No 5: The cost of cutting defense acquisition (01/30/2009)

The state of the global economy has prompted many governments to initiate programs providing financial support and economic stimuli for affected industry sectors. An urgent question that runs parallel to such actions is how to finance them. Cutting discretionary spending constitutes one obvious solution. Within this category, defense acquisition spending is for many at the top of the list.[1] But defense acquisition cuts carry risks. Budget decisions must be consistent with a clear defense strategy. [2] In particular, operational, financial and industrial-base factors have to be considered before opting to reduce defense acquisition spending.

Operational Requirements:
From an operational perspective, defense acquisition should be driven by threat and capability assessments. Cancellations of projects that were initiated based on sound requirements will therefore create military capability gaps. An alternative would be to revise the overarching defense strategy and the operational requirements derived from it. Sweden is an example of this alternative; facing considerable financial constraints, the Swedish military leadership has begun adjusting its capability expectations to more modest levels. [3] Absent such a revision, generating the same defense capabilities with fewer financial resources is hardly possible. Conversely, if a program can be cut without causing a deficit in required capabilities, it likely should have not been on the acquisition agenda in the first place.

The third tranche of the Eurofighter could fall victim to cuts in European defense acquisition spending. Yet such a step could accrue significant financial penalties for the governments involved.
Photo source: German Ministry of Defense

Financial Viability:
The potential financial gains from cutting defense acquisition spending may also be limited. Extending the in-service time of equipment fielded today and postponing the introduction of new systems may yield savings in current acquisition costs. However, portions of the savings realized through cancelling or delaying programs will have to be re-invested in maintaining and possibly even upgrading existing equipment. This in turn might adversely affect operational capabilities based on lower readiness rates for older equipment. Absent a revision of military

[1] See for example: T. Shanker and C. Drew, "Pentagon Expects Cuts in Military Spending," *New York Times*, November 2, 2008.
[2] W. Matthews, "Obstacles Await Efforts To Change Spending Plans," *Defense News*, January 19, 2009.
[3] G. O'Dwyer, "Finances Force Sweden to Think Small," *Defense News*, October 28, 2008.

requirements, underfunding of programs requested by warfighters will inevitably create a backlog of acquisition demands in the future. In some cases, a possible middle road could be to substitute the introduction of a next-generation system with the acquisition of the latest model of a current in-service system.[4]

Even if the capability losses resulting from termination of a next generation system were deemed acceptable, substantial financial benefits may still not be possible. Most large-scale acquisition projects are implemented over long time horizons, and cancelling any projects already under way often accrues significant termination fees, thus decreasing the net saving. Although termination costs appear not to be a driving factor in past and current cancellation decisions, this provision effectively reduces the potential savings from cutting acquisition. [5]

Industrial Base Considerations:
From an industrial base standpoint, large-scale cancellations of defense acquisition programs reduce the realm of available future options. Reopening closed production lines is prohibitively expensive. For instance, the production of an additional 75 F-22s beyond the currently planned 183 units would increase per-unit cost by an estimated $70 million if the production line were shut down and had to be re-opened. [6]

Decisions to keep production lines open have to be made far in advance because of the flow of work orders to sub-contractors. The order of four additional F-22s in 2008 to keep the option of follow-on orders under President Obama available is indicative of this long-lead-time components problem.

Another important factor is the defense industrial workforce itself. In 2007, the aerospace and defense sector in the United States and Europe employed a combined workforce of approximately 1.3 million highly skilled workers.[7] The health of this industry segment and the jobs associated with it rely heavily on a constant flow of government contracts. Should the contracts cease, not only would jobs be lost, but it could also be impossible to reconstitute this skilled workforce should it be needed again. This in turn adversely influences the long-term quality of the domestic defense industry's product portfolio.

All in all, reductions in defense acquisition spending can only bring real savings if they are consistent with a well-defined defense strategy that accounts for the future structure of the defense industrial base.

- Joachim Hofbauer

[4] S. Kosiak, CSBA (2008) discusses the associated tradeoffs in "U.S. Defense Budget – Options and Choices for the Long Haul."
[5] GAO (2008), "Defense Acquisitions: Termination Costs Are Generally Not a Compelling Reason to Continue Programs or Contracts That Otherwise Warrant Ending," p. 2.
[6] A. H. Cordesman and H. U. Kaeser, CSIS (2008), "America's Self-Destroying Airpower: Becoming Your Own Peer Threat," pp. 14-15.
[7] Aerospace and Defence Industries Association of Europe (2008), Facts & Figures 2007, p. 4; C. R. Hedden, "Aviation Week Workforce Study Results," in *Aviation Week & Space Technology*, August 18, 2008.