Should-Cost Review: A Pragmatic Approach to Affordability

A systematic plan for reducing costs in aerospace and defense

The U.S. Department of Defense is experiencing unprecedented cost pressures as demands to reduce government spending rise. In this “doing more with the same—or less” environment, affordability of weapons programs and services is a hot topic. Should-Cost Review is becoming the tool of choice to improve affordability. And for good reason. SCR, when implemented systematically, can reduce total system costs by 5 to 15 percent and subsystems costs by up to 40 percent.

The demand for affordability in the U.S. Department of Defense is underscored by the Under Secretary of Defense for Acquisition, Technology and Logistics, Dr. Ashton Carter, in a series of memos issued in 2010 and early 2011, stresses that a should-cost review (SCR) will serve as an important tool in attaining program affordability. He points out that should-cost targets are now required for all ACAT I, II and III programs and that progress toward these targets will be reviewed at major program milestones. In other words, should-cost reviews are expected to be the basis for driving cost management or cost reduction results. Therefore, they must be more than “studies.” Rather, they must lay out specific initiatives that can be executed to manage or reduce costs and improve affordability.

We at A.T. Kearney believe the should-cost review is an opportunity (or challenge) for everyone involved in weapons programs to question the status quo and traditional ways of doing business, and to manage the supply chain and production processes in ways that improve efficiency, productivity and innovation. Furthermore, we see the SCR as a valuable tool for helping to improve affordability when it is employed systematically (but pragmatically), is tailored to the program’s specific situation, and has realistic implementation plans.

The end result of a successful SCR will be lower total program costs without eroding supplier profitability or cutting back on program scope or capabilities. It’s a win-win proposition for the DoD and its suppliers.

What Makes Should-Cost Different?

A should-cost review, which in our view must be based on practical rather than theoretical considerations, is a pragmatic methodology that goes beyond traditional cost estimating to improve transparency and affordability.
Unlike traditional cost estimate practices, it is not an historical or parametric-based exercise. It neither accepts existing cost structures and historical data as valid cost inputs for predicting future costs, nor does it start with historical or "did costs" and then take into account cost factor changes to produce "will costs" (see figure 1).

Instead, a should-cost review attempts to break the cycle of historical-based cost estimation by challenging existing cost structures. In doing so, it answers the overriding question: “What would be the costs of a program in an efficient, highly competitive environment?” Figure 1 illustrates the inputs—including a detailed understanding of cost drivers, granular cost elements and a multi-functional team that understands the business perspective—that are necessary to achieve quality SCR outputs.

The SCR is not a “one size fits all” endeavor. It must be fine-tuned to fit each specific weapons program, recognizing a program’s unique objectives, life-cycle stage, timeframe for decision-making and resources deployed. And, of course, it must be implementable.

Such an analysis, when done with sufficient rigor, can provide far more visibility of cost composition and cost drivers, which can support more accurate decisions in managing programs and reducing costs. From our firsthand experience in conducting a range of SCRs from high level (top-down approach) to deep dives (bottom-up approach) in both the private sector and in defense, we believe a should-cost review offers several key advantages over traditional cost estimation practices. For example, it:

- Provides an understanding of both “cost to produce” and “over-specification” cost reduction opportunities
- Delivers the cost details to support...
fact-based negotiations
• Sets the foundation for implementable cost reductions
• Limits future design changes (through reusable designs)
• Assesses the true impact of program decisions and trade-offs

Moreover, if the SCR is coupled with a rigorous action plan and tracking mechanism, it can deliver substantial cost-reduction opportunities. In our work, we typically experience validated cost reductions ranging from 5 to 15 percent of total system costs and up to 40 percent on some subsystems.

Five Characteristics of Successful Should-Cost Reviews
The should-cost review alone will not save the DoD any money. It’s what’s done with the output of the review that can lead to reduced costs and improved affordability. Therefore, the SCR must be designed from the beginning to include a detailed action plan with metrics that can be gauged at specific milestones, starting with an aggressive implementation “mindset” to ensure that the SCR is not viewed merely as a “study” that when completed ends up on a shelf, unused. Instead, this mindset will underscore that change must occur to actually take costs out of the program.

The following are five ways to ensure that accelerated, maximum benefits are captured from the SCR (see figure 2).

Bring best practices to bear. Begin the SCR with an aggressive attitude for challenging the status quo. Look outside the current paradigm and defense environment for best practices to replicate in a competitive environment. Focus on determining the most efficient cost-to-deliver program requirements—not on the likelihood that these requirements will be accepted or gain approval. Continually ask “What if?” and “Why not?”

Perform rigorous analysis. Acquire an in-depth understanding of the root cost drivers and efficiency potential for the major areas—including supply chain, manufacturing, program management and overhead elements of the program. The analysis should be detailed enough to uncover the cost savings needed to support the cost-reduction decision and to drive tangible actions.

Establish the right incentives. Recognize that cost-reduction changes are best accomplished when the right incentives (those benefitting both the government and suppliers) are in place to encourage people to move beyond the status quo and act with an appropriate degree of urgency. The best results are achieved when the effort is collaborative, and when incentives...
encourage everyone to perform in a way that improves suppliers’ profits in exchange for lower total costs to the government.

Translate opportunities into tangible actions. Convert cost management and reduction opportunities into realistic action plans with real timelines, responsibilities, accountabilities, governance processes and metrics. Invoke a total systems perspective in determining these action plans, using multiple approaches to achieve cost reductions, including (when appropriate) negotiations; investments; joint-process improvements involving government, primes and sub-tier suppliers; and restructuring contractual relationships. Figure 3 illustrates the major success factors of a should-cost review.

FIGURE 3: Success factors that can make or break a should-cost review

- Tenacious: Challenges the status quo
- Comprehensive: Develops in-depth understanding of root cost drivers
- Collaborative: Engages suppliers in active participation
- Strategic: Involves all parties (as process and organizational changes are often needed)
- Pragmatic: Creates and adheres to action plan and tracks results

Source: A.T. Kearney analysis

Track performance against the cost-reduction plans. Implement a Target Assurance Program that identifies cost reduction targets and milestones. Regularly review the progress against this plan so that slippages are understood and mitigation steps are in place to get back on track as quickly as possible. Make sure progress is visible to everyone involved, credible and managed correctly.

SCR: A Valuable Affordability Tool

A should-cost review is neither a simple nor an easy exercise to perform, but it can serve as a valuable affordability tool. With the right results-oriented approach and a realistic action plan that can be (and actually is) executed, SCR is a useful tool for lowering DoD program costs without eroding supplier profitability.

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