

Improving Defense Acquisition of Goods and Services

Jacques S. Gansler ¹

While there is widespread recognition that **today's defense challenge** is to deal with the **declining budgets** and the **growing security challenges**; there is **great reluctance to make changes** (by the Congress, the Administration, the Military, the industry, and the unions) - - yet **change** (in the way the DoD's business is done) **is clearly required** - - from the "requirements" process and the regulation/oversight "rules," on through the "acquisition" process (including: research, development, and demonstration; budgeting; competition and source selection; cost, schedule, and performance incentives; program and budget stability; logistics; and support).

Today's environment presents many challenges for the Department of Defense as it attempts to modernize the nation's forces. The following issues must be highlighted:

- **Significantly shrinking budgets; with considerable uncertainty about the budgets for the future.** As a result of the ending of Iraq and Afghanistan contingency operations, and in response to the nation's budgetary problems, the DoD's budgets have declined significantly. In the past, the DoD could rely on personnel reductions in order to constrain future costs. Today, however, the active military force structure is projected to decrease to near an all-time low; thus, further reductions in troop end-strength are unlikely. Additionally, the Budget Control Act of 2011 introduced budget "sequestration"—that is, automatic cuts imposed because deficit reduction targets were not met; and Congress has rejected repeated requests from the Secretary of Defense for Base Closures (to match the force reduction).
- **Worldwide security concerns:** Terrorism; pirates; cyber vulnerabilities; regional and religious conflicts; growing irredentist movements; nuclear and biological weapons proliferation; etc; **and much uncertainty about "what's next"**.
- **High costs, overruns, and schedule slippages in the DoD's purchases of goods and services.** The DoD continues to struggle to contain the costs of its weapons programs. Yet, the underlying causes of cost growth - - over-optimism, estimating errors, unrecognized technical issues, requirements creep, and budget, quantity, and schedule changes - - have proven difficult to overcome.
- **A rapidly-changing world** – in technology, geopolitics, economics, and security.
- **An increasing share (over 50%) of defense acquisition dollars going to buying services** (from I.T. to wartime field support); but all policies, practices, regulations, etc. are based on buying "goods" - - yet acquiring an engineer, or a software program, is definitely different from acquiring a tank.

Clearly, **a very challenging environment!** However, significant change is definitely required at both the prime and subcontract levels - - **yet there are very high barriers** (from all of the involved institutions) to make the required changes.

¹ Dr. Gansler is a Professor, and the Roger C. Lipitz Chair, as well as the Director of the Center for Public Policy and Private Enterprise, at the School of Public Policy in the University of Maryland. He served as the Under Secretary of Defense (Acquisition, Technology, and Logistics) from 1997 to 2001.

Required Actions:

- **Utilize appropriate forms of competition:**

The American system of incentives (institutional and individual), and the overwhelming historical evidence, **demonstrate** that competition will not only reduce costs, but, (equally important), produce higher-performance and higher-quality products; and do it much faster; while focusing more attention on customer needs. Using appropriate forms of “fair” competition (i.e. with equal requirements and regulations applied) throughout the acquisition cycle will help ensure that its significant benefits are realized. Although, competition is largely accepted at the initiation of development, and for initiation of production, it is often resisted during production; even though it is the key to ensuring that a real incentive is given for contractors to ensure they meet cost, schedule, and performance requirements - - as was proven on the engines for the F-15 and F-16; where competition was maintained, and **both** engines got higher reliability and lower costs; in this case (known as “the great engine war”) the Air Force says there was a **net savings** of \$4 Billion - - yet this “dual sourcing” of the engines was not continued on the F-35. Competition into production can produce significant cost savings; and it should be encouraged, in all its various forms and credible options.

Federal agencies should focus on their **public** core competencies (i.e. inherently governmental functions -- such as policy, fiscal management, oversight, and warfighting). Competition should be introduced into all other activities, to get the “best value” from either the private or the public sector; i.e. attaining higher performance, at the lowest cost. History provides many examples where this has been a successful strategy. There have been over 3000 **public vs. private competitions** (for non-inherently-governmental work, currently being done by government employees) and the results were: an average of over 30% cost savings (no matter if the government employees or a contractor won); with improved performance and greater cost visibility.² And the public sector won over 50% of the competitions (with significant cost savings). Importantly, a study has shown that, in spite of the efficiencies from these competitions, only 5% of the government workers were involuntarily separated (most either transferred to other government jobs, or retired voluntarily and were employed by the winning contractor).³ Yet, ignoring the overwhelming **demonstrated** benefits (in terms of cost reductions and improved performance) Congress has restricted future public/private competitions (even though two of the last competitions were won by the public sector, with 70% and 82% cost reductions!).

In addition to the above, **current law** requires that 50% of all depot work (a multibillion activity that is **not** inherently-governmental work) must be done, sole-source, by government workers (even though it is an ideal area for competition - - using “public/private partnerships”).

² Trunkey R. Derek, Robert F Trost, Christopher M. Snyder, “Analysis of DoD’s Commercial Activities Program,” Center for Naval Analysis, Dec 1996

³ 21. Gansler, J.S. and W. Lucyshyn, Competitive Sourcing: What Happens to Civilian Employees?, IBM Center for The Business of Government Report, Oct 2004

- Make human capital sourcing decisions based on total costs.** What constitutes the right mix of contractor and government employees often hinges on individual views on the proper role of the government. While the use of private sector providers has historically expanded and contracted, as a result of political forces; there is no doubt that some functions are “inherently governmental,” and that these tasks **must** be performed by government employees. Still, it appears that “insourcing” is sometimes promoted for its own sake, while the underlying rationale (be it cost savings or inherently governmental status) is misconstrued or misrepresented. Recent government policies, aimed explicitly at increasing the government workforce, accomplished little in the way of reducing costs and, as described below, may significantly increase long-term costs. Before making a human capital sourcing decision, a complete analysis of costs, (that will enable accurate comparisons between private and public sector service providers), is needed. Clearly, direct costs must be considered. However, indirect costs, or “overhead,” should also be incorporated into a cost comparison methodology. Indirect costs include shared costs; fixed costs; overheads; individual benefits; and variable costs. Accordingly, accounting techniques must be quite sophisticated if they are to fully capture these types of indirect costs. Presently, however, these are not adequately accounted for in the cost comparison methodologies used by government agencies. Several studies (by both the CBO and the OMB) found that, for example, it would be **90% cheaper** to use competitive contractors, (when full benefits, overhead, and rotational base are included), for deployed operational support.^{4, 5} But, again, such findings have been ignored. For example, the Air Force believed they could save 40% by “insourcing” maintenance (based on the difference in hourly pay; but excluding all other factors).
- Reduce the regulatory burden.** Both the Congress and the Executive Branch continue to write more and more legislation and regulations - - creating increasing auditing, oversight, and reports to be submitted by DoD and/or their contractors. In fact, the number of pages in the Code of Federal Regulations, by 2011, had reached 180,000 pages.⁶ And, **both the OMB and the SBA estimated that regulatory compliance costs, by 2008, had reached \$1.752 Trillion** (up from \$1.1 Trillion in 2005, and \$843 Billion in 2001).⁷ Clearly, it is necessary to determine the costs (in dollars; and, therefore, in security) of current and additional regulation; and to evaluate the relative benefits and costs in schedule and performance impacts, of being changed (i.e. increased or reduced).
- Make cost a requirement.** Traditionally, the Military have argued that “cost is not a military requirement” - - but it should be! Since, given a budget appropriation for a program, the **quantity** that is affordable is determined by the unit cost. As stated by Lanchester’s Law, the total force effectiveness is proportional to the individual weapon’s effectiveness times the quantity **squared**. So unit cost, which drives quantity, is clearly a military requirement - -which should receive the same (or more) attention as given to the weapon’s performance requirements, (during the design of the weapon, and its production). Additionally, life-cycle cost should receive the same attention; since O&M

⁴ Congressional Budget Office (CBO). (2005). Logistics support for deployed military forces. Washington, DC:.

⁵ Congressional Budget Office (CBO). (2008). Contractors' support for U.S. operations in Iraq. Washington, DC:.

⁶ McLaughlin, Patrick A., On The Human Cost of the U.S. Regulatory System, August 1, 2013.

⁷ Crew, Clyde Wayne Jr., Ten Thousand Commandments, Competitive Enterprise Institute, 2013.

dollars are similarly limited; so they also affect the quantity of weapons that are affordable.

- **Use a “Best Value” Tradeoff Source Selection Strategy for Complex and High-Knowledge-Content Work.** In the (false) belief that it will save money, (in this period of reduced budgets) many of the competitions for goods or services are now being decided on the basis of “lowest price/technically acceptable (LPTA)”. This works fine for interchangeable, simple commodities. But for complex weapons or sophisticated services, it leads to simply “buying cheap” - - which usually leads to inferior performance, and much higher life-cycle costs. Obviously, the preferred source-selection basis, (for complex, sophisticated procurements) is “best value” (i.e. the balanced combination of costs, risks, and performances).
- Another acquisition practice that has gotten out of hand is the **trend to large numbers of “winners” on Phase I of IDIQ contracts.** To simplify the acquisition of an Indefinite Delivery and Indefinite Quantity of a good or a service, the DoD has moved to a two-step process - - first, they compete firms to determine who is sufficiently qualified in a given area; ideally the “winners” of this phase are a few (e.g. 2 to 5) contractors. During the second phase, these contractors then compete for each task order, as they come out. This should speed up the process; and result in effective competition among qualified sources. However, (primarily to avoid protests), the results have been to award to a large number of firms on the first round (for example, on the Navy’s “SEAPORT E” IDIQ, there were 2200 first-round “winners”; who all, then, can bid on the tasks as they come out. This not only drives up the government’s costs for the evaluations, but the industry “bid and proposal” costs, in their government-reimbursed overheads. Clearly, this is a high-cost process; that must be changed.
- **Reduce Barriers to Buying Commercial and to Dual-Use Industrial Operations.** There are two required (industrial base) changes:
 - 1) the removal of the “barriers” to the DoD buying from commercial or foreign firms (when they offer the “best value”),
 - 2) the removal of the “barriers” to firms integrating their commercial and defense operations in the same facilities (in order to gain the cost and performance benefits from the “economics of scale” of the higher volume; and, to gain the performance and cost benefits from the “technology transfer” between the sectors.

One example (of the latter need) was when Boeing was building commercial and military transports together in Wichita, the DoD requirement for “specialized cost accounting” and detailed auditing **forced** them to move the commercial production to California - - thus, raising the price for both sectors, because of the reduced volume in the plant.

Many people don’t realize that, today, there is **twice the overall R&D investment being made by U.S. commercial firms as by the total U.S. federal government.**⁸ So, in many areas (such as I.T. and advanced manufacturing) the commercial world leads the government world in developing and applying advanced technology.⁹ However, because of the required, detailed auditing and regulations (even at the subcontract level); and the shutting-out of the world market, due to export controls (e.g. if a commercial item is

⁸ David Mowery “Military R&D and Innovation” (University of California Press, 2007)

⁹ National Science Foundation, S&E Indicators 2006; OECD, Main S&T Indicators database, Nov. 2004

subcontracted on an export-controlled end item; then, the subcontracted item cannot be exported) as a result, many top-level commercial firms consciously avoid doing defense business. So, the DoD loses their technological leadership and low-cost focus.

Similarly, the “spending on R&D by the rest of the world” significantly leads the U.S. (commercial plus government) in developing and applying advanced technology. So that, today, **every U.S. weapon system contains foreign parts - - because they are higher performance**; not just because they are less expensive.

When the DoD decided to “harden” their soldiers’-carrying vehicles against “road-side bombs” (the largest killer and maimer of fighting men and women in Iraq and Afghanistan) they found that the best armor came from Israel; the best shock absorbers came from Germany; the best tires came from France; and the best design for the undercarriage (against mines) came from South Africa. Then, the Israel-owed armor company (Plasan) set up its plant in Vermont (to address the U.S. labor concerns).

Implementation of Changes

The literature is clear, about how to successfully implement changes in large organizations. Two things are required: first, **recognition of the need for change**; and, second, **a leadership team, with a vision, a strategy, and a set of actions**. Clearly, today there is widespread recognition of the need for changes in the way the DoD does its business; but the leadership (with a clear vision; a desirable and achievable strategy; and a set of actions (that can achieve widespread alignment and motivation); is not visible - - and the leadership team must be aligned at all levels (Congress, the Administration, key DoD appointees, the military, and industry).

One critical area that has been grossly undervalued is **the DoD acquisition workforce**. Without sharp, experienced leaders, managers, and buyers, Machiavelli’s 16th Century prediction (about the difficulty of making change in government) will be realized. We must recruit, train, and reward top people for the critical acquisition positions.

It can be done! A successful “story” (case history) of a DoD weapon system, that applied all of the changes described above, is the Joint Direct Attack Munition (JDAM)- - whose job was to add a guidance and control package to convert all “dumb bombs” into “smart bombs”. The Chief of Staff of the Air Force wrote the “requirement”; which he said had only 3 parts: 1) hit the target; 2) work, when the button is pushed; and 3) cost under \$40,000 each (so the DoD could afford to buy enough of them). The senior people in the Air Force (recognizing the importance of the program) picked a previously-successful **leader** (Terry Little) as the Program Manager (who was willing to make the required changes). His strategy was to use **continuous competition** (through the prototype phase); to make maximum use of **commercial** subsystems; and to **focus on accuracy, reliability, and cost**. (The latter was a particular challenge, since the “independent cost estimate” (based on historic, similar-complexity systems) was \$68,000; and he had a “requirement” to achieve under \$40,000.

The result of the JDAM “best value” source selection (between the competitive prototypes) was that the accuracy and reliability were both **better** than the required performance; and that **both** competitors bid a unit cost of around \$18,000! Clearly, a success story; and **a demonstration that it can be done!**