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An Analysis of the Potential Impacts of Ashton Carter's "Should-Cost" Memorandum on Defense Contracting

17 September 2012

by

E. Cory Yoder, Senior Lecturer

Graduate School of Business & Public Policy

Naval Postgraduate School

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Abstract

Ashton Carter, Under Secretary of Defense for Acquisition, Technology, and Logistics (USD[AT&L]), and Robert F. Hale, Under Secretary of Defense (Comptroller/Chief Financial Officer), issued a Joint memorandum on April 22, 2011, titled *Joint memorandum on Saving Related to "Should-Cost."* As iterated in the memorandum, Dr. Carter's goal for the should-cost initiative is to ensure that program managers (PMs) drive productivity improvements into their programs during contract negotiations and throughout program execution and sustainment. This is achievable, according to Dr. Carter, if PMs continuously perform should-cost analysis that scrutinizes every element of government and contractor cost.

In addition to the Joint memorandum, Dr. Carter issued a second memorandum on April 22, 2011, for acquisition and logistics professionals, titled *Implementation of Will-Cost and Should-Cost Management.* This guidance is applicable for all acquisition category (ACAT) I, II, and III programs.

The purpose of this research is to examine the potential impacts this and related directives have on the contracting community's ability to request, acquire, audit, and utilize data germane to contract negotiations and management and whether there may be inherent potential conflicts with the commercial item acquisition provisions of Federal Acquisition Regulation (FAR) Part 12 and the contract pricing initiatives of FAR Part 15 to reduce reliance on the Truth in Negotiations Act (TINA) requirements for certified cost and pricing data and cost accounting standards (CAS), and explore strategies for implementing the directive effectively. Additionally, the research will determine the nature and extent of any potential impacts on the Defense Contract Management Agency (DCMA) and Defense Contract Audit Agency (DCAA) at supporting the should-cost effort.

Keywords: Better Buying Power, should-cost, will-cost, contract pricing, FAR Part 15, FAR Part 12, FARA, FASA, TINA, cost consciousness, weapons program savings

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A special thank you to those individuals providing interviews, insights, information, and data essential for answering some of the tough questions this work addresses, including but not limited to

- Mr. Shay Assad, Office of the Secretary of Defense, Director of Defense Pricing;
- Mr. Elliott Branch, ASN(RD&A), DASN AP;
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- Mr. Walter Brown, NAVSUP Acquisition Policy HCA; and
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About the Author

CDR (Ret.) Cory Yoder is a faculty member of the Naval Postgraduate School's (NPS) Graduate School of Business and Public Policy (GSBPP). Yoder was originally assigned to NPS in July 2000 while on active-duty commission with the Navy, was hired upon military retirement to a lecturer position in June 2004, and was promoted to senior lecturer in May 2008. He has performed duties as academic associate (program manager) for the 815 Master of Business Administration course (three-year appointment ending July 2005) and currently serves as academic associate for the 835 Master of Science in Contract Management (MSCM) course (with an indefinite appointment). Yoder has strong acquisition and contracting experience, combined with several challenging acquisition, logistics, industrial, headquarter, and combat support operations assignments. Yoder is the recipient of the prestigious Rear Admiral John Jay Schieffelin Award for Excellence in Teaching for academic year 2010, presented in June 2011, and was nominated in the top 5% of candidates in academic years 2006, 2007, 2008, and 2009. Yoder holds the following degrees: a Master of Arts in national security and strategic studies, from the Naval War College (NWC) in Newport, RI; a Master of Science in management from the Naval Postgraduate School in Monterey, CA; a Bachelor of Science in business management from Indiana University's Kelley School of Business, Bloomington, IN; and a certificate in business resource management from the University of Virginia's Darden Graduate School of Business Administration, Charlottesville, VA. Yoder is a Beta Gamma Sigma honor society member with a lifetime appointment, is DAWIA Contract Level III, is an active member of the Institute for Supply Management (ISM) with direct national membership, and holds an active TOP SECRET security clearance.

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Table of Contents

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I. Introduction and Objective

A. Research Purpose and Objective

In response to skyrocketing program, acquisition, and contract cost on major weapons systems, Ashton Carter, Under Secretary of Defense (Acquisition, Technology, and Logistics; USD[AT&L]), and Robert F. Hale, Under Secretary of Defense (Comptroller/Chief Financial Officer), issued a Joint memorandum on April 22, 2011, titled *Joint memorandum on Savings Related to "Should-Cost."* As iterated in the memorandum, Dr. Carter's goal for the should-cost initiative is to ensure that program managers (PMs)_drive productivity improvements into their programs during contract negotiations and throughout program execution and sustainment. This is achievable, according to Dr. Carter, if PMs continually perform should-cost analysis that scrutinizes every element of government and contractor cost.

In addition to the Joint memorandum, Dr. Carter issued a second memorandum on April 22, 2011, for acquisition and logistics professionals, titled *Implementation of Will-Cost and Should-Cost Management.* This guidance is applicable for all acquisition category (ACAT) I, II, and III programs.

The objective of this research is to examine the potential impacts this and related directives have on the contracting community's ability to request, acquire, audit, and utilize data germane to contract negotiations and management and whether there may be inherent potential conflicts with commercial item acquisition provisions of FAR Part 12, and Contract Pricing FAR Part 15 initiatives to reduce reliance on the Truth in Negotiations Act (TINA) requirements for certified cost and pricing data and cost accounting standards (CAS), and explore strategies for implementing the directive effectively. Additionally, the research will determine the nature and extent of any potential impacts on the Defense Contract Management

Agency (DCMA) and Defense Contract Audit Agency (DCAA) at supporting the should-cost effort as iterated.

It is my belief that this work will add value to the current body of work designed to create a culture of efficiency and effectiveness in Department of Defense (DoD) procurement and contracting and provide a highly referenced and readable work useful for policy-makers, practitioners, and academics.

B. Research Questions

The primary research questions addressed in this paper are as follows:

- What specific impact does Ashton Carter's should-cost directive have on DoD contracting as related to protocols for acquiring commercial items?
- What are the data requirement provisions under protocols for acquiring commercial items versus non-protocols for acquiring commercial items?
- Is the should-cost requirement approach, as defined in the memorandum, achievable under the commercial item acquisition provisions of the Federal Acquisition Reform Act (FARA) and the Federal Acquisition Streamlining Act (FASA), or does the memorandum call for another acquisition strategy using non-protocols for acquiring commercial items?
- If the should-cost memorandum mandates are to be achieved, what specific actions and strategies must be taken by contracting offices to support the mandate?
- Are the DCMA and DCAA able to fully support this initiative, and what specific actions must they take?
- What specific findings and recommendations can be proffered to effectively implement the should-cost initiatives?

C. Methodology and Scope

This research includes a thorough literature review, examination and assimilation of key policy documents, and outreach to subject-matter experts (SMEs) integral to the should-cost will-cost initiative. Specific sources include, but are not limited to, the following:

- General Accountability Office (GAO) reports and testimony,
- existing and ongoing research efforts at the Naval Postgraduate School (NPS),
- professional information sources from major systems PM and contracting activities,
- academic literature, and
- SMEs within the DoD and other organizations.

Whenever SMEs are utilized, the DoD and NPS mandate that Institutional Review Board (IRB) protocols are followed to ensure SMEs are given full notification of a researcher's intent to use information gathered from them for research purposes. In accordance with these policies, I obtained consent from all SMEs that I consulted as part of my research for this published work.

Based on the information obtained through this research, I make conclusions and recommendations to professionals desiring a better understanding of the implementation of Ashton Carter's should-cost will-cost initiative, address concerns over potential conflicts with the FARA and FASA, and identify how the DoD may be best structured for achieving the greatest efficiencies and effectiveness at implementation.

D. Section Conclusion

The following section presents an overview of should-cost will-cost, its historical roots, and the Ashton Carter initiative. In Section III, I examine the FASA, the FARA, and the TINA, since a premise of this work is to determine possible conflicts with the implementation of should-cost will-cost and those acts. In Section IV, I examine should-cost will-cost implementation and potential barriers, along with the DoD's structural capability—in terms of personnel, platforms, and protocols—to meet the new initiative. Finally, in Section V, I provide a summary, conclusions, and recommendations based on the examination and analysis conducted pursuant to this work.

II. Should-Cost Will-Cost Overview

A. Should-Cost and Will-Cost Defined

The definitions if should-cost and will-cost are necessary for an understanding of the concepts and applicability.

1. *Will-cost* is defined as what a program weapons system is likely to cost given a non-advocate (independent) cost estimate, such as in an independent cost estimate (ICE) or independent government estimate (IGE), based primarily on historical cost incurred.

2. *Should-cost* is defined as the program weapons system cost adjusted for the program's initiatives or opportunities to reduce cost below the ICE level.

The main difference between will-cost and should-cost is the extensive use of historically incurred cost for will-cost estimates versus the examination of forward-looking efforts at reducing cost in operations and manufacturing utilized in developing should-cost estimates.

B. Should-Cost and Will-Cost History

Should-cost will-cost is not a new concept. As early as the mid-1950s, should-cost analysis was proposed as a means to get better, more accurate estimates on what systems ought to cost, versus what they will cost based on historical data that may have included numerous inefficiencies in production and management.

According to Nick Schwellenbach (2011), director of investigations at the Project on Government Oversight (POGO), in some ways, the should-cost and will-cost prongs seem contradictory, but if implemented correctly and in concert, they should save money—or at least lead to better managed programs. One of the prongs of Ashton Carter's initiative, the should-cost prong, was pioneered by industrial engineer Ernest Fitzgerald, a now-retired Air Force acquisition official who was an ardent proponent of should-cost analysis beginning in the 1950s until his retirement in the mid-1960s.

Major David N. Burt, a well-recognized name in many contracting and acquisition professional circles, published an article in the September-October 1972 *Air University Review* titled “Should Cost, A Multimillion-Dollar Savings,” in which he describes should-cost as “a procedure used to determine what a system ought to cost, assuming reasonably attainable economy and efficiency in the contractor’s operation. It differs from traditional pricing methods in two ways: the depth of analysis and the purposeful challenging of inefficiencies in the contractor’s operation.” Burt explains that the Air Force needed a comprehensive analysis on contractors’ systems to lower cost through improving contractor performance in organization and management, engineering, contract management, production and quality control, logistics, and materiel management. In the 1960s, the Air Force established teams of eight to 10 credentialed evaluators to examine contractor processes and management. These reviews were initially called industrial management surveys and later called program management evaluations—the precursor of today’s milestone reviews. During these evaluations, the *Armed Services Procurement Manual (ASPM)*—the precursor of the Federal Acquisition Regulation (FAR)—stipulated that cost analysis should examine all cost for their (1) necessity, (2) reasonableness, (3) allowances for contingencies (uncertainties), (4) basis used to allocate overhead cost, and (5) appropriateness of allocations of overhead cost to the proposed contract (Burt, 1972).

In June 1972, the United States Army, under the Army’s SAFEGUARD system office, published an extensive work titled *Should Cost/Will Cost/Must Cost—A Theory on the Cause of Cost Growth.* In this work, the Army describes the unique effect of limited competition among major weapons suppliers and a single buyer dynamic on program cost growth (U.S. Army Office of the Assistant for Cost Analysis, 1972).

POGO founder Dina Rasor closely collaborated with Fitzgerald in the POGO's early years in the 1980s, when the POGO was known as the Project on Military Procurement. The essence of should-cost is what work should cost after the fat is squeezed out, as Fitzgerald put it in his 1989 book, *The Pentagonists*. DoD had embraced the term *should-cost* but not the substance of the hard-nosed, on-the-floor analysis of contractor cost that he recommended (Rasor, 2011).

C. Should-Cost Will-Cost: The Federal Acquisition Regulation (FAR)

The FAR, along with its associated implementing and supporting FAR supplements such as the Defense Federal Acquisition Regulation Supplement (DFARS) and the Air Force Acquisition Regulation Supplement (AFARS), currently include the should-cost concept and initiative, which first appeared officially in the *ASPM*

Specifically, FAR 15.407-4 currently states the following (I have left the original FAR part, section, and subsection numbering and punctuation intact).

5.407-4 -- Should-Cost Review

(a) *General.*

(1) Should-cost reviews are a specialized form of cost analysis. Should-cost reviews differ from traditional evaluation methods because they do not assume that a contractor's historical costs reflect efficient and economical operation. Instead, these reviews evaluate the economy and efficiency of the contractor's existing work force, methods, materials, equipment, real property, operating systems, and management. These reviews are accomplished by a multi-functional team of Government contracting, contract administration, pricing, audit, and engineering representatives. The objective of should-cost reviews is to promote both short and long-range improvements in the contractor's economy and efficiency in

order to reduce the cost of performance of Government contracts. In addition, by providing rationale for any recommendations and quantifying their impact on cost, the Government will be better able to develop realistic objectives for negotiation.

(2) There are two types of should-cost reviews -- program should-cost review (see paragraph (b) of this subsection) and overhead should-cost review (see paragraph (c) of this subsection)

(3) These should-cost reviews may be performed together or independently.

(b) Program should-cost review.

(1) A program should-cost review is used to evaluate significant elements of direct costs, such as material and labor, and associate indirect costs, usually associated with the production of major weapons systems.

(2) A program should-cost review should be considered, particularly in the case of a major system acquisition, when,

(i) Some initial production has already taken place;

(ii) The contract will be awarded on a sole source basis;

(iii) There are future year production requirements for substantial items of like items;

(iv) The items being acquired have a history of increasing costs;

(v) The work is sufficiently defined to permit an effective analysis and major changes are unlikely;

(vi) Sufficient time is available to plan and adequately conduct the should-cost review, and;

(vii) Personnel with the required skills are available or can be assigned for the duration of the should cost review."

For the sake of brevity, I have provided only pertinent excerpts of FAR 15.407-4 in this section (see Appendix A for the complete FAR 15.407-4 Should-Cost Review section).

D. Should-Cost in Today's Environments

1. Shrinking Budgets

Since 2007, Congress and the DoD have placed increasing emphasis on cost reductions in military spending. Current projections for military spending may not be sustainable according to Congressional Budget Office (CBO) projections. In the July 2012 edition of its publication *Long-Term Implications of the 2013 Future Years Defense Program (FYDP*; subsequently "2013 FYDP"), the CBO projected potential shortfalls in funding for programs and sustainability, notwithstanding the cost of overseas contingency operations (OCO). Figure 1 depicts current estimates in the 2013 FYDP, with projections out to 2030.

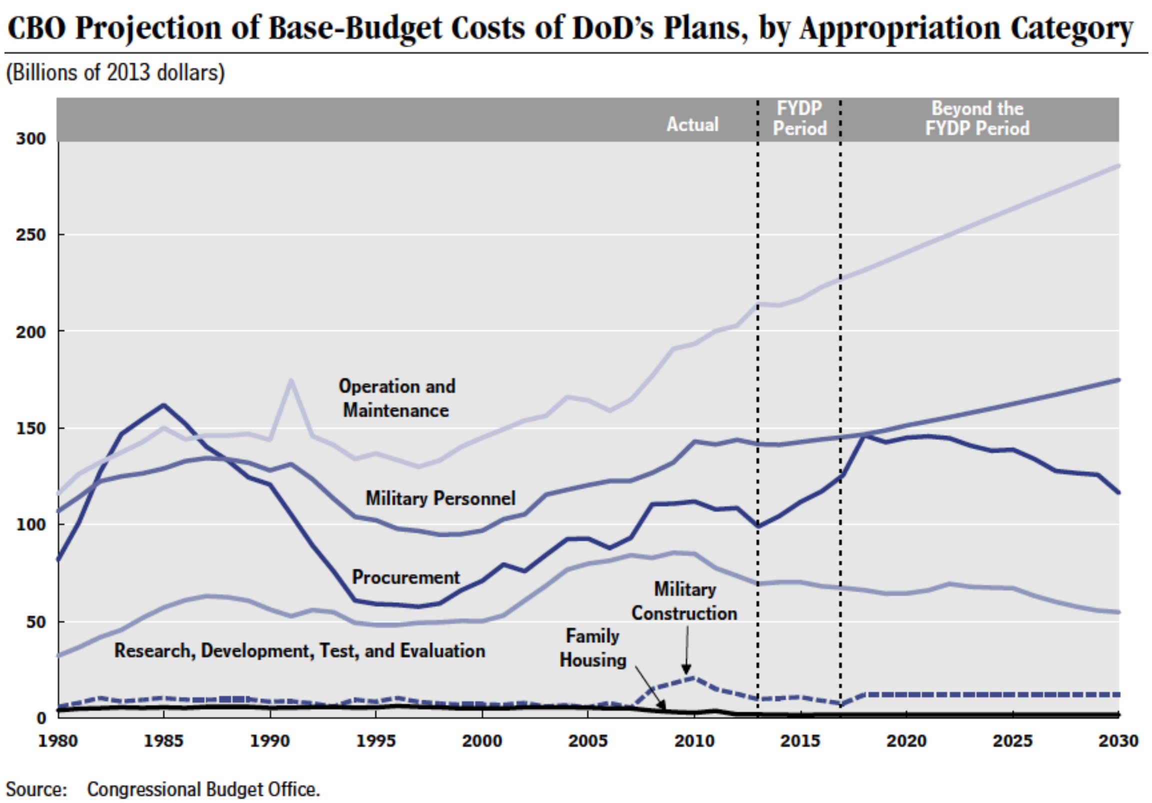


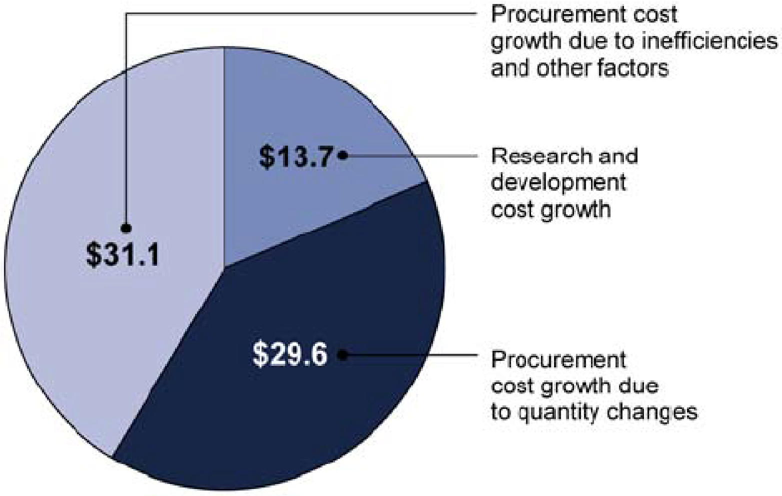
Figure 1. CBO Projection of Base-Budget Cost by Category
(CBO, 2012)

Under current CBO projections, the cost for the DoD's plans exceed the funding that the DoD can receive through 2021 under the caps established by the Budget Control Act (BCA) of 2011 (Public Law 122-25). Even without the potential advent of the BCA caps, which are currently scheduled for January 2013, funding for the DoD during 2012–2021 is about $80 billion less than inflation projections. With the BCA caps, the reduction in DoD budgets will be approximately $55 billion per year over the 2013–2021 period, totaling $589 billion in reductions for that nine-year period (CBO, 2012).

2. Escalating Cost

Despite economic and political factors negatively impacting FYDP budgets, acquisition program cost continues to escalate. According to the Government Accountability Office (GAO), the total estimated cost of the DoD's 2011 portfolio of 96 major defense acquisition programs stands at $1.58 trillion. In the past year, the total acquisition cost of these programs has grown by over $74.4 billion, or 5%, of which, according to the GAO, approximately $31.1 billion is attributed to factors such as inefficiencies in production, $29.6 billion is attributed to quantity changes, and $13.7 billion is attributed to research and development cost growth. The majority of programs in the portfolio have lost buying power because unit cost have increased (GAO, 2012). Figure 2 presents the allocation of major defense acquisition program (MDAP) cost growth in 2011. Of particular interest is the growth in cost due to inefficiencies.

Cost Growth over the Past Year for DOD's 2011 Portfolio of Major Defense Acquisition Programs (Fiscal Year 2012 Dollars in Billions)



Source: GAO analysis of DOD data.

Figure 2. GAO Analysis of the Cost Growth for the DoD's 2011 MDAPs by Category (GAO, 2012)

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III. Ashton Carter's Initiative

The Ashton Carter should-cost initiative was promulgated through a series of memoranda issued between June 2010 and August 2011 as well as through associated implementation directives issued by the Navy, Air Force, and Army. The following section provides an overview of the should-cost initiative, as iterated in the memoranda; the information here is condensed to reflect a concise demonstration of germane elements. Ashton Carter's memoranda reviewed in this section are presented in their entirety as Appendices B through G.

A. *Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending* (June 2010)

On June 28, 2010, Ashton Carter issued the first in a series of memoranda mandating affordability and efficiency in DoD spending. The memorandum for acquisition professionals, titled *Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending*, laid the foundation for all subsequent memoranda issued over the next 15 months. In this memorandum, Dr. Carter called for "delivering better value to the taxpayer and improving the way the Department does business. … We must abandon inefficient practices accumulated in a period of budget growth and learn to manage defense dollars in a manner that is, to quote Secretary Gates at his May 8, 2010 speech at the Eisenhower Library, 'respectful of the American taxpayer at a time of economic and fiscal distress'" (Carter, 2010a; see Appendix B for the complete memorandum).

B. *Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending* and *Implementation Directive for Better Buying Power—Restoring Affordability and Productivity in Defense Spending* (September 2010)

Ashton Carter subsequently issued two memoranda, again while acting as USD(AT&L); both memoranda were dated and released on September 14, 2010. The first memorandum is titled *Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending* (Carter, 2010b) and the second is titled *Implementation Directive for Better Buying Power—Restoring Affordability and Productivity in Defense Spending* (Carter, 2010c; see Appendix C and D, respectively, for the complete memoranda).

The memorandum *Implementation Directive for Better Buying Power—Restoring Affordability and Productivity in Defense Spending* (Carter, 2010c) requested the Director, Defense Procurement and Acquisition Policy (DPAP) to develop the protocols and manpower required to implement the overarching initiatives in the Better Buying Power memorandums. This request included incorporation and integration of key agencies in the protocol and manpower reviews, including the DCMA and the DCAA. An excerpt from this memorandum states,

> Work with the Defense Contract Audit Agency (DCAA) and the Defense Contract Management Agency (DCMA) to develop guidance which will clearly spell out the roles and responsibilities of each organization in those areas where duplication and overlap occur. Provide recommended guidance to me and to the Under Secretary of Defense (Comptroller) by December 1, 2010.
>
> By October 1, 2010, you are to task DCMA to be responsible for the promulgation of all Forward Pricing Rate Recommendations. In those cases, where DCAA has completed an audit of a particular contractor's rates, DCMA shall adopt the DCAA recommended rates as the Department's position with regards to those." (Carter, 2010c)

Dr. Carter also stated,

> To put it bluntly: we have a continuing responsibility to procure the critical goods and services our forces need in the years ahead, but we will not have ever-increasing budgets to pay for them. We must therefore strive to achieve what economists call productivity growth: in simple terms, to DO MORE WITHOUT MORE. (Carter, 2010c).

Acting on Secretary of Defense Robert Gates' call for obtaining greater efficiencies in DoD procurements, Dr. Carter worked with senior leaders in the acquisition community—including the component acquisition executives (CAEs), senior logisticians and systems command leaders, the Office of the Secretary of Defense (OSD), program executive officers (PEOs), and PMs—to create the Better Buying Power initiatives and guidance. The guidance potentially affected $400 billion of the $700 billion DoD budget spent on goods and services ($200 billion each for weapons, electronics, fuel, etc., and $200 billion for information technology [IT] support.) Secretary Gates and Dr. Carter estimated the potential savings from the initiatives and guidance as a significant element of the targeted $100 billion from unproductive to more productive purposes over the five-year period from 2011–2015.

Within the USD(AT&L) guidance memorandum, should-cost protocol was addressed as a means to reduce unproductive overhead within supporting contractors and to capture reductions in contracts by informing future price and contract-type negotiations (Carter, 2010b). The following is an excerpt from Dr. Carter's September 14, 2010, Better Buying Power memorandum:

> During contract negotiation and program execution, our managers should be driving productivity improvement in their programs. They should be scrutinizing every element of program cost, assessing whether each element can be reduced relative to the year before, challenging learning curves, dissecting overheads and indirect costs, and targeting cost reduction with profit incentive—in short, executing to what the program should cost. The Department's decision makers and Congress use independent cost estimates (ICE)—forecasts of what a program will cost based upon reasonable extrapolations from historical experience—to support budgeting and programming. While ICE Will Cost analysis is valuable and credible, it does not help the program manager to drive leanness into the program. In fact, just the opposite can occur: the ICE, reflecting business-as usual management in

> past programs, becomes a self-fulfilling prophecy. The forecast budget is expected, even required, to be fully obligated and expended.
>
> To interrupt this vicious cycle and give program managers and contracting officers and their industry counterparts a tool to drive productivity improvement into programs, I will require the manager of each major program to conduct a Should Cost analysis justifying each element of program cost and showing how it is improving year by year or meeting other relevant benchmarks for value. Meanwhile, the Department will continue to set the program budget baseline (used also in ADMs and Selected Acquisition Reports (SARs)) using an ICE. We will use this method, for example, to drive cost down in the Joint Strike Fighter (JSF) program, the Department's largest program and the backbone of tactical air power for the U.S. and many other countries in the future. This aircraft's ICE (Will Cost) average unit price grew from $50 million Average Unit Procurement Cost (APUC) when the program began (in 2002 dollars, when the program was baselined) to $92 million in the most recent ICE. Accordingly, the JSF program had a Nunn-McCurdy breach last year and had to be restructured by the Secretary of Defense. As a result of that restructuring, a Should Cost analysis is being done in association with the negotiation of the early lot production contracts. The Department is scrubbing costs with the aim of identifying unneeded cost and rewarding its elimination over time. The result should be a negotiated price substantially lower than the Will Cost ICE to which the Department has forecasted and budgeted. Secretary Gates indicated in his Efficiency Initiative that monies saved in this way could be retained by the Service that achieved the efficiency; in this case the Air Force, Navy, and Marine Corps could reallocate JSF funds to buy other capabilities.
>
> The Department will obligate about $2 trillion in contracts over the next five years according to Will Cost estimates, so savings of a few percent per year in execution are significant.
>
> The metric of success for Should Cost management leading to annual productivity increases is annual savings of a few percent from all our ongoing contracted activities as they execute to a lower figure than budgeted. Industry can succeed in this environment because we will tie better performance to higher profit, and because affordable programs will not face cancellation. (Carter, 2010b, pp. 3–4)

This excerpt, on close examination, promoted a forward-looking analysis of contractors' embedded practices and associated cost for production as the should-cost position on which PMs must focus, rather than on the initial and/or existing will-cost position that serves as the initial baseline for the program.

C. *Implementation Directive for Better Buying Power—Obtaining Greater Efficiency and Productivity in Defense Spending* (November 2010)

Dr. Carter's seven-page November 3, 2010, memorandum titled *Implementation Directive for Better Buying Power—Obtaining Greater Efficiency and Productivity in Defense Spending* reiterated guidance provided in prior memoranda (see Subsections B and C of Section III) and specified actions that the secretaries of the military departments and directors of defense agencies should execute immediately or in the time frame specified within the memorandum. The memorandum also stated that additional actions in support of the initiatives proffered in the memoranda dated September 14, 2010, will be developed over the following weeks and months. The memorandum addressed five specific areas from the September 14, 2010, memoranda: (1) targeting affordability and controlling cost growth, (2) incentivizing productivity and innovation in industry, (3) promoting real competition, (4) improving tradecraft in service acquisition, and (5) reducing non-productive processes and bureaucracy.

I have provided the November 3, 2010, memorandum in its entirety as Appendix E. Will-cost and should-cost are specifically addressed in the following excerpt from Dr. Carter's memorandum:

> Effective November 15, 2010, you will establish "Should Cost" targets as management tools for all ACAT I programs as they are considered for major MS decisions. As described in my September 14, 2010, Guidance to the acquisition workforce, "Should Cost" targets will be developed using sound estimating techniques that are based on bottom-up assessments of what programs should cost, if reasonable efficiency and productivity enhancing efforts are undertaken.
>
> These costs will be used as a basis for contract negotiations and contract incentives and to track contractor and program executive officer/project manager performance. Program performance against "Should Cost" estimates will be reported to the Office of Acquisition Resources and Analysis through Acquisition Visibility Service Oriented Architecture (AV SoA).

> By January 1, 2011, you will establish "Should Cost" estimates for ACAT II and III programs as they are considered for component MS decisions. You will use "Should Cost"-based management to track performance of ACAT II and III programs. (Carter, 2010c)

Dr. Carter further invoked the should-cost initiative in addressing poor tradecraft in services acquisitions, stating,

> I will issue further detailed guidance for establishing taxonomy of preferred contract types in services acquisition, but starting immediately, you will ensure that services acquisitions under your control are predisposed toward Cost-Plus-Fixed-Fee (CPFF) or Cost-Plus-Incentive Fee (CPIF) arrangements when robust competition or recent competitive pricing history does not exist. This practice will be used to build sufficient cost knowledge of those services within that market segment. You will employ that cost knowledge to inform the "Should Cost" estimates of future price and contract type negotiations. When robust competition already exists, or there is recent competitive pricing history, you will ensure that services acquisitions under your control are predisposed toward Firm-Fixed-Price (FFP) type contract arrangements. FFP should also be used to the maximum extent reasonable when ongoing competition is used in Multiple Award Contract scenarios. (Carter, 2010c).

In the preceding context, Dr. Carter wanted to build a knowledge base of cost within particular service segments where true competition is not driving the prices paid. This can only be accomplished through contract vehicles that allow for detailed submission of cost estimates in discussions and negotiations and for utilization of that data to support future contract negotiations. Hence Dr. Carter’s predisposition for cost-plus-fixed-fee (CPFF) and cost-plus-incentive-fee (CPIF) contract arrangements in non-competitive circumstances.

D. *Implementation of Will-Cost and Should-Cost Management* (April 2011)

Dr. Carter’s April 22, 2011, memorandum, *Implementation of Will-Cost and Should-Cost Management*, was addressed to acquisition and logistics professionals and issued the clearest guidance on should-cost and what the initiative embodies and the responsibilities for conduct among the Services and agencies (see Appendix F for the full memorandum). As iterated in the memorandum, the goal of the should-cost initiative is to ensure that PMs drive productivity improvements into their programs during contract negotiations and throughout program execution, including sustainment. This means eliminating cost overruns and delivering programs below budget baselines that are independently established in the will-cost estimates. PMs are to continuously perform should-cost analyses that scrutinize every element of government and contractor cost. Not only are PMs to focus on cutting contractor inefficiency but also on inefficiency within the DoD. Will-cost estimates will continue to be utilized as the official position for acquisition program baselines or to set budgets for the budgeting, programming, and reports promulgated externally to the DoD.

Any savings generated from the initiative links PMs' and PEOs' performance evaluations to results of the initiative. Additionally, savings generated are to be shared between the contractor and government, with appropriate recognition for employees in both arenas that delivered the improvements.

Service and component acquisition executives (S/CAEs), PEOs, and PMs are tasked to weigh the best method of meeting the should-cost initiative. The should-cost estimates can be developed using any of three methods or combinations of the three. Specifically, the first method is through a "bottoms-up" estimate, which includes a detailed examination of all cost and associated driving processes. The second method is to identify specific reductions from the will-cost estimates. Since the will-cost estimate is developed independently of the DoD stakeholders—specifically the PEOs and PMs—any purposeful inflation of the will-cost baseline by PMs to create a should-cost savings is avoided. The third method is use of competitive contracting, where warranted, and contract negotiation is utilized to identify should-cost savings. Table 1 summarizes the three primary methodologies for conducting should-cost analysis.

Table 1. Dr. Carter's Recommended Methodologies for Should-Cost Estimates
(Yoder, 2012)

Estimate Methodology	Methodology Highlights
1. Bottoms-up methodology	• Cross-functional teams examine all processes and associated cost • May use lean-six protocols
2. Will-cost estimate reductions	• Create actionable items or targets for reduction • Estimate and track with should-cost progress reports • Must not be arbitrary but substantiated through analysis • Must be consistent with the program of record (or presented in separate excursions to the Milestone Decision Authority (MDA)
3. Competitive contracting and contract negotiations	• Identify savings through sound contract business practices • Create share savings in contract structure • Utilize incentive contracts to entice participant savings • Negotiate fixed-price contracts that reflect should-cost estimates

This memorandum included two attachments: the first was "Ingredients of Should Cost Management" (subsequently "Ingredients"), and the second was "Will-Cost and Should-Cost Management Example Programs" (subsequently "Example Program"; Carter, 2011b). The "Ingredients" attachment provided a clear and concise list of 10 management practices that may be applicable for PMs as well as management practices and contracting activities to incorporate into business practice. Specifically, the list provided the following recommendations:

1. Scrutinize each contributing ingredient of program cost and justify it. Why is it as reported or negotiated? What reasonable measures might reduce it?

2. Particularly challenge the basis for indirect cost in contractor proposals.

3. Track recent program cost, cost, schedule, and performance trends and identify ways to reverse negative trend(s).

4. Benchmark against similar DoD programs and commercial analogues (where possible), and against other programs performed by the same contractor or in the same facilities.

5. Promote Supply Chain Management to encourage competition and incentivize cost performance at lower tiers.

6. Reconstruct the program (government and contractor) team to be more streamlined and efficient.

7. Identify opportunities to breakout Government-Furnished Equipment versus prime contractor-provided items.

8. Identify items or services contracted through a second or third party vehicle. Eliminate unnecessary pass-through costs by considering other contracting options.

9. In the area of test:

    a. Take full advantage of integrated Development and Operational Testing to reduce overall cost of testing;
    b. Integrate modeling and simulation into the test construct to reduce overall costs and ensure optimal use of National test facilities and ranges.

10. Identify an alternative technology/material that can potentially reduce development of life cycle costs for a program. Ensure the prime contract includes the development of this technology/material at the right time. (Carter, 2011b)

The memorandum's "Example Programs" attachment identified five target should-cost initiative programs from each Service (see Table 2).

Table 2. Will-Cost and Should-Cost Management Example Programs

Air Force	Army	Navy
Joint Strike Fighter (F-35)	Joint Air Ground Missile (JAGM)	Joint Strike Fighter (F-35)
Global Hawk Blocks 30 & 40 (GH BLK 30 & 40)	Black Hawk (UH-60M)	Hawkeye (E-2D)
Space Based Infrared System (SBIRS)	Ground Combat Vehicle (GCV)	Presidential Helo (VXX)
Evolved Expendable Launch Vehicle (EELV)	Paladin Product Improvement (PIM)	Littoral Combat Ship (LCS)
Advanced Extremely High Frequency (AEHF) Satellite System	NETT Warrior	Ohio Replacement Program

Note. The information in this table was adapted from Dr. Carter's April 22, 2011, memorandum.

Note that technically, this table represents 14 total programs since the Air Force and Navy share the Joint Strike Fighter (F-35) program.

E. *Should-Cost and Affordability* (August 2011)

Dr. Carter's August 24, 2011, memorandum, *Should-Cost and Affordability*, is provided in its entirety as Appendix G. This memorandum was issued to quell confusion among PMs wrestling with key issues during early implementation of Better Buying Power and should-cost initiatives on programs prior to Milestone B. Confusion existed regarding two elements of Better Buying Power memoranda (Carter, 2010a, 2010b): specifically, definitions of the terms *affordability as a requirement* and *should-cost* and applicability of specific should-cost mandates within early program milestones, prior to engineering and manufacturing development (EMD) and production.

Dr. Carter addressed the issue by defining *affordability as a requirement* as the DoD's goal for unit production cost and sustainment cost based on what DoD can pay. These goals are set early and used to drive design trade-offs and choices about priorities. The Milestone Decision Authority (MDA) establishes the affordability requirement; the affordability requirement represents a metric that captures the product’s expected capability against its expected (affordable) life cycle cost.

Should-cost, according to the August 2011 memorandum, asks for something different than *affordability as a requirement*. It calls for a continuous fight to lower all DoD cost, wherever that makes sense. Should-cost focuses on the actual work being performed and uses information gathered to better inform negotiations and the ensuing structure of contract cost and incentives. According to the memorandum,

> The should-cost approach challenges us to do our best to find specific ways to beat the Independent Cost Estimate (ICE) or Program Estimate (which should already reflect the affordability requirements) and other cost projections funded in our budgets (i.e., “will-cost”), when we find sensible opportunities to do so. For example, should cost does not mean trading away the long-term value of sound design practices and discipline a engineering management for short-term gain; it does mean eliminating non-value added overhead and unnecessary reporting requirements. Should-cost can be applied to anything that we do and to any source of costs, including cost for services and internal government costs as well as contracted product costs. Unlike affordability requirements, we do not expect them to always be achieved, by we do expect strong efforts to do so. (Carter, 2011c)

Additionally, the memorandum recognized the potential conflict between affordability and should-cost early in programs. As indicated, affordability is designed into the product, and early initiatives to reduce future cost can have a huge impact on cost reduction. During initial stages of a program, when design choices are made, affordability constraints should be established to provide a guide for ultimate design. During the early design processes, should-cost management can be utilized to reduce overhead and unproductive expenses. The information gleaned from should-cost can also be utilized in examining initial low rate initial production (LRIP) prices during contract negotiations. Once the requirements, design, and affordability goals are established and an ICE or program estimate exists, should-cost can then be utilized to challenge assumptions, perform additional analysis, formulate should-cost estimates for follow-on production and sustainment, and work towards those goals (Carter, 2011c).

F. Service Implementation of Ashton Carter's Initiative

The Navy, Air Force, and Army took quick action to place Dr. Carter's should-cost initiative into practice. All three Services issued implementation memoranda, in June and July 2011. These memoranda clearly brought Dr. Carter's should-cost initiative from a conceptual plan into a more implementable concept; providing many of the details and functional assignments required to bringing the concept into business practice. I present highlights of the Service implementation mandates within the following narrative (see Appendix H (Navy), Appendix I (Air Force), and Appendix J (Army) for the complete memoranda).

G. *Implementation of Should-Cost Management* - ASN (July 2011)

The Assistant Secretary of the Navy for Research, Development, and Acquisition (ASN[RD&A]) issued the memorandum *Implementation of Should-Cost Management* on July 19, 2011 (Stackley, 2011; see Appendix H for the entire memorandum).

In summary, this memorandum directed the MDA to approve all should-cost management initiatives and targets and will use these to set program execution goals. PMs are directed to manage, report, and track to these targets as well as defend the validity of the specific initiatives identified that achieve savings against the will-cost estimate. For programs that report to the OSD, approval of should-cost management initiatives by the MDA is required prior to leaving Department of Navy (DoN) review. Of note is that should-cost management reporting will not be external to the DoD.

Program budget baselines will be informed by the will-cost estimate for all ACAT I, II, and III programs. During budget execution years, funds will be available to programs (PMs) based on their should-cost targets. Successful execution to the should-cost management estimate will create assets within the DoN for reallocation to the highest priority needs, initially limited to the five programs under the example programs F-35, E-2D, VXX, LCS, and Ohio Replacement programs.

The Navy implementation memorandum contained an attachment promulgating should-cost management guidelines. These guidelines included will-cost and should-cost management, will-cost estimate (budget baseline) and development, should-cost management (program execution targets) and development, should-cost management reporting processes and procedures, reporting methods and templates, and withhold and release process details (for differences between the will-cost [budget] and should-cost estimates). Additionally, the memorandum's appendices included a section on opportunities for should-cost management, which expanded on the examples proffered in Dr. Carter's memoranda.

The section titled "Process for Withhold and Release of the Difference between the Will-Cost Estimate (budget) and the Should-Cost Management Target" required all differences between will-cost and should-cost estimates to be held at the secretariat level, with specific details for reporting, holding, and release, if applicable.

H. *Implementation of Will-Cost and Should-Cost Management* - ASAF (June 2011)

The Department of the Air Force issued the memorandum *Implementation of Will-Cost and Should-Cost Management* on June 15, 2011 (Morin & Van Buren, 2011; see Appendix I for the entire memorandum) This memorandum called for should-cost protocols to follow both the FAR and DFARS protocol to develop objectives for use in negotiating the immediate contract. However, the Air Force further called for a broader interpretation, as Dr. Carter's memoranda promoted, to include should-cost covering all government and contract program cost throughout the entire life cycle. Will-cost estimates will be used for baseline budgeting and programming decisions and will be the metric for external reporting. The should-cost estimates must be kept internally for Air Force official use only and will be prepared by the program offices, with cross-functional assistance, where warranted, from the Air Force Cost Analysis Agency (AFCAA) or the DCMA. The overarching theme is to drive leanness in all operations.

The Air Force limited the initial should-cost will-cost implementation to five programs: Joint Strike Fighter (F-35), Global Hawk Blocks 30 & 40, Evolved Expendable Launch Vehicle (EELV), Space Based Infrared System (SBIRS), and the Advanced Extremely High Frequency (AEHF) Satellite System.

Differences between will-cost and should-cost amounts are held at the Service level. The Secretary of the Air Force Acquisition (SAF/AQ) and the Secretary of the Air Force Financial Management (SAF/FM) will jointly decide on distribution of funds, if and when appropriate.

Main elements of this memorandum included will-cost and should-cost management, will-cost management baseline (budget baseline), should-cost management baseline, detailed guidance on will-cost estimate development, detailed guidance on should-cost estimate development, reporting procedures, waivers to provisions of the implementation plan, withhold and release process details (for differences between the will-cost and should-cost estimates), and templates for reporting.

I. *Army Implementation of Under Secretary of Defense (Acquisition, Technology and Logistics) (USD (AT&L)) Affordability Initiatives* Assistant Secretary of the Army (June 2011)

The Department of the Army issued a memorandum titled *Army Implementation of Under Secretary of Defense (Acquisition, Technology and Logistics) (USD (AT&L)) Affordability Initiatives* on June 10, 2011 (Shyu, 2011; see Appendix J for the entire memorandum.) This memorandum included all the Better Buying Power initiatives, including should-cost will-cost.

The Army mandates program offices to immediately implement the initiatives on ACAT I–III selected programs. The will-cost serves as the baseline and is generated by a cost analysis independent cost estimate or a Department of the Army service cost position. ACAT II and III programs are tasked to develop the rigor in estimating that is currently applied for ACAT I programs. The MDA will approve all initial should-cost estimates and use these estimates for program execution targets. The overarching theme is to drive leanness into all operations.

The difference between the funds distributed and the program budget baseline will be withheld at the Service level for ACAT I and at the PEO for programs in which the PEO is the MDA. The MDA for ACAT I—and the PEO for those in which the PEO is the MDA—is the decision authority for distribution of any withheld funds determined for release to the programs.

The memorandum contained templates for reporting along with enclosures for will-cost and should-cost estimating and management guidelines. Main elements of the enclosure guidelines included will-cost and should-cost management, will-cost management baseline (budget baseline), should-cost management baseline (program execution baseline), detailed processes and procedures for will-cost and should-cost development, withhold and release process details (for differences between the will-cost and should-cost estimates), and reporting methods and templates.

J. Should-Cost Will-Cost Implementation Memoranda Summary

The Services have implemented Dr. Carter's should-cost initiative with striking similarities. Table 3 is an examination of the implementation memoranda key elements and provisions.

Table 3. Should-Cost Will-Cost Implementation Memoranda Summary

Key Common Element	Navy Implementation—ASN(RD&A) Memo July 19, 2011 (Appendix H)	Air Force Implementation—Dept. of the Air Force Memo June 15, 2011 (Appendix I)	Army Implementation—Dept. of Army Memo June 10, 2011 (Appendix J)
Identification of Programs	Yes	Yes	Yes
Definition & Use of Will-Cost	Yes. Independent baseline for program budget and funding. External promulgation allowed.	Yes. Independent baseline for program budget and funding. External promulgation allowed.	Yes. Independent baseline for program budget and funding. External promulgation allowed.
Development of Will-Cost Protocols	Yes. CAPE ICE or service cost position. SECNAVINST 5223.3 DON SCP germane. Will-cost is the program of record estimate and the cost analysis requirements description (CARD).	Yes. Non-advocate baseline developed with Air Force AFPD 65-5 and AFI 65-508 for ACAT I and with approval from product or logistics center financial cost estimating organization (FMC).	Yes. ICE existing ACAT I and managed ACAT II defined protocols extend to ACAT III programs. Will-cost estimates used for baselines for budgeting, programming, and reporting.
Definition & Use of Should-Cost	Yes. PM develops targets using technical and schedule baselines with applied efficiencies, lessons learned, and best practices in productivity and for informed negotiations under FAR 15.407-4 and DFARS 215.407-4. External	Yes. PM develops targets via driving leanness at major milestone decisions. NOT used for budgeting, programming, or reporting outside the department.	Yes. PM drives leanness through should-cost management. Incentivizes targets to performance. NOT for budgeting, programming, or reporting outside the department. Creates informed negotiations under

	promulgation NOT allowed.		FAR 15.407-4 and DFARS 215.407-4.
Development of Should-Cost Targets	PM responsible for targets. Developed in one or more of three ways: 1) will-cost base with discrete, measureable savings. Recommended for all programs with a will-cost estimate. 2) bottom-up estimate without a formal FAR/DFARS should-cost review. 3) bottom-up estimate with a formal FAR/DFARS should-cost review.	PM responsible for targets along with tracking and reporting. AT&L (ACAT 1D and IAMs) and SAF/AQ (or delegated PEO/DAO) approve should-cost estimates at milestones.	PM responsible for identifying savings opportunities and targets. Not applicable to quick reaction capabilities. PM determines discrete and measurable targets while maintaining realistic technical and schedule. MDA approves should-cost targets. Recommended approaches: 1) will-cost base applying discrete measurable items/initiatives. 2) bottom-up approach without a detailed FAR/DFARS should-cost review. 3) bottom-up with a formal FAR/DFARS should-cost review.
Participants in Should-Cost Target Development	SYSCOM/PM. May seek assistance from the Naval Center for Cost Analysis (NCAA),	PM with cross-functional teams. Can seek assistance from outside: the	PM with assistance from outside organizations such as Deputy

	DCMA, and other PM offices.	AFCAA or DCMA.	Assistant Secretary for the Army Cost and Economics (DASA [CE]) and DCMA.
Milestone A	Will-cost estimate (initial or updated) should-cost management target (initial or update)	Will-cost estimate (initial or updated) should-cost management target (initial or update)	Will-cost estimate (initial or updated) should-cost management target (initial or update)
Milestone B	Will-cost update (initial baseline for Nunn-McCurdy metrics) Should-cost (sets internal program execution baseline) Initial to support contract actions (optional)	Will-cost update (initial baseline for Nunn-McCurdy metrics) Should-cost (sets internal program execution baseline) Initial to support contract actions (optional)	Will-cost update (initial baseline for Nunn-McCurdy metrics) Should-cost (sets internal program execution baseline) Initial to support contract actions (optional)
Milestone C	Update will-cost and should-cost. Indirect/direct contract cost reviews (optional) FAR 15.407-4 and DFARS 215.407-4	Update will-cost and should-cost. Indirect/direct contract cost reviews (optional) FAR 15.407-4 and DFARS 215.407-4	Update will-cost and should-cost. Indirect/direct contract cost reviews (optional) FAR 15.407-4 and DFARS 215.407-4
Full-Rate Production Decision/Contract	Update	Update	Update
Withholding and Distribution of Funds	Yes, delta withheld. SAE for ACAT I, MDA for ACAT II, PEO for ACAT III	Yes, delta withheld. Remains in program element. Release by service/component acquisition executive (S/CAE)	Yes, delta managed consistent with the type of contracts used in the program. When fixed-price contracts are utilized, any delta should be considered "realized" and built into the contract.

Reporting Templates	Yes	Yes	Yes

Note. The information in this table was derived from elements of the Service implementation memoranda.

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IV. The Federal Acquisition Reform Act (FARA) and the Federal Acquisition Streamlining Act (FASA): Impacts on Contracting

A. FARA and FASA Background and History

Acquisition reform initiatives—specifically, commercialization of business processes—and the 1990s decade of streamlining the acquisition workforce were all aimed at fundamentally improving the business of acquiring goods and services for federal agencies, including the DoD.

The reforms towards commercial business practices commenced with the National Performance Review in 1993. Initial efforts gained significant momentum during President Clinton's administration and, more recently, with influential reformers such as Dr. Jacques S. Gansler, former Under Secretary of Defense (AT&L), and then-Representative Tom Davis (R-VA), who chaired the Committee on Government Reform.

Amidst all of the reforms and structural changes, there was a significant shift in the nature, or makeup, of what the federal government procures—from predominantly tangible goods and hardware to over a 50-50 mix of services to tangible goods and services, with many accounts placing the percentage of dollars in services at nearly 65% of the DoD's total annual spend.

The FASA of 1994 and the FARA of 1995 moved federal acquisition policies and procedures closer to commercial-industry standard.

The same restructuring era of the 1990s and early 2000s, which was based on the anticipated benefits of reduced regulatory and administrative oversight requirements in federal contracting emanating from the FARA and FASA, also generated large reductions in the acquisition workforce. Specifically, the DCMA and the DCAA experienced personnel reductions of over 50% from levels prior to the FARA and FASA legislation.

B. The FARA and FASA: Push for Greater Efficiency

The FARA and FASA represented the beginning of the legislative acquisition reforms aimed at commercialization. Prior to these legislative reforms, federal acquisitions were subject to myriad laws and regulations—compliance with which was mandatory for contractors participating in federal procurements. The actual range and scope of applicable laws and regulations to a specific contract action was, and continues to be, based on the acquisition methodology, the type of contract vehicle, and the monetary amount of the acquisition, to name just a few of the primary drivers. Prior to the FARA and FASA, the plethora of laws and regulations, including those incorporated in the FAR and the DFARS and specific agency and Service mandates and regulations, created a choke hold on contractors doing business with the federal government. In addition to being a choke hold on businesses engaged in contracts with the federal government, these regulations acted as a solid barrier-to-entry for potential non-traditional commercial businesses that could offer much-needed commercial goods and services to the federal government. Many potential businesses refused to conduct business with the federal government due to the imposition of legal, regulatory, and reporting requirements unique to federal contracting.

Recognizing the dilemma emerging from traditional statutory and regulatory-based constrictive business practices (and the impact these were having on potential and actual participants with the federal government), the DoD contracted a study of the negative impacts of federal and DoD acquisition mandates and oversight requirements on its existing and potential contractors. In December 1994, Coopers and Lybrand issued a report identifying over 120 regulatory and statutory cost drivers that, according to the study, increased the price that the DoD paid for goods and services by 18% (GAO, 1996).

As an example relevant to this paper, the TINA resulted in a 1.3% premium paid by the government. The TINA is normally applicable on negotiated contracts following FAR Part 15 protocols.

The FARA and FASA eliminated over 120 statutes and regulations, most of which were identified in the Coopers and Lybrand study, that would otherwise be applicable on federal acquisitions. The FARA and FASA created business protocols more like that which exist in commercial business arenas, and with the legislation came the advent of FAR Part 12, Acquisition of Commercial Items. FAR 12.503, "Applicability of certain laws to Executive agency contracts for the acquisition of commercial items," FAR 12.504, "Applicability of certain laws to subcontracts for the acquisition of commercial items," and FAR 12.505, "Applicability of certain laws to contracts for the acquisition of COTS items," specify laws and regulations that are not applicable on acquisitions under the protocols for acquiring commercial items outlined in FAR Part 12.

C. FARA, FASA, and FAR 2.101 Definitions and FAR Part 12 Protocols for Acquiring Commercial Items

The FASA and FARA statutes mandated use of protocols for acquiring commercial items and created a broad definition of acquisition business criteria for those goods or services eligible for the streamlined FAR Part 12 commercial item acquisition protocols—the idea to reduce the complexities and cost-driving mandates on business. A clear understanding of the commercial item acquisition applicability, under defined mandates, is required to understand how the government protocols enable buyers to make "fair and reasonable" determinations, which are mandatory on each and every acquisition and contract, regardless of value. FASA legislative provision content germane to this paper is provided in Table 4.

Table 4. Federal Acquisition Streamlining Act (FASA) Highlights
(Yoder)

Created preference for "commercial item" acquisition.
Provided for utilization of "less intrusive" data sources in determining "fair and reasonable" pursuant to contract award; eliminated TINA requirements.
Created a "broad" definition of *commercial item* to allow for maximum applicability of the legislative and regulatory relief under the provision.
Created "best practice" business processes and protocols similar to commercial-business-to-business standards.
Maximized reliance on industry and market forces to establish "fair and reasonable" pricing.

With popular support among business and acquisition community participants, additional legislation—the FARA—was passed shortly after the FASA. The FARA legislation expanded the definition of *commercial item* to include not only items "sold, leased, or licensed to the general public" but also those "offered for sale, lease, or license to the general public," along with additional supporting definitions that are incorporated into FAR Part 12 definitions of commercial items. Specific FARA highlights are provided in Table 5.

Table 5. Federal Acquisition Reform Act (FARA) Highlights
(Yoder)

Expanded the definition of *commercial item* and its applicability to include the following: • items sold, leased, or licensed to the general public, • items *offered* for sale, lease, or license to the general public (these items may have zero prior sales history in the commercial or public market), • items that have *evolved* from commercial items, • Items that are commercial with modifications to meet government-unique requirements, • non-developmental items (NDI), which are items originally developed and/or sourced by a government agency, and • services at catalog or market price (defined by market analysis or competition).
Prohibited the use of certified cost or pricing data under the TINA.

The term *commercial item* is further defined within the FAR 2.101 definitions:

“Commercial item” means— (1) Any item, other than real property, that is of a type customarily used by the general public or by non-governmental entities for purposes other than governmental purposes, and—

(i) Has been sold, leased, or licensed to the general public; or

(ii) Has been offered for sale, lease, or license to the general public;

(2) Any item that evolved from an item described in paragraph (1) of this definition through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;

(3) Any item that would satisfy a criterion expressed in paragraphs (1) or (2) of this definition, but for—

(i) Modifications of a type customarily available in the commercial marketplace; or

(ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements. Minor modifications means modifications that do not significantly alter the nongovernmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;

(4) Any combination of items meeting the requirements of paragraphs (1), (2), (3), or (5) of this definition that are of a type customarily combined and sold in combination to the general public;

(5) Installation services, maintenance services, repair services, training services, and other services if—

(i) Such services are procured for support of an item referred to in paragraph (1), (2), (3), or (4) of this definition, regardless of whether such services are provided by the same source or at the same time as the item; and

(ii) The source of such services provides similar services contemporaneously to the general public under terms and conditions similar to those offered to the Federal Government;

(6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks per- formed or specific outcomes to be achieved and under standard commercial terms and conditions. For purposes of these services—

(i) “Catalog price” means a price included in a catalog, price list, schedule, or other form that is regularly maintained by the

> manufacturer or vendor, is either published or otherwise available for inspection by customers, and states prices at which sales are currently, or were last, made to a significant number of buyers constituting the general public; and
>
> (ii) “Market prices” means current prices that are established in the course of ordinary trade between buyers and sellers free to bargain and that can be substantiated through competition or from sources independent of the offerors.
>
> (7) Any item, combination of items, or service referred to in paragraphs (1) through (6) of this definition, notwithstanding the fact that the item, combination of items, or ser- vice is transferred between or among separate divisions, subsidiaries, or affiliates of a contractor; or (8) A non-developmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple State and local governments.
>
> “Commercially available off-the-shelf (COTS)” item— (1) Means any item of supply (including construction material) that is— (i) A commercial item (as defined in paragraph (1) of the definition in this section); (ii) Sold in substantial quantities in the commercial marketplace; and (iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and (2) Does not include bulk cargo, as defined in section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), such as agricultural products and petroleum products. (FAR, 2012)

Key aspects of the FARA are (1) an elimination of over 120 statutes and regulations when using commercial item protocols, (2) a broad definition of what constitutes a commercial item for federal procurements, and (3) prohibition of TINA provisions.

D. Determining “Fair and Reasonable”: Disengagement Emanating from the FARA, the FASA, and FAR Part 12

The FARA, the FASA, and FAR Part 12 have revolutionized federal acquisition protocols. In addition, they have eliminated over 120 statutes and regulations that were placing a choke hold on businesses, creating barriers-to-entry, and increasing the cost of all goods and services by over 18%. The DoD spent nearly $3 trillion (at a conservative estimate of $300 billion awarded per year) via contract award in the last 10 years. Figure 3 shows the DoD contract spend for the 20 years leading up to and including fiscal year (FY) 2010.

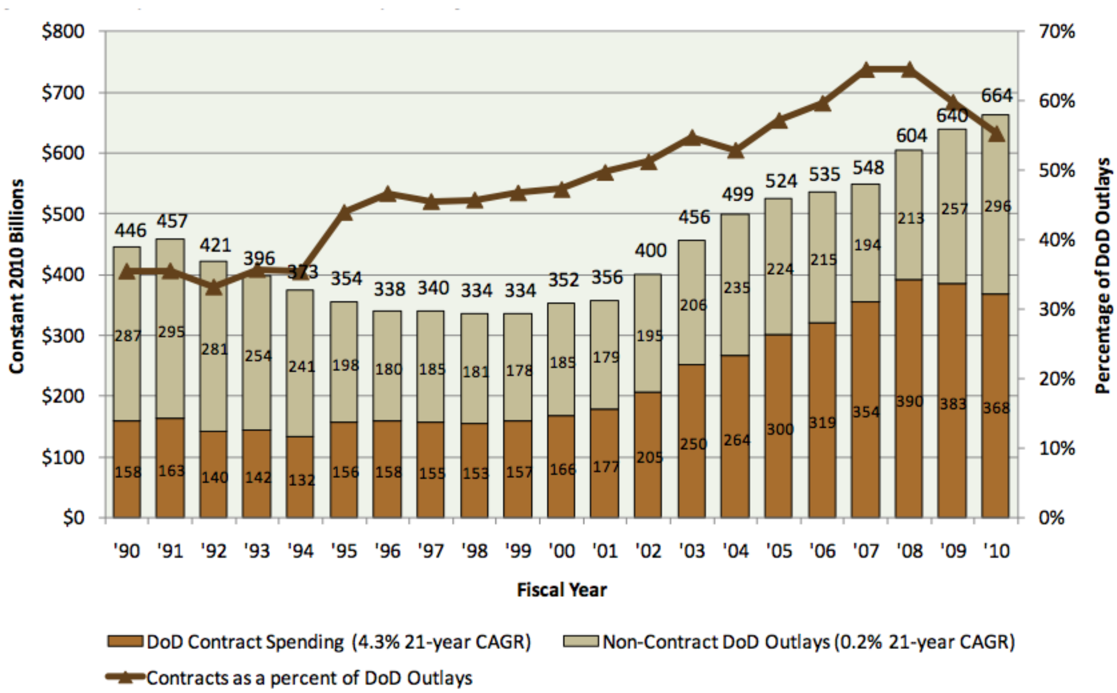

Figure 3. DoD Contract Spending Trends (DoD Contract and Non-Contract)
(Center for Strategic and International Studies [CSIS], 2011)

The potential savings resulting from an 18% reduction through the FARA, the FASA, and FAR Part 12 is significant—totaling up to $540 billion in savings over a 10-year period!

However, despite the potential benefits, the commercial item protocols have resulted in disengagement in two key areas that are particularly germane to ACAT I, II, and III program-level contracts. *Disengagement* is defined herein as the inability or unwillingness of the federal government to monitor and/or oversee the actions of contractors and subcontractors anticipating receipt of federally awarded contracts. The first aspect of disengagement is in fair and reasonableness determination leading up to and at the time of the contract award. The determination of fair and reasonable is mandatory for all contract awards. The warranted contracting officer's signature represents an attestation that a sound methodology for fairness and reasonableness was conducted, and the contracting officer must annotate the contracting file appropriately. The most preferred method to determine fair and reasonable is through adequate competition. The FAR prescribes favored techniques for making fair and reasonable determinations, listed in order of precedence from FAR 15.401:

> 1. Price analysis is the process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit.
>
> 2. The Government may use various price analysis techniques and procedures to ensure a fair and reasonable price. Examples of such techniques include, but are not limited to:
>
> i. Comparison of proposed prices received in response to the solicitation. Normally, adequate price competition establishes price reasonableness (see FAR 15.403-1(c)(1)).
>
> ii. Comparison of previously-proposed prices, previous Government- and commercial contract prices with current proposed prices for the same or similar items, if both the validity of the comparison and the reasonableness of the previous price(s) can be established.
>
> iii. Use of parametric estimating methods/application of rough yardsticks (such as dollars per pound or per horsepower, or other units) to highlight significant inconsistencies that warrant additional pricing inquiry.
>
> iv. Comparison with competitive published price lists, published market prices of commodities, similar indexes, and discount or rebate arrangements.
>
> v. Comparison of proposed prices with independent Government cost estimates.
>
> vi. Comparison of proposed prices with prices obtained through market research for the same or similar items.
>
> vii. Analysis of pricing information provided by the offeror.

Commercial-item designation under the FARA, the FASA, and FAR Part 12 has one primary function or ideal. The basic idea behind commercial item acquisition is to capitalize on competitive market forces to establish fair and reasonable pricing.

The federal government is charged with maximizing the value of taxpayer dollars. In order to maximize value, the government generally seeks to award its contracts through competition. However, the government does not always buy truly commercial items that are sold in substantial quantities to the general public. Instead, and quite often, the government buys unique products and services to which there is no direct commercially available counterpart. The competitive market in which the federal government acquires its goods and services is diverse: from purely competitive and commercial competitors to oligopolistic or monopolistic contractors that match distinctive government requirements. Figure 4 portrays the differences found in pure competitive commercial markets versus those found in markets associated with procurements most often associated with ACAT I, II, and III program contracts.

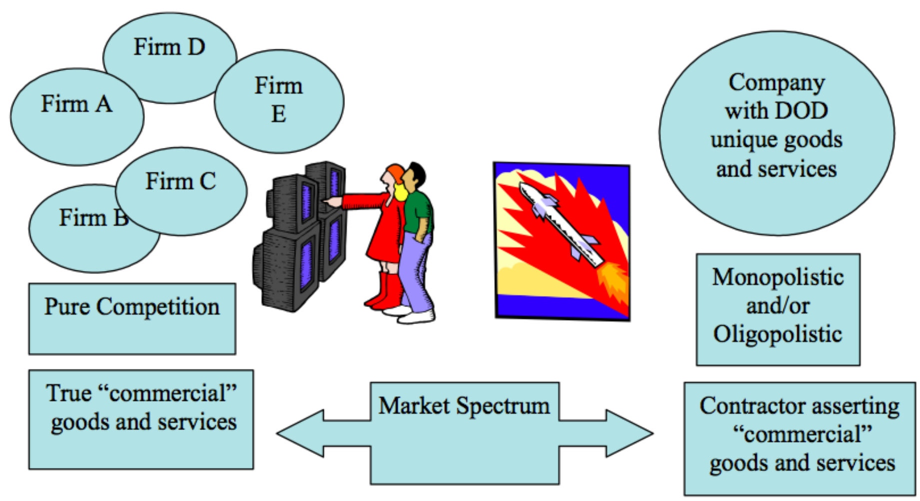

Figure 4. Pure Competitive Commercial Markets Versus DoD-Unique Markets (Yoder, 2012)

Federal contracts awarded above the simplified acquisition procedure (SAP) threshold, reported on the Contract Action Reporting System (CARS) and compiled in the Federal Procurement Data System (FPDS) (both mandatory reports on contract actions), went to contractors that, generally speaking, did not offer bona fide "commercial" goods or services. Of the nearly $505 billion obligated on contract in

FY2011, fully $294.76 billion, representing 55.414% of awarded contract dollars, went to the top 100 defense contractors (as defined by the total dollar amount of awards; FPDS data extracted August 2012). In addition, the top 10 defense contractors received $147.74 billion, representing 27.83%, of the total dollars expended. Table 6 displays the top 10 companies by federal contract award dollars for FY2011.

The majority of dollars being awarded by the DoD goes to "traditional" defense contractors. The dollars awarded to these firms were nearly evenly split between supplies (goods) and services; approximately 55% of the awards were spent on goods and 45% on services. These firms, for a majority of the products and services they offer, operate in quasi-competitive environments. Such arenas are characterized as oligopolistic or monopolistic markets.

Table 6. Top 10 Companies by Federal Contract Award Dollars—FY2011
(Derived from the FPDS, 2012)

Company Name	Dollar Total 2011	Percentage of Total
1. Lockheed Martin	$ 42,446,866, 959.53	7.9960%
2. Boeing	$ 21,599,245,643.25	4.0688%
3. General Dynamics	$ 19,442,764,028.59	3.6626%
4. Northrop Grumman	$ 15,020,080,455.00	2.8294%
5. Raytheon	$ 14,771,086,834.84	2.7825%
6. United Technologies	$ 7,908,114,454.95	1.4897%
7. SAIC	$ 7,378,984,631.81	1.3900%
8. L-3 Communications	$ 7,357,742,515.71	1.3860%
9. BAE Systems PLC	$ 6,876,349,891.22	1.2954%
10. Oshkosh	$ 4,942,070,285.97	0.9310%
Top Ten Summary	**$147,743,305,700.87**	**27.8316%**

E. Determining Fair and Reasonable—Disengagement Emanating from the FARA, the FASA, and FAR Part 12

Quite simply, *disengagement* is defined as the inability or unwillingness of the government to interact with the market place using its sovereign capabilities, through legislation and regulation. Disengagement from the FARA and FASA has many manifestations, as presented previously, but one of the most striking and potentially negative manifestations for the government contracting officer is the elimination of the capability to invoke the TINA as it pertains to requesting and utilizing certified cost and pricing data, defined in FAR Part 15 and DFARS Part 215. As discussed previously, commercial item designation under the provisions of the FARA and FASA may work well when competitive marketplaces, and full and open competition, drive the determination of fairness and reasonableness. However, in many, if not most, cases in contracts associated with ACAT I through III programs, truly competitive forces do not exist.

The DFARS helps alleviate the phenomenon of sole source or quasi-competitive firms from declaring commercial item exemption from TINA provisions, thus helping to eliminate contracting officer dilemmas of using the lower-tier methodologies in determining fairness and reasonableness. The DFARS 215-403 series, titled "Obtaining certified cost or pricing data," continues to list adequate competition as the primary means to alleviate the need to obtain certified cost or pricing data. However, in the event that competitive forces are not adequate to determine whether a contract award is fair and reasonable the DFARS 215.371 series applies. The following excerpt is from the DFARS dated August 24, 2012.

> **215.371-3 Fair and reasonable price.**
>
> (a) If there was "reasonable expectation …that two or more offerors, competing independently, would submit priced offers" but only one offer is received, this circumstance does not constitute adequate price competition unless an official at one level above the contracting officer approves the determination that the price is reasonable (see FAR 15.403-1(c)(1)(ii)).
>
> (b) Except as provided in section 215.371-4(a), if only one offer is received when competitive procedures were used and the solicitation allowed at least 30 days for receipt of proposals (unless the 30-day requirement is not applicable in accordance with 215.371-4(b) or has been waived in accordance with section 215.371-5), the contracting officer shall—
>
> (1) Determine through cost or price analysis that the offered price is fair and reasonable and that adequate price competition exists (with approval of the determination at one level above the contracting officer) or another exception to the requirement for certified cost or pricing data applies

(see FAR 15.403-1(c) and 15.403-4). In these circumstances, no further cost or pricing data is required; or

(2)(i) Obtain from the offeror cost or pricing data necessary to determine a fair and reasonable price and comply with the requirement for certified cost or pricing data at FAR 15.403-4, in accordance with FAR provision 52.215-20. For acquisitions that exceed the cost or pricing data threshold, if no exception at FAR 15.403-1(c) applies, the cost or pricing data shall be certified; and

(ii) Enter into negotiations with the offeror as necessary to establish a fair and reasonable price. The negotiated price should not exceed the offered price.

215.371-4 Exceptions.

(a)(1) The requirements at sections 215.371-2 and 215.371-3 do not apply to acquisitions—

(i) At or below the simplified acquisition threshold;

(ii) In support of contingency, humanitarian or peacekeeping operations, or to facilitate defense against or recovery from nuclear, biological, chemical, or radiological attack; or

(iii) Of basic or applied research or development, as specified in FAR 35.016(a), that use a broad agency announcement.

(2) The applicability of an exception in paragraph (a)(1) of this section does not eliminate the need for the contracting officer to seek maximum practicable competition and to ensure that the price is fair and reasonable.

(b)(1) The requirements at section 215.371-2 do not apply to small business set-asides under FAR subpart 19.5 or set-asides under the HUBZone Program (see FAR 19.1305(c)), the Service-Disabled Veteran-Owned Small Business Procurement Program (see FAR 19.1405(c)), or the Woman-Owned Small Business Program (see FAR 19.1505(d)).

(2) The requirements at section 215.371-3 do apply to such set-asides. (DFARS, 2012)

DFARS subparagraph (b) allows for the contracting officer to request and obtain certified cost and pricing data in the event that true competitive forces were not at play for the instant contract action. The ability to obtain certified data is a relatively recent change to regulation, since it was not part of the original FARA and FASA statutes. As a researcher, I had proposed in 2004 that the government be given greater authority to allow for obtaining certified cost and pricing data and/or to eliminate the contractor's unilateral authority to claim commercial item designation beyond the FARA and FASA. This DFARS provision allows for that greater sovereign capability and strengthens the contracting officer's ability to make fair and reasonable determinations based on truly competitive market forces, the preferred methodology, or via obtaining certified cost or pricing data and subsequent analysis and negotiations.

F. Does the Should-Cost Initiative Conflict With Commercial Item Acquisition Provisions Under the FARA and FASA?

As my analysis indicates, the newest provisions of DFARS 215 related to cost and pricing data have corrected one of the greatest potential problems of commercial item acquisition provisions -- the FARA and FASA prohibition against obtaining certified cost and pricing data needed for analysis and negotiation of contract actions in non-competitive marketplaces.

Mr. Elliott Branch, Deputy Assistant Secretary of the Navy, Acquisition Policy ASN(AP), and Mr. Charlie Williams, Director of the DCMA, indicated during interviews for this research conducted in August 2012, that the current policies on commercial item acquisition under the FARA and FASA do not pose a big concern for the should-cost initiative. With the recent DFARS 215-317 allowance for inadequate competition and the invocation of certified cost and pricing data capabilities under the TINA, the government has asserted its capability to get the information necessary to conduct sound cost element and price analysis that is needed for examining contractor proposals. These DFARS changes were fully implemented on July 24, 2012.

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V. Should-Cost Will-Cost Implementation and Potential Impacts

Should-cost initiatives are envisioned to save money within contracts immediately being used to buy weapons systems, but, and this is new to the Should-cost initiative, also within the conduct and structure of the program offices and the contractor's business units actually producing the weapons systems. In this section, I present results from research, interviews, and analysis on whether the DoD is properly structured to adequately achieve the tenets of the Ashton Carter initiative. I also reiterate the pilot programs for should-cost, along with an analysis of the personnel, platforms, and protocols that are, or will be, required for efficiently conducting and capitalizing on should-cost initiatives. Since the initiative is relatively new and there is only a limited amount of published data specific to the personnel, platforms, and protocols, I have conducted interviews with key senior leaders identified as having a crucial role in implementing and executing the should-cost initiative. These interviews included, but were not limited to, the following:

- Mr. Shay Assad, Office of the Undersecretary of Defense, Acquisition Technology, and Logistics, DPAP, Director of Defense Pricing, Tuesday, August 7, 2012. (Assad, 2012);
- Mr. Elliott Branch, Assistant Secretary of the Navy, Research Development and Acquisition, Acquisition Policy, Thursday, August 9, and Friday, August 24, 2012. (Branch, 2012a, 2012b);
- CAPT Scott Hoffman, Director, Contracting (Code 2.0), U.S. Naval Space Warfare Command (SPAWAR), Thursday, August 9, 2012. (Hoffman, 2012);
- Mr. Charlie Williams, Director, Defense Contract Management Agency (DCMA), Tuesday, August 14, 2012; and
- Mr. Walt Brown, Naval Supply Systems Command (NAVSUP) Head of Contracting Agency (HCA) Policy Directorate, Wednesday, August 1, 2012.

I conducted additional interviews with contracting officers, contract specialists and program office personnel, and representatives from the DCMA and DCAA commands and field offices. These personnel wished not to be quoted directly, in most cases because of concerns that statements may not be in exact harmony with current policy initiatives or may be viewed negatively. The number of those expressing concerns over anonymity was small relative to the number contacted, but I've chosen not to identify them for Institutional Review Board compliance and to maintain the confidentiality of the interviewees.

A. Programs Initially Covered by Ashton Carter's Should-Cost Initiative

The implementation of will-cost and should-cost management initiatives was targeted at five ACAT I–III programs equally allocated in the Army, Navy, and Air Force. The five programs vary in their current maturity and milestone attainments. Specifically, the programs are reiterated in Table 7.

Table 7. Should-Cost Management Example (Pilot) Programs

Air Force	Army	Navy
Joint Strike Fighter (F-35)	Joint Air Ground Missile (JAGM)	Joint Strike Fighter (F-35)
Global Hawk Blocks 30 & 40 (GH BLK 30 & 40)	Black Hawk (UH-60M)	Hawkeye (E-2D)
Space Based Infrared System (SBIRS)	Ground Combat Vehicle (GCV)	Presidential Helo (VXX)
Evolved Expendable Launch Vehicle (EELV)	Paladin Product Improvement (PIM)	Littoral Combat Ship (LCS)
Advanced Extremely High Frequency (AEHF) Satellite System	NETT Warrior	Ohio Replacement Program

Note. The information in this table was adapted from the *Implementation of Will-Cost and Should Cost Management* memorandum, dated April 22, 2011 (Carter, 2011b).

B. Program and Contract Examination for Greater Efficiencies

According to Ashton Carter's *Implementation of Will-Cost and Should-Cost Management* memorandum, dated April 22, 2011, (see Appendix F for the complete memorandum) and based on interviews with senior leaders and policy-makers, should-cost management is now much broader in scope and methodology than that which is defined in FAR Part 15 and DFARS Part 215. Mr. Elliott Branch, Assistant Secretary of the Navy for Research, Development, and Acquisition (ASN[RD&A]), Deputy Assistant Secretary of the Navy for Acquisition Policy (DASN AP), stated during an interview for this project that the name *should-cost* is a misnomer for this initiative. The reason is that most seasoned professionals view should-cost in terms of FAR Part 15 and DFARS 215, but in fact, the current initiative encompasses much more scope and breadth than the traditional definition (Branch, 2012b). According to Ashton Carter's April 22, 2011, memorandum and other implementation guidance, the current initiative spans program, contract and contractor business unit, and contracting offices, as iterated in the following, as examples from the April 22, 2011, memorandum:

1. Scrutinize each contributing ingredient of program and cost and justify it. Why is it reported or negotiated. What reasonable measures might reduce it?
2. Particularly challenge the basis for indirect cost in contractor proposals.
3. Track recent program cost, schedule, and performance trends and identify ways to reverse negative trends.
4. Benchmark against similar DoD programs and commercial analogues (where possible), and against other programs performed by the same contractor or in the same facilities.
5. Promote Supply Chain Management to encourage competition and incentivize cost performance at lower tiers.
6. Reconstruct the program (government and contractor) team to be more streamlined and efficient.

7. Identify opportunities to breakout Government-Furnished versus Prime contractor-provided items.

8. Indentify items or services contracted through a second or third party vehicle. Eliminate unnecessary pass-through costs by considering other contracting options.

9. In the area of test:

   a. Take full advantage of integrated Developmental and Operational Testing (DOT) to reduce overall cost of testing;

   b. Integrate modeling and simulation into the test construct to reduce overall costs and ensure optimal use of National test facilities and ranges.

10. Identify and alternative technology/material that can potentially reduce development or life cycle costs for a program. Ensure the prime product contract includes the development of this technology/material at the right time. (Carter, 2011b)

While FAR Part 15 and DFARS 215 primarily address means to capture reductions in overhead (OH and G&A), Dr. Carter's initiative has expanded FAR and DFARS conceptually to include all aspects that can drive cost into a weapons systems acquisition—encompassing, but clearly not limited to, program, contract, operations and production, and test and evaluation, to name a few.

Elliott Branch, indicated that based on the scope of the new initiative that Ashton Carter picked the wrong name, stated that the name should be *cost consciousness* and not *should-cost*. Cost consciousness, considering all business activity and decisions that may drive cost, includes much more than traditional should-cost, and using a new name could alleviate misperceptions among the 1102 series contract specialists and other stakeholders that this initiative is solely a revitalization of a rather dormant provision of the FAR and DFARS that was already in existence. "Contracting Officers are used to seeing should cost in the FAR. It [this initiative] means something completely different" (Branch, 2012b).

Traditional FAR- and DFARS-driven should-cost is represented in Figure 5, wherein contracting was the primary focus of the protocol. Dr. Carter's should-cost initiative encompasses more than what was traditionally done under the existing FAR and DFARS protocols and is represented in Figure 6, with some of the myriad management and functional protocols that may be included within the contracting, program, and contractor spheres.

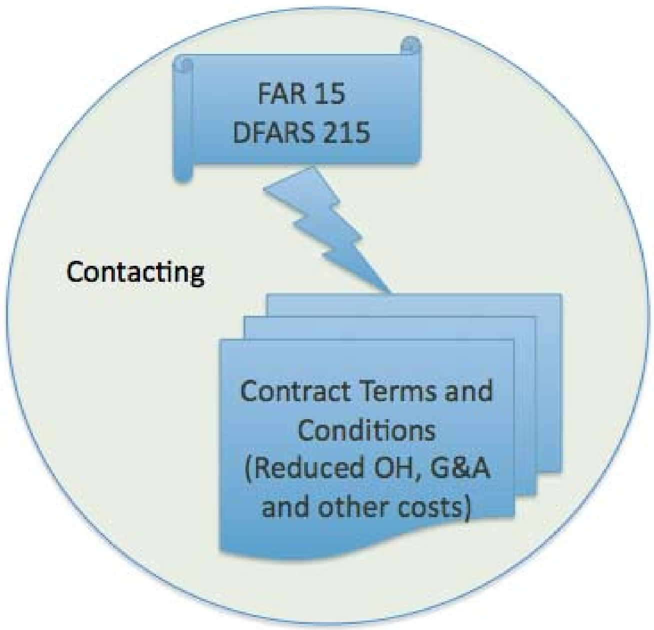

Figure 5. Traditional Should-Cost Driven by FAR Part 15 and DFARS 215
(Yoder, 2012)

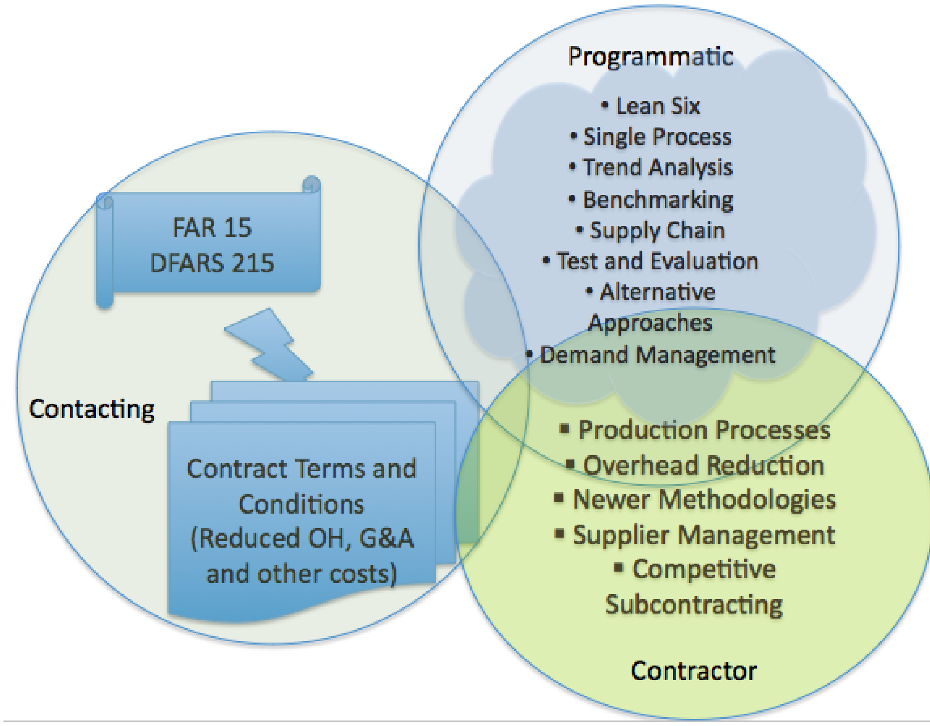

Figure 6. Should-Cost Cost Consciousness in Dr. Carter's Initiative
(Yoder, 2012)

C. Is There a Potential or Actual Conflict Between the Current Initiative and the FARA and FASA?

Prior sections in this report indicated potential negative effects that a commercial item acquisition mandates under the FARA and FASA, as implemented for federal contracting in FAR Part 12. The contracting officer's ability to determine fairness and reasonableness, a mandate for all contract actions regardless of price, may be negatively impacted in instances where adequate competition is not manifest on the instant contract action and yet protocols for acquiring commercial items are followed. The commercial item protocols eliminate the ability to obtain certified cost and pricing data, an often necessary element of sound pre-negotiation analysis, contract negotiation, and the ability to hold contractors accountable for the information they provide in response to requests for proposals. Without certified cost and pricing information in these limited, competitive, commercial item acquisition protocol buys, the contracting officer is relegated to utilizing second-tier methodologies to determine a fair and reasonable price.

During interviews for this research with senior officials including Shay Assad, Charlie Williams, and Mr. Elliott Branch, the apparent conflict between the ability to obtain information and commercial protocols are not as manifest as they may have been years ago when the FARA and FASA were first implemented. First, recent changes to DFARS Part 215 Section 4 (DFARS 215-400 series presented below) now allow for a review of the determination of fairness and reasonableness at a level above the contracting officer in instances where truly adequate competition is not achievable.

215.371-3 Fair and reasonable price.

(a) If there was "reasonable expectation …that two or more offerors, competing independently, would submit priced offers" but only one offer is received, this circumstance does not constitute adequate price competition unless an official at one level above the contracting officer approves the determination that the price is reasonable (see FAR 15.403-1(c)(1)(ii)).

(b) Except as provided in section 215.371-4(a), if only one offer is received when competitive procedures were used and the solicitation allowed at least 30 days for receipt of proposals (unless the 30-day requirement is not applicable in accordance with 215.371-4(b) or has been waived in accordance with section 215.371-5), the contracting officer shall—

(1) Determine through cost or price analysis that the offered price is fair and reasonable and that adequate price competition exists (with approval of the determination at one level above the contracting officer) or another exception to the requirement for certified cost or pricing data applies (see FAR 15.403-1(c) and 15.403-4). In these circumstances, no further cost or pricing data is required; or

(2)(i) Obtain from the offeror cost or pricing data necessary to determine a fair and reasonable price and comply with the requirement for certified cost or pricing data at FAR 15.403-4, in accordance with FAR provision 52.215-20. For acquisitions that exceed the cost or pricing data threshold, if no exception at FAR 15.403-1(c) applies, the cost or pricing data shall be certified; and

(ii) Enter into negotiations with the offeror as necessary to establish a fair and reasonable price. The negotiated price should not exceed the offered price."

Although the DFARS provision does provide some relief for contracting officers who decide on fairness and reasonableness and whether to award a contract, the capability to make the decision will still be based on information that is not certified current, accurate, and complete as of the date of agreement on price, as is the case under the TINA.

Mr. Shay Assad does not think that the lack of TINA certified cost and pricing data is an issue on major programs. Notwithstanding the preceding information, Mr. Assad stated that most contractors, in his experience (which is well documented), are reluctant under any circumstances to provide the government with inaccurate information pursuant to a contract proposal or negotiation. “Contractors are just as concerned over a False Claims Act violation as they are for a TINA violation. Contractors don’t want to purposefully submit any data that can be construed to be false. There is no incentive for them to do it” (Assad, 2012).

Additionally, most prospective contractors and actual contractors on the current ACAT I–III programs under Dr. Carter’s should-cost initiative have not claimed commercial item protocols under FAR Part 12, which prevents hindering the contracting officer from requesting or obtaining certified cost or pricing data where warranted.

Conceptually there is, in fact, a conflict, since the FARA and FASA commercial item acquisition is mandatory and statutory definitions allow for a broad interpretation of what constitutes a commercial item. However, in practice, the DoD hasn’t recently utilized commercial item protocols on major weapons systems nor on those under the new should-cost initiative.

D. Is the DoD Structured to Efficiently Implement Should-Cost?

Are PMs, the DCMA, and the DCAA able to fully support the initiatives in terms of personnel, platforms, and protocols?

What exactly do the terms *personnel*, *platforms*, and *protocols* mean? *Personnel* refers to having the right number and mix of personnel with the right credentials and experience that enables them to perform needed functions in DoD organizations. *Platforms* refers to the systems, including hardware and software systems, management information systems, report generation, and visibility to those that need them. *Protocols* refers to the statutory, regulatory, and business rules and processes that guide the DoD through the acquisition and contracting process. These three elements—personnel, platforms, and protocols— I first published in 2007 as the *Three Pillars of Integrative Success* for contingency contracting operations analysis and subsequently successfully utilized by the Air Force for analysis of green acquisition initiatives. In this report, I use this same framework to determine if key pillars of success are in place to ensure that Ashton Carter's should-cost initiative is met successfully, and if not, how any deficiencies can be addressed.

1. Personnel: The First Pillar of Integrative Success

According to Mr. Shay Assad, the should-cost initiative requires integrated cost analysis teams (ICAT). ICATs are all the relevant stakeholders and experts in cost analysis efforts within a program. In order to effectively implement should-cost, program offices must include all relevant stakeholders into ICATs, and the teams must be established early in a program, preferably during definition. FAR Part 15 calls traditional should-cost teams "Multi-functional Teams (MTs)"; however, this terminology has yet to be widely used and should be replaced on a broader scale with ICAT. Within the Navy, ICATs are being accomplished by establishing integration in engineering, program management, and pricing teams—specifically, an integration that includes a DCMA partnership with Navy Price Fighters. This integration requires a change in the traditional view of what a contracting officer can do alone. It also requires creating revolutions in the DCMA (Assad, 2012). The contracting officer must still be the pricing expert because ultimately, the decision to award and the implicit determination of fairness and reasonableness is vested in warranted authority at the contracting-officer level. What's new is the integration across offices and disciplines.

Shay Assad and Charlie Williams both point to a recent increase in personnel at the DCMA, driven in large part to the new should-cost initiative. The DCMA has increased its full-time-equivalent (FTE) workforce by over 350 personnel. The DCAA has increased its FTE by over 700 personnel, with an additional 600-personnel increased planned for the next five years. I expressed concern that these may be targeted in potential upcoming budget cuts, but both Assad and Williams indicated that these positions are necessary to effect future cost savings and not subject to potential cuts. Once trained, these personnel will support the new initiatives and should provide a positive return on investment.

Everyone I interviewed—including Shay Assad, Charlie Williams, Elliott Branch, Scott Hoffman, and others—indicated that DoD is not where it needs to be from a personnel standpoint. Although the numbers of personnel, as a whole, are increasing, training is being conducted in specific areas needed at the Defense Acquisition University (DAU)—and I'll add at the NPS—and what's lacking is the experiential component. Auditing in complex environments and interpreting the results into actionable items is lacking to some degree. Additionally, most of the individuals I interviewed stated that DoD does not have the right mix of personnel, meaning the right balance of skill sets in the inventory. Elliott Branch stated that we need production- and engineering-savvy personnel who can walk into a contractor's plant, examine processes, and make sound recommendations. In order to do that, we need people who have some type of production business acumen—even Lean-Six-Sigma analysis in production. It is a discipline that DoD used to have resident in systems commands but was lost during the last two decades. We need to reconstitute this capability. Additionally, we need business literacy—people who know how to appropriately allocate business contracts against time and space and who are fluent in cost and price analysis (Branch, 2012b).

In summary, key points extracted from my interviews regarding personnel include, but are not limited to, the following:

- Personnel must be integrated across program, contracting, and other disciplines in ICAT.
- The DCMA has increased by over 350 personnel and is scheduled to gain hundreds more, many in roles designed to support the should-cost initiative.
- The DCAA has increased by over 700 personnel, with more scheduled in the next five years.
- Training in critical disciplines, cost analysis, CAS, the FAR, and so forth is occurring at the DAU.
- Experience is lacking in the credentials of new hires, and only time on the job will rectify this deficiency.
- Key disciplines are still lacking, particularly in production and engineering specialists with skills to translate business changes into actionable savings in contract and program cost.
- Leadership is wholly committed to the should-cost initiative.

The DoD is getting the personnel pillar in place with the right number and right mix of people necessary to affect should-cost savings. However, there are still deficiencies in the total numbers of personnel on board, in experience levels, and in specific skill sets. These deficiencies are well known among senior leaders and policy-makers and are being addressed. It may take a decade to realize the changes in the personnel pillar in order to optimize the should-cost initiative.

2. Platforms: The Second Pillar of Integrative Success

Platforms represent the second pillar for success of the should-cost initiative. Platforms are the hardware and software systems needed to efficiently capture, analyze, and disseminate information necessary to managing critical aspects of programs and contracts in support of acquisitions. There are literally dozens of these platforms at work in the current acquisition arena. Within contracting, for example, the Standard Procurement System (SPS), also known as the DP2 system, is the platform utilized for the conduct of structuring and awarding contract actions. The Federal Procurement Data System (FPDS) is the platform for collecting, maintaining, and disseminating data on contract actions, including identification of key parameters of socio-economic data related to contract and modification awards.

A single platform system for the collection and utilization of data necessary for should-cost initiatives did not exist, until recently. The DCMA has deployed a new platform called the Contract Business Analysis Repository, or the CBAR. This platform was established in March 2011 per director of Defense Pricing Mr. Shay Assad. It is designed, primarily, to provide contracting officers with the necessary single-point access to key information spanning DoD-wide contracts and relevant information required for contracting officers to produce pre-negotiation business clearances, sometimes known as business clearance memorandum (BCM). CBAR data can be utillized as a pre-cursor to conducting negotiations pursuant to a contract award and data for the continued management of contracts with real-time actionable information available 24/7 via a secure network. Although the DCMA and DCAA will drive much of the data input, all DoD services and systems commands will have CBAR data as well as key roles in populating and managing data in the system.

As of August 2012, the Naval Sea Systems Command, Army Contracting Command, Air Armament Center, and Ogden Logistics Center were designated as pilot sites to test the system with procurement contracting officers (PCOs), contract specialists, buyers, price/cost analysts, and procurement analysts. According to Shay Assad, the CBAR platform can provide instant data to the key players, including to the PCO online and in real-time. Not only will DoD activities have data input but also corporations themselves will participate in populating data such as actual production data and associated cost. Naturally, this type of data must be strictly controlled to be compliant with confidentiality and proprietary data rights, particularly those under the Procurement Integrity Act restrictions on disclosure of source-selection sensitive information. Information will only be accessible for pre-authorized personnel using contractor commercial and government entity CAGE codes to verify need-to-know and precertification within the DoD. Currently, and as planned, data entry for contractor-provided information will be accomplished through DCMA personnel in order to validate the data and limit access to the system. Detailed policies and procedures for the system are under development and/or review. Users will register via the DCMA External Web Access Management (EWAM) system to request CBAR access at the web address (http://eadf.dcma.mil/ewam2/registration/setup.do).

Shay Assad also stated in our interview that "Information must be integrated from all sources, creating systems that coordinate and synchronize data with ICAT teams. We have never had this capability until now" (Assad, 2012).

According to Mr. Charlie Williams and DCMA sources, the CBAR will incorporate forward pricing rate agreements/recommendations for overhead, G&A, and other cost categories in real-time—initially, for major business units associated with the should-cost pilot programs, and later, to ACAT I–III program supporting contractor business units, along with data from supporting contracting offices, DCMA field offices, and the DCAA. Ideally, the system will capture in real-time all of the following for ACAT I–III contractors:

- forward pricing rate agreements/recommendations;
- latest contractor business systems;
- Contractor Purchasing System Review (CPSR) data, deficiencies, and corrective action plans (if warranted);
- company data including but not limited to
    - cash flow,
    - profit and/or fee, and
    - return on investment (ROI);

- results of recent contract negotiations (business clearance versus actual negotiation results);
- etc.

Note that the contractor and the PCO, among others, must load the data into the CBAR system. As in any system, managing and updating the data and having it stored in a readily accessible manner will be the key to successful deployment of the promising system.

3. Protocols: The Third Pillar of Integrative Success

Protocols are the statutes, regulations, policies, and business processes that allow acquisition to occur while adhering to standardized business rules with discretionary freedoms. Protocol includes statutes such as the FARA, the FASA, the TINA, and the Small Business Act; regulations including the FAR, DFARS, and service issued regulations; and policies such as the should-cost will-cost policy issued by Ashton Carter. The statutory, regulatory, and policy protocol hierarchy must work in harmony.

The protocols for the should-cost initiative are specifically structured to allow for the greatest flexibility in execution by the program and contracting offices and by the business units doing business with the government. The senior leadership interviewed for this project supported the concept of having flexibility at the program office for determining the types of events and targets that will best serve the interests of the government, based on the unique circumstances of each program. To paraphrase a senior program office manager, “This is much better than a one size fits all approach. Those usually don’t take into account specific criteria that may be best for a particular situation.”

On the downside, most senior leaders, including Elliott Branch and Charlie Williams, expressed concerns over the name of this initiative. *Should-cost* is most often associated with the FAR 15 and DFARS 215 contracting specific regulations. Will-cost and should-cost management is an ongoing process to achieve efficiencies in acquisition. Traditional FAR and DFARS should-cost reviews are defined and described as a special form of cost analysis done in support of contract negotiation. The FAR 15 should-cost is unique, however; it differs from traditional evaluation methods because traditional methods do not assume that a contractor's historical cost reflect efficient and economic operation. These reviews evaluate the economy and efficiency of the contractor's existing work force, materials, methods, equipment, real property, operating systems, and management (Boito, Brancato, Cook, & Graser, 2012).

But, Ashton Carter's initiative is more than the traditional FAR and DFARS protocol. The initiative should be called *cost consciousness*.

The FAR and DFARS protocols include many business disciplines across a large spectrum. Figure 6 is represented as Figure 7 shows the broader scope of Ashton Carter's should-cost will-cost initiative.

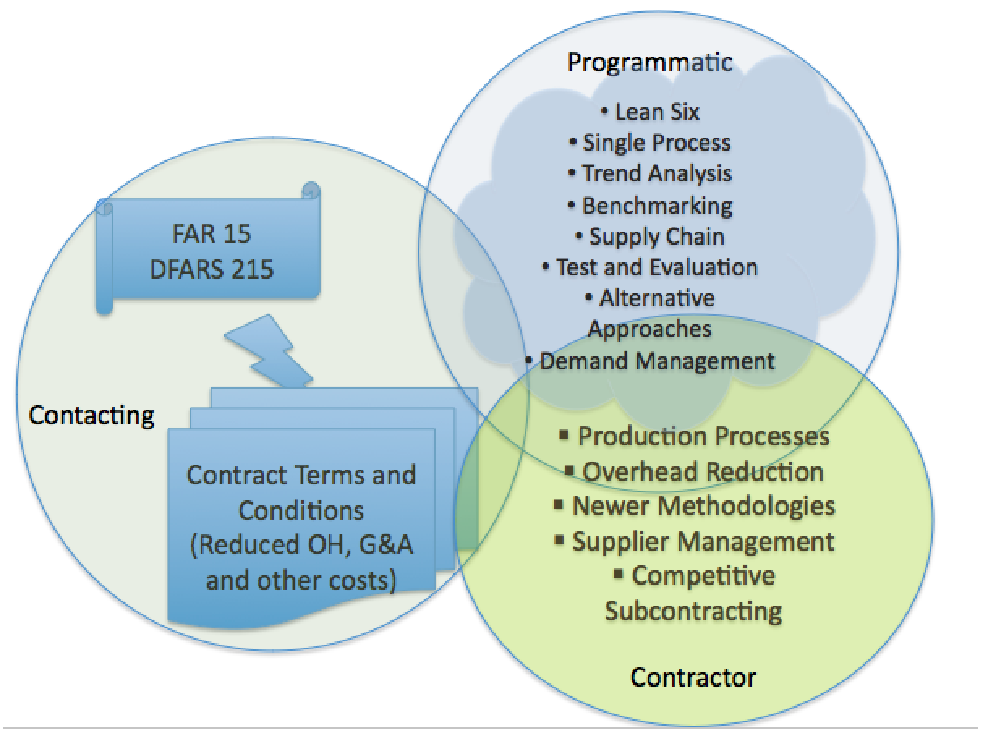

Figure 7.   Cost Consciousness is the Heart of Ashton Carter's Should-Cost
(Yoder, 2012)

In order to effectively implement should-cost, program offices must include all relevant stakeholders in should-cost into task-specific integrated process teams (IPTs), and the teams must be established early. FAR Part 15 calls these teams "Multi-functional Teams (MTs)"; however, this terminology has yet to be broadly used. These teams should be structured, as Mr. Shay Assad states, as ICATs in order to meet the broader definition and scope of the initiative.

Mr. Elliott Branch and CAPT Scott Hoffman both expressed the need to have the protocols in place in the development and specification writing stages, long before the first milestone. The early design requirements drive future production parameters and cost, many of which, once established, cannot be changed without introducing additional cost and/or delays in the program. Hoffman was adamant that earlier PM involvement in specification writing, and getting it correct, is paramount. Once the specification is proffered, it becomes the heart of the contract and governs the business relationship. "The contract is Commander's business. … [N]ew recognition of the importance of the contract is needed" (Hoffman, 2012).

FAR 15 and DFARS 215 traditional protocols for should-cost at the program review level should be conducted under and with the following considerations:

- some initial production has already taken place;
- the contract will be awarded on a sole-source basis;
- there are future-year production requirements for substantial quantities of like items;
- the items being acquired have a history of increasing cost;
- the work is sufficiently defined to permit an effective analysis, and major changes are unlikely;
- sufficient time is available to plan and adequately conduct the should-cost review; and
- personnel with the required skills are available or can be assigned for the duration of the should-cost review.

In the broader definition of *should-cost*, the concepts are implemented across a longer time horizon and the protocols are used cyclically and continually to identify and extract value and savings to all the parties, government and contractor. The broader-scope should-cost initiative protocol can be distilled into seven identified phases. Figure 8 presents these seven phases.

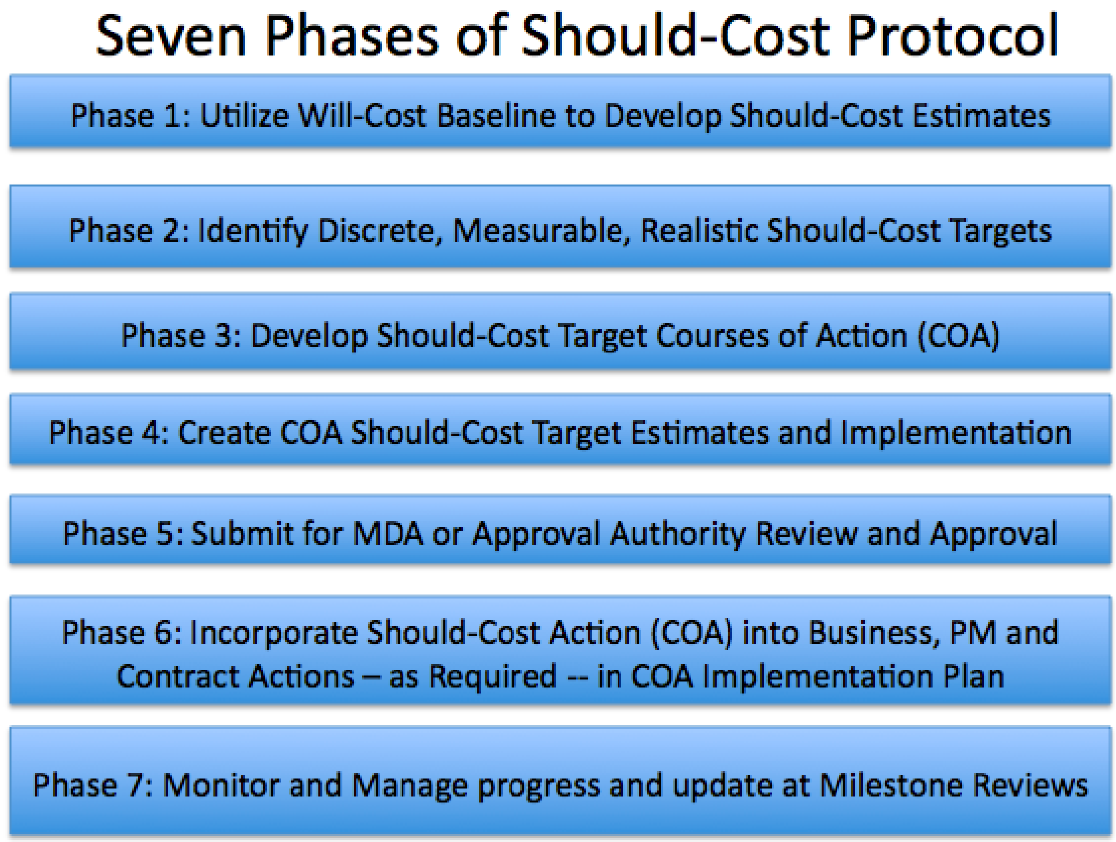

Figure 8. The Seven Phases of Should-Cost Protocol
(Yoder, 2012)

Of particular note is that much of the official published information on should-cost does identify the "what" that should be done—only the interviews and personal managerial experience identified the Phase 6 protocol, Incorporate Should-Cost Action into Business, PM and Contract Actions – as Required – in course of action (COA) Implementation Plan. Phase 6 is the "how" protocol that will require managerial expertise to time-phase specific identified actions into the business language and specific actions required to actually capture the anticipated savings.

For example, if a should-cost COA or target calls for a revision of manufacturing processes to gain efficiencies, any actual gains must then be reflected in a realizable savings to the government. Most often, the mechanism to capture savings—if actually achieved from the revision of manufacturing processes—is through the protocols for realizing such savings by the contract vehicle itself. Most contracting officers I interviewed recognized this, although some PM personnel were not as convinced that the contract itself was the means to capture the savings. If not in the contract, then how will that savings be captured?

During the execution of this research, when given the example discussed previously in the manufacturing process example, many PMs and PM office personnel expressed that lower overhead rates would result from the changes on manufacturing processes, although, they were uncertain as to how those would be reflected in actual savings. However, as contracting officers and I contend, the lower rates from the example can only be realized if and only if the contract type and structure is designed to capture those savings!

The should-cost protocols must encompass all ICAT stakeholders, including contracting, to be successful. Do not underestimate the role that a well-integrated contracting team will play in the efficacy and viability of the should-cost initiative.

In conclusion, the integrated pillars for success—personnel, platforms, and protocols—must be in place to fully realize the potential of the Ashton Carter should-cost initiative. Weaknesses in any or all of the pillars will have adverse effects on the DoD's ability to create the desired savings.

VI. Summary, Conclusions, and Recommendations

Ashton Carter, and those following him, are committed to achieving cost savings in our weapons systems acquisitions. The should-cost initiative is a mechanism to deal with escalating cost in market places that are increasingly characterized by limited or not true competition among manufacturers.

I designed this research to answer several primary questions, which are presented in the following section along with their associated answers. Also in the following section, I identify and propose many areas for further research.

A. Summary of Questions and Concise Research Findings

I address and answer the following questions pursuant to this research.

Question 1: What specific impact does Ashton Carter's should-cost initiative have on DoD contracting as related to commercial item protocols?

The FASA and the FARA created a preference for protocols for acquiring commercial items, which are now mandatory for use, statutorily and under FAR Part 12. The concern is that some data that PMs and contracting offices may want or need may not due to data and audit limitations imposed under protocols for acquiring commercial items, such as loss of the capability to obtain certified cost and pricing data under the TINA.

Senior leaders in acquisition and contracting are not concerned about the potential loss of capability, in that there are recent provisions and legislative changes in progress that will lessen the applicability of the FARA and FASA and of FAR Part 12 protocols in circumstances where the acquisition is limited by no true competition in the marketplace. Revisions for the applicability of commercial protocol in acquisitions where there is limited or no competition, is a potential change, which I have championed, along with many others in the field. Notwithstanding legislative changes in the applicability of the FARA and FASA, a contract strategy can be implemented by PMs and contracting officers that allows for a shift from cost reimbursement contracts, normally utilized early in pre-production and low-rate-production phases, to fixed-priced vehicles once cost data becomes available, usually at or just after (LRIP) occurs. A preferred strategy is utilizing fixed-price incentive contracts and specific clause and provision contract language to ensure that the should-cost savings realized can and will be captured in whole or in part by the contract vehicle. I cannot emphasize enough that unless the should-cost savings is captured, it really is not a realized savings. The legal relationship and capabilities of the government and contractor are defined in and by the contract; the capability must be built into the language and structure of the contract. At this time, the best overarching vehicle to accomplish the savings at or after LRIP is through a fixed-priced-incentive-fee (FPIF) or similar vehicle. Note that this research is not intended to explore the FPIF or other vehicles. Those wanting more details on contract types can explore numerous publications on the topic.

This does not mean that there is no conflict between the FARA and FASA and the should-cost initiative; there is. However, it is how we deal with the conflict, via the previously discussed strategy, that determines the magnitude of the conflict and potential capability to obtain information that will ultimately be used in contract negotiations or administration to affect and realize savings. DoD can and should chart an acquisition strategy that will allow for the transition to fixed-priced contract types during full production, and we can still capture emerging realized savings with the FPIF. A senior official I interviewed who wished not to be specifically identified on this particular issue states that senior leaders in DoD acquisition are working with legislators to eliminate the broad definition of *commercial item* that is expressed in the FARA and FASA—and that has caused the conflict and dilemma on major weapons systems acquisition and contracting strategies and execution.

Question 2: What are the data requirement provisions under commercial item acquisition protocols versus protocols for acquiring non-commercial items?

The data requirement provisions are based primarily on the statutory and regulatory provisions of the FARA and FASA, and FAR Part 12. These provisions eliminate the applicability of the TINA provisions requiring contractors to provide certified cost and pricing data on negotiated contracts and modifications exceeding established monetary thresholds. The TINA provisions also precluded DCMA and DCAA some audit rights on commercial item acquisitions.

The potential loss of audits and cost analysis on contracts transitioning to FAR Part 12 commercial item acquisition fixed-priced contracts, as is mandated under the FARA and FASA by definition, could impair if not outright preclude key mechanisms and protocols needed for the should-cost initiative. As an example, a loss of capability could include the DCMA (1) making recommendations for process improvements and conducting audits to determine actual cost savings incurred at a contractor's business unit but (2) not having the authority to review contractors' actual records pursuant to a formal should-cost audit under FAR Part 15 and DFARS Part 215.

An alternative strategy and FPIF-type contracts, along with defined audit rights under FAR Part 15 and DFARS Part 215, should be utilized by DoD on ACAT I-II programs to ensure that any potential loss of data examination is removed or mitigated. Ultimately, a revision to the FARA and FASA application to major weapons systems in quasi-competitive and non-competitive markets must be enacted by Congress and incorporated into the FAR to eliminate any loss of government capability and remove any potential conflict in data and audit rights.

Question 3: Is the should-cost requirement approach, as defined in the memoranda achievable under the commercial item acquisition provisions of

the FARA and the FASA, or does the memorandum call for another acquisition strategy using protocols for acquiring non-commercial items?

And **Question 4: If the should-cost memoranda initiatives are to be achieved, what specific actions and strategies must contracting offices take to support the mandate?**

Questions 3 and 4 are similar and answered by the response to question 2, above and in the following.

In essence, without a legislative change that closes the broad definition of *commercial item*, the PM and contracting strategy must call for an integration of review and audit rights defined in the contracts at or near Milestone B and/or LRIP. Normally, the FARA and FASA would assume a strategy of morphing to a FAR Part 12 commercial contract at milestone B. This can still be accomplished if warranted and in the best interests of the government. However, if more data and audit capability are needed for the realization of should-cost target attainment, then FAR Part 15 and subsequent deeper audit capability, along with other provisions such as the TINA, may be more appropriate. These decisions must be iterated within each acquisition and associated contract strategy and as part of milestone review. The ICAT must be in place to help make these decisions, although the PCO, with warrant authority, will ultimately decide on contract type and execution.

Question 5: Are the DCMA and DCAA able to fully support this initiative, and what specific actions must they take?

It is important to point out that a balanced analytical framework was utilized to help answer this question. The three pillars of integrative success—personnel, platforms, and protocols—all must be structured and work in harmony in order to have any major policy success.

Both the DCMA and DCAA are in the long-term process of recapitalizing their workforce, in large part, to allow for should-cost initiative capabilities. As Mr. Charlie

Williams and Mr. Elliott Branch stated in my interviews with them, it is not enough to have the people—credentialed people with experience are the key. New personnel hires are getting state-of-the-art training and education—from the DAU and NPS—but the experience component is not something that can be attained in the classroom. The recapitalization will take years and is currently part of the strategies at these organizations.

The platforms are being established by DoD, including DCMA, particularly including CBAR—the brand new integrated system that will capture essential data needed for sound business analysis and contract negotiations and that is specifically targeted for should-cost initiatives. The challenge will be to ensure that the data is in a useful and readily retrievable format and is managed for currency and relativity—no small task. Since the system is just now being fielded and will take a few years to fully populate with essential data, contractors and government personnel are required to input data, a function that can and should be defined and monitored by the ICATs and managed to a large degree by the DCMA.

The should-cost protocols are in place, albeit with a potential conflict with the FARA and FASA, but the potential conflict may be mitigated by PMs and PCOs when the correct strategy is selected, based on specific should-cost targets and the need for information derived from non-commercial versus commercial contract strategies. The DCMA and DCAA can work within the overarching strategy and provisions allowed via specific contract language and protocol, whether in FAR Part 12 or FAR Part 15. Specific protocols for optimizing should-cost can best be identified early in the strategy development and should be reviewed at each milestone or when business conditions warrant. The basic seven-step protocol I've identified through literature and interview analysis may be used as a template. This protocol includes integrating contracting protocols with the ICAT developed should-cost initiatives for each specific program and contracting strategy.

So, are the DCMA and DCAA ready to implement the should-cost initiative? They are making solid and demonstrable progress towards it.

Question 6: What specific findings and recommendations can be proffered to effectively implement the should-cost initiative?

I make the following findings and recommendations pursuant to the results of this research.

- **Finding #1 FARA and FASA**
  There is a conflict in the specific definition of *commercial item acquisition* that allows for major weapons systems procurements in limited- or non-competitive marketplaces to be characterized as commercial under FARA and FASA statutes. However, any potential negative effect of this conflict is mitigated by current policies that call for advanced approval of commercial item acquisition strategies on weapons systems procurements to ensure that adequate competition can be met.

- **Recommendation #1 FARA and FASA**
  Legislation must be introduced and passed to revise the FARA and FASA definitions of what qualifies as a commercial good or service, to include phrases such as "must have demonstrable track record of recent sales in the commercial marketplace and/or to the general public." Several senior leaders interviewed during the execution of this research support this recommendation but wished not to be cited directly, since there are current efforts to change the statutory language.

- **Finding #2: Personnel**
  The DCMA, the DCAA, and the Services have made, and are continuing to make, significant progress at re-capitalizing their workforce with credentialed personnel in key functional specialties needed to support the should-cost initiative. Key functional specialties include, but are not limited to, auditors and production specialists, with additional specialties in Lean Six Sigma, process management, and so forth.

- **Recommendation #2: Personnel**
  With the advent of impending budget cuts and potential austerity measures, the additional increases in personnel and future hires may be targets for freeze or reduction. The personnel increases must be protected against any potential cuts to ensure that cost consciousness and reduction in systems acquisition cost can mature and flourish—continue to re-capitalize the workforce.

- **Finding #3: Platforms**
  The CBAR data system has recently been deployed by DCMA. This system is designed for the capture, dissemination, and analysis of meaningful cost and pricing, production, corporate operations, and other data essential for should-cost efforts and the support of contract business case development and negotiations. This platform was established in March 2011 per Director of Defense Pricing Shay Assad. It is designed, primarily, to provide contracting officers with the necessary single-point access to key information spanning DoD-wide contracts and relevant information required for contracting officers to produce pre-negotiation business clearances, sometimes known as business clearance memorandum (BCM), as a pre-cursor to conducting negotiations pursuant to a contract award, and data for the continued management of contracts with real-time actionable information available 24/7 via a secure network. Although the DCMA and DCAA will drive much of the data input, all DoD services and systems commands will have it, and have key roles in populating and managing data in the system.

- **Recommendation #3: Platforms**
  The CBAR system must be funded to maintain accurate and recent data. The data must be relevant and germane to the should-cost effort, which will take quality personnel to define, collect, and populate. Continued management and maintenance of this system is imperative and must have high-level support.

- **Finding #4: Protocols**
  Notwithstanding the FARA and FASA findings and recommendations mentioned previously, the protocols for should-cost analysis have been promulgated with an emphasis on flexibility. This flexibility allows program offices the highest degree of latitude in determining should-cost targets and how to achieved those targets. Flexibility is a huge plus, according to senior leaders I interviewed pursuant to this research. As one official noted, “This approach is much better than ramming a ‘one size fits all’ mandate on the program and contracting offices.” The tailored approach will allow for exploration of savings potentials unique to the business units, contracts, and program office objectives. The results, according to should-cost memoranda, will be kept close-hold for internal use only—because some of the data may be considered contractor proprietary under the Federal Procurement Integrity Act provisions. However, that information may be shared within the government for future target savings and contract negotiations.

- **Recommendation #4: Protocols**
  Continue to emphasize Service program office entrepreneurship at

developing its individual targets. Share information, internally, with other program and contracting offices via the CBAR.

- **Finding #5: Should-Cost Target Savings Holdback**
  The should-cost initiative calls for withholding from each should-cost germane acquisition program, the difference, or delta, between the will-cost baseline and the should-cost target. The idea is that this captured savings, once realized, can be utilized by DoD, to buy more weapons within the program, provide for system upgrades, or be re-programmed for other uses. The amount of holdback is not for external dissemination, according to should-cost memoranda. Many senior practitioners in program, budget and finance, and contracting are skeptical about this holdback idea—there is expressed concern that if not managed properly, holdback funds may be re-allocated for purposes other than improvements in the immediate weapons systems acquisition, thus creating a huge disincentive for program offices to set aggressive should-cost targets. It is too early in the initiative to determine whether or not holdback funds are actually being applied to PM improvements and additional weapons systems, or being re-allocated for other purposes outside of the PM.

- **Recommendation #5: Should-Cost Target Savings Holdback**
  Senior leaders must provide incentives for the program offices to set aggressive should-cost targets, wherein the will-cost versus should-cost potential savings have a guaranteed amount or percentage, I'll call it a cost savings incentive (CSI), that can be used for program purposes and objectives. The program office can utilize the CSI amount, which perhaps represents either the entire or a portion of the total delta. Of course, appropriate approval and statutory provisions respecting appropriation and authorization, for additional weapons, additional improvements, and local initiatives that will act as incentives for continued efforts at improving operations must be addressed.

- **Finding #6: Metrics and Determining Success**
  Senior leaders I interviewed agree that meaningful metrics to determine the efficacy of the should-cost initiative are needed by Milestone authorities, PMs and PCOs , although these metrics have yet to be developed and universally promulgated.

- **Recommendation #6: Metrics and Determining Success**
  Sound metrics for cost-reductions, efficiency gains and such, must be developed and implemented to determine the efficacy of the should-cost initiative. At a minimum, an ROI can be developed and utilized, capturing DoD's total loaded labor cost to conduct the should-cost efforts, including organic and contractor personnel dedicated to the efforts, against actual target savings achieved. The DCMA has utilized

a similar rough order of magnitude (ROM) metric for many of its initiatives. For example, one DCMA metric determined that for each dollar of audit and management capability expended, $6 were either recovered or avoided as contract expenditures—an ROI of 1:6. Other metrics I recommend include continued examination of the three pillars of personnel, platforms, and protocols against the derived capability or utility they provide. Another metric I recommend is determining potential cost savings from commercial item acquisition protocol strategy versus the cost of should-cost implementation and use of non-commercial acquisition protocol strategy, and of course, actual savings to date.

B. Areas for Additional Research

This research was limited in scope to the specific areas posed in the research questions and the areas closely related to those questions. However, many additional areas for research have become apparent from the interviews and analysis of this research. Some of the prominent areas for further research are the following:

- Determine best methodologies for use of captured target savings and means to incentivize program and contracting offices to set and meet aggressive savings targets.
- Identify and promulgate the best metrics for the should-cost initiative, to include program, contracting, and business-unit-centric measures.
- Provide DCMA and DCAA research support in personnel credential, training, and retention for long-range recapitalization objectives.
- Conduct a detailed analysis of the should-cost pilot programs' actual will-cost and should-cost target savings and means by which those savings are captured, such as production improvements, Lean Six Sigma initiatives, and so forth. This could be on a program-by-program basis or by Service for scope and magnitude considerations.

C. Final Thoughts and Conclusion

Through this research project, I have determined that there is a conflict in statutory and regulatory provisions defining *commercial items* that could potentially have a negative impact on the DoD's ability to implement some should-cost cost reduction actions due to a lack of TINA provisions and specific audit rights reserved under non-commercial negotiated contracts. The actual impact of the conflict has been minimal, since recent guidance (e.g., DFARS 215) calls for higher approval for commercial item acquisition strategies. Notwithstanding, FARA and FASA statutes take precedence, and as such, the statutory language should be revised to tighten the definition of *commercial item* to those goods and/or services that have a recent track record of sales in commercial markets and/or to the general public.

Ashton Carter's should-cost initiative is a very promising and potentially sound means to capture real savings on major weapons systems acquisitions, particularly when business units providing production and services operate in quasi- or non-competitive markets. The should-cost initiative is a long-term endeavor that must have continued leadership and support, both managerially and financially. The true benefits of the initiative, perhaps defined as an ROI, may not be realized for years to come, but the effort is surely needed and, if nurtured properly, should succeed.

Surprisingly, in his September 5, 2012, *Defense News* report, Zachary Fryer-Biggs quoted USD(AT&L) Frank Kendall's ComDef 2012 conference speech in which Kendall made the following statement:

> [A] new version of the Pentagon's Better Buying Power, with some of the tenets as the original[,] … [w]ill be rolling out shortly. We've learned from the experience of the last couple of years that some of those things worked very well, some of them have not turned out to be all that productive, others have been difficult to implement." He continued, "I think that nothing, nothing, works better than competition to drive cost down. As long as we have competition, we will be better off. (as cited in Fryer-Biggs, 2012)

However, as I have clearly presented in this research, many of our major weapons systems providers operate in non-competitive environments. Sans increasing the industrial base, the best approach is a continued push with the program, contract, and business unit should-cost alliance.

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Appendix A. FAR 15.407-4 -- Should-Cost

15.407-4 Should-cost review.

(a) General.

(1) Should-cost reviews are a specialized form of cost analysis. Should-cost reviews differ from traditional evaluation methods because they do not assume that a contractor's historical cost reflect efficient and economical operation. Instead, these reviews evaluate the economy and efficiency of the contractor's existing work force, methods, materials, equipment, real property, operating systems, and management. These reviews are accomplished by a multi-functional team of Government contracting, contract administration, pricing, audit, and engineering representatives. The objective of should-cost reviews is to promote both short and long-range improvements in the contractor's economy and efficiency in order to reduce the cost of performance of Government contracts. In addition, by providing rationale for any recommendations and quantifying their impact on cost, the Government will be better able to develop realistic objectives for negotiation.

(2) There are two types of should-cost reviews—program should-cost review (see paragraph (b) of this subsection) and overhead should-cost review (see paragraph (c) of this subsection). These should-cost reviews may be performed together or independently. The scope of a should-cost review can range from a large-scale review examining the contractor's entire operation (including plant-wide overhead and selected major subcontractors) to a small-scale tailored review examining specific portions of a contractor's operation.

(b) Program should-cost review.

(1) A program should-cost review is used to evaluate significant elements of direct cost, such as material and labor, and associated indirect cost, usually associated with the production of major systems. When a program should-cost review is conducted relative to a contractor proposal, a separate audit report on the proposal is required.

(2) A program should-cost review should be considered, particularly in the case of a major system acquisition (see Part 34), when—

(i) Some initial production has already taken place;

(ii) The contract will be awarded on a sole source basis;

(iii) There are future year production requirements for substantial quantities of like items;

(iv) The items being acquired have a history of increasing cost;

(v) The work is sufficiently defined to permit an effective analysis and major changes are unlikely;

(vi) Sufficient time is available to plan and adequately conduct the should-cost review; and

(vii) Personnel with the required skills are available or can be assigned for the duration of the should-cost review.

(3) The contracting officer should decide which elements of the contractor's

operation have the greatest potential for cost savings and assign the available personnel resources accordingly. The expertise of on-site Government personnel should be used, when appropriate. While the particular elements to be analyzed are a function of the contract work task, elements such as manufacturing, pricing and accounting, management and organization, and subcontract and vendor management are normally reviewed in a should-cost review.

(4) In acquisitions for which a program should-cost review is conducted, a separate program should-cost review team report, prepared in accordance with agency procedures, is required. The contracting officer shall consider the findings and recommendations contained in the program should-cost review team report when negotiating the contract price. After completing the negotiation, the contracting officer shall provide the ACO a report of any identified uneconomical or inefficient practices, together with a report of correction or disposition agreements reached with the contractor. The contracting officer shall establish a follow-up plan to monitor the correction of the uneconomical or inefficient practices.

(5) When a program should-cost review is planned, the contracting officer should state this fact in the acquisition plan or acquisition plan updates (see Subpart 7.1) and in the solicitation.

(c) Overhead should-cost review.

(1) An overhead should- cost review is used to evaluate indirect cost, such as fringe benefits, shipping and receiving, real property, and equipment, depreciation, plant maintenance and security, taxes, and general and administrative activities. It is normally used to evaluate and negotiate an FPRA with the contractor. When an overhead should-cost review is conducted, a separate audit report is required.

(2) The following factors should be considered when selecting contractor sites for overhead should-cost reviews:

(i) Dollar amount of Government business.

(ii) Level of Government participation.

(iii) Level of noncompetitive Government contracts.

(iv) Volume of proposal activity.

(v) Major system or program.

(vi) Corporate reorganizations, mergers, acquisitions, or takeovers.

(vii) Other conditions (*e.g.,* changes in accounting systems, management, or business activity).

(3) The objective of the overhead should-cost review is to evaluate significant indirect cost elements in-depth, and identify and recommend corrective actions regarding inefficient and uneconomical practices. If it is conducted in conjunction with a program should-cost review, a separate overhead should-cost review report is not required. However, the findings and recommendations of the overhead should-cost team, or any separate overhead should-cost review report, shall be provided to the ACO. The ACO should use this information to form the basis for the Government position in negotiating an FPRA with the contractor. The ACO shall establish a follow-up plan to monitor the correction of the uneconomical or inefficient practices.

Appendix B. Carter-Memo-on-Defense-Spending-28-Jun-2010

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION, TECHNOLOGY AND LOGISTICS

JUN 28 2010

MEMORANDUM FOR ACQUISITION PROFESSIONALS

SUBJECT: Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending

I have written to you previously to emphasize, with President Obama and Secretary Gates, that your highest priority is to support our forces at war on an urgent basis. Over the last year, the Department has also worked to reform its acquisition system, including implementing the Weapon Systems Acquisition Reform Act. Today I write to give direction on another important priority: delivering better value to the taxpayer and improving the way the Department does business.

We are a nation at war, and the Department does not expect the defense budget to decline. At the same time, we will not enjoy the large rate of growth we experienced during the years after September 11, 2001. We must therefore abandon inefficient practices accumulated in a period of budget growth and learn to manage defense dollars in a manner that is, to quote Secretary Gates at his May 8, 2010 speech at the Eisenhower Library, "respectful of the American taxpayer at a time of economic and fiscal distress."

This reality, combined with a determination to take care of our service members and avoid major changes in force structure, has led the Secretary and Deputy Secretary to launch an efficiencies initiative in the Department. The initiative requires the Department to reduce funding devoted to unneeded or low-priority overhead, and to transfer these funds to force structure and modernization so that funding for these warfighting capabilities grows at approximately three percent annually. This is the rate of growth needed historically to continue to give the troops what they need.

Some of these savings can be found by eliminating unneeded programs and activities; and, indeed, the Department's leadership has already taken strong action in this area and will need to do more. But other savings can be found within programs and activities we do need, by conducting them more efficiently. Deputy Secretary Lynn expects that two-thirds of the savings transferred to warfighting accounts should come about this way. Pursuing this kind of efficiency is the purpose of my message today to the Department's acquisition professionals. We need to restore affordability to our programs and activities. I would like us to embark upon a process today to identify and then act on steps we can take to obtain two to three percent net annual growth in warfighting capabilities without incurring a commensurate budget increase by identifying and eliminating unproductive or low-value-added overhead; in effect, doing more without more.

The Department is spending approximately $700 billion per year for our nation's defense. Approximately $300 billion of those funds are spent within the Department's walls – on the salaries and benefits of military personnel and civilian employees, and on the buildings and facilities within which they work. But the remainder – $400 billion – is spent on contracts issued to entities outside of the Department of Defense. This $400 billion is divided about equally between products (e.g., weapons, electronics, fuel, and facilities) and services (e.g., IT services, knowledge-based services, facilities upkeep, and transportation). We, the Department's acquisition officials, agree to these contracts on behalf of the taxpayer. Each of these contracts contains a statement of the services or products it is procuring; an arrangement between the government and the contractor for how the costs of those items will be paid; and the overheads, indirect charges, and fees that complete the business transaction and make it possible for the defense industry to be economically viable.

The guidance memorandum I plan to issue will require each of you, as you craft and execute the Department's contracts in coming years, to scrutinize these terms to ensure that they do not contain inefficiencies or unneeded overhead. The guidance will give you specific features to examine and targets to hit in the pursuit of greater efficiency. The guidance will focus on getting better outcomes, not on our bureaucratic structures. But it must also take note of where the government's processes and regulations contribute to inefficiency in our business relationships.

Today I want to share with you the preliminary outlines of this guidance, so that I can have the benefit of your experience and perspective before I issue it in final form. I am also asking our partners in industry for their thoughts and input. I am also sharing these plans with the Congress. A process of analysis and dialogue is necessary to make sure our actions are effective and soundly based.

I want to emphasize two points about this initiative:

First, the savings we are seeking will not be found overnight. It has taken years for excessive costs and unproductive overhead to creep into our business processes, and it will take years to work them out. We will be concentrating on new contracts as they are awarded in coming years, to ensure that they reflect new efficiencies. Some of the targets and objectives we decide to pursue will only be able to be achieved on a timeline of several years. On the other hand, Secretary Gates has explained clearly why we need to embark now. And the earlier we embark, the easier it will be to succeed.

Second, we in the Department cannot succeed at this task alone. We need the input and involvement of industry, and I will be actively seeking their support and ideas. We do not have an arsenal system in the United States: the Department does not make most of our weapons or provide many non-governmental services essential to warfighting – these are provided by private industry. Our industry partners are patriots as well as businessmen. This initiative should contribute to the continuing vitality and financial viability of the defense industry in the era ahead by aligning the direction and incentives of the Department and industry. It is intended to enhance and incentivize efficiency and total factor productivity. Most of the rest of the economy exhibits productivity growth, meaning that every year the buyer gets more for the same amount of money. So it should be in the defense economy. Increased productivity is good for both industry and government. So also is avoiding budget turbulence and getting more programs into stable production.

We also need the help of Congress. Members of Congress observe with dismay as they are asked to approve ever-increasing funding for the very same product or service. We will need their input and support to make necessary adjustments that will in some cases be difficult.

What is contained in the attached charts is an initial framework for restoring affordability to defense. I will be refining this framework over coming weeks, in full consultation with you, with industry, with Congress, and with outside experts and leaders. I plan to issue a final version of this mandate later this summer.

Realizing the objective of this initiative will be a formidable endeavor. But it is imperative. Secretary Gates, Deputy Secretary Lynn, and I have concluded that we cannot support our troops with the capabilities they need unless we achieve greater efficiency.

Ashton B. Carter

Objectives

- Deliver the warfighting capability we need for the dollars we have
- Get better buying power for warfighter and taxpayer
- Restore affordability to defense goods and services
- Improve defense industry productivity
- Remove government impediments to leanness
- Avoid program turbulence
- Maintain a vibrant and financially healthy defense industry

Obtain 2-3% net annual growth in warfighting capabilities without commensurate budget increase by identifying and eliminating unproductive or low-value-added overhead and transfer savings to warfighting capabilities. Do more without more.

Providing Incentives for Greater Efficiency in Industry

- **LEVERAGING REAL COMPETITION:** Avoid directed buys and other substitutes for real competition. Use technical data packages and open systems architectures to support a continuous competitive environment.
- **USING PROPER CONTRACT TYPE FOR DEVELOPMENT AND PROCUREMENT:** Phase out award-fee contracts and favor fixed-price or cost-type incentive contracts in which government and industry share equally in overruns and underruns, and overruns have analytically-based caps. Use cost-reimbursement contracts only when either government requirements or industry processes cannot be adequately specified to support pricing. Adjust sole-source fixed-price contracts over time to reflect realized costs. Work down undefinitized contract actions. Seek authority for multi-year contracts where significant savings are possible.
- **USING PROPER CONTRACT TYPE FOR SERVICES:** Phase out Time and Material and sole-source ID/IQ contracts wherever possible. Utilize fixed-price performance-based contracts when requirements are firm and can be measured, with payments tied to performance. Utilize fixed-price level of effort or cost-plus-fixed-fee contracts (with profit/fee tied to weighted guidelines) when requirements are still being defined. Award fees should be used only by exception. Maximize the use of multiple-source, continuously competitive contracts.
- **ALIGNING POLICY ON PROFIT AND FEE TO CIRCUMSTANCE:** Align opportunity to earn profits/fees to both value to the taxpayer and risk to the contractor. Apply weighted guidelines to profit/fee levels. Reward higher productivity with higher profits. Incentivize investment in innovation.
- **SHARING THE BENEFITS OF CASH FLOW:** Ensure that taxpayers receive adequate consideration (price reductions) for improved cash flows. Progress payments must reflect performance but can be increased above customary levels in return for consideration by the contractor. Reduce over time the gap between proposed and actual rates in forward price rate agreements.
- **TARGETING NON-VALUE-ADDED COSTS:** Identify and eliminate non-value-added overhead and G&A charged to contracts. Limit fees for subcontractor management to reflect actual value provided (risk assumed by prime and continuous subcontractor risk reduction). Limit B&P allowable costs in sole source contracts and encourage effective use of IRAD.
- **INVOLVING DYNAMIC SMALL BUSINESS IN DEFENSE:** When establishing multiple award contracts for services, make every effort to provide for small business participation. If at least two small businesses are deemed capable of performing on such a contract, consider setting aside that work for competition among them.
- **REWARDING EXCELLENT SUPPLIERS:** Emulate the Navy's pilot program to provide special benefits to consistently excellent industrial performers.

Adopting Government Practices that Encourage Efficiency

- **ADOPTING "SHOULD-COST" AND "WILL-COST" MANAGEMENT:** Use historically informed independent cost estimation ("will-cost" estimates) to inform managing of programs to cost objectives ("should-cost" estimates).
- **STRENGTHENING THE ACQUISITION WORKFORCE:** Achieve SECDEF goal of adding to government acquisition workforce with increased skill levels. Leverage unique qualities of non-profit FFRDCs and UARCs to augment acquisition workforce capability.
- **IMPROVING AUDITS:** Improve consistency and quality of government audits, and focus them on value-added content.
- **MANDATING AFFORDABILITY AS A REQUIREMENT:** In new programs such as the SSBN-X nuclear missile submarine, the Presidential Helicopter, the Ground Combat Vehicle, and the Air Force/Navy Long Range Strike Family of Systems, cost considerations must shape requirements and design.
- **STABILIZING PRODUCTION RATES:** To ensure more programs are in stable, economically favorable rates of production and avoid cost escalation, program managers may not adjust production rates downward without head of component authority.
- **ELIMINATING REDUNDANCY WITHIN WARFIGHTING PORTFOLIOS:** Emulate the Army's Precision Fires Capability Portfolio approach to identify where multiple programs are pursuing similar objectives.
- **ESTABLISHING SENIOR MANAGERS FOR PROCUREMENT OF SERVICES:** Follow the Air Force lead in establishing a Program Executive Officer for services in each DOD component to focus on improving policy and practice in this high-dollar-value area.
- **PROTECTING THE TECHNOLOGY BASE:** Protect the future by sustaining investment while focusing on high value-added work.

Appendix C. Dr-Carter-Memo-d20100914acquisitionprocurement

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SEP 1 4 2010

ACQUISITION, TECHNOLOGY AND LOGISTICS

MEMORANDUM FOR ACQUISITION PROFESSIONALS

SUBJECT: Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending

On June 28, I wrote to you describing a mandate to deliver better value to the taxpayer and warfighter by improving the way the Department does business. I emphasized that, next to supporting our forces at war on an urgent basis, this was President Obama's and Secretary Gates' highest priority for the Department's acquisition professionals. To put it bluntly: we have a continuing responsibility to procure the critical goods and services our forces need in the years ahead, but we will not have ever-increasing budgets to pay for them. We must therefore strive to achieve what economists call productivity growth: in simple terms, to DO MORE WITHOUT MORE. This memorandum contains specific Guidance for achieving the June 28 mandate.

Secretary Gates has directed the Department to pursue a wide-ranging Efficiencies Initiative, of which this Guidance is a central part. This Guidance affects the approximately $400 billion of the $700 billion defense budget that is spent annually on contracts for goods (weapons, electronics, fuel, facilities etc., amounting to about $200 billion) and services (IT services, knowledge-based services, facilities upkeep, weapons system maintenance, transportation, etc., amounting to about another $200 billion). We estimate that the efficiencies targeted by this Guidance can make a significant contribution to achieving the $100 billion redirection of defense budget dollars from unproductive to more productive purposes that is sought by Secretary Gates and Deputy Secretary Lynn over the next five years.

Since June, the senior leadership of the acquisition community – the Component Acquisition Executives (CAEs), senior logisticians and systems command leaders, OSD officials, and program executive officers (PEOs) and program managers (PMs) – has been meeting regularly with me to inform and craft this Guidance. We have analyzed data on the Department's practices, expenditures, and outcomes and examined various options for changing our practices. We have sought to base the specific actions I am directing today on the best data the Department has available to it. In some cases, however, this data is very limited. In these cases, the Guidance makes provision for future adjustments as experience and data accumulate so that unintended consequences can be detected and mitigated. We have conducted some preliminary estimates of the dollar savings anticipated from each action based on reasonable and gradual, but steady and determined, progress against a clear goal and confirmed that they can indeed be substantial.

Changing our business practices will require the continued close involvement of others. We have sought out the best ideas and initiatives from industry, many of which have been adopted in this Guidance. We have also sought the input of outside experts with decades of experience in defense acquisition.

Going forward we will need the support of Congress, which will be essential to the success of this endeavor and we have tried to take their concerns fully into account in formulating this Guidance.

A capable, qualified, and appropriately sized acquisition workforce will be key to achieving efficiency. While Secretary Gates has directed a scrub of the oversight staff in OSD and the military commands, he has also determined that the acquisition workforce increases planned last year should proceed, since they are focused on specific skill sets near to the point of execution. You, the acquisition leaders, and your workforce will be essential to the success of this Guidance.

This Guidance contains 23 principal actions to improve efficiency organized in five major areas. Specific guidance is contained in directives I am issuing today or in the near future. Over the coming months, the acquisition leadership will discuss with each of you how you can implement this Guidance and monitor progress against its metrics.

There is every reason to believe the efficiencies we are seeking can be realized. It has taken years for excessive costs and unproductive overhead to creep into our business practices, but over the coming years we can surely work them out again. Those who hesitate to go down the road of greater efficiency must consider the alternative: broken or cancelled programs, budget turbulence, uncertainty and unpredictability for industry, erosion of taxpayer confidence that they are getting value for their defense dollar and, above all, lost capability for the warfighter in a dangerous world. Not only can we succeed: we must.

TARGET AFFORDABILITY AND CONTROL COST GROWTH

<u>Mandate affordability as a requirement</u>. Affordability means conducting a program at a cost constrained by the maximum resources the Department can allocate for that capability. Many of our programs flunk this basic test from their inception. As the Department begins new programs like the Ohio-class SSBN(X) replacement, the new Presidential Helicopter, the Army's Ground Combat Vehicle (GCV), and the joint Family of Systems for long-range strike in the near future, I will require program managers to treat affordability as a requirement before granting milestone authority to proceed with the program. *Specifically, at Milestone A, my Acquisition Decision Memorandum (ADM) approving formal commencement of the program will contain an affordability target to be treated by the program manager (PM) like a Key Performance Parameter (KPP) such as speed, power, or data rate – i.e., a design parameter not to be sacrificed or compromised without my specific authority. At Milestone B, when a system's detailed design is begun, I will require presentation of a systems engineering tradeoff analysis showing how cost varies as the major design parameters and time to complete are varied.* This analysis would allow decisions to be made about how the system could be made less expensive without loss of important capability. This analysis would then form the basis of the 'Affordability Requirement' that would be part of the ADM decision. I will be issuing a directive in the near future to implement this guidance that will apply to both elements of a program's life cycle cost – the acquisition cost (typically 30 percent) and the operating and support cost (typically 70 percent). For smaller programs, the CAEs will be directed to do the same at their level of approval. I recognize that we need to improve the Department's capability to perform this kind of engineering tradeoff analysis, but the ability to understand and control future costs from a program's inception is critical to achieving affordability requirements.

The Navy has been conducting just this sort of analysis in connection with the commencement of the Ohio-class replacement. This submarine will be the bulwark of our survivable nuclear deterrent for the indefinite future as required by the Nuclear Posture Review, but at the price originally estimated, its construction would swamp the Navy's shipbuilding budget during the 2020-2030 periods. By conducting the kind of design tradeoffs I will require at Milestone B and trimming requirements as a result without compromising critical capability, the Navy has reduced the estimated average procurement cost by 16 percent with a goal of fully 27 percent. Over the next five years, the Department expects to begin new programs with acquisition costs in the FYDP of over $50 billion and totaling over $200 billion. If the forecast costs of these new programs can be scrubbed down by even a fraction of that achieved in the SSBN(X) program, billions of dollars just within the FYDP can be reallocated to more productive purposes.

Drive productivity growth through Will Cost/Should Cost management. During contract negotiation and program execution, our managers should be driving productivity improvement in their programs. They should be scrutinizing every element of program cost, assessing whether each element can be reduced relative to the year before, challenging learning curves, dissecting overheads and indirect costs, and targeting cost reduction with profit incentive – in short, executing to what the program *should cost*. The Department's decision makers and Congress use independent cost estimates (ICE) – forecasts of what a program *will cost* based upon reasonable extrapolations from historical experience – to support budgeting and programming. While ICE Will Cost analysis is valuable and credible, it does not help the program manager to drive leanness into the program. In fact, just the opposite can occur: the ICE, reflecting business-as-usual management in past programs, becomes a self-fulfilling prophesy. The forecast budget is expected, even required, to be fully obligated and expended.

To interrupt this vicious cycle and give program managers and contracting officers and their industry counterparts a tool to drive productivity improvement into programs, *I will require the manager of each major program to conduct a Should Cost analysis justifying each element of program cost and showing how it is improving year by year or meeting other relevant benchmarks for value. Meanwhile, the Department will continue to set the program budget baseline (used also in ADMs and Selected Acquisition Reports (SARs)) using an ICE.* We will use this method, for example, to drive cost down in the Joint Strike Fighter (JSF) program, the Department's largest program and the backbone of tactical air power for the U.S. and many other countries in the future. This aircraft's ICE (Will Cost) average unit price grew from $50 million Average Unit Procurement Cost (APUC) when the program began (in 2002 dollars, when the program was baselined) to $92 million in the most recent ICE. Accordingly, the JSF program had a Nunn-McCurdy breach last year and had to be restructured by the Secretary of Defense. As a result of that restructuring, a Should Cost analysis is being done in association with the negotiation of the early lot production contracts. The Department is scrubbing costs with the aim of identifying unneeded cost and rewarding its elimination over time. The result should be a negotiated price substantially lower than the Will Cost ICE to which the Department has forecasted and budgeted. Secretary Gates indicated in his Efficiency Initiative that monies saved in this way could be retained by the Service that achieved the efficiency; in this case the Air Force, Navy, and Marine Corps could reallocate JSF funds to buy other capabilities.

The Department will obligate about $2 trillion in contracts over the next five years according to Will Cost estimates, so savings of a few percent per year in execution are significant.

The metric of success for Should Cost management leading to annual productivity increases is annual savings of a few percent from all our ongoing contracted activities as they execute to a lower figure than budgeted. Industry can succeed in this environment because we will tie better performance to higher profit, and because affordable programs will not face cancellation.

Eliminate redundancy within warfighter portfolios. The Army recently determined that it could forego the Non-Line-of-Sight Launch System (NLOS-LS) short-range guided missile because it already had weapons that had some (though not all) of the same features as NLOS-LS and because the cost of NLOS-LS – almost $300,000 each – was too high for the narrow capability gap it would fill. This was a classic value decision that could not have been made by looking at the NLOS-LS program in isolation. The Army had to look at the entire "warfighting portfolio" of precision weapons to see that NLOS-LS's cancellation would not, in fact, result in a major sacrifice of military capability.

I intend to conduct similar portfolio reviews at the joint and Department-wide level with an eye toward identifying redundancies. These reviews will initially cover Ground Moving Target Indicator (GMTI) systems and Integrated Air and Missile Defense. *I am directing the components to do the same for smaller programs and report the results.* The savings from these reviews cannot be estimated until they are conducted, but the savings could be substantial.

Make production rates economical and hold them stable. Government and industry both benefit from economic order quantity (EOQ) rates of production, and from stability in production year after year. Unfortunately, quantity cutting and turbulence to meet budget targets is widespread. Production rates are a critical part of any acquisition strategy approved by me. *Therefore, beginning immediately, I will expect production rate to be part of the affordability analysis presented at Milestones A and B. Furthermore, at Milestone C, I will set a range of approved production rates. Deviation from that range without my prior approval will lead to revocation of the Milestone.*

Recent examples where the Department ensured cost savings by implementing economical production rates include the Navy's E-2D Advanced Hawkeye program and the Air Force's Small Diameter Bomb II program. During reviews for initial production for both programs, business case analyses demonstrated significant dollar savings and more rapid achievement of operational capability, with the use of aggressive but attainable production profiles. Those EOQs were directed and are expected to realize savings of $575 million for the E-2D and $450 million for the SDB II as a result.

I expect to see a 5 percent annual increase in the number of ACAT 1D and 1C programs executing at their EOQ level.

Set shorter program timelines and manage to them. The leisurely 10-15 year schedule of even the simplest and least ambitious Department programs not only delays the delivery of needed capability to the warfighter, but directly affects program cost. As all programs compete for funding, the usual result is that a program settles into a level-of-effort pattern of annual funding that does not deviate much from year to year. The total program cost is the level-of-effort times the length of the program. Thus a one-year extension of a program set to complete in 10 years can be expected to result in 10 percent growth in cost as the team working on the project is kept on another year.

Yet managers who run into a problem in program execution generally cannot easily compromise requirements and face an uphill battle to obtain more than their budgeted level of funding. The frequent result is a stretch in the schedule.

An example of the importance of addressing schedule directly as an independent variable is the Army's GCV. An initial acquisition plan had this program taking approximately 10 years to complete a first production vehicle, typical of the normal leisurely pace of programs. (In contrast, the MRAP-ATV began in 2009 and delivered more than 5,700 vehicles to Afghanistan by August 2010.) Given the large investment in ground vehicle technology made in the cancelled Future Combat Systems (FCS) program, there was no need to take this much time, especially if the basic requirements were limited to those essential to an infantry fighting vehicle and incorporating the lessons of recent wars. The Department determined that the GCV program should have a seven-year schedule to first production vehicle. Requirements and technology level for the first block of GCVs will have to fit this schedule, not the other way around. *When requirements and proposed schedules are inconsistent, I will work on an expedited basis with the Services and the Joint Staff to modify requirements as needed before granting authority for the program to proceed. In particular, I will not grant authority to release requests for proposals until I am confident requirements and proposed schedules are consistent. From now on, I will also require as part of the cost tradeoff analysis at Milestone B to support affordability, a justification for the proposed program schedule. This justification will be part of the ADM authorizing the program to proceed. Deviation from that schedule without my prior approval will lead to revocation of the Milestone.*

INCENTIVIZE PRODUCTIVITY AND INNOVATION IN INDUSTRY

<u>Reward contractors for successful supply chain and indirect expense management</u>. The Department pays profit/fee to prime contractors on work they conduct themselves, work subcontracted by the prime contractor to subcontractors, and allowable overhead and administrative costs. All three are appropriate, but in each instance the level of profit should be calculated to reward performance. Profit on subcontracted work is meant to compensate the prime for taking on the burden of managing subcontractor risk and delivering subcontractor value. Otherwise, the government would have to manage the subcontractor itself (an alternative called "breakout"). It follows that higher profit should be awarded to management of higher-risk subcontracts, and higher profit should be given when the prime succeeds in driving down subcontractor costs every year. Likewise, profit on overhead should incentivize control of overhead cost. There is evidence, however, that blanket profit levels are set and, what is more, are not revisited periodically in light of actual performance. This should be done as a matter of course. Additionally, incentives have not kept pace with fundamental changes in the defense industrial environment, among them the growth of services contracts and a shift in the role of prime contractors from manufacturers to integrators of components manufactured by subcontractors.

I am instructing the Director of Defense Procurement and Acquisition Policy (DPAP) to review the Weighted Guidelines for profit with the aim of emphasizing the tie between profit and performance. In the meantime and effective immediately, I expect all managers of ACAT 1D programs to provide to me, as part of their acquisition strategy, the reward and incentive strategy behind their profit policy, including consideration of breakout alternatives where *appropriate. I direct the CAEs to do the same in programs for which they have acquisition authority.*

It is important to note that the savings to be expected from this direction will be in cost, not in profit. Savings are not expected in profit per se since in some instances profit will increase to reward risk management and performance. But if profit policy incentivizes reduction in program cost, the overall price to the taxpayer (cost plus profit) will be less.

The value of considering a breakout option is illustrated by the results of a recent review of DDG-51 Destroyer costs. During this review, it was noted that the new cost for the Restart Main Reductions Gears (MRG), previously subcontracted by two construction shipyards as Class Standard Equipment, was now more than three times the previous cost. The incumbent manufacturer had exited the market for MRGs and had sold its intellectual property to another firm. The prime passed on this subcontractor's new bill to the government without aggressive cost management. The PEO broke out the MRG from the prime contract and conducted a full and open competition, which resulted in savings over $400 million to the government for a lot buy of nine ship sets.

<u>Increase the use of Fixed-Price Incentive Firm Target (FPIF) contract type where appropriate using a 50/50 share line and 120 percent ceiling as a point of departure</u>. Choosing contract type is one important way of aligning the incentives of the government and the contractor. One size does not fit all. At one time, the Department attempted to impose fixed-price contracts on efforts where significant invention (and thus unknowable costs) could be anticipated. More recently, Cost Plus Award Fee (CPAF) contracts with subjective measures of award fee not clearly tied to cost control became widespread. In between these extremes is the FPIF contract, which should be the contracting officer's point of departure whenever conditions obtain (or can be created) that make it appropriate. "Fixed Price" is appropriate when the government knows what it wants and does not change its mind, and when industry has good control of its processes and costs and can thus name a price. While these preconditions do not always exist (as in, for example, a risky development where invention is needed), they are certainly desirable, and both parties to the contract should aspire to fulfilling them. "Incentive" is important, since it shares the costs of overruns and rewards of underruns between government and industry, giving both sides of the transaction an incentive for good performance. FPIF will normally be appropriate early in production and in single-source production where year-on-year price improvement can be rewarded.

A 50/50 share line suggests that the government and contractor have a common view of the likely contract execution cost. A 50/50 share line should represent a point where the estimate is deemed equally likely to be too low or too high. A flat or steep share line suggests that the government and contractor do not see project cost the same way. These differences in view should be discussed and considered as the basis for adjusting the target cost before an uneven share line is agreed to in contract. This might occur, for example, earlier in a program where the costs are inherently more uncertain.

A ceiling of 120 percent on an FPIF contract sets a 20 percent limit on the government's liability for overrun of the contract target cost. This is reasonable in view of historical experience in program overruns, and also reasonable because programs that overrun more than this amount in an era of relatively flat defense budgets should face review with an eye to cancellation.

A higher proposed ceiling requires explanation to the relevant head of contracting authority. Likewise, a lower ceiling than 120 percent suggests that perhaps a firm fixed-price contract is appropriate.

I am considering whether to issue more formal guidance on this matter, but effective immediately, I will require a justification of contract type for each proposed contract settlement be made to the relevant acquisition executive before negotiations are concluded. The metric for success of this measure would be fewer programs that overrun their cost targets.

The Navy, for example, recently concluded negotiations for a multi-year procurement of 124 F/A-18 strike fighter and E/A-18 electronic attack aircraft, which will yield over $600 million (greater than 10 percent) savings to the Department and the taxpayer. The F-18 program was able to drive down cost for each lot of aircraft procured in the framework of a fixed-price incentive contract that meets the Department's objectives for realistic costs, reasonable profit, a 50/50 shareline, and a 120 percent ceiling.

<u>Adjust progress payments to incentivize performance.</u> The government is an exceptionally reliable customer in terms of financing. The Department pays up front and regularly, sometimes before products are delivered. The Department also finances most industry investment needed to prepare products for the defense market. The Department can therefore offer its contractors a high cash flow return on invested capital, a feature highly valued by investors. This financial environment in turn offers another opportunity to reward good performance. The Department should take advantage of this circumstance through the use of innovative contract financing methods to incentivize vendors with the time value of money in exchange for lower prices/costs. *As a matter of practice, on all fixed price type contracts, I expect that the basis of negotiations shall be the use of customary progress payments. After agreement on price on the basis of customary progress payments, the contractor shall have flexibility to propose an alternate payment arrangement for the Government's consideration.* By having determined the projected contract cost, the contracting officer should be able to determine the consideration being offered by the contractor for a more favorable payment structure. The benefits of that improved cash flow shall be documented and the contracting officer will clearly identify in the business clearance the amount of consideration the Government received for the use of the improved cash flow opportunity. *I will direct that the Director of DPAP develop for my review a cash flow model to be used by all contracting officers contemplating financing other than customary progress payments and make certain that the guidance is developed to ensure that the improved cash flow opportunities provide benefit to both industry (at both prime and subcontractor level) and the taxpayer.*

<u>Extend the Navy's Preferred Supplier Program to a DoD-wide pilot</u>. The Department should recognize and reward businesses and corporations that consistently demonstrate exemplary performance. The Department has experience with these types of programs in certain parts of our business. For example, the Defense Logistics Agency's Strategic Supplier Alliance (SSA) has established long term relationships with major original equipment manufacturers (OEMs) within commodity groups for parts and supplies, and they are eligible to receive contract awards on a sole source basis. SSA suppliers have their performance tracked via a vendor scorecard tool that reports administrative lead time, production lead time, percent obligations and other measures and are eligible for preferred status based upon these measures.

The Navy has announced a pilot program that would allow contracting authorities to set favorable post-award special terms and conditions that recognize those businesses and corporations that have demonstrated, over time, superior performance in delivering quality products and services, robust subcontracting management, cost containment, and on-time delivery. In the Navy's pilot, the special terms and conditions can, for example, include more favorable progress payments, higher designated ranges in the weighted guidelines, special award fee pools, and other potential post-award advantages. I believe this has significant potential to appropriately reward those corporate/business suppliers that the Department can count on to repeatedly deliver the value that we expect. *I am directing the Navy to continue to lead the pilot program but to immediately include the other Services and DoD components in order to transition to a full DoD program as soon as practical.*

Reinvigorate industry's independent research and development and protect the defense technology base. The Department reimburses industry as an allowable cost over $3 billion annually in "Independent Research and Development" (IRAD). This is one of the Department's principal investments in technology innovation, larger than any single military department's annual Science and Technology (6.1-6.3) program. Yet, we do not have insight into how or where these funds go or if they benefit the Department or promote the technological prowess of our industry. Beginning in the 1990s, the Department reduced its technical exchanges with industry, in part to ensure the "independence" of IRAD. The result has been a loss of visibility into the linkage between funding and technological purpose. Additionally, there is some evidence that the defense industry has reduced its in-house laboratory infrastructure to a point not envisioned in the 1990s.

The capability to perform work in science and technology has increased throughout the world. Data suggests U.S. world share is continuing to decline. In order to maintain our innovative edge, secure the basis for a strong economy, and provide for national security, we must implement new policies to effectively use Department resources and maintain appropriate investment in technology development and lower cost and time required for providing those capabilities.

Understanding that industry needs to maintain independence, but acknowledging that the public funds these investments, I am reviewing how we can work with industry to identify and eliminate impediments to innovation, provide better feedback to industry researchers, and better define the Department's needs to our industry partners.

I intend to take action to align the purpose of IRAD to actual practice. Unfortunately, as noted above, the Department does not have the information about how the program is actually functioning that I would need to undergird a policy change at this time. Accordingly, I am today directing three steps that I will review in six months with the objective of issuing a directive on this subject at that time. First, the Director of Defense Research and Engineering (DDR&E) should engage with the largest of the performers of IRAD to collect data on how they have used these funds in recent years, the resulting benefits to government and industry, and how they obtain insight into technical areas of potential interest to the government. Second, I will ask the Defense Contract Audit Agency (DCAA) to collect and provide to me IRAD financial data from all firms with allowable IRAD costs. Third, I direct the DDR&E to provide to me within 60 days a plan for a pilot program, to improve the return on IRAD investments for industry and *government. The pilot program is to apply to as much as a third of the IRAD allocation, and will reflect early insights from the data we will collect.*

PROMOTE REAL COMPETITION

Real competition is the single most powerful tool available to the Department to drive productivity. Real competition is to be distinguished from a series of directed buys or other contrived two-source situations which do not harness the full energy of competition. Competition is not always available, but evidence suggests that the government is not availing itself of all possible competitive situations.

Present a competitive strategy at each program Milestone. Since it is not practical to develop two of everything the Department needs, competition must be found in other forms. Program managers should have a competitive strategy for their program even if they do not have classic head-to-head competition. This might take the form of a related program that could serve as partial substitute for the program in question, a plan to re-gain competition in an unproductive sole source situation, breakout of subcontracted work, adapting commercial products, or other strategies.

I will require a presentation of a competitive strategy for each program at each Milestone and expect the CAEs to do the same at their level.

A highly successful example of a competitive strategy is the Navy's Littoral Combat Ship. This program was in danger of falling into a pattern of directed buys rather than real competition, with the result that the price of an LCS was creeping up towards that of a destroyer. The Navy decided to select only one of the LCS designs for production, doing so in an additional competitive selection. Competition in a different form will then be introduced into the program, as other shipbuilders are provided the technical data to build the same ship design competitively. This strategy is expected to save the Navy over $1 billion over the FYDP, with additional savings expected over the life of the LCS acquisition program.

Remove obstacles to competition. In recent years, the Department has achieved the highest rates of competition in its history. Having said that, the fact is that a significant fraction of those competitive procurements have involved what is termed "ineffective competition," since only one offer to a solicitation was received even when publicized under full and open competition. This occurs in about $55 billion of Department contracts annually. One step the Department can take is to mitigate this loss of savings from the absence of competition. A common practice has been to conclude that either a bid or proposal submitted by a single offeror in response to a full and open competition met the standard for adequate price competition because the bid or proposal was submitted with the expectation of competition. As a result, no certified cost or pricing data was requested, no cost or price analysis was undertaken, and often, no negotiations were conducted with that single offeror. *Henceforth I expect contracting officers to conduct negotiations with all single bid offerors and that the basis of that negotiation shall be cost or price analysis, as the case may be, using non-certified data.*

A more important approach is to remove obstacles to competitive bidding. For example, the Air Force's PEO for Services reviewed the Air Force's Design and Engineering Support Program (DESP) for effective competition. She found 39 percent of the task order competitions under the

Indefinite Delivery/Indefinite Quantity (IDIQ) contract resulted in one bid. The Air Force team undertook an analysis to determine why they were getting the one bid and made two changes. First, they amended their source selection methodology so that technical, cost, and past performance factors were more equally weighted. No one factor can be less than 25 percent or more than 50 percent. This served to lessen the advantage of the incumbent contractor since the technical factor could not overshadow past performance and cost. Second, the team provided a monthly report to all DESP IDIQ holders listing all known requirements in the pipeline. The report includes sufficient information to allow contractors to evaluate whether or not to bid and to start to prepare a bid package. The team has effectively added an additional 45 days to the time a requirement is made known to the potential offerors and the bid due date. These two changes have reduced the percentage of task orders receiving one bid by 50 percent. The team continues to evaluate its processes to further reduce the percentage.

Each service component and agency has a competition advocate. *I am directing each competition advocate to develop a plan to improve both the overall rate of competition and the rate of effective competition. Those plans should establish an improvement rate of at least 2 percent per year for overall competition and an improvement rate of at least 10 percent per year for effective competition. Those plans are to be approved by the CAEs. The Department's competition advocate shall brief me on the overall progress being made to achieve those goals.*

- *Require open systems architectures and set rules for acquisition of technical data rights.*

At Milestone B, I will require that a business case analysis be conducted in concert with the engineering trade analysis that would outline an approach for using open systems architectures and acquiring technical data rights to ensure sustained consideration of competition in the acquisition of weapons systems. A successful example of the strategic use of open architecture and buying of appropriate technical data rights is the Navy's Virginia-class SSN program. The Virginia program uses a modular open systems architecture and selective sub-component technical data rights procurement that promotes a robust competition at the component supplier level, while still supporting continual and effective block upgrades to the existing systems that reduces the overall life cycle cost of the system.

Increase dynamic small business role in defense marketplace competition. Small businesses have repeatedly demonstrated their contribution to leading the nation in innovation and driving the economy by their example of hiring over 65 percent of all new jobs and holding more patents than all the nation's universities and large corporations combined.

Our defense industry must leverage that innovation and opportunity into our competitions, as small business representation on programs has demonstrated lower costs to the government. For many small businesses, subcontracting on Department contracts is the first step to becoming a Department prime contractor. Components must understand the small business capabilities within their industry and increase market research and outreach efforts to ensure small business utilization is maximized. In order to remove barriers to small business participation in Department contracts and competition, *I direct the CAEs to institute in all competitive and non-competitive procurement actions emphasis on small business utilization through weighting factors in past performance and in fee construct.*

IMPROVE TRADECRAFT IN SERVICES ACQUISITION

Contract support services spending now represents more than 50 percent of our total contract spending. In 2009, the Department spent more than $212 billion in contracting services, using more than 100,000 contract vehicles held by more than 32,200 contractors — with more than 50 percent of the spend awarded to about 100 contractors.

This contractor support is critical to the Department. For professional services, for example, the Department depends upon three sources: the government workforce, the unique not-for-profit FFRDCs and UARCs, and for-profit professional services companies. Management mechanisms are in place for the first two, but far less for the third.

The Department's practices for buying such services are much less mature than for buying weapons systems. It is critically important that we have a cohesive and integrated strategy with regard to the acquisition of services. This substantial amount of spend demands a management structure to strategically source these goods and services.

<u>Create a senior manager for acquisition of services in each component, following the Air Force's example</u>. In order to achieve efficiencies in services contracting commensurate with the scale of the Department's spend, new governance is necessary. *I am directing the CAEs of the military departments and the commanders and directors of the other DoD components to establish a senior manager for acquisition of services, who will be at the General Officer, Flag, or SES level.* This senior manager will be responsible for governance in planning, execution, strategic sourcing, and management of service contracts. The senior manager will be the Decision Authority for Category I service acquisitions valued at $250 million or less or as delegated and collaborate with requiring activities which retain funding authority on service contract spend.

<u>Adopt uniform taxonomy for different types of services</u>. Today, the Department lacks a standard taxonomy for service contract spend that can be used among the components to understand the Department's aggregate spending and value of specific services contracting. Without a standard approach, the Department has no way of measuring productivity in more than 50 percent of its contracting investment. *I am directing, therefore, each component to use the following primary categories of service spend: Knowledge-based services; Electronics and Communications Services; Equipment Related Services; Medical Services; Facility Related Services; and Transportation Services. These are derived from, and consistent with, Product Service Code (PSC) categories contained in the PSC manual maintained by the General Services Administration, Federal Procurement Data Center, and Office of Management and Budget (OMB). This taxonomy will be used by each component to ensure basic consistency.*

<u>Address causes of poor tradecraft in services acquisition.</u>

o *Assist users of services to define requirements and prevent creep via requirements templates.* The Department has experienced significant increases in mission/requirements creep for services spending, particularly in knowledge management services, which has increased 400 percent in the last decade. These requirements often require the same function or service to be provided but are written uniquely among various commands so that competition is limited. *Therefore, I am directing two initiatives to address mission/requirements creep. First, the Services and DoD components should establish, through their senior managers for services,* *maximum use of standard templates in developing Performance Work Statements (PWS) to improve contract solicitations.* Successful examples of the use of standard templates are the Navy's SEAPORT acquisitions and DLA's use of templates to acquire Headquarters support services. *Second, I also expect market research to be strengthened in order to understand industry's capabilities and appropriate pricing within the market in which we are buying. I expect the military departments and DoD components will achieve this by establishing dedicated market research teams at the portfolio management level.*

- *Enhance competition by requiring more frequent re-competes of knowledge based services.* Although 89 percent of the Department's services contracting spend was awarded under competitive conditions, in 24 percent of those cases only one bid was received. This suggests bona fide competition (two or more bids) is not occurring in the $31 billion represented by those cases. To improve competition in services, *I will require the military departments and DoD components to review the length of time that services contracts remain in effect before re-competition occurs.* Single-award contract actions should be limited to three years (including options) unless, by exception, it is fully justified for longer periods by the senior manager for services. Contract length should be appropriate for the activity performed. Knowledge-based services readily meet the three-year limit. Other services such as Performance Based Logistics (PBL), LOGCAP, and environmental remediation, as examples, may not. The intent is that each service requirement will be reviewed by the appropriate official and only those with a sound business rationale will contain longer contract performance provisions. Multiple award IDIQ contracts may be up to five years if on-ramp provisions are included to refresh/update the competitor pool. In addition, *I expect Service components to align contract spend data, to the maximum extent that is practical, to the functional/requirements elements executing the spend.* This will focus all elements of the Department on the importance of achieving improved results.

- In cases where "1-bid" proposals are received, *I will require fully negotiated pricing and cost data as appropriate. Further, I will require solicitations that receive only one bid, and that were open to industry for less than 30 days, to be re-advertised for a minimum additional period of 30 days.*

- *Limit the use of time and materials and award fee contracts for services.* Today, more than 20 percent of the Department's services acquisitions are written using Time & Material (T&M) or Cost Plus Award Fee (CPAF) contract types. At a time when the Department is driving toward more fiscal discipline, we spend about $24 billion in services using T&M contract types, which are the least preferred contract type for understanding costs. Similarly, CPAF contract types provide only limited motivation for cost discipline. The acquisition of services differs greatly from the acquisition of supplies and equipment. The contractor at-risk capital is typically much lower for most service acquisitions and must be factored into the contract decision process. *I will issue further detailed guidance for establishing a taxonomy of preferred contract types in services acquisition, but starting immediately, I expect services acquisitions to be predisposed toward Cost-Plus-Fixed-Fee (CPFF), or Cost-Plus-Incentive-Fee (CPIF) arrangements, when robust competition or recent competitive pricing history does not exist to build sufficient cost knowledge of those services within that market segment. I expect thet cost knowledge gained from those contracts to inform the Should Cost estimates of future price and contract type negotiations. When robust competition already exists, or there is recent competitive pricing history, I expect components to be predisposed toward Firm-Fixed-Price*

(FFP) type contract arrangements. FFP should also be used to the maximum extent reasonable when ongoing competition is utilized in multiple award contract scenarios.

o *Require that services contracts exceeding $1 billion contain cost efficiency objectives.* With large Department outlays of capital for services contracting, it is important that the Department incentivize, achieve, and share in cost improvements over the period of performance for support services acquisitions, including knowledge management services. In acquisitions of material and production end items, we expect the contractor to be on a learning or efficiency curve to drive costs down and value up. We should incentivize and expect similar cost improvement on high-value services contracts. *Beginning immediately, I will require services contracts valued at more than $1 billion to contain provisions in the contract to achieve productivity improvements and cost efficiencies throughout the contract period.*

Increase small business participation in providing services. Small businesses provide the Department with an important degree of agility and innovation, even in support services, and they do so with generally lower overhead structures. To strengthen and improve opportunities for small businesses in the acquisition of services, *I am directing the OSD Office of Small Business Programs to review acquisition plans for services acquisitions exceeding $1 billion, and to be members of the OSD peer reviews of services acquisitions. Additionally, when multiple award contracts are used for services acquisitions, specific tasks suitable for small businesses will be set aside and military departments and DoD components will seek opportunities to compete Multiple Award/IDIQ contracts among small businesses.*

REDUCE NON-PRODUCTIVE PROCESSES AND BUREAUCRACY

Unnecessary and low-value added processes and document requirements are a significant drag on acquisition productivity and must be aggressively identified and eliminated. We cannot achieve Should Cost goals solely by providing incentives to industry to reduce overhead and increase productivity; the government must also eliminate unnecessary and often counterproductive overhead. Some of this overhead is required by statute, and I will work with the Congress to reduce these requirements that neither add value nor improve operational performance. Some of it is imposed by OSD, and is the natural bureaucratic growth in oversight that staffs generate over time and which has to be trimmed back periodically to more effective and productive levels. Secretary Gates has emphasized that the Department's efficiency initiative does not just extend to the $400 billion of contracted work outside the Department's walls, but to the $300 billion spent on the people and facilities that comprise the Department itself. He has reached into his own OSD staff and to senior commands to require greater leanness. Within OSD , he has directed my office (AT&L) to conduct a much-needed bottom-up scrub of process and staffing. Secretary Gates' determination to increase the overall acquisition workforce remains steadfast; however he intends for those additional positions to be filled with specific skill sets in short supply near the point of program execution, not an across-the-board increase or an increase in oversight staff. We must use these, and all our resources, effectively. I am calling on all participants in the acquisition system and all those who affect its processes to work with me to remove non-productive processes and bureaucracy. The following are just some of the steps we can take to address this problem:

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. The number and frequency of OSD-level program reviews has increased significantly over the past several years. The year prior to August 2010 showed that over 240 major reviews and significant USD (AT&L)/staff reviews required more than 100,000 labor-hours to complete. This practice has tended to relieve the Senior Acquisition Executives (SAEs), PEOs, and PMs from responsibility and accountability for the programs they are executing. Insight at the AT&L level into program execution performance can generally be achieved through established status reporting mechanisms and informal staff contacts. While I expect a certain level of staff oversight, I expect the staff reviews to be focused primarily on major decision points for which I am responsible and on surfacing and solving execution problems. I also expect the OSD staff in AT&L and elsewhere to remain cognizant of our programs' progress and to identify problems quickly so that they can be dealt with as early as possible. There is a balance between this appropriate level of oversight and that which is excessive and tends to relieve the chain of command from management responsibility. I believe we have tipped the balance too far in favor of additional oversight and need to restore it to a more appropriate and effective level.

- *Realign OSD Acquisition Reviews to add more value.* It is important that we align AT&L resources to address the most significant investment decisions required at the Under Secretary level. Therefore, *I am directing ARA to review the current list of OSD reviews — DABs, Pre-DABs, OIPTs, PSRs, and TRLs etc., to recommend specific realignment of these reviews/meetings to ensure they focus their purpose on the major acquisition investment decisions made by the Department.*

- *Review DAB documentation requirements to eliminate non-relevant content.* Our DAB documents have become bloated and at the same time often fail to provide necessary and important content. A team has already been established to review DAB documents beginning with the Acquisition Strategy Report. *I am directing ARA to complete the review of all DAB documents by March 1, 2011 and to provide me with recommendations for streamlining and focusing these documents on needed content to support AT&L level decisions.*

- *Reform TRL reviews to focus on technology as opposed to engineering and integration risk.* The TRL review and certification process has grown well beyond the original intent and should be reoriented to an assessment of technology maturity and risk as opposed to engineering or integration risk. *I am directing the DDR&E to review this process and to make recommendations to refocus the TRL certification process to be consistent with its original intent.*

<u>Eliminate low-value-added statutory processes</u>. I recognize the importance of keeping programs within cost and schedule and agree on the need to reevaluate the viability of programs that incur large overruns or schedule slips. I fully support the spirit and the intention of the Nunn-McCurdy review process. However, I believe the process can be streamlined in a way that we can make sound decisions about the future of programs and provide Congress with the information and certifications they need without overly burdening programs and, in some cases, without reviewing programs that experience average unit cost growth because of decisions made by the Department, such as changed quantities resulting from requirements changes. As an example of overhead costs, my staff calculated the number of hours and attendant costs for Nunn-McCurdy evaluations that the Department undertook this year for the most recent six programs that breached the critical Nunn-McCurdy thresholds. The estimates for these six evaluations exceeded $10 million and 95,000 hours of overhead labor. Notwithstanding the legal

requirement, two of the six evaluations were for technical breaches since the breaches were the result of production quantity changes or acquisition strategy changes rather than a result of cost growth per se. The knowledge we gained by conducting full evaluations was not significantly greater than what we already knew at the outset and had no effect on the decision to continue the programs. To curb this, *I am targeting specific oversight processes, described below, to reduce or eliminate costs associated with what I believe are unnecessary overhead burdens that add marginal or questionable value to meeting the needs of our warfighters or expectations of the taxpayer. I am also directing the streamlining of some processes that are important to keep, but that require significant efficiency improvement to be effective. The Department will continue to comply with all statutory requirements, but where it makes sense we will tailor how we achieve compliance to be consistent with the circumstances, and we will work with Congress to modify statutory requirements where the intended goal is clearly not being achieved.*

- *Request Nunn-McCurdy Rules for Special Situations. I will work with Congress to eliminate the requirement for the full suite of Nunn-McCurdy assessments and reporting activities in special circumstances where quantity-induced or other external reasons cause critical breaches to occur.*

- *2366a and 2366b Certification Process Review. I will work with OSD staff and the Congress to reassess both the need for and the overall method of implementation we have imposed on ourselves to respond to the requirement for retroactive 2366a/b certifications to ensure objectives are met without burdensome and inefficient bureaucracy.*

- *Congressionally-mandated organizational changes within AT&L.* Congress has correctly identified and mandated some changes to the AT&L organization that are improving our ability to oversee acquisition programs and make better decisions about specific investments and about acquisition policy. It is important, however, that AT&L have the flexibility to balance the internal staff elements in order to effectively execute all the functions for which AT&L is responsible. *I intend to work with the Congress to ensure that all oversight functions are adequately staffed and performed without inserting inefficiencies and unnecessary overhead into the acquisition process at the same time.*

<u>Reduce by half, the volume and cost of internal and congressional reports.</u> The time and resources spent on one-time and recurring internal and congressional reports are costly to the Department and take the acquisition workforce away from executing programs. For internal reports, the Department must suppress its appetite for non-critical information and resist the temptation to become checkers of checkers. For congressional reports, in the past 10 years, the total number levied on the Department has grown from 514 to 719. During that same span, the number of reports assigned to my office (AT&L) grew from 102 to 156. Many of these reports, once they are introduced into legislative language, continue to be required year after year — long after the immediate relevancy and value of the information have passed. None of these reports are free. A conservative cost estimate of the resources consumed in producing the 719 congressional reports is $350 million annually. Consequently, *I am directing my staff to conduct a bottom-up review of all internally-generated reporting requirements and to work with ASD (Legislative Affairs) to conduct a bottom-up review of all congressionally mandated acquisition reports to assess the value of the reports with a goal to eliminate at least 50 percent of the reports and to substantially shorten the ones remaining. I am also tasking ARA to impose*

reasonable page count caps (given the information requested) when reports are assigned for production and to indicate the estimated cost to prepare each report on its cover.

Reduce non-value-added overhead imposed on industry. Industry has its own internal unproductive processes which add to project costs, but these are in some part a reflection of the requirements which the government imposes. A great number of the inputs I received from industry were directed at what was viewed as excessive overhead expenses based solely on non-value-added mandates and reporting requirements which may have been relevant at some point in time, but have little relevance in the world in which we now find ourselves. *In order to identify and reduce these costly requirements, I am directing the Director of Industrial Policy, with support from DPAP, to more fully survey our industrial base to identify, prioritize, and recommend a path forward to unwind duplicative and overly rigorous requirements that add to costs, but do not add to quality of product or timeliness of delivery. As we remove these requirements, I will expect a decline in the overhead charged to the Department by our industrial base that reflects these reduced costs.*

Align Defense Contract Management Agency (DCMA) and Defense Contract Audit Agency (DCAA) processes to ensure work is complementary. It is well known that during the last 20 years, due to budget constraints, DCMA and DCAA have progressively reduced staff and capability. As a result, critical functions they perform have become blurred and require clarification, and where necessary should be de-conflicted to avoid unnecessary overlap and redundancies. In this vein, industry has expressed concern regarding overlapping roles and missions between DCMA and DCAA, resulting in duplication of data requests submitted by contractors and inefficient application of Department resources. Over the past several months, at my direction, the Director of DPAP has been working with DCAA and DCMA to identify areas of potential overlapping responsibility, such as Accounting, Estimating, Purchasing, Financial Capability Reviews, Earned Value Management System (EVMS), MMAS, Property Management, and Forward Pricing, and propose methods to eliminate the duplication. *I am tasking the Director of DPAP to develop guidance that will clearly spell out the roles and responsibilities of each organization in those areas where duplication and overlap occur.*

Increase use of Forward Pricing Rate Recommendations (FPRRs) to reduce administrative costs. Contract negotiations can administratively benefit from the use of Forward Pricing Rate Agreements (FPRAs). Certainly a quality FPRA will result in reduced administrative costs associated with negotiating and managing acquisitions. However, it is also recognized that establishing FPRAs just for the sake of having FPRAs is not beneficial and has been costly to the taxpayer. For multiple reasons, including but not limited to complexity of contractor rate structures and audit process changes today, DCMA has only established 32 percent of expected FPRAs. It has, on the other hand, established 85 percent of the expected FPRRs. Clearly the opportunity exists to re-examine how best to ensure contracting officers obtain the support they need to negotiate rates. We will strive to have FPRAs, when possible, but we will not do so when FPRR's are available if we believe that there is not a legitimate and thoughtful basis for departing from them. *Accordingly, I am tasking DCMA to be responsible for the promulgation of all FPRRs. In those cases, where DCAA has completed an audit of a particular contractor's rates, DCMA shall adopt the DCAA recommended rates as the Department's position with regard to those rates.*

This letter is not the end of a process, but the beginning of vigorous implementation and further refinement. Today I have signed out directive memoranda to my key staff elements, DPAP, ARA, DDR&E, and the leaders of the OIPTs that coordinate the OSD-level oversight of major programs setting those offices on the course to begin implementing this guidance. I have provided the Component Acquisition Executives with a draft directive memorandum that I intend to sign within the next few days for their review and comments. Starting today but extending over the next several months we will be putting the actions I have described in this guidance into more formal direction and practice. Today, however, I am tasking all of you to absorb this guidance memo and begin acting on it within the scope of your existing authority. There is no time to lose.

Ashton B. Carter

Ashton B. Carter

Guidance Roadmap

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

THE UNDER SECRETARY OF DEFENSE
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WASHINGTON, DC 20301-3010

ACQUISITION,
TECHNOLOGY
AND LOGISTICS

JUN 28 2010

MEMORANDUM FOR ACQUISITION PROFESSIONALS

SUBJECT: Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending

I have written to you previously to emphasize, with President Obama and Secretary Gates, that your highest priority is to support our forces at war on an urgent basis. Over the last year, the Department has also worked to reform its acquisition system, including implementing the Weapon Systems Acquisition Reform Act. Today I write to give direction on another important priority: delivering better value to the taxpayer and improving the way the Department does business.

We are a nation at war, and the Department does not expect the defense budget to decline. At the same time, we will not enjoy the large rate of growth we experienced during the years after September 11, 2001. We must therefore abandon inefficient practices accumulated in a period of budget growth and learn to manage defense dollars in a manner that is, to quote Secretary Gates at his May 8, 2010 speech at the Eisenhower Library, "respectful of the American taxpayer at a time of economic and fiscal distress."

This reality, combined with a determination to take care of our service members and avoid major changes in force structure, has led the Secretary and Deputy Secretary to launch an efficiencies initiative in the Department. The initiative requires the Department to reduce funding devoted to unneeded or low-priority overhead, and to transfer these funds to force structure and modernization so that funding for these warfighting capabilities grows at approximately three percent annually. This is the rate of growth needed historically to continue to give the troops what they need.

Some of these savings can be found by eliminating unneeded programs and activities; and, indeed, the Department's leadership has already taken strong action in this area and will need to do more. But other savings can be found within programs and activities we do need, by conducting them more efficiently. Deputy Secretary Lynn expects that two-thirds of the savings transferred to warfighting accounts should come about this way. Pursuing this kind of efficiency is the purpose of my message today to the Department's acquisition professionals. We need to restore affordability to our programs and activities. I would like us to embark upon a process today to identify and then act on steps we can take to obtain two to three percent net annual growth in warfighting capabilities without incurring a commensurate budget increase by identifying and eliminating unproductive or low-value-added overhead; in effect, doing more without more.

The Department is spending approximately $700 billion per year for our nation's defense. Approximately $300 billion of those funds are spent within the Department's walls – on the salaries and benefits of military personnel and civilian employees, and on the buildings and facilities within which they work. But the remainder – $400 billion – is spent on contracts issued to entities outside of the Department of Defense. This $400 billion is divided about equally between products (e.g., weapons, electronics, fuel, and facilities) and services (e.g., IT services, knowledge-based services, facilities upkeep, and transportation). We, the Department's acquisition officials, agree to these contracts on behalf of the taxpayer. Each of these contracts contains a statement of the services or products it is procuring; an arrangement between the government and the contractor for how the costs of those items will be paid; and the overheads, indirect charges, and fees that complete the business transaction and make it possible for the defense industry to be economically viable.

The guidance memorandum I plan to issue will require each of you, as you craft and execute the Department's contracts in coming years, to scrutinize these terms to ensure that they do not contain inefficiencies or unneeded overhead. The guidance will give you specific features to examine and targets to hit in the pursuit of greater efficiency. The guidance will focus on getting better outcomes, not on our bureaucratic structures. But it must also take note of where the government's processes and regulations contribute to inefficiency in our business relationships.

Today I want to share with you the preliminary outlines of this guidance, so that I can have the benefit of your experience and perspective before I issue it in final form. I am also asking our partners in industry for their thoughts and input. I am also sharing these plans with the Congress. A process of analysis and dialogue is necessary to make sure our actions are effective and soundly based.

I want to emphasize two points about this initiative:

First, the savings we are seeking will not be found overnight. It has taken years for excessive costs and unproductive overhead to creep into our business processes, and it will take years to work them out. We will be concentrating on new contracts as they are awarded in coming years, to ensure that they reflect new efficiencies. Some of the targets and objectives we decide to pursue will only be able to be achieved on a timeline of several years. On the other hand, Secretary Gates has explained clearly why we need to embark now. And the earlier we embark, the easier it will be to succeed.

Second, we in the Department cannot succeed at this task alone. We need the input and involvement of industry, and I will be actively seeking their support and ideas. We do not have an arsenal system in the United States: the Department does not make most of our weapons or provide many non-governmental services essential to warfighting – these are provided by private industry. Our industry partners are patriots as well as businessmen. This initiative should contribute to the continuing vitality and financial viability of the defense industry in the era ahead by aligning the direction and incentives of the Department and industry. It is intended to enhance and incentivize efficiency and total factor productivity. Most of the rest of the economy exhibits productivity growth, meaning that every year the buyer gets more for the same amount of money. So it should be in the defense economy. Increased productivity is good for both industry and government. So also is avoiding budget turbulence and getting more programs into stable production.

We also need the help of Congress. Members of Congress observe with dismay as they are asked to approve ever-increasing funding for the very same product or service. We will need their input and support to make necessary adjustments that will in some cases be difficult.

What is contained in the attached charts is an initial framework for restoring affordability to defense. I will be refining this framework over coming weeks, in full consultation with you, with industry, with Congress, and with outside experts and leaders. I plan to issue a final version of this mandate later this summer.

Realizing the objective of this initiative will be a formidable endeavor. But it is imperative. Secretary Gates, Deputy Secretary Lynn, and I have concluded that we cannot support our troops with the capabilities they need unless we achieve greater efficiency.

Ashton B. Carter

Objectives

- Deliver the warfighting capability we need for the dollars we have
- Get better buying power for warfighter and taxpayer
- Restore affordability to defense goods and services
- Improve defense industry productivity
- Remove government impediments to leanness
- Avoid program turbulence
- Maintain a vibrant and financially healthy defense industry

Obtain 2-3% net annual growth in warfighting capabilities without commensurate budget increase by identifying and eliminating unproductive or low-value-added overhead and transfer savings to warfighting capabilities. Do more without more.

Providing Incentives for Greater Efficiency in Industry

- **LEVERAGING REAL COMPETITION:** Avoid directed buys and other substitutes for real competition. Use technical data packages and open systems architectures to support a continuous competitive environment.
- **USING PROPER CONTRACT TYPE FOR DEVELOPMENT AND PROCUREMENT:** Phase out award-fee contracts and favor fixed-price or cost-type incentive contracts in which government and industry share equally in overruns and underruns, and overruns have analytically-based caps. Use cost-reimbursement contracts only when either government requirements or industry processes cannot be adequately specified to support pricing. Adjust sole-source fixed-price contracts over time to reflect realized costs. Work down undefinitized contract actions. Seek authority for multi-year contracts where significant savings are possible.
- **USING PROPER CONTRACT TYPE FOR SERVICES:** Phase out Time and Material and sole-source ID/IQ contracts wherever possible. Utilize fixed-price performance-based contracts when requirements are firm and can be measured, with payments tied to performance. Utilize fixed-price level of effort or cost-plus-fixed-fee contracts (with profit/fee tied to weighted guidelines) when requirements are still being defined. Award fees should be used only by exception. Maximize the use of multiple-source, continuously competitive contracts.
- **ALIGNING POLICY ON PROFIT AND FEE TO CIRCUMSTANCE:** Align opportunity to earn profits/fees to both value to the taxpayer and risk to the contractor. Apply weighted guidelines to profit/fee levels. Reward higher productivity with higher profits. Incentivize investment in innovation.
- **SHARING THE BENEFITS OF CASH FLOW:** Ensure that taxpayers receive adequate consideration (price reductions) for improved cash flows. Progress payments must reflect performance but can be increased above customary levels in return for consideration by the contractor. Reduce over time the gap between proposed and actual rates in forward price rate agreements.
- **TARGETING NON-VALUE-ADDED COSTS:** Identify and eliminate non-value-added overhead and G&A charged to contracts. Limit fees for subcontractor management to reflect actual value provided (risk assumed by prime and continuous subcontractor risk reduction). Limit B&P allowable costs in sole source contracts and encourage effective use of IRAD.
- **INVOLVING DYNAMIC SMALL BUSINESS IN DEFENSE:** When establishing multiple award contracts for services, make every effort to provide for small business participation. If at least two small businesses are deemed capable of performing on such a contract, consider setting aside that work for competition among them.
- **REWARDING EXCELLENT SUPPLIERS:** Emulate the Navy's pilot program to provide special benefits to consistently excellent industrial performers.

Adopting Government Practices that Encourage Efficiency

- **ADOPTING "SHOULD-COST" AND "WILL-COST" MANAGEMENT:** Use historically informed independent cost estimation ("will-cost" estimates) to inform managing of programs to cost objectives ("should-cost" estimates).
- **STRENGTHENING THE ACQUISITION WORKFORCE:** Achieve SECDEF goal of adding to government acquisition workforce with increased skill levels. Leverage unique qualities of non-profit FFRDCs and UARCs to augment acquisition workforce capability.
- **IMPROVING AUDITS:** Improve consistency and quality of government audits, and focus them on value-added content.
- **MANDATING AFFORDABILITY AS A REQUIREMENT:** In new programs such as the SSBN-X nuclear missile submarine, the Presidential Helicopter, the Ground Combat Vehicle, and the Air Force/Navy Long Range Strike Family of Systems, cost considerations must shape requirements and design.
- **STABILIZING PRODUCTION RATES:** To ensure more programs are in stable, economically favorable rates of production and avoid cost escalation, program managers may not adjust production rates downward without head of component authority.
- **ELIMINATING REDUNDANCY WITHIN WARFIGHTING PORTFOLIOS:** Emulate the Army's Precision Fires Capability Portfolio approach to identify where multiple programs are pursuing similar objectives.
- **ESTABLISHING SENIOR MANAGERS FOR PROCUREMENT OF SERVICES:** Follow the Air Force lead in establishing a Program Executive Officer for services in each DOD component to focus on improving policy and practice in this high-dollar-value area.
- **PROTECTING THE TECHNOLOGY BASE:** Protect the future by sustaining investment while focusing on high value-added work.

Appendix D. Restoring-Affordability-Sep-14-2010

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION, TECHNOLOGY AND LOGISTICS

September 14, 2010

MEMORANDUM FOR: Director, Defense Procurement & Acquisition Policy

SUBJECT: Implementation Directive for Better Buying Power – Restoring Affordability and Productivity in Defense Spending

As detailed in my September 14, 2010 memorandum for acquisition professionals, I am seeking to restore affordability and productivity through initiatives in the following five areas: (1) Targeting Affordability and Controlling Cost Growth; (2) Incentivizing Productivity and Innovation in Industry; (3) Promoting Real Competition; (4) Improving Tradecraft in Services Acquisition, and; (5) Reducing Non-Productive Processes and Bureaucracy.

These initiatives include steps that can be taken immediately and steps that will require more development and staffing before they are implemented. This memorandum provides actions that I expect you to execute either immediately or in the time frame specified. Additional actions in support of these five initiatives will be developed over the next few weeks and months.

You will review my September 14, 2010 memorandum to determine what changes to DoD Directive 5000.01, DoD Instruction 5000.02, and other regulatory and statutory requirements may be required to implement the guidance in the memorandum. You will report to me by October 15, 2010 with a plan to implement these changes. Coordinate with the Director, Acquisition Resources & Analysis to ensure there is no duplication of effort.

Review the Weighted Guidelines with the aim of emphasizing the tie between profit and performance. Provide me with the results of this review by December 1, 2010.

By December 1, 2010, develop a cash flow model and accompanying guidance that can be used by all contracting officers contemplating financing other than customary progress payments. Ensure the guidance is developed so that the improved cash flow opportunities for industry provide benefit to both industry and the taxpayer.

With the Defense Acquisition University (DAU), review acquisition policy training curriculum and revise as appropriate by January 1, 2011, to ensure that the efficiency initiatives I am implementing are reflected in the DAU curriculum.

By December 1, 2010, develop and staff a directive for my approval detailing specific implementation guidance for the effort to standardize service taxonomy as provided for in my memorandum of September 14, 2010. This taxonomy will be utilized by each component to ensure basic consistency within the separate governance structures for services.

By December 1, 2010, develop detailed guidance for establishing a taxonomy of preferred contract types in services acquisition that is consistent with the guidance provided in my September 14, 2010 memorandum.

Effective immediately, ensure that the Defense Office of Small Business Programs is included as a member of the Office of the Secretary of Defense peer reviews of service acquisitions.

Work with the Defense Contract Audit Agency (DCAA) and the Defense Contract Management Agency (DCMA) to develop guidance which will clearly spell out the roles and responsibilities of each organization in those areas where duplication and overlap occur. Provide recommended guidance to me and to the Under Secretary of Defense (Comptroller) by December 1, 2010.

By October 1, 2010, you are to task DCMA to be responsible for the promulgation of all Forward Pricing Rate Recommendations. In those cases, where DCAA has completed an audit of a particular contractor's rates, DCMA shall adopt the DCAA recommended rates as the Department's position with regard to those.

Ashton B. Carter

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION, TECHNOLOGY AND LOGISTICS

September 14, 2010

MEMORANDUM FOR: Director, Acquisition Resources & Analysis

SUBJECT: Implementation Directive for Better Buying Power – Restoring Affordability and Productivity in Defense Spending

As detailed in my September 14, 2010 memorandum for acquisition professionals, I am seeking to restore affordability and productivity through initiatives in the following five areas: (1) Targeting Affordability and Controlling Cost Growth; (2) Incentivizing Productivity and Innovation in Industry; (3) Promoting Real Competition; (4) Improving Tradecraft in Services Acquisition, and; (5) Reducing Non-Productive Processes and Bureaucracy.

These initiatives include steps that can be taken immediately and steps that will require more development and staffing before they are implemented. This memorandum provides actions that I expect you to execute either immediately or in the time frame specified. Additional actions in support of these five initiatives will be developed over the next few weeks and months.

You will establish a tracking system to monitor progress and compliance with the direction I am providing to the acquisition work force to restore affordability and productivity in defense spending. Review my September 14, 2010 memorandum, extract from it all taskings and assignments, and review the memoranda I am sending to the Acquisition Executives, Overarching Integrated Product Team (OIPT) leads, Director, Defense Procurement & Acquisition Policy, Director, Defense Research & Engineering, and this memorandum to determine the actions we need to include in the tracking system.

By December 1, 2010, you are to conduct a review of the current list of OSD reviews -- Defense Acquisition Boards (DABs), Pre-DABs, OIPTs, and Technology Readiness Level, etc. -- to recommend specific realignment of these reviews/meetings to ensure they focus their purpose on the major acquisition investment decisions made by the Department.

You are to complete the ongoing review of all acquisition documents by March 1, 2011 to provide me with recommendations for streamlining and focusing these documents on needed content to support AT&L level decisions. As individual documents are reviewed, you should implement changes without waiting for the completion of the review of all documents.

You are to conduct a bottom-up review of all internally-generated reporting requirements and to work with the Assistant Secretary of Defense (Legislative Affairs) to conduct a bottom-up review of all congressionally mandated acquisition reports. Assess the value of the reports with a goal to eliminate at least 50% of the reports and to substantially shorten the ones remaining. In addition, effective immediately, you are to impose reasonable page count caps (based on the nature of the information requested) when you assign lead responsibility for report production.

Ashton B. Carter

Ashton B. Carter

ACQUISITION,
TECHNOLOGY
AND LOGISTICS

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

September 14, 2010

MEMORANDUM FOR: Overarching Integrated Product Team (OIPT) Leads

SUBJECT: Implementation Directive for Better Buying Power – Restoring Affordability and Productivity in Defense Spending

As detailed in my September 14, 2010 memorandum for acquisition professionals, I am seeking to restore affordability and productivity through initiatives in the following five areas: (1) Targeting Affordability and Controlling Cost Growth; (2) Incentivizing Productivity and Innovation in Industry; (3) Promoting Real Competition; (4) Improving Tradecraft in Services Acquisition, and; (5) Reducing Non-Productive Processes and Bureaucracy.

These initiatives include steps that can be taken immediately and steps that will require more development and staffing before they are implemented. This memorandum provides actions that I expect you to execute either immediately or in the time frame specified. Additional actions in support of these five initiatives will be developed over the next few weeks and months.

I intend to conduct portfolio reviews at the joint and Department-wide level for Acquisition Category I programs with the intention of eliminating redundancy. By October 1, 2010, provide me with a recommended list of portfolios that you believe should be used to evaluate the programs for which you are responsible, together with the rationale for recommending that list. In addition, provide a recommendation on your priorities for conducting this analysis and a proposed schedule.

You are directed to review the current list of scheduled OIPT and Defense Acquisition Board reviews of the programs for which you are responsible. Recommend specific realignment of these reviews/meetings to ensure they focus their purpose on the major acquisition investment decisions made by the Department. Report the results of your review to me by November 1, 2010.

Ashton B. Carter

Ashton B. Carter

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION,
TECHNOLOGY
AND LOGISTICS

September 14, 2010

MEMORANDUM FOR: Director, Defense Research and Engineering

SUBJECT: Implementation Directive for Better Buying Power – Restoring Affordability and Productivity in Defense Spending

As detailed in my September 14, 2010 memorandum for acquisition professionals, I am seeking to restore affordability and productivity through initiatives in the following five areas: (1) Targeting Affordability and Controlling Cost Growth; (2) Incentivizing Productivity and Innovation in Industry; (3) Promoting Real Competition; (4) Improving Tradecraft in Services Acquisition, and; (5) Reducing Non-Productive Processes and Bureaucracy.

These initiatives include steps that can be taken immediately and steps that will require more development and staffing before they are implemented. This memorandum provides actions that I expect you to execute either immediately or in the time frame specified. Additional actions in support of these five initiatives will be developed over the next few weeks and months.

The Department does not have the information it needs to understand how the Independent Research and Development (IRAD) program is functioning. You will engage with the largest of the performers of IRAD to collect data on how they have used these funds for the last 10 years, the resulting benefits to industry and government, and how these companies obtain insight into technical areas of potential interest to the government. In support of this task, you will work with the Defense Contract Audit Agency to obtain IRAD financial data from all firms with allowable IRAD costs.

By November 15, 2010, you will provide me with a plan for a pilot program to apply to as much as a third of the IRAD allocation, that will reflect the insights gained from the review directed above.

As noted in my September 14, 2010 memorandum, the Technology Readiness Level (TRL) review and certification process has grown well beyond the original intent and should be reoriented to an assessment of technology maturity and risk as opposed to engineering or integration risk. You are directed to review and to make recommendations to refocus the TRL certification process to be consistent with its original intent. You are also tasked to propose an efficient mechanism to provide independent assessments of engineering and integration risk, as well as technology risk, at major investment decision points. These actions are to be complete by November 1, 2010.

Ashton B. Carter

Ashton B. Carter

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Appendix E. Memo-for-Services-and-Agencies

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

NOV 0 3 2010

ACQUISITION,
TECHNOLOGY
AND LOGISTICS

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: Implementation Directive for Better Buying Power – Obtaining Greater Efficiency and Productivity in Defense Spending

As detailed in my September 14, 2010 Guidance to acquisition professionals, I am seeking to obtain greater efficiency and productivity in defense spending by pursuing initiatives in the following five areas: (1) Target Affordability and Control Cost Growth; (2) Incentivize Productivity and Innovation in Industry; (3) Promote Real Competition; (4) Improve Tradecraft in Services Acquisition; and (5) Reduce Non-Productive Processes and Bureaucracy.

This memorandum specifies actions that I expect you to execute either immediately or in the time frame indicated in order to implement the September 14 Guidance. Additional actions in support of these five initiatives will be developed over the next few weeks and months.

TARGET AFFORDABILITY AND CONTROLLING COST GROWTH

Mandate affordability as a requirement:

Effective November 15, 2010, I will implement affordability-based decision making at milestone decision points for all Acquisition Category (ACAT I) programs. Specifically, I direct the following actions:

Baseline Portfolio and/or Mission Area Definitions: As a basis for affordability analysis, you will use standard budget categories to the extent possible. Representative examples include: tactical wheeled vehicles, tactical aircraft, surface combatants, and communications satellites.

Milestone (MS) A: You will establish an affordability target to be treated by the program manager (PM) like a Key Performance Parameter (KPP). This affordability target (initially, average unit acquisition cost and average annual operating and support cost per unit) will be the basis for pre-MS B decision making and systems engineering tradeoff analysis. This analysis should show results of capability excursions around expected design performance points to highlight elements that can be used to establish cost and schedule trade space. The affordability target should be presented in the context of an analysis of the resources that are projected to be available in the portfolio(s) or mission area(s) associated with the program being considered for the MS A decision, assuming programmed defense budgets and force structures. In order to meet this requirement, you will provide a quantitative analysis of the program's portfolio or mission area across the life cycle of all products in the portfolio or mission area, including acquisition and operating and support budget suitability to absorb the proposed new start as a content change. Specifically, if introducing a new program into a portfolio or mission area, you should indicate what specific adjustments will be made to absorb the new program.

Milestone B: You will present a systems engineering tradeoff analysis showing how cost varies as the major design parameters and time to complete are traded off against each other. The analysis will pay due attention to spiral upgrades. You will recommend for my approval to establish and document, in the Acquisition Decision Memorandum (ADM) and in the program baseline, an 'Affordability Requirement' for acquisition cost and for operating and support cost. This requirement will be the functional equivalent of Key Performance Parameters (KPPs) for baseline establishment and monitoring. You will provide cost tradeoff curves or trade space around major affordability drivers (including KPPs when they are major cost drivers) to show how the program has established a cost-effective design point for these affordability drivers.

By November 15, 2010, you will provide me with a schedule that charts when you will establish affordability as a requirement for ACAT II and below programs for which you are responsible.

Drive productivity growth through Will Cost/Should Cost management:

Effective November 15, 2010, you will establish "Should Cost" targets as management tools for all ACAT I programs as they are considered for major MS decisions. As described in my September 14, 2010, Guidance to the acquisition workforce, "Should Cost" targets will be developed using sound estimating techniques that are based on bottom-up assessments of what programs should cost, if reasonable efficiency and productivity enhancing efforts are undertaken. These costs will be used as a basis for contract negotiations and contract incentives and to track contractor and program executive officer/project manager performance. Program performance against "Should Cost" estimates will be reported to the Office of Acquisition Resources and Analysis through Acquisition Visibility Service Oriented Architecture (AV SoA).

By January 1, 2011, you will establish "Should Cost" estimates for ACAT II and III programs as they are considered for component MS decisions. You will use "Should Cost"-based management to track performance of ACAT II and III programs.

Eliminate redundancy within Warfighter portfolios:

You will conduct portfolio reviews for selected ACAT II and III programs under your management to identify and eliminate redundancy. Beginning March 1, 2011, and annually thereafter, you will provide me with a one-page report on the selection of portfolios for review and the results of these reviews.

Make production rates economical and hold them stable:

By January 1, 2011, you will provide me, for each of your ACAT I programs, a one-page description of how the procurement rate and schedule were set, with reference to Economic Order Quantity (EOQ) and the affordability target set at MS A, as adjusted at MS B. As a central component of this investment plan, you will define production rate change limits based on the MS A or B affordability assessments mentioned above. Program deviations from these limits, including those intended in budget adjustments, will require my review and approval prior to implementation or submission with component Program Objective Memoranda (POMs).

Set shorter program timelines and manage to them:

Effective November 15, 2010, you will include a justification for the proposed program schedule as part of the cost tradeoff analysis at MS B to support affordability. This justification will be part of the ADM authorizing the program to proceed. Deviation from the schedule established at the most recent MS without my prior approval could lead to revocation of the MS.

INCENTIVIZE PRODUCTIVITY AND INNOVATION IN INDUSTRY

Reward contractors for successful supply chain and indirect expense management:

Effective November 15, 2010, you will include the incentive strategy behind the profit policy, including consideration of breakout alternatives where appropriate, in all acquisition strategies for all ACAT ID programs. By January 1, 2011, you are directed to establish the same requirement for all other programs over which you have acquisition authority.

Increase the use of Fixed-Price Incentive Firm Target (FPIF) contract type where appropriate using a 50/50 share line and 120 percent ceiling as a point of departure:

Effective immediately, you will give greater consideration to using Fixed-Price Incentive Firm Target (FPIF) contracts, particularly for efforts moving from development to production. In the past, acquisition teams have moved frequently from cost reimbursement contracts for development efforts and early production lots to Firm-Fixed-Price (FFP) for production efforts without adequately considering the use of FPIF contracts.

Effective immediately, you will provide a justification for the contract type used for each proposed contract above $100 million for ACAT ID programs. Effective immediately, you will also similarly review the contract type chosen for all contracts for more than $100 million under other ACAT levels.

I expect acquisition teams to pay particular attention to share lines and ceiling prices, and FPIF contracts with a 120 percent ceiling and a 50/50 share ratio should be the norm, or starting point. Effective immediately, you will implement this Guidance for all programs under your immediate direction and direct your PEOs to do the same.

Adjust progress payments to incentivize performance:

Effective January 1, 2011, you will identify pilot programs to use innovative financing methods as a negotiating tool. To assist in this effort, I have directed the Director, Defense Procurement & Acquisition Policy (DPAP) to immediately develop a cash flow model and to provide guidance for the use of a preferred hierarchy of innovative financing methods described in the model that takes into consideration the lifecycle phase of weapon system programs. Emphasis should be placed on flow-down provisions to subcontractors as well.

Extend the Superior Supplier Incentive Program (SSIP) to a DoD-wide pilot:

DPAP will establish a Superior Supplier Incentive Program (SSIP) based on the Department of the Navy's program pilot, effective January 1, 2011.

Reinvigorate industry's independent research and development and protect the defense technology base:

Effective immediately, you are directed to support the Director, Defense Research & Engineering (DDR&E), whom I have tasked to reinvigorate the Independent Research and Development (IRAD) program and create other incentives for industry to conduct more defense-relevant R&D. This task includes enhancing the Small Business Innovation Research (SBIR) program to promote the role of small business in supporting DoD IRAD needs.

PROMOTE REAL COMPETITION

Present a competitive acquisition strategy at each program milestone:

Effective immediately, you will provide a one-page competitive strategy for each ACAT ID program at each milestone as part of the overall acquisition strategy. By December 1, 2010, you will require a competitive strategy to be included in the acquisition strategy prior to each milestone for ACAT IC, II, III and IV programs under your management. You will also report to me on how you intend to reduce single-bid competitions. At a minimum, your report will address market research, restricted specifications, and adequate time for proposal preparation. I expect you to achieve a two percent reduction in single-bid competitive contracts in Fiscal Year 2011, with continuing reductions thereafter.

Remove obstacles to competition:

You will ensure that by November 15, 2010, your contracting officers conduct negotiations with all single-bid offerors unless this requirement is specifically waived by the Head of Contracting Activity (HCA) or yourself. The basis of these negotiations will be cost or price analysis, as the case may be, using either certified or non-certified cost or pricing data, as appropriate.

You will direct your component or agency competition advocate to develop a plan to improve both the overall rate of competition and the rate of effective competition by December 1, 2010. These plans will establish an improvement rate of at least two percent per year for overall competition and an improvement rate of at least 10 percent per year for effective competition.

- ***Require open systems architectures and set rules for acquisition of technical data rights:***

Effective November 15, 2010, you will conduct a business case analysis, in consort with the engineering tradeoff analysis that will be presented at MS B. The business case analysis will outline the open systems architecture approach, combined with technical data rights the government will pursue in order to ensure a lifetime consideration of competition in the acquisition of weapon systems. The results of this analysis will be reported in the Acquisition Strategy Report and in the competition strategy.

Increase dynamic small business role in defense marketplace competition:

Effective December 1, 2010, all competitive and non-competitive procurement actions will seek to increase small business participation through weighting factors in past performance and in fee construct.

IMPROVE TRADECRAFT IN SERVICES ACQUISITION

Create a senior manager for acquisition of services in each component, following the Air Force's example:

By November 15, 2010, you will provide me with an implementation plan with relevant milestones to establish a senior manager for the acquisition of services at the general officer, flag, or SES level. This senior manager will be responsible for governance in planning, execution, strategic sourcing, and management of service contracts. The senior manager will be the decision authority for services acquisitions valued at less than $250 million.

Adopt uniform taxonomy for different types of services:

Effective immediately, you will use the existing Product Service Code (PSC) categories contained in the Product and Service Code Manual maintained by the General Services Administration, Federal Procurement Data Center, and Office of Management and Budget as the basis for collecting data on and managing services contracts.

Address causes of poor tradecraft in services acquisition:

- ***Assist users of services to define requirements and prevent creep via requirements templates:***

By January 1, 2011, you will standardize the method by which you acquire services through the development and use of standard templates in developing Performance Work Statements to improve contract solicitations. You will coordinate with the Director, DPAP and other CAEs to ensure a consistent approach across DoD.

By December 1, 2010, you will develop a plan to strengthen and improve the use of market research in order to understand industry's capabilities and pricing strategies.

- ***Enhance competition by requiring more frequent re-competes of knowledge-based services:***

By January 31, 2011, you will conduct a review of the length of time knowledge-based services contracts within your agency or component are scheduled to remain in effect before re-competition occurs and report the results to me. Single-award actions should normally be limited to three years (including options). I specifically exempt Federally Funded Research and Development Center (FFRDC) contracts and University Affiliated Research Center (UARC) contracts from this three-year policy given the strategic, long-term nature of their contracts and their unique relationship with the Department. By March 1, 2011, you will provide me with a plan to bring knowledge-based services contracts within your agency or component into closer compliance with the three-year general limitation.

- ***"1-bid" proposals:***

In cases where "1-bid" proposals are received, you will require pricing and cost data as appropriate. In addition, solicitations receiving only 1-bid, and which were open to industry for less than 30 days, are to be re-advertised for a minimum period of an additional 30 days unless a waiver is obtained from the Head of Contracting Activity (HCA). This directive is to be implemented no later than December 1, 2010.

- ***Limit the use of time and materials and award fee contracts for services:***

I will issue further detailed guidance for establishing taxonomy of preferred contract types in services acquisition, but starting immediately, you will ensure that services acquisitions under your control are predisposed toward Cost-Plus-Fixed-Fee (CPFF) or Cost-Plus-Incentive-Fee (CPIF) arrangements when robust competition or recent competitive pricing history does not exist. This practice will be used to build sufficient cost knowledge of those services within that market segment. You will employ that cost knowledge to inform the "Should Cost" estimates of future price and contract type negotiations. When robust competition already exists, or there is recent competitive pricing history, you will ensure that services acquisitions under your control are predisposed toward Firm-Fixed-Price (FFP) type contract arrangements. FFP should also be used to the maximum extent reasonable when ongoing competition is used in Multiple Award Contract scenarios.

- ***Require services contracts exceeding $1 billion contain cost efficiency objectives:***

Effective immediately, you will ensure that services contracts valued at more than $1 billion contain provisions in the contract to achieve productivity improvements and cost efficiencies throughout the term of the contract.

Increase small business participation in providing services:

Effective January 1, 2011, DoD components will seek opportunities to compete Multiple Award/IDIQ contracts among small businesses.

REDUCE NON-PRODUCTIVE PROCESSES AND BUREAUCRACY

In accordance with the OSD tasking, you should seek to reduce non-productive processes and bureaucracy in your acquisition process.

By November 15, 2010, you are to complete an assessment of all internal reviews to ensure that they focus their purpose on the major acquisition investment decisions to be made by your component and the Department.

By March 1, 2011, you should review all component- required acquisition documents for redundancy with OSD-required documents and eliminate redundant documents and non-value-added content. You should ensure that such documents are focused on content needed to make Component- level decisions.

You are to conduct a bottom-up review of all internally-generated reporting requirements. You are to assess the value of the reports with a goal to eliminate at least 50 percent of the reports and substantially shorten the ones remaining. In addition, effective immediately, you are to assign reasonable page count caps (based upon the nature of the information requested) when you assign lead responsibility for report production.

DoD Regulatory System: This directive and guidance are effective immediately. All applicable DoD Directives and other related issuances shall be updated to implement this direction and guidance within 180 days.

Ashton B. Carter

cc:
All CAEs
DCMA
DCAA
DCMO

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Appendix F. Memorandum on Implementation of Will-Cost and Should-Cost Management 042211

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION, TECHNOLOGY AND LOGISTICS

APR 2 2 2011

MEMORANDUM FOR ACQUISITION AND LOGISTICS PROFESSIONALS

SUBJECT: Implementation of Will-Cost and Should-Cost Management

Last September, I directed the implementation of an internal management tool for all ACAT I, II, and III programs that I coined Will-Cost and Should-Cost Management. My goal for this initiative is to ensure that Program Managers drive productivity improvements into their programs during contract negotiations and throughout program execution including sustainment. It is essential that we eliminate cost overruns and begin to deliver programs below budget baselines that are set using independent Will-Cost estimates. I believe this is achievable if Program Managers continuously perform Should-Cost analysis that scrutinizes every element of government and contractor cost. This memorandum provides additional direction on the implementation of Will-Cost and Should-Cost Management.

Program Managers will develop, own, track, and report against Should-Cost estimates. In doing so, they should use all relevant resources within the Department to facilitate the development of program Should-Cost estimates (e.g., DCMA assisted overhead and program cost reviews). I expect Program Managers to provide program-level Should-Cost estimates for their ACAT I, II, and III programs as they are reviewed at major milestone decisions. The Defense Acquisition Board templates have recently been updated to reflect the type of information that is expected for Will-Cost and Should-Cost program estimates. In addition, I have directed the Services to each identify five programs to serve as models for Should-Cost implementation.

These programs will be used to communicate and demonstrate to other DoD offices and Congress the intent and advantages associated with managing to a Should-Cost estimate that is lower than the program budget. The delta between Should-Cost and Will-Cost will be managed consistently with the contract type(s) being used in the program. Once a firm-fixed-price contract is negotiated, any delta between budgeted amount and contracted price can be considered to have been "realized" and be reallocated consistent with statutory limitations and DoD/Service policies. For other types of contracts, funds generally can be reallocated after sufficient confidence has been established that contract performance will result in realized savings.

Service and Component Acquisition Executives should develop incentive plans for their Program Managers to reinforce and reward commitment to the Will-Cost and Should-Cost Management process. In addition, an annual report on Should-Cost progress is expected from each Service and Component. The first report is due to me on November 1, 2011. Progress reporting on the Should-Cost estimates will also be required for all Defense Acquisition Executive Summary reviews. Should-Cost estimates are not to be used for official program reporting, to set acquisition program baselines, or to set budgets. The Will-Cost estimate will continue to be the official position of the Department for use in budgeting, programming, setting acquisition program baselines, and for any other program reporting requirements external to the Department.

An essential ingredient of Should-Cost management is the provision of incentives for both of the parties to program execution: government managers, who seek more value for the warfighter and taxpayer; and industry managers, who develop, build and sustain our systems and provide needed services. The key is to seek and eliminate low-value-added ingredients of program cost and to reward appropriately those who succeed in doing this. For government managers, this means additional resources to enhance their programs (for example, by freeing up funds to buy more warfighting capability) and professional recognition. This will be part of how every Program Manager's and Program Executive Officer's performance will be evaluated. For industry, this means sharing in savings realized in the form of increased profit and enhanced corporate recognitions for delivering value to the government.

Service and Component Acquisition Executives, Program Executive Officers, and Program Managers should weigh the best method of meeting the intent of this initiative. Should-Cost estimates can be developed in any of three ways or in a combination. The first is through a bottoms-up estimate. Program offices do not need to form excessively large cross-functional teams to perform detailed bottoms-up assessments on *every* ACAT I, II, and III program. In some cases, however, this level of detailed analysis will be extremely beneficial and desired.

The second method is to identify reductions from "Will-Cost" estimates. At a minimum, I expect each Program Manager to determine specific discrete and measurable items or initiatives that can achieve savings against the Will-Cost estimate. These actionable items will be presented via the Should-Cost estimate and will be tracked and managed as part of Should-Cost estimate progress reporting. Arbitrary reductions and unsubstantiated high-risk goals against the Will-Cost estimate are not acceptable. Should-Cost estimates must be consistent with the defined program of record and have actionable content. Items that require significant up-front investment or significant change to the program of record (e.g., economic production rates) should not be presented in the Should-Cost estimate base, but should be highlighted in separate excursions for consideration by the Milestone Decision Authority.

A third method, where applicable, should use competitive contracting and contract negotiations to identify Should-Cost savings. In all cases, our contracts should reflect our efforts to manage to Should-Cost levels. This includes providing adequate savings sharing for industry to achieve Should-Cost levels that have been identified but not yet realized in incentive-type contracts and negotiating fixed-price contracts that reflect Should-Cost estimates.

Ashton B. Carter

Ashton B. Carter

Attachments:
1. Ingredients of Should-Cost Management
2. Will-Cost and Should-Cost Management Example Programs

ATTACHMENT 1

Ingredients of Should-Cost Management

1. Scrutinize each contributing ingredient of program cost and justify it. Why is it as reported or negotiated? What reasonable measures might reduce it?

2. Particularly challenge the basis for indirect costs in contractor proposals.

3. Track recent program cost, schedule, and performance trends and identify ways to reverse negative trend(s).

4. Benchmark against similar DoD programs and commercial analogues (where possible), and against other programs performed by the same contractor or in the same facilities.

5. Promote Supply Chain Management to encourage competition and incentivize cost performance at lower tiers.

6. Reconstruct the program (government and contractor) team to be more streamlined and efficient.

7. Identify opportunities to breakout Government-Furnished Equipment versus prime contractor-provided items.

8. Identify items or services contracted through a second or third party vehicle. Eliminate unnecessary pass-through costs by considering other contracting options.

9. In the area of test:

    a. Take full advantage of integrated Developmental and Operational Testing to reduce overall cost of testing;
    b. Integrate modeling and simulation into the test construct to reduce overall costs and ensure optimal use of National test facilities and ranges.

10. Identify an alternative technology/material that can potentially reduce development or life cycle costs for a program. Ensure the prime product contract includes the development of this technology/material at the right time.

ATTACHMENT 2

Will-Cost and Should-Cost Management
Example Programs

Air Force	**Army**	**Navy**
Joint Strike Fighter (F-35)	Joint Air Ground Missile (JAGM)	Joint Strike Fighter (F-35)
Global Hawk Blocks 30 & 40 (GH BLK 30 & 40)	Black Hawk (UH-60M)	Hawkeye (E-2D)
Space Based Infrared System (SBIRS)	Ground Combat Vehicle (GCV)	Presidential Helo (VXX)
Evolved Expendable Launch Vehicle (EELV)	Paladin Product Improvement (PIM)	Littoral Combat Ship (LCS)
Advanced Extremely High Frequency (AEHF) Satellite System	NETT Warrior	Ohio Replacement Program

Appendix G. Should-Cost—Ashton-Carter-Memo--24Aug11

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION, TECHNOLOGY AND LOGISTICS

AUG 2 4 2011

MEMORANDUM FOR DEFENSE ACQUISITION AND LOGISTICS PROFESSIONALS

SUBJECT: Should-cost and Affordability

For product development programs, some understandable confusion exists as to how to implement both "should-cost" and "affordability as a requirement," particularly early in a program's life cycle before engineering and manufacturing development (EMD) and production. The two are compatible, but they must be balanced differently across the product life cycle. The emphasis prior to Milestone B should be on defining and achieving affordability targets. Past this point, the emphasis shifts to defining and achieving should-cost estimates.

"Affordability as a requirement" directs that we establish quantified goals for unit production cost and sustainment costs for our products, driven by what the Department or Service can pay. We should set these goals early and use them to drive design trades and choices about affordable priorities. Affordability analysis is based on the budgets we expect to have for the product over its life cycle and provides a design constraint on the product we will build, procure, and sustain. When the Department, i.e., the Milestone Decision Authority, establishes the affordability requirement, it represents a metric that captures the product's expected capability against its expected (affordable) life cycle cost. From this point on, any future unit cost or sustainment cost increase above those levels, from whatever cause, must come back to the MDA and the user to determine what requirements can be dropped to stay within the affordability requirement or if the program must be terminated.

"Should-cost" asks us consciously to do something different. It asks us to continuously fight to lower all our costs, wherever that makes sense. Should-cost is a tool to manage all costs throughout the life cycle, and it operates in parallel with the effort to constrain our requirements appetites in order to control the final product unit and sustainment costs. Should-cost is focused on controlling the cost of the actual work that we are doing and expect to do. In particular, should-cost estimates inform our negotiations with industry over contract costs and incentives. The should-cost approach challenges us to do our best to find specific ways to beat the Independent Cost Estimates (ICE) or Program Estimate (which should already reflect the affordability requirements) and other cost projections funded in our budgets (i.e., "will-cost"), when we find sensible opportunities to do so. For example, should-cost does not mean trading away the long-term value of sound design practices and disciplined engineering management for short-term gain; it does mean eliminating non-value added overhead and unnecessary reporting requirements.

Should-cost can be applied to anything that we do and to any source of costs, including costs for services and internal government costs as well as contracted product costs. Should-cost targets are often stretch goals we expect our leaders to do their best to reach; we expect them to be based on real opportunities, but to be challenging to execute. Unlike affordability requirements, we do not expect them to always be achieved, but we do expect strong efforts to do so.

Should-cost and affordability can come into conflict early in programs, particularly before MS B, when an affordability requirement may have been defined based on expected budgets, but it is too early to define should-cost estimates for future production or sustainment of products, because we have not yet defined the design. This is also the time when spending money on efforts to reduce future costs can have the biggest payoff. As a result, during the early stages of product development, the priority should be toward establishing affordability constraints and working to provide the enablers to achieve them in the ultimate design. In the early phases of programs, should-cost can still be constructively used to control program overhead and unproductive expenses and to generally reduce contracted development costs, but it should not keep us from making sound investments in product affordability. Prior to the pre-EMD Review or MS B, the ICE or Program Estimate for production and sustainment has not been finalized, and any should-cost estimates for future production lots and sustainment spending would be premature. At that point, however, particularly if we are ready to ask for bids and negotiate low rate initial production (LRIP) prices, we need a should-cost estimate to inform negotiations. Once the requirements, design and affordability goals are established and an ICE or Program Estimate exists, then it is time to challenge the assumptions embedded in those analyses, formulate should-cost estimates for production and sustainment, and work to achieve those estimates.

Ashton B. Carter

Ashton B. Carter

Appendix H. Navy-Implementation-of-Should-Cost-Mgt-19Jul11

THE ASSISTANT SECRETARY OF THE NAVY
(RESEARCH, DEVELOPMENT AND ACQUISITION)
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

JUL 19 2011

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Implementation of Should-Cost Management

References: (a) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum "Implementation Directive for Better Buying Power – Obtaining Greater Efficiency and Productivity in Defense Spending" November 3, 2010
(b) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum "Better Buying Power: Guidance for Providing Better Efficiency and Productivity in Defense Spending" dated September 24, 2010
(c) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum "Implementation of Will-Cost and Should-Cost Management" dated April 22, 2011
(d) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum on Savings Related to "Should-Cost"
(e) Under Secretary of Defense (Acquisition Technology & Logistics) Memorandum "Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending" dated June 28, 2010
(f) Assistant Secretary of the Navy (Research, Development, and Acquisition) and Assistant Secretary of the Navy (Financial Management and Comptroller) Memorandum "Department of the Navy Service Cost Positions" dated January 7, 2010
(g) SECNAVINST 5223.2 Department of the Navy Cost Analysis dated December 16, 2008

Attachment (1): Should-Cost Management Guidelines

The Department of the Navy (DoN) acquisition community is continuing to implement the 23 principle actions identified in references (a) and (b) to gain greater efficiency and productivity in defense spending. Of particular importance is implementation of "Should-Cost Management," emphasized in reference (c) and (d).

In accordance with references (a) – (e), the DoN is directed to establish Should-Cost targets for all ACAT I – III programs and to use Should-Cost Management to track subsequent performance. Implementation of these directives requires the establishment of a Will-Cost estimate and continual Should-Cost Management activity for all ACAT I, II, and III programs as defined in the Should-Cost Management Guidelines (attachment (1)). Program managers, through continuous Should-Cost Management, will identify specific, discrete, and measurable actions or initiatives that achieve savings against the Will-Cost estimate. Should-Cost Management challenges program managers to drive productivity improvements in all phases of program execution by scrutinizing every element of government and contractor costs. Reference (c) provides program managers with specific approaches to achieving Should-Cost targets and realizing savings through lower program costs.

The Milestone Decision Authority (MDA) will approve all Should-Cost Management initiatives and targets and will use these to set program execution goals. Program managers will manage, report and track to these targets, as well as defend the validity of the specific initiatives identified that achieve savings against the Will-Cost estimate. For programs that report to the Office of Secretary of Defense, approval by the MDA of Should-Cost Management initiatives is required prior to leaving the DoN. Should-Cost Management reporting will not be external to the Department of Defense (DoD).

Program budget baselines for ACAT I, II, and III programs will be informed by the program Will-Cost estimate. During the year of execution, funds will be available to programs based on their Should-Cost Management targets. Successful execution to the Should-Cost Management estimate will create assets within the DoN for reallocation to the highest priority needs. Initially, the withholding of funds will be limited to the F-35, E-2D, VXX, LCS and Ohio Replacement programs, which will serve as pilots to develop an effective funds management process.

Attachment (1) provides initial guidance and clarifies terms, procedures, and reporting requirements associated with this initiative. The point of contact for this initiative is the Deputy Assistant Secretary of the Navy, Management and Budget (M&B).

Sean J. Stackley

Distribution:
ASN (FM&C)
COMNAVSEASYSCOM (SEA 00, SEA 06)
COMNAVAIRSYSCOM
COMSPAWARSYSCOM
COMMARCORSYSCOM
COMNAVFACENGCOM
COMNAVSUPSYSCOM

SUBJECT: Implementation of Should-Cost Management

COMSC
CMC
CNR
CNO (N09B, N1, N21N6, N3/5, N4, NS, N8)
PEO (JSF)
PEO (T)
PEO (A)
PEO (U&W)
PEO (SPACE)
PEO (LCS)
PEO (SHIPS)
PEO (SUBS)
PEO (CARRIERS)
PEO (IWS)
PEO (EIS)
PEO (C4I)
PEO (LS)
DRPM (SSP)

cc:
DASN (M&B, SHIPS, AIR, C4I/IO/SPACE, E&LM, RDT&E, IP, AP)
AGC (RD&A)

SHOULD-COST MANAGEMENT GUIDELINES

Will-Cost Estimates and Should-Cost Management

A transparent, two tiered cost, funding, and management approach using two separate estimates, a Will-Cost estimate to inform the program/budget process and a Should-Cost Management target for program management and execution.

Will-Cost Estimate (Budget Baseline) and Development

The budget baseline will be informed by a Will-Cost estimate that aims to provide sufficient resources to execute the program under normal conditions, encountering appropriate levels of technical, schedule, and programmatic risk and to provide assurance that: 1) the program can be completed within the budgeted program baseline and 2) the program will not encounter a Nunn-McCurdy breach. For ACAT I programs, the Will-Cost estimate is the CAPE Independent Cost Estimate (ICE) or the Service Cost Position (SCP). The Will-Cost estimate will be prepared in accordance with all applicable documents found in Appendix A and the cost estimating procedures noted in references (e) and (f) of this Implementation of Should-Cost Management memorandum. Reference (f) describes specific requirements for DoN Service Cost Positions in support of ACAT I milestone decisions, and these same principles should be applied to ACAT II and III programs. Will-Cost estimates for ACAT II and III programs will be presented at milestone decisions and approved by the appropriate Systems Command (SYSCOM) cost estimating organizations in accordance with reference (g).

As identified in SECNAVINST 5223.3 "Department of the Navy Service Cost Positions" dated December 16, 2008, the Will-Cost estimate should reflect the program of record estimate and the Cost Analysis Requirements Description (CARD). Programs are expected to actively manage the budget baseline using current Will-Cost estimates for all acquisition, budget, and programming decisions.

Processes for Will-Cost estimates are currently in place for ACAT I programs, including a requirement for a SCP at each milestone decision. ACAT II and III programs should present a Will-Cost estimate at milestone decisions that have been approved by the appropriate System Command (SYSCOM) cost estimating organization. Annual ACAT II and III program Will-Cost estimate updates must also be approved by the appropriate SYSCOM cost estimating organization. For all programs, the Will-Cost estimate review/update must assess all Should-Cost Management efficiencies identified for potential incorporation.

Should-Cost Management (Program Execution Targets) and Development

The program execution target will incorporate Should-Cost Management initiatives developed by the program office and will be used as an internal management tool within the DoD to incentivize performance to the target. The Should-Cost target will be based on

1

Attachment 1

realistic technical and schedule baselines and assumes successful outcomes from implementation of efficiencies, lessons learned, and best practices. Targets will be designed to drive productivity improvements in programs, will inform contract negotiations and will incorporate results of contract direct and indirect cost reviews when they are conducted. (See FAR 15.407-4 and DFARS 215.407-4 Should Cost Reviews.) The program office is responsible for developing Should-Cost Management targets and initiatives along with all tracking and reporting requirements. Under Secretary of Defense, (Acquisition Technology & Logistics), USD (AT&L) (ACAT ID and IAMs) and Assistant Secretary of the Navy (Research, Development, and Acquisition), ASN (RD&A) (or delegated MDA or PEO) will approve Should-Cost Management targets at milestones and at annual Gate Reviews/Configuration Steering Boards. Updates resulting from annual reviews for all ACAT I programs are approved by ASN (RD&A) with AT&L notified of these revisions.

Should-Cost targets should consider all Will-Cost estimate excursions and all previously defined Should-Cost targets. Should-Cost Management initiatives will be categorized as either near-term (within the program manager's tenure) or long-term initiatives (e.g. cost related to sustainment); and program driven (within program manager's control), service driven (within the services control), or externally driven (outside service control).

Should-Cost targets should be developed in one of three ways:

- The Should-Cost target is developed using the Will-Cost estimate as the base and applies discrete, measurable items and/or specific initiatives for savings against that base. This is the recommended approach for all programs with an established Will-Cost estimate.

- The Should-Cost target is developed using a bottom-up approach without a formal FAR/DFARS should cost review and includes actionable content that will lead to achieving cost below the Will-Cost estimate or budget baseline. The bottoms-up approach can be performed at the very lowest levels or at higher levels, and is primarily defined as using methods distinctly different from the Will-Cost estimate development.

- The Should-Cost target is developed using a bottom-up approach with a full-up indirect/direct contract should cost review in accordance with FAR 15.407-4 and DFAR 215.407-4 and includes actionable content that will lead to achieving cost below the Will-Cost estimate or budget baseline.

Note: Detailed FAR/DFARS should cost reviews are recommended to support contract negotiations, particularly for sole source production procurements; however, they are often resource and time intensive and require advance coordination with DCMA and Service functional communities.

Should-Cost targets will be developed in collaboration with the appropriate SYSCOM functional organizations and program managers may seek assistance from outside organizations (e.g. ASN (RD&A), the Naval Center for Cost Analysis (NCCA), DCMA and other program offices) as program managers identify Should-Cost initiatives. Unspecified cost reductions (e.g. broad based dollar / percent reductions) against the Will-Cost estimate are not valid Should-Cost targets. Initiatives are expected to have specific actionable content associated with the reductions. Most items outside the control of the program office and inconsistent with the current program of record are outside excursions and not appropriate as Should-Cost Management initiatives. For example, economic production rate excursions or other quantity excursions are not part of the program Should-Cost target. They should be identified and presented separately. Items that require significant up-front investment or a significant change to the program of record (e.g. economic production rates) should not be included as a Should-Cost Management initiative, but should be presented as separate but important excursions for consideration by the MDA.

Should-Cost Management Reporting Processes and Procedures

Will-Cost estimates and Should-Cost Management targets are required for all ACAT I, II and III milestone decisions. Table 1 summarizes when Will-Cost estimates, Should-Cost targets, and Indirect/Direct Contract Cost Reviews are required or recommended.

Table 1: Event Driven Cost Estimate Reporting Requirements

Event	Will-Cost estimate (Initial / Update) (Refer to App. A & B).	**Program Should-Cost Management target** **(Initial / Update)**	Indirect/Direct Contract Cost Reviews (Refer to recommendations IAW FAR 15.407-4 and DFAR 215.407-4)
MS A	Initial	**Initial**	N/A
MS B	Update (Initial setting of Budget Baseline for Nunn-McCurdy metrics)	**Update (Sets Internal Program Execution Baseline)**	Initial to Support Contract Actions (Optional)
MS C / LRIP 1 Contract Award	Update	**Update**	Optional Refer to recommendations IAW FAR 15.407-4 and DFARS 215.407-4.

In addition, consideration should be given to updating Should-Cost Management targets for the following program events:

- FRP (FDDR) Decision / Contract Award.

- In preparation for or immediately following Critical Design Review.

- First LRIP award out of option contracts; in particular, in cases where option production contracts were awarded as part of the development contract award.

- Interim Contractor Support and Contractor Logistic Support first contract awards. At a minimum update the Will-Cost estimate, but consider updating the Should-Cost target and conducting a FAR/DFARS indirect/direct cost reviews. Conducting these updates in conjunction with a sustainment Business Case Analysis (BCA) is beneficial.

- Organic Logistics Infrastructure. Update the Will-Cost estimate, but consider updating the Should-Cost target and conducting a FAR/DFARS indirect/direct cost reviews. Conducting these updates in conjunction with a sustainment BCA is beneficial.

Reporting Methods and Templates

Program offices will be responsible for tracking and reporting all Should-Cost targets and any updates. At a minimum, reporting elements will include the discrete items or specific initiatives, cost savings associated with each individual item, a program timeline or event when the savings is expected to be realized, and the total expected to be saved. Maintaining visibility of the original program execution baseline over time, how it changes and the successes achieved is critical and will provide valuable lessons learned and data for other and future programs.

The Should-Cost target is an internal management tool for incentivizing performance to target, and is, therefore, not to be used for budgeting, programming, or reporting outside the department. Thus, Should-Cost target documentation must be marked and treated as For Official Use Only. For programs that report to the Office of Secretary of Defense, approval by the MDA of Should-Cost Management initiatives is required prior to leaving the DoN. Formal reporting in DASHBOARD will be required in the future and the Should-Cost targets will be reported to the AT&L/ARA through Acquisition Visibility Service Oriented Architecture (AV SOA).

Appendix B contains the approved Will-Cost/Should-Cost DAB template for MS A and MS B, and for DoN Gate Reviews. This template can be tailored as necessary. Appendix C offers recent examples of DoN program Should-Cost Management opportunities for consideration.

With appropriate justification, waivers may be granted for Should-Cost targets or subsequent updates. In rare circumstances, and with appropriate justification, waivers may be requested from the OUSD (AT&L) for ACAT ID/IAM programs, the ASN (RD&A) for ACAT IC/IAC programs, and by the MDA or PEO for ACAT II and III programs. Waiver requests to the Should-Cost Management requirements should be submitted to DASN (M&B) using the form "Exemption to Should-Cost Management Requirement" found in Appendix D.

Process for withhold and release of the difference between the Will-Cost estimate (budget) and the Should-Cost Management target

During program execution the difference between the funds appropriated annually and Should-Cost Management target will be held at the Secretariat level. The SAE is the decision authority on the distribution of the difference for all ACAT I programs, the MDA for all ACAT II programs and the PEOs are the decision authority for the distribution of the difference for all ACAT III programs. Initial and updated Will-Cost estimates and Should-Cost targets must be promptly provided to ASN (RD&A) DASN (M&B) and OASN (FM&C) DASN (FMB) to manage the funding hold process. The funding hold and release process for the Department of the Navy will be as follows:

- Programs that are funded starting in FY2012 and are limited to expending no more than the Should-Cost Management target. Funds equal to the Should-Cost target will be released to the program manager for execution. The remaining funds representing the difference between the Will-Cost estimate and the Should-Cost target will remain in the program line but be placed on hold at the Secretariat level.

- Each program manager will brief their execution status relative to the Should-Cost Management target at the annual Gate Six Sufficiency Review/ Configuration Steering Board. Program managers will also present their annual Should-Cost target updates during any scheduled SAE reviews.

- Program managers will request any release of funds on hold during the annual Gate Review/CSB (see Appendix B for a template).

- If a program manager requires release of funding between regularly scheduled Gate Six reviews, the Program Executive Officer shall schedule an out-of-cycle Gate Six review through the appropriate product DASN.

- If a program manager requires release of funding between regularly scheduled Gate Six reviews, the Program Executive Officer shall schedule an out-of-cycle Gate Six review through the appropriate product DASN.

NOTE: The process to hold funds that have been appropriated and that represent the difference between the Will-Cost estimate and the Should-Cost Management target will initially be piloted on five DoN programs (i.e., F-35, E-2D, VXX, LCS, Ohio Replacement) and will be fully implemented across all ACAT I, II and III programs upon successful completion of the pilot.

Program managers will share Should-Cost Management information and results among all DoN cost organizations in a transparent and timely manner. Program offices, SYSCOM cost staffs, and NCCA will ensure full incorporation of the achieved savings into updated Will-Cost estimates. Updated Will-Cost estimates incorporating the latest information on release of funds and achieved savings will be provided through the DoN Objective Memorandum (POM) process for inclusion in revised POM positions.

Appendix A

Cost Estimating Policy, Directives, and Guidance

1) Department of Defense (DoD) Instruction 5000.2 dated December 8, 2008

2) OUSD (AT&L)/ARA Policy Memo "Required Signed and Documented Component-level Cost Position for Milestone Reviews," dated March 12, 2009

3) ASN (RD&A) and ASN (FM&C) Memorandum "Department of the Navy Service Cost Positions," dated January 7, 2010

4) Department of Navy Cost Estimating Guide: Compendium of Best Practices

Will Cost/Should Cost

Will / Should Cost Analysis

RDTE + APA Total	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	12-17 Total	To Comp FY18-25	Total FY12-25
Will Cost (ICE)	$805.4	$1,256.0	$1,691.1	$1,260.2	$1,170.5	$973.3	$ 7,156.4	$5,556.0	$12,712.4
Should Cost	$789.4	$1,231.3	$1,675.7	$1,155.8	$ 933.1	$784.5	$ 6,569.8	$4,740.3	$11,310.1

Supporting Evidence for Should Cost:

- **Production rates economical and historically stable (\$XXX)**
- **Shorten program timeline**
  - Complete R&D effort in FY16 vs. FY17 as currently planned in ICE **(\$XXX)**
  - Potential production rate increase **(\$XXX)**
- **Strong negotiation positions (\$XXX)**
  - Historical cost, learning curve, and understanding of production efficiencies **(\$XXX)**
  - Long-term supplier agreements **(\$XXX)**
- **Parametric model MOA established with contractor for key routine functions/costs (\$XXX)**
- **Open system architecture design eases future enhancements (\$XXX)**
- **Aggressive "Breakout" IPT established for appropriate technical data packages (TDP) and data rights (\$XXX)**

Recommendation: Keep (DAB Unique) (Navy additions in blue)

Examples of Opportunities for Should-Cost Management

- Identify items or services contracted through a second or third party vehicle. Eliminate unnecessary pass-through costs by considering other contracting options

- Identify an alternative technology/material that can potentially reduce development or life cycle costs (IR&D/Lab, etc) for a program. Ensure the prime product contract includes the development of this technology/material at the right time

- Reconstruct the program (government and contractor) team to be more streamlined and efficient

- In the area of test:

    - Take full advantage of integrated Developmental and Operational Testing to reduce overall cost of testing

    - Integrate modeling and simulation into the test construct to reduce overall costs and ensure full use of National test facilities and ranges

- Identify opportunities to breakout Government Furnished Equipment versus prime contractor provided items

- Promote Supply Chain Management to encourage competition at lower tiers

- Changes to ICE (SCP) assumptions
    - Multi year procurement (economic order quantity)
    - Learning curve reduction
    - Reduced change orders
    - Overhead rate reduction
- Focus areas
    - System specifications
    - Design for affordability
    - Build strategy
    - Contracting strategy
    - Schedule reduction
    - Next generation Integrated Product Development Environment (IPDE)
    - Facility/production enhancements
- Other
    - Tandem buy (negotiate two LRIP lots)
    - Second sources
    - Alternative designs
    - Process improvements

Some approaches/items not to include in the Should-Cost estimate:

- Arbitrary reductions against the Will-Cost estimate are not acceptable for Should-Cost estimates. These estimates are expected to have specific actionable content associated with the reductions.

- Choosing a lower confidence level from your Will-cost estimate range is not acceptable for the Should-Cost estimates. These estimates are expected to have specific actionable content associated with the reductions.

- Programs operating under Firm Fixed price (FFP) should use the common sense – focused scrutiny should be on associated other government costs and only reopen FFPs if there is a clear benefit to do so.

EXEMPTION TO THE SHOULD COST REQUIREMENT		Requestor's Name:
DATE:	EXEMPTION REQUEST FORM	Requestor's Number:

DESCRIPTION OF PROGRAM:

JUSTIFICATION FOR EXEMPTION:

**Attach a copy of the program schedule to this request form.

PROGRAM START DATE	YEARS LEFT IN PROGRAM	PERCENTAGE OF FIELDING REMAINING	PROGRAM IN SUSTAINMENT	IS THERE AN APB	PROGRAM BUDGET ALL YEARS	PROGRAM BUDGET REMAINING	REPORTING REQUIRED?

<u>For Authorized Use Only</u>

PLATFORM DASN REVIEW OF REQUEST
Comments/Recommendation:

PEO: ______________________ Date: ____________

PLATFORM DASN: ______________________ Date: ____________

DASN (M&B): ______________________ Date: ____________

ASN RD&A: ______________________ Date: ____________

Appendix D

Appendix I. Air-Force-Implementation-of-Will-_-Should-Cost-Mgt-15Jun11

DEPARTMENT OF THE AIR FORCE
WASHINGTON DC

JUN 15 2011

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Implementation of Will-Cost and Should-Cost Management

In order to gain greater efficiency and productivity in Defense spending, the Under Secretary of Defense for Acquisition, Technology & Logistics (USD(AT&L)) has directed the Military Departments and Directors of Defense Agencies to implement Will-Cost and Should-Cost management for all Acquisition Category (ACAT) I, II, and III programs. Dr. Carter, USD (AT&L), is challenging program managers to drive productivity improvements into their programs during contract negotiation and program execution by conducting Should-Cost analysis. This analysis goes beyond the Federal Acquisition Regulation/Defense Federal Acquisition Regulation Supplement (FAR/DFARS) Should-Cost reviews. FAR/DFARS Should-Cost reviews set realistic objectives for negotiating the immediate contract. The Should-Cost estimate as defined in this implementation memorandum is much broader in definition, covering all government and contract program costs throughout the entire life-cycle. SAF/AQ and SAF/FM fully support the implementation of Will-Cost and Should-Cost management and expect the Air Force acquisition community to embrace the concepts and adjust our management processes immediately.

The Department will continue to set program budget baselines using non-advocate Will-Cost estimates. Air Force guidance and instruction (e.g., AFPD 65-5 and AFI 65-508) describe specific requirements for non-advocate Will-Cost estimates or Service Cost Positions in support of ACAT I milestone decisions. However, the same level of rigor and attention is currently not required for ACAT II and III programs even though they account for about 48 percent of the Air Force acquisition budget. To ensure we exercise the same discipline for these programs that we do for our ACAT I programs, all ACAT II and III programs identified on the Acquisition Master List will present Will-Cost estimates at milestone decisions that have been approved by the appropriate product or logistics center financial management cost estimating organization (FMC). As with ACAT I programs, the non-advocate Will-Cost estimate will be used as the basis for all budgeting and programming decisions. All metrics and reporting external to the department will be based on the Will-Cost estimate.

Program managers must begin to drive leanness into their programs by establishing Should-Cost estimates at major milestone decisions. The Should-Cost estimate is an internal management tool for incentivizing performance to target, and is, therefore, not to be used for budgeting, programming, or reporting outside the department. Therefore, Should-Cost estimate documentation must be marked and treated as For Official Use Only. We recognize program managers have concerns about providing estimates that are lower than the budget, since DoD culture tends to use programming and budgeting to incentivize achievement. That is not the intent of this initiative. Will-Cost estimates are the official program position for budgeting, programming, and reporting.

Program managers are responsible for developing Should-Cost estimates. They should ensure cross-functional involvement in the development of the Should-Cost estimate and they can seek assistance from outside organizations (e.g., the Air Force Cost Analysis Agency or Defense Contract

Management Agency) throughout the development process. This effort does not necessarily require large teams to perform detailed bottoms-up assessments on every ACAT I, II, and III program. In some cases, this level of detailed analysis is extremely beneficial and desired, but we expect Program Executive Officers (PEOs), Designated Acquisition Officials (DAOs), and program managers to consider resources required versus potential benefits to determine the best approach. At a minimum, program managers are expected to identify specific discrete measurable items or initiatives that achieve savings against the Will-Cost estimate.

In accordance with USD AT&L direction, program managers for ACAT I, II and III programs identified on the Acquisition Master List will present Should-Cost estimates at their next major milestone. The Milestone Decision Authority (MDA) will approve all Should-Cost estimates and will expect program managers to manage, report, and track to these estimates. We will provide an annual report to OUSD (AT&L)/ARA on our progress. By 1 Jul 2011, PEOs/DAOs will submit a prioritized plan and timeline for completing Should-Cost estimates on all their ACAT I, II, and III programs not scheduled for a major milestone review in 2011. We recognize a waiver for some of these requirements may make sense. USD(AT&L) will consider and approve waivers for ACAT ID and IAM programs. SAF/AQ and SAF/FM will consider and approve waivers for all ACAT IC/IAC programs. The PEOs/DAOs and product/logistic center FM leads will approve waivers for ACAT II and III programs.

The following Air Force programs have been designated as pilots: JSF (F-35), Global Hawk Blocks 30 & 40, Evolved Expendable Launch Vehicle (EELV), Space Based Infrared System (SBIRS), and Advanced Extremely High Frequency (AEHF) Satellite System. These programs will be the first to actually have funds distributed based on Should-Cost execution baselines. The difference between the funds distributed and the program budget baseline will be held at the Service level. SAF/AQ and SAF/FM will jointly be the decision authority for release of these funds. We will need to capture lessons learned from each of these programs and share them with OSD and the other Services.

The attachment provides additional guidance and clarifies terms, procedures, and reporting requirements associated with this initiative. The guidance will be updated and codified in policy as USD(AT&L) and the Services/Components gain experience with Will-Cost and Should-Cost management. The POCs for this issue are Ms. Ranae Woods, AFCAA/TD, 703-604-0400, ranae.woods@us.af.mil and Mr. Bob Martin, SAF/AECO, 703-588-7177, robert.martin@pentagon.af.mil.

Jamie M. Morin
Assistant Secretary of the Air Force
(Financial Management and Comptroller)

David M. Van Buren
Air Force Service Acquisition Executive

Attachment:
Will-Cost and Should-Cost Management Guidelines

2

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AFMC/FM
AFMC/A2/5

WILL-COST AND SHOULD-COST MANAGEMENT GUIDELINES

DEFINITIONS:

Will-Cost and Should-Cost Management:

A transparent, two tiered cost, funding, and management approach using two separate cost estimates, a non-advocate Will-Cost for budgeting and a program Should-Cost for internal program execution. The difference between the Will-Cost Estimate and the Should-Cost Estimate will be available first to the program, but may not need to be released to the program if program performance meets Should-Cost objectives. For execution year decisions, SAF/AQ and SAF/FM are the decision authority on the distribution of the difference for all ACAT I programs and SAF/AQX and SAF/FMB are the decision authority for the distribution of the difference for all ACAT II and III programs.

Will-Cost Management Baseline (budget baseline)

The budget baseline will be based on a non-advocate Will-Cost estimate that aims to provide sufficient resources to execute the program under normal conditions, encountering average levels of technical, schedule, and programmatic risk (usually no less than mean confidence level, typically between 55-65%). This Will-Cost estimate supports the budget and ensures sufficient funding to provide confidence that: 1) the program can be completed without the need for significant adjustment to program budgets, and 2) the program can avoid Nunn-McCurdy or critical change breaches.

- The non-advocate Will-Cost estimate shall be approved by an office or entity operating outside the program office chain of command.

- Programs are expected to actively manage the budget baseline using updated non-advocate Will-Cost estimates for all acquisition, budget, and program execution decisions (e.g. source-selection, contract negotiations, IBRs, major reviews, PMB monitoring, annual budget/programming cycle).

Should-Cost Management Baseline

The Should-Cost management baseline will be based on a program Should-Cost estimate developed by the program office and will be used as an internal management tool to incentivize performance to targets. The Should-Cost estimate will be based on realistic technical and schedule baselines and assumes success-oriented outcomes from implementation of efficiencies, lessons learned, and best practices. The estimates will be designed to drive productivity improvements in our programs. The estimate will also incorporate results of FAR/DFARS Should-Cost review of contract direct and indirect cost (See FAR 15.407-4 and DFARS 215-407-4 Should-Cost Reviews) when they are conducted.

PROCESSES AND PROCEDURES:

Will-Cost Estimate Development:

Processes for Will-Cost estimate generation are currently in place for ACAT I programs, including a requirement for Service Cost Positions (Will-Cost estimates) at each milestone decision and annual Program Office Estimates (POEs) and non-advocate cost assessments (NACAs). However, ACAT II and III programs must also begin to present Will-Cost estimates at milestone decisions that have been approved by the appropriate product or logistics center financial management cost estimating organization (FMC). Annual ACAT II and III program Will-Cost estimate updates must also be approved by the appropriate product or logistics center financial management cost estimating organization (FMC). For all programs, the annual Will-Cost estimate updates must assess all Should-Cost efficiencies identified for potential incorporation into revised Will-Cost estimates.

SAF/FMC has developed a revised instruction (revised AFI 65-508) outlining Air Force processes associated with generating Will-Cost estimates or Service Cost Positions. This instruction will be released for coordination in the near future. In the meantime, the general required procedures are as follows:

- For all ACAT I programs:
  - Non-advocate Will-cost estimates (referred to as Service Cost Positions and Independent Cost Estimates) will be approved and signed out by SAF/FMC at program milestones.
  - Per AFPD 65-5, annual program office will-cost estimates (referred to as Program Office Estimates) and Non-Advocate Cost Assessments are required. Per AFPD 65-5, waivers to the annual requirement must be approved by SAF/AQ and SAF/FM.
  - Note: the OSD(CAPE) will prepare independent cost estimates to satisfy statute for ACAT ID and IAM programs.
- For ACAT II and III programs:
  - Will-cost estimates will be approved and signed out by the appropriate product or logistics center financial management cost estimating organization (FMC) for program milestone decisions and annually thereafter.
  - Per draft revised AFI 65-508, annual program office will-cost estimates (also referred as Program Office Estimates (POEs)) are required. Waivers to annual requirements will be approved by the PEO and center FM.

Should-Cost Estimate Development:

- The program manager is responsible for developing Should-Cost estimates along with all tracking and reporting requirements. AT&L (ACAT ID and IAMs), and the SAF/AQ (or delegated PEO/DAO) approve Should-Cost estimates at milestones. Annual updates for all ACAT I programs are approved by SAF/AQ and AT&L is notified.

- Various approaches may be used to develop Should-Cost estimates. The following three are recommended alternatives:

  - The Should-Cost estimate is developed using the Will-Cost estimate as the base and applies discrete, measurable items and/or specific initiatives for savings against that base.

  - The Should-Cost estimate is developed using a bottoms-up approach without a detailed FAR/DFARS program contract or overhead Should-Cost review and includes actionable content that will lead to achieving cost below the Will-Cost estimate or budget baseline. The bottoms-up approach can be performed at the very lowest levels or at higher levels, and is primarily defined as using methods distinctly different from the Will-Cost estimate development.

  - The Should-Cost estimate is developed using a bottoms-up approach with a FAR/DFARS program contract or overhead Should-Cost review and includes actionable content that will lead to achieving cost below the Will-Cost estimate or budget baseline. Note: Early, proactive detailed FAR/DFARS Should-Cost reviews are recommended to support contract negotiations, particularly for sole source production procurements; however, they are often resource and time intensive and require advance coordination with DCMA and Service functional communities.

- Should-Cost initiatives will be categorized as:

  - Near-term (within the program manager's tenure) and long-term initiatives; and

  - Program driven (within program manager's control), "Service Driven (within the services control)," or "Externally Driven (outside service control)."

- Should-Cost estimates will be developed in collaboration with appropriate Center level functional organizations.

- Should-Cost estimates will consider all Will-Cost estimate excursions from the non-advocate organization and all previously defined Should-cost estimates.

- Program managers should seek assistance from outside organizations (e.g., the Air Force Cost Analysis Agency, DCMA, and DCAA) as they develop their Should-Cost estimates.

- Should-Cost initiatives must consider the full life-cycle cost impacts, not just the near-term benefits and savings.

- Some approaches/items not to include in the Should-Cost estimate:
  - Arbitrary reductions against the Will-Cost estimate are not acceptable for Should-Cost estimates. These estimates are expected to have specific actionable content associated with the reductions.
  - Choosing a lower confidence level from your Will-cost estimate range is not acceptable for the Should-Cost estimates. These estimates are expected to have specific actionable content associated with the reductions.
  - Most items outside the control of the program office and inconsistent with the current program of record are outside excursions and not appropriate for the Should-Cost estimate. For example, economic production rate excursions or other quantity excursions are not part of the program Should-Cost estimate. They should be shown separately. Multi-year assumptions that keep the yearly buy schedule the same could be included in the Should-Cost estimate.
  - Anything requiring significant investment for completion and an increase to the budget (i.e. with a pay back outside the budget year) is outside the scope of the Should-Cost estimate, but could be shown separately.
  - Programs operating under Firm Fixed Price (FFP) should use common sense – focused scrutiny should be on associated other government costs and only reopen FFPs if there is a clear benefit to do so.

Will-Cost and Should-Cost Reporting:

Will-Cost and Should-Cost estimates are required at milestone decisions for all ACAT I, II and III programs that are designated on the Acquisition Master list (AML). Annual updates to both the Will-Cost and Should-Cost estimates are also required. With appropriate justification, waivers may be granted for annual Will-Cost and Should-Cost estimate updates. Waivers are approved by the OUSD(AT&L) for ACAT ID/IAM programs, SAF/AQ and SAF/FM for ACAT IC/IAC programs, and by the PEO and product/logistics center FM leads for ACAT II and III programs. Table 1 summarizes when Will-Cost estimates, Should-Cost estimates, and Detailed Contract Should-Cost Reviews are required or recommended.

Table 1: Event Driven Cost Estimate Reporting Requirements for ACAT I, II, and III programs

Event	Will-Cost estimates (Initial / Update)	Program Should-Cost estimates (Initial / Update)	FAR/DFARS program and overhead should-cost reviews on contracts
MS A	Initial	Initial	N/A
Yearly Updates	Update	Update	N/A
MS B	Update (Initial setting of Budget Baseline for Nunn-McCurdy metrics)	Update (Sets Internal Program Should-Cost Execution Baseline)	Initial to Support Contract Actions (Optional)
Yearly Updates	Update	Update	Optional
MS C Decision / LRIP 1 Contract Award	Update	Update	Optional Refer to recommendations IAW FAR 15.407-4 -- Should-Cost Review and DFARS 215.407-4 Should-Cost
Yearly Updates	Update	Update	Optional
FRP (FDDR) Decision / Contract Award	Update	Update	Optional Refer to recommendations IAW FAR 15.407-4 -- Should-Cost Review and DFARS 215.407-4 - Should-Cost review.
Yearly Updates	Update	Update	Optional

In addition, consideration should be given to updating Will-Cost and Should-Cost estimates and conducting detailed FAR//DFARS contract Should-Cost Reviews for the following program events:

- In preparation for or immediately following Critical Design Review.
- First LRIP award out of option contracts; in particular, in cases where option production contracts were awarded as part of the development contract award.

- Interim Contractor Support and Contractor Logistic Support first contract awards. At a minimum update the Will-Cost estimate, but consider updating the Should-Cost estimate and conducting a FAR/DFARS contract Should-Cost review. Conducting these updates in conjunction with a sustainment Business Case Analysis (BCA) is beneficial.

- Organic Logistics Infrastructure (e.g., depot stand-up, DLA, ALC). At a minimum update the Will-Cost estimate, but consider updating the Should-Cost estimate and conducting a FAR/DFARS contract Should-Cost review. Conducting these updates in conjunction with a sustainment BCA is beneficial.

Reporting Methods and Templates:

Program offices will be responsible for tracking and reporting all Should-Cost estimates and any updates. At a minimum, reporting elements will include the discrete items or specific initiatives, cost savings associated with each, and a program timeline or event when the savings is expected to be realized. Maintaining visibility of the original Should-Cost management baseline over time, how it changes and the successes achieved is critical and will provide valuable lessons learned and data for other and future programs. Formal reporting in SMART will be required in the future and the Should-Cost estimates will eventually be reported to the OUSD(AT&L)/ARA through Acquisition Visibility Service Oriented Architecture.

Appendix A contains the approved DAB template for MS A and MS B. These templates can be tailored as necessary. For example, it is highly recommended to include in the chart the dollar value associated with each initiative and the expected timeline or event when the savings is expected to be realized.

Appendix B also offers some recent Air Force program examples for consideration in briefing the program Should-Cost estimate to the acquisition executives. The first chart displays a one page categorization of the initiatives into those that are Program driven (within program manager's control), "Service Driven (within the service's control)," or "Externally Driven (outside service control)." However, note that this example is missing the required "near-term" and "long-term" categorization. The second chart provides a way to display two things: 1) when the budget is above or below the Will-cost estimate, and 2) a dotted line to separate the "Should-cost" estimate base from other savings that could be achieved from accelerated buys (or more economical production rates). Appendix B charts are not required, they are provided as general examples only.

Waiver Procedures:

The procedures for requesting waivers to the annual Will-Cost estimate requirement will be outlined in the new AFI 65-508. In the meantime, requests should be submitted through the product/logistics center FMC to SAF/FMC. Contact your product/logistic center FMC for additional information. SAF/FMC will send copies of all approved program waivers to SAF/AQX. SAF/AQX will maintain a repository on all waivers.

Waiver requests to the Should-Cost estimate requirements for ACAT I programs should be submitted via e-mail to the SAF/AQX Workflow box. Requests must be no longer than one-page, and include a written program description along with full justification for the waiver request.

Procedures for ACAT II and III Should-Cost waivers should be developed by the PEO/DAOs in conjunction with the product/logistic center FMC. PEOs/DAOs and the product/logistic center FMC must ensure that all approved Will-Cost and Should-Cost waivers for ACAT II and III programs are sent to the SAF/AQX Workflow box.

SAF/AQX will maintain a repository of granted waivers for all ACAT I, II, and III programs.

Withhold/Release Process (for the difference between the Will-Cost estimate (budget) and the Should-Cost estimate):

This section only applies to the five Air Force pilot programs selected: JSF (F-35), Global Hawk Blocks 30 & 40, Evolved Expendable Launch Vehicle (EELV), Space Based Infrared System (SBIRS), and Advanced Extremely High Frequency (AEHF) Satellite System. These programs will be the first where the delta between the Will-Cost and Should-Cost estimate is actually withheld during program execution. This delta will remain in the program element, but the decision authority for the release of the funds will be managed by the Service/Component Acquisition Executive. These programs will also be used to communicate and demonstrate to other DoD offices and Congressional committees the intent and advantages associated with managing to a Should-Cost estimate that is lower than the program budget.

Initial and annual Will-Cost estimates and Should-Cost estimates must be promptly provided to SAF/FMB and SAF/AQX in order to manage the funding withholds process. The funding withhold and release process for the Air Force will be as follows:

1) The funding difference between the Will-Cost estimate and the Should-Cost estimate will be placed on withhold at headquarters AF. Only funds equal to the Should-Cost estimate will be released to the field for execution.

2) Each program manager will brief their execution status relative to the Should-Cost estimate during the Spring Program Review (SPR) and Investment Budget Review (IBR). Program managers will also present their annual Should-Cost estimate updates during any scheduled SAE reviews, e.g. Acquisition Strategy Panels and Air Force Review Boards. All reviews of Should-Cost estimate updates must be vetted by a cross-functional team to include cost, financial management and budget, contracting, engineering, logistics, and programming representatives.

3) Program managers will request any release of funds withheld during the SPR/IBR. Any "booked" savings will also be briefed during the SPR/IBR.

4) Release of additional authority:

    a. Following the conclusion of all SPR/IBRs, SAF/FMB and SAF/AQX will consolidate requests for release of funds and review for concurrence, need for additional information, or initial declination of request.

    b. A consolidated FMB/AQX approved list will be forwarded to SAF/AQ for SAE approval.

c. Upon SAE approval, SAF/AQX will issue program authority and SAF/FMB will issue budget authority.

5) Booking of savings:

a. Following the conclusion of all SPR/IBRs, SAF/FMB and SAF/AQX will consolidate information for all achieved savings.

b. Information on release of funds and achieved savings will be provided to product/logistics center cost staffs and the AFCAA. Program offices and the AFCAA will ensure full incorporation of the information into updated Will-Cost estimates.

c. Updated Will-Cost estimates incorporating the latest information on release of funds and achieved savings will be provided through the Air Force Corporate Structure Program Objective Memorandum (POM) process (AF/A8P at a minimum) for inclusion in revised POM positions.

6) Out of cycle requests for release of withheld funds will be submitted to SAF/FMB and SAF/AQX simultaneously for review. Out of cycle requests will be processed similar to the post SPR/IBR process.

Appendix A

DAB Template
Will-Cost/Should-Cost

Will / Should Cost Analysis

RDTE + APA Total	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	12-17 Total	To Comp FY18-25	Total FY12-25
Will Cost (ICE)	$805.4	$1,256.0	$1,691.1	$1,260.2	$1,170.5	$973.3	$ 7,156.4	$5,556.0	$12,712.4
Should Cost	$789.4	$1,231.3	$1,675.7	$1,155.8	$ 933.1	$784.5	$ 6,569.8	$4,740.3	$11,310.1

Supporting Evidence for Should Cost:

- **Production rates economical and historically stable**
- **Shorten program timeline**
  - Complete R&D effort in FY16 vs. FY17 as currently planned in ICE
  - Potential production rate increase
- **Negotiation positions**
  - Historical cost, learning curve, and understanding of production efficiencies
  - Long-term supplier agreements
- **Parametric model MOA established with contractor for key routine functions/costs**
- **Open system architecture design eases future enhancements**
- **Aggressive "Breakout" IPT established for appropriate technical data packages (TDP) and data rights**

Another Potential Template

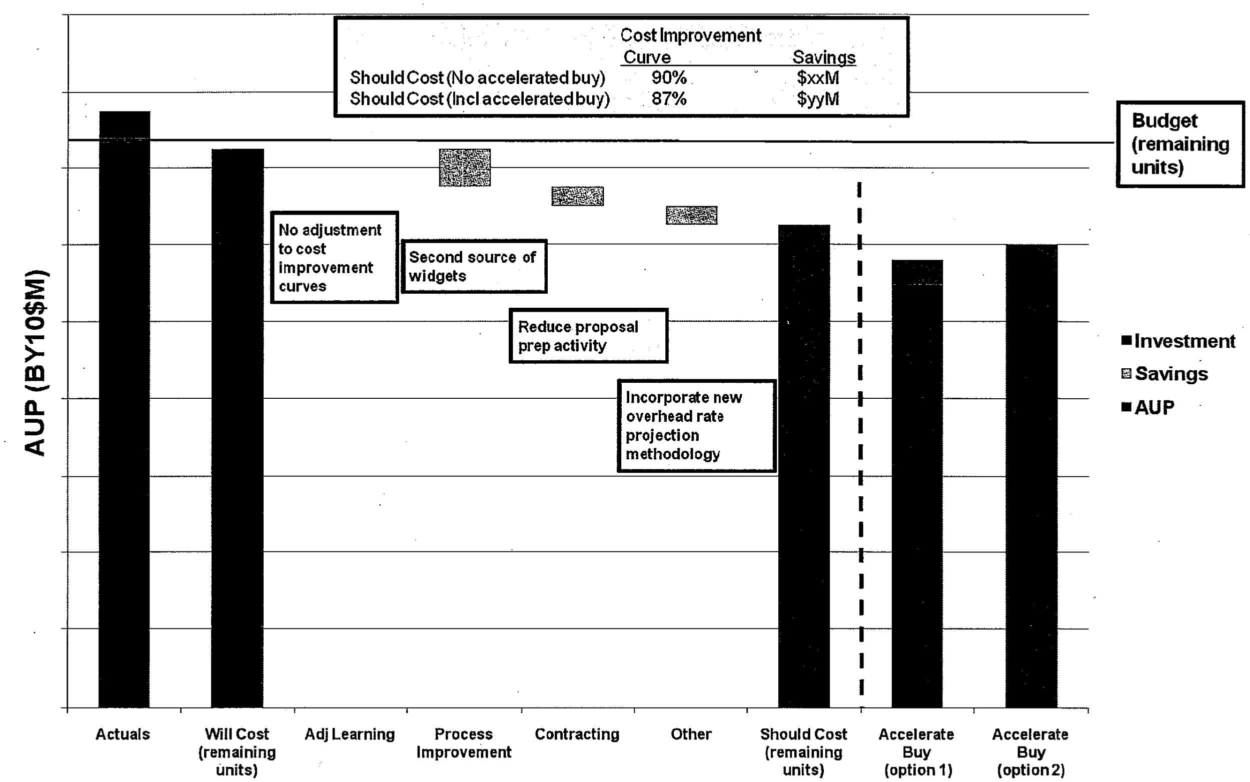
Title: Cost Improvement Assessments By System (BY10$M)

	System 1	System 2	System 3	System X
Potential Savings	$xxxM ($yy/unit)	$xxxM ($yy/unit)	$xxxM ($yy/unit)	$xxxM ($yy/unit)
Adjusted Learning		$xxM	$xxM	$xxM
	-Cost improvement reasonable (no adjustment made)	-Forecast using historical learning /rate curves	-Forecast Labor at historical improvement curve levels -Forecast material costs at composite level with 95% rate curve	-Touch learning reasonable (not adjusted) -Forecast material costs at composite level w/ 95% rate curve -Historical learning applied to Sustain Eng.
Process Improvement	$xxM	$xxM	$xxM	$xxM
	-Eliminate redundant work -Move work to more efficient facility	-Reduce SEPM staff based on history	-Acquire new sources for widgets A, B, and C	-Move work to more efficient facility -Implement cost reduction initiatives
Contracting	$xxM	$xxM	$xxM	$xxM
	-Eliminate proposal prep with priced options	-Sync buys w/ other customers -Reduce proposal activity -Reduce flight test activity	-Negotiate lower Material Handling and Flight test support	-Account for concurrent buys with other customers
Other	$xxM	$xxM		$xxM
	-DCMA use new rate projection methods	-DCMA use new rate projection methods	-Not assessed	-DCMA use new rate projection methods
Accelerate Buys	$xxM	$xxM	$xxM	
	-Increase buy rate, shortens program and amortizes fixed costs over more units per lot	-Increase buy rate, shortens program and amortizes fixed costs over more units per lot	-Increase buy rate, shortens program amortizing fixed costs over more units per lot	-Not assessed

SPO Driven Improvements | Service Driven Improvements | External Driven Improvements

System 1 Should-Cost

Avg Unit Price to Govt



Appendix J. Army-Implementation-of-Affordability-Initiatives-10Jun11

DEPARTMENT OF THE ARMY
WASHINGTON DC 20310-0103

JUN 10 2011

SAAL-ZR

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Army Implementation of Under Secretary of Defense (Acquisition, Technology and Logistics) (USD(AT&L)) Affordability Initiatives

1. References:

a. Memorandum, Office of the Secretary of Defense (OSD), Acquisition, Technology and Logistics (AT&L)), 3 November 2010, Subject: Implementation Directive for Better Buying Power-Obtaining Better Efficiency and Productivity in Defense Spending.

b. Memorandum, OSD(AT&L), 14 September 2010, subject: Better Buying Power-Guidance for Obtaining Better Efficiency and Productivity in Defense Spending.

c. Memorandum, OSD(AT&L), 28 June 2010, subject: Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending.

d. Memorandum, Office of the Army Secretary of the Army (Acquisition, Logistics and Technology), 3 January 2010, subject: Clarification of Defense Acquisition Executive (DAE) Policy Regarding Acquisition Category (ACAT) III Program Reviews.

2. In accordance with reference a., this memorandum and the enclosed guidance provide my direction on the implementation of Dr. Carter's affordability initiatives. I fully support these affordability initiatives and expect the Department of Army (DA) acquisition community to embrace the concepts and adjust our management processes immediately. Included in Target Affordability and Cost Growth are five initiatives: (1) mandate affordability as a requirement, (2) drive productivity growth through should-cost/will-cost management, (3) eliminate redundancy within Warfighter portfolios, (4) make production rates economical and hold them stable, and (5) set shorter timelines and manage to them. Each of these is addressed in more detail below.

a. Mandate affordability as a requirement: All programs will use the Defense Acquisition Board (DAB) template for affordability (see enclosure 1). I expect each program at Milestone A to set affordability targets and manage to them in a similar manner as a Key Performance Parameter. At Milestone B you will establish engineering trades showing how each key design feature affects the target cost and then you will perform trade-off analysis.

(1) Drive productivity growth through should cost/will cost management: In order to gain greater efficiency and productivity in Defense spending, the USD(AT&L) has directed the Military Departments and Directors of Defense Agencies to implement will-cost and should-cost management for all ACAT I, II and III programs. Dr. Carter is challenging program managers to drive productivity improvements into their programs during contract negotiation and program execution by conducting should-cost analysis, whereby every element of Government and contractor costs are scrutinized.

(2) The Department will continue to set program budget baselines using will-cost estimates (through Cost Analysis and Program Evacuation) Independent Cost Estimate or a Department of the Army Service Cost Position) in support of ACAT I and II milestone decisions. While Army ACAT I and Army Acquisition Executive managed ACAT II program will-cost estimating (Army Cost Position development) already follows clear procedural guidelines, our Program Executive Officers (PEOs) managed ACAT II and III programs are less consistent. Effective immediately, all Army ACAT II and III programs are required to develop and have independent verification of will-cost estimates prior to milestone decisions. As with ACAT I programs, the will-cost estimate will be used as the basis for all budgeting and programming decisions. All metrics and reporting external to the Department will be based on the will-cost estimate.

(3) Program managers must begin to drive leanness through should-cost management. The should-cost estimate is an internal management tool for incentivizing performance to target, and is therefore not to be used for budgeting, programming, or reporting outside the Department. Rather, will-cost estimates are the official program position for budgeting, programming, and reporting.

(4) Program managers are responsible to identify opportunities for savings and develop should-cost estimates. This effort does not necessarily require large cross-functional teams to perform detailed bottoms-up assessments on every ACAT I, II, and III program. Instead, I expect program managers through continuous Should-cost management review to identify specific discrete measurable items or initiatives that achieve savings against the will-cost estimate. Currently, there is no requirement to provide Should-cost management for Quick Reaction Capabilities.

(5) The Milestone Decision Authority (MDA) will approve all initial should-cost estimates and will use these estimates to set program execution targets. By 1 January 2012 all ACAT I, II, and III programs will have MDA approved should-cost execution targets. In addition, they will be prepared to manage, report, and track to these targets and defend the validity of the specific initiatives identified that achieve savings against

the will-cost estimate. In the event programs are not scheduled for a major milestone review in 2011, program managers should take appropriate steps to ensure the MDA reviews and approves should-cost targets for all programs. I will approve annual updates to program should-cost targets for ACAT I and those ACAT II programs that I manage and the PEOs will have approval authority for the ACAT II programs delegated to them and ACAT III programs. The PEOs will annually report on their progress to ASA(ALT) (SAAL-RP) and I will provide a consolidated annual report to OUSD(AT&L)/ ARA on our progress. For the first year the PEOs will review and submit their should-cost initiatives by program on the following dates: All ACAT I program submissions are required no later than (NLT) 30 October 2011, ACAT II programs NLT 30 December 2011, and ACAT III programs NLT 1 March 2012. After the first year, all submissions are required NLT 30 October of that year.

(6) During the year of execution, funds will be distributed to programs based on their should-cost estimate. The difference between the funds distributed and the program budget baseline will be withheld at the Service level for ACAT I, special interest, and those programs where I am the MDA and at the PEO for those programs where they are the MDA. I will be the decision authority for distribution of any additional funds for ACAT I and those programs where I am the MDA. The PEOs will be the decision authority for the programs where they are the MDA.

(7) As noted above, effective immediately Program Managers are required to develop should-cost estimates and identify opportunities for savings. However, initially, the withholding of funds and the margin management process will be limited to the five DA programs, which will serve as a testing ground toward the development of an effective margin management process. This process, once established and vetted, will apply to all programs regardless of ACAT.

(8) Enclosure 2 provides additional guidance and clarifies terms, procedures, and reporting requirements associated with this initiative. The guidance will be updated and codified in policy as USD(AT&L) and I gain experience with will-cost and should-cost management. Enclosure 3 is a Waiver Request form.

b. Eliminate Redundancy within Warfighter Portfolios: ACAT I, II, and Special Programs are reviewed annually by the Office of the Secretary of Defense and/or the AAE. At that time the health of the program as well as functional requirements are reviewed and assessed. Reference c. above directs each Program Executive Officer (PEO), as Milestone Decision Authority, to conduct annual reviews of their ACAT III portfolios to comply with the DAE's instructions. The PEO will provide the ASA(ALT) with a concise report of the results of the review no later than the end of the Fiscal Year and address how they are eliminating redundancy within their respective portfolios.

c. Make production rates economical and hold them stable: Dr. Carter's memorandum further defines OSD(AT&L's) expectations that PEOs and PMs "Make production rates economical and hold them stable". As directed in the USD(AT&L) memorandum, each PM of an ACAT I program prepared a one page description of how the procurement rate and schedule were set. The information was consolidated into an ASA(ALT) package. Deviations from the one page description limits defined above will require OSD(AT&L) review and approval prior to implementation or submission of component Program Objective Memorandum. The Equipping Program Evaluation Group will adjudicate and review as the Army component lead.

d. Set shorter timelines and manage to them: The PEOs will provide the ASA(ALT) their plan for reviewing each ACAT program in development. There will be specific review of the program schedule as part of the cost trade-off analysis at each milestone, beginning with Milestone B. The PEOs will conduct these scheduled sensitivity analyses when setting affordability targets and requirements. Further, the PEO will ensure requirements and program schedules are consistent in the Acquisition Strategy. This schedule compliance justification will be a part of the Acquisition Decision Memorandum authorizing the program to proceed. The MDAs will not grant authority to release requests for proposal until they are confident requirements and schedule compliance are consistent. Deviation from the established schedule at the most recent milestone, without MDA approval, will result in revocation of the Milestone.

4. The point of contact is Ms. Gail Foley, (703) 604-7441, or e-mail: gail.l.foley@ us.army.mil.

Heidi Shyu

Encls

Heidi Shyu
Acting Assistant Secretary of the Army
(Acquisition, Logistics and Technology)

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MS A Affordability

Basic Questions:

- **Program Related:**
  - **What do you (PM/PEO/CAE) think the driving costs in your design concept will be and why?**
  - **Are the largest drivers related to technical, schedule, or other factors?**
- **Portfolio Related:**
  - **What adjustments are necessary to the existing portfolio to fit this new program in?**
  - **What price point for the program would cause reconsideration within the portfolio?**

MS A AFFORDABILITY REQUIREMENT:

NOTIONAL SYSTEM

Affordability Targets

Description	Cost Target
APUC	$27.8M
O&S	$40.3B
TBD	XXX
TBD	XXX
TBD	XXX

Cost Drivers & Trade Excursions Plan

Description	Trade Excursion	Date
- Range Readjustment	Speed/Range Tradeoff Review	2Q FY11
- Reliability Growth	RAM Study	3Q FY11
- Engine Redesign	NAVAIR /CTR Focus Group	3Q FY11
- Prognostics & Health Mgmt.	Independent Logistics Assessment	3Q FY12
- F/A-XY Avionics Reuse	NAVAIR Tiger Team	3Q FY12
- Reduced Ordnance Load	JROC Review	4Q FY12

Discussion Points:

- **#1**
- **#2**
- **#3**

11

6

MS B Affordability

Basic Questions:

- **Program Related:**
  - What do you (PM/PEO/CAE) think are the driving costs in your design and why?
  - Are the largest drivers related to technical, schedule or other factors? Is there trade space for these factors that can influence affordability? (If not, it does not go on the chart)
    - If the key trades are technical, what are those elements around which some "sweet spots" can be influenced?
- **Portfolio Related:**
  - What adjustments are necessary to the existing portfolio to fit this new program in?
  - What price point for the program would cause reconsideration within the portfolio?

MS B AFFORDABILITY REQUIREMENT: NOTIONAL SYSTEM

Proposed Affordability Requirements

Description	Affordability Requirement	Current Estimate
APUC	$22.6M	$24.4M
O&S	$32.9B	$35.6B
TBD	XXX	XXX
TBD	XXX	XXX
TBD	XXX	XXX

Cost Drivers & Trade Excursions

Description	APUC	PAUC	RDT&E	Proc	O&S	Schedule Impact
Original Cost Estimate	$26.7M	$32.3M	$1.32B	$15.1B	$86.1B	N/A
- Range Readjustment	-$0.3M	-$0.4M	+$2M	-$75M	-$100M	None
- Reliability Growth	+$2.2M	+$2.3M	+$15M	+$50M	-$1.5B	+4 Months
- Engine Redesign	-$0.7M	-$1.1M	+$4M	$-125M	-$75.0M	+3 Months
- Prognostics & Health Management	+$0.2M	$0.3M	$0.0M	$0.0M	-$2.0B	None
- F/A-XY Avionics Reuse	-$1.9M	-$2.4M	-$16M	-$50M	+$200M	-6 Months
- Reduced Ordnance Load	-$1.8M	-$2.0M	+$2M	-$15M	$0.0M	None
Current Cost Estimate	$24.4M	$29.6M	$1.31B	$14.9B	$85.6B	N/A

Discussion Points:

- #1
- #2
- #3

7

Will Cost/Should Cost

Will / Should Cost Analysis

RDTE + APA Total	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	12-17 Total	To Comp FY18-25	Total FY12-25
Will Cost (ICE)	$805.4	$1,256.0	$1,691.1	$1,260.2	$1,170.5	$973.3	$ 7,156.4	$5,556.0	$12,712.4
Should Cost	$789.4	$1,231.3	$1,675.7	$1,155.8	$ 933.1	$784.5	$ 6,569.8	$4,740.3	$11,310.1

<u>**Supporting Evidence for Should Cost:**</u>

- **Apache production rates economical and historically stable**
- **Shorten program timeline**
  - Complete R&D effort in FY16 vs. FY17 as currently planned in ICE
  - Potential production rate increase
- **Strong negotiation positions**
  - Historical cost, learning curve, and understanding of production efficiencies
  - Long-term supplier agreements
- **Parametric model MOA established with contractor for key routine functions/costs**
- **Open system architecture design eases future enhancements**
- **Aggressive "Breakout" IPT established for appropriate technical data packages (TDP) and data rights**

AB 3 MS C DAB
27 September 2010

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13

8

Enclosure 2

WILL-COST AND SHOULD-COST ESTIMATING AND MANAGEMENT GUIDELINES

DEFINITIONS:

Will-Cost and Should-Cost Management: A transparent, two tiered cost, funding, and management approach using two separate cost estimates: a Will-cost for budgeting and a program Should-cost for program execution. During program execution the difference between the funds appropriated annually and the Should-cost management target will be held at the Service or PEO level depending on MDA. The AAE is the decision authority on the distribution of the difference for all ACAT I programs and those ACAT II programs where he is the MDA and the PEOs are the decision authority for the distribution of the difference for those programs where they are the MDA.

Will-Cost Management Baseline (budget baseline) -.

- The budget baseline will be based on a Will-cost estimate (i.e., CAPE, ICE, Army Cost Position, or verified Program Office Estimate) that aims to provide sufficient resources to execute the program under normal conditions, encountering average levels of technical, schedule, and programmatic risk (usually no less than 50% confidence level). This Will-cost estimate supports the budget and ensures sufficient funding to provide confidence that: 1) the program can be completed without the need for significant adjustment to program budgets, and 2) the program can avoid Nunn-McCurdy or critical change breaches.
  - The Will-cost estimate shall be verified by an office or entity operating outside or above the program management office.
  - Programs are expected to actively manage the budget baseline using current Will-cost estimates for all acquisition, budget and program execution decisions (e.g. source-selection, contract negotiations, IBRs, major reviews, PMB monitoring, annual budget/programming cycle).

Should-Cost Management Baseline (program execution baseline)

- The program execution target will incorporate Should-cost management initiatives developed by the program office and approved by the MDA. These approved initiatives will be used as a management tool to incentivize performance to the Should-cost target. The Should-cost estimate will be based on realistic technical and schedule baselines and assumes success-oriented outcomes from implementation of efficiencies, lessons learned and best practices. The estimates will be designed to drive productivity improvements in our programs, will inform contract negotiations and incorporate results of contract

9

direct and indirect cost reviews (See FAR 15.407-4 and DFARS 215.407-4 Should-cost Reviews) when they are conducted.

Processes and Procedures:

Will-Cost Estimate Development:

An independent verification to establish the Will Cost baseline should happen prior to the first time a program presents their Affordability position to the MDA. For ACAT I and II programs the PM will go through the established process to arrive at an Army Cost Position and/or approved CAPE ICE. This results in the establishment of the approved Will Cost estimate once the MDA approves the program budgeted cost at the Milestone. For delegated ACAT II and III programs, the PM will obtain an independent verification through either an ICE or validation/verification of the POE. This will then be presented to the MDA for approval thereby establishing the Will Cost. When a program modification or event occurs which significantly impacts (e.g., causes a JROC Tripwire process/5% of before unit cost Breach) the approved program baseline and the associated Will Cost, the PM will be expected to update their program office estimate and re-verify through the appropriate independent reviewer. Upon completion of these tasks they will submit the updated documents to the MDA who will approve the revised Will Cost baseline. The PM is encouraged to track interim changes to ensure that the underlying assumptions used in the Will Cost baseline still exist when addressing potential savings in Should Cost initiatives. Examples include 1) A Continuing Resolution Authority (CRA) which holds a program to a prior year budget that would impact the ability to implement Should Cost Initiatives, 2) Underlying economic indices including significant changes to inflation rates, and 3). ACAT I and II presentations at the Configuration Steering Board (CSB) that result in significant cost impacts.

Should-cost Estimate Development:

- Each program office is responsible for developing Should-cost estimates along with all tracking and reporting requirements. OSD AT&L (ACAT ID and IAMs), and AAE (or delegated PEO) approve Should-cost estimates at milestones. Updates for ACAT II and III programs are approved by the MDA. In cases where the PEO is the MDA, letter notification of the updates will be sent through the PARCA Directorate to the AAE. Annual updates for all ACAT I programs are approved by the AAE and OSD AT&L is notified.

- Should-cost estimates shall consider all Will-cost estimate excursions and all previously defined Should-cost estimates.
- There are various approaches to developing a Should-cost estimate. The recommended approaches are as follows:

10

1) The Should-cost estimate is developed using the Will-cost estimate as the base, and applying discrete, measurable items and/or specific initiatives for savings against that base. This is the recommended approach for all programs with an established Will-cost estimate.

2) The Should-Cost estimate is developed using a bottoms-up approach without a detailed FAR/DFARS Should-cost review and includes actionable content that will lead to achieving cost below the Will-Cost estimate or budget baseline. The bottoms-up approach can be performed at the very lowest levels or at higher levels, and is primarily defined as using methods distinctly different from the Will-Cost estimate development.

3) The Should-cost estimate is developed using a bottoms-up approach with a FAR/DFARS Should-cost review and includes actionable content that will lead to achieving cost below the Will-cost estimate or budget baseline. Note: Early, proactive detailed FAR/DFARS Should-cost reviews are recommended to support contract negotiations, particularly for sole source production procurements; however, they are often resource and time intensive and require advance coordination with DCMA and Service functional communities.

- Should-cost estimates will be developed in collaboration with the appropriate Army functional organizations.

- Program managers should seek assistance from outside organizations (e.g., the Deputy Assistant Secretary for the Army for Cost and Economics (DASA(CE)), DCMA) as they develop their Should-cost estimates.

- Should-cost initiatives will be categorized as:

  - Near-term (within the program manager's tenure) and long-term initiatives; and

  - Program driven (within program manager's control), "Service Driven" (within the services control), or "Externally Driven" (outside service control).

Broad challenges by management to reduce cost through straight reductions by a specified percentage or dollar value against the Will-Cost estimate are not valid Should-Cost estimates. The Should-cost estimates are expected to have specific actionable content associated with the reductions. However, some initiatives will require support from additional stakeholders to enable successful implementation

11

- (i.e., the functional, test, or headquarters ASA(ALT) communities). These stakeholders must be included in the development of the Should-cost initiatives and have a coordinated position on their ability to support the initiative. Most items outside the control of the program office and inconsistent with the current program of record are outside excursions and not appropriate for the Should-Cost estimate. For example, economic production rate excursions or other quantity excursions are not part of the program Should-Cost estimate. They should be shown separately. Multi-year assumptions that keep the yearly buy schedule the same would be included in the Should-Cost estimate. Anything requiring significant investment for completion and an increase to the budget is outside the scope of the Should-Cost estimate and should be shown separately.

<u>Will-cost and Should-cost Reporting Processes and Procedures:</u>

Will-cost and Should-cost estimates are required for all ACAT I, II and III milestone decisions. Annual updates of the Should-cost estimate are required.

In addition, there are cases where there is limited potential savings for using the Should Cost constructs due to where a program is in the lifecycle, total cost remaining on program, etc. In those cases, an Army waiver process (see Enclosure 3 for format) is being established within this policy memorandum. All requests, for waiver from the requirement to establish a Should-cost estimate, will be filled out and processed through the PARCA office for concurrence prior to submission for approval. Approval authority for all waivers is the ASA (ALT).

Table 1: Event Driven Cost Estimate Reporting Requirements for ACAT I, II and III programs

Event	**Will-Cost (Initial /Update/Review)**	**Program-Level Should-Cost (Initial / Update)**	**Contract-Level Should-Cost**
MS A	Initial	Initial	N/A
Yearly Updates	At PM's discretion	Update	N/A
MS B	Update (Initial setting of Budget Baseline for Nunn-McCurdy metrics)	Update (Sets Program Execution Baseline)	Initial to Support Contract Actions (Optional)
Yearly Updates	At PM's discretion	Update	Optional
MS C Decision / LRIP 1 Contract Award	Update	Update	Optional Recommended IAW FAR 15.407-4

12

			Should-Cost Review and DFARS 215.407-4 Should-cost review.
Yearly Updates	At PM's discretion	Update	Optional
FRP (FDDR) Decision / Contract Award	Update	Update	Optional Recommended IAW FAR 15.407-4 -- Should-Cost Review and DFARS 215.407-4 Should-cost review.
Yearly Updates	At PM's discretion	Update	Optional

In addition, consideration should be given to updating Will-cost estimates and Should-cost estimates and conducting direct and indirect Should-cost reviews for the following program events:

- In preparation for or immediately following Critical Design Review

- First LRIP award out of option contracts; in particular, in cases where option production contracts were awarded as part of the development contract award

- Interim Contractor Support and Contractor Logistic Support first contract awards. Recommend at a minimum a Will-cost estimate update, but also consider updating the Should-cost estimate and conducting a FAR/DFARS indirect/direct cost review. Conducting these updates in conjunction with any sustainment Business Case Analysis (BCA) is beneficial.

- Organic Logistics Infrastructure. At a minimum update the Will-cost estimate, but consider updating the Should-cost estimate and conducting a FAR/DFARS indirect/direct cost review. Conducting these updates in conjunction with a sustainment Business Case Analysis (BCA) is beneficial.

Process for withhold and release of the difference between the Will-cost and Should-cost estimate:

Per OSD memorandum dated April 22, 2011, the delta between Should-Cost and Will-Cost will be managed consistently with the contract type(s) being used in the program. Once a firm-fixed-price contract is negotiated, any delta between budgeted amount and contracted price can be considered to have been "realized" and be reallocated consistent with statutory limitations and DoD/Service policies. For other types of contracts, funds generally can be reallocated after sufficient confidence has been established that contract performance will result in realized savings.

Initial and updated Will-cost estimates and Should-cost estimates must be promptly provided to the Army DASA Plans, Programs, and Resources (PARCA office) and addressed in the annual program health/milestone briefings who will coordinate with the appropriate Army Comptroller designee in order to manage the funding hold process. The funding hold and release process for the Department of Army will be as follows:

1.) Programs that are funded starting in FY2012 and out are limited to expending no more than the Should-cost management target. The remaining funds representing the difference between the Will-cost estimate and Should-cost management target will be placed on hold at the appropriate Army level. Only funds equal to the Should-cost estimate will be released to the program manager for execution.

2.) Each program manager will brief their execution status relative to the Should-cost management target at their annual program review. Program managers will also present their annual Should-cost estimate updates during any scheduled AAE reviews. All reviews of Should-cost estimate updates must be vetted by a cross-functional team to include cost, financial management and budget, contracting, engineering, logistics and programming representatives.

3.) Program manager will request any release of funds on hold during the annual review.

4.) If a program manager requires release of funding between regularly scheduled reviews, the Program Executive Officer shall schedule an out-of-cycle review with all appropriate participants to include the AAE if he is the MDA for that program.

5.) The PEO shall provide a monthly report to Army PARCA on any release of delta dollars with a copy of the request(s). A consolidated monthly report will be sent to ASA (ALT) showing all programs using dollars within the delta between the Will-cost and Should-cost estimates.

NOTE: The process to hold funds that have been appropriated that represent the difference between the Will-cost estimate and the Should-cost management target will initially be piloted on 5 Army programs prior to full implementation across all ACAT I, II and III programs.

Information on release of funds and/or achieved savings will be provided to ASA(ALT). Program offices and Army Cost element (DASA CE, PEO Cost Analyst, or AMC LCC) will ensure full incorporation of the information into updated Will-cost estimates. Updated Will-cost estimates incorporating the latest information of achieved savings will be provided through the DA Program Objective Memorandum (POM) process for inclusion in revised POM positions.

Reporting Methods and Templates:

Program offices will be responsible for tracking and reporting all Should-cost estimates and any updates. At a minimum, reporting elements will include the discrete items or specific initiatives, cost savings associated with each, and a program timeline or event when the savings is expected to be realized. Maintaining visibility of the original program execution baseline over time, how it changes and the successes achieved is critical and will provide valuable lessons learned and data for other and future programs. The Should Cost estimates will be reported to the OUSD(AT&L)/ARA through Acquisition Visibility Service Oriented Architecture (AV SoA).
Waiver requests to the Should Cost Management requirements should be submitted through the PARCA office to ASA(ALT) for review and approval.

Enclosure 3 – Request for Waiver from Should-Cost Requirement

WAIVER TO THE SHOULD COST REQUIREMENT

Requestor's Name:

PEO/PM:

DATE:

EXEMPTION REQUEST FORM

Requestor's Number:

DESCRIPTION OF PROGRAM:

JUSTIFICATION FOR EXEMPTION:

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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PARCA REVIEW OF REQUEST

[illegible]

PARCA: ______________________ Date: __________

DASA-PPR: ______________________ Date: __________

MILDEP/CIVDEP: ______________________ Date: __________

ASA(ALT): ______________________ Date: __________

Date:

2003 - 2012 Sponsored Research Topics

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- Acquiring Combat Capability via Public-Private Partnerships (PPPs)
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- Defense Industry Consolidation
- EU-US Defense Industrial Relationships
- Knowledge Value Added (KVA) + Real Options (RO) Applied to Shipyard Planning Processes
- Managing the Services Supply Chain
- MOSA Contracting Implications
- Portfolio Optimization via KVA + RO
- Private Military Sector
- Software Requirements for OA
- Spiral Development
- Strategy for Defense Acquisition Research
- The Software, Hardware Asset Reuse Enterprise (SHARE) repository

Contract Management

- Commodity Sourcing Strategies
- Contracting Government Procurement Functions
- Contractors in 21st-century Combat Zone
- Joint Contingency Contracting
- Model for Optimizing Contingency Contracting, Planning and Execution
- Navy Contract Writing Guide
- Past Performance in Source Selection
- Strategic Contingency Contracting
- Transforming DoD Contract Closeout
- USAF Energy Savings Performance Contracts
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- Budgeting for Capabilities-based Planning
- Capital Budgeting for the DoD
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- Lessons from Private Sector Capital Budgeting for DoD Acquisition Budgeting Reform
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- Special Termination Liability in MDAPs
- Strategic Sourcing
- Transaction Cost Economics (TCE) to Improve Cost Estimates

Human Resources

- Indefinite Reenlistment
- Individual Augmentation
- Learning Management Systems
- Moral Conduct Waivers and First-term Attrition
- Retention
- The Navy’s Selective Reenlistment Bonus (SRB) Management System
- Tuition Assistance

Logistics Management

- Analysis of LAV Depot Maintenance
- Army LOG MOD
- ASDS Product Support Analysis
- Cold-chain Logistics
- Contractors Supporting Military Operations
- Diffusion/Variability on Vendor Performance Evaluation
- Evolutionary Acquisition
- Lean Six Sigma to Reduce Cost and Improve Readiness

- Naval Aviation Maintenance and Process Improvement (2)
- Optimizing CIWS Lifecycle Support (LCS)
- Outsourcing the Pearl Harbor MK-48 Intermediate Maintenance Activity
- Pallet Management System
- PBL (4)
- Privatization-NOSL/NAWCI
- RFID (6)
- Risk Analysis for Performance-based Logistics
- R-TOC AEGIS Microwave Power Tubes
- Sense-and-Respond Logistics Network
- Strategic Sourcing

Program Management

- Building Collaborative Capacity
- Business Process Reengineering (BPR) for LCS Mission Module Acquisition
- Collaborative IT Tools Leveraging Competence
- Contractor vs. Organic Support
- Knowledge, Responsibilities and Decision Rights in MDAPs
- KVA Applied to AEGIS and SSDS
- Managing the Service Supply Chain
- Measuring Uncertainty in Earned Value
- Organizational Modeling and Simulation
- Public-Private Partnership
- Terminating Your Own Program
- Utilizing Collaborative and Three-dimensional Imaging Technology

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