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

DISTRIBUTION LIST:
SAF/FMB
SAF/FMC
AFCAA/TD
AF/A8P
SAF/AQI
SAF/AQL
SAF/AQP
SAF/AQQ
SAF/AQR
SAF/AQX
SAF/AQS
AFRCO
AFPEO/CM
AFPEO/JSF
AFPEO/AC
AFPEO/KC-X
AFPEO/ISR&SOF
AFPEO/FB
AFPEO/C2&CS
AFPEO/EIS
AFPEO/ELS
AFPEO/C2ISR
AFPEO/CN
AFPEO/WP
AFPEO/SS
AFPEO/BM
AFPEO/ACS
AFPEO/Mobility
AFPEO/SP
AFPEO/SL
AFMC/CC/CV/CD/
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.

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:

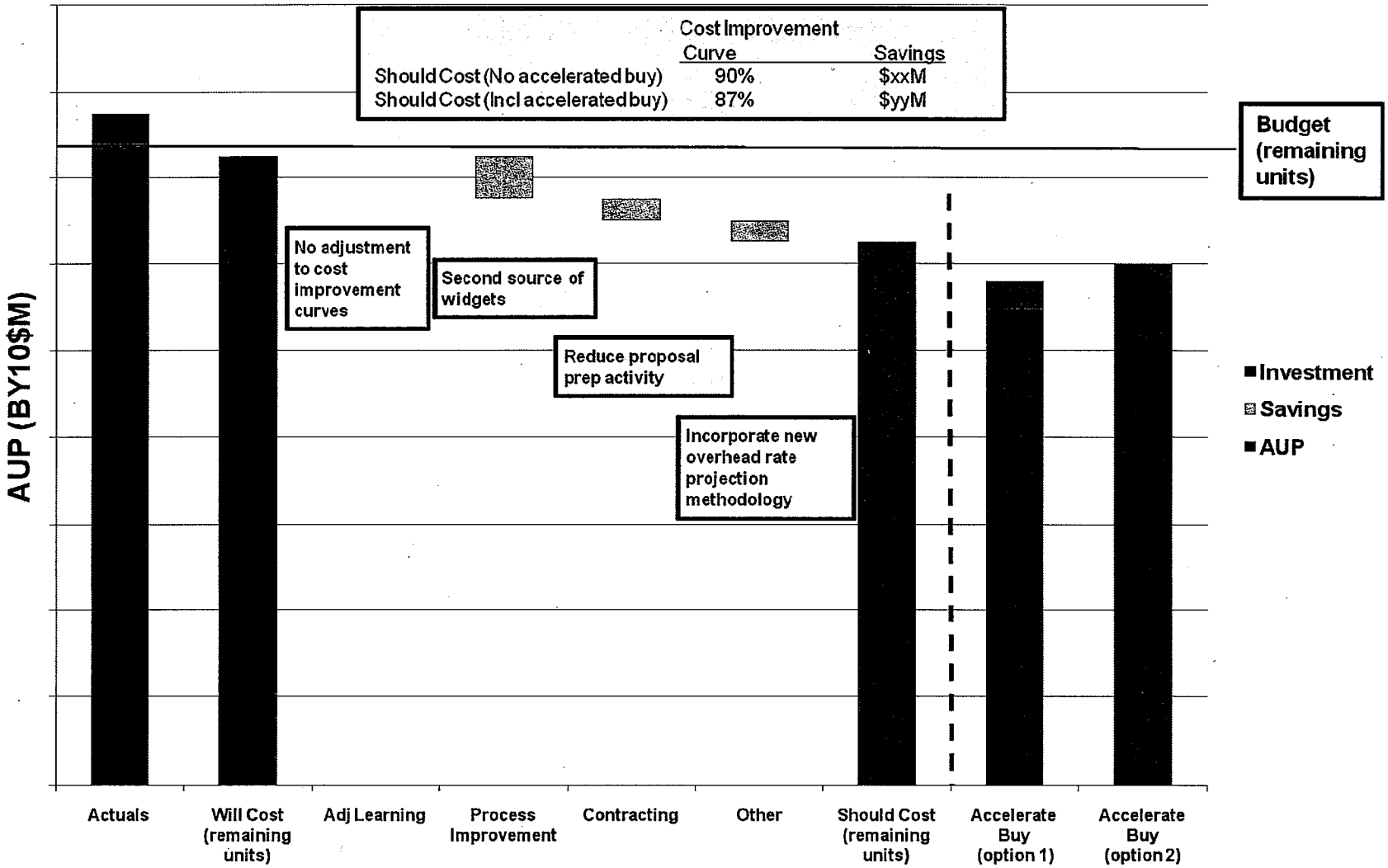
- **Production rates economical and historically stable**
- **Shorten program timeline**
  - Complete R&D effort in FY16 vs. FY17 as currently planned in ICE
  - Potential production rate increase
- **Negotiation positions**
  - Historical cost, learning curve, and understanding of production efficiencies
  - 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