

OSD Product Support BCA Guidebook



Joseph “Colt” Murphy
Senior Financial Analyst
ODASD Materiel Readiness
9 May 2011
Joseph.murphy@osd.mil

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 09 MAY 2011		2. REPORT TYPE		3. DATES COVERED 00-00-2011 to 00-00-2011	
4. TITLE AND SUBTITLE OSD Product Support BCA Guidebook				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Office of the Deputy Assistant Secretary of Defense for Materiel Readiness ,3500 Defense Pentagon Room 3C168,Washington,DC,20301-3500				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition held 9-12 May 2011 in New Orleans, LA.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 27	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Introduction

- Product Support BCA Guidebook
 - Draft document
 - Final review phases within Materiel Readiness
- Purpose of brief
 - Explain the PSM need for standardized, transparent, and defensible decision making process
 - Present an overview of the BCA guide, context, and application



Overview

- Product Support Background
 - Assessments of DOD Product Support Actions
 - Product Support Strategy
 - Product Support Business Model
- Product Support BCA Guidebook
 - Definition
 - Structure
 - Delivery
 - Other considerations



Findings from GAO Report-December 2008

- “29 PBLs examined (9 USA, 10 DON, 10 USAF)
 - Most of the Services have not established internal controls necessary to ensure a comprehensive assessment...many inconsistencies across the Services guidance.
 - In general, BCAs were either not done, not fully documented, or were not comprehensive or sound
 - Almost all costs were either difficult to verify/validate or trace back to sound accounting data”



2009 DoD Weapon System Acquisition Reform: Product Support Assessment (PSA)

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

Metrics:

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

O&S Costs:

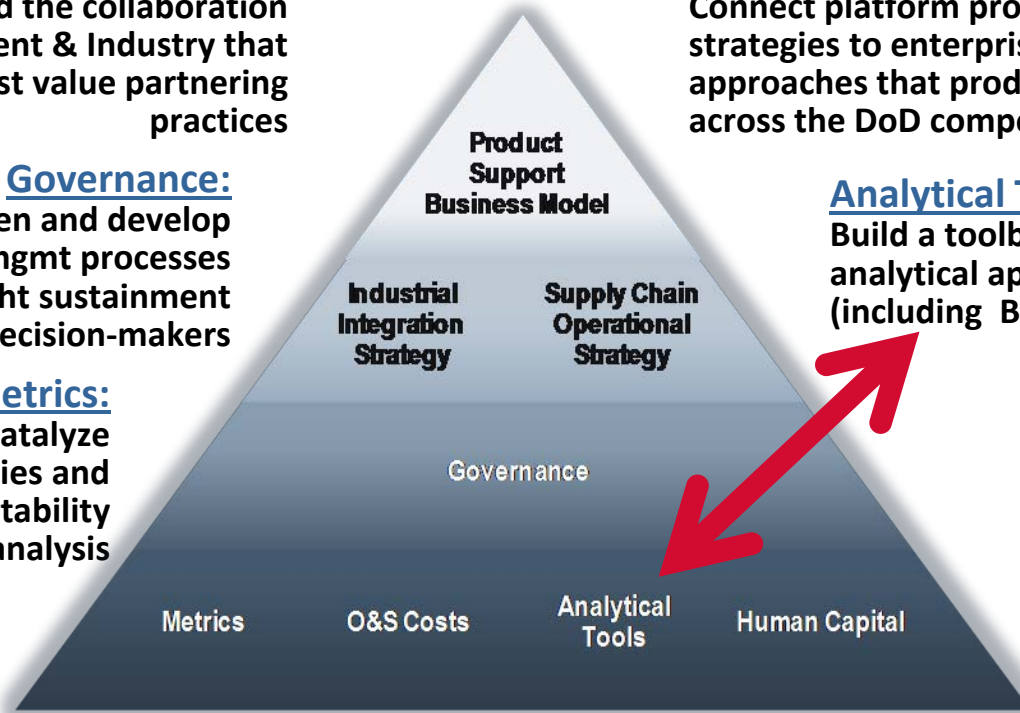
Improve O&S cost visibility and influence

Analytical Tools:

Build a toolbox of analytical approaches (including BCA)

Human Capital:

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



Weapons System Data:

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



Product Support Manager

- Product Support Strategy
 - The business model of an integrated system
 - Balance across functional areas and stakeholders
 - Evolutionary process develops the strategy
- Congressional influences on the Strategy
 - Required governmental position with responsibility
 - Improved credibility and transparency of data and decision making
 - Directive in governing frequency and supporting documentation of decision making
 - NDAA 2010 Section 805, WSARA 2009

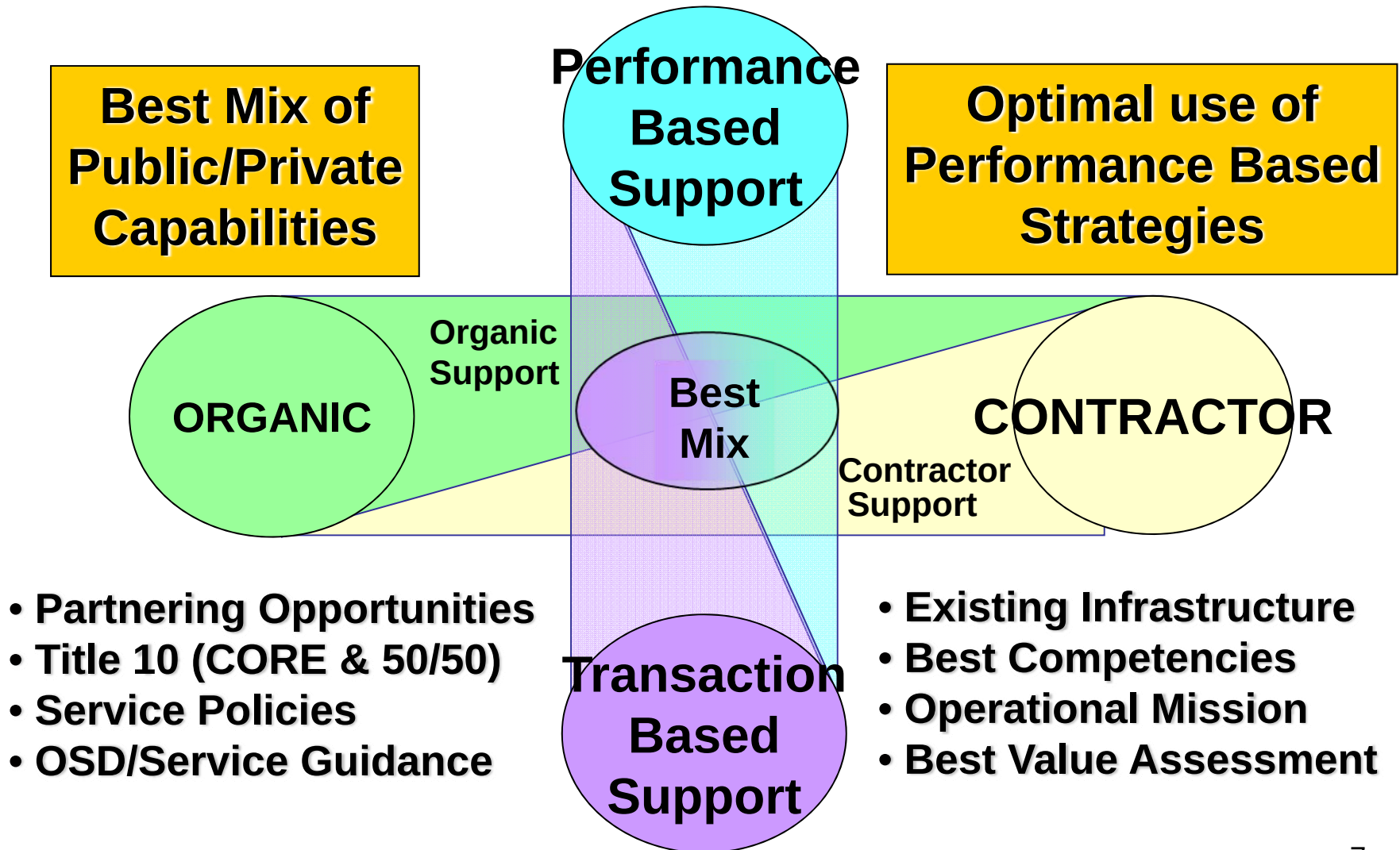


DoD Product Support Strategy Process





Analysis of support and strategy options





Product Support Decision Matrix

Weapons System Strategy		Integration Strategy		
Platform	Platform	1.1 Industry-Centric Platform Strategy (Example: C-12 Huron)	1.2 Blended DoD-Industry Platform Strategy (Example: C-17)	1.3 DoD-Centric Platform Strategy (Example: Common Ground System)
	Subsystem	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)
	Component	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)
		Industry Capabilities	Partnerships	Organic Capabilities



Overview

- Product Support Background
 - Assessments of DOD Product Support Actions
 - Product Support Strategy
 - Product Support Business Model
- Product Support BCA Guidebook
 - Definition
 - Structure
 - Delivery
 - Other considerations



DoD Product Support BCA Definition

- What is a BCA?

“A (Product Support) BCA is a structured methodology and document that aids decision making by identifying and comparing alternatives by examining the mission and business impacts (both financial and non-financial), risks, and sensitivities”



Purpose of a BCA

- Support decisions that balance benefits, costs and risks within some form of prioritization
- Provides a fair and objective study to lead to a decision, not justify a decision after the fact
- For product support strategies, assess performance and costs with the goal to:
 - Optimize total system availability
 - Minimize cost
 - Minimize logistics footprint



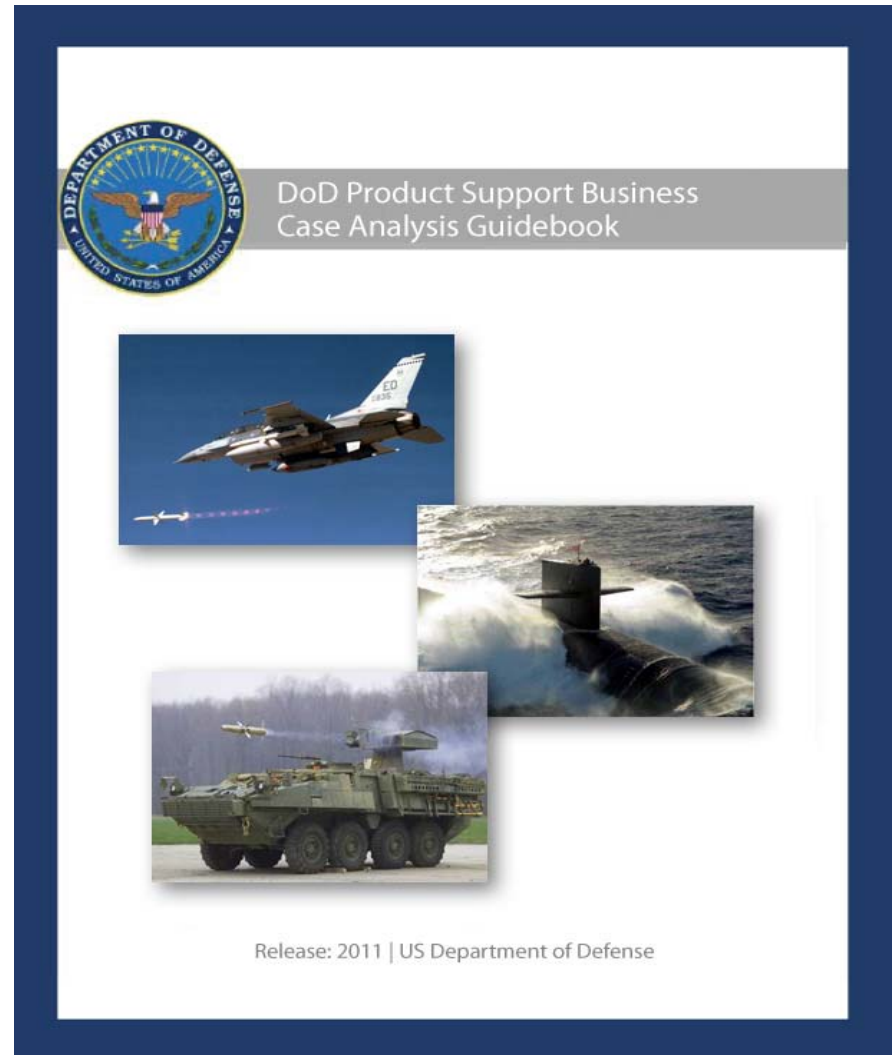
Business Case Analysis Structure





Product Support BCA Guidebook Overview

- Purpose
- People
- Data Management
- Process & Content
- Governance
- Documentation
- Checklist
- References





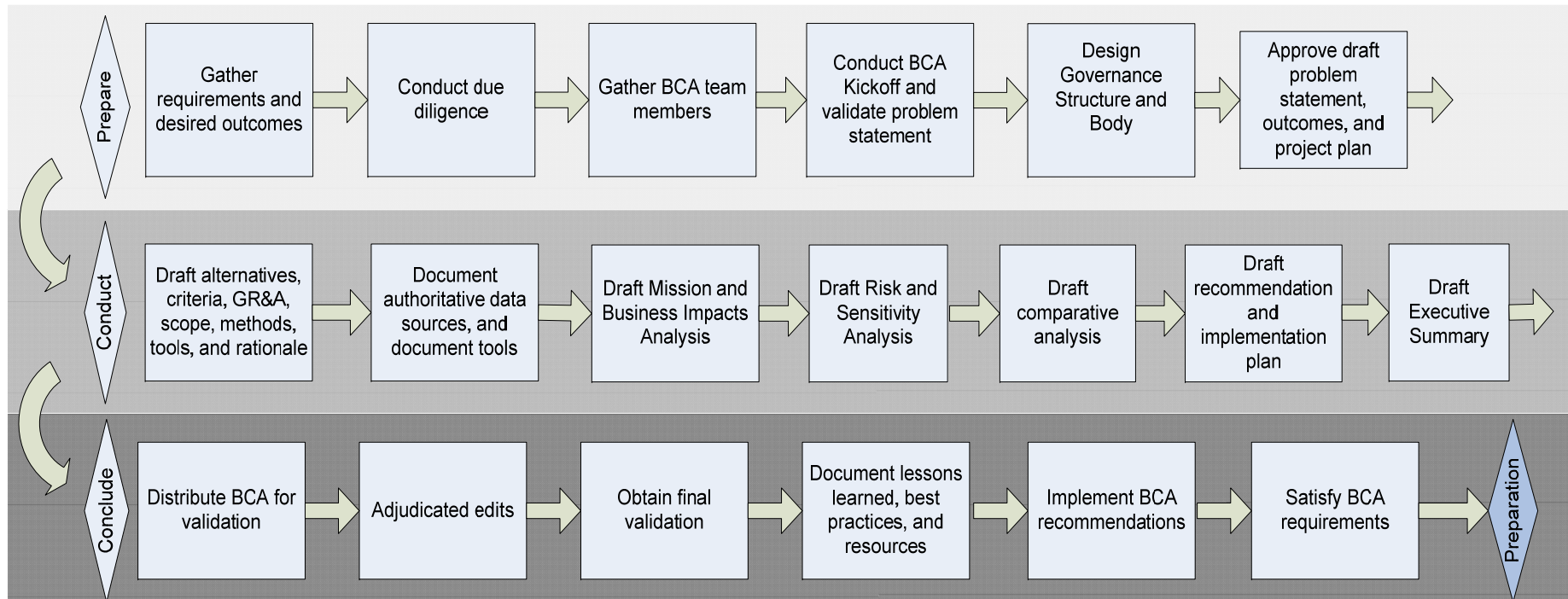
BCA People

- A. Sponsor
- B. Owner
- C. Warfighter
- D. PM/PSM
- E. Governance Body
- F. Business Analyst
- G. Logistician
- H. Systems Engineer
- I. PSI/PSP
- J. Data Manager
- K. Legal & Contracts
- L. Approval Authorities
- M. Subject Matter Experts (SMEs)
- N. Other



Draft DoD BCA Process

The BCA process flow prepares, performs, and presents a BCA in a structured manner to ensure effective documentation and credible decision support.





BCA – Content

Executive Summary	
Introduction	Problem Statement
	Background
	Scope
Desired Outcomes and Requirements	Desired Outcomes
	Requirements
Assumptions and Methods	Grounds Rules, Assumptions, and Constraints
	Analysis Methods, Tools, and Rationale
	Evaluation Criteria
Alternatives	Current Baseline/Anticipated Initial Support/Status Quo
	Alternatives
Mission and Business Impacts	Benefits and Nonfinancial Analysis
	Cost and Financial Analysis
Risk Analysis	Risk Analysis and Mitigation Plans
Sensitivity Analysis	Sensitivity Analysis
Conclusion	Comparison of Alternatives
	Summary of Results
Recommendations	Specific Actions Based on Business Objectives
	Implementation Plan



Comparison of Alternatives

- Overall integrated score for each alternative
 - Requires extensive weighting and scoring (scoring criteria essential)
 - Rolls cost, schedule, and performance into a single score
 - Potential to lose important distinctions in the process
 - Good for repeatability and transparency
- Robust discussions of the recommendation present the trade space around the decision



BCA Delivery

- An undelivered BCA = no BCA
 - Narrative document, fully addresses the study
 - Comprehensive and organized in a useful manner for decision makers and reviewing officials
 - Fully supported with documentation
 - Anticipated oversight requirements
 - Credibility required to stand up to rigorous auditing
- The document is iterative by nature
 - Foundation for follow-on studies within the program
 - Useful in analogy methodology of future programs



Other BCA Attributes

- Standardized BCA process
 - Its principles are similar to those of any scientific or objective based study
 - Emphasis on credibility, transparency and repeatability
- Process is standard yet methods are not prescribed
 - Tailor to the problem statement
 - Availability of required data can drive analysis
 - Required fidelity of the results can drive scope
 - Time and resources available vary by program

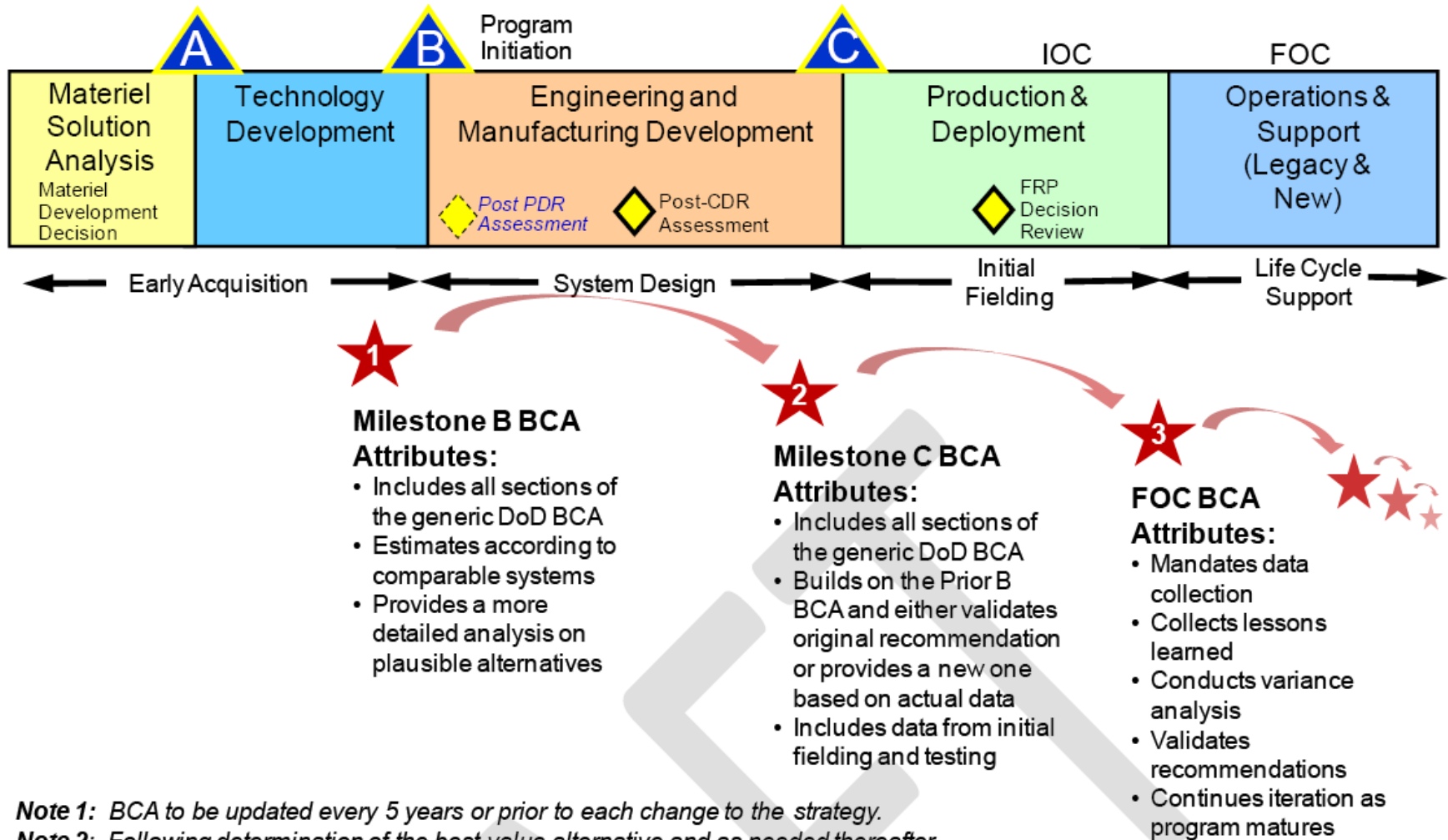


Other BCA Considerations

- Workload associated with a BCA can vary from moderate to very large
- You get what you pay for (sometimes)
- Standardized BCA process has many positives
 - Decision support becomes consistent
 - Process clarity provides greater understanding and less ambiguity
 - Structure inherently provides for easier review, updating, and incorporating into follow-on studies



Product Support BCA Requirements



Note 1: BCA to be updated every 5 years or prior to each change to the strategy.

Note 2: Following determination of the best value alternative and as needed thereafter, a contract BCA helps determine the best-value solution provider.



DoD Product Support BCA Principles to Keep in Mind

- Product Support BCAs should be based on Warfighter requirements
- Be linked to Warfighter outcomes, metrics and contract incentives
- For ACAT 1 programs, develop initial BCA prior to MS B and perform detailed BCA prior to MS C
- Use best value determination
- Update BCA every five years or prior to a change in Product Support Strategy



Sustainability and the Best Value Determination

- Sustainability strongly affects the requirements and affordability equation
- Included in benefits and risk sections of guidebook
- Important component in risk analysis and trade space in comparison of alternatives



Discussion



Back-up



Product Support Strategy Specifics

- For legacy programs, assess changes to existing strategy – develop new program strategy
- For legacy programs, use cost and performance history for baseline – for new programs establish baseline early in the life cycle
- Reflect operational requirements and DoD guidance for contractors on the battlefield
- Address flexibility to support contingencies and surge requirements
- Value and affordability based decision