it require a private-sector integrator” (AFI 63-107)
Good Performance Metrics

There are two sets of metrics to consider:

- Those that are program level reportable metrics to include the KPPs and KSAs as used in the Sustainment Quad Chart
- Subordinate metrics to allow for additional and/or more detailed tracking of specific outcomes

- Measures of readiness and supportability performance must balance against cost and schedule requirements, as well as other program, Service or DoD priorities
- Metrics should reflect “SMART” criteria defined as: Specific, Measurable, Attainable, Relevant, and Timely

*Metrics drive behavior to achieve program outcomes.*
Requirement for Affordability

• USD(AT&L) launched Better Buying Power (BBP) in 2010 to restore affordability and productivity to Defense spending
• Intent was to challenge the way we think about our programs to achieve greater efficiency

Culture of cost consciousness and increase procurement efficiencies is a thing of the future not the past.

1. Achieve Affordable Programs
2. Achieve Dominant Capabilities While Controlling Lifecycle Costs
3. Incentivize Productivity in Industry and Government
   • Ensure effective use of Performance-Based Logistics
4. Incentivize Innovation in Industry and Government
5. Eliminate Unproductive Processes and Bureaucracy
6. Promote Effective Competition
7. Improve Tradecraft in Acquisition of Services
8. Improve the Professionalism of the Total Acquisition Workforce
Product Support Manager (PSM)

10 U.S.C. § 2337 - PSM Role & Responsibilities

- Develop and implement a comprehensive product support strategy
- Conduct appropriate cost analyses to validate the product support strategy (BCA)
- Assure achievement of desired product support outcomes through product support arrangements
- Optimize implementation of the product support strategy (i.e. balance war fighter effectiveness and affordability - PBL)
- Periodically review product support arrangements between PSIs and PSPs for consistency with the overall product support strategy
- Prior to changing the product support strategy or every five years, revalidate the BCA / product support strategy

PSM Is Responsible For The Development, Implementation, And Execution Of Life Cycle Sustainment Solution
Product Support Business Model

Here lies the Responsibility for the Product Support Strategy per Per U.S. Code 10 U.S.C § 2337
Ensure Effective Use of PBL

Where Do We Stand?

- < 5% of DoD systems, sub-systems and components covered by PBL
- High Sustainment Costs – Financial incentives not aligned to life cycle affordability
- Dismal Reliability for Transactional Sustainment – Availability Impacted

Proof of Point Studies (2011-2013)

Properly structured and executed, PBLs reduce cost per unit-of-performance while driving up system, sub-system and component readiness

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

Annual DoD Logistics Spending was ~ $171B* and growing!
- $79.5B in maintenance
- $68.4B in supply
- $23.1B in transportation

* FY12 expenditure
Why Effective PBL Arrangements Work

• DoD obtains comprehensive performance package
  - Not individual parts, transactions, or “spares & repairs”

• Approach reverses vendor incentive
  - Fixed price performance arrangements tied to warfighter outcome turn traditional revenue centers into cost centers - motivate vendor to reduce failures/ consumption through innovation
  - 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
  - Support Providers with system knowledge and investment oriented business models innovate to convert cost avoidance into performance gains

It’s about Motivating Productivity Through Innovation
Performance Based Logistics (PBL) Guidebook: A Guide to Developing Performance-Based Arrangements

• Focuses on developing **effective PBL arrangements**
• Reference manual for experienced and new PBL practitioners
• It provides PBL best practices and practical examples

**Additional Resources:**

• DoD Product Support Manager (PSM) Guidebook
• Integrated Product Support (IPS) Element Guidebook
• DoD Product Support Business Case Analysis (BCA) Guidebook
• DoD Logistics Assessment Guidebook
• DoD Weapon Systems Acquisition Reform Product Support Assessment Report
• Product Support Strategy Development Tool
“Go to” Information Sources for Life Cycle Logistics, Product Support, & PBL

Shortcut Link: https://www.dau.mil/cop/log

Shortcut Link: https://www.dau.mil/cop/pb