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United States Government Accountability Office  
Washington, DC 20548

January 27, 2006

The Honorable John Warner  
Chairman  
The Honorable Carl Levin  
Ranking Minority Member  
Committee on Armed Services  
United States Senate

Subject: *Defense Trade Data*

Defense trade impacts many issues of importance to the Department of Defense (DOD), including maintaining a healthy supplier base, protecting critical technologies, ensuring access to a secure supply of defense-related items and services, managing technology transfers, and increasing interoperability with allies. A critical element to guide decision makers is access to comprehensive and reliable data. The Committee, through its report on the National Defense Authorization Act for Fiscal Year 2006, directed GAO to identify and assess defense trade data. In response, we (1) identified defense trade data available from U.S. government sources and their limitations, and (2) determined defense trade balances as indicated by the data for years 2000 through 2004.

For this review, we defined defense trade as the buying and selling of defense articles and services between the United States and foreign entities. To identify data sources and limitations, we interviewed agency officials of the Departments of Defense, State, Commerce (Census Bureau and Bureau of Economic Analysis), and Homeland Security (Customs and Border Protection) and reviewed past GAO and agency reports. To determine defense trade balances, we analyzed data from the Departments of Defense, Commerce, and State and considered their limitations. To assess data reliability, we performed electronic testing of required data elements, interviewed knowledgeable agency officials, and reviewed existing information about the data system. In addition, where applicable, we compared data to published data. Those data sets that we determined to be sufficiently reliable indicators of

defense trade were used to calculate the defense trade balance for the years 2000 to 2004.

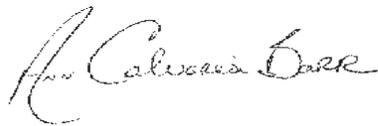
We performed our review from May 2005 to January 2006 in accordance with generally accepted government auditing standards.

In brief, we found that several agencies collect data that can be used as indicators of defense trade, such as the Census Bureau's data on U.S. imports and exports and DOD's foreign military sales and prime contracts data. While there are other related data sources, such as the State Department's export licensing data, Bureau of Economic Analysis' defense service data, and DOD's foreign subcontractor data, we found them to be of limited use as defense trade indicators. However, data from Census and DOD sources were sufficient to assess defense trade at an aggregate level. Based on the data we analyzed from these agencies, we found that for each of the years 2000 through 2004, the United States sold significantly more defense articles and services to foreign entities than it bought from them.

On November 1, 2005, we briefed the results of our study to your staff. These results are included as an enclosure to this letter.

The Departments of Defense, Commerce, and State provided technical comments to a draft of this letter and enclosure, which we have incorporated as appropriate.

Should you or your staff have any questions concerning this report, please contact me at (202) 512-4841. Copies of this report are also available on GAO's Web site at [www.gao.gov](http://www.gao.gov). Key contributors to this report were John Neumann, Assistant Director; John Ting; Bradley Terry; and Mark Gribbin.



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Enclosure

## BRIEFING TO SENATE COMMITTEE ON ARMED SERVICES

# Defense Trade Data

## Engagement Scope

Our definition of defense articles and services is based on the U.S. government's International Traffic in Arms Regulations. This regulation defines a defense service as the furnishing of assistance to foreign persons, which includes the design, engineering, manufacture, operation, and maintenance of defense articles. Based on this definition, services paid for by the Department of Defense (DOD) to support military bases overseas, such as payments for wages to foreign nationals, foreign contractual services, and construction expenditures abroad are not included in our analysis of defense trade.

## Methodology

To identify U.S. government data sources, we researched past GAO reports and agency reports and documents, and interviewed agency officials at DOD and the Departments of Commerce, Homeland Security, and State. To show the defense trade balance for the years 2000 to 2004, we analyzed data from DOD, Commerce, and State covering 2000 to 2004.

DOD, Commerce, and State provided technical comments to a draft of this letter and enclosure, which we have incorporated as appropriate.

## Background

Defense trade data provides national security decision makers with vital information on transfers of defense articles and services between the United States and foreign entities. These transfers are made through government-to-government programs such as the Foreign Military Sales (FMS) program, or directly by companies selling to foreign entities under an approved export license. In addition, DOD and U.S. companies purchase defense articles and services from foreign entities.

## Objectives

The Senate Armed Services Committee report on the National Defense Authorization Act for FY 2006 directed GAO to identify and assess defense trade data. In response, this briefing evaluates the following:

1. What defense trade data is available from U.S. government sources and what are their limitations?
2. What does the available data indicate about the U.S. defense trade balance from 2000 to 2004?

## Summary

Several agencies collect data that can be used as indicators of defense trade. The Department of Commerce collects data on U.S. imports and exports. Additionally, DOD collects data on its own sales and purchases. Data from these sources were sufficiently reliable to assess defense trade at an aggregate level. Other related data on balance of payments, export licenses, and foreign subcontractors were of limited use as indicators of the level of defense trade.

The United States sells significantly more defense articles and services to foreign entities than it buys. Between 2000 and 2004, U.S. defense exports averaged \$11.5 billion a year, versus imports of \$1.8 billion a year; DOD military sales averaged \$12.6 billion a year, versus purchases of \$1.5 billion a year. During the same period, DOD purchases of defense articles and services from foreign companies have decreased from 2.4 percent to 1.7 percent of all such DOD purchases.

**Defense Trade Data**

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**Objective 1**

What defense trade data is available from U.S. government sources and what are their limitations?

**Data Available from Federal Agencies**

DOD and the Departments of Commerce and State are the principal agencies that collect data related to defense trade.

- The Department of Commerce’s Census Bureau collects export and import data on actual shipments and deliveries of goods, which includes defense articles, as part of its U.S. foreign trade statistics. This data is mostly collected by the Department of Homeland Security’s Customs and Border Protection at ports of entry and exit, which is then reported to Census. Separately, Commerce’s Bureau of Economic Analysis (BEA) assembles estimates of imports and exports of a range of services as a part of its Balance of Payments Accounts.
- DOD collects data on contractual sales and purchases of defense articles and services through its FMS and prime contract data systems. FMS data include all defense articles and services sold by DOD to foreign governments, while prime contract data include DOD purchases from foreign entities. This data differs from Commerce import and export data as it reflects signed contracts for goods and services rather than actual deliveries. Another DOD office separately collects data from U.S. contractors on defense subcontracts performed overseas, based on certain dollar thresholds and reporting criteria.
- The State Department collects data on proposed direct commercial sales of defense articles and services by U.S. companies to foreign persons as part of its export licensing program. License data are based on the authorized value of export licenses and agreements. Export licenses authorize U.S. companies to sell defense articles and services directly to foreign persons. Agreements, such as manufacturing license agreements and technical assistance agreements, allow the transfers of technical knowledge, production rights or manufacturing know-how from U.S. companies to foreign persons.

**Defense Trade Data**

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**Objective 1 (cont.)**

**Commerce Department Data Observations and Limitations**

- Census data reflect the movement of goods crossing U.S. borders. Consequently, the data may count movements even when they do not result in changes of ownership. For example, if goods are temporarily exported to the manufacturer for repair or maintenance, they will be counted as exports even though no purchase or sale is being made. However, as these goods are likely to be imported back into the United States, these transfers do not significantly impact the data's usefulness in assessing defense trade.
- BEA service import and export data was limited for the purpose of assessing defense trade because it captures data that was outside our definition of defense services.

BEA captures U.S. company exports of services under technical assistance agreements and manufacturing license agreements, but it does not separate them into defense and non-defense sectors. While BEA data include defense services associated with the FMS program, this information is not complete without data on defense services exported by U.S. companies.

BEA's Direct Defense Expenditures account captures service import data that is outside our definition of defense services. This account primarily measures expenditures incurred abroad by U.S. military agencies, including wages for foreign nationals, foreign contractual services, and construction expenditures in support of military bases overseas.

**Defense Trade Data**

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**Objective 1 (cont.)**

**Defense Department Data Observations and Limitations**

- FMS data includes sales financed by U.S. government grants and loans to foreign countries. Grant-funded sales are the practical equivalent of sales from U.S. industry to U.S. government.<sup>1</sup>
- Our analysis of the FMS data showed discrepancies in the value of some FMS agreements. According to a DOD official, one possible reason for the discrepancies is that amendments representing additional sales for some of the agreements were not entered into the data, thus underreporting sales. However, even if all the discrepancies result in underreporting of sales, they amounted to only 5 percent of total sales for the years 2000 through 2004 and, therefore, were not significant enough to impact the reliability of the data for determining the aggregate level of sales.
- DOD prime contract data defines a foreign contractor as a company that is not incorporated in the United States. Therefore, DOD does not consider purchases from a company that is incorporated in the United States but owned by a foreign parent company to be foreign.
- DOD foreign subcontractor data was not used in our analysis as it only captures a segment of foreign subcontracts and is of limited use as an indicator of aggregate defense trade. It does not capture:
  - Subcontracts beyond the second tier.
  - Subcontracts worth under \$500,000.
  - Subcontracts where under \$100,000 of work is performed abroad.
  - Subcontracts let under prime contracts where (1) the principal place of performance is abroad; and (2) foreign place of performance is indicated in the contractor's offer.<sup>2</sup>

In addition, GAO has previously identified contractor compliance problems with the requirement to report foreign subcontracts to DOD (GAO/NSIAD-99-8; GAO-04-381). While DOD has taken actions

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<sup>1</sup> FMS data includes equipment paid for by U.S. military grants. From fiscal years 2000-2004, U.S. military grants to foreign governments averaged \$4.5 billion per year.

<sup>2</sup> DOD contracts where the principal place of performance is abroad can be identified through DOD's DD-350 database.

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**Defense Trade Data**

**Objective 1 (cont.)**

to address this issue, such as sending letters to the top 100 defense contractors to remind them of the reporting requirement, we have not evaluated whether these actions have improved contractor compliance.

**State Department Data Observations and Limitations**

- State Department license data does not represent actual orders placed or deliveries<sup>3</sup> made by companies, only the amounts they are authorized to export. Therefore, license values cannot be used to quantify the actual value of trade and were not used in our analysis of defense trade.<sup>4</sup>
- State Department license data also has reliability issues.

Previous GAO work noted that the State Department data double-counts the value of export licenses stemming from manufacturing license and technical assistance agreements (GAO-05-156R).

License values given in the State Department's licensing database include the values of terminated agreements.

<sup>3</sup> On October 18, 2003, use of the Automated Export System (operated by Census and the Bureau of Customs and Border Protection) by exporters became mandatory for all shipments of State Department controlled hardware. After some data problems are resolved, State Department data could become useful for our analysis.

<sup>4</sup> Data on actual exports of goods resulting from export licenses is captured in the Census data used in our analysis.

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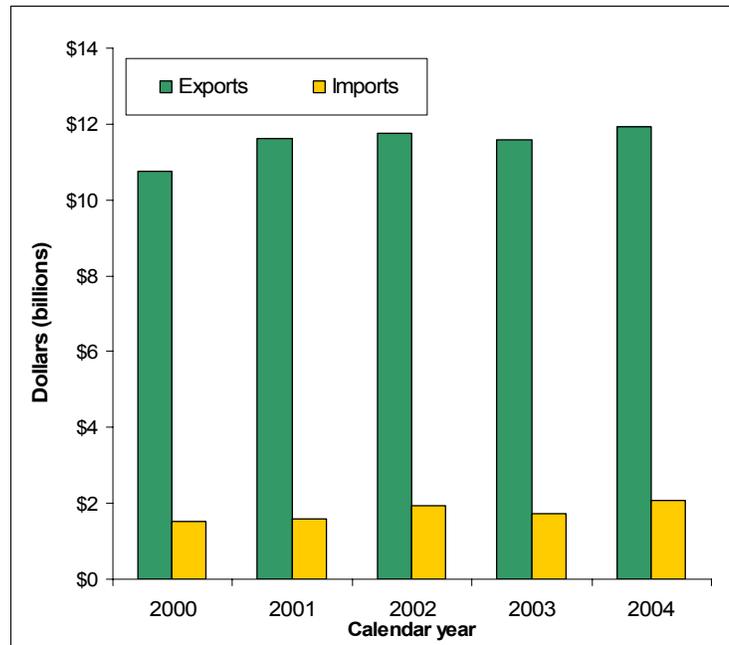
**Defense Trade Data**

**Objective 2**

What does the available data indicate about the U.S. defense trade balance from 2000 to 2004?

**Defense Trade Balance: U.S. Exports versus Imports<sup>5</sup>**

Based on our analysis of Census data, U.S. defense exports averaged \$11.5 billion a year, versus imports of \$1.8 billion a year. U.S. exports of defense articles ranged from \$10.7 to \$11.9 billion while imports ranged from \$1.5 to \$2.1 billion.



Source: GAO analysis of U.S. Census Bureau data.

Another measure of the defense trade balance shows that imports averaged only 15 percent of exports during the period 2000-2004.

Calendar year	Defense exports (billions)	Defense imports (billions)	Imports as % of exports
2000	\$10.7	\$1.5	14
2001	11.6	1.6	14
2002	11.8	1.9	16
2003	11.6	1.7	15
2004	11.9	2.1	18

Source: GAO analysis of U.S. Census Bureau data.

<sup>5</sup> Data are all in nominal values, unadjusted for inflation. Data represent actual deliveries and shipments of defense articles for calendar years 2000-2004. As noted on page 5, BEA service trade data was not used in our analysis because it did not allow us to present defense service data in accordance with our definition.

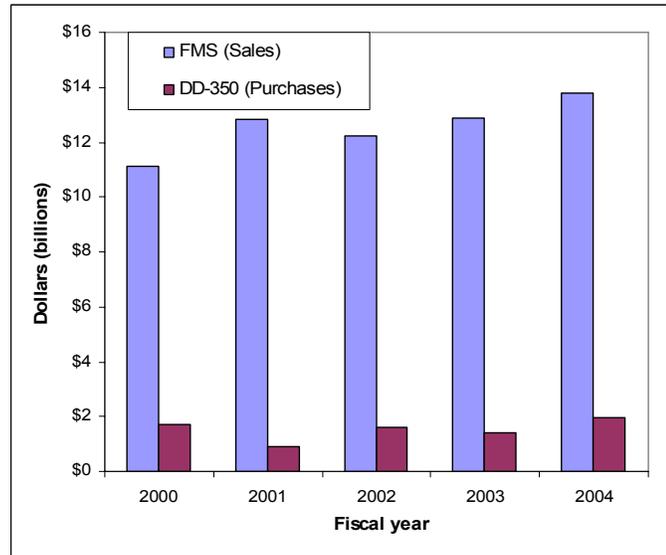
BRIEFING TO SENATE COMMITTEE ON ARMED SERVICES

**Defense Trade Data**

**Objective 2 (cont.)**

**DOD Sales versus Purchases<sup>6</sup>**

Based on our analysis of DOD sales and purchase contract data, FMS averaged \$12.6 billion<sup>7</sup> a year, versus foreign military purchases of \$1.5 billion a year. FMS ranged from \$11.1 to \$13.8 billion between 2000 and 2004, while foreign military purchases ranged from \$0.9 to \$2.0 billion.



Source: GAO analysis of DOD's FMS and prime contract data.

Another measure of the defense trade balance shows that purchases averaged only 12 percent of sales during the period 2000-2004.

Fiscal year	DOD FMS (billions)	DOD Foreign Military Purchases (billions)	DOD Foreign Military Purchases as % of FMS
2000	\$11.1	\$1.7	15
2001	12.8	0.9	7
2002	12.2	1.6	13
2003	12.9	1.4	11
2004	13.8	2.0	14

Source: GAO analysis of DOD's FMS and prime contract data.

<sup>6</sup> Data are all in nominal values, unadjusted for inflation. Data represent DOD's contractual obligations for sales and purchases of defense articles and services for fiscal years 2000-2004, not actual shipments or deliveries. As deliveries and shipments are not necessarily completed in the same year that a contract is made, DOD sale and purchase data are not directly comparable to the Census export and import data presented in the preceding section.

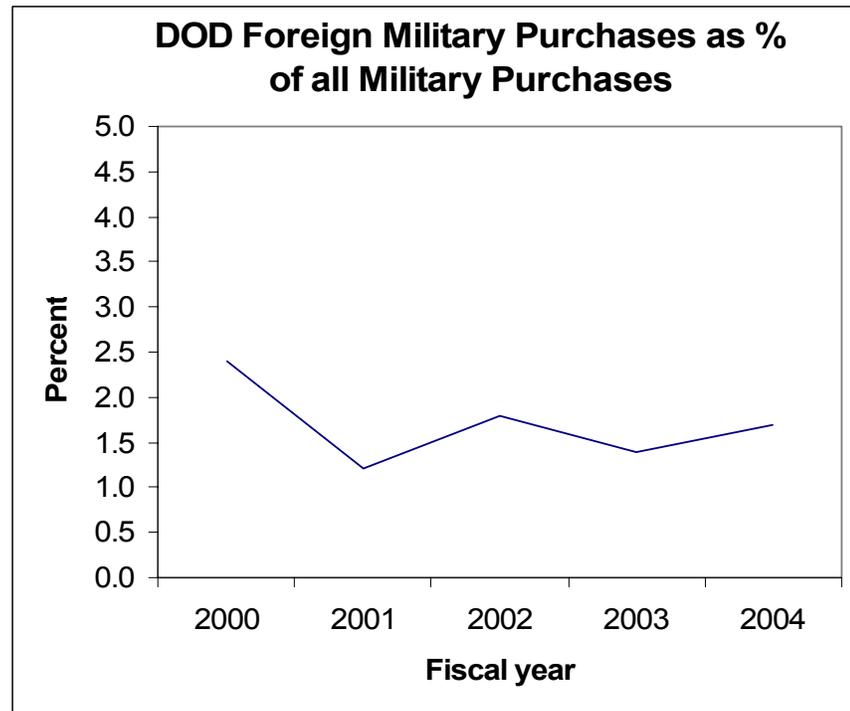
<sup>7</sup> Total U.S. military sales is likely higher because, as stated on page 7, we did not include State Department's licensing values in our analysis of defense trade.

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**Defense Trade Data**

**Additional Observation<sup>8</sup>**

Based on our analysis of DOD’s prime contract data, the percentage of DOD purchases of defense articles and services from foreign companies as compared to all DOD purchases of defense articles and services, decreased from 2.4 percent in fiscal year 2000 to 1.7 percent in 2004.



Source: GAO analysis of DOD’s prime contract data.

Fiscal Year	DOD Foreign Military Purchases (billions)	DOD Foreign Military Purchases as a % of All Military Purchases
2000	\$1.7	2.4
2001	0.9	1.2
2002	1.6	1.8
2003	1.4	1.4
2004	2.0	1.7

Source: GAO analysis of DOD’s prime contract data.

<sup>8</sup> Data presented in this section are all in nominal values, unadjusted for inflation.