Better Buying Power 3.0

White Paper

Office of the Under Secretary of Defense
Acquisition, Technology and Logistics
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Better Buying Power (BBP) is based on the principle that continuous improvement is the best approach to improving the performance of the defense acquisition enterprise. The evolution from BBP 1.0 to BBP 2.0 was based on the premise that emphasis would shift as initiatives were put in place, experience was accumulated, data was collected and analyzed, and conditions changed. BBP 3.0 continues that approach with a shift in emphasis toward achieving dominant capabilities through innovation and technical excellence.

Introduction

The progression from BBP 1.0 to 2.0 reflected a change in emphasis from specific "best practices" to an increased emphasis on helping acquisition professionals think critically and make better decisions as they confront the myriad, complex situations we encounter in defense acquisition. In BBP 2.0 we emphasized professionalism and providing better tools to help the acquisition professionals in DoD make sound decisions. We also continued many initiatives from BBP 1.0 and made adjustments in some areas based on our experience and feedback from industry and government. BBP 3.0 continues the focus on continuous improvement with a new emphasis on initiatives that encourage innovation and promote technical excellence with the overarching goal of ensuring that the United States' military has the dominant capabilities to meet future national security requirements.

Underpinning BBP 3.0 is the growing concern that the United States' technological superiority over potential adversaries is being threatened today in a way that we have not seen for decades. Our military today depends on a suite of dominant capabilities that originated in the '70s and '80s, has been enhanced and upgraded since, but has not fundamentally changed. This suite includes precision munitions, wide area surveillance systems, networked forces, and stealth technology. It is also dependent on a small number of high value assets in space, on land, and at sea. Potential adversaries have had decades to study the American way of war and to develop and field systems and tactics designed to defeat American forces, particularly our global power projection capabilities. At the same time there has been a remarkable leveling of the state of technology in the world, where commercial technologies with military applications such as advanced computing technologies, microelectronics, sophisticated sensors, and many advanced materials, are now widely available. In addition the global information network has made protection of technical information much more difficult, a fact that potential adversaries are doing their best to exploit. Our technological superiority is not assured, and in fact it is being challenged very effectively right now.

As with BBP 1.0 and 2.0, there is an element of cultural change in BBP 3.0. BBP 1.0 and 2.0 focused on cost consciousness and professionalism as critical elements of our culture. Cost consciousness was emphasized in part because the government system tends to emphasize spending over cost control. The idea was to increase both government and industry's focus on

understanding and controlling cost as a fundamental definition of success. Professionalism was emphasized not because of some perception that the workforce lacked professionalism. The acquisition workforce is in fact highly professional. It was emphasized for three reasons; first because we all can and should always be working to improve our abilities; second, because it is important that the communities we work with understand the importance of professionalism to success in defense acquisition; and third because nothing is more important to our success than our professional ability to understand, think critically, and make sound decisions about the complex and often highly technical matters defense acquisition confronts.

Introducing BBP 3.0 is not an abandonment of the earlier versions of BBP. Some earlier initiatives will receive continued emphasis. Many of these are "core" initiatives including items such as affordability constraints, should-cost management, use of data to inform policy, strong incentives to industry, and the use of competition. The emphasis on professionalism continues to be central to everything we do in defense acquisition. Attached to this document is a summary of the status of the BBP 2.0 initiatives; most are continuing, some have been completed, and some are now just part of how we do business. One of the dominant characteristics of defense acquisition is its scope and complexity. There are no simple solutions to all the myriad problems acquisition professionals have to solve. There is no short "rule set" that will tell us all we need to know. Acquisition professionals have to be able to think on many levels, integrate inputs from many perspectives, balance competing needs, and satisfy many stakeholders and customers. This release of BBP does not end our focus on controlling costs, critical thinking and sound professional management. It shifts our emphasis slightly toward the products we produce for our customers: the warfighters who depend on us to give them dominant capabilities on the battlefields of the future.

What follows is a brief summary of the intent behind the draft BBP 3.0 initiatives. Over the next two or three months we will consult with the acquisition workforce, industry, academia, the Congress, our military customers, and other stakeholders as we work to finalize BBP 3.0 and develop implementing instructions and plans.

DRAFT BBP 3.0 Initiatives

Achieve Affordable Programs:

Continue to set and enforce affordability constraints. This is a continuing "core" BBP initiative from BBP 1.0. It forces Service leadership (programmers and operational leadership) to conduct an analysis to determine whether or not a desired product can be afforded in future budgets – *before* the program is initiated. This same analysis is used to establish production and sustainment affordability caps. Affordability caps are of little value unless they are enforced, and we will continue to track our performance against the caps we have established to ensure they are complied with.

Achieve Dominant Capabilities While Controlling Life Cycle Costs:

Strengthen and expand "should cost" as an important tool for cost management. This is also a "core" BBP initiative. This initiative requires the active management of cost, starting with the deep understanding of cost structures, followed by identifying specific goals for cost reduction (should cost goals), and the efforts to achieve those cost reductions. Most programs and contracted activities in DoD now have should cost targets and are managing to them. We will continue to expand this practice.

Build stronger partnerships between acquisition, requirements, and intelligence communities. This BBP 3.0 initiative expands on the requirements and acquisition community emphasis in BBP 2.0 to include the Intelligence Community. The actions of potential adversaries drive our requirements and our acquisition programs. Today, potential adversaries are reacting to our systems in the field and in development at a rapid pace. We need to have as deep and current an understanding of potential threats as possible, and we need to maintain this understanding on a continuing basis.

Anticipate and plan for responsive and emerging threats. Potential adversaries are modernizing at a significant rate, and they are responding rapidly to our development programs and fielded systems. This is true of peer, near-peer and even less capable potential adversaries. Our technology development and system designs must accommodate this reality. We must plan for likely responses to our designs, and we must be watchful and responsive ourselves to emerging threats.

Institutionalize stronger DoD level long range research and development (R&D) planning. Our approach to R&D planning at the DoD level has been largely hands-off for some time. While we have set topical strategic priorities for science and technology efforts, we have not conducted DoD level long range planning or provided strategic R&D investment guidance. This year we will initiate such an effort, modeled on a similar effort that was conducted in the 1970s. That effort led to many of the capabilities we have in the field today.

Incentivize Productivity in Industry and Government:

Align profitability more tightly with Department goals. This is another "core" initiative. Our data shows that the Department does a reasonably good job of aligning profit with performance. There are exceptions, however, and they need to be eliminated. Profit is the reason that the firms we rely upon exist, and we should not use profit as a cost cutting measure; industry should expect a reasonable profit for the products and services it provides. Profit should not be excessive, however, and higher profit levels should be tied to better performance and lower levels to poorer performance. Our data analysis shows clearly that the way we structure our business deals does affect how industry performs. We all want a defense industry that is lean, competitive, innovative and productive. Profit is an effective tool to achieve these ends, when we use it appropriately.

Employ appropriate contract types, but increase the use of incentive-type contracts. In BBP 3.0 we modify some earlier guidance based on our analysis published a few months ago in the "Annual Report on the Performance of the Defense Acquisition System." What this report called "formulaic incentives" show a high correlation with better cost and schedule performance. This refers to Cost-Plus-Incentive and Fixed-Price-Incentive contract vehicles, where the effect of overruns and underruns are shared between the parties based on a formula in the contract which explicitly ties the contractor's liability or benefit to performance. We do NOT want exclusive use of these types of contracts, but instead want to reinforce that they should be used whenever appropriate and given explicit consideration and some preference over other contract types.

Expand the Superior Supplier Incentive Program across DoD. A few months ago we announced the results of the Navy's pilot Superior Supplier Incentive Program. This is a BBP 1.0 initiative that took a long time to implement, even on a pilot basis. At this point we have enough experience with the Navy pilot that the other Military Departments can build their own programs, which they will implement in the next several months. At this time we do not intend to implement a DoD level supplier incentive program. The focus of this effort will be on the performance of major business units, which are often aligned with individual Services.

Increase the use of performance-based logistics (PBL). This initiative was partly implemented in BBP 2.0 and will continue under BBP 3.0. When properly established and effectively executed, PBL is an effective way to balance cost and performance regardless of whether industry or the government is providing the logistics service. If industry is the provider, PBL also provides explicit productivity incentives and ensures the best value for the DoD, particularly for service contracts such as maintenance and support contracts. We believe there is opportunity for more progress in expanding the use of PBL, and it will be receiving additional emphasis and management attention going forward.

Remove barriers to commercial technology utilization. Some commercial technologies with military utility are advancing at a faster pace by far than comparable military unique technologies. However, for a variety of reasons many firms that are active in commercial markets choose not to pursue business with the Department, or with our prime contractors. The Department needs to understand the barriers that exist and find ways to reduce or remove them. This initiative is new, and it will require close consultation with industry and other stakeholders to identify areas in which we can improve our performance.

Improve the return on investment in DoD laboratories: The DoD's in-house laboratories process about $30 billion in spending per year. This is a substantial investment in these institutions. It is not clear that the Department is getting as much return on this investment as it could. This is a new initiative which will examine the missions, organization, test strategies, cost structure, and productivity of the DoD laboratories with a goal of increasing the return on this investment.

Increase the productivity of industry Independent Research and Development (IR&D) and Contracted Research and Development (CR&D). Under BBP 1.0 and 2.0 we took steps to improve the communication between industry and government so that both IR&D and CR&D could be more productive. This new initiative will expand on that work by taking a deeper look at the productivity of both of these accounts (IR&D is about $4 billion per year, CR&D is about $9.5 billion per year[1]) and investigate ways in which the outputs of these efforts could be improved.

Incentivize Innovation in Industry and Government:

Increase the use of prototyping and experimentation. Prototyping and experimentation can provide several benefits. They can advance technology, allow innovative operational concepts to be explored, and they preserve a vital part of the industrial base, our design teams. All this can be accomplished at relatively low cost, making these activities attractive during periods when budgets are constrained. Unfortunately the current period of constrained budgets is also characterized by high operational demands, continuing international turmoil, the pressing threat of violent extremist groups, and great uncertainty about final budget levels. Although carving out resources for prototyping and experimentation will have to be done selectively and by exception in this environment, it is still a goal worth pursuing.

Emphasize technology insertion and refresh in program planning. This initiative covers both the demand side (programs) and the supply side (Science and Technology projects). Because of the pace at which the technology associated with digital processing, radio frequency devices, optics, and networks (among others) is moving, the Department cannot hope to keep up using traditional acquisition approaches. We have to design our acquisition plans to account for periodic technology refresh cycles on a much faster time scale. In some cases we may completely replace earlier versions of end products (e.g. some tactical radios), while in other cases we must plan and design for periodic upgrades, sometimes while development is still in progress (e.g. F-35). In addition we need to ensure that our early R&D investments are aligned as much as possible with insertion opportunities in the products we are likely to acquire. This requires a tighter connection between our Science and Technology communities and our development programs.

Use Modular Open Systems Architecture to stimulate innovation. This is closely related to designing for technology insertion, but it also ensures that competitive sources have opportunities to provide superior performing products as components or subsystems to larger programs. We have pursued this goal with varying degrees of success in the past. We need to do a better job of ensuring that our designs are modular - and that the government is in a position to control all the relevant interfaces so that competitors have the opportunity win their way onto our programs. Often this design feature has been either traded away because of competing

[1] CR&D refers to contracted research and development that is pre-Engineering and Manufacturing Development, budget accounts 6.1 through 6.4.

requirements or lost because the government has failed to secure technical control and ownership of all the needed interfaces, including those required for software integration.

Increase the return on Small Business Innovation Research (SBIR). The SBIR program has been very successful in helping small creative businesses make progress in early stage technology development. It has been moderately successful in helping businesses transition from development to production. The focus of this initiative will be to ensure a tighter coupling between our SBIRs investments and opportunities for moving products beyond development and into the hands of the warfighters.

Provide draft technical requirements to industry and involve industry in funded concept definition to support requirements definition. Historically, the Department was able to work closely with industry in the earliest stages of the product life cycle, but this has declined. One form of this interaction that should be strengthened is asking industry for feedback and recommendations on early stage draft requirements. Another is to fund competitive concept definition studies (e.g., early design trade studies and operations research) to inform decisions about requirements and as inputs to formal Analysis of Alternatives conducted after the Material Development Decision. The perceived barriers between industry and government can be overcome, and doing so will lead to better informed government decisions and more innovative products.

Provide clear "best value" definitions so that industry can propose and DoD can choose wisely. Under BBP 2.0 we started down the path of providing industry with information on the value, in monetary terms, of higher levels of performance than minimally acceptable or threshold levels. Unless industry has this information, the default position will be to bid to the lowest acceptable level of performance. With this information, industry will know what the competitive effect of offering higher performance will be and can bid accordingly. More importantly this practice creates appropriate incentives to encourage industry to innovate.

Eliminate Unproductive Processes and Bureaucracy:

Emphasize Acquisition Executive, Program Executive Officer, and Program Manager responsibility, authority, and accountability. This initiative and the other ones in this category are continuing efforts from BBP 2.0 that require additional attention. Left to their own devices staffs in both the Services and OSD will tend to inject themselves in the acquisition chain of command. Such staff "oversight" has the unintended effect of removing responsibility from the chain of command – where it belongs. We need to continue to emphasize and support the acquisition chain of command and align responsibility and accountability within this chain. We need to emphasize the supporting role of staff "oversight" and the central criticality and authority of the acquisition chain.

Reduce cycle time while ensuring sound investments. Under BBP 2.0 we introduced the concept of a Skunk Works approach to be implemented on a pilot basis. This has not been implemented

yet, but we are still looking for appropriate programs to experiment with this approach. As concerns about technological superiority mount, the priority given to shortening cycle time in general will increase. This may manifest itself in more highly streamlined approaches that explicitly accept risk in exchange for acquisition speed. In addition, some of the successful rapid acquisition initiatives that were introduced to support the wars in Iraq and Afghanistan will be sustained and integrated into our standard practices.

Streamline documentation requirements and staff reviews. Too much program management time is spent supporting staff reviews and preparing documents primarily for review instead of for use during program execution. This overhead comes with a cost in time and money, but most importantly it distracts leadership from core program management tasks. That said, there are legitimate staff and supporting organization functions that do need to be performed, but striking the right balance is a continuous effort that requires constant attention.

Promote Effective Competition:

Emphasize competition by creating and maintaining competitive environments. This is another "core" BBP item that would be in any version of BBP. Competition is the most effective tool we have to control cost. In the absence of direct competition, anything that creates a "competitive environment" (where the incumbent is concerned about maintaining his or her position relative to an alternative product or service provider) has value to the Department. When direct competition at the product level is not economically viable, then alternative means of introducing competitive pressure or direct competition at lower levels should be pursued.

Improve technology search and outreach in global markets. This new BBP 3.0 initiative recognizes that the sources of a great deal of today's technical innovation are not located in the United States. We have global allies, friends, and trading partners who share our values and can assist us in pursuing innovation and technological superiority. In addition, and where appropriate, products from non-U.S. sources may be adequate and less expensive than domestic products, freeing up resources for other priorities. Increased investments in cooperative research, co-development, and co-production may also provide better products for our warfighters at reduced cost.

Improve Tradecraft in the Acquisition of Services:

Increase small business participation, including more effective use of market research. This is a continuing effort. The Department has made good progress in the use of small businesses for contracted services over the last few years, but more can be done. Small businesses remain one of DoD's most productive sources of innovation - in services as well as in products. Active oversight and management of small business goals, including data metrics, effective market research and appropriate communications is needed to ensure that we are aware of the capabilities of small businesses and that they are aware of DoD's needs.

Strengthen services contract management outside the normal program-focused acquisition chain. DoD will continue to emphasize effective management of contracted services throughout the Department. This initiative began in earlier BBP iterations and we have made progress, but there is significant opportunity for additional improvement in efficiency and productivity.

Improve requirements definition for contracted services. As with products, well-defined requirements for contracted services are a cornerstone of effective contracting, planning, and management. Building on improvements developed and implemented under BBP 1.0 and 2.0, we will continue to work to improve the Department's performance in this area.

Improve the effectiveness and productivity of contracted engineering, technical and support services. The Department relies heavily on contracted services for technical management support, systems engineering, and engineering services. This new BBP 3.0 initiative focuses on improving how this element contributes to enhancing the technological edge for our warfighters. Under this initiative we will evaluate how we currently manage this technical capability across the enterprise, how we acquire these services, how we assess their effectiveness, how we manage their access to information, and how we can improve their effectiveness especially with regard to innovation and the maintenance of technological superiority.

Improve the Professionalism of the Total Acquisition Workforce:

Establish higher standards for key leadership positions. This and most of the initiatives in this category are continued from BBP 2.0. Better defined and more experience-based standards for key leadership positions are in the process of being established. This process should be completed within the next year, but it will be under continuous review as we learn from our experience. The DoD level professional qualification board for our key acquisition leaders in the test and evaluation field is expected to be expanded from the initial pilot to cover the broader set of key leadership positions.

Establish stronger professional qualification requirements for all acquisition specialties. This continues the BBP 2.0 effort in this area. The DAWIA training and certification process must be supplemented to establish a stronger basis for levels of professional qualification for all of the acquisition career fields.

Strengthen organic engineering capabilities. This new and focused BBP 3.0 initiative will strengthen the Department's organic military and government civilian technical expertise. The Department cannot be an effective customer for technical excellence and innovation if we do not embody those characteristics fully in our own workforce. We cannot make decisions about technology if we don't fully understand what is possible and how to achieve it. Although industry can assist DoD in this task, ultimately this understanding must be resident in the government and cannot be left entirely to industry. Concepts such as the Skunk Works acquisition approach mentioned above are not possible unless government engineers and scientists are as professional and capable as their industry counterparts.

Ensure the DoD leadership for development programs is technically qualified to manage R&D activities. We would not expect to see a non-lawyer supervising a group of trial lawyers litigating cases, and we would not expect to see a non-surgeon supervising a group of doctors performing surgery. We should also not expect a Program Manager with no technical education or experience in engineering to supervise a development program. Today the Department is not doing enough to ensure that technically qualified leaders are available and entrusted with managing our development programs. Generally this is an exception and not the rule, but in some cases it is a serious issue that needs to be addressed.

Improve our leaders' ability to understand and mitigate technical risk. We have made some progress in this area over the last few years, but we need to do more. Most of product development revolves around understanding and managing risk. Risk management is an endeavor that begins with requirements formulation and assessment, includes the planning and conducting a risk reduction phase if needed, and strongly influences the structure of the development and test program. All this is necessary to minimize the likelihood of program disruption and to maximize the probability of fielding the desired product within reasonable time and cost. Effective risk management is proactive; it goes well beyond merely identifying and tracking risk.

Increase DoD support for Science, Technology, Engineering, and Math (STEM) education. This BBP 3.0 initiative is focused on the long term health of the DoD acquisition enterprise, our ability to sustain technological superiority militarily, and the economic well-being of our nation. DoD and many of our partners in the Defense Industrial Base are already active in promoting STEM education. This activism includes financial and institutional support as well as a great deal of volunteer work. While efforts to encourage young people to pursue STEM related careers now may seem a long way from our immediate concerns, in the long run our society, and our military, is highly dependent on our ability to encourage students to enter and remain in technical career fields.