Better Buying Power Initiatives (BBPI) 3.0 and Should Cost

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Better Buying Power (BBP) General Concept

- BBP implements initiatives intended to increase the productivity of all providers of DoD products and services
- BBP 1.0 announced in June 2010
- Guidance issued in September 2010. It includes 23 initiatives organized into five focus areas:
  - Target Affordability and Control Cost Growth
  - Incentivize Productivity and Innovation in Industry
  - Reduce Non-Productive Processes and Bureaucracy
  - Promote Real Competition
  - Improve Tradecraft in Acquisition of Services
- Implementation overseen by Business Senior Integration Group (BSIG), chaired by USD(AT&L)
- Some initiatives have been fully implemented, others are in progress, some have been modified, and others have been either dropped or delayed
- Additional opportunities identified

Source: Mr. Kendall at Nov 2012 SLAT Forum
Better Buying Power 1.0 Status
as of Nov 2012

Target Affordability and Control Cost Growth

- Mandate affordability as a requirement – implemented, continue in 2.0
- Implement “should cost” based management – implemented, continue in 2.0
- Eliminate redundancy within warfighter portfolios – continue in 2.0
- Achieve Stable and economical production rates – continue in 2.0
- Manage program timelines – continue, rephrased in 2.0

Incentivize Productivity & Innovation in Industry

- Reward contractors for successful supply chain and indirect expense management – continue in 2.0
- Increase Use of FPIF contract type – modified in 2.0
- Capitalize on progress payment structures – implemented
- Institute a superior supplier incentive program – continue in 2.0
- Reinvigorate industry’s independent research and development – continue in 2.0

Reduce Non-Productive Processes and Bureaucracy

- Reduce frequency of OSD level reviews –implemented, continue in 2.0
- Work with Congress to eliminate low value added statutory requirements – implemented, continue in 2.0
- Reduce the volume and cost of Congressional Reports – implemented, continue in 2.0
- Reduce non-value added requirements imposed on industry – continue in 2.0
- Align DCMA and DCAA processes to ensure work is complementary – implemented

Promote Real Competition

- Emphasize competitive strategy at each program milestone – continue, rephrase for emphasis in 2.0
- Remove obstacles to competition
  - Allow reasonable time to bid – continue in 2.0
  - Require non-certified cost and pricing data on single offers – implemented
  - Enforce open system architectures and set rules for acquisition of technical data rights – continue, rephrase for emphasis in 2.0
- Increase small business role and opportunities – continue in 2.0

Improve Tradecraft in Acquisition of Services

- Assign senior managers for acquisition of services – implemented, continue in 2.0
- Adopt uniform services market segmentation (taxonomy) – implemented, continue in 2.0
- Address causes of poor tradecraft
  - Define requirements and prevent creep – continue in 2.0
  - Conduct market research – continue in 2.0
- Increase small business participation – continue in 2.0
**Better Buying Power 2.0**

*(Apr 2013 Final)*

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**Achieve Affordable Programs**

- Mandate affordability as a requirement
- Institute a system of investment planning to derive affordability caps
- Enforce affordability caps

**Control Costs Throughout the Product Lifecycle**

- Implement “should cost” based management
- Eliminate redundancy within warfighter portfolios
- Institute a system to measure the cost performance of programs and institutions and to assess the effectiveness of acquisition policies
- Build stronger partnerships with the requirements community to control costs
- Increase the incorporation of defense exportability features in initial designs

**Incentivize Productivity & Innovation in Industry and Government**

- Align profitability more tightly with Department goals
- Employ appropriate contract types
- Increase use of Fixed Price Incentive contracts in Low Rate Initial Production
- Better define value in “best value” competitions
- Only use LPTA when able to clearly define Technical Acceptability
- Institute a superior supplier incentive program
- Increase effective use of Performance-Based Logistics
- Reduce backlog of DCAA Audits without compromising effectiveness
- Expand programs to leverage industry’s IR&D

**Eliminate Unproductive Processes and Bureaucracy**

- Reduce frequency of higher headquarters level reviews
- Re-emphasize AE, PEO and PM responsibility, authority, and accountability
- Eliminate requirements imposed on industry where costs outweigh benefits (deleted)
- Reduce cycle times while ensuring sound investment decisions

**Promote Effective Competition**

- Emphasize competition strategies and creating and maintaining competitive environments
- Enforce open system architectures and effectively manage technical data rights
- Increase small business roles and opportunities
- Use the Technology Development phase for true risk reduction

**Improve Tradecraft in Acquisition of Services**

- Assign senior managers for acquisition of services
- Adopt uniform services market segmentation
- Improve requirements definition/prevent requirements creep
- Increase small business participation, including through more effective use of market research (combined SB and MR initiatives)
- Strengthen contract management outside the normal acquisition chain – installations, etc.
- Expand use of requirements review boards and tripwires

**Improve the Professionalism of the Total Acquisition Workforce**

- Establish higher standards for key leadership positions
- Establish stronger professional qualification requirements for all acquisition specialties
- Increase the recognition of excellence in acquisition management
- Continue to increase the cost consciousness of the acquisition workforce – change the culture
Better Buying Power 3.0

Achieving Dominant Capabilities through Technical Excellence and Innovation

Achieve Affordable Programs
- Continue to set and enforce affordability caps

Achieve Dominant Capabilities While Controlling Lifecycle Costs
- Strengthen and expand “should cost” based cost management
- Anticipate and plan for responsive and emerging threats by building stronger partnerships of acquisition, requirements, and intelligence communities
- Institutionalize stronger DoD level Long Range R&D Program Plans
- Strengthen cybersecurity throughout the product lifecycle

Incentivize Productivity in Industry and Government
- Align profitability more tightly with Department goals
- Employ appropriate contract types, but increase the use of incentive type contracts
- Expand the superior supplier incentive program
- Ensure effective use of Performance-Based Logistics
- Remove barriers to commercial technology utilization
- Improve the return on investment in DoD laboratories
- Increase the productivity of corporate IRAD

Incentivize Innovation in Industry and Government
- Increase the use of prototyping and experimentation
- Emphasize technology insertion and refresh in program planning
- Use Modular Open Systems Architecture to stimulate innovation
- Increase the return on and access to small business research and development
- Provide draft technical requirements to industry early and involve industry in funded concept definition
- Provide clear and objective “best value” definitions to industry

Eliminate Unproductive Processes and Bureaucracy
- Emphasize acquisition chain of command responsibility, authority, and accountability
- Reduce cycle times while ensuring sound investments
- Streamline documentation requirements and staff reviews
- Remove unproductive requirements imposed on industry

Promote Effective Competition
- Create and maintain competitive environments
- Improve DoD outreach for technology and products from global markets
- Increase small business participation, including through more effective use of market research

Improve Tradecraft in Acquisition of Services
- Strengthen contract management outside the normal acquisition chain – installations, etc.
- Improve requirements definition for services
- Improve the effectiveness and productivity of contracted engineering and technical services

Improve the Professionalism of the Total Acquisition Workforce
- Establish higher standards for key leadership positions
- Establish stronger professional qualification requirements for all acquisition specialties
- Strengthen organic engineering capabilities
- Ensure development program leadership for is technically qualified to manage R&D activities
- Improve our leaders’ ability to understand and mitigate technical risk
- Increase DoD support for (STEM) education

Continue Strengthening Our Culture of:
Cost Consciousness, Professionalism, and Technical Excellence

Ideas retained from BBP 2.0 and/or BBP 1.0
New in BBP 3.0
Should Cost
“Will Cost” vs “Should Cost”
USD (AT&L) and USD(C) 22 Apr 11 Memo

- **Will Cost**
  - Used for programming and budgeting
  - Used for acquisition program baselines (APBs)
  - Used for all reporting requirements external to DoD

- **Should Cost**
  - Scrutinize every element of govt and contractor costs
  - 3 ways to develop should cost estimates:
    - Bottoms –Up estimate
    - Determine specific discrete and measurable items
    - Use competitive contracting and contract negotiations to identify should cost savings (old FAR definition)
Should Cost is NOT

• Army Affordability Initiatives memo, 10 Jun 2011
  – Broad challenge by management to reduce cost by a specified percentage or dollar value
  – Most items outside the control of the program office and inconsistent with the current program of record
  – Anything requiring significant investment for completion and an increase to the budget

• Air Force Should Cost memo, 15 Jun 2011
  – Arbitrary reductions against the will cost estimate
  – Choosing a lower confidence level from your will cost range
  – Most items outside the control of the program office and inconsistent with the current program of record
  – Anything requiring significant investment for completion and an increase to the budget
  – FFP contracts should only be reopened if there is a clear benefit to do so

• Navy Should Cost memo, 19 Jul 2011
  – Arbitrary reductions against the will cost estimate
  – Choosing a lower confidence level from your will cost range
  – FFP contracts should only be reopened if there is a clear benefit to do so
• Should Cost applies to your Program of Record
• It should become the focus after MS B for the acquisition community
Should Cost General Approach: First Step
Cost Categories by Phase - Where are You Now?

Life Cycle Costs

- Research & Development Costs
- Investment Costs
- Operating & Support Costs
- Disposal Costs

- Technology Maturation and Risk Reduction
- Engineering & Manufacturing Development
- Production & Deployment
- Operations & Support

FRPDR
PM’s Should Cost Team

- Seek outside assistance
  - The Service’s Cost Analysis Agency
  - DCMA
  - SAE

- Collaborate with appropriate center level functional organizations

- Engage with personnel who developed Independent Cost Estimate and/or other previously defined should-cost estimates
Cost Estimating Methodology
Cost Drivers

• Items having major impact on program cost
  • Ex: High dollar value items
• Any item with a high programmatic risk
  • Ex: Software development
• Any item with a high variation in value
  • Ex: Precious metals
• Any item for which a small change in value may have major impact
  • Ex: Labor rates
SCM: 5 Step Process

• Step 1: Identify Cost Drivers
• Step 2: Identify & Prioritize Opportunities
  • Consider each of the following:
    • Investment Cost
    • Ease of Implementation
    • Time to Implement/Realize
    • Unit Cost Benefit
• Step 3: Develop Discrete “Should Cost” POA&M
• Step 4: Establish Measurable Targets
• Step 5: Disposition of Realized Cost Savings with Higher Hqs
CVN 79 PARM Review: High Impact Opportunities

RAM
- **Opportunity:** IF there is a Reduction of Spares Costs, THEN a Cost savings can be realized
- **Driver:** PMS 378 CVN 79 PARM Progress Reviews
- **Action:** IWS 3.0 will continue to review to realize cost savings
- **Proposed:** FY16

 Cv-TSc
- **Opportunity:** IF increased processing w/ CPS Ti16 can reduce the racks from 2 to 1, THEN Cost savings can be realized
- **Driver:** PMS 378 CVN 79 PARM Progress Reviews
- **Action:** IWS 5.0 will continue to review to realize cost savings
- **Proposed:** FY13/14

RLGN
- **Opportunity:** IF EOQ Pricing based on multiple system procurement is realized, THEN Cost savings can be realized
- **Driver:** PMS 378 CVN 79 PARM Progress Reviews
- **Action:** IWS 6.0 will continue to review to realize cost savings
- **Proposed:** FY15

DBR
- **Opportunity:** IF a H/W reduction to ECP and Equipment Refresh is realized, THEN Cost savings can be realized
- **Driver:** PMS 378 CVN 79 PARM Progress Reviews
- **Action:** IWS 2.0 will continue to review to realize cost savings
- **Proposed:** FY13

GMLS
- **Opportunity:** IF EOQ Pricing could reduce shipset equipment cost; based upon FY12 production shipset costs negotiated for CVN 78, THEN Cost savings can be realized
- **Driver:** PMS 378 CVN 79 PARM Progress Reviews
- **Action:** IWS 3.0 will continue to review to realize cost savings
- **Proposed:** FY15

MK 38 MGS
- **Opportunity:** IF Requirements for MK 38 are fully defined allowing the ROM unit cost to be refined, THEN Cost savings can be realized
- **Driver:** PMS 378 CVN 79 PARM Progress Reviews
- **Action:** IWS 3.0 will continue to review to realize cost savings
- **Proposed:** FY15

Likelihood Scale:
- B: 25%
- C: 50%
- D: 75%
- E: 90%

Impact Scale:
- 4: Savings from $100k-$1m
- 5: Savings >$1m
Implement “Should Cost” Based Management

• **Examples**
  - Use of traditional operations research methods to identify and prioritize cost reduction opportunities (AIM-9X Program)
    - Fishbone diagram to conduct root cause analysis and identify cost drivers
    - Combined Pareto and Business Case Analysis to identify and prioritize best cost reduction opportunities
    - Discrete Plan of Action and Milestones developed for each actionable cost reduction initiative
    - Establish measurable targets, consolidate into SC baseline, and monitor progress
  - AIM-9X Active Optical Target Detector manufacturing improvements reduced unit production cost
  - DDG 51 shifted from sole source to performance specification-based competition for Main Reduction Gear (MRG)
  - Guided Multiple Launch Rocket System (GMLRS) bundled FY12 and FY13 procurements
  - Stryker used a bundle buy concept to achieve economies of scale by combining order for 294 Double V-Hulls (FY11) with 100 NBCRVs (FY12)
  - F-22 conducted Should Cost Reviews on vendor proposal to inform negotiations prior to major contract awards.
Success Story - AIM-9X Block II

- Applied traditional operations research methods to identify and prioritize cost reduction opportunities
  - Fishbone diagram
  - Pareto Analysis
  - Plan of Action and Milestones
  - Establish measurable targets
  - Monitor progress
- Accelerated production deliveries
- Leveraged FMS for EOQ buys
- Active Optical Target Detector manufacturing improvements

Realized savings: $21M for Lot 11
Projected savings: $82M (FY11-15); $595M over program of record
Success Story – DDG 51 Shipbuilding Program

- DDG 51 Main Reduction Gear (MRG)
  - Existing sole source subcontractor exited market
  - Transferred data rights and equipment to new company
  - Negotiations between new company and prime contractors were unsuccessful
  - Navy ran separate, performance specification-based competition for MRGs
    - Will provide to shipbuilders as GFE

Estimated Savings: ~$400 Million, FY10-15
Success Story - GMLRS
Guided Multiple Launch Rocket System

- Bundled FY12 and FY13 procurements
  - Leveraged total quantities instead of independent annual quantities
  - Extending cost / pricing data through 31 Dec allowed PMO to execute FY13 procurement through contract mod to FY12 contract
    - Mod repriced FY12 FRP 7 Unitary rocket cost from $99.4K to $92.6K per rocket—a ~$23M savings in FY12
    - Mod avoided significant cost increase due to lower quantities in a FY13 stand alone contract—cost avoidance of ~$29.3M
- Alternative Warhead Should Cost approaches
  - Implemented test efficiencies
  - Shortened development schedule by 16 months (~32%)
  - Used rockets from inventory to build test articles
  - Aggressive contract negotiations

Realized savings: ~$52.3M for bundled procurements; ~$33.6M for Alternative Warhead Should Cost savings
Success Story - Stryker

• Bundle buy concept
  – Achieved economies of scale by combining order for 294 Double V-Hulls (FY11) with 100 NBCRVs (FY12)
  – Required senior leader authority to purchase on tight timeline

• Test cost efficiencies
  – Utilize existing test data
  – Combine test events

Realized savings: ~$18M bundle-buy; ~$7.7M test efficiencies (FY12)
Success Story – F-22

- Conducted Should Cost analysis to inform negotiations prior to major contract award
  - Early validation tests enabled less oversight of sub-contractor development
  - Proposal SW development hours challenged based on contractor’s advanced capability, process, and language experience
  - Number of contract vehicles reduced (i.e. CLINS, DO’s, etc.)
  - Implemented defined promotion criteria for tests passed, requirements met, and number of known defects before code is promoted across phases and locations

*Savings applied to Life Support System and Auto-Ground Collision Avoidance System unfunded requirements

Projected savings: $32M for Increment 3.2A (negotiated CPIF contract price compared to Will Cost)*
1. Should cost applies to all acquisition programs.
2. Should cost only applies to development and production efforts.
3. Contractor “opportunities” are not part of Should Cost.
4. Should cost is one of the Better Buying Power initiatives.
5. Should Cost is expected to be a higher number than the Will Cost number.
Backup Slides
Confidence Levels: Risk and Opportunity

Opportunity: Uncertainty covered by budget
Risk: Uncertainty not covered by budget
BBP 2.0 (Apr 2013 final) encompasses 34 initiatives organized into seven focus areas.

- Identify opportunities to do better and manage toward that goal.
- Every acquisition manager’s performance evaluation should consider effective cost control including should cost management by the end of CY 2013.
- All ACAT I-III programs should have should cost targets in place by 1 Aug 2013, or the next milestone decision, whichever comes first.
- AT&L will re-issue guidance by 1 Jun 2013.
- Components will re-issue guidance by 1 Jul 2013.
- Effective immediately, for ACAT I programs, PMs and PEOs will report should cost targets and progress achieving them at all DAES and DAB reviews.
- DAU will develop a repository for best practices and create rapid deployment training by 1 Aug 2013; integrate across all DAU curricula by 1 Nov 2013.
- DCMA, in collaboration with CAEs, will implement an annual planning process to maximize the use of DCMA Cost and Pricing Center capability for assisting program offices and PEOs with should cost activities by 1 Jun 2013.
• Elements of Opportunity and Should Cost Management
  – Opportunity Management (OM)
    • Understand cost estimate and identify cost drivers
    • Identify and assess opportunities
    • Prioritize opportunities
    • Develop discrete opportunity capture plans
  – Should Cost Management (SCM)
    • Develop discrete opportunity capture plans (shared with OM process)
    • Establish measurable should cost targets
    • Disposition of realized cost savings with HQMC/OPNAV
    • Understand the cost estimate and identify the cost drivers
      – Repeat the process
• Opportunity Cube (5 X 5 grid)
  – Likelihood: 10%, 30%, 50%, 70%, 90%
  – Benefit: Defined in terms of technical, schedule, and cost
Cost Estimating Process

• Definition and planning
  • Understand the requirement and purpose of the estimate
  • Define the ground rules and assumptions
  • Select the estimating approach
  • Put together the Cost Estimating Team and CPIPT

• Data collection and analysis
  • Historical data collection
  • Normalize the data
  • Determine cost drivers

• Estimate formulation
  • Use available methodologies and tools (learning curves, inflation, FY spreads)

• Review and presentation
  • Reasonable – Realistic - Complete

• Final documentation
  • Will someone else be able to figure out what you’ve done?
• Should Cost
  – Covers all govt and contract costs throughout the entire life cycle of the program
  – Internal management tool for incentivizing performance
  – PM must ensure cross-functional involvement in development of the estimate
  – Drive productivity improvements into program during contract negotiation and program execution
  – Broader definition than FAR/DFARS Should Cost reviews which set realistic objectives for negotiating the immediate contract
  – Applies to ACAT I, II, and III programs
  – At a minimum, PMs expected to identify specific discrete measurable items or initiatives that achieve savings against the Will Cost estimate
  – MDA approves all Should Cost estimates and will expect PMs to manage, report, and track to these estimates-done at milestones, gate reviews/CSBs
  – Formal reporting in DASHBOARD and to AT&L/ARA through AV SOA
  – Pilot programs: F-35, E-2D, VXX, LCS, and Ohio Replacement
    • First programs to have funds distributed based on Should Cost baselines; delta held by service
Examples of Opportunities for Should Cost (SC) Management

- Eliminate unnecessary pass-through costs from second and third party contracts
- Identify an alternative technology/material that can potentially reduce development or life cycle costs
- Reconstruct the program (govt & ktr) team to be more streamlined and efficient
- Test
  - Take full advantage of integrated Developmental and Operational Testing
  - Integrate modeling and simulation into test construct to reduce overall costs
- Identify opportunities to breakout GFE vs prime contractor provided items
- Promote supply chain management to encourage competition at lower tiers
- Changes to ICE (SCP) assumptions
  - MYP (EOQ)
  - Learning curve reduction
  - Reduced change orders
  - Overhead rate reduction
Examples of Opportunities for SC Management (cont.)

- Focus areas:
  - System specs
  - Design for affordability
  - Build strategy
  - Contracting strategy
  - Schedule reduction
  - Next generation Integrated Product Development Environment
  - Facility/production enhancements

- Other
  - Tandem buy (negotiate two LRIP lots)
  - Second sources
  - Alternative designs
  - Process improvements
Better Buying Power Initiatives 1.0 (1/2)
USD(AT&L) 14 Sep 10 Memo

• Target Affordability and Control Cost Growth
  – Mandate affordability as a requirement
  – 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 and Innovation in Industry
  – Reward contractors for successful supply chain and indirect expense management
  – Increase use of FPIF, where appropriate
    • Use 50/50 share and 120% ceiling as point of departure
  – Adjust progress payments to incentivize performance
  – Extend the Navy’s preferred supplier program to a DoD-wide pilot
  – Reinvigorate industry’s IRAD and protect the defense technology base

• Promote Real Competition
  – Present a competitive strategy at each program milestone
  – Remove obstacles to competition
    • Require open systems architecture and set rules for acquisition of technical data rights
  – Increase dynamic small business role in defense marketplace competition
Better Buying Power 2.0

• BBP 2.0 reflects the Department of Defense’s commitment to continuous improvement in acquisition performance

• BBP 2.0 (Nov 2012 initial) encompasses 36 initiatives organized into seven focus areas:
  o Achieve Affordable Programs
  o Control Costs throughout the Product Lifecycle
  o Incentivize Productivity & Innovation in Industry and Government
  o Eliminate Unproductive Processes and Bureaucracy
  o Promote Effective Competition
  o Improve Tradecraft in Acquisition of Services
  o Improve the Professionalism of the Total Acquisition Workforce

Source: Mr Kendall at Nov 2012 SLAT Forum