



Performance Based Logistics

Conclusive Evidence Supporting the Impact of PBLs on Life Cycle Costs

PBL Community of Practice



PBL

PBL ≠ CLS

- Performance Based Logistics (PBL) – An *outcome based support strategy* that plans and delivers an *integrated, affordable, performance solution* designed to *optimize system readiness*
- PBL is focused on the *what* and the *how* - CLS is focused on the *who*
- Whether it is called Performance Based Logistics, Performance Based Life Cycle Product Support, Through Life Support, or any other name, PBL is a strategy to affordably and effectively satisfy war fighter requirements

“The PM shall employ effective Performance-Based Life-Cycle Product Support (PBL) planning, development, implementation, and management” DoDI 5000.02



Has Performance Based Logistics Delivered on Expectations?

DoD's *Sense* of the PBL Experience: 1998 –2012

- Readiness impact distinctly positive
- Benefit/cost ratio questionable

No data driven, fact-based analyses documenting impact of PBLs on cost

MR & Deloitte Team chartered to address this gap and end the debate

- Hypothesis: Sustaining materiel via Performance Based Logistics arrangements delivers improved readiness at reduced life cycle costs
 - That is, the cost per unit of performance to the Department of Defense is lower when a system, sub-system or component is maintained via a PBL agreement rather than through traditional, transactional maintenance arrangements
- Phase I Methodology:
 - 10 “Middle Dives”
 - 1 “Deep Dive”
- Phase II Methodology:
 - 11 “Middle Dives
 - 5 “Deep Dives”



Bottom Line

- **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**
 - Avg 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
- **The Annual DoD Logistics Spending is ~ \$171B.**
 - \$79.5B in maintenance
 - \$68.4B in supply
 - \$23.1B in transportation
- **< 5% of DoD systems, sub-systems and components covered by a PBL**

These are the primary areas PBL can improve

“PBLs Are A Home Run -
We Just Need To Make Sure We Get The Deal Right”



Conclusion Supported by Four Tiers of Evidence

Empirical Evidence

- 20 of 21 PBLs analyzed experienced performance improvements over the life of the PBL , including ones with limited adherence to generally accepted PBL tenets
- 14 of 15 PBLs analyzed with at least moderate adherence to generally accepted PBL tenets resulted in both cost and performance improvements.
 - The 15th PBL experience indeterminable cost impact

Statistical Point of Proof with a Defined Level of Confidence

- PBLs have successfully reduced costs per unit of performance while simultaneously driving up the absolute levels of system, sub-system and component readiness/availability
- PBLs have incentivized PBL provider behavior that delivered superior sustainment pricing and performance for systems, sub-systems and components

Compelling Evidence

- Sustainment provider behavior is directly linked to the incentives embedded in their contracts – the military Services set the contractual arrangement
- Services get outcomes for which they contract/incentivize
- Well-crafted PBL contracts “manufacture competition” by incentivizing companies to compete against internal waste and quality challenges to drive up quality (thereby reducing demand for maintenance) and drive down repair process, labor and material costs.

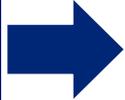
Preponderance of Evidence

- Appropriate term contracts that provide assured revenue streams and contain well-crafted cost and performance incentives drive predictably positive outcomes for the Services



Robustness Assessment Methodology

- ### Criteria
- Generally accepted PBL tenets
 - Core to contract structure
 - Directly related to cost and performance
 - Observable from data and information gathered during analysis



Program X

PBL Robustness

- Contract type incentivizes cost reduction behavior and shares the risk from the government to the provider ●
- Incentives and/or penalties aligned to support desired outcome(s) (Key Performance Indicators) ●
- Key Performance Metric(s) manageable and measurable ●
- Agreed upon Key Performance Metric target level(s) for cost, reliability, and availability ●
- Contract length appropriate to support recovery of investments ●

Results

Performance targets met ↑

Price per flight hour decreasing ↓

Overall Score: ●

Characteristics

Cost	
PBL	Non-PBL
<ul style="list-style-type: none"> • Firm Fixed Price • 5 year base • one 3 year option • one 2 year option 	N/A

Performance	
PBL	Non-PBL
<ul style="list-style-type: none"> • Performance metric defined with target levels established • Incentive fees aligned to performance outcomes • Manageable number of metrics 	N/A

PBL Tenet: Contract length appropriate to support recovery of investments		
Non-PBL: Traditional Approach	●	<ul style="list-style-type: none"> • Contracts are for a short-term horizon (i.e., one year at a time) with little commitment to out-year contract award
Better: Elements of PBL	●	<ul style="list-style-type: none"> • Multiple year contract terms with minimal base period (i.e., one year) and maximum option years with some confidence in exercising option years; allows supplier to make rational commitment to performance-improving investments with expectation of earning back investment.
Best Practice: Robust PBL	●	<ul style="list-style-type: none"> • Contract length is commensurate with payback period for supplier's investments • Longer term contracts encourage long-term investment to improve product or process efficiencies • Contracts are typically multi-year or multiple year (i.e., 5 years with additional option or award term years), with high confidence level for exercising options/award term years • Provisions provided to recognize supplier investment and provide opportunity for recoupment



Summary Findings

Program	Type	Robustness	Contract Length	Contract Type	Cost	Performance
	Sub-System	●	5 years	Firm Fixed Price	↓	↑
	Sub-System	●	5 year, one 3 year & one 2 year options	Firm Fixed Price	↓	↑
	Component	●	5 year base, two 5 year options	Firm Fixed Price	↓	↑
	Sub-System	●	5 year base, one 5 year option	Firm Fixed Price	↓ ■	↑ ■
	Sub-System	●	4 years	Firm Fixed Price	↓	↑
	System	●	5 years	Firm Fixed Price	↓	→ *
	Sub-System	●	1 year, 9 option years	Firm Fixed Price	↓	→ *
	Component	●	5 month base, 7 option years	Firm Fixed Price	↓	↑
	System	●	5 years	Firm Fixed Price Award Fee	↓	↑
	Sub-System	●	5 years, one 5 year option	Firm Fixed Price	↓	↑
	System	●	5 years	Firm Fixed Price	Indeterminable	↑



Summary Findings

Program	Type	Robustness	Contract Length	Contract Type	Cost	Performance
	System		~ yearly	Cost Plus Incentive Fees		
	Sub-System		5 years	Firm Fixed Price		*
	System		6 year base, 6 option years	Cost Plus Award Fee		
	System		1 base year 7 option years	Fixed Price Award Fee; Cost Plus Incentive Fee		*
	System		5 years, with option years	Firm Fixed Price		
	System		1 year base, 7 option years	Fixed Price Incentive Fee		*
	System		1 year	Firm Fixed Price		
	System		1 year	Cost Plus Incentive Fee/ Cost Plus Award Fee		*
	System		1 year	Not Applicable	Indeterminable	*
	System		1 year	Cost Plus Fixed Fee		*

Deep Dive PBL

* No Pre-PBL Support / Performance Exceeding PBL expectations

Information on this chart was prepared to support an ODASD/MR oral presentation and cannot be considered complete without the oral discussion



Three Case Studies

**Substantial Adherence to PBL Tenets in Contractual Arrangement
Execution Substantially Aligned to Contract**

**Meaningful Adherence to PBL Contract Structure Tenets
Problematic Execution**

**Limited Adherence to PBL Tenets in Contractual Arrangement
Execution Aligned to Contract**

Program Name

Provider and Service

Definition of System
Population: 700 plus

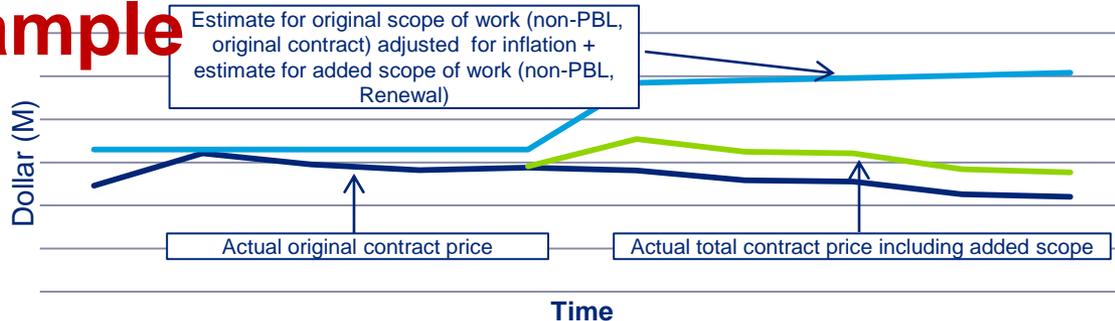
The Basics

PBL Coverage	Sub-System
PBL Initiated	February 20XX
Contract Type	Firm Fixed Price w/ availability payment adjustments
Contract Number	2
Contract Coverage	Xxxx-xxxx (Original) Xxxx-xxxx (Wider Scope)
Pre-PBL Support?	Yes

Key Metrics	Material Availability Req. Response Time Material Reliability
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Example



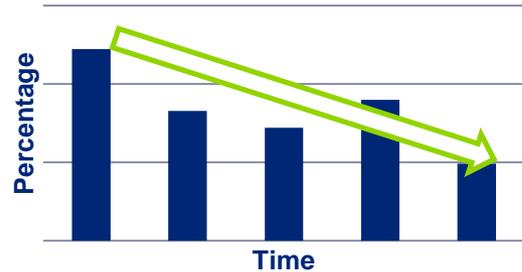
— Original Scope — Increased Scope — Non-PBL*
* Assumption: calculated from an inflation rate

Performance

Material Availability: Percentage of Request Delivered On Time



Priority 1-3 as a % of Unclassified Requisitions



Key Observations

- Decreased cost:
 - Original scope :XX%
 - Gross savings ~\$XXM* versus Non-PBL across both contracts
- Increased performance by ~XX%
- Asset availability and strong performance on low priority reqs driving down high priority reqs

* Assumption: calculated from an inflation rate



DoD Sustainment – At an Inflection Point

PBLs reduce Service's cost per unit-of-performance while simultaneously driving up absolute levels of system, sub-system and component readiness when there is meaningful adherence to PBL tenets

- Fewer than 90 PBLs 2012
- ~1/2 the number of PBLs in '05
- Few new PBLs being pursued
- Services not renewing some existing PBLs
- Despite analyses estimating 5% -- 20% annual savings

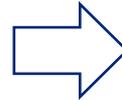


Challenges & Actions

Challenges

• Recognition of Benefits

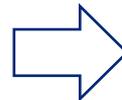
- Service equities – legacy sustainment culture
- Full costing organic DoD sustainment
- Speed-to-savings, ...what's in it for PM now



Communications Campaign to Endorse & Embrace

• Complexity

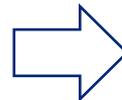
- Limited PBL expertise (PM/PSM, Kt, Pricing)
- Degree of difficulty and time investment



Reshape Workforce with Policy, Processes, Tools & Training

• Competition imperative

- In competitive markets
- In oligopolistic or monopolistic markets

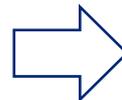


Best Acquisition Option

- Competitive solicitation
- Manufacture internal competition

• Flexibility

- Must pay bills
- Title 10 Core & 50/50
- Operational uncertainty
- Contract length concerns



Tailored PBL Arrangements

- PPPs
- Organic PBLs
- Usage/Perf Ranges; \$/FH
- Term Awards

• Stranded Costs



Phased Restructuring

• Inertia



Program Structure & Discipline



Summary

- Change **culture**: Need understanding & buy-in from Stakeholders – Services, Functional Communities, and Industry
- Enable **workforce**: Align policy, processes, tools, and training across all functional communities
- **Structure and execute** PBLs effectively: Results in right performance at best value; lower life cycle cost

Services' Advocacy For Next Generation
PBL Sustainment Strategies