
Report to Congress on the Defense Industrial Base

[The following is an extract of Chapter 4, "The International Environment," from a November 1991, report, title as above, submitted to Congress by Mr. Donald J. Yockey, the Under Secretary of Defense (Acquisition) and Mr. Colin McMillan, the Assistant Secretary of Defense (Production and Logistics).]

The consequences of DoD budget reductions will be one of the most important issues facing defense contractors in the 1990s. Also important is the fact that the defense industrial base needs to be built on a strong domestic industry that is competitive in the international market. Defense contractors conduct their business in an environment that is increasingly international and interdependent, and their ability to compete effectively in world markets will be pivotal to their future. The globalization of defense-related business has been recognized by DoD and is an essential element of its international programs and acquisition policies. Foreign military sales, offshore sourcing, foreign direct investment, international teaming arrangements, international cooperative programs, foreign technology developments, and offsets all have changed the business climate for both defense contractors and DoD.

Foreign and direct commercial sales, for example, are a crucial part of U.S. industry's involvement in the international market place, but also represent complex policy issues for the U.S. Government. FMS and direct sales not only contribute to industry's total sales and profits, but enhance its production capability by keeping defense facilities operating longer and at higher production rates that would be otherwise possible. For the future, many firms are looking toward increased foreign sales to sustain operations while DoD budgets are lower. Unfortunately, foreign defense firms are under many of the same pressures as domestic ones—reacting to their own nation's defense budget reductions and production overcapacity—and the international arms market is more competitive than ever. It will not be easy for U.S. defense contractors to offset reduced U.S. Government sales with increased foreign sales. With defense budgets expected to decline in most allied and friendly countries, foreign governments may choose to forgo indigenous development of weapons systems and instead seek cooperative development with, and/or licensed production from, other countries. This could present opportunities for U.S. prime contractors to increase their global market penetration, but these cooperative endeavors must be carefully considered. On the other hand, protectionist sentiments and policies in foreign countries may inhibit sales abroad by U.S. firms: similarly, the U.S. Buy America Act prevents foreign suppliers from participating in certain aspects of U.S. defense contracts.

Offsets are another form of international strategy for U.S. defense contractors. Commercial defense export sales must take local production offset requirements into account as a "way of doing business." Recognizing the common practice of these commercial arrangements in the free market, the U.S. Government permits U.S. industry to negotiate offset arrangements with overseas buyers of U.S.-produced goods and services. Although the U.S. Government is not a party to these arrangements, it retains the right to review offsets as part of its review and approval of proposed international defense cooperative programs.

The international environment is evolving rapidly, and industry-to-industry agreements and other forms of direct cooperation between U.S. and foreign defense firms have been increasing. This cooperation includes data exchanges, personnel exchanges, direct foreign sourcing (as distinct from U.S. Government purchases of foreign-produced items), subcontracting, mergers, joint ventures, research consortia, and strategic partnerships. This cooperation has taken place largely at the level of prime contractors, who seek to increase their share in overseas markets, obtain technical advantage, enhance efficiency, and improve their profitability. Such cooperation, however, may impact second and third tier U.S. defense contractors since many of the components

previously provided by these smaller companies will now be provided by foreign partners of U.S. prime contractors.

Within this environment, contracts between U.S. and foreign defense firms are now a routine practice. Rather than the national origins of specific products, services, or technologies, the key DoD issues include the following: 1) To produce and maintain existing systems, DoD must be assured of the timely delivery of affordable components and materials regardless of the national origin: 2) DoD also must be assured of sufficient access to world-wide state-of-the-art technology in order to develop next-generation systems and to improve the U.S. domestic technology base. It is important for DoD to understand international trends that impact these needs and to assure access to the production and technical resources of the international marketplace.

In summary, there is a complex set of advantages and pitfalls in the current trends toward internationalization. The defense industrial base depends on a national commitment to promote the technical excellence and international competitiveness of U.S. firms. Foreign suppliers have acquired a growing share of U.S. defense and commercial markets, in large measure because of their competitive costs, quality, and service. DoD efforts have only limited influence on the competitiveness of the domestic production base, particularly when defense purchases constitute a small and diminishing portion of the market. However, DoD continues to monitor international trends to assure that national interests are protected. The following section discusses DoD's approach toward two particularly important areas: purchases from overseas sources and foreign direct investment in the United States.

FOREIGN PURCHASE AND INVESTMENTS

PURCHASES FROM OVERSEAS SOURCES

DoD purchases thousands of materials, parts, components, and finished goods either directly or indirectly from foreign manufacturers, just as other governments purchase such items from the United States. Since these purchases involve numerous weapon systems, thousands of contractors, and subcontractors, and millions of parts and components, comprehensive information on foreign-sourced items is not routinely available to DoD. As an example, many of DoD's electronic components (such as semiconductors) are initially developed for the commercial market in a friendly or allied country such as Japan or Germany, and produced by a subtier manufacturer within the global industrial base. By the time the product is embedded in a DoD weapon system, it has become very cumbersome and costly to monitor all of the original sources of the technology and product. Overseas sources are a vital asset to our national defense and help to strengthen the national security; however, there may be occasions when excessive reliance on a single overseas source potentially could lead to unacceptable risks to the continuity of supply. If such excessive reliance occurs, steps must be taken to address it.

Three terms are used to describe defense-related purchases from overseas suppliers and the degree of vulnerability that might result. **Foreign sourcing** is the purchase of goods, services, or technologies from sources outside the United States or Canada. Foreign sourcing is a fact of life for DoD, and these purchases often offer cost, availability, or quality advantages over U.S.-manufactured product. Overseas sourcing can contribute to national security by increasing commonality of equipment with allies, by providing access to products that cannot be competitively obtained domestically, and by ensuring that U.S. weapon systems incorporate the very best products and technologies available. **Foreign dependence** occurs when goods, services, or technologies are purchased from offshore because they are not available at all from U.S. or Canadian sources. These dependencies, which might arise for several reasons, raise understandable concerns about potential disruptions in the supply of products and materials essential to defense. Determining whether a foreign dependence can be tolerated depends on such

factors as the criticality of the item, the likelihood of supply disruption, the availability of alternative sources both within the U.S. and throughout the world, or the time and cost to develop alternatives. **Foreign vulnerabilities** are those cases of foreign dependence where loss of access to a single foreign source supplier would impair the nation's capability to field a critical weapon system or otherwise endanger national security. These situations could impact the nation's security by producing an excessive reliance on a foreign sole-source supplier.

DoD and other government agencies have conducted a number of case studies on the potential impact of foreign sourcing and on necessary solutions. These studies have examined many weapon systems and industrial sectors, including semiconductors and machine tools, and have been conducted by a variety of government agencies and private organizations. Findings to date indicate that although foreign vulnerabilities are potentially of great concern to DoD, they represent an exceedingly small proportion of the items that are foreign sourced today. Furthermore, the Department of Commerce has undertaken an ambitious study of foreign sourcing and vulnerability in three Navy systems, including a communications system, a torpedo, and a missile system, with data collection extending to third- and fourth-tier suppliers. When available later this year, this study will provide further insight into DoD foreign sourcing, and possible dependence, on foreign-made components.

Foreign sourcing and potential vulnerability issues are also being addressed directly by DoD major weapon systems programs. One important initiative is DoD's recent mandate that all Defense Acquisition Board (DAB) programs address industrial base concerns (including foreign dependence and vulnerability issues) at each milestone review leading up to the production decision. In addition, individual program offices and defense contractors identify critical parts and components in major weapon systems and take actions within the acquisition system to plan for reliable sources of supply. For example, second sources can be created where practical and cost-effective to eliminate single- and sole-source dependencies. The DPA Title III program has contributed in this area by creating domestic capacity for materials that had previously been available only from offshore, including polysilicon, quartz fiber, silicon-on-sapphire wafers, and AC/DC steel plate. Projects in the planning stage will reduce current and potential vulnerabilities in the areas of single crystal silicon, silicon carbide/carbonitride yarn, garnet epitaxial wafers, and gallium arsenide.

FOREIGN DIRECT INVESTMENT (FDI)

Foreign direct investment in U.S. defense firms can provide defense-related companies with an infusion of needed capital, encourage plant and equipment modernization, and promote the transfer of advanced product and process technologies to the United States.

Foreign investment is monitored to ensure that it does not jeopardize national security. The Committee on Foreign Investment in the United States (CFIUS) reviews acquisitions that have a potential impact on national security.¹ Filings with CFIUS by parties to an acquisition are voluntary, but the Committee can investigate on its own initiative the acquisition of any U.S. firm by a foreign interest that may potentially affect national security. If there is credible evidence that the foreign investor might take action detrimental to our nation's security interests, the President may prohibit or suspend the acquisition.

¹CFIUS was established in 1975 by executive order and became codified as Section 721 (Exon-Florio amendment) of the 1988 Defense Production Act. The Committee consists of representatives from the Departments of Treasury, Commerce, Defense, State, and Justice, as well as the Office of Management and Budget, the U.S. Trade Representative's Office, and the Council of Economic Advisors.

Foreign direct investment (FDI) takes place through a variety of mechanisms: acquisition of domestic firms, mergers between overseas and domestic companies, and construction of foreign-owned facilities in the United States. The level of investment grew significantly over the 1980s, particularly in key sectors such as electronics. In 1989, the value of FDI in the United States totaled over \$390 billion, although the rate of investment has declined dramatically in recent years. The United Kingdom is the leading investor in U.S. companies, followed by Japan, the Netherlands, and Canada. About 37 percent of all foreign direct investment is in the manufacturing sector.

During the course of an investigation, CFIUS reviews a number of factors including a foreign investor's plans for locating research, development, and production facilities; the criticality of the technology and net technological impact of the investment (including the question of licensing technology to U.S. firms); and the classified and unclassified contract with DoD and other Government Agencies. None of these factors has yet been cited as a basis for blocking a foreign takeover, but overseas firms have provided assurances or representations to the U.S. Government, or have modified or dropped takeover plans as a result of the CFIUS review or investigation. Of the more than 600 filings that have been made since 1988, CFIUS has found cause to perform a detailed investigation in 13 cases. Of these, the President exercised his statutory authority only once to prohibit a transaction—forcing an aerospace machine tool firm owned by the People's Republic of China to divest itself of U.S. holdings. In the remaining cases, CFIUS determined that no clear threat to the national security existed.

Independent of the the CFIUS process, DoD has broad authority under Defense Investigative Service (DIS) Regulations to review any acquisition of interest by a foreign person in a foreign firm which does classified defense contract work. DoD may impose measures to protect sensitive information, e.g., voting trust and other arrangements that insulate foreign owners from access. In this connection, DoD balances concerns about possible compromise of information within the estimated benefits to DoD of foreign capital and technology.

CONCLUSIONS

In order to deal more effectively with the highly complex international environment, DoD has developed formal objectives that are embodied in its international defense cooperation program. The objectives are:

- To foster the collective security of the United States, its allies, and other friendly countries by encouraging participating countries to make adequate investment in modern conventional defense equipment and in the technical and other capabilities required to support that equipment, making the most efficient use of the total scientific, technical, and industrial resources available to participating countries.
- To encourage participating countries to adopt standardized or interoperable equipment, uniform or compatible logistics support arrangements, and common strategic and operational concepts.
- To foster defense industrial capabilities in the United States and in other participating countries that meet the military requirements of all participating countries.

There are strong benefits to the trend toward internationalization and interdependence. In taking advantage of these benefits, it must be remembered that the national security of the United States always comes first. This national security includes economic security, and requires that DoD have an assured and reliable source of supply of defense materiel in peacetime, crisis, and war, in an era of declining budgets and increasing globalization of defense markets. Thus, the

potential for increased access to global technologies and products is balanced with continued DoD support of innovation in the U.S. industrial base and continued concern for its global competitiveness.