A Case Study for Better Buying Power
INFORMATION ANALYSIS CENTERS OF THE DEFENSE TECHNICAL INFORMATION CENTER

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Executive Summary

Affordability Imperative

Affordability is the top challenge facing the Department of Defense (DoD) today, and this challenge is amplified by the uncertain national economic and defense budget environments. Given this reality, it is not surprising that Acting Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) Frank Kendall has continued and reemphasized former USD(AT&L) Ashton Carter’s commitment to reduce defense system costs.

“We will continue to refine and build upon [the Better Buying Power Initiative]. We will continue the never-ending quest to control and reduce our costs while acquiring products and services that provide the highest possible value to our warfighters.”

Realigning and refocusing Information Analysis Center (IAC) capabilities and products on defense system affordability is an essential task for DoD and Defense Technical Information Center (DTIC) leadership going forward.

IAC Structure

The current 10-center IAC structure has provided DoD with consistent, reliable, and readily available information. Nevertheless, given the need to adapt to an evolving environment, DTIC is realigning the IAC program to achieve several objectives:

- Expand scope and increase synergy across related technology areas
- Increase opportunities for small business
- Lower cost and improve quality through enhanced competition
- Expand the industrial base accessible through the IACs

To achieve these objectives, DTIC is separating Basic Centers of Operation (BCO) services from Technical Area Tasks (TATs). This is being accomplished via separate Performance Work Statements for each BCO contract and consolidated multiple-award indefinite delivery, indefinite quantity (IDIQ) contracts for TATs. DTIC is streamlining/consolidating the current structure of 10 IACs managed via individual IDIQ contracts into 3 single-award contracts for BCO operations and 3 multiple-award IDIQ contracts for TATs.

The IACs will retain the same mission and competencies but operate with an expanded scope in a different operating environment. Under this new construct, the BCOs will establish a knowledge base in areas of strategic importance, and TATs will leverage the “Core” knowledge base to increase efficiency and effectiveness.

Potential Benefits of the New Construct

Under the new consolidated, restructured, and enhanced construct, BCOs will be positioned to create and sustain a focus on the Better Buying Power (BBP) Initiative to improve affordability, productivity, and standardization within defense acquisition programs; shape TATs more holistically; and reduce overhead expenses.

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BCOs still will analyze and synthesize scientific and technical information (STI). However, they also are to take on an expanded role in program analysis and integration by assessing and shaping emerging TATs to ensure consistency with and reduce duplication of prior or other ongoing work and by helping to ensure TATs are more responsive both to customer needs and broader DoD imperatives. BCOs also are to ensure that TAT results are properly characterized, captured, and made available for broad dissemination.

The consolidated IACs offer reduced infrastructure/overhead and the potential for strategic STI analysis, synthesis, and dissemination. The new IAC acquisition strategy of three single-award contracts to manage the BCOs and three multiple-award IDIQ contracts under which TATs will be performed will leverage more competition for BCO management and TAT contract awards. It also will enable enlarging relevant portions of the technology and industrial base by making additional potential suppliers accessible to support the DoD mission.

**Findings**

1. **IACs are a value-added resource for the acquisition community.**
2. **There are tenuous links between IAC activities and program milestone decision support and the BBP Initiative.**
3. **The Data and Analysis Center for Software has taken positive steps to facilitate defense system affordability.**

Although the IACs already are a value-added resource for the acquisition community, there are tenuous links between IAC activities and program milestone decision support and the BBP Initiative. STI management is a key enabler for both the research and development (R&D) and acquisition communities. The collection and dissemination of STI is a fundamental prerequisite for well-designed and solidly performing R&D and acquisition programs, and IAC customers have used IAC-supplied STI for multiple acquisitions and a variety of platforms.

However, despite the need for, and potential benefits of, acquisition affordability, the IACs (even when positively contributing to R&D efforts) do not appear to be attuned fully, intellectually or culturally, to STI management that effectively informs acquisition program affordability-related decisions, generally, or supports the BBP Initiative, specifically. This likely is the result of past IAC emphasis and culture. IACs historically have focused on R&D STI and not acquisition-related STI. Neither IACs nor major stakeholders seem to be aware of how IACs are contributing to the BBP Initiative–like efforts. BCOs appear not to understand or emphasize the BBP Initiative and have not attempted to shape TATs to support those initiatives. Additionally, IAC TAT customers have not fully taken advantage of the IACs to support acquisition programs or the BBP Initiative.

One small business-operated IAC within the new structure seems to have taken significant positive steps to address defense system affordability. The Data and Analysis Center for Software (DACS) appears to have internalized DoD’s acquisition affordability imperative within its “Core” STI focus—as part of the new CSIAC. One particular DACS initiative, the Software & Systems Cost and Performance Analysis Toolkit (S2CPAT), serves as an example of the significant benefits of the new IAC construct, including increased support to the BBP Initiative.
Recommendations

1. **Integrate IACs into the broader acquisition affordability imperative.**

2. **Focus IAC program products on support to three BBP Initiative elements:**
   a. Mandating affordability as a requirement,
   b. Incentivize productivity and innovation in industry,
   c. Promote real competition.

3. **Revise and refocus internal DTIC/IAC program policies, procedures, and products to support several other desired BBP Initiative outcomes:**
   a. Identify and address causes of poor tradecraft in services acquisitions,
   b. Eliminate redundancy in warfighter portfolios and reduce non-productive processes,
   c. Identify and suggest alternatives to eliminate/reduce barriers to small business participation.

The IACs need to be integrated more fully and effectively into the broader DoD acquisition community and the acquisition affordability imperative. BCOs need to internalize the intent and details of the BBP Initiative. They need to align themselves more explicitly with the BBP Initiative and emphasize the importance of STI to acquisition decisions. BCOs should encourage collaboration with and/or the reduction of duplicative customer efforts. DTIC should continue executing its plan to reduce BCO management overhead by consolidating from 10 IACs and 10 IDIQ contracts to 3 single-award IAC BCO contracts and 3 multiple-award IDIQ contracts for TATs. Consolidation from 10 to 3 BCOs retains focus on individual essential technologies and avoids undue dilution of management attention and expertise. Consolidation beyond 3 BCOs could result in loss of unique, essential “niche” capabilities/STI.

Additionally, IAC program products can provide significant support to the BBP Initiative by focusing on and informing defense acquisition system and subsystem affordability-related decisions. While some of these potential support activities can be driven by DTIC, the broader DoD community has a role to ensure that IAC resources are fully utilized.

IACs could support “mandating affordability as a requirement” by establishing baseline portfolio and/or mission area definitions to support affordability analyses, suggesting an affordability target for Milestone A decisions, conducting a systems engineering/cost trade-off analysis for Milestone B decisions, suggesting will cost/should cost targets, conducting reviews aimed at eliminating redundancy within warfighter portfolios, and suggesting economical production rates and economic order quantities.

DoD could institutionalize this desired outcome by mandating an affordability focus in IAC-related policies, procedures, and contracts, for example, by establishing a formal policy to require contractual consideration, integration, and promulgation of BBP Initiative focus areas in IAC products.

IACs could “incentivize productivity and innovation in industry” by offering suggestions to reinvigorate Independent Research and Development (IRAD) and/or protect essential, at risk elements of the defense technology base. Additionally, IACs could support broad technological innovation and productivity by highlighting DoD R&D needs to their customers, surveying and assessing DoD and industry R&D activities, and identifying gaps and overlaps to stakeholders.
IACs could “promote real competition” by encouraging open systems architecture and supporting technical data rights acquisition.

DTIC could leverage the ways it awards and evaluates its BCO and TAT contracts to incentivize industry productivity and innovation by taking steps to reduce single bid competitions, increasing the use of small businesses (which are not necessarily seen as competitors to major systems developers), and rewarding its contractors for indirect expense management. Finally, there are other opportunities for internal DTIC and/or IAC policies, procedures, and products to support additional specific initiatives of BBP. Of the 23 action areas enumerated by former USD(AT&L) Ashton Carter, several are particularly susceptible to internal DTIC/IAC analyses and actions. They are: (1) identify and address causes of poor tradecraft in services acquisition; (2) eliminate redundancy within warfighter portfolios and reduce nonproductive processes by clarifying the scope, characteristics, and relationships among BCOs and TATs; (3) identify and suggest alternatives to eliminate/reduce barriers to small business participation; and (4) identify and suggest potential low-value-added statutory processes for management review (a subset of “reduce nonproductive processes and bureaucracy”).

The restructured IACs are in a position to offer support to these areas proactively, while providing a resource for organizations across DoD seeking to effectively achieve these BBP objectives.
A. Affordability Imperative

Affordability is the top challenge facing the Department of Defense (DoD) today; and this challenge is amplified by the uncertain national economic and defense budget environments. Given this reality, it is not surprising that senior DoD leaders have raised concerns about defense affordability in the recent past:

- Then–Secretary of Defense Robert Gates (at the Eisenhower Library on May 8, 2010) called for “managing defense dollars in a manner that is respectful of the American taxpayer at a time of economic and fiscal distress.”

- Then–Under Secretary of Defense for Acquisition, Technology & Logistics (USD(AT&L)) Ashton Carter asserted that DoD, industry, and the Congress needed to focus on providing DoD with “better buying power, restoring affordability and productivity in defense spending” (“Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending,” June 28, 2010).

Despite changes in DoD leadership, the affordability imperative and the value of the Better Buying Power (BBP) Initiative to address that imperative remain. Acting USD(AT&L) Frank Kendall has continued and reemphasized this commitment to reduce defense system costs. Improving efficiency through the BBP is among his top priorities:1

“We will continue to refine and build upon [the Better Buying Power Initiative]. We will continue the never-ending quest to control and reduce our costs while acquiring products and services that provide the highest possible value to our warfighters.”

Realigning and refocusing Information Analysis Center (IAC) capabilities and products on defense system affordability is an essential task for DoD and Defense Technical Information Center (DTIC) leadership going forward.

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B. Structure of IACs Today and the Plan to Move Forward

The IAC program structure is changing significantly in response to congressional guidance and the evolving defense environment. Figure 1 describes the current IAC structure and the planned way forward.

The IACs comprise a two-part structure that focuses on “Core” (Basic Centers of Operation (BCOs)) and “Technical Area Tasks” (TATs). The BCOs are managed by both industry and academia. They collect, process, and manage internal databases and libraries in addition to analyzing and disseminating a wide variety of products. IACs also submit scientific and technical information (STI) to DTIC’s digital database for instant access. Users access DTIC for STI to benefit warfighters’ needs.

Figure 1: Current IAC Structure and Way Forward

The flow of money into the IAC program is considerable. With direct budget appropriations of only $7.1 million in FY2012, the IACs are an example of minimally funded DoD enterprises that produce needed products and services. IAC TATs are funded from DoD appropriations as well as by program offices and contractors, solely through IAC contract vehicles, which pay for their services. To put things in perspective, the entire IAC program has a contract ceiling

of $15.2 billion.\(^3\) Two of the IACs, IATAC and SURVIAC, represent over two-thirds of the available room to grow under that ceiling. Much of this growth has been due to increased demand for information related to warfighting capabilities in Afghanistan, Iraq, and other conflicts in which the United States is involved. With a reliable and readily available contract vehicle, IACs represent a direct and key link in the chain of information-to-warfighting capability.

Nondirect investment in both BCOs and TATs has seen substantial increases within the last five fiscal years. While IAC contractors continue to collect, analyze, and disseminate STI within their core capacity, many IACs also have scaled support to meet an increased need for specific research and analysis on technical tasks. This has translated into rapid growth within the TAT program. BCO funding has experienced a five-year compound annual growth rate (CAGR) of 10 percent per year, while TAT funding has ballooned with a 27.6 percent five-year CAGR.\(^4\) BCO funding has grown from $7.7 million in FY2005 to $12 million in FY2010, with two of the IACs, MSIAC (15 percent) and SURVIAC (13 percent), receiving the most funding (via contracts from DoD programs). TAT funding grew from $428 million in FY2005 to $1.6 billion in FY2010, with three IACs, SURVIAC (29 percent), RIAC (27 percent), and IATAC (17 percent), receiving the largest capital inflows.

The current 10-center IAC structure has provided DoD with consistent, reliable, and readily available information. Nevertheless, given the need to adapt to an evolving environment, DTIC is realigning the IAC program to achieve several objectives:

- Expand scope and increase synergy across related technology areas
- Increase opportunities for small business
- Lower cost and improve quality through enhanced competition
- Expand the industrial base accessible through the IACs

To achieve these objectives, DTIC is separating BCO services from TATs. This is being accomplished via separate Performance Work Statements for each BCO contract and consolidated multiple-award indefinite delivery, indefinite quantity (IDIQ) contracts for TATs. DTIC is streamlining/consolidating the current structure of 10 IACs managed via individual IDIQ contracts into 3 single-award contracts for BCO operations and 3 multiple-award IDIQ contracts for TATs.

DTIC also is focusing the program to respond more to emerging areas of interest. The new alignment creates 3 BCOs (Cyber Security IAC; Defense Systems IAC; Homeland Defense IAC) and 3 TATs (Software, Networks, Information, Modeling and Simulation; Defense Systems; Homeland Defense) by 2013.\(^5\) The IACs will retain the same mission and competencies but operate with an expanded scope in a different operating environment.

Under this new construct, the BCOs will establish and sustain a knowledge base in areas of strategic importance; and TATs will leverage the “Core” knowledge base to increase efficiency and effectiveness. According to IAC deputy program manager Christopher Zember:

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\(^3\) Christopher Zember, “IAC Metrics Summary, December FY12,” Defense Technical Information Center, slide 1.
\(^4\) Figures and CAGRs are derived from funding charts provided to CSIS by IAC deputy program manager Christopher Zember, “IAC Funding” (presentation Defense Technical Information Center, Ft. Belvoir, VA, April 1, 2011).
\(^5\) The Software, Networks, Information, Modeling and Simulation (SNIM) contract was the first multiple-award IDIQ contract awarded, on May 24, 2010, to nine prime contractors.
“Core/BCO contracts will allow us to build knowledge in these areas proactively, while TAT contracts provide a cost-reimbursable avenue for customers to apply the core knowledge base to meet deeper requirements.”
C. Potential Benefits of the New Construct

The new IAC construct offers significant potential benefits, including an increased ability to support the BBP Initiative. Figure 2 summarizes key IAC characteristics today and after planned changes, including the potential positive impacts of the new construct.

Figure 2: IAC Characteristics Today

<table>
<thead>
<tr>
<th>Roles</th>
<th>Current Structure</th>
<th>Future Structure</th>
<th>Impact</th>
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<tbody>
<tr>
<td></td>
<td>BCO: Contract administration, shaping STI</td>
<td>BCO: ST/TAT program analysis and integration, Contract administration, shaping STI</td>
<td>Strengthened BCO STI integration role</td>
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<tr>
<td></td>
<td>TAT: R&amp;D analysis, new STI production, Subject matter expertise on emerging areas of interest</td>
<td>TAT: R&amp;D analysis, new STI production, SME on emerging areas of interest, post project feedback for BCOs</td>
<td>Bridge between technical and operational communities</td>
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<td></td>
<td>10 Centers (BCO &amp; TAT's combined)</td>
<td>3 + 3 (3 BCOs) (3 TATs)</td>
<td>Visibility/responsibility within and across TATs to improve quality, responsiveness, and STI sharing, and reduce redundancy</td>
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<tr>
<td></td>
<td>10 Single-Award IDIQs (BCOs + TAT's)</td>
<td>3 Single-Award IDIQs (BCOs) + 3 Multiple-Award IDIQs (TATs)</td>
<td>Improved competitive environment for BCO and TAT contract award</td>
</tr>
<tr>
<td></td>
<td>10 Centers (BCO &amp; TAT's combined)</td>
<td>3 + 3 (3 BCOs) (3 TATs)</td>
<td>Broadened accessible technology &amp; industrial base</td>
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</table>

The new IAC management structure separates BCOs from TATs. The new structure is designed to enable better performance in the evolving DoD environment than the former structure. Under the new consolidated, restructured, and enhanced construct, BCOs will be positioned to create and sustain a focus on the BBP Initiative to improve affordability, productivity, and standardization within defense acquisition programs. They also will be positioned to shape TATs more holistically and reduce overhead expenses.

The role of the BCO is expanded significantly. BCOs still will analyze and synthesize STI. However, they also are to take on an expanded role in program analysis and integration. They are to work closely with expanded steering committees that provide corporate and technical guidance and act as a bridge between the technical and operational communities to address significant technical and programmatic challenges. BCOs are to participate more actively in TATs by assessing and shaping emerging TATs to ensure consistency with and reduce duplication of prior or other ongoing work, and they are to provide help to ensure TATs are more responsive to both customer needs and broader DoD imperatives. BCOs also will bring in the perspective of the broader technical community rather than focusing on one unique customer. Finally, BCOs also are to ensure that TAT results are properly characterized, captured, and made available for broad dissemination.
The consolidated IACs offer reduced infrastructure/overhead and the potential for strategic STI analysis, synthesis, and dissemination. Separately funding BCOs and TATs, and long-term planning, will permit IACs to build and maintain relationships with multiple DoD agencies and provide better opportunities for direct connection to the warfighter.

As part of IAC restructuring, the new IAC acquisition strategy includes 3 single-award contracts to manage the BCOs and 3 multiple-award IDIQ contracts under which TATs will be performed. This strategy will leverage more competition for BCO management (by taking steps to reduce single bid competitions) and TAT contract awards, while expanding small business opportunities for BCO management. It also will enable enlarging relevant portions of the technology and industrial base by making additional potential suppliers accessible to support the DoD mission.
D. Findings

1. IACs are a value-added resource for the acquisition community:
   a. STI management is a key foundation for both the R&D and acquisition communities,
   b. Expanded use of steering committees will increase the potential for IACs to add value to the DoD acquisition process.

2. There are tenuous links between IAC activities and program milestone decision support and the BBP Initiative:
   a. IACs historically have focused on R&D STI,
   b. IACs and stakeholders generally are unaware of how IACs already are contributing to the BBP Initiative,
   c. BCOs appear not to understand or emphasize BBP Initiative support.

3. The Data and Analysis Center for Software has taken positive steps to facilitate defense system affordability.

Although IACs are a value-added resource for the acquisition community, there are tenuous links between IAC activities and program milestone decision support and the BBP Initiative. STI management is a key enabler for both the R&D and acquisition communities. The collection and dissemination of STI is a fundamental prerequisite for well-designed and solidly performing R&D and acquisition programs. In fact, IAC customers have used IAC-supplied STI for multiple acquisitions and a variety of platforms. Additionally, planned, and to some extent ongoing, expanded use of steering committees is bridging the gap between the operational and technical/acquisition communities and increasing the potential for positive IAC impact on defense systems and subsystems, generally, and on defense program affordability.

Nevertheless, despite the need for and potential benefits of acquisition affordability emphasis, IACs (even when positively contributing to R&D efforts) do not appear to be attuned fully, intellectually or culturally, to STI management that effectively informs acquisition program affordability-related decisions, generally, or supports the BBP Initiative, specifically. This likely is the result of past IAC focus and culture. IACs historically have focused on R&D STI and not acquisition-related STI. Neither IACs nor major stakeholders seem to be aware of how IACs are contributing to the BBP Initiative—like efforts. Additionally, BCOs appear not to understand or emphasize the BBP Initiative and have not attempted to shape TATs to support those initiatives. Additionally, IAC TAT customers have not taken full advantage of the IACs to support acquisition programs or the BBP Initiative.

CSIS discussions with IAC managers confirmed this disconnect. Additionally, few stakeholders provided CSIS with examples of previous IAC products providing affordability-related benefits.

However, one small business-operated IAC within the new structure seems to have taken significant positive steps to address defense system affordability. The Data and Analysis Center for Software (DACS) appears to have internalized DoD’s acquisition affordability imperative within its “core” STI focus—as part of the new CSIAC. One particular DACS
initiative, the Software & Systems Cost and Performance Analysis Toolkit (S2CPAT), serves as an example of the significant benefits of the new IAC construct, including increased support to the BBP Initiative. A successful IAC must embody three key characteristics in the emerging defense environment.

First, it must focus generally on benefits to DoD acquisition programs, not just on R&D. DACS does this by targeting STI benefitting DoD acquisition programs to improve the quality of software-intensive systems, including development capability.

Second, it must focus on BBP Initiative support. DACS focuses on software and software engineering for systems and systems of systems; including, size, schedule, total ownership cost, interoperability, and quality data and trends. It also emphasizes the ability to predict the effort/workload and schedule required to develop such systems. DACS targets cost estimation by including local calibrations for cost models or estimation analogies. Finally, DACS addresses project planning and management by including life cycle model information, key risks, lessons learned (including interoperability lessons), templates, and estimation options.

Third, it must make a commitment to a strong BCO management integration role by “pulling” relevant STI from the broadest possible base and “pushing” relevant STI to the broader community to inform acquisition decisions more effectively. DACS pulls and consolidates STI from multiple sources and makes its repository available to all participants. It does this “safely” by stripping information indicating the original source/developer and keeping that information in offline protected media, and aggregating data as necessary to protect proprietary information. DACS pushes acquisition-related STI to the broader community by maintaining and analyzing data for all related DoD projects in order to support all user queries.

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6 Prototype operational in December 2011.
E. Recommendations

This report offers both overarching (“strategic”) recommendations for the IAC program and more focused (“tactical”) recommendations detailing how the IACs could better support the BBP Initiative.

<table>
<thead>
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<th>Strategic Recommendations</th>
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<tr>
<td>1. Integrate IACs into the broader DoD acquisition affordability imperative.</td>
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<td>2. BCOs should internalize the intent and details of the BBP Initiative in order to be a lead integrator for acquisition program-related STI.</td>
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<td>3. Revitalized and consolidated BCOs should:</td>
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<td>a. Emphasize STI tied to acquisition decisions,</td>
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<td>b. Encourage reduction of duplicative customer actions,</td>
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<tr>
<td>c. Reduce BCO management overhead,</td>
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<tr>
<td>d. Retain sufficient capability and focus to meet unique customer needs.</td>
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From an overarching strategy perspective, the IACs need to be integrated more fully and effectively into the broader DoD acquisition community and the acquisition affordability imperative. Culture, policies, procedures, and responsibilities require adjustment. BCOs need to internalize the intent and details of the BBP Initiative if they are to be a lead integrator for acquisition program-related STI; and they need to align themselves more explicitly with the BBP Initiative. The revitalized and consolidated BCOs should emphasize the importance of STI to acquisition decisions. They should encourage collaboration with and/or the reduction of duplicative customer efforts (including customer efforts to develop/sustain duplicative “centers of excellence”). DTIC should complete its plan to reduce BCO management overhead by consolidating from 10 IACs and 10 IDIQ contracts to 3 single-award IAC BCO contracts and 3 multiple-award IDIQ contracts for TATs. While doing this, DTIC, IAC, and BCO managers must ensure that necessary and unique capability sets are retained within the IACs. Consolidation from 10 to 3 “Cores/BCOs” retains focus on individual essential technologies and avoids undue dilution of management attention and expertise. Such consolidation also preserves the ability to meet unique customer needs. However, further consolidation without consideration of technical focus or capability could be problematic. DoD should balance the overhead reduction savings associated with further BCO consolidation (below the current 3) with the benefits of preserving focus on key STI technologies/practices and on customer care. Consolidation beyond 3 also could result in loss of unique, essential “niche” capabilities/STI.

There are specific areas where IAC program products can provide significant support to the BBP Initiative by focusing on and informing defense acquisition system and subsystem affordability-related decisions. While some of these potential support activities can be driven by DTIC, the broader DoD community also has a role to ensure IAC resources are fully utilized.

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7 Realigning and integrating an R&D STI-focused organization with DoD’s acquisition community requires significant management attention and is beyond the scope of this study.
IACs could support “mandating affordability as a requirement” by:

- Establishing baseline portfolio and/or mission area definitions to support affordability analyses.
- Suggesting an affordability target for Milestone A decisions.
- Conducting a systems engineering/cost trade-off analysis for Milestone B decisions.
- Suggesting will cost/should cost targets.
- Conducting reviews aimed at eliminating redundancy within warfighter portfolios.
- Suggesting economical production rates and economic order quantities.

However, to accomplish these objectives, greater IAC integration into the DoD acquisition community will be required. This could be facilitated via an IAC “push” to focus its products in support of the BBP Initiative and a DoD “pull” mandating that focus. TAT managers could proactively market affordability-supporting STI to the program community by structuring, executing, and delivering TATs that inform programmatic affordability-related decisions.

DoD policies and leaders could institutionalize this desired outcome by mandating an affordability focus via IAC-related policies, procedures, and contracts, for example, by establishing a formal policy to require contractual consideration, integration, and promulgation of the BBP Initiative focus areas in IAC products.

IACs could “incentivize productivity and innovation in industry” by offering suggestions to reinvigorate Independent Research and Development (IRAD) and/or protect essential, at risk, elements of the defense technology base. Additionally, IACs could support broad technological innovation and productivity by highlighting DoD R&D needs to their customers, surveying and assessing DoD and industry R&D activities, and identifying gaps and overlaps to stakeholders.

IACs could “promote real competition” by encouraging open systems architectures and supporting technical data rights acquisition.

DTIC could leverage the ways it awards and monitors its BCO and TAT contracts to incentivize industry productivity and innovation by taking steps to reduce single bid

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**Tactical Recommendations**

1. **Focus IAC program products on three BBP Initiative elements:**
   - Mandating affordability as a requirement,
   - Incentivize productivity and innovation in industry,
   - Promote real competition.
2. **Revise and refocus internal DTIC/IAC program policies, procedures, and products to contribute to several other desired BBP Initiative outcomes:**
   - Identify and address causes of poor tradecraft in services acquisitions,
   - Eliminate redundancy in warfighter portfolios and reduce non-productive processes,
   - Identify and suggest alternatives to eliminate/reduce barriers to small business participation.
competitions, increasing the use of small businesses (which are not necessarily seen as competitors to major systems developers), and rewarding its contractors for indirect expense management. Finally, there are other opportunities for internal DTIC and/or IAC policies, procedures, and products to support additional specific initiatives of BBP. Of the 23 action areas laid out by former USD(AT&L) Ashton Carter, several would particularly benefit from internal DTIC/IAC analyses and actions. They are: (1) identify and address causes of poor tradecraft in services acquisition; (2) eliminate redundancy within warfighter portfolios and reduce nonproductive processes and bureaucracy by clarifying the scope, characteristics, and relationships among BCOs and TATs; (3) identify and suggest alternatives to eliminate/reduce barriers to small business participation; and (4) identify and suggest potential low-value-added statutory processes for management review (a subset of “reduce nonproductive processes and bureaucracy”).

The restructured IACs are in a position to offer support proactively to these areas, while providing a resource for organizations across DoD seeking to achieve these BBP objectives effectively.
Appendixes

F. CSIS Methodology and Deliverables

G. Historical Background of the DTIC & IAC Communities

H. Identified Opportunities (and Potential Impact areas) for IAC Management and the IAC Construct (BCO/TATs) to Support the USD(AT&L) Better Buying Power Initiative within the IAC Program and Program Structure

I. Identified Opportunities (and Potential Impact Areas) for IAC Management and the IAC Construct (BCO/TATs) to Support the USD(AT&L) Better Buying Initiative within Internal DTIC/IAC Activities, Contract Pre-award, Contract Provisions, and Products Produced

J. Key Reference Material
F. CSIS Methodology and Deliverables

In accordance with the Statement of Work in Contract FA1500-11-R-0002, CSIS has mapped selected capabilities of the DTIC IACs against the Guidance Roadmap from the USD(AT&L) BBP Initiative, its 5 general categories, and its 23 efficiency actions. Under this contract, CSIS also has provided a multi-phased, independent analysis and review of those capabilities of DTIC and the IACs that could best positively impact the BBP Initiative. CSIS has evaluated DoD progress on the BBP Initiative and activities and potential activities with which DTIC and IACs could provide effective support to those initiatives. To accomplish these tasks, CSIS conducted a comprehensive document review, interviewed DoD officials and industry representatives, and made on-site visits to selected IACs.

The two primary memoranda pertaining to the Better Buying Power Initiative are:


The document review included but was not limited to relevant DoD governing documents (for example, directives and instructions), relevant IAC documents (for example, strategies, existing analyses, and case studies), USD(AT&L) efficiency guidance and associated documents (for example, transcripts of speeches, public comments, and meeting notes), and IAC contracts.

CSIS also interviewed DTIC and IAC officials, other DoD managers, contractors, and customers, and visited several IACs to discuss their capabilities, products, processes, and plans with the managing contractors. Specifically, CSIS representatives visited:

- Chemical Propulsion IAC (CPIAC); managed by Johns Hopkins University’s Whiting School of Engineering, Columbia, MD.
- Information Assurance IAC (IATAC) / Survivability/Vulnerability IAC (SURVIAC); managed by Booz Allen Hamilton, Herndon, VA.
- Data and Analysis Center for Software (DACS) / Reliability IAC (RIAC); managed by Quanterion Solutions, Utica, NY. (Quanterion operates as a subcontractor to Wyle Laboratories in managing the RIAC BCO.)
- Advanced Materials, Manufacturing & Testing (AMMITIAC) / Weapons Systems Technology IAC (WSTIAC); managed by Alion Science, Rome, NY.

CSIS has provided several “interim” deliverables under this contract:

- An “Initial IAC Map” identified and mapped IAC capabilities against the USD(AT&L) Guidance Roadmap’s 5 general categories and 23 efficiency actions.
- An “Expanded IAC Map” included the 2013 IAC end state as envisioned by DTIC leaders.
• An “IAC Map Update per USD(AT&L) 23 Actions” updated efficiency actions.
• An “IAC Gaps and Shortfalls Actions” identified areas in which IACs could improve.

CSIS provided two “Final” deliverables for this contract:

• A final, top-level PowerPoint briefing (with Notes pages) suitable for the IAC program management officer (PMO) to brief DoD leaders and industry managers on the results of study (provided under separate cover).

• This final narrative report documenting IAC “defense system affordability-related” capabilities, gaps, and possible actions.
G. Historical Background of the DTIC & IAC Communities

The DTIC is a DoD “Field Activity” that reports to the USD(AT&L) but is managed by the assistant secretary of defense for research and engineering (ASD (R&E)). Its mission is to provide essential technical research, development, test and evaluation (RDT&E) information rapidly, accurately, and reliably to support DoD customers (researchers, scientists, engineers, and program managers) in all areas of DoD research and engineering. DTIC uses IACs to support this mission. IACs collect, analyze, apply, and disseminate worldwide scientific and technical information (STI) while promoting standardization within their fields of expertise. Currently, the IACs are composed of 10 subject-oriented centers managed by 8 contractors. The 4 military services sponsor their own IAC program as supported by 9 separate centers. These centers have minimal contact with the uniquely focused DoD-sponsored IACs and also possess specialized expertise.

Several IACs mark their existence to about the same time DTIC’s foundation was established. With a remarkable disadvantage in aircraft capabilities, U.S. Army Air Force (USAAF) military leaders created the “Bolling Commission” in 1917, which in turn sent military and industry experts to Europe. Their goal was to acquire aviation STI and to recommend aircraft and equipment to the USAAF. This STI needed to be housed, and the Air Documents Research Center (ADRC) was created in 1944 and then merged with the USAAF J-2 Division (which was to become the National Air Intelligence Center) in 1945 to become the Air Documents Division. This was the foundation for what eventually became DTIC, albeit after multiple realignments and mission changes. After the U.S. Air Force was created from the USAAF in 1947, what was to become DTIC became the repository and research appendage for all U.S. military STI in 1949. The IAC program was added to DTIC’s mission in 1980 further enabling IAC support of research and engineering expertise within the broad purview of DoD.

The IACs have existed since 1946 in a variety of configurations and are charged to collect, analyze, synthesize, and disseminate STI in clearly defined, unique subject areas. They serve as a bridge between the warfighter and the acquisition community by disseminating the most up-to-date STI available to a broad DoD customer base through analytical products that assist the warfighter of today. Specializing in subjects from propellants to manufacturing and information assurance, IACs have supported DoD’s drive for innovation and ingenuity for decades. IACs also fill knowledge gaps by leveraging scientific and engineering talent to drive this innovation further. IAC managers have identified several notable success stories, including assistance on NASA rockets, stealth airplanes, light weaponry, Patriot and other missiles, Mine-Resistant Ambush-Protected (MRAP) vehicles, Improvised Explosive Device (IED) Defeat, force protection, helicopter survivability, and DoD database management.

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8 After the U.S. Air Force was created from the USAAF in 1947, the ADD became the Central Air Documents Office (CADO), the repository and research appendage for the entire U.S. military for STI, in 1948. CADO split from J-2 jurisdiction in 1949 and merged with the Library of Congress’s Technical Information Division in January 1952 for enhanced STI capabilities. After the Cuban Missile Crisis, the Armed Services Technical Information Agency (ASTIA) changed into the Defense Documentation Center (DDC) and soon after was designated a “field activity” under the Defense Supply Agency (DSA). The Defense Logistics Agency (DLA) was responsible for operational control until it was transferred to USD (Acquisitions) in 1991. In 1979, DDC changed its name to the Defense Technical Information Center (DTIC) and the IAC program was added to DTIC’s mission in 1980. This addition enhanced the IAC mission to support research and engineering expertise within the broad purview of DoD. DTIC moved to its current location at Ft. Belvoir, VA, in 1995 and became a “Field Activity” and was placed under USD(AT&L) in 2004.
Examples of today’s IAC products include the System Reliability Toolkit handbook, the Software Security Assurance State-of-the-Art Report (SOAR), Insider Threat SOAR, Global Information Technology (IT) Supply Chain SOAR, and a Power & Energy Journal Issue. Within the 10 centers, DoD has access to expertise on advanced materials, weapons systems, survivability, sensors, reliability, and other fields within the IAC purview.9

The 10 DoD-sponsored IACs support DoD and industry program managers, and warfighters, in a variety of specific subject areas. These 10 IACs and their respective areas of expertise are:

- **AMMTIAC**: Advanced Materials, Manufacturing & Testing
- **CBRNIAC**: Chemical, Biological, Radiological, Nuclear Defense
- **CPIAC**: Chemical Propulsion
- **DACS**: Data and Analysis Center for Software
- **IATAC**: Information Assurance
- **MSIAC**: Modeling & Simulation
- **RIAC**: Reliability
- **SENSIAC**: Sensor Technology
- **SURVIAC**: Survivability/Vulnerability
- **WSTIAC**: Weapons Systems Technology

The IACs are in constant contact with DoD and industry program officials within the USD(AT&L) and ASD (R&E) community in a variety of roles. Currently, IACs directly support Science, Technology, Engineering, Mathematics (STEM) Education, Basic Science, Technologies, System Analysis, Mission Assurance, Complex Systems, Joint Operational Support, and Joint Interoperability within ASD(R&E). IACs also are developing support capabilities for other R&E areas including Laboratories, the Joint Rapid Acquisition Cell, and the Rapid Reaction Technology Office. With multiple avenues to support USD(AT&L), IACs represent an essential tool for cost-effectively fielding superior warfighting capabilities in today’s ever-changing high-technological environment.

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9 Since the inception of the first center in 1946 (Rocket Propellant Information Agency—RPIA), IACs have specialized in many scientific and technical areas. Previous IAC portfolio specializations included propellants, infrared, mechanics, ceramics, thermo properties, reliability, plastics, conflict and tactics, pavements and soil, shock and vibration, weapons and guidance, survivability, manufacturing, chemical and biological warfare, and crew systems.
H. Identified Opportunities (and Potential Impact Areas) for IAC Management and the IAC Construct (BCO/TATs) to Support the USD(AT&L) Better Buying Power Initiative within the IAC Program and Program Structure

<table>
<thead>
<tr>
<th>Better Buying Power Initiative Action Areas ¹⁰</th>
<th>BCOs</th>
<th>TATs</th>
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<td>• Adopt uniform taxonomy for different types of services</td>
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<td>P/S/M/PA/C</td>
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<tr>
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<td>P/S/M/PA/C</td>
<td>P/M/PA/C</td>
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<tr>
<td>• Increase small business participation in providing services</td>
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<td><strong>Reduce nonproductive processes and bureaucracy</strong></td>
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“P” indicates an IAC opportunity to support Productivity improvements.
“S” indicates an IAC opportunity to support Standardization improvements.
“O” indicates an IAC opportunity to support Other improvements.
“M” indicates a DTIC Management opportunity to support a BBP Initiative.
“PA” indicates a Pre-Award opportunity to support a BBP Initiative.
“C” indicates an IAC Contract opportunity to support a BBP Initiative.

I. Identified Opportunities (and Potential Impact areas) for IAC Management and the IAC Construct (BCO/TATs) to Support the USD(AT&L) Better Buying Power Initiative within Internal DTIC/IAC Activities, Contract Pre-award, Contract Provisions, and Products Produced

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$^{11}$ Ibid.
J. Key Reference Material

1. DoD Research and Engineering Strategic Imperatives (as summarized in “DTIC IAC Metrics, FY2010 Analysis,” December 2010, Executive Summary, page 2, Recommendations, paragraph 1)
   - Accelerate delivery of technical capabilities to win the current fight
   - Prepare for an uncertain future
   - Reduce the cost, acquisition time, and risk of our major defense acquisition programs
   - Develop world class science, technology, engineering, and mathematics capabilities for DoD and the nation

   - Provide users with focused expert assistance and unbiased scientific and technical information
   - Establish and maintain comprehensive knowledge databases that include technical, scientific, and other data and information collected on a worldwide basis in their field of interest
   - Identify sources and assess the relevance of data held by others
   - Coordinate closely with their sponsoring DoD technical communities and the DoD user community in general as a means to focus their efforts on defense community needs
   - Collect, maintain, and develop analytical tools and techniques including databases, models, and simulations

3. “IAC Mission” (briefing by Deputy Director Christopher Zember, “Information Analysis Centers: IAC Program Overview and Way Ahead Considerations,” April 1, 2011, slide 2)
   - Improve productivity of researchers, engineers, and program managers in the defense research, development, and acquisition communities by collecting, analyzing, synthesizing, and disseminating worldwide STI in clearly defined, specialized fields or subject areas
   - Promote standardization within their respective fields by
     - Providing in-depth analysis
     - Creating products
     - Responding to technical inquiries
     - Performing technology assessments
     - Supporting exchanges of information among scientists, engineers, and practitioners of various disciplines

   - 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

<table>
<thead>
<tr>
<th>Obtain 2 to 3 percent net growth in warfighting capabilities without commensurate budget increases by identifying and eliminating unproductive or low-value-added overhead and transfer savings to warfighting capabilities. Do more without more.</th>
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- Providing incentives for greater efficiency in industry
  - Leveraging real competition
  - Using proper contract type for development and procurement
  - Using proper contract type for services
  - Aligning policy on profit and fee to circumstance
  - Sharing the benefits of cash flow
  - Targeting non-value-added costs
  - Involving dynamic small business in defense
  - Rewarding excellent suppliers
  - Adopting “should-cost” and “will-cost” management
  - Strengthening the acquisition workforce
  - Improving audits
  - Mandating affordability as a requirement
  - Stabilizing production rates
  - Eliminating redundancy within warfighting portfolios
  - Establishing senior managers for procurement of services
  - Protecting the technology base


- Target affordability and controlling cost growth
  - Mandate affordability as a requirement
  - Drive productivity growth through will cost/should cost management
  - Eliminate redundancy within warfighter portfolios
- Make production rates economical and hold them stable
- Set shorter program timelines and manage to them

- Incentivize productivity and innovation in industry
  - Reward contractors for successful supply chain and indirect expense management
  - Increase the use of FPIF contract type where appropriate, and a 50/50 share line and 120 percent ceiling
  - Adjust progress payments to incentivize performance
  - Extend the Navy’s Preferred Supplier Program to a DoD-wide pilot
  - Reinvigorate IRAD and protect the defense technology base

- Promote real competition
  - Present a competitive strategy at each program milestone
  - Remove obstacles to competition
  - 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
  - Adopt uniform taxonomy for different types of services\(^\text{12}\)
  - Address causes of poor tradecraft in services acquisition
  - Increase small business participation in providing services

- Reduce nonproductive 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 the use of FPRRs to reduce administrative costs


- Target affordability and control cost growth

\(^{12}\) R&D is not included in this taxonomy; therefore, R&D is not considered part of services. However, the September 14, 2010, USD(AT&L) memo discusses a $700 billion annual DoD budget. The budget is said to be composed of $300 billion for funds “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; and the remaining $400 billion is “spent on contracts issued to entities outside of the Department of Defense”—of which $200 billion is spent on “goods” and $200 billion is spent on “services.” Therefore, it seems appropriate to consider R&D as “goods” within the Better Buying Power Initiative construct.
- Mandate affordability as a requirement
  - Baseline portfolio and/or mission area definitions as a basis for affordability analyses (examples include tactical wheeled vehicles, tactical aircraft, surface combatants, communications satellites)
  - For Milestone A, establish an affordability target to be treated like a Key Performance Parameter as the basis for pre-MS B decisionmaking and systems engineering trade-off analysis
  - For Milestone B, present a systems engineering trade-off analysis showing how cost varies as the major design parameters and time required to complete are traded off against each other
- Drive productivity growth through will cost/should cost management by establishing should cost targets based on bottom-up assessments of what programs should cost if reasonable efficiency and productivity enhancing efforts are undertaken; and use these costs as a basis for contract negotiations, contract incentives, and performance measurement
- Eliminate redundancy within warfighter portfolios by conducting portfolio reviews for selected ACAT II and III programs and reporting results of the reviews
- Make production rates economical and hold them stable with reference to economic order quantities and the affordability target set at MS A, as adjusted at MS B; and define production rate change limitations based on the MS A or B affordability assessments. Program deviations require USD(AT&L) review and approval
- Set shorter program timelines and manage to them by including proposed program schedule as part of the cost trade-off analysis at MS B to support affordability. Deviation from the schedule without prior USD(AT&L) approval could lead to MS revocation

- Incentivize productivity and innovation in industry
  - Reward contractors for successful supply chain and indirect expense management and include the incentive strategy behind the profit policy in all ACAT 1D program acquisition strategies
  - Increase the use of fixed-price incentive firm target contract type where appropriate using a 50/50 share line and 120 percent ceiling as a point of departure, particularly for efforts moving from development to production
  - Adjust progress payments to incentivize performance by using a DPAP-developed cash flow model and guidance with respect to the use of a preferred hierarchy of innovative financing methods described in the model that takes into consideration the life cycle phase of weapon system programs. Include flow-down provisions to subcontractors
  - Extend the Superior Supplier Incentive Program to a DoD-wide pilot based on the Navy’s program pilot
  - Reinvigorate industry’s IRAD and protect the defense technology base including additional incentives for industry to conduct more defense-relevant R&D and to promote the role of small business in DoD IRAD
• Promote real competition
  - **Present a competitive acquisition strategy at each program milestone** and report how single-bid competitions will be reduced, addressing market research, restricted specifications, and adequate time for proposal preparation
  - **Remove obstacles to competition** by ensuring that contracting officers conduct negotiations with all single-bid offerors unless the requirement is waived by the HCA. Negotiations will be based on either certified or noncertified cost or pricing data. Develop a component or agency plan to improve both the overall rate of competition and the rate of effective competition, including requiring open systems architectures and setting rules for acquisition of technical data rights
  - **Increase dynamic small business role in defense marketplace competition** through weighting factors in past performance and in fee construct for all competitive and noncompetitive procurement actions

• Improve tradecraft in services acquisition
  - **Create a senior manager for acquisition of services in each component**, following the Air Force’s example responsible for governance in planning, execution, strategic sourcing, and management of services contracts
  - **Adopt uniform taxonomy for different types of services** using the existing Product Service Code categories contained in the Product and Service Code Manual as the basis for collecting data on and managing services contracts
  - **Address causes of poor tradecraft in services acquisitions**, by
    - Assisting users of services to define requirements and prevent creep by using standardized requirements templates in developing Performance Work Statements
    - Enhancing competition by requiring more frequent re-competes of knowledge-based services by reviewing the length of time such contracts are scheduled to remain in effect before re-competition occurs and reporting the results to the USD(AT&L). Except for FFRDCs and UARCs, single-award contracts should normally be limited to three years
    - Requiring cost and pricing data where “1-bid” proposals are received. Additionally, solicitations receiving only 1-bid and which were open to industry for less than 30 days are to be re-advertised for a minimum of an additional 30 days unless waived by the HCA
    - Limiting the use of time and materials and award fee contracts for services by favoring cost-plus-fixed-fee or cost-plus-incentive-fee arrangements in the absence of robust competition or recent competitive pricing history. Use that cost knowledge to inform “should cost” estimates and negotiations. When robust competition already exists or there is recent competitive pricing history, favor firm-fixed-price (FFP) type contract arrangements for services acquisitions. FFP contracts should also be used to the maximum extent reasonable when ongoing competition is used in multiple-award contract scenarios
    - Requiring services contracts exceeding $1 billion to contain cost efficiency objectives and provisions to achieve productivity improvement and cost efficiencies throughout the contract term
- Require small business participation in providing services by seeking opportunities to compete multiple-award/IDIQ contracts among small businesses

- Reduce nonproductive processes and bureaucracy
  - Complete an assessment of all internal reviews to ensure they focus their purpose on the major acquisition investment decisions to be made
  - Review all component-required acquisition documents for redundancy with OSD-required documents and eliminate redundant documents and non-value-added content
  - Conduct a bottom-up review of all internally generated reporting requirements, assess the value of the reports (with a goal to eliminate 50 percent of the reports and substantially shortening the ones remaining), and assign reasonable page count caps when assigning lead responsibility for report production


- Program managers (PMs) will develop, own, track, and report against should-cost estimates
  - PMs to provide should-cost estimates for their ACAT I, II, and III programs at major milestone decisions
    - PMs should utilize Defense Acquisition Board templates for estimates
    - Each service to identify five programs to serve as models for should-cost implementation

- Service and component acquisition executives to develop incentive plans for their program managers to reinforce and reward commitment to will-cost and should-cost management
  - Annual reports due from each service and component
  - Progress reporting on should-cost estimates required for all Defense Acquisition Executive Summary reviews
  - Will-cost estimates to continue to be the official position of DoD for use in budgeting, programming, setting acquisition programs baselines, and for other reporting external to the department

- Should-cost estimates can be developed in any of three ways or in a combination
  - First is through bottoms-up estimate
  - Second is to identify reductions from will-cost estimates
  - Third, where applicable, should use competitive contracting and contract negotiations to identify should-cost savings
About the Authors

David J. Berteau is senior vice president and director of both the CSIS Defense-Industrial Initiatives Group and the CSIS International Security Program. Mr. Berteau is an adjunct professor at Georgetown University and also served on the secretary of the army’s Commission on Army Acquisition and Program Management in Expeditionary Operations. He is currently a director of the Procurement Round Table, a fellow of the National Academy of Public Administration, and a senior fellow of the Robert S. Strauss Center for International Security and Law, University of Texas at Austin. Prior to joining CSIS, he was director of national defense and homeland security for Clark & Weinstock. From 2001 to 2003, he was the director of Syracuse University’s National Security Studies Program. Mr. Berteau was a senior vice president at Science Applications International Corporation (SAIC) for seven years, and he served in the Defense Department under four defense secretaries, including four years as principal deputy assistant secretary of defense for production and logistics. Mr. Berteau graduated with a B.A. from Tulane University in 1971 and received his master’s degree in 1981 from the LBJ School of Public Affairs at the University of Texas.

Gregory Kiley is a senior associate at CSIS, focusing on national security and economics. He is also a vice president of Potomac Strategic Development, LLC. Prior to joining CSIS, Mr. Kiley spent six years as a senior professional staff member for the Senate Armed Services Committee (SASC). As staff director for two SASC subcommittees, his oversight portfolio included all air and ground forces, military logistics and readiness, and the defense budget. Responsibilities included coordinating and conducting congressional hearings, developing and drafting legislation, and negotiating and staffing passage of annual National Defense Authorization Acts and supplemental spending bills. Prior to the SASC, Mr. Kiley spent 3 years as a principal analyst for the National Security Division of the Congressional Budget Office concentrating on logistics and readiness issues. Mr. Kiley began his professional career in the U.S. Air Force (USAF), culminating as a senior pilot, flying C-130 aircraft and deploying throughout the world including Southwest Asia, Europe, the Far East, and Latin America. He also held USAF positions as a wing plans officer, maintenance officer, and information management officer. Mr. Kiley is a graduate of the U.S. Air Force Academy (1988), the Graduate School of Public Affairs at the University of Maryland (1990), and the Seminar XXI Program of the Massachusetts Institute of Technology (2003).

Gary Powell is a senior associate at CSIS. Prior to joining CSIS, he spent more than 30 years with the Department of Defense (DoD), most recently, as assistant deputy undersecretary of defense for industrial policy (ADUSD(IP)), the senior career executive for all matters related to the defense industry and industrial policy. As ADUSD(IP), Mr. Powell directed or oversaw all corporate DoD industrial capability assessments to identify potential near-term industrial bottlenecks and long-term industrial capability viability concerns. He also represented DoD equities to Congress for current and proposed “Buy American” legislation and other industrial base-related statutes and policies. Mr. Powell directed DoD mergers and acquisitions reviews for both antitrust (Hart-Scott-Rodino) and national security (Committee on Foreign Investment in the United States) purposes. He also directed DoD’s Defense Priorities and Allocations System and Priority Allocation of Industrial Resources Task Force to ensure the most important programs received priority delivery when faced with production resource constraints, most recently supporting U.S. and coalition operations in Iraq and Afghanistan. Mr. Powell’s responsibilities also included the development of policies, procedures, analyses, and recommendations relating to defense industrial resources and defense industry trends and the programmatic, industrial, financial, and economic impacts of DoD acquisition strategies on the industrial base.
Reed Livergood is a research associate with the CSIS Defense-Industrial Initiatives Group. His current work focuses on issues related to the health and management of the U.S. and global defense-industrial base, federal professional services contracting, and rare earth elements. Mr. Livergood received his M.A. in international policy studies from the Monterey Institute of International Studies, with a specialization in conflict negotiation and resolution. He also holds a B.A. in history and music performance from Lindenwood University.
A Case Study for Better Buying Power

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