



DoD Life Cycle Management (LCM) & Product Support Manager (PSM) Rapid Deployment Training

Learn.

Perform.

Succeed.

“Never lose sight of who the ultimate customer is”

– GEN David Petraeus



'02 '06



'05 '06 '07



'04 '06 '07 '09



'03 '04



- **Section I – Life Cycle Management (LCM)**
 - Life Cycle Management Challenge
 - Life Cycle Cost (LCC)
 - Life Cycle Sustainment Outcome Metrics
 - Life Cycle Sustainment Plan (LCSP)
 - Life Cycle Sustainment Governance
 - Linkage to USD AT&L 14 Sep 10 “Better Buying Power” Memo
- **Section II – Product Support Initiatives**
 - DoD Weapon System Acquisition Reform: Product Support Assessment (PSA)
 - Performance Based Life Cycle Product Support (PBL)
- **Section III – Product Support Manager (PSM)**
 - Public Law 111-84, Section 805 and Implementing Policies
 - PSM Professional Development
 - PSM Roles, Responsibilities, Expectations
 - PSM Resources & Enablers
- **Section IV – Life Cycle Logistics**
 - DoD Life Cycle Logistics (LCL)
 - LCL Workforce
 - LCL Professional Development
 - LCL Tools, Resources, References

Section I – Life Cycle Management (LCM)

- Life Cycle Management Challenge
- Life Cycle Cost (LCC)
- Life Cycle Sustainment Outcome Metrics
- Life Cycle Sustainment Plan (LCSP)
- Life Cycle Sustainment Governance
- Linkage to USD AT&L 14 Sep 10 Memo “Better Buying Power: Guidance for Obtaining Greater Efficiency & Productivity in Defense Spending”

Life Cycle Management (LCM)

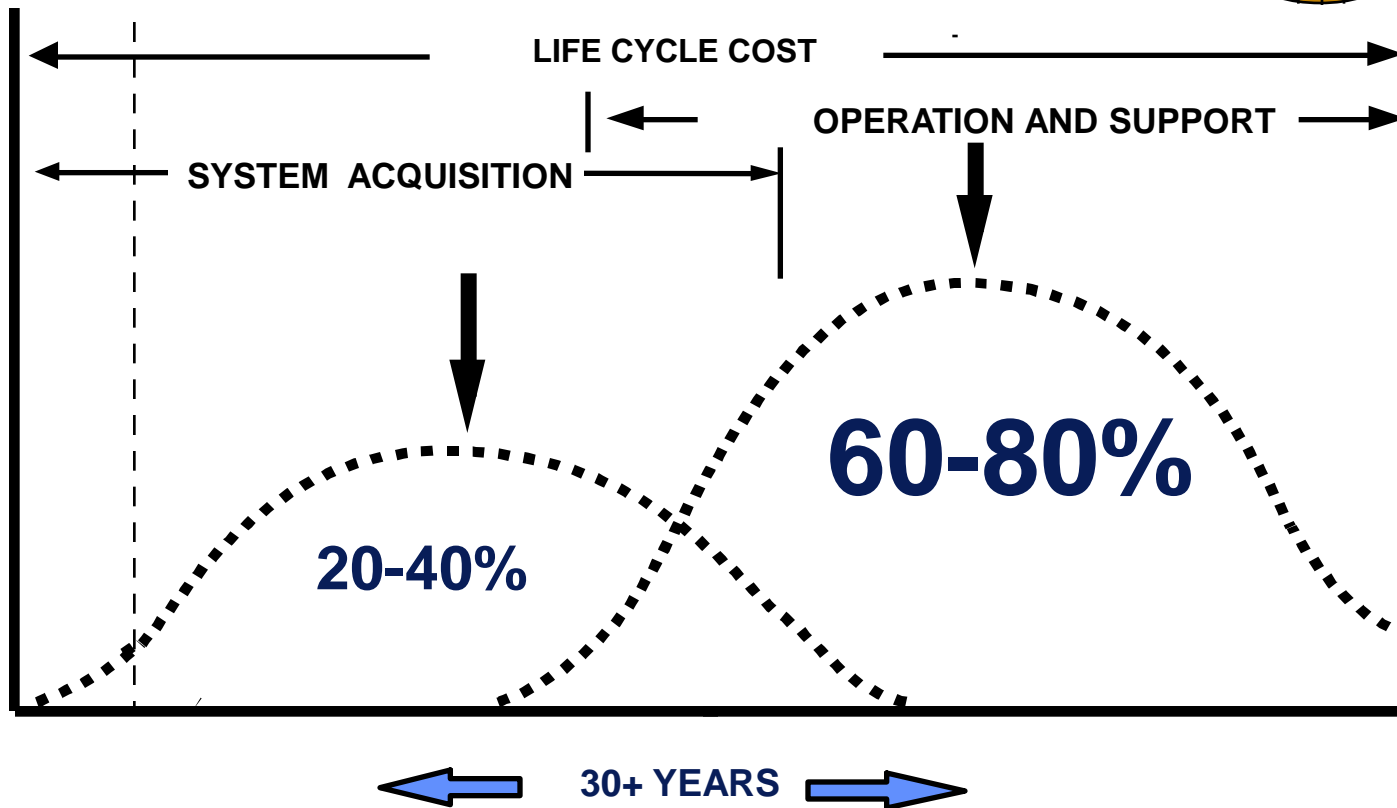
- “Life Cycle Management is the implementation, management, and oversight, by the designated Program Manager (PM), of all activities associated with the acquisition, development, production, fielding, sustainment, and disposal of a DOD system across its life cycle.” ([JCIDS Operation Manual](#))
- “The PM shall be the single point of accountability for accomplishment of program objectives for total life cycle systems management, including sustainment” ([DoDD 5000.01, Para E1.29.](#))

PM has full accountability & responsibility for system acquisition and sustainment – new PSM directly supports

Why is Life Cycle Management so Critical?



Typical DoD Acquisition Program with a Service Life of 30+ Years

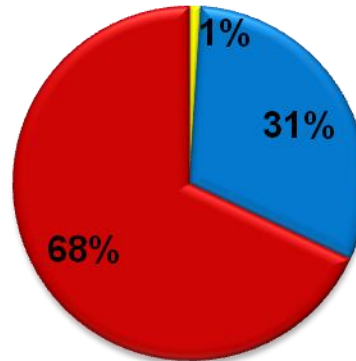


Nominal Life Cycle Cost Distribution

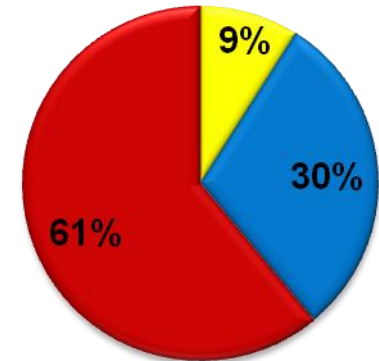
National Interest:

- ✓ WSARA – May '09
- ✓ CAPE Report to Congress
- ✓ GAO Study - ongoing
- ✓ WSAR PSA – Nov '09
- ✓ Service Initiatives/BCAs
- ✓ QDR
- ✓ Budget Pressures
- ✓ Proposed HR 5013
IMPROVE Acquisition Act
– Apr '10

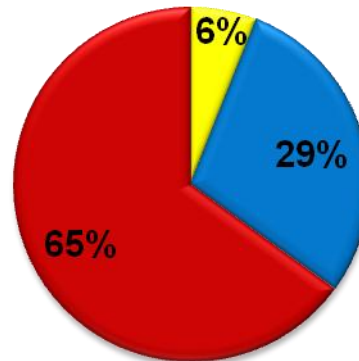
Surface Ships



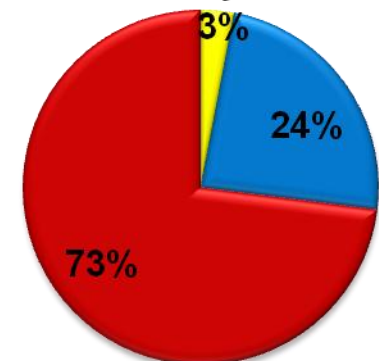
Fixed Wing Aircraft - Fighters



Rotary Wing Aircraft



Ground Systems



RDT&E



Procurement



O&S

- Long track record of real annual growth
- O&S costs tend to increase with greater weapon system complexity
- 60-80% O&S costs as percentage of TOC remained fairly steady for many years

Mandatory Sustainment KPP & KSAs

- **A Sustainment KPP (Availability) & two mandatory supporting KSAs (Materiel Reliability and Ownership Cost) will be developed for all JROC Interest programs involving materiel solutions**
 - In the case of mandated Sustainment KPP (Materiel Availability), the supporting Materiel Reliability and Ownership Cost KSAs require changes to be documented in the subsequent update to the APB.
- **Definitions:**
 - **KPPs are those system attributes considered most critical or essential for an effective military capability”**
 - Failure to meet a KPP threshold may result in reevaluation or reassessment of the program or a modification of the production increments
 - **KSAs are system attributes considered most critical or essential for an effective military capability but not selected as a KPP.**
 - KSAs provide an additional level of capability prioritization below the KPP but with senior sponsor leadership control (generally 4-star level, Defense agency commander, or Principal Staff Assistant)

Additional Information: 31 Jul 09 JCIDS Operation Manual

https://www.intelink.gov/wiki/JCIDS_Manual

Four DoD Life Cycle Sustainment Outcome Metrics



Goals
Determined
By Warfighter
Needs

- **Availability (Materiel & Operational Availability) (KPP*)**
 - A Key Data Element Used In Maintenance & Logistics Planning
- **Materiel Reliability (KSA*)**
 - Provides A Measure Of How Often The System Fails/Requires Maintenance
 - Another Key Data Element In Forecasting Maintenance/Logistics Needs
- **Ownership Cost (KSA*)**
 - Focused On The Sustainment Aspects Of The System
 - An Essential Metric For Sustainment Planning And Execution
 - Useful For Trend Analyses – Supports Design Improvements/Modifications
- **Plus Mean Downtime**
 - A Measure Of How Long A System Will Be Unavailable After A Failure
 - Another Key Piece Used In The Maintenance/Logistics Planning Process
- **Other Sustainment Outcome Metrics May Be Critical To Specific Systems, And Should Be Added As Appropriate**
- **Established in 10 Mar 07 DUSD (L&MR) Policy Memo**
 - <https://acc.dau.mil/CommunityBrowser.aspx?id=141309>

** Sustainment KPP & KSAs Included in CJCSM 3170*

**These 4 Life Cycle Sustainment Outcome Metrics Are Universal
Across All Programs And Are Essential To Effective Sustainment Planning**

Life Cycle Sustainment Plan (LCSP)

- "DoD Instruction 5000.02 requires LCSP be developed and included as a part of the Acquisition Strategy to document how sustainment strategy is being implemented" (*DAG para 5.1.2.2.*)
- ...**LCSP is an evolutionary document** begun during the Materiel Solution Analysis Phase as a strategic framework for obtaining optimal sustainment at minimal LCC. **It evolves into an execution plan** for how sustainment is applied, measured, managed, assessed, and reported after system fielding.." (*DAG para 5.1.2.2.*)
- "System sustainment is enabled by effective planning, development, implementation, and management. To accomplish this, the PM needs **to adequately plan for the long-term supportability and sustainment through the aggressive application of performance-based life-cycle product support strategies.** The plan for implementing these strategies seamlessly spans the entire life cycle and is spelled out in the Life-Cycle Sustainment Plan (LCSP)." (*DAG para 11.7*)
- References
 - LOG CoP LCSP Site - <https://acc.dau.mil/lcsp>
 - Defense Acquisition Guidebook - <https://dag.dau.mil/Pages/Default.aspx>
 - LCSP ACQuipedia Article - <https://acc.dau.mil/CommunityBrowser.aspx?id=y390167>
 - LCSP Template – Coming from OSD by Summer 2011



Strengthened Sustainment Guidance for Acquisition Program Reviews

- **USD AT&L April 5, 2010 Policy Memo “Strengthened Sustainment Governance for Acquisition Program Reviews”**
 - “... to improve program life cycle management (and) strengthen sustainment governance by conducting detailed reviews of...sustainment planning for all ACAT ID weapons systems...at decision and other review points in the acquisition process.”
 - To increase visibility of sustainment factors to ensure delivery of “a program that meets Warfighter materiel readiness objectives with long-term affordability consideration.”
 - To facilitate a comprehensive review and provide the required information in a standardized format, program managers are to use the sustainment quad chart to report status of sustainment planning at OIPT and Defense Acquisition Board reviews.”
- **Four quad chart focus areas :**
 - Product Support Strategy (current sustainment philosophy & future differences)
 - Metrics Data (current estimates of sustainment metrics vs. goals and antecedents)
 - Sustainment Schedule (planned sustainment schedule milestones)
 - O&S Data (status of O&S Costs; comparison of antecedent, baseline, & current costs)
- **Memo:** <https://acc.dau.mil/CommunityBrowser.aspx?id=360875&lang=en-US>
- **Video:** <http://view.dau.mil/dauvideo/view/eventListing.jhtml?eventid=2363&c=343>

Product Support Strategy

Sustainment Approach

- Current (initial CLS covering total system)
- Future (sub-system based PBL contracts)

Issues

- Shortfall in O&M funding in FYDP
- Reliability and availability estimates are below goals
- LCSP requires update before DAB

Resolution

- POM request for O&M restoration submitted
- Reliability improvement plan with clear RAM goals up for final signature
- LCSP in draft

Metrics Data

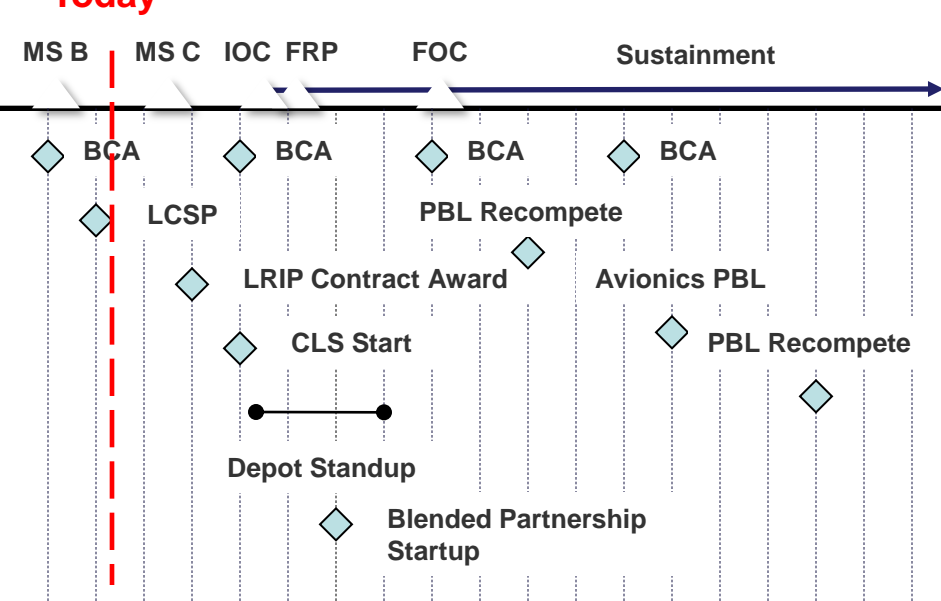
Metric	Antecedent Actual	Original Goal	Current Goal	Current Estimate/ Actual
Material Availability	76%	80%	77%	71%
Material Reliability	37 hrs	50 hrs	50.5 hrs	48 hrs
Ownership Cost	245.6B	385.5B	395.1B	395.1B
Mean Down Time	12 hrs	20 hrs	18 hrs	15 hrs

* Test or fielding event data derived from _____

Notes:

Today

Sustainment Schedule



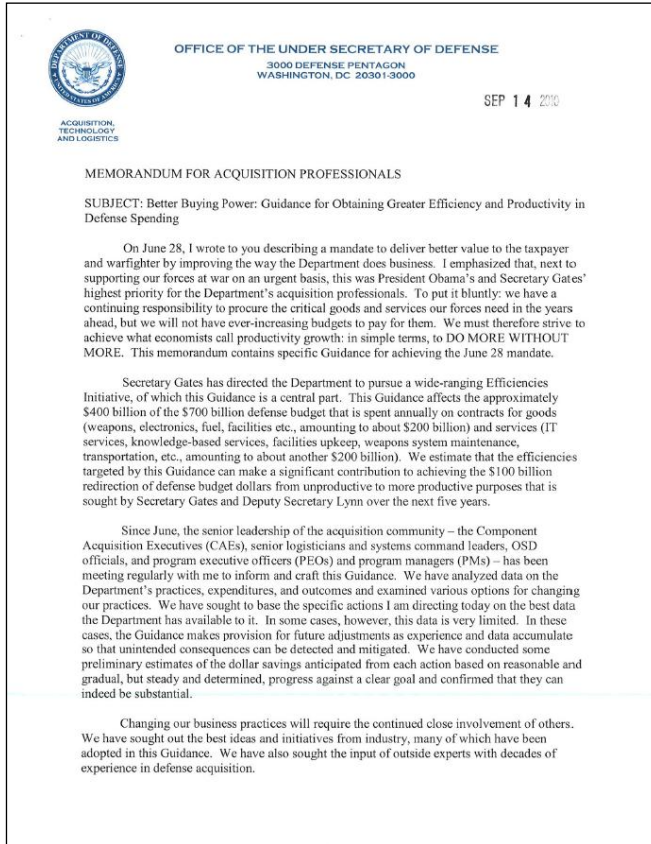
O&S Data

Cost Element	Antecedent Cost	ABC Original Baseline	ABC Current Cost
1.0 Unit-Level Manpower	3.952	5.144	5.750
2.0 Unit Operations	6.052	6.851	6.852
3.0 Maintenance	0.739	0.605	0.688
4.0 Sustaining Support	2.298	2.401	2.401
5.0 Continuing System Improvements	0.129	0.025	0.035
6.0 Indirect Support	1.846	1.925	1.956
Total	15.046	16.951	17.682

Cost based on average annual cost per squadron

Total O&S Costs	Antecedent	ABC
Base Year \$M	102,995.2	184,011.9
Then Year \$M	245,665.3	395,147.2

Better Buying Power Initiative – USD AT&L 14 Sep 2010 Memo



More Information:
<https://acc.dau.mil/bbp>

Five “High Grounds”

- Target Affordability and Cost Growth
- Incentivize Productivity and Innovation In Industry
- Promote Real Competition
- Improve Tradecraft in Services Acquisition
- Reduce Non-Productive Processes and Bureaucracy



Guidance Roadmap

(23 Principal Actions)

Target Affordability and Control Cost Growth

- **Mandate affordability as a requirement**
 - At Milestone A set affordability target as a Key Performance Parameter
 - At Milestone B establish engineering trades showing how each key design feature affects the target cost
- Drive productivity growth through Will Cost/Should Cost management
- Eliminate redundancy within warfighter portfolios
- Make production rates economical and hold them stable
- Set shorter program timelines and manage to them

Incentivize Productivity & Innovation in Industry

- **Reward contractors for successful supply chain and indirect expense management**
- Increase the use of FPIF contract type where appropriate using a 50/50 share line and 120 percent ceiling as a point of departure
- Adjust progress payments to incentivize performance
- Extend the Navy's Preferred Supplier Program to a DoD-wide pilot
- Reinvigorate industry's independent research and development and protect the defense technology base

Promote Real Competition

- Present a competitive strategy at each program milestone
- **Remove obstacles to competition**
 - Allow reasonable time to bid
 - Require non-certified cost and pricing data on single offers
 - **Require open system architectures and set rules for acquisition of technical data rights**
- Increase dynamic small business role in defense marketplace competition

Improve Tradecraft in Services Acquisition

- Create a senior manager for acquisition of services in each component, following the Air Force's example
- Adopt uniform taxonomy for different types of services
- **Address causes of poor tradecraft in services acquisition**
 - Assist users of services to define requirements and prevent creep via requirements templates
 - Assist users of services to conduct market research to support competition and pricing
 - **Enhance competition by requiring more frequent re-compete of knowledge-based services**
 - Limit the use of time and materials and award fee contracts for services
 - Require that services contracts exceeding \$1B contain cost efficiency objectives
- Increase small business participation in providing services

Reduce Non-Productive Processes and Bureaucracy

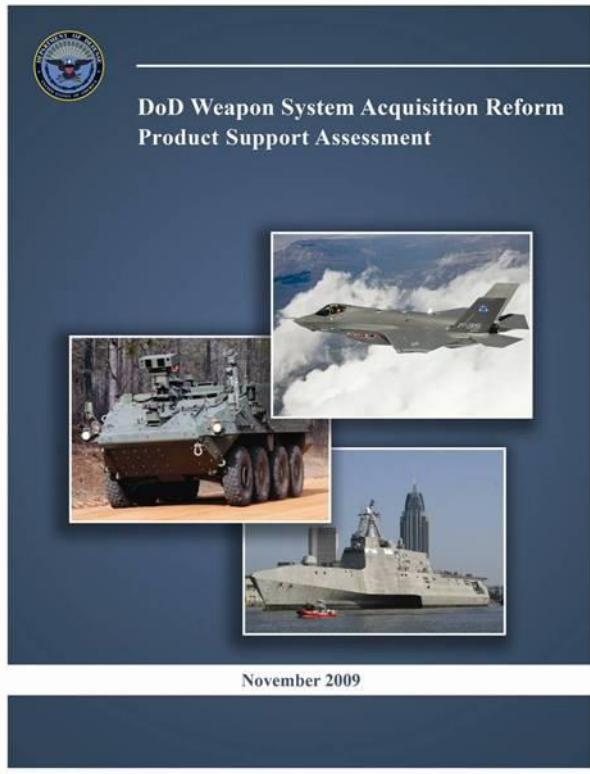
- Reduce the number of OSD-level reviews to those necessary to support major investment decisions or to uncover and respond to significant program execution issues
- Eliminate low-value-added statutory processes
- Reduce by half the volume and cost of internal and congressional reports
- Reduce non-value-added overhead imposed on industry
- Align DCMA and DCAA processes to ensure work is complementary
- Increase use of Forward Pricing Rate Recommendations (FPRRs) to reduce administrative costs

**Direct Applicability to LCM,
LCC Optimization, Product
Support Strategies**



Section II – Product Support Initiatives

- DoD Weapon System Acquisition Reform: Product Support Assessment (PSA)
- Performance Based Life Cycle Product Support (PBL)



Purpose

- Recommends to senior leadership improvement of existing weapon system sustainment strategy
- Encompasses operational, acquisition, and sustainment communities
- Complements Weapon System Acquisition Reform Act with perspectives attentive to life cycle management and sustainment
- Provides recommendations to improve weapon system readiness and control life cycle cost
- Important reference for new PSMs

- ✓ *DoD Senior Steering Group strongly endorsed report and way ahead*
- ✓ *Final report signed by USD(AT&L) on November 12, 2009*
- ✓ *Implementation actions underway*

Product Support Assessment: Life Cycle Product Support Vision and Guiding Principles

Implementation Guidelines

- Ruthlessly separate needs from appetites
- Understand portfolio of alternatives
- Tie metrics directly to 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

- Manage with facts and drive accountability for performance and costs
- Build and evolve BCAs that enhance decision making

Implementation Guidelines

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

Implementation Guidelines

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

Product Support Assessment (PSA) Key Focus Areas

Product Support Business Model:

Provide Program Managers a model template for a weapon system support strategy that drives cost-effective performance and capability for the Warfighter across the weapon system life cycle and enables most advantageous use of an integrated defense industrial base

Industrial Integration Strategy:

Align and expand the collaboration between Government & Industry that produces best value partnering practices

Supply Chain Operational Strategy:

Connect platform product support strategies to enterprise supply chain approaches that produces best value across the DoD components

Governance:

Strengthen and develop organization and mgmt processes to deliver the right sustainment information to decision-makers

Analytical Tools:

Build a toolbox of analytical approaches (including BCA)

Metrics:

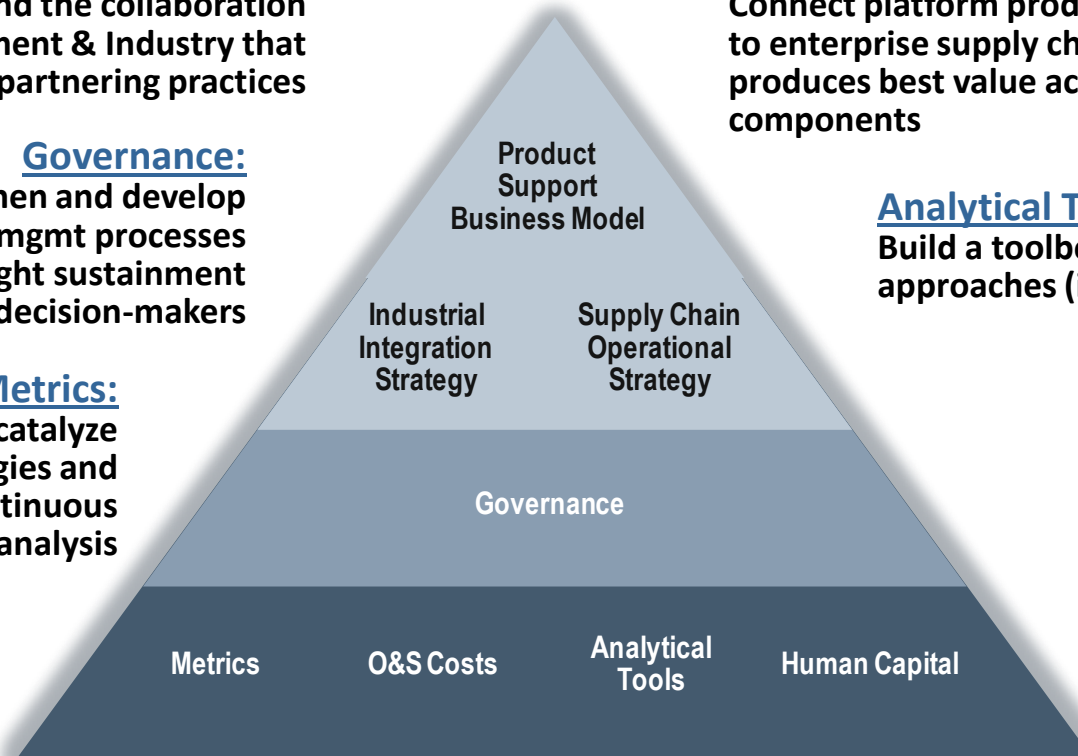
Use existing metrics to catalyze sustainment strategies and trigger continuous supportability analysis

Human Capital:

Integrate Product Support competencies across the Logistics and Acquisition workforce domain to institutionalize successful traits of an outcome-based culture

O&S Costs:

Improve O&S cost visibility and influence



Weapons System Data:

Define, collect, report, and manage the data we need to drive effective Life Cycle Product Support



Although Policies & Processes are Evolving, DoD Commitment to PBL is Clear

- **DoD Directive 5000.1 (May 2003)**

Total Systems Approach. *The PM shall be the single point of accountability for accomplishment of program objectives for total life cycle systems management, including sustainment.*

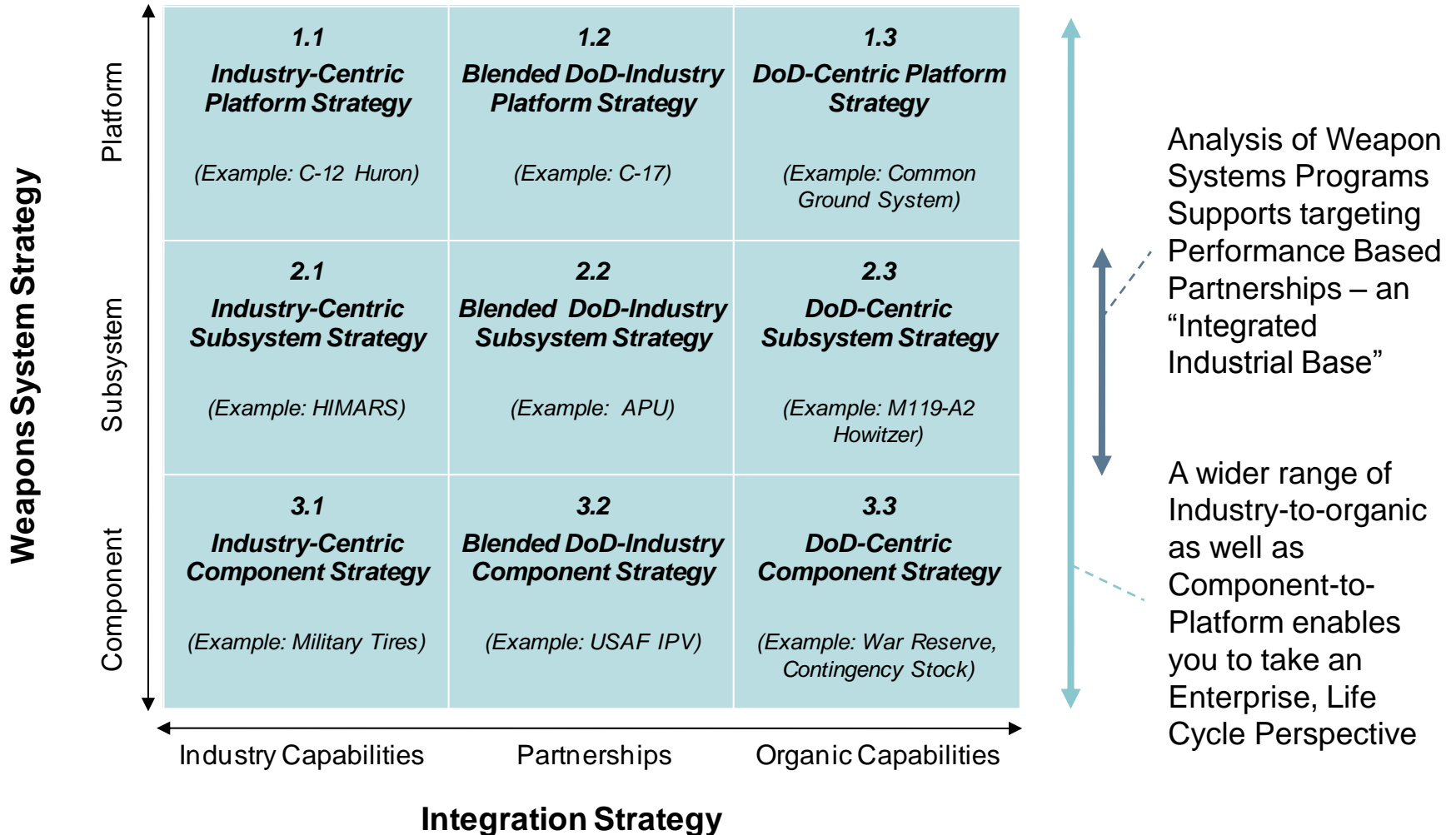
Performance-Based Logistics. *PMs shall develop & implement performance-based logistics strategies that optimize total system availability while minimizing cost and logistics footprint.*

- **DoD Instruction 5000.02 (Dec 2008)**

Performance-Based Life-Cycle Product Support. *The PM shall employ effective Performance-Based Life-Cycle Product Support (PBL) planning, development, implementation & management. Performance-Based Life-Cycle Product Support represents the latest evolution of Performance Based Logistics. Both can be referred to as “PBL”.*

Performance-Based Life-Cycle Product Support. *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...*

Range of Product Support Solutions Addresses Enterprise Portfolio



PBL & Product Support Guidance Evolution 1998-2011



- Fiscal Year 1998 Section 912(c) of the National Defense Authorization Act
- “Secretary of Defense Report to Congress: Actions to Accelerate the Movement to the New Workforce Vision” in Response to Section 912(c) of the NDA for FY 1998 *(Apr 98)*
- Product Support for the 21st Century: Report of the Department of Defense (DoD) Product Support Reengineering Implementation Team *Section 912(c) (Jul 99)*
- Product Support for the 21st Century: A Year Later *(Sep 00)*
- Product Support for the 21st Century: A Program Manager’s Guide to Buying Performance *(Nov 01)*
- DoDD 5000.1 Defense Acquisition System *(May 2003)* and DoDI 5000.2 Operation of the Defense Acquisition System *(May 03)*
- Defense Acquisition Guidebook (DAG), Chapter 5 *(2004 & After)*
- Performance Based Logistics: A Program Manager’s Product Support Guide *(Mar 05)*
- DoDI 5000.02 Operation of Defense Acquisition System Update *(Dec 08)*
- DoD Weapon System Acquisition Reform: Product Support Assessment (PSA) *(Nov 09)*
- Product Support Manager’s (PSM) Guidebook *(Apr 11)*
- Business Case Analysis (BCA) Guidebook *(Apr 11)*
- **Logistics Assessment (LA) Guidebook** *(ECD: Jul 11)*
- **Integrated Product Support (IPS) Element Guidebook** *(ECD: Aug 11)*
- **Cost Assessment & Program Evaluation (CAPE) O&S Cost Estimating Guidebook** *(ECD: Dec 11)*
- **DoD Cost Management Guidebook** *(ECD: Dec 11)*



Department of Defense PBL Award Winners

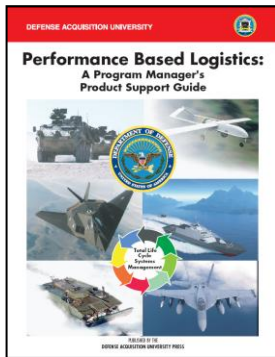
Year	Level	Program	Service	Commercial Partner
2005	System	F-117	USAF	Lockheed Martin
	Sub-System	F-404 Engine	USN	General Electric
	Component	Navy APU	USN	Honeywell
	Special GWOT	Shadow 200 Tactical UAS	USA	AAI
2006	System	HIMARS	USA	Lockheed Martin
	Sub-System	H-60 FLIR	USN	Raytheon
	Component	F/A-18 & F-14D Cockpit Displays	USN	Rockwell
2007	System	F/A-18 (FIRST)	USN	Boeing
	Sub-System	ITAS	USA	Raytheon
	Component	GE T700 Engine	USN	General Electric
2008	System	F-22	USAF	Lockheed Martin
	Sub-System	ARL-67 Radar Warning System	USN	Raytheon
	Component	TAIS ATC System	USA	General Dynamics
2009	System	CASS	USN	Lockheed Martin
	System	HIMARS	USA	Lockheed Martin
	Sub-System	AN/ALQ-126B ECS	USN	BAE Systems
	Sub-System	F-404 Synchronized Supply Chain	DLA	General Electric
	Component	AN/UYQ-70(V) Display System	USN	Lockheed Martin
2010	System	Shadow Tactical Unmanned Aircraft System	USA	AAI
	Subsystem	AH-64D Apache	USA	Boeing
	Component	H-46 Sea Knight / H-53 Sea Stallion APU	USN	Hamilton Sunstrand



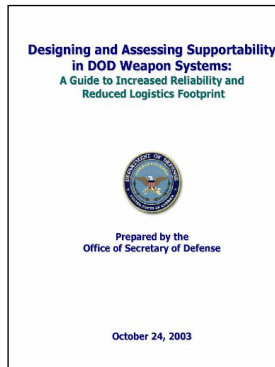
PBL & Product Support Reference Evolution (2011)



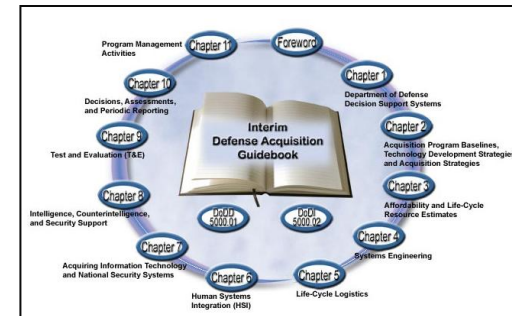
Existing Twelve-Step PBL Implementation Model will be replaced by **new DoD Product Support Strategy Process Model** (and web-based PBL Toolkit will be replaced with **new PSM Toolkit**)



Existing 2005 DoD "Performance Based Logistics: A Program Manager's Product Support Guide" will be replaced by a **new DoD Product Support Manager (PSM) Guidebook**



Existing 2003 "Designing & Assessing Supportability in DoD Weapon Systems" Guidebook will be incorporated into **Defense Acquisition Guidebook (DAG) Chapter 5**



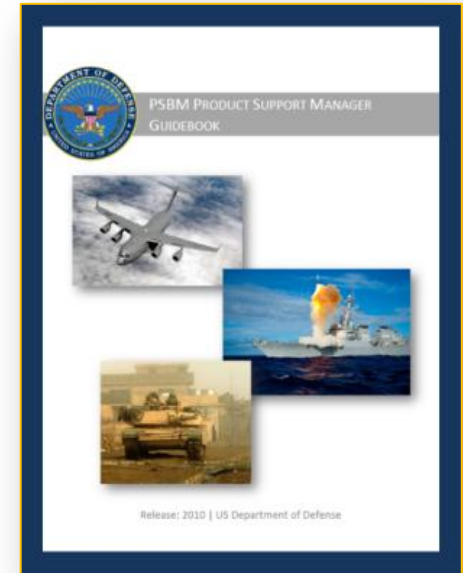
New DoD Product Support Strategy Process Model





New PSM Guidebook Objectives

- **Provide a philosophy and a process for executing product support strategies and making weapon system life-cycle decisions**
- **Define a common and consistent product support language and define key organizational roles and responsibilities**
- **Ensure a consistent approach to enterprise level supply chain considerations as well as cost and performance measurement concerns**
- **Use (provide) DoD guidance on business case analysis that specifies comparison criteria and standards**



Focus on the Product Support Manager



PSM Guidebook Describes Product Support Business Model and Execution Mechanisms

Introduction

- Background
- Purpose
- Major tasks of the PSM
- Relationship to Policy and Other Guidance

Product Support Business Model

- Product Support Business Model Overview
- PSM, PSI, PSP Roles and Responsibilities
- Product Support Agreements
- Product Support Strategy and Implementation

Life-Cycle Management Tools

- Sustainment Readiness Levels
- Logistics Assessments
- Metrics
- Enterprise Synergies and IPS Elements
- Business and Variance Analysis
- Supply Chain Management
- LCSP
- Product Support Package Update
- Funding Alignment

Developing or Transitioning to a New Product Support Strategy

Sustainment in the Life-Cycle Phases

- Materiel Solution Analysis
- Technology Development
- Engineering and Manufacturing Development
- Production and Deployment
- Operations and Support

Appendices

Frames the product support discussion & puts the document in context

Delineates roles and responsibilities, product support relationships, and codification of those relationships

Describes major product support activities and tools that the PSM manages or uses to drive sustainment outcomes

Provides a 12-step process for developing and implementing a product support strategy

Provides phase specific guidance on using select life-cycle management tools and activities



The PSM Guidebook Bridges Product Support Strategy Guidance & Execution

	A		B		C		IOC		FOC	
Life Cycle Phase <i>Policy(When do I do something?)</i>	Material Solution Analysis	Technology Development	Engineering & Manufacturing Development	Production & Deployment	Operations & Support					
SMLs <i>(What should I do?)</i>	SML 1-3	SML 4	SML 5	SML 6	SML 7	SML 8	SML 9	SML 10	SML 11	SML 12
PSM Guidebook <i>(How do I do it?)</i>	Integrated Product Support Elements									
	Guidance on tasks that must be performed, capabilities to be developed, and analyses to be conducted to manage product support									
Life Cycle Sustainment Plan <i>(What is the best value solution?)</i>	Document describing how product support will be developed and implemented, including how tasks identified in the PSM Guidebook will be completed over the weapon system life cycle and who will complete those tasks									
LHA / LA / Other Reviews <i>(How am I doing?)</i>	Assessment of the LCSP's quality, execution, and effectiveness									

Note:

- LHA = Logistics Health Assessment
- LA = Independent Logistics Assessment
- SMLs = Sustainment Readiness Levels



Section III – Product Support Manager (PSM)

- Public Law 111-84, Section 805 & PSM Policies
- PSM Professional Development
- PSM Roles, Responsibilities, Expectations
- PSM Resources & Enablers



FY10 NDAA Section 805 Product Support Manager (PSM)

- Congress passed, and President Obama signed FY10 National Defense Authorization Act (NDAA) into law (Public Law 111-84), Oct 2009
- The legislation contained a provision in Sec 805 entitled “Life Cycle Management and Product Support” requires:
 - the Secretary of Defense issue comprehensive guidance on life-cycle management and development/implementation of product support strategies for major weapon systems;
 - each major weapon system be supported by a product support manager (PSM); and
 - each PSM position be performed by a properly qualified member of the armed forces or full-time employee of the Department of Defense

“The Secretary of Defense shall require that each major weapon system be supported by a product support manager...” to “maximize value to the Department of Defense by providing the best possible product support outcomes at the lowest operations and support cost.” -- FY10 NDAA, Section 805

- Product Support: “*the application of the package of integrated logistics elements and support functions necessary to sustain the readiness and operational capability of the system*”

-- (DAG Paragraphs 5.1.1.1. & 5.1.3.2)

Note: Traditional ten ILS Elements evolving into twelve Integrated Product Support (IPS) Elements depicted on next page



PL 111-84 Sec 805 PSM Responsibilities

PSM References & Resources: <https://acc.dau.mil/psm>

- **A product support manager for a major weapon system shall-**
 - develop and implement a **comprehensive product support strategy** for the weapon system;
 - 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;
 - assure **achievement of desired product support outcomes** through development and implementation of appropriate product support arrangements;
 - adjust performance requirements and resource allocations across product support integrators and product support providers as necessary to **optimize implementation of the product support strategy**;
 - periodically review **product support arrangements** between the product support integrators and product support providers to ensure the arrangements are consistent with the overall product support strategy; and
 - 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.

Two Basic Objectives of a PSM

1. Weapons system should be designed, maintained, and modified to continuously **reduce demand for logistics**
2. Logistics support must be **effective and efficient**; resources required to provide life cycle product support must be minimized while meeting warfighter needs

Bottom Line: Achieving Optimized, Affordable Readiness!

KEY PSM RESPONSIBILITY: INTEGRATED PRODUCT SUPPORT

Design Interface



Sustaining
Engineering



Supply Support



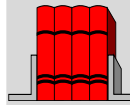
Maintenance Planning
& Management



Packaging, Handling, Storage
& Transportation (PHS&T)



Technical
Data



Support
Equipment



Training &
Training Support



Manpower
& Personnel



Facilities &
Infrastructure



Computer
Resources

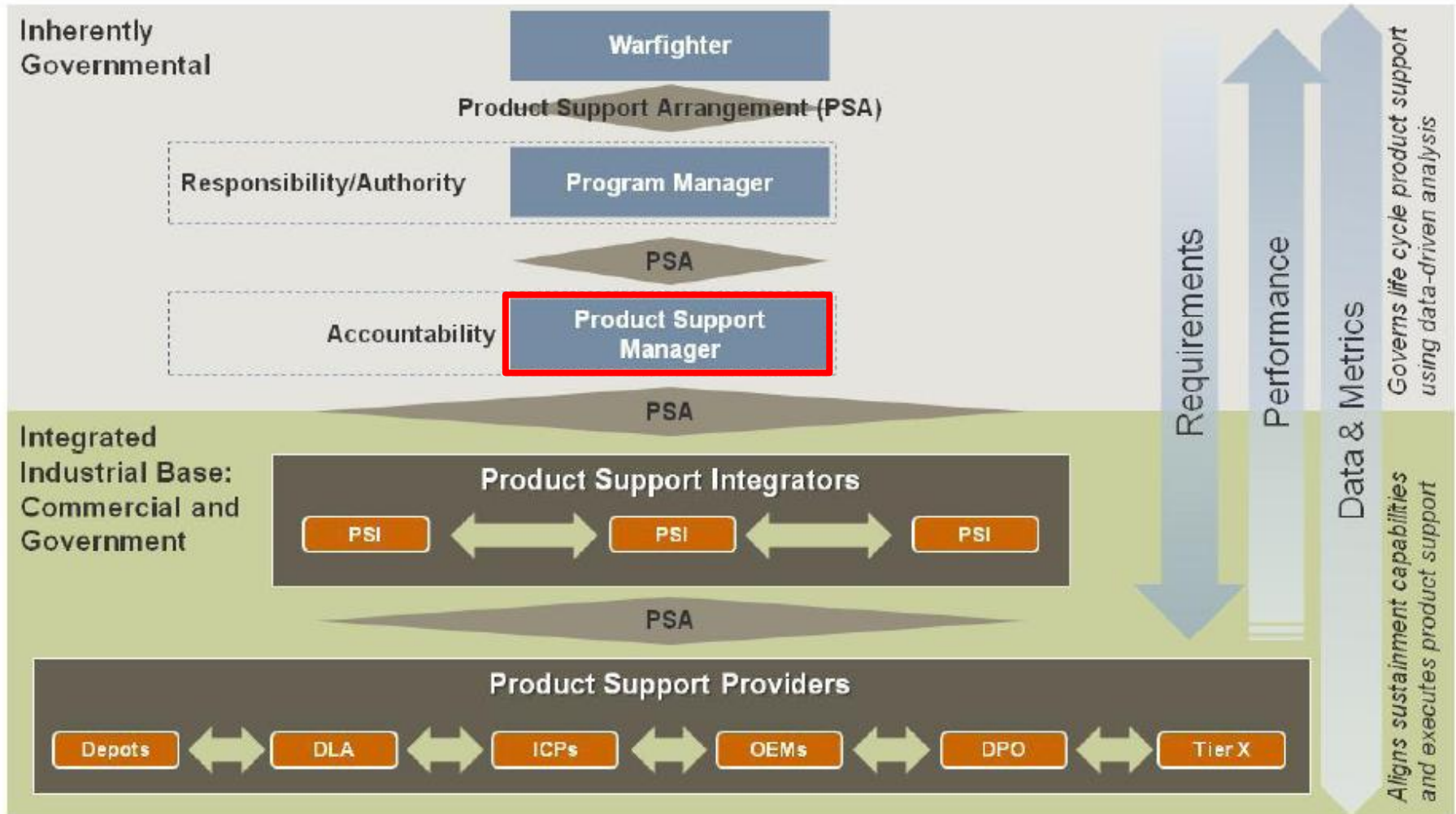


Product Support Management



*Product Support is enabled by a package of 12 Integrated Product Support (IPS) Elements designed to **deliver system readiness & availability while optimizing system life cycle cost***

DoD Product Support Business Model (PSBM)



***PSM is the Warfighter's Principle Product Support Agent
Responsible for Incentivizing PSI(s) to Achieve Warfighter Requirements***



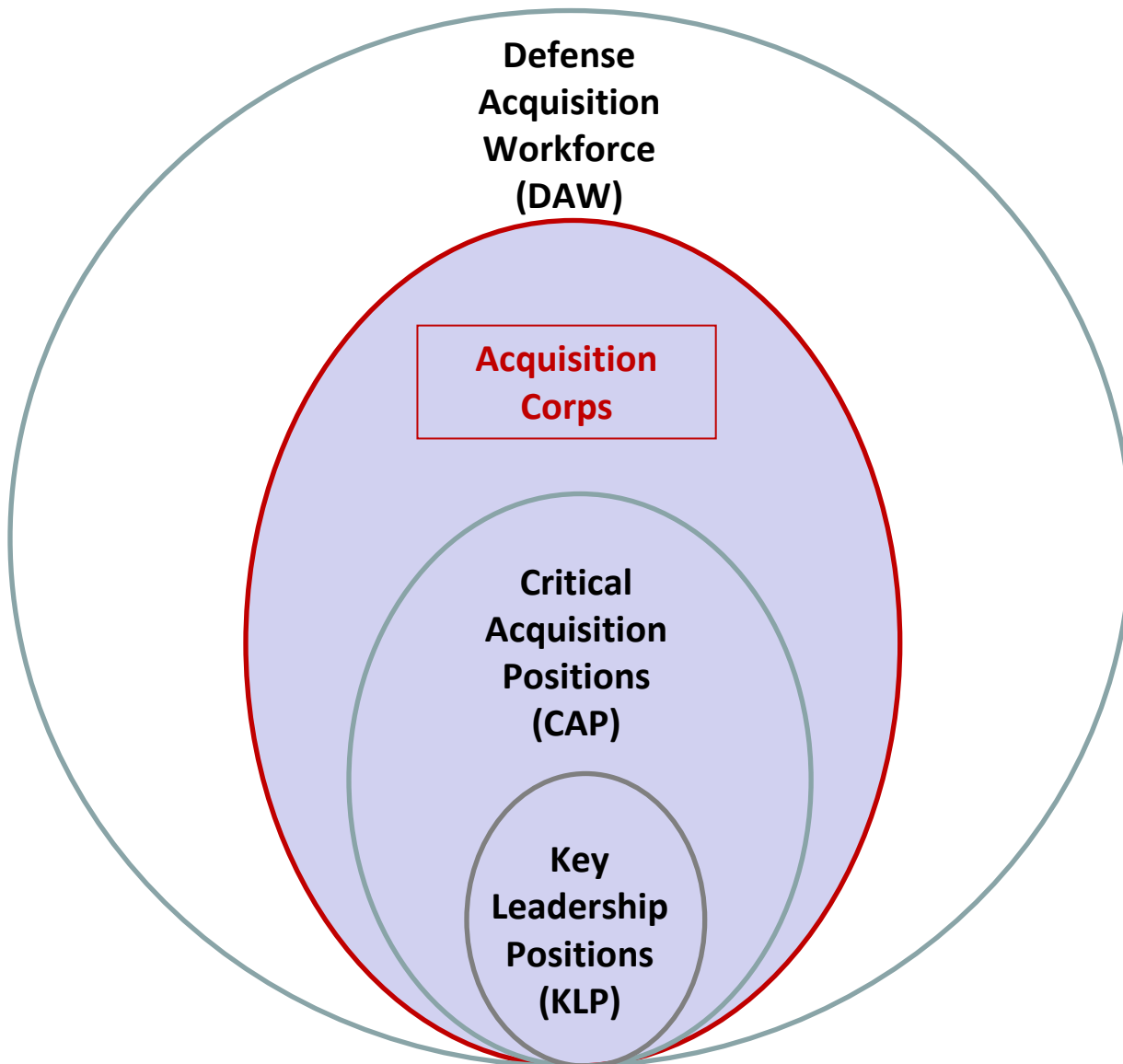
USD AT&L Memo: "Government Performance of Critical Acquisition Functions" (25 Aug 10) (Cont'd)

<https://acc.dau.mil/CommunityBrowser.aspx?id=392198&lang=en-US>

- **"In general, the "program lead" positions are expected to be filled by military members at the lieutenant colonel/colonel or commander/Navy captain levels or by the civilian equivalent"**
- **"Program leads advise the PM/DPM and may be matrixed to the program office"**
- **"Although program leads may report to a higher-level functional (i.e., command/center functional lead or his or her direct report), these positions must be designated as KLPs"**
- **"Program lead KLPs must be designated in the position category associated with the lead function. For example, "lead logistician" positions must be designated as positions in the "Life Cycle Logistics" position category."**
- **Further information on KLPs can be found in DoDD 5000.52 including:**
 - **CAPs... are senior acquisition positions specifically designated by the CAEs (Para 4.2.1.)**
 - **KLPs are selected CAPs specifically designated by the CAEs and approved by the USD (AT&L) (Para 4.2.2.)**
 - **KLPs may also include selected staff positions, as well as any CAP that, by the criticality of the duties, warrants special management attention to qualification and tenure requirements. (Para 4.2.2.3.)**



Key Leadership Positions (KLPs)

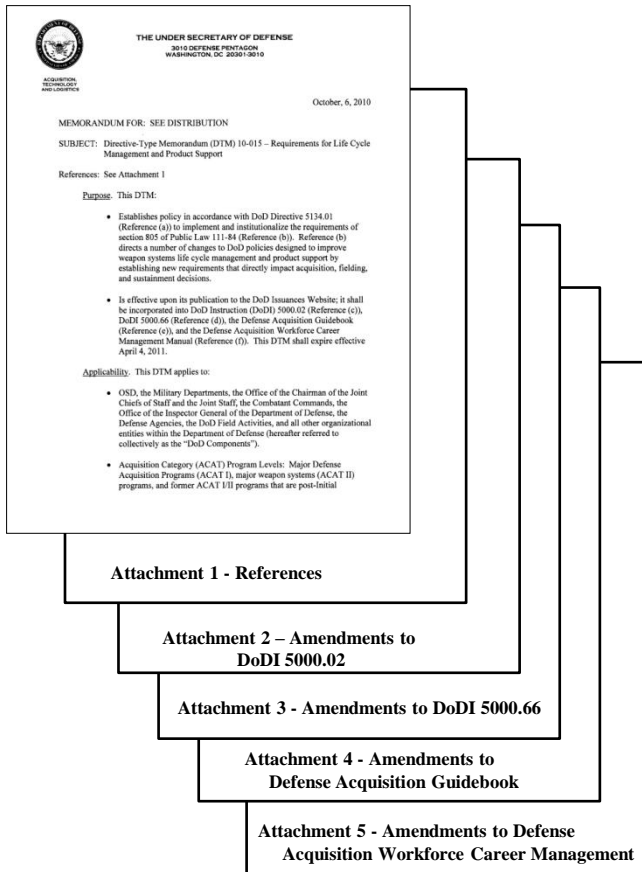


**FY10 NDAA
Section 805
Includes Provision
Identifying
Product Support
Manager (PSM) as
a Key Leadership
Position (KLP) on
ACAT I MDAP
Programs**

**Key Leadership
Positions (KLP)
are a sub-set of
Critical
Acquisition
Positions (CAP),
the Acquisition
Corps, & Defense
Acquisition
Workforce**



Directive-Type Memorandum 10-015 – Requirements for Life Cycle Management & Product Support



- **DTM 10-015 issued by USD(AT&L) on October 6, 2010 (Change 1 issued April 29, 2011)**
- **Establishes Policy to implement & institutionalize requirements of Section 805 of Public Law 111-84**
- **Applies to ACAT I & II programs, and fielded post-IOC former ACAT I & II programs**
- **Outcome-based (readiness-based) strategies at best-value costs**
- **Balanced use of DoD and industry resources via stable and robust partnerships**
- **Maximize competition, or the option of competition for long-term product support effectiveness**
- **Assist PMs in LCM responsibilities via establishment of mandatory product support manager (PSM) positions**
- **Assign properly qualified military or DoD employee to PSM positions**
- **Specifies PSM duties**

“It is DoD policy that a mandatory Product Support Manager (PSM) position shall be identified and assigned for each ACAT I and ACAT II System and filled by a properly qualified Military Service Member or full-time employee of the Department of Defense.”



DTM 10-015 Applicability

- **OSD, Military Departments, Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, Combatant Commands, Office of the Inspector General of the Department of Defense, Defense Agencies, DoD Field Activities, and all other organizational entities within the Department of Defense**
- **Major Defense Acquisition Programs (ACAT I)**
- **Major weapon systems (ACAT II) programs**
- **Former ACAT I/II programs that are post-Initial Operational Capability (IOC) or no longer have program managers (PMs) reporting to Component Acquisition Executives (CAE)**



DoD Instruction 5000.66 Changes Directed by DTM 10-015

- CAEs shall designate and assign a **PSM within every ACAT I and ACAT II program**, prior to but no later than program initiation and to **former ACAT I/II programs that are post-IOC** or no longer have PMs reporting to CAEs
- The position of PSM shall be performed by a properly qualified Military Service member or full-time employee of the Department of Defense
- PSM will be designated as a **key leadership position (KLP)** for all Major Defense Acquisition Programs and major weapon systems and designated a **critical acquisition position (CAP)** for all other major weapon systems
- The PSM will be an integral part of the program management team and **will report directly to the PM**
- Incumbents are required to meet the requirements of the position within the prescribed timeframe for CAPs
- PSM positions must be filled based on the criteria identified in DoDI 5000.66 and not later than 180 days after DTM issuance



Army PSM Implementation Guidance

- **ASA(ALT) Memo “Product Support Manager (PSM) Implementation”, 5 Nov 10**
 - “...establishment of the PSM highlights the important role logistics plays in the acquisition process”
 - “...PSM will provide our program managers the expertise necessary to develop and implement a comprehensive, outcome-based product support strategy”
 - “The position will be filled by our best, most qualified and motivated DAWIA Level III certified and experienced Life Cycle Logisticians, and will report directly to the Program Manager”
- **Additional Guidance is being Incorporated into next Revisions of AR 700-127 *Integrated Logistics Support* and DA Pam 700-56 *Logistics Supportability Planning and Procedures in Army Acquisition***
- **<https://acc.dau.mil/CommunityBrowser.aspx?id=408157&lang=en-US>**



Dept of Navy PSM Implementation Guidance

- **DASN (Acquisition & Logistics Management) Memo “Product Support Manager (PSM) Implementation” Memo, 18 May 11**
 - “...all Department of Navy (DON) major weapon systems shall designate a PSM”
 - “...PSM to be the lead logistician and an integral part of the program management team reporting directly to the PM...”
 - **DON PSM Requirements Matrix:**

PROGRAM CATEGORY	DAWIA Level 3 LCL	PSM	CAP	KLP
ACAT I (MDAP/MAIS)	YES	YES	YES	YES
ACAT II	YES	YES	YES	NO
POST – IOC ACAT I/II	YES	YES	Optional	NO

- <https://acc.dau.mil/CommunityBrowser.aspx?id=446792&lang=en-US>



Air Force PSM Implementation Guidance

- **SAF/AQ “Air Force Guidance Memorandum to AFI 63-101, Acquisition and Sustainment Life Cycle Management ” Memo, 27 Apr 11**
 - “AF Guidance Memorandum changes AFI 63-101, Acquisition and Sustainment Life Cycle Management and is effective immediately...”
 - “... PSM is an individual with responsibility to lead the development, implementation, and top-level integration and management of all sources of support to meet Warfighter sustainment and readiness requirements ”
 - “...PSM shall develop and implement a comprehensive product support strategy for each applicable program.”
 - “...PSM reports directly to, and is accountable to, the PM for the execution of all product support requirements within PM’s scope of responsibilities”
 - “...PSM has the responsibility to interface directly with lead and supporting commands’ logistics, installation, and mission support functional authorities to ensure execution of readiness requirements”
- <https://acc.dau.mil/CommunityBrowser.aspx?id=438302&lang=en-US>

A NOTIONAL PSM Professional Development Ladder Construct

POTENTIAL DoD PSM RQMTS

MDAP	104
Pre-MDAP	55
ACAT II	80
Former ACAT I/II in Sustainment	280
Candidate Pool**	~779
Total –	1,298

(**Assumes 1.5:1 ratio -candidate pool to actual)

Program Manager (PM),
PEO/OSD/HQ Staff

“Graduated” PSMs

- Continued career progression

Product Support Manager
(PSM)

Senior Program Logistician

- Designated KLP & CAP Position
- Training: New 400 Level Courses?
- Exp: Min 8 yrs (10+ yrs desired)?
- Education: Masters and/or SSS?

Cadre of Future PSMs:
Experienced Leaders

Laser-Focus on Grooming Superstars

- Training: PMT 352, ACQ 405
- Experience: Acquisition and Sustainment

Life Cycle Logistician:
Expert Practitioners

DAWIA Level III Life Cycle Logistician

- Training: LOG 350, 340 (future), 2 CL Modules
- Experience: Minimum 4 years (6 yrs desired)
- Broadening across Acq & Logistics Domains

Journeyman: Gaining
Depth and Breadth

DAWIA Level II Life Cycle Logistician

- Training: ACQ 201, LOG 200, 201, 206, 235, 236
- Experience: Minimum 2 years (4 years desired)
- Education: None Required (Bachelors Desired)

New Life Cycle Logistician:
Entry Level/Intern

DAWIA Level I Life Cycle Logistician

- Training: ACQ 101, LOG 101, 102, 103, 2 CL Modules
- Experience: Minimum 1 year (2 yrs desired)



Targeted New PSM Resources

- **Available Now**

- Extensive DAU Life Cycle Logistics Training and Knowledge Sharing Resources
- Enhanced LOG 350 “Enterprise Life Cycle Logistics Management” Course
- PSM Rapid Deployment Training (RDT) (<http://www.dau.mil/images/Pages/RDT.aspx>)
- PSM Reference Repository on DAU Logistics Community of Practice (<https://acc.dau.mil/psm>)
- Product Support Manager’s (PSM) Guidebook (<https://acc.dau.mil/psm-guidebook>)
- Business Case Analysis (BCA) Guidebook (<https://acc.dau.mil/bca-guidebook>)
- Product Support Policy, Guidance & Tools Repository (<https://acc.dau.mil/productsupport>)

- **Available Soon (end of CY11)**

- Defense Acquisition Guidebook (DAG) Update
- Logistics Assessment (LA) Guidebook
- Integrated Product Support (IPS) Element Guidebook
- Web-based PSM Toolkit
- LOG 340 “Life Cycle Product Support” Course
- CLL 036 “PSM Fundamentals” Continuous Learning Module
- Cost Assessment & Program Evaluation (CAPE) O&S Cost Estimating Guidebook
- DoD Cost Management Guidebook

- **Available in the Future/Proposed (CY12-13)**


- Joint Service Product Support Wall Chart
- Post-Level III LOG 3xx (or 4xx) Product Support Manager’s Course
- Collaboratively Developed ICAF Level Life Cycle Management (LCM) Elective

- DoD Life Cycle Logistics (LCL)
- LCL Workforce
- LCL Professional Development
- LCL Tools, Resources, References

DTM 10-015 Guidance: “The PSM **must be designated in the Life Cycle Logistics position category**” and “PSM positions for all major weapon systems **must be certified at Defense Acquisition Workforce Improvement Act (DAWIA) Level III in the Life Cycle Logistics career field**”

- Document signed by DUSD (L&MR) on May 12, 2008
- Available at <http://www.acq.osd.mil/log/sci/hcs.html>

A Message from the Deputy Under Secretary of Defense for Logistics & Materiel Readiness



The Department of Defense (DoD) logistics workforce exists to deliver agile, timely, precise, and cost-effective support to the warfighter, ensuring readiness and sustainability for the Active and Reserve Soldiers, Sailors, Marines, and Airmen, and the government, civilians and industry partners who support the armed forces across the spectrum of military operations. While its mission and purpose are constant, the logistics workforce faces a perpetually evolving strategic environment. As the world changes rapidly, profoundly, and in every dimension—social, economic, and political—the logistics workforce needs to continuously evolve and operate in a way that optimizes the human capital of the entire enterprise rather than individual parts.


It is imperative that the logistics workforce align its human capital with transforming warfighting, modernized weapons systems, business rules, emerging enterprise management systems, and executive-level strategic goals. The community should also be grounded in teamwork and collaboration; ultimately, all logisticians across the enterprise would view one another as partners and contributors willing to support each other to achieve mission accomplishment.

The DoD Logistics Human Capital Strategy (HCS) supports these goals and fulfills the requirements and objectives of the President's Management Agenda, the Quadrennial Defense Review (QDR), the DoD Civilian Human Capital Strategic Plan, and the AT&L Human Capital Strategic Plan. It has been developed to serve as a valuable resource for the Service and Agencies' logistics human capital efforts. I encourage leaders within OSD, the Service Agencies, and combatant commands (COCOMs) to continue to support and move forward with these comprehensive and forward-leaning workforce strategies.


Jack Bell
JACK BELL
 Deputy Under Secretary of Defense
 for Logistics & Materiel Readiness

Developing an Integrated, Agile, and High-Performing Workforce

DoD Logistics Human Capital Strategy



Developing an Integrated, Agile, and High-Performing Future Workforce of Multi-Faceted, Interchangeable Logisticians That Succeed in a Joint Operating Environment.



Office of the Secretary of Defense
 Logistics & Materiel Readiness

May 12, 2008

A Message from the Executive Steering Group

Undersigned, members of the DoD Logistics Human Capital Strategy (HCS) Executive Steering Group (ESG), are pleased to present the following HCS summarizing the vision, challenges and path forward for transformation of the DoD logistics workforce.

James O. Hall
JAMES O. HALL
 Chairman, Executive Steering Group
 Assistant Deputy Under Secretary of Defense (Logistics Plans & Studies)

John P. Prendergast
JOHN P. PRENDERGAST
 JPO, SC, USN
 Vice Director for Logistics, JS

Michael A. Almon
MICHAEL A. ALMON, P.E.
 DCS/Logistics, Installations & Missions Support
 US Air Force

P. M. Tamburino
P. M. TAMBURINO
 Assistant Deputy Chief of Naval Operations
 Fleet Readiness and Logistics
 US Navy

Mark D. Cutler
MARK D. CUTLER
 Executive Director
 Policy, Process and Assessment Directorate (J-8Y)
 Defense Logistics Agency

Frank J. Anderson, Jr.
FRANK J. ANDERSON, JR.
 President
 Defense Acquisition University

Earl S. Johnson, Jr.
EARL S. JOHNSON, JR.
 Assistant Deputy Under Secretary of Defense (Transportation Policy)

Alan F. Espevez
ALAN F. ESPEVEZ
 Principal Assistant Deputy Under Secretary of Defense (Logistics & Materiel Readiness)

Thomas J. Edwards
THOMAS J. EDWARDS
 Assistant Deputy Chief of Staff, G-4
 US Army

Carol Lucchino
CAROL LUCCHINO
 Assistant Deputy Commandant,
 Installations and Logistics
 Headquarters, US Marine Corps

Mark C. Harritcher
MARK C. HARRITCHER
 SACM, USN
 Director, Strategy, Policy, Programs, and Logistics
 USSTRANSCOM

Gary J. Motsek
GARY J. MOTSEK
 Assistant Deputy Under Secretary of Defense (Program Support)

DoD Logistics Human Capital Strategy



Four Logistics Workforce Categories & Fifteen Technical Competencies

SUPPLY MANAGEMENT



Includes procurement to disposal of defense system material, and integration of multiple material sources and processes to meet war fighter requirements.

Forecasting and Demand Planning

Supply Planning

Sourcing

Inventory Management

MAINTENANCE SUPPORT



Includes planning and executing maintenance, both scheduled and unscheduled, to defense system equipment.

Maintenance Operations (includes depot maintenance)

Production & Support

DEPLOYMENT/ DISTRIBUTION/ TRANSPORTATION



Includes transportation, packaging, cargo scheduling, and dispatching of materials, support services, and personnel in response to customer requirements to move and sustain the force.

Physical Distribution/ Transportation Operations

Deployment Planning

LIFE CYCLE LOGISTICS



Includes planning, development, implementation, and management of a comprehensive, affordable, and effective systems support strategy.

Logistics Design Influence

Integrated Logistics Support Planning

Product Support & Sustainment

Configuration Management

Reliability & Maintainability Analysis

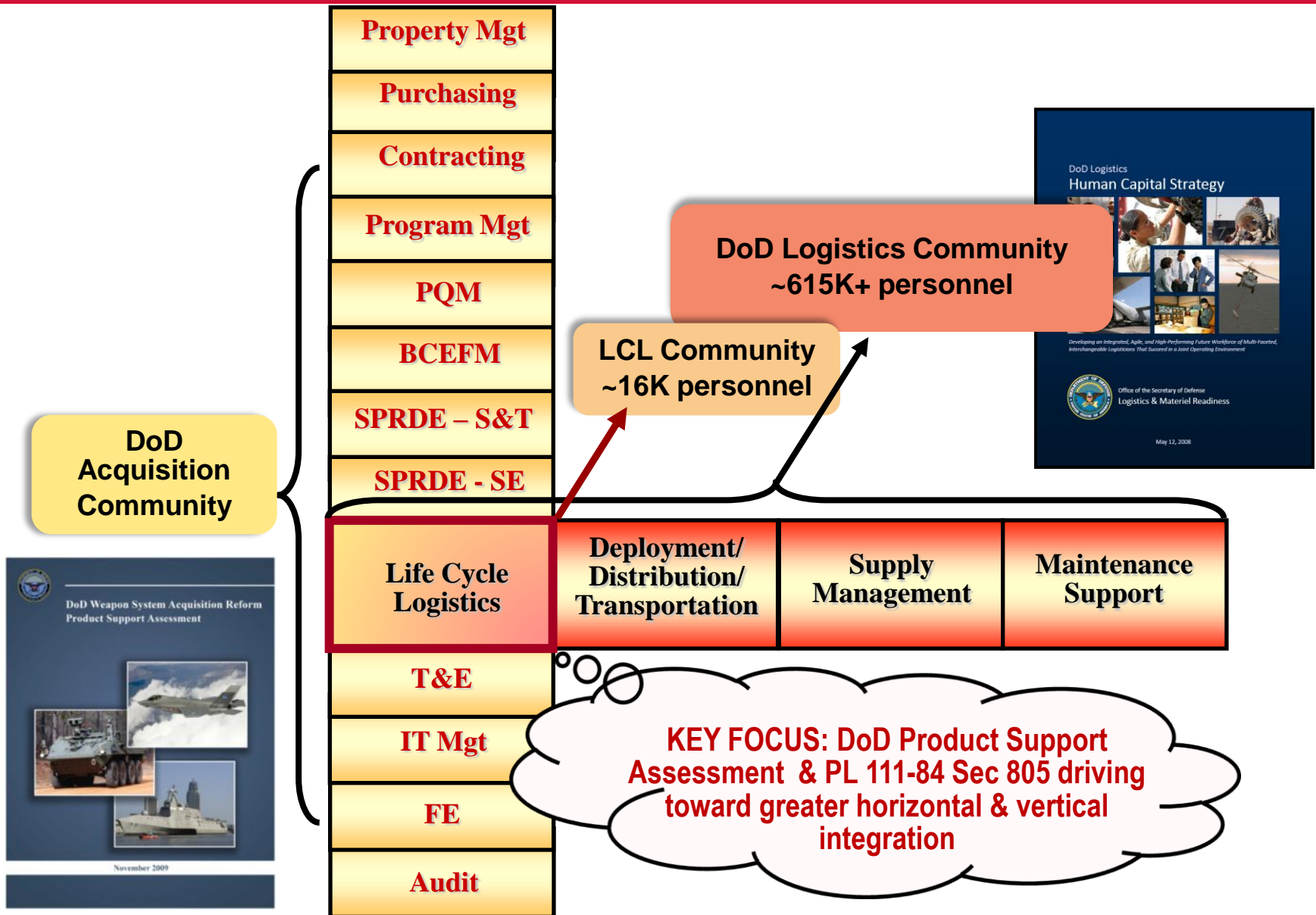
Technical/Product Data Management

Supportability Analysis

Bottom line: Support the Warfighter!

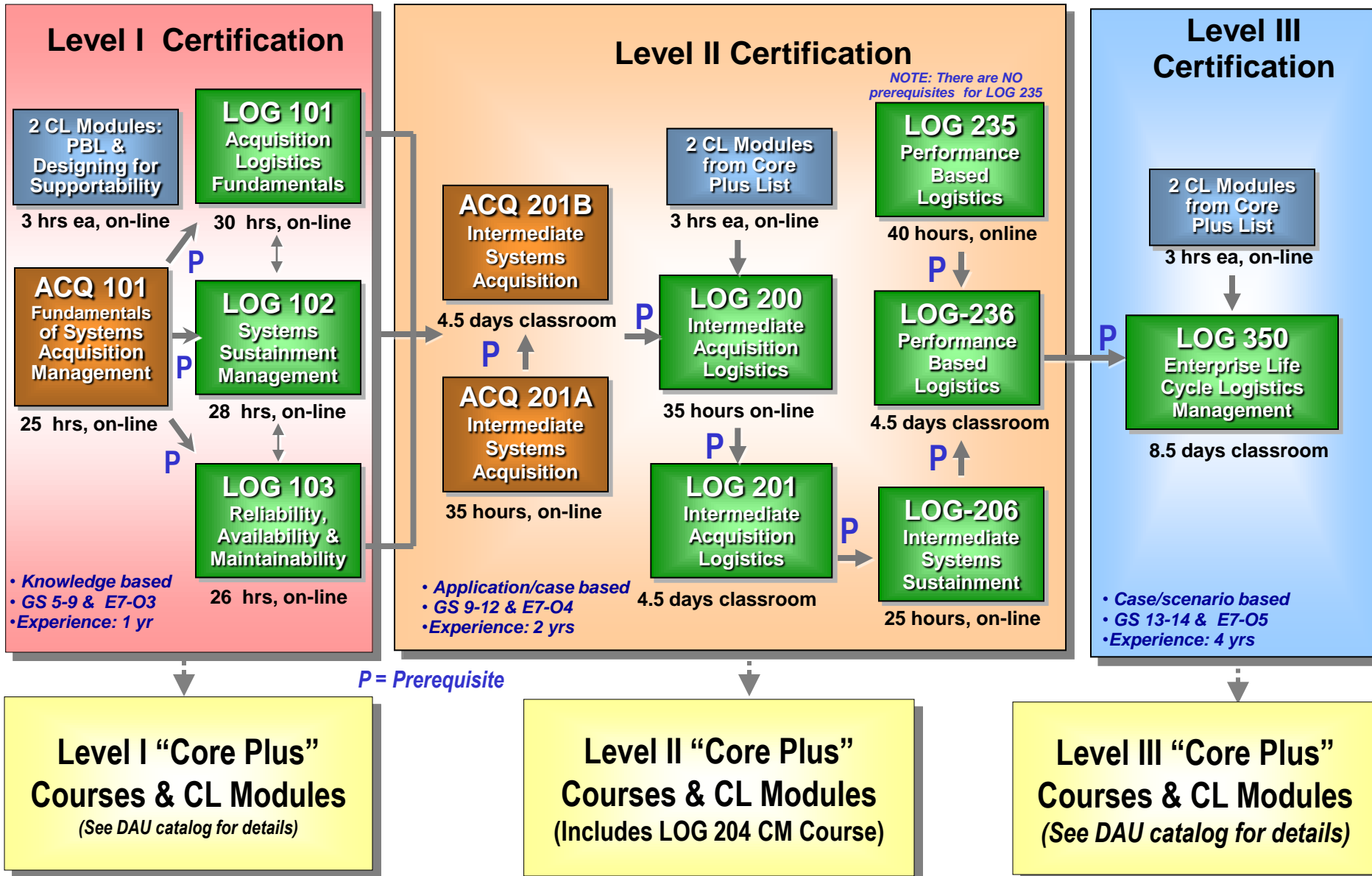


Life Cycle Logistics: At Nexus of DoD Acquisition & Logistics Communities





FY 11 Life Cycle Logistics Certification Training





Life Cycle Logistics Workforce Transformation: Expanding Product Support Capabilities (2008-2014)

• Strategic Imperative

- *“Product support considerations, germane to both acquisition and logistics, are necessary throughout the DoD life cycle framework, beginning with early requirements determination and continuing through system design, development, operational use, retirement, and disposal.”*

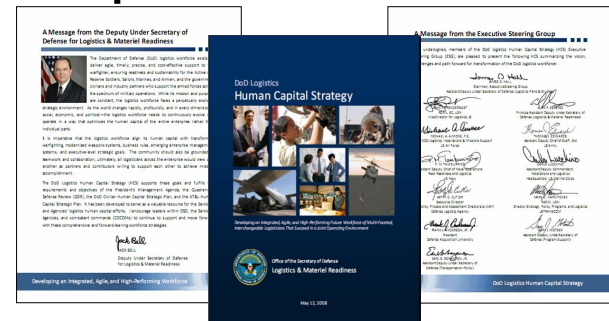
– DoD Product Support Assessment (Nov 2009)

• Drivers

- Life Cycle Sustainment Outcome Metrics (Availability KPP, Reliability/Cost KSAs, Mean Down Time) (Mar 2007)
- DoD Logistics Human Capital Strategy (June 2008) & Subsequent Competency Reviews and Refinement
- FY2010 National Defense Authorization Act (Public Law 111-84), Section 805 Establishing Requirement for Product Support Manager, (Oct 2009)
- DoD Weapon System Acquisition Review: Product Support Assessment (Nov 2009)
- USD AT&L Better Buying Power Memos (June, Sept & Nov 2010)
- USD AT&L Directive-Type Memorandum (DTM) 10-015 - Requirements for Life Cycle Management and Product Support (Oct 2010)
- Product Support Manager (PSM) Guidebook and New 12 Integrated Product Support (IPS) Elements

• Integrated Life Cycle Logistics/Product Support Competencies

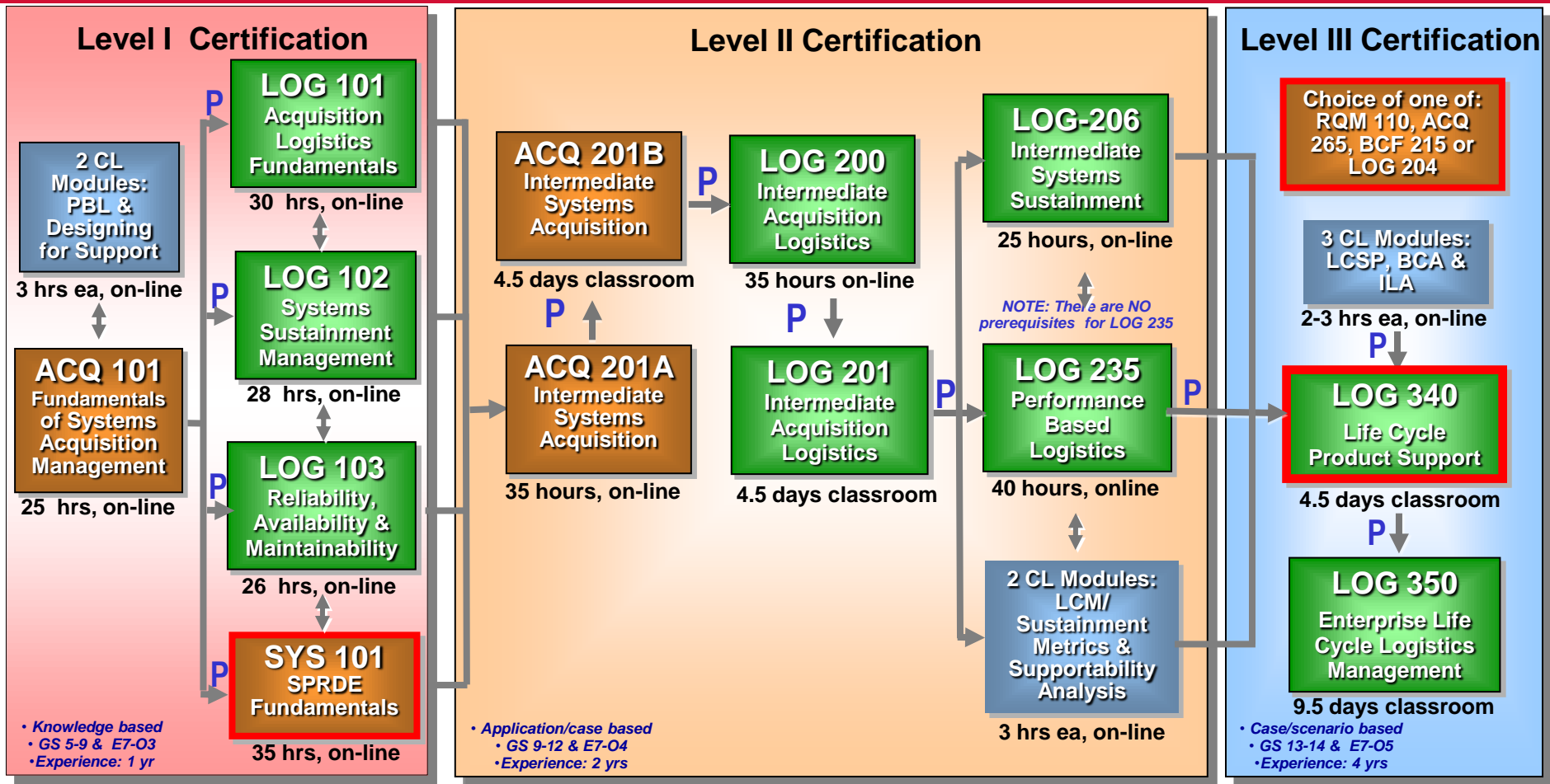
- Logistics Design Influence
- Integrated Logistics Support Planning
- Product Support & Sustainment
- Configuration Management
- Reliability, Availability & Maintainability Analysis
- Technical/Product Data Management
- Supportability Analysis



“As DoD moves forward with weapon system acquisition reform, *attention to product support must be increased, and life cycle management must be better focused* to achieve affordable operational Warfighter outcomes”-- Dr Ashton Carter, USD(AT&L) November 2009



FY12 Life Cycle Logistics Certification Training



Level I "Core Plus" Courses & CL Modules
(See DAU iCatalog for details)

New Certification Rqmts

P = Prerequisite

Level II "Core Plus" Courses & CL Modules
(See DAU iCatalog for details)

Level III "Core Plus" Courses & CL Modules
(See DAU iCatalog for details)



Future Executive Level PSM Course

- **300 or 400 Level Course**
- **1-to-2 week-long classroom course**
- **Targeted to Sitting/Selected PSMs**
- **Extensive, Broad Breadth of Life Cycle Logistics Experience**
- **What must a successful PSM know?**

What do you want to see in such a course?



39 Life Cycle Logistics Continuous Learning Modules

Currently Available or *Soon to Deploy*

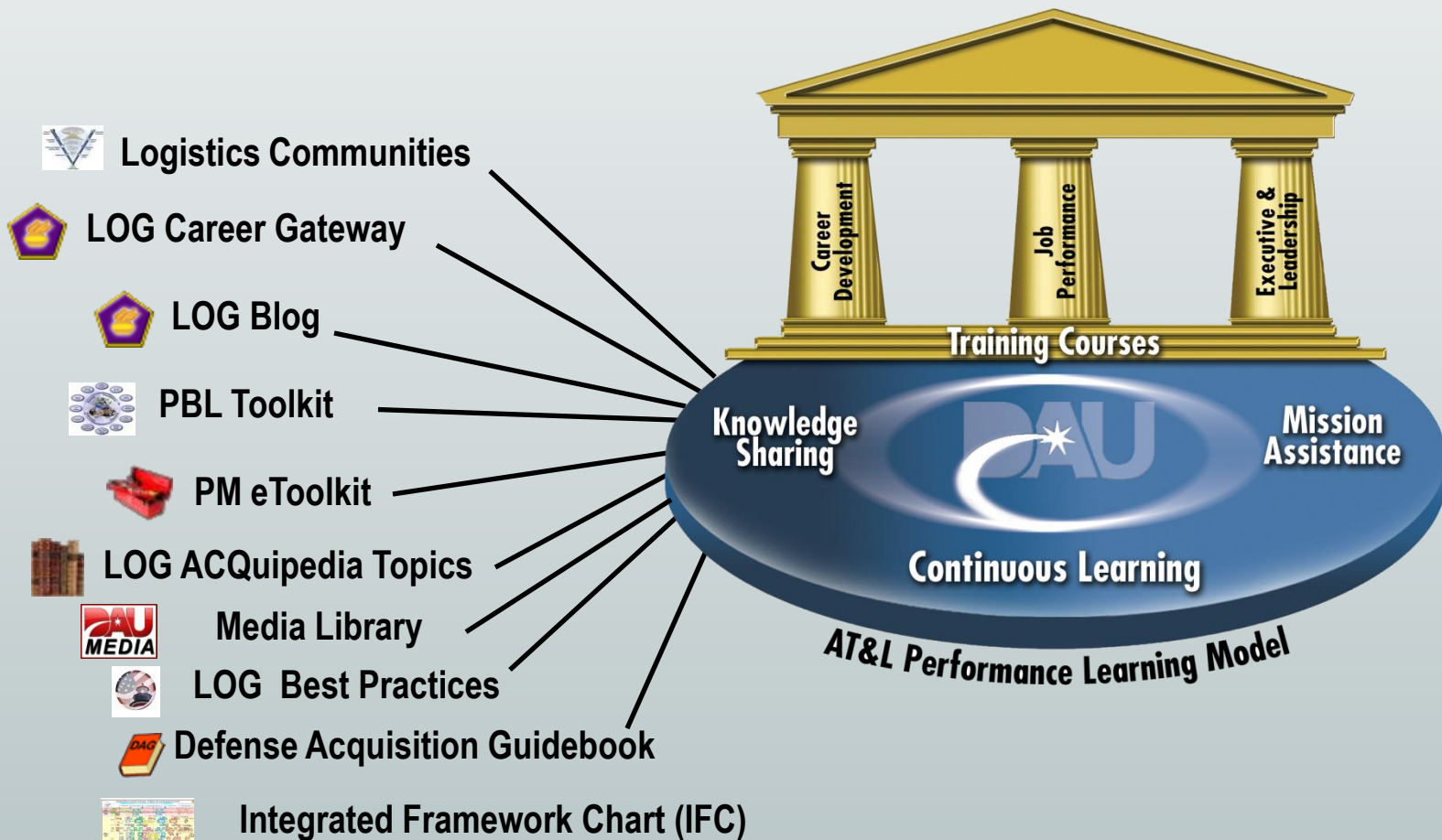
Required in FY12 for LCL Certification

Module	Title
CLL002	DLA Support To The PM
CLL004	Life Cycle Logistics for the Rest of Us
CLL006	Depot Maintenance Partnering
CLL007	Lead-Free Electronics
CLL008	Designing for Supportability in DoD Systems
CLL011	Performance Based Logistics (PBL)
CLL013	Defense Packaging
CLL014	Joint Systems Integrated Support Strategies
CLL015	Business Case Analysis (BCA)
CLL 016	Joint Logistics
CLL017	Defense Distribution & Transportation
CLL018	Joint Deployment Distribution Ops Center
CLL019	Technology Refreshment Planning
CLL020	Independent Logistics Assessments (ILA)
CLL022	Title 10 Depot Maintenance Statute Overview
CLL023	10 USC 2464 Core Statute Implementation
CLL024	10 USC 2466 "50-50" Statute Implementation
CLL025	Depot Maintenance Interservice Support Agreements (DMISA)
CLL026	Depot Maintenance Capacity
CLL029	Condition Based Maintenance (CBM+)

Module	Title
CLL030	Reliability Centered Maintenance (RCM)
CLL032	Preventing Counterfeit Parts from Entering the DoD Supply System
CLL034	US Army SSN-LIN Automated Management & Integrating System (SLAMIS)
CLL054	Joint Task Force Port Opening (JTF-PO)
CLL055	Joint Deployment & Distribution Metrics
CLL119	Technology Refreshment Implementation
CLL201	DMSMS Fundamentals
CLL202	DMSMS Executive Course
CLL203	DMSMS Essentials for DLA
CLL204	DMSMS Case Studies
CLL 205	DMSMS for the Technical Professional
CLL206	Parts Management Executive Overview
CLL001	Life Cycle Management & Sustainment Metrics
CLL003	Supportability Test & Evaluation (T&E)
CLL005	Developing a Life Cycle Sustainment Plan (LCSP)
CLL012	Supportability Analysis
CLL043	Green Logistics: Planning for Sustainability
CLL057	Level of Repair Analysis (LORA) Fundamentals
CLL058	Level of Repair Analysis Theory & Principles



DAU Supporting the Defense Acquisition Workforce...



Providing a Constant Support Presence in DoD Acquisition Careers

AT&L Performance Learning Model enables better workforce performance

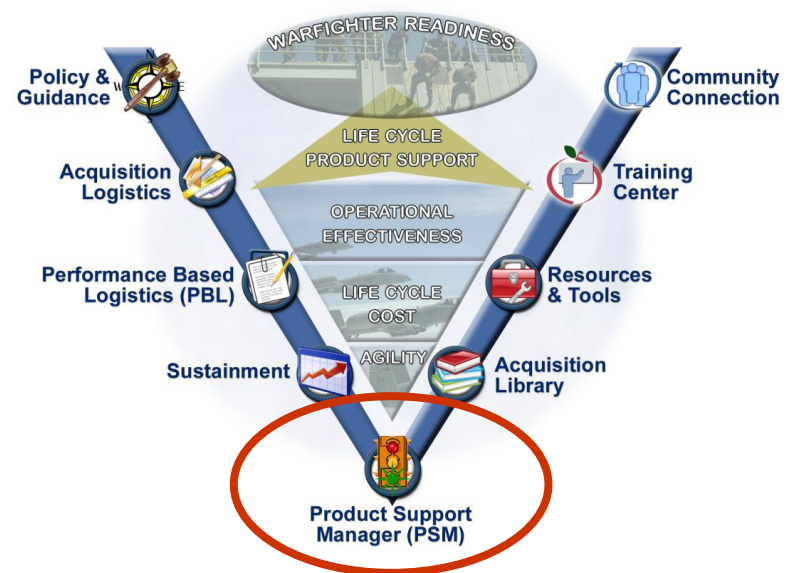
- Award-winning Knowledge Mgt capability
- LOG CoP is most robust, most visited site
- Largest of 17 acquisition communities, with extensive sustainment resources
- ***New Product Support Manager (PSM) Site***
(<https://acc.dau.mil/psm>)

Tools & Templates

- Access Latest LCL Resources
- Supportability Best Practices
- Logistics Lessons Learned
- Sustainment Issues and Initiatives

Life Cycle Logistics Resource Center

- Logistics Training & Education
- Latest OSD Policy and Direction
- Logistics Conferences/Events
- Link to Top DoD Web sites



Accessible online at
<https://acc.dau.mil/log>

Other Sources for Current, Up-to-Date Information

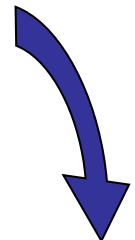
- **Defense Acquisition Portal (DAP)**

<https://dap.dau.mil>



- **Logistics Career Field Gateway**

<https://dap.dau.mil/career/log>



- **DAU Logistics & Sustainment Center Director's Blog**

<https://dap.dau.mil/career/log/blogs>





References & Resources

- DoD Directive 5000.01 - www.dtic.mil/whs/directives/corres/pdf/500001p.pdf
- DoD Instruction 5000.02 - www.dtic.mil/whs/directives/corres/pdf/500002p.pdf
- Defense Acquisition Guidebook (DAG) Chapter 5 - https://acc.dau.mil/dag_5
- DAU Logistics Community of Practice (LOG CoP) - <https://acc.dau.mil/log>
- Product Support Manager (PSM) Homepage - <https://acc.dau.mil/psm>
- PSM ACQuipedia Site - <https://acc.dau.mil/CommunityBrowser.aspx?id=375980>
- Performance Based Life Cycle Product Support (PBL) Toolkit - <https://acc.dau.mil/pbl>
- Life Cycle Sustainment Plan (LCSP) - <https://acc.dau.mil/lcsp>
- DoD Logistics Human Capital Strategy (HCS) - <http://www.acq.osd.mil/log/sci/hcs.html>
- Life Cycle Logistics ACQuipedia Repository - https://acquipedia.dau.mil/log_lcic.aspx
- Life Cycle Logistics Blog - <https://dap.dau.mil/career/log/blogs/default.aspx>
- Recommended Reading List - <https://acc.dau.mil/CommunityBrowser.aspx?id=383460>
- Logistics Career Field Gateway - <https://dap.dau.mil/career/log>
- DAU Life Cycle Logistics Media Library - <http://www.dau.mil/mpi/default.html>
- Product Support Policy, Guidance & Tools Site – <https://acc.dau.mil/productsupport>
- Integrated Defense AT&L Life Cycle Framework Chart - <https://ilc.dau.mil/>
- Army Life Cycle Logistics Framework Chart - <https://acc.dau.mil/logsa>
- Joint Life Cycle Logistics Framework Chart – Will be posted on the LOG CoP
- Product Support Manager’s (PSM) Guidebook - <https://acc.dau.mil/psm-guidebook>
- Business Case Analysis (BCA) Guidebook – <https://acc.dau.mil/bca-guidebook>
- Logistics Assessment (LA) Guidebook - Will be posted on the LOG CoP
- Integrated Product Support (IPS) Element Guidebook - Will be posted on the LOG CoP

- **Goal: Genuine Life Cycle Management Delivering Sustained Long-Term Weapon System Readiness/Availability to the Warfighter While Optimizing Life Cycle Costs**
- **While PM is Ultimately Responsible for LCM, PSM will be Key to Sustainment Planning and Execution**
- **Think (Very) Long Term, Best Value, “Life of Program” Product Support Perspective**
- **Performance Based Life Cycle Product Support (PBL) is a Powerful Enabler**
- **Operational Perspectives, Early Sustainment Planning, Investment in Reliability, Availability & Maintainability (RAM) and a Life Cycle Focus are Paramount**
- **Congressional Mandate for Product Support Manager (PSM) is a Game Changer**
- **Policy Evolving Rapidly; PL 111-84, Sec 805 Implementation & DoD Product Support Assessment will drive next round**
- **By including Section 805 in FY 2010 NDAA, Congress made it clear where it stands on these issues -- and who is responsible for addressing them**

