

DEFENSE INDUSTRIAL INITIATIVES CURRENT ISSUES

No. 13: Measuring the Defense Industrial Value of Acquisition Programs (08/03/09)

The primary objective of defense acquisition is to provide the warfighter with adequate equipment in a timely and economical way. A cornerstone in this process is the availability of a reliable, cost-effective, and sufficient industrial base that can develop, produce, and provide the products and services required by the Department of Defense (DoD). Section 2440 of U.S. Code Title 10 correspondingly requires that the defense industrial base be considered in the planning for major defense acquisition programs (MDAPs).¹ Developing and collecting standardized metrics to measure the value of individual defense programs to the industrial base constitutes a crucial prerequisite for complying with this regulation.

A Lack of Standardization

Today DoD largely lacks such metrics. This in turn considerably hampers its ability to factor such considerations into its acquisition decisions. Secretary Gates' decision not to integrate defense industrial base considerations into his April defense budget recommendation could potentially have been influenced by this information shortfall.

The varying methods used for measuring employment associated with acquisition programs is a case in point. For instance, Lockheed Martin claims that the F-22 program provides some 95,000 jobs, many of which could be affected by terminating the program. Secretary of Defense Robert Gates, in his April 6 defense budget press conference, claimed that the program currently only provides some 24,000 jobs. The considerable discrepancy could be explained by the difference between

direct and indirect job counts, and by other variations in the applied accounting methods.

Defining Adequate Metrics

Yet, even with a universally accepted metric, many of the variables most commonly discussed today are inadequate to facilitate more defense industrial base conscious acquisition decisions. Variables such as employment, direct wages, indirect spending, or wage base primarily quantify the economic contributions of the defense industry associated with defense programs. They are consequently suitable, for instance, for state wide economic impact studies of the defense industry or the Base Relocation and Closure process.² However, they provide little insight into the relevance of a given program for the aggregate defense industrial capabilities of the United States. Rather, gaining a more complete understanding of this aspect requires a more differentiated assessment of specific workforce skills and production abilities. The Annual Industrial Capabilities Report to Congress and the studies referenced within address this need, yet they fail to do this in a systematic and standardized program by program manner.³

Different occupations within a defense acquisition program are of varying value to the overall industrial base. For instance, workers involved in the design and development of a combat aircraft require more training and more advanced skills than workers involved in the

¹ Office of the Law Revision Counsel, U.S. House of Representatives (2008), [10 USC Sec. 2440](#)

² See for example Ninigret Partners (2006), [The Rhode Island Defense Industry: Economic Impact Report](#)

³ Office of Under Secretary of Defense Acquisition, Technology & Logistics-Industrial Policy (2009), [Annual Industrial Capabilities Report to Congress](#), pp. 29-88

full-rate production of the very same aircraft.⁴ From an industrial base perspective, this makes these workers more unique, as it would take more time and resources to replenish their skills, if lost. Another aspect is that certain skill sets are more defense-specific and therefore more perishable once government demand diminishes. Therefore, a workforce with such skills will be even harder to replace, as it lacks commercial counterparts from which DoD could draw should demand re-emerge in the future.

Similar distinctions need to be made for production facilities. For instance, a shipyard capable of producing nuclear-powered submarines presents a more specialized capability that is harder to replicate than a shipyard that builds frigates. Consequently, any decision leading to the closure of the former will be harder to reverse.

Institutionalizing the Assessment Process

These points illustrate the need to define meaningful standardized metrics that accurately capture the defense industrial value of individual defense programs. The subsequent step must be to institutionalize data collection.

Currently, DoD Directive 5000.60 requires that “DoD Components shall assess industrial capabilities on a case-by-case basis when there is a known or projected problem.”⁵ DoD should reverse this reactive approach and make documenting industrial-base metrics a mandatory part of the acquisition process. The government workforce could leverage prime contractors and their more detailed insight of the supply chain to obtain a considerable amount of the required data.⁶ For instance, it would be

conceivable to require the submission of the relevant data as part of the bidding process in response to a request for proposal. In order to prevent inflationary reporting on the labor and production capabilities associated with a program, it is essential to pre-establish clearly defined categories, ideally paired with an independent auditing process. This should also ensure that data collected remains comparable across programs.

The Value of Increased Awareness

Obtaining these insights for individual acquisition programs alone will not suffice. Aggregating the collected data and viewing it within the broader context of defense industrial analyses will determine the actual value of individual acquisition programs for the sector-specific or nationwide defense industrial base. This enhanced knowledge can add value in three ways. First, it will obviously allow an easier integration of defense industrial base considerations into any kind of program decision. Second, it might also act as a tripwire, drawing attention to the potential loss of unique capabilities upon the completion of an acquisition program. Third, it will provide a more accurate and detailed overview of the capability profile of the entire U.S. defense industrial base.

Embedding the defense industrial base in acquisition decisions requires the definition and collection of relevant data through appropriate metrics. Only with such metrics at hand will it be possible for DoD leadership, as well as Congress, to lead a more informed debate and reach more informed decisions on this issue. The real challenge will be to define and agree upon these metrics and to add a corresponding collection mechanism to the current acquisition process.

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⁴ The Congressional Research Service, for instance, makes this argument with regard to the F-22, C. Bolkom and E. Chanlett-Avery (2007), “[Potential F-22 Raptor Export to Japan](#),” p. 3

⁵ Department of Defense (1996), [Directive 5000.60](#), p. 1

⁶ Government Accountability Office (2008), [A Departmentwide Framework to Identify and Report Gaps in the Defense Supplier Base Is Needed](#), p. 12