

DECEMBER 2009

Smart Defense Acquisition: Learning from French Procurement Reform

POLICY BRIEF



By Ethan B. Kapstein

President Barack Obama has signaled a powerful determination to curb the growth of the defense procurement budget. Given the high fiscal costs of the federal government's response to the "Great Recession" that began in 2008, the search for savings has become even more pressing. At \$110 billion, the U.S. government's annual expenditure on defense acquisition – the single largest discretionary item in the federal budget – is an obvious target for reduction.

Fiscal responsibility, however, should not provide the sole – or even the most compelling – reason for acquisition reform. To the extent that our weapons are needlessly expensive, they deprive our forces of the quantities of firepower they need when they go in to harm's way (think of the lack of armored vehicles in Iraq and Afghanistan) and other needed goods and services. That makes efficient weapons procurement both a strategic and moral necessity.

To date, the president's procurement reform proposals have been largely off the mark. His emphasis, for example, on changing the types of contracts that the Pentagon writes with the defense industry fails to take into account the complexity of modern weapons systems and the need for an incentive system that motivates both the government and the manufacturers to take reasonable risks on new technical solutions. More generally, the president has not faced the multi-faceted reasons for cost growth in military acquisition, which include not just the way the Pentagon does business but also the role of Congress in micro-managing acquisition policy in ways that benefit the parochial interests of each representative.

As President Obama seeks to reform defense acquisition, he should look to "best practices" from beyond the Beltway, namely to Paris. Unbeknownst to most Americans, the French have developed an innovative approach to controlling the cost growth of the weapons they produce. The United States would do well to examine, and perhaps adapt, elements of this model.

The French Experience

In the late 1980s, as the Cold War came to its conclusion, the days of higher French defense budgets also came to an end. Between 1990 and 1997 authorized procurement budgets decreased by more than 20 percent, from 116 billion francs (equivalent to about €17.7 billion today) to somewhat less than 89 billion francs (€13.5 billion). In order to cope with these rapidly declining acquisition budgets, the defense ministry was forced to think hard about why weapons had become so expensive in the first place. It discovered that several different factors were responsible and developed strategies to address each one.

First, the French found that too many public agencies, along with the military services, were influencing the design and development of weapons systems. Accordingly, one single executive agency within the Ministry of Defense, the Délégation Générale pour l'Armement (DGA), was made responsible for the contracting and management of all weapons programs, from initial inception to delivery, including export sales. The head of the DGA reports directly to the Defense Minister and is ranked above any military officer. This ranking is consequential, as it gives the DGA tremendous prestige within the French government.

Second, the French found that defense contractors were able to over-charge the government because of the profound information asymmetries that existed between the public and private sectors. Most of the technical knowledge about building weapons resides in private firms, which of course are motivated to make profits (as in the United States). Since the French (like the Americans) adopted “cost-plus” contracting as a general rule at this time, it was relatively easy for these firms to inflate their costs and pass them on to the state. To confront these information asymmetries, government needed to level the playing field with industry.

Accordingly, the DGA set out to recruit the nation's very best and brightest scientific and engineering talent. Indeed, entry into the DGA and promotion to the title of “armaments engineer” (which is bestowed upon project managers) normally requires an engineering degree from one of the “Grandes Écoles,” preferably the most desirable of them all, the École Polytechnique. While there is no precise American equivalent of the Grandes Écoles system, it would be comparable to restricting the recruitment of defense procurement officials to graduates of a handful of engineering schools such as MIT or CalTech (one can reasonably assume that the most desirable employers for America's best engineering students are companies like Apple or Google rather than the federal government). One major implication of this recruitment policy is that DGA prides itself on the technical knowledge about weapons systems that it brings to the acquisition process.

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After recruiting the best and brightest staff, the French government developed their expertise through assignments in industry, and by appointing them to the same weapons program for many years. To reduce the information asymmetry between business and government, the DGA gave its project managers significant experience of working in either industry or in the French arsenals, giving them “hands-on,” practical knowledge. The French also endowed its armaments engineers with substantial program authority and kept them in place long enough to learn about the “nuts and bolts” details of the systems under their responsibility.

In France, a manager will stay for many years with the same program, learning every detail in the process. In the United States, the average weapons program manager stays on the job for only two years before rotating to his or her next assignment.

Third, the French changed the way they did business with the industry. Having reduced information asymmetries, they could now assess cost and risk more effectively and develop more solid cost estimates up front. During the early 1990s the DGA began entering into “pre-contractual” negotiations with its suppliers during the development phase of a new program. These negotiations explicitly attempted to identify where potential cost over-runs were most likely to occur. Since most cost overruns occur in the early stages of a project’s lifetime due to the uncertainties associated with a new technology, effective *ex ante* monitoring, as exemplified by credible pre-contractual risk assessments, is crucial to cost containment.

Like the Obama administration today, the French in the late 1980s recognized the perils of engaging in cost-plus contracting with its defense industry. The president will thus be interested to learn that the DGA therefore returned to fixed price (FP) contracting, but with a distinctive Gallic twist. For unlike the FP contracts that the Obama team now wants to write, which effectively place all project risks on the industry, the French adopted a unique approach to risk sharing and the additional costs that unanticipated risks incurred.

In the French FP process, firms are required to make final bids on the delivery of finished systems and they must, at least in theory, accept all the risks associated with any cost overruns that occur. After signing an FP contract, the firms cannot plead ignorance with the Defense Ministry about the real costs of a project and request more money as compensation. If the government altered the FP contract after it was awarded, other competitors might protest the original contracting decision, which would

supposedly have been given to the lowest bidder, all other factors being equal.

However, because it is impossible for project managers and industry executives to know *ex ante* what all the unforeseen design challenges of building a new weapons system will be, FP contracts must be incomplete by their very nature, inevitably leading to costly renegotiations between firms and the government over who bears the responsibility for the extra costs that are incurred, and how those costs will be shared (in economic parlance, FP contracts are thus “inefficient” mechanisms for governing complex projects). Indeed, contractual renegotiations along with informal contractual amendments are commonplace in French defense contracting. In response, the French have introduced a “responsibility principle” to FP contracting, meaning that

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those who are actually responsible for failing to meet contractual obligations, whether government or industry, must generally pay the costs.

When firms are clearly responsible, they must take the charges against their profits. When the government is the cause of the contractual changes (for example, because it changes the parameters of the project) then the costs are usually deducted from the DGA’s procurement budget. Crucial to the operation of this responsibility principle, it must be emphasized, is a shared sense of “fairness” – that the correct party is in fact taking on the burdens of its cost overruns. In the United States today, the absence of trust between government and industry is a major barrier to the introduction of this type of informal contracting mechanism. After a decade or more of procurement scandals, involving everything from high-priced toilets to alleged corruption in the

acquisition process, basic bonds of trust have been broken that will not easily be restored.

Beyond tackling the multiplicity of executive branch actors, the information asymmetries, and the contractual problems, the French also recognized that its parliament (the National Assembly) could increase weapons costs through the use of pork barrel politics that benefitted high-cost producers in various regions throughout the country. But under French law the Assembly can only vote up or down on the entire military budget – it cannot intervene in specific programs. It is worth contemplating whether the United States would get better procurement outcomes if a similar approach were adopted here. After all, we should recall that the U.S. Congress has been able to act boldly when it recognized its own inability to pursue policies in the public interest. The most dramatic example in the defense sector is the Base Realignment and Closure process, which compelled Congress to adopt or reject an entire package of policy recommendations rather than intervene base by base. And in the non-defense realm, namely trade, Congress voluntarily tied its own hands after World War II when it recognized the economic and political turmoil it had created with the passage of the infamous Smoot-Hawley tariffs during the Great Depression; today Congress can only vote up or down on a proposed foreign trade bill.

To be sure, that France had the capacity to carry out all these reforms reflects the nature of their relatively centralized state. Unlike in the United States, where each of the armed services has its own defense procurement agency and where Congress looms large in weapons procurement, the French defense acquisition system is now largely in the hands of one agency, the DGA. But without transforming Washington into Paris (although one might also reasonably envy, alongside France's defense procurement system, its nuclear power plants and high-speed train network), the United States could make incremental policy

changes that could begin to confront the escalating costs of America's weapons systems.

Reforming U.S. Defense Acquisition

U.S. defense procurement reform should focus on three main areas: recruitment, cost assessment accuracy, and the role of Congress.

Recruitment: At a time when the job market is soft and patriotism high, the Defense Department should work hard to recruit America's very best engineering students. It should offer them exciting careers with challenging projects and a compelling career ladder – perhaps DARPA (Defense Advanced Research Projects Agency) provides a possible model. Today, industry executives are rarely impressed by the public officials they must negotiate with. It is time to alter that perception. By restoring balance between the public and private sectors, both sides would be better served.

Cost Assessment Accuracy: with a technically stronger acquisition team in place, the administration could begin to enter into more robust *ex ante* assessments of the risks associated with new weapons programs and anticipated project costs. Today, poor *ex ante* analysis means that projects are given low cost estimates, which then naturally rise once the contracts are let. The Pentagon must address this problem if FP contracts to be effective. The Pentagon should also make note of France's "responsibility principle" in contracting.

Role of Congress: The role of Congress must be part of any serious discussion of acquisition reform. Its role in defense acquisition is not inevitably harmful. However the media, think tanks, and the administration should object strenuously when Congress channels unnecessary funds to procurement that should be going directly to our "boots on the ground" instead. President Obama has made a good start in this direction and he should be supported by all those concerned by the high costs of modern weaponry.

For the longest time, discussions of defense procurement reform have taken place outside the broader – and, frankly, more interesting – debates over grand strategy. Many intelligent people would rather focus on the number of troops going to Afghanistan than the price tag of the next submarine or jet fighter. But this separation in the national security realm between the accountants who worry about the costs of weapons and the political and military leaders who worry about warfighting has ultimately done a disservice to America's armed forces. Without question, they should only go into harm's way holding the very best weaponry in their hands. But those weapons should be fielded at costs that do not deny them the pay and benefits they so richly deserve.

**This CNAS policy brief, generously supported by the Alfred P. Sloan Foundation, is drawn from Ethan B. Kapstein and Jean-Michel Oudot, "Reforming Defense Procurement: Lessons from France," Business and Politics 11, 2 (Summer 2009).*

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