

Offsets in Defense Trade

Twelfth Report to Congress



December 2007

U.S. Department of Commerce
Bureau of Industry and Security



Offsets in Defense Trade

Twelfth Study

*Conducted Pursuant to Section 309 of the Defense
Production Act of 1950, as Amended*



U.S. Department of Commerce
Bureau of Industry and Security
Office of Strategic Industries and Economic Security

December 2007

For more information, please contact the
Office of Strategic Industries and Economic Security at 202-482-4506
www.bis.doc.gov/defenseindustrialbase/programs/osies/offsets

Table of Contents

EXECUTIVE SUMMARY	iii
1 BACKGROUND	1-1
1-1 STATUTES AND REGULATIONS.....	1-1
1-2 U.S. GOVERNMENT POLICY	1-2
1-3 OFFSETS TERMINOLOGY	1-3
1-4 COUNTRIES AND REGIONS.....	1-5
1-5 SCOPE OF REPORT	1-6
2 STATISTICAL OVERVIEW	2-1
2-1 GENERAL OVERVIEW.....	2-1
2-2 TYPES OF OFFSET TRANSACTIONS.....	2-4
2-3 OFFSET TRANSACTION CATEGORIES.....	2-6
2-4 INDUSTRY CLASSIFICATION – SIC CODES	2-10
2-5 COUNTRIES AND GROUPS	2-12
3 IMPACT OF OFFSETS ON THE U.S. DEFENSE INDUSTRIAL BASE	3-1
3-1 DEFENSE PREPAREDNESS.....	3-1
3-2 EMPLOYMENT	3-2
3-3 DOMESTIC DEFENSE PRODUCTIVE CAPABILITY	3-4
4 OFFSET AGREEMENTS, 1993-2006.....	4-1
4-1 OVERVIEW.....	4-1
4-2 CONCENTRATION OF OFFSET ACTIVITY	4-1
4-3 REGIONAL DISTRIBUTIONS	4-4
4-4 EUROPE COMPARED TO THE REST OF THE WORLD	4-5
4-5 ARE OFFSET DEMANDS INCREASING?.....	4-8
5 OFFSET TRANSACTION ACTIVITY, 1993-2006	5-1
5-1 OVERVIEW	5-1
5-2 REGIONAL DISTRIBUTIONS	5-4
5-3 THE ROLE OF MULTIPLIERS	5-5
5-4 OFFSET TRANSACTIONS BY TYPE.....	5-11
5-5 OFFSET TRANSACTIONS BY CATEGORY.....	5-12
5-6 OFFSET TRANSACTIONS BY CATEGORY AND TYPE	5-14
5-7 OFFSET TRANSACTIONS BY INDUSTRIAL SECTOR.....	5-17

6 BACKGROUND ON THE INTERAGENCY TEAM ON CONSULTATION WITH FOREIGN NATIONS
ON LIMITING THE ADVERSE EFFECTS OF OFFSETS IN DEFENSE PROCUREMENT 6-I

- Appendix A: Section 309 of the Defense Production Act of 1950, as amended
- Appendix B: U.S. Department of Commerce Regulations Regarding Reporting of Offset Activity
- Appendix C: Executive Order 12919
- Appendix D: Defense Production Act Reauthorization Act of 2003 (Pub. L. 108-195)
- Appendix E: Offset Transactions by Economic Sector
- Appendix F: Countries' Official Offset Policies
- Appendix G: Glossary and Offset Example
- Appendix H: Interagency Team Progress Report on Consultation with Foreign Nations on Limiting the Adverse Effects of Offsets in Defense Procurement

Executive Summary

This is the twelfth annual report on the impact of offsets in defense trade prepared by the U.S. Department of Commerce's Bureau of Industry and Security (BIS), Office of Strategic Industries and Economic Security pursuant to Section 309 of the Defense Production Act of 1950,¹ as amended (DPA). The report analyzes the impact of offsets on the defense preparedness, industrial competitiveness, employment, and trade of the United States.

Offsets in defense trade encompass a range of industrial compensation arrangements required by a foreign government as a condition of purchase of U.S. defense articles and services. This mandatory compensation can take many forms; it can be directly related to the purchased defense system and related services, or it can involve activities or goods unrelated to the defense system. The compensation can be further classified as a Subcontract, Purchase, Co-production, Technology Transfer, Licensed Production, Credit Assistance, Overseas Investment, or Training.

Some legislators in the U.S. Congress have raised concerns about the effects of offsets on the U.S. industrial base, because most offset arrangements involve purchasing, subcontracting, and co-production opportunities for U.S. competitors, as well as transferring technology and know-how. The official U.S. Government policy on offsets in defense trade states that the Government considers offsets to be "economically inefficient and trade distorting," and prohibits any agency of the U.S. Government from encouraging, entering directly into, or committing U.S. firms to any offset arrangement in connection with the sale of defense goods or services to foreign governments.² U.S. prime contractors generally see offsets as a reality of the marketplace for companies competing for international defense sales. Several U.S. prime contractors have informed BIS that offsets are usually necessary in order to make a defense sale.

In order to assess the impact of offsets in defense trade, BIS collects data from U.S. defense firms involved in defense exports and offsets. These firms report their offset activities to BIS annually³. This report covers offset agreements entered into and the offset transactions carried out to fulfill these offset obligations from 1993 through 2006. This report also includes a progress report (Appendix H) of the work of the Interagency

¹ Codified at 50 U.S.C. app. § 2099 (2000).

² Defense Production Act Amendments of 1992 (Pub. L. 102-558, Title I, Part C, § 123)

³ Pursuant to 15 CFR Part 701.

Team on Offsets in Defense Trade, which is chartered to consult with foreign nations on limiting the adverse effects of offsets in defense procurement.

Offset Activities

Offset activities examined in this report involve two distinct business arrangements: offset agreements entered into between U.S. defense contractors and foreign governments in connection with a U.S. defense-related export, and offset transactions concluded to satisfy these offset agreements.

Offset Agreements 2006: In 2006, U.S. defense contractors reported 44 new offset agreements with 20 countries valued at \$3.4 billion. These agreements equaled 70.9 percent of the \$4.8 billion in related export contracts and were higher in number of agreements (25) and value of offset agreements (\$1.5 billion) than in 2005. The 2005 reported totals were the lowest recorded annual levels in the 14-year reporting period.

Offset Agreements 1993-2006: During 1993-2006, U.S. companies reported entering into 582 offset agreements with 42 countries related to export sales totaling \$84.3 billion. These offset agreements were valued at \$60 billion and equaled 71.2 percent of the export contract value, the same percentage as reported during the 1993-2005 period.⁴

Offset Transactions 2006: In 2006, U.S. companies reported 653 offset transactions in 29 countries, compared with 611 transactions in 30 countries in 2005. Offset transactions reported by U.S. companies were valued at \$4.69 billion in 2006, compared with the \$4.71 billion reported in 2005 (the highest level recorded during the 14-year reporting period).

In 2006, indirect offsets (transactions that are primarily non-defense related) accounted for 63.6 percent of the value of offset transactions, compared with 61.8 percent in 2005. Direct offset transactions accounted for 36 percent of the value of offset transactions in 2006, compared with 38.2 percent in 2005.

⁴ According to anecdotal information from U.S. defense firms, the value of the actual fulfillment of the offset agreement may be less than the offset percentage stated in the contract as a result of applied multipliers and banked credits (credits provided by the foreign government for work previously performed in-country by U.S. defense firms).

Offset Transactions 1993-2006: For 1993-2006, U.S. companies reported 8,660 offset transactions in 42 countries. The actual value of the offset transactions from 1993 to 2006 was \$42 billion. During 2003-2006, the annual value of offset transactions increased significantly over the previous years. The high value of offset transactions during 2003-2006 was greatly influenced by the increase in the number of export contracts signed in the 1999-2003 period when annual export contract values ranged between \$5.7 billion and \$7.4 billion.

Role of Multipliers: Multipliers continue to be applied to only a small number of offset transactions. In 2006, the multiplier was 1.043. This 2006 multiplier means that, as a whole, the total credit value (the value assigned to the transaction for offset fulfillment purposes) of the transaction was 4.3 percent more than the actual value. The average multiplier for the 14-year period was 1.165. Therefore, the total actual value of transactions for 1993-2006 was \$42 billion, but the credit value was \$48.9 billion.

Employment Impact

BIS has developed an estimate of employment impact related to offsets by using U.S. aerospace-related employment and value added data collected by the U.S. Department of Commerce, Bureau of the Census. Based on BIS' calculations, it appears that 2002-2005 defense export sales had a net positive effect on employment in the defense sector during the four-year period (an annual average of 16,085 work years).⁵

Interagency Team on Offsets in Defense Procurement

In December 2003, President Bush signed into law a reauthorization of, and amendments to, the Defense Production Act of 1950 (DPA). Section 7 (c) of P.L. 108-195 amended Section 123 (c) of the DPA by requiring the President to designate a chairman of an interagency team to consult with foreign nations on limiting the adverse effects of offsets in defense procurement without damaging the economy or the defense industrial base of the United States, or United States defense production or defense preparedness.

The interagency team submitted its third and final report on limiting the adverse effects of offsets on defense procurement to Congress in February 2007. However, the interagency group has continued its dialogue with foreign partners regarding how to limit

⁵ These calculations are based on the supposition that this value represents 100 percent U.S. content in all exports, which is not necessarily an accurate assumption.

the adverse effects of offsets in defense trade. As a result, the interagency team submitted a progress report on this dialogue for 2007, which is attached in Appendix H of this report.

In 2007, the interagency team met with Australia and the six Letter of Intent (LOI6) countries (France, Germany, Italy, Spain, Sweden, and the United Kingdom) in an effort to formulate a multi-lateral agreement on the creation of statement of principles for Best Practices to limit the adverse affects of offsets and to encourage flexibility and equitable treatment for all participating nations.

1 Background

I-1 Statutes and Regulations

In 1984, the Congress enacted amendments to the Defense Production Act (DPA), including the addition of Section 309 addressing offsets in defense trade.⁶ Section 309 requires the President to submit an annual report on the impact of offsets on the U.S. defense industrial base to the Congress's then-Committee on Banking, Finance, and Urban Affairs of the House of Representatives⁷ and the Committee on Banking, Housing, and Urban Affairs of the Senate.

The Office of Management and Budget was appointed the interagency coordinator for preparing the report for Congress when Section 309 was first put into place. Other agencies involved in the process included the Departments of Commerce, Defense, Labor, State, and the Treasury, and the Office of the U.S. Trade Representative. Section 309 of the DPA was amended in 1992, and the Secretary of Commerce was directed to function as the President's Executive Agent for carrying out the responsibilities set forth in Section 309 of the DPA.⁸ *See Appendix A for the text of Section 309.*

Section 309 authorized the Secretary of Commerce to develop and administer the regulations necessary to collect offset data from U.S. defense exporters. The Secretary of Commerce delegated this authority to the Bureau of Industry and Security (BIS). BIS published its offset regulations in 1994.⁹ *See Appendix B for a copy of the regulations.*

Every year, U.S. companies report offset agreement and transaction data for the previous calendar year to BIS. The 1992 amendments to Section 309 of the DPA reduced the offset agreement reporting threshold from \$50 million to \$5 million for U.S. firms entering into foreign defense sales contracts subject to offset agreements. Firms are also required to report all offset transactions for which they receive offset credits of \$250,000 or more. The data elements collected each year from the firms are listed in Section 701.4 of the Department's offset regulations.

⁶ *See* Pub. L. 98-265, April 17, 1984, 98 Stat. 149.

⁷ Section 309 of the DPA was amended in 2001 to reflect the change in the name of the House committee to the "Committee on Financial Services of the House of Representatives." *See* 50 U.S.C. app. § 2099(a)(1).

⁸ *See* Pub. L. 102-558, Oct. 28, 1992, 106 Stat. 4198; *see also* Part IV of Exec. Order No. 12919, 59 *Fed. Reg.* 29525 (June 3, 1994).

⁹ *See* 59 *Fed. Reg.* 61796, Dec. 2, 1994, codified at 15 C.F.R. § 701.

I-2 U.S. Government Policy

The U.S. Government policy on offsets in defense trade was developed by an interagency offset team. On April 16, 1990, the President announced a policy on offsets in military exports.¹⁰ In 1992, Congress passed the following provision, which closely reflects the policy announced by the President:¹¹

(a) In General. Recognizing that certain offsets for military exports are economically inefficient and market distorting, and mindful of the need to minimize the adverse effects of offsets in military exports while ensuring that the ability of United States firms to compete for military export sales is not undermined, it is the policy of the Congress that--

(1) no agency of the United States Government shall encourage, enter directly into, or commit United States firms to any offset arrangement in connection with the sale of defense goods or services to foreign governments;

(2) United States Government funds shall not be used to finance offsets in security assistance transactions, except in accordance with policies and procedures that were in existence on March 1, 1992;

(3) nothing in this section shall prevent agencies of the United States Government from fulfilling obligations incurred through international agreements entered into before March 1, 1992; and

(4) the decision whether to engage in offsets, and the responsibility for negotiating and implementing offset arrangements, reside with the companies involved.

(b) Presidential Approval of Exceptions. It is the policy of the Congress that the President may approve an exception to the policy stated in subsection (a) after receiving the recommendation of the National Security Council.

(c) Consultation. It is the policy of the Congress that the President shall designate the Secretary of Defense to lead, in coordination with the Secretary of State, an interagency team to consult with foreign nations on limiting the adverse effects of offsets in defense procurement. The President shall transmit an annual report on the results of these consultations to the Congress as part of the report required under section 309(a) of the DPA.

¹⁰ See April 16, 1990 statement by Press Secretary Fitzwater on offsets in military exports.

¹¹ Congress incorporated this policy statement into law with the Defense Production Act Amendments of 1992 (Pub. L. 102-558, Title I, Part C, § 123, 106 Stat. 4198).

Provisions in the Defense Offsets Disclosure Act of 1999¹² supplemented the offset policy:

- (1) A fair business environment is necessary to advance international trade, economic stability, and development worldwide; this is beneficial for American workers and businesses, and is in the United States' national interest.
- (2) In some cases, mandated offset agreements can cause economic distortions in international defense trade and undermine fairness and competitiveness, and may cause particular harm to small- and medium-sized businesses.
- (3) The use of offsets may lead to increasing dependence on foreign suppliers for the production of United States weapons systems.
- (4) The offset demands required by some purchasing countries, including some close allies of the United States, equal or exceed the value of the base contract they are intended to offset, mitigating much of the potential economic benefit of the exports.
- (5) Offset demands often unduly distort the prices of defense contracts.
- (6) In some cases, United States contractors are required to provide indirect offsets which can negatively impact non-defense industrial sectors.
- (7) Unilateral efforts by the United States to prohibit offsets may be impractical in the current era of globalization and would severely hinder the competitiveness of the United States defense industry in the global market.

The Defense Offsets Disclosure Act of 1999 continues with the following declaration of policy:

It is the policy of the United States to monitor the use of offsets in international defense trade, to promote fairness in such trade, and to ensure that foreign participation in the production of United States weapons systems does not harm the economy of the United States.

I-3 Offsets Terminology

Several basic terms are used in discussions of offsets in defense trade. For more definitions and an illustrative example of an offset arrangement, please see the Glossary in Appendix G.

¹² See Pub. L. No. 106-113, Div. B, § 1000(a)(7) 113 Stat. 1536, 1510A-500 to 1501A-505 (1999) (enacting into law Subtitle D of Title XII of Division B of H.R. 3427 (113 Stat. 1501A-500) as introduced on Nov. 17, 1999) (found at 50 U.S.C. App. 2099, Note).

Offsets: Compensation practices required as a condition of purchase in either government-to-government or commercial sales of “defense articles” and/or “defense services” as defined by the Arms Export Control Act (22 U.S.C. § 2751, et seq.) and the International Traffic in Arms Regulations (22 C.F.R. §§ 120-130).

Direct Offsets: Contractual arrangements that involve defense articles and services referenced in the sales agreement for military exports. These transactions are directly related to the defense items or services exported by the defense firm and are usually in the form of co-production, subcontracting, technology transfer, training, production, licensed production, or financing activities.

Co-production: Overseas production based upon government-to-government agreement that permits a foreign government or producer(s) to acquire the technical information to manufacture all or part of a U.S.-origin defense article. Co-production includes government-to-government licensed production, but excludes licensed production based upon direct commercial arrangements by U.S. manufacturers.

Subcontracts: Overseas production of a part or component of a U.S.-origin defense article. The subcontract does not necessarily involve license of technical information and is usually a direct commercial arrangement between the defense prime contractor and a foreign producer.

Indirect Offsets: Contractual arrangements that involve defense goods and services unrelated to the defense items or services export referenced in the sales agreement. The kinds of offsets that are considered “indirect” include purchases, investment, training, financing activities, marketing/exporting assistance, and technology transfer.

Purchases: Procurement of off-the-shelf items from the offset recipient. Often, but not always, purchases are indirect by nature.

Overseas Investment: Investment arising from an offset agreement, often taking the form of capital dedicated to establishing an unrelated foreign entity or expanding a subsidiary or joint venture in the foreign country.

Technology Transfer: Transfer of technology that occurs as a result of an offset agreement and that may take the form of research and development conducted abroad, technical assistance provided to the subsidiary or joint venture of overseas investment, or other activities under direct commercial arrangement between the defense prime contractor and a foreign entity.

I-4 Countries and Regions

Countries and country groups actively requiring offsets in conjunction with purchases of U.S. defense systems during the period of 1993-2006, as reported by industry, were divided into four geographic regions: Europe, Africa and the Middle East, North and South America, and Asia-Pacific. This was done for ease of analysis and in some cases to protect company confidentiality. The countries found in each region are listed in Table I-1.

**Table I-1: Purchasing Countries and Groups with Offsets Agreements
(by Region, 1993-2006)**

<p><u>Europe</u> Austria Belgium Czech Republic Denmark EPG – the European Participating Group (Belgium, the Netherlands, Norway) Finland France Germany Greece Hungary Italy Lithuania Luxembourg NATO The Netherlands Norway Poland Portugal Romania Slovenia Spain Sweden Switzerland United Kingdom</p>	<p><u>Middle East and Africa</u> Egypt Israel Kuwait Saudi Arabia South Africa Turkey United Arab Emirates</p>
	<p><u>North and South America</u> Brazil Canada Chile</p>
	<p><u>Asia-Pacific</u> Australia China Indonesia Malaysia New Zealand Philippines Singapore Republic of Korea Taiwan Thailand</p>

I-5 Scope of Report

This is the twelfth report on Offsets in Defense Trade prepared by the Department of Commerce's Bureau of Industry and Security, Office of Strategic Industries and Economic Security. The report is prepared after analyzing offset data reported to the Department of Commerce by U.S. defense firms, in compliance with regulations established under Section 309 of the DPA.

The twelfth report reviews offset data for the 14-year period from 1993 to 2006. The initial offsets report, issued in 1996, covered the time period from 1993 to 1994; each subsequent offset report added an additional year to the reporting period, with the exception of the eighth report, which added two years. This report was prepared in consultation with the Departments of Defense, State, the Treasury, and Labor; the Office of the U.S. Trade Representative; and the Central Intelligence Agency.

Each section of the report begins with an overview of the data collected from U.S. industry for both 2006 alone, and for the period of 1993-2006, followed by an analysis of the effects of offsets on the U.S. defense industrial base. Next, the report presents a statistical analysis of offset agreements entered into for both 2006 alone, and for the 1993-2006 period. This is followed by a similar analysis of offset transaction activity over the same period, including a detailed review of the role of multipliers. Lastly, the report includes a description of the activities of the Interagency Team and Working Group which is chartered to engage in consultations with foreign governments on eliminating the adverse effects of offsets in defense trade.

2 Statistical Overview

This chapter provides a general overview of BIS offset data for the years 1993 - 2006; a discussion of offset transactions by type, kind, and industry; the countries involved in offset activity; and a review of some of the terms used to organize the data for analysis. The following data points are used to organize and analyze the information collected:

<u>Offset Agreements</u>	<u>Offset Transactions</u>
Year	Year
Country	Country
Defense System	Referenced Defense System
Export Contract Value	Recipient
Offset Agreement Value	Actual Value
Percent Agreement Value to Export Value	Credit Value
	Multiplier (credit value ÷ actual value)
	Type
	Category
	Description
	Industry Involved

2-1 General Overview

Table 2-1 provides a summary of all offset agreement and transaction activity for the 14-year period from 1993 through 2006. Detailed sections on offset agreements and transactions will follow in Chapters 4 and 5, respectively.

In 2006, the total value of offset agreements was \$3.4 billion. These agreements were made in conjunction with U.S. defense system export contracts totaling \$4.8 billion in 2006. Twelve prime contractors reported that they entered into 44 offset agreements with 20 countries that year. The average offset percentage (offset value ÷ value of exported system) for 2006 was 70.9 percent, up from 64.8 percent in 2005, but still lower than the peak of 124.9 percent recorded in 2003.¹³

¹³ The high offset percentage for 2003 was skewed because of one large weapon system contract with a large offset component (See footnote 24 on page 4-1).

The value of offset transactions completed in 2006 fell by approximately 5 percent from the 14-year high reported in 2004. The transactions in 2006 totaled \$4.7 billion, still significantly higher than the totals recorded before 2004. Prime contractors carried out 653 offset transactions in 2006 with 29 countries. On average, prime contractors received slightly more than the value of the transactions as credit toward their offset obligation.

The average multiplier in 2006 was 1.043, still below the average of 1.182 for the 14-year period.¹⁴ The data show that multipliers have been granted on a decreasing level of transactions over time. A declining multiplier indicates that countries demanding offsets have granted lower credit values associated with offset agreements. Multipliers are further discussed in Chapter Five.

¹⁴ This incentive, called a multiplier, varies by country and by the kind of transaction – usually indirect offset transactions receive higher credit value than direct offset transactions.

Table 2-1 : General Summary of Offset Activity, 1993-2006						
(\$ millions)						
Offset Agreements						
Year	Export Value	Offset Value	% Offset	Companies	Agreements	Countries
1993	\$13,935.0	\$4,784.4	34.30%	17	28	16
1994	\$4,792.4	\$2,048.7	42.70%	18	49	20
1995	\$7,529.9	\$6,102.6	81.00%	20	47	18
1996	\$3,119.7	\$2,431.6	77.90%	16	53	19
1997	\$5,925.5	\$3,825.5	64.60%	15	60	20
1998	\$3,029.2	\$1,768.2	58.40%	12	41	17
1999	\$5,656.6	\$3,456.9	61.10%	10	45	11
2000	\$6,576.2	\$5,704.8	86.70%	10	43	16
2001	\$7,017.3	\$5,460.9	77.80%	11	34	13
2002	\$7,406.2	\$6,094.8	82.30%	12	41	17
2003	\$7,293.1	\$9,110.4	124.90%	11	32	13
2004	\$4,927.5	\$4,329.7	87.90%	14	40	18
2005	\$2,259.9	\$1,464.1	64.79%	8	25	18
2006	\$4,832.5	\$3,425.4	70.88%	12	44	20
TOTAL	\$84,301.0	\$60,008.0	71.18%	42	582	42
Offset Transactions						
Year	Actual Value	Credit Value	Multiplier*	Offset Fulfillers	Transactions	Countries
1993	\$1,897.9	\$2,213.6	1.166	43	444	27
1994	\$1,934.9	\$2,206.1	1.14	38	566	26
1995	\$2,890.5	\$3,592.6	1.243	57	711	26
1996	\$2,875.8	\$3,098.0	1.077	54	634	26
1997	\$2,720.6	\$3,272.3	1.203	51	578	26
1998	\$2,312.2	\$2,623.2	1.135	50	582	29
1999	\$2,059.7	\$2,808.3	1.363	41	513	25
2000	\$2,208.2	\$2,846.4	1.289	40	627	24
2001	\$2,555.8	\$3,274.4	1.281	53	617	25
2002	\$2,616.0	\$3,284.5	1.256	50	729	26
2003	\$3,565.5	\$4,010.7	1.125	56	689	31
2004	\$4,933.1	\$5,364.3	1.087	62	706	33
2005	\$4,709.6	\$5,426.6	1.152	61	611	30
2006	\$4,688.0	\$4,888.5	1.043	63	653	29
TOTAL	\$41,967.7	\$48,909.6	1.165	308	8,660	45

Source: BIS Offsets Database.

Note: Due to rounding, totals may not add up exactly.

*Multipliers are used in a small percentage of the total number of transactions. See Chapter Five for further discussion.

2-2 Types of Offset Transactions

Table 2-2 presents offset transaction data by offset type (direct, indirect, or unspecified) and the percent distribution for each year from 1993 to 2006. Table 2-2 also shows the total actual and credit values of the transactions for each year. The actual value of offset transactions completed during 2006 was \$4.7 billion, the third highest level recorded (after 2004 and 2005) in the 1993-2006 period. This is due to the high level of export sales and related offset agreements since 2000. Transactions lag a few years behind the associated offset agreements.

In 2006, the percentage of the actual value of offset transactions attributed to indirect offset transactions rose to 63.6 percent compared to 61.8 percent in 2005. Indirect offsets had decreased to 46.6 percent in 2004, the second lowest level in the 14-year period. Direct transactions correspondingly decreased from 53.4 percent of all offset transactions completed in 2004, to 38 percent in 2005, and then to 36 percent in 2006. 1998 had the highest percentage with 63.6 percent of offset transactions being direct and 2004 recorded the second highest percentage for transactions classified as direct (53.4 percent). Percentages recorded in 2006 align more closely with those recorded from 1999-2003 than those recorded in 2004. For the 14-year period, 59.7 percent were indirect (up from 59.5 percent in 1993-2005), and 39.6 percent of offset transactions by value were direct (down from 39.8 percent for 1993-2005).

The multiplier, also shown in Table 2-2, is the percentage difference between the actual value of offset transactions and the credit value.¹⁵ The multiplier means that during the 14-year period the total credit value of offset transactions is 16.5 percent more than the actual value; this is a slight decrease from the 18.1 percent recorded in the 1993-2005 period. In 2005, the multiplier rose to 1.153, reversing the steady drop witnessed since the 1999 level of 1.363. However, in 2006, the multiplier fell again to 1.043, the lowest multiplier level in the 14-year period. The great majority of offset transactions neither include multipliers nor have multipliers that provide a credit value less than the actual value of the transaction. Offset transaction data and multipliers are more fully discussed in Chapter Five.

¹⁵ The credit value is sometimes more than the actual value assigned to transactions; as some foreign governments give greater credit as an incentive for certain kinds of offset transactions.

Table 2-2: Offset Transactions by Type, 1993-2006 (\$ millions)								
Year	Total	Direct	Indirect	Unsp.	Dir.	Ind.	Unsp.	
Actual Value				% Distribution				
1993	\$1,897.90	\$583.60	\$1,250.50	\$63.90	30.70%	65.90%	3.40%	
1994	\$1,934.90	\$599.80	\$1,230.80	\$104.30	31.00%	63.60%	5.40%	
1995	\$2,890.50	\$1,108.80	\$1,756.80	\$24.90	38.40%	60.80%	0.90%	
1996	\$2,875.80	\$1,248.80	\$1,625.60	\$1.40	43.40%	56.50%	0.00%	
1997	\$2,720.60	\$1,041.70	\$1,657.50	\$21.40	38.30%	60.90%	0.80%	
1998	\$2,312.20	\$1,469.70	\$842.40	\$0.10	63.60%	36.40%	0.00%	
1999	\$2,059.70	\$685.20	\$1,363.10	\$11.40	33.30%	66.20%	0.60%	
2000	\$2,208.20	\$785.60	\$1,411.90	\$10.60	35.60%	63.90%	0.50%	
2001	\$2,555.80	\$940.90	\$1,614.90	NR	36.80%	63.20%	NR	
2002	\$2,616.00	\$941.80	\$1,673.00	\$1.30	36.00%	63.90%	0.10%	
2003	\$3,565.50	\$1,113.00	\$2,447.00	\$5.60	31.20%	68.60%	0.20%	
2004	\$4,933.10	\$2,635.20	\$2,297.40	\$0.50	53.40%	46.60%	0.00%	
2005	\$4,709.56	\$1,797.48	\$2,912.09	NR	38.17%	61.83%	0.00%	
2006	\$4,688.00	\$1,688.92	\$2,980.74	\$18.30	36.03%	63.58%	0.39%	
Total	\$41,967.70	\$16,635.42	\$25,068.53	\$263.71	39.64%	59.73%	0.63%	
Credit Value				% Distribution				
1993	\$2,213.60	\$684.30	\$1,460.60	\$68.70	30.90%	66.00%	3.10%	
1994	\$2,206.10	\$774.10	\$1,323.20	\$108.80	35.10%	60.00%	4.90%	
1995	\$3,592.60	\$1,302.60	\$2,250.70	\$39.30	36.30%	62.60%	1.10%	
1996	\$3,098.00	\$1,182.00	\$1,880.00	\$36.00	38.20%	60.70%	1.20%	
1997	\$3,272.30	\$1,183.50	\$2,039.10	\$49.70	36.20%	62.30%	1.50%	
1998	\$2,623.20	\$1,629.40	\$991.30	\$2.50	62.10%	37.80%	0.10%	
1999	\$2,808.30	\$1,119.40	\$1,618.70	\$70.30	39.90%	57.60%	2.50%	
2000	\$2,846.40	\$1,146.40	\$1,689.50	\$10.60	40.30%	59.40%	0.40%	
2001	\$3,274.40	\$1,292.30	\$1,982.10	NR	39.50%	60.50%	NR	
2002	\$3,284.50	\$1,111.20	\$2,171.90	\$1.30	33.80%	66.10%	0.00%	
2003	\$4,010.70	\$1,215.50	\$2,783.20	\$12.00	30.30%	69.40%	0.30%	
2004	\$5,364.30	\$2,764.30	\$2,599.50	\$0.50	51.50%	48.50%	0.00%	
2005	\$5,426.61	\$1,870.89	\$3,555.72	NR	34.48%	65.52%	0.00%	
2006	\$4,888.50	\$1,634.95	\$3,239.78	\$13.80	33.44%	66.27%	0.28%	
Total	\$48,909.64	\$18,905.91	\$29,590.13	\$413.60	38.65%	60.50%	0.85%	
Multiplier*				# of Transactions				
Year	Total	Direct	Indirect	Unsp.	Total	Direct	Indirect	Unsp.
1993	1.166	1.173	1.168	1.076	444	132	308	4
1994	1.140	1.291	1.075	1.043	566	157	404	5
1995	1.243	1.175	1.281	1.579	711	204	505	2
1996	1.077	0.947	1.156	25.71	634	228	404	2
1997	1.203	1.136	1.23	2.326	578	202	372	4
1998	1.135	1.109	1.177	19.54	582	241	340	1
1999	1.363	1.634	1.187	6.152	513	203	305	5
2000	1.289	1.459	1.197	1	627	216	409	2
2001	1.281	1.374	1.227	NR	617	224	393	NR
2002	1.256	1.180	1.298	1	729	194	534	1
2003	1.125	1.092	1.137	2.151	689	179	506	4
2004	1.087	1.049	1.131	1	706	375	330	1
2005	1.153	1.041	1.221	1	611	206	405	NR
2006	1.043	0.968	1.087	0.754	653	295	356	2
Total	1.165	1.136	1.180	1.568	8,660	3,056	5,571	33

Source: BIS Offsets Database

Note: Due to rounding, totals may not add up exactly.

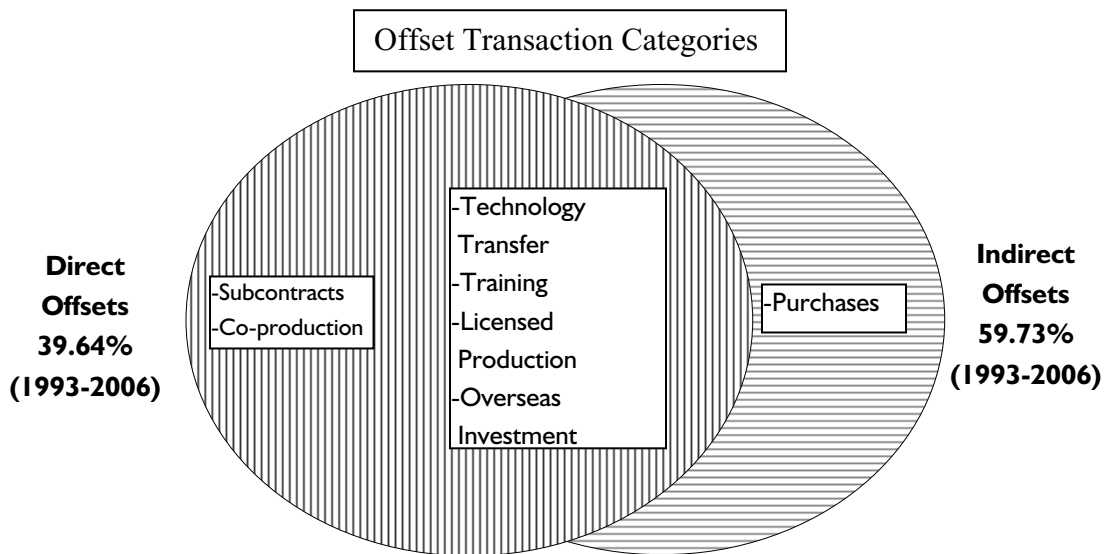
Unsp. = Unspecified Direct or Indirect

NR = None Reported

* Multipliers are used only in a small percentage of the total number of transactions (see Chapter Five for further discussion).

2-3 Offset Transaction Categories

In addition to classifying offset transactions by type (direct or indirect), offset transactions are identified by various categories, which more specifically describe the nature of the arrangement or exchange. These categories include Purchases, Subcontracts, Technology Transfers, Credit Assistance, Training, Overseas Investment, Co-production, Licensed Production, and Miscellaneous. The diagram below shows that each category is considered direct, indirect, or could be either one (e.g., Technology Transfer and Training). Definitions for the categories begin below; Appendix G contains additional relevant offset definitions as well as illustrative examples.¹⁶



Source: BIS Offsets Database

Purchases result in overseas production of goods or services usually for export to the United States. Purchases are always classified as indirect offsets to distinguish them from subcontracts, because the purchases are of items unrelated to the exported defense system. The U.S. exporter may make the purchase, or they can also use brokering and marketing assistance services that result in purchases by a third party. For 1993-2006, Purchases represented 38.2 percent of the actual value of all offset transactions, more than any other category. Purchases made up 64 percent of the value of indirect offsets.

¹⁶ With respect to any export of product or technology from the United States, U.S. export control laws apply. Whether or not the export is associated with an offset agreement, U.S. exporters must comply with U.S. export control requirements, which include licensing requirements. License applications are carefully reviewed by the appropriate U.S. Government agencies to insure that the product or technology is permitted to be exported under U.S. laws and regulations. Where no license is required, U.S. exporters must comply with end-use and end-user restrictions.

Aerospace-related offset transactions made up over 55.2 percent of the value of Purchases during 1993-2006.

Subcontracts result in overseas production of goods or services for use in the production or operation of a U.S. exported defense system subject to an offset agreement. Subcontracts are always classified as direct offsets. During 1993-2006, Subcontracts made up 22.2 percent of the actual value of all offset transactions, and over 56 percent of the value of all direct offsets. Over 78.1 percent of the value of Subcontracts was aerospace-related.

Technology Transfer includes research and development conducted abroad, exchange programs for personnel, data exchanges, integration of machinery and equipment into a recipient's production facility, technical assistance, education and training, manufacturing know-how, and licensing and patent sharing. Technology Transfer is normally accomplished under a commercial arrangement between the U.S. prime contractor and a foreign company. A major subcontractor may also accomplish the Technology Transfer on behalf of the U.S. prime contractor. From 1993-2006, Technology Transfers represented 16.5 percent of the actual value of all offset transactions, more than any other category. Technology Transfers made up 15.2 percent of the value of indirect offsets and 17.7 percent of all direct transfers. Aerospace-related offset transactions made up 57.1 percent of the value of Technology Transfer reported during 1993-2006.

Co-production is overseas production based upon a government-to-government agreement that permits a foreign government or producer to acquire the technical information to manufacture all or part of a U.S.-origin defense system. Co-production is always classified as a direct offset. It includes government-to-government licensed production, but excludes licensed production based upon direct commercial arrangements by U.S. manufacturers. During 1993-2006, 78.8 percent of the value of Co-production reported was aerospace-related.

Co-production accounted for 6.7 percent of the value of offset transactions for 1993-2006, a marginal increase from 6.6 percent in 2005. Past Co-production transactions have involved constructing major production facilities in foreign countries (primarily at the expense of the foreign government) for the assembly of entire defense systems, such as aircraft, missiles, or ground systems. Co-production arrangements of this kind generally impose a high cost on the foreign government, including upfront construction and tooling costs and increased unit costs for limited production runs. Some countries

negotiate with prime contractors for production or assembly contracts related to future sales to third countries of the defense systems or system components.

Credit Assistance includes direct loans, brokered loans, loan guarantees, assistance in achieving favorable payment terms, credit extensions, and lower interest rates. Credit Assistance transactions accounted for 4.6 percent of the actual value of all transactions for 1993-2006. Credit Assistance is nearly always classified as an indirect offset transaction but can be either direct or indirect. Indirect transactions made up 89.5 percent of the actual value of Credit Assistance for the period.

Overseas Investment includes capital invested to establish or expand a subsidiary or joint venture in the foreign country as well as investments in third-party facilities; the latter received the highest multipliers. Overseas Investments accounted for 2.8 percent of the actual value of all offset transactions during the period of 1993-2006; 66 percent of the value of Overseas Investment transactions was classified as indirect and 27.4 percent as direct.

Training transactions relate to the production, maintenance, or actual use of the exported defense systems or a component thereof. Training transactions, which can be either direct or indirect, may be required in areas such as computers, foreign language skills, engineering capabilities, or management. Training accounted for 2.1 percent of the total value of offset transactions during 1993-2006. During the reporting period, direct offset transactions made up 54.2 percent of the value of training transactions; 45.6 percent was indirect, and 0.2 percent was unspecified.

Licensed Production is overseas production of a U.S.-origin defense article. Licensed Production differs from Co-production in that it is based on commercial arrangements between a U.S. manufacturer and a foreign entity as opposed to a U.S. manufacturer-to-foreign government agreement. In addition, Licensed Production virtually always involves a part or component for a defense system, rather than a complete defense system. These transactions can be either direct or indirect. Licensed Production is the smallest among the offset categories, accounting for only 0.8 percent of the total value of offset transactions; 44.4 percent of the Licensed Production transactions (by actual value) were directly related to the defense systems sold.

Table 2-3 presents a summary of offset transactions by category and type for the 14-year reporting period (1993-2006).

Table 2-3: Offset Transactions by Category and Type, 1993-2006

Transaction Category	Actual Values in \$ millions				Percent by Column Total			
	Total	Dir.	Ind.	Unsp.	Total	Dir.	Ind.	Unsp.
Purchase	\$16,034.3		\$16,034.3		38.2%		64.0%	
Subcontract	\$9,327.0	\$9,327.0			22.2%	56.1%		
Technology Transfer	\$6,920.6	\$2,947.3	\$3,822.7	\$132.2	16.5%	17.7%	15.2%	53.9%
Miscellaneous	\$2,526.3	\$382.1	\$2,134.4	\$9.8	6.0%	2.3%	8.5%	4.0%
Coproduction	\$2,815.1	\$2,815.1			6.7%	16.9%	0.0%	
Credit Transfer	\$1,931.8	\$202.7	\$1,729.5		4.6%	1.2%	6.9%	
Overseas Investment	\$1,160.6	\$317.5	\$765.7	\$77.5	2.8%	1.9%	3.1%	31.6%
Training	\$900.9	\$488.3	\$410.7	\$1.9	2.1%	2.9%	1.6%	0.8%
Licensed Production	\$351.1	\$155.9	\$171.2	\$24.0	0.8%	0.9%	0.7%	9.8%
Total	\$41,967.7	\$16,635.8	\$25,068.5	\$245.4	100.0%	100.0%	100.0%	100.0%
Transaction Category	Credit Values in \$ millions				Percent by Column Total			
	Total	Dir.	Ind.	Unsp.	Total	Dir.	Ind.	Unsp.
Purchase	\$17,823.2		\$17,823.2		36.4%	0.0%	60.2%	0.0%
Subcontract	\$10,248.4	\$10,248.4			21.0%	54.2%		
Technology Transfer	\$8,031.9	\$3,123.3	\$4,740.2	\$168.4	16.4%	16.5%	16.0%	40.7%
Miscellaneous	\$3,623.5	\$903.0	\$2,648.1	\$72.4	7.4%	4.8%	8.9%	17.5%
Coproduction	\$2,828.5	\$2,828.5			5.8%	15.0%		
Credit Transfer	\$2,145.4	\$271.5	\$1,873.9		4.4%	1.4%	6.3%	
Overseas Investment	\$2,230.0	\$603.1	\$1,498.7	\$128.2	4.6%	3.2%	5.1%	31.0%
Training	\$1,434.4	\$755.3	\$665.7	\$12.4	2.9%	4.0%	2.2%	3.0%
Licensed Production	\$544.3	\$172.8	\$340.3	\$32.2	1.1%	0.9%	1.1%	7.8%
Total	\$48,909.6	\$18,905.9	\$29,590.1	\$413.6	100.0%	100.0%	100.0%	100.0%
Transaction Category	Multiplier*				# of Transactions			
	Total	Dir.	Ind.	Unsp.	Total	Dir.	Ind.	Unsp.
Purchase	1.112		1.112		4,120	0	4,120	0
Subcontract	1.099	1.099			1,970	1,970	0	0
Technology Transfer	1.161	1.060	1.240	1.273	996	415	565	16
Miscellaneous	1.434	2.363	1.241	7.384	551	107	439	5
Coproduction	1.005	1.005			408	408	0	0
Credit Transfer	1.111	1.340	1.083		147	12	135	0
Overseas Investment	1.921	1.900	1.957	1.655	149	29	115	5
Training	1.592	1.547	1.621	6.640	277	133	139	5
Licensed Production	1.550	1.109	1.987	1.341	42	29	11	2
Total	1.165	1.136	1.180	1.685	8,660	3,103	5,524	33

Source: BIS Offsets Database

Note: Due to rounding, totals may not add up exactly.

*Multipliers are used in a small percentage of the total number of transactions. See Chapter five for further discussion.

2-4 Industry Classification – SIC Codes

Table 2-4 shows the offset transactions classified by major industrial sector for the 14-year period, 1993-2006. Each industry sector is defined using the Standard Industrial Classification (SIC) system.¹⁷ Forty-four SIC categories are listed, which represent a wide cross section of the U.S. industrial base.

Five SIC categories account for 80.4 percent of the total value of all transactions reported to date. Of the various sectors, Transportation Equipment (SIC 37) accounted for more than half – 53.2 percent of the actual value of all offset transactions completed during the 14-year period. Transportation Equipment made up 58.8 percent of the value of direct offset transactions, 49.2 percent of the value of indirect offset transactions, and 81.1 percent of the value of unspecified offset transactions. Transactions in this sector were composed mostly of aerospace products, including aircraft parts and components, engines and parts, hydraulic subsystems, and guided missiles and components.

Other major industry groups include Electronic/Electrical Equipment (SIC 36) with 12.9 percent of the actual value of all transactions. SIC 36 includes products such as radar, communications equipment, and electronic components, as well as completed avionics equipment and material inputs for avionics such as circuit boards.

Technical Services & Consulting (SIC 87) made up 5.5 percent of the value of all transactions. Industrial Machinery (SIC 35) accounted for 4.5 percent and Measuring and Analyzing Instruments (SIC 38) accounted for 4.3 percent of the actual value of transactions.

¹⁷ SIC codes are used because conversion to the North American Industry Classification System (NAICS) has not been fully implemented.

Table 2-4: Offset Transactions by Major Industrial Sector and Offset Type, 1993-2006 (in \$ millions)

2-Digit SIC Code and Description		Total	Direct	Indirect	Unsp.	Total	Direct	Indirect	Unsp.
7	Agriculture	\$53.6		\$53.6		0.1%		0.2%	
9	Fishing, Hunting, and Preserves	\$7.9		\$7.9		0.0%		0.0%	
10	Metal Mining	\$3.2		\$3.2		0.0%		0.0%	
13	Crude Petrol. & Natl. Gas	\$51.3		\$51.3		0.1%		0.2%	
15	Building Construction	\$35.9	\$20.8	\$15.1		0.1%	0.1%	0.1%	
16	Heavy Construction	\$1.5	\$1.2	\$0.3		0.0%	0.0%	0.0%	
17	Construction - Spec. Trades	\$21.2	\$1.0	\$20.2		0.1%	0.0%	0.1%	
20	Food And Kindred Products	\$15.5		\$15.5		0.0%		0.1%	
22	Textile Mill Products	\$6.4		\$6.4		0.0%		0.0%	
23	Apparel & Other Fin Prods	\$3.8		\$3.8		0.0%		0.0%	
24	Lumber & Wood Products	\$0.3		\$0.3		0.0%		0.0%	
25	Furniture And Fixtures	\$0.3		\$0.3		0.0%		0.0%	
26	Paper Mills & Allied Prod	\$26.9	\$0.9	\$26.1		0.1%	0.0%	0.1%	
27	Printing & Publishing	\$76.9	\$23.9	\$53.0		0.2%	0.1%	0.2%	
28	Chemicals & Allied Prod	\$449.6	\$20.3	\$429.3		1.1%	0.1%	1.7%	
29	Petroleum Refining	\$3.2		\$3.2		0.0%		0.0%	
30	Rubber & Misc Plast Prod	\$8.0	\$1.2	\$6.8		0.0%	0.0%	0.0%	
32	Cut Stone & Stone Prod	\$13.4		\$13.4		0.0%		0.1%	
33	Primary Metal Industries	\$270.8	\$12.9	\$257.9		0.6%	0.1%	1.0%	
34	Fabricated Metal Products	\$1,275.3	\$769.4	\$505.9		3.0%	4.6%	2.0%	
35	Indl Machinery, Exc Elec	\$1,877.4	\$289.3	\$1,587.6	\$0.5	4.5%	1.7%	6.3%	0.2%
36	Electronic/Electrical Equip	\$5,428.6	\$2,301.2	\$3,110.9	\$16.5	12.9%	13.8%	12.4%	6.3%
37	Transportation Equipment	\$22,338.8	\$9,786.1	\$12,338.9	\$213.8	53.2%	58.8%	49.2%	81.1%
38	Measuring & Analyzing Inst	\$1,814.9	\$839.8	\$975.2		4.3%	5.0%	3.9%	
39	Misc Manuf Industries	\$18.3	\$0.6	\$17.6		0.0%	0.0%	0.1%	
42	Motor Frt & Warehousing	\$2.8		\$2.8		0.0%		0.0%	
44	Water Transportation	\$60.6		\$60.6		0.1%		0.2%	
45	Transportation By Air	\$71.7	\$54.7	\$17.0		0.2%	0.3%	0.1%	
47	Transportation Services	\$3.5	0.0	\$3.4		0.0%	0.0%	0.0%	
48	Communications	\$217.3	\$110.2	\$107.1		0.5%	0.7%	0.4%	
49	Electric, Gas, & San Serv	\$3.8		\$3.8		0.0%		0.0%	
61	Non-Depos Credit Inst	\$820.4	\$17.1	\$803.3		2.0%	0.1%	3.2%	
62	Security & Comm Brokers	\$1,32.4	\$2.1	\$130.3		0.3%	0.0%	0.5%	
67	Holding & Other Invest Off	\$820.8	\$229.6	\$567.6	\$23.6	2.0%	1.4%	2.3%	8.9%
70	Hotels & Other Lodging	\$1.3	\$0.9	\$0.4		0.0%		0.0%	
73	Business Services	\$1,455.2	\$350.3	\$1,097.1	\$7.7	3.5%	2.1%	4.4%	2.9%
76	Misc Repair Shops	\$29.5	\$17.9	\$11.7		0.1%	0.1%	0.0%	
80	Health Services	\$0.0		\$0.0		0.0%		0.0%	
81	Legal Services	\$0.1		\$0.1		0.0%		0.0%	
82	Educational Services	\$884.3	\$305.5	\$578.8		2.1%	1.8%	2.3%	
87	Technical Servs & Cons	\$2,325.7	\$838.5	\$1,485.5	\$1.7	5.5%	5.0%	5.9%	0.6%
89	Misc. Services	\$124.7	\$39.6	\$85.1		0.3%	0.2%	0.3%	
96	Admin of Econ Programs	\$12.0		\$12.0		0.0%		0.0%	
97	Nat Security and Int'l Affairs	\$15.5	\$1.1	\$14.4		0.0%	0.0%	0.1%	
99	Undetermined	\$1,183.1	\$599.1	\$583.9		2.8%	3.6%	2.3%	
	Total	\$41,967.7	\$16,635.4	\$25,068.5	\$263.7	100.0%	100.0%	100.0%	100.0%

Source: BIS Offsets Database.

Unsp.=Unspecified Direct or Indirect

Note: In some cases, the amounts were too small to show in \$ millions

2-5 Countries and Groups

Table 2-5 shows various countries' offset requirements as a percentage of the underlying contract value, calculated from the data reported by U.S prime contractors as well as the offset percentages required by each country's current official offset policy.

In Table 2-5, the numbers depicted in 'Offset Percents' is an average percentage derived from the BIS Offsets Database for the period covering 1993 to 2006, which is calculated by dividing the offset value by the export value. These 14-year average percentages tend to be lower than the official offset policy percentage. Offset demands have fluctuated over time, so the 14-year average percentage lags behind the actual current offset percentage required by the foreign government.

Overall, the data indicate that regional offset percentages are greater in Europe and North and South America, with demands of 98.4 percent and 97 percent respectively, than in the Middle East and Africa which have 44.0 percent and Asia-Pacific with 39.1 percent.

Table 2-5: Offset Percentages by Country and Groups, 1993-2006			
EUROPE		NORTH AND SOUTH AMERICA	
Country, Groups	% Offsets	Country	% Offsets
Austria	172.2%	Brazil	W
Belgium	80.1%	Canada	97.0%
Bulgaria	100.0%	Chile	W
Czech Republic	20.0%	Region Total	97.0%
EPG	100.0%		
Denmark	27.8%	MIDDLE EAST AND AFRICA	
Finland	100.0%	Country	% Offsets
France	84.6%	Egypt	N/R
Germany	100.0%	Israel	48.3%
Greece	114.2%	Kuwait	32.7%
Hungary	100.0%	Saudi Arabia	W
Italy	93.8%	South Africa	116.0%
Lithuania	100.0%	Turkey	46.6%
NATO	55.8%	UAE	57.8%
The Netherlands	117.3%	Region Total	44.0%
Norway	101.8%		
Poland	167.7%	ASIA-PACIFIC	
Portugal	48.3%	Country	% Offsets
Romania	87.1%	Australia	45.8%
Slovakia	89.0%	Indonesia	N/R
Slovenia	58.6%	Malaysia	37.3%
Spain	89.2%	New Zealand	W
Sweden	103.9%	Philippines	100.0%
Switzerland	78.9%	Singapore	W
United Kingdom	82.0%	Republic of Korea	58.5%
Region Total	98.4%	Taiwan*	22.0%
		Thailand	26.6%
		Region Total	39.1%

Source: BIS Offsets Database

N/A=Not Applicable

N/R=None Reported

W=Withheld to protect company-proprietary information

* For the purposes of this report, when "country" is mentioned and Taiwan is included in the discussion, "country" refers to both countries and economies.

3 Impact of Offsets on the U.S. Defense Industrial Base

The Defense Production Act of 1950, as amended, requires that the U.S. Department of Commerce determine the impact of offsets on defense preparedness, industrial competitiveness, employment, and trade of the United States. This chapter discusses the impact of offsets on defense preparedness and employment.

3-1 Defense Preparedness

The revenue generated by export sales, and the exports themselves, are important to U.S. defense prime contractors and to U.S. foreign policy and economic interests. Exports of major defense systems help defray high overhead costs for the U.S. producer and help maintain production facilities and workforce expertise for current and future U.S. defense needs. The production capabilities and workforce are also available in case they are needed to respond to a national emergency. Exports also provide additional business to many U.S. subcontractors and lower-tier suppliers, promote interoperability of weapon systems between the United States and allied countries, and contribute positively to U.S. international trade account balances.

However, when an offset package requires a high proportion of Subcontracting, Co-production, Licensed Production, or Purchases, it can negate many of the economic and industrial base benefits accrued through the export sale. U.S. defense subcontractors and suppliers, and in some cases portions of the prime contractor's business, are displaced by exports that include Subcontract, Co-production, or Licensed Production offsets. Purchases, which are indirect offsets, can displace sales from the commercial manufacturing sectors of the U.S. economy.

Previous studies and discussions indicate that U.S. prime contractors sometimes develop long-term supplier relationships with overseas subcontractors based on short-term offset requirements.¹⁸ These new relationships, combined with mandatory offset requirements and obligations, can endanger future business opportunities for U.S. subcontractors and suppliers, with possible negative consequences for the domestic industrial base. Other kinds of offsets can increase research and development spending and capital investment

¹⁸ See GAO report on offset activities, "Defense Trade: U.S. Contractors Employ Diverse Activities to Meet Offset Obligations," December 1998 (GAO/NSIAD-99-35), pp. 4-5.

in foreign countries for defense or non-defense industries. Such offsets can also help create or enhance current and future competitors for U.S. subcontractors and suppliers, and in some cases prime contractors.

3-2 Employment

Given the variety of defense weapon systems sold, the number of offset transactions carried out, and the limited data available, it is difficult to determine precisely the impact of offset agreements and transactions on employment in the U.S. defense sector. BIS has developed an estimate by using a four-year average of aerospace-related employment and value added data collected by the U.S. Department of Commerce's Bureau of the Census for the 2002-2005 period.¹⁹ Since sales of aerospace weapon systems accounted for an average of 83.8 percent of the value of defense exports connected with offset agreements during 2002-2005, this method provides a reliable estimate. This method takes into account work-years maintained because of the export sales as well as the work-years lost through certain kinds of offset transactions carried out in fulfillment of offset agreements.

In the 2002-2005 period, U.S. prime contractors reported a cumulative \$21.9 billion in defense export contracts that included offset agreements, equating to an annual average of nearly \$5.5 billion in defense export contracts that included offset agreements. According to the Census Bureau's *Annual Survey of Manufactures*, the average annual value added per employee for the aerospace product and parts manufacturing industry during 2002-2005 was \$168,833.²⁰ Dividing value added per employee into the 2002-2005 annual average defense export sales total results in an average annual total of 32,408 work-years that were maintained by defense exports associated with offset agreements during the 2002-2005 period.

For 2002-2005, the average annual of \$5.5 billion in defense export contracts had a related average annual of \$5.3 billion in offset commitments (offset obligations). The

¹⁹The 2005 data are the most recent available from the Census Bureau. BIS's offset database uses SIC codes to define industries; in preparing its value added estimates, the Census Bureau uses the North American Industrial Classification System (NAICS). The SIC definition of the aerospace industry differs slightly from the NAICS definition, but the results are not significantly altered. Please also note that previous reports used a five-year average; this year's report uses a four-year average because the current data released by Census included the four-year time period 2002-2005.

²⁰ This calculation is based on Census Bureau figures for value added and employment data for NAICS 3364, aerospace product and part production.

average contract term for the fulfillment of related offset obligations for defense export contracts during the 2002-2005 time period was 76.8 months. The average actual value of fulfilled offsets (offset transactions) was \$4.0 billion per year between 2002 and 2005. In order to more accurately assess the impact of offset transactions on work-years, BIS compared the export contract to the prime contractor's offset obligation, as contractually committed to at the time of the sale.

The data indicate that Subcontracting, Purchasing, Co-production, and Licensing offset transactions are most likely to provide production and sales opportunities to overseas firms. Other categories of offset transactions (Technology Transfer, Training, Overseas Investment, and Marketing), in the short or long run, can shift sales from U.S. suppliers as well; however, their impact is more difficult to calculate. Therefore, BIS bases its estimate of employment impacts only on Subcontracting, Purchasing, Co-production, and Licensing offset transactions.

These conservative calculations are based on the assumption that the offset obligations entered into during 2002-2005 are comprised of nearly the same proportion of offset transaction categories as past offset obligations. Those categories that can be most directly related to employment – Subcontracting, Purchasing, Co-production, and Licensing – accounted for an average of \$2.8 billion, which equates to 69.7 percent of the \$4.0 billion total value of offset transactions during the 2002-2005 time period. Applying the same value added per employee figure used above (\$168,833) leads to the loss of 16,323 work-years annually associated with the offset transactions completed in the period 2002-2005.

Based on these calculations, it appears that 2002-2005 defense export sales averaging \$5.5 billion annually had a net positive effect on employment in the defense sector during the four-year period (an annual average of 16,805 work years).²¹ This equates to a gain of 482 work years due to defense export sales over the 2002-2005 time period. It should be noted that the 2002-2005 analysis does not include the potential impacts of an additional \$948 million annually of Technology Transfer, Training, and Overseas Investment offset transactions. This \$948.0 million equates to nearly 24.0 percent of the \$4.0 billion in average annual offset transactions.²²

²¹ These calculations are based on the supposition that this value represents 100 percent U.S. content in all exports, which is not necessarily an accurate assumption.

²² The category for "Credit assistance" for offset transactions accounted for approximately 1.8 percent of the actual value of annual offset transactions in the 2002-2005 time period. The category "Miscellaneous"

3-3 Domestic Defense Productive Capability

Section 309(b)(1) of the DPA requires identification of the cumulative effects of offset agreements on “the full range of domestic defense productive capability with special attention paid to the firms serving as lower tier subcontractors or suppliers” and “the domestic defense technology base as a consequence of the technology transfers associated with such offset agreements.”

To address the effects of offsets on defense productive capability, this analysis compares 2005 offset transactions involving Transportation Equipment Manufacturing (SIC 37, NAICS 336) with the 2005 value added data from industry as reported in the Census Bureau’s 2005 *Annual Survey of Manufactures*. See *Table 3-1*. According to the Census Bureau, 19.1 percent of the total value of SIC 37/NAICS 336 shipments are aerospace-related shipments (NAICS 3364). The remainder of SIC 37/NAICS 336 includes motor vehicles and motorcycles, shipbuilding and repair, guided missiles and space vehicles, and railroad equipment.²³

Offset transactions in SIC 37/NAICS 336 involved a wide range of activities, from technology transfer and training to components and repair. For 1993-2005, 83.3 percent of the value of all offset transactions in SIC 37 was aerospace-related.

Comparing transactions to value added gives a more accurate picture of the lost current and future opportunities to U.S. companies caused by offset transactions. Value added in turn, is a measurement of the productive capability of an entire industry, encompassing labor productivity, efficient capital use, and full production capacity.

Table 3-1: Domestic Defense Productive Capability: Transportation Equipment Offset Transactions and Value Added, 2005	
Transactions (% of total)	\$2,468,925,336 (52.42%)
Value Added for Industry	\$254,664,714,000
Transactions as a % of Industry Value Added	0.97%

Source: BIS Offsets Database and Bureau of the Census, *Annual Survey of Manufactures*

offset transactions accounts for 3.7 percent of the actual value of offset transactions in the 2002-2005 period. Percentages do not add exactly to 100 due to rounding.

²³ See Appendix E for full listing of offset transactions by economic sector (SIC).

In 2005, the value of offset transactions in the transportation equipment industry averaged 0.97 percent of the 2005 total value added to the U.S. economy by the transportation industry. This figure represents the value added that was gained abroad instead of domestically as the result of an offset agreement. It does not, however, translate into a 0.97 percent loss in domestic defense productive capability. The U.S. defense exports associated with the transactions do directly enhance U.S. defense production.

To identify the effects of technology transfer of offsets on the domestic defense technology base, Table 3-2 compares 2005 aerospace-related offset transfers that involved technology transfer to total 2005 R&D spending for the aerospace manufacturing industry.²⁴

Table 3-2: Domestic Defense Technology Base: Technology Transfer Offsets and R&D Spending, 2005	
Aerospace-Related Technology Transfer Transactions	\$1,162,468,335
Aerospace Industry R&D Spending (Federal and Industry)	\$15,005,000,000
Technology Transfer Transactions as % of R&D Spending	7.8%

Source: BIS Offsets Database and Country Policy Research and National Science Foundation, Expenditures for U.S. Industrial R&D Continue to Increase in 2005; R&D Performance Geographically Concentrated

As seen in Table 3-2, in 2005, aerospace-related offset transactions that involved technology transfer totaled nearly \$1.2 billion. This value is equivalent to 7.8 percent of total R&D spending for the U.S. aerospace industry in 2005. This figure does not mean that domestic firms in this industry lost 7.8 percent of their R&D spending in 2005; rather, the number indicates that offset activities provided to foreign companies' technology is equivalent to 7.8 percent of 2005 domestic R&D spending in this industry.

BIS does not collect data from companies for this report regarding the specific technologies transferred as a result of offset arrangements. However, anecdotal information suggests that the cutting edge or nascent technologies under development in U.S. R&D activities may be less likely to be transferred to foreign companies in fulfillment of offset obligations than older technologies. Regardless, any transfer of export-controlled technology must be approved through the U.S. Government's normal export licensing process. The existence of an offset obligation provides no circumvention of the established licensing process for the U.S. Departments of Commerce and State to rule on applications for the transfer of sensitive technology.

²⁴ Data collected by the Aerospace Industry Association from U.S. Bureau of the Census data.

4 Offset Agreements, 1993-2006

4-1 Overview

From 1993 to 2006, 42 prime contractors reported entering into 582 offset agreements valued at \$60 billion. The agreements were signed in connection with defense weapon system exports totaling \$84.3 billion to 42 different countries. The value of the offset agreements represented 71.2 percent of the total value of the related export contracts during the entire 14-year period. The average term for completing the offset agreements with specific transactions was 81.2 months, or just less than seven years. Sales of aerospace defense systems made up 84 percent of all export contracts, totaling \$70.5 billion.

The data for defense export contracts and related offset agreements (including offset percentages) are presented in Chart 4-1. The value of the offset agreements as a percentage of the value of defense export contracts increased an average of 2.8 percentage points per year over the 14-year reporting period. In 2003, offset agreements as a percentage of export contracts (by value) reached the highest point during the 14-year period: 124.9 percent;²⁵ this ratio declined to 87.9 percent in 2004 and again in 2005 to 64.8 percent. The lowest percentage was recorded in 1993 at 34.3 percent of the value.²⁶

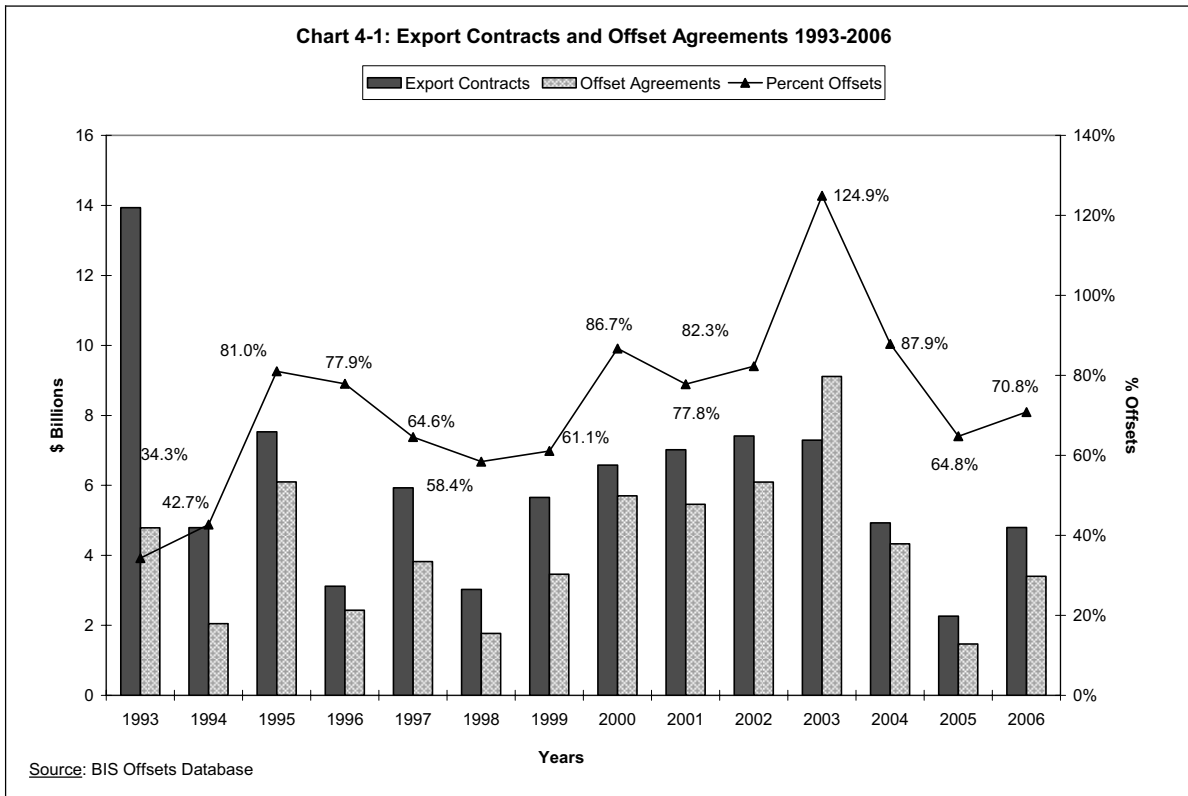
4-2 Concentration of Offset Activity

The data reported by U.S. firms confirm that a small number of companies, countries, and defense systems dominated offset agreements during 1993-2006. Five U.S. exporters constituted the majority of the agreements reported in the 14-year period and accounted for 70.2 percent of the value of defense export contracts and 73.8 percent of the value of offset agreements. This market concentration reflects industry consolidation, the high costs of developing and manufacturing defense systems, and the

²⁵ One large weapon system export in 2003 with an offset percentage of more than 170 percent skewed the data for that year. Without this export and its related offset agreement, the average offset percentage for 2003 would fall to 81.3 percent (from 124.9 percent including the sale). This export also affected the average offset percentage for the entire period. With this sale and corresponding offset, the average offset percentage for 1993-2005 is 71.2 percent; without it, the percentage is 66.5 percent.

²⁶ Much like the outlier from 2003 (above footnote), a similar occurrence took place in 1993 when two large exports with low offset percentages skewed the average offset percentage downward.

small number of firms that have the financial and productive resources to produce and export them.



Similarly, offsets and related defense system exports appear to be concentrated among a few purchaser governments. Table 4-1 lists the top 25 countries and their total export contract and offset agreement values for 1993-2006 (42 governments were reported as involved over the time period). The top five countries involved in the reported defense exports (the United Kingdom, Taiwan, South Korea, Greece and Canada) accounted for 54 percent of the value of defense export systems purchased and 52.4 percent of the value of offset agreements during 1993-2006.²⁷ The top 10 countries (the United Kingdom, Taiwan, South Korea, Greece, Canada, Israel, Saudi Arabia, Turkey, Poland, and Australia) represented 77.2 percent of defense system purchases and 74.4 percent of the offset agreements.

²⁷ For the purposes of this report, when “country” is mentioned and Taiwan is included in the discussion, “country” refers to both countries and economies.

Table 4-1: Top 25 Countries by Export Contracts, 1993-2006

Country	# of Agreements	Export Contracts	Offset Agreements
1. United Kingdom	47	\$12,812,901,286	\$10,509,292,643
2. Taiwan*	42	\$11,391,270,700	\$2,510,242,030
3. South Korea	67	\$9,215,188,892	\$5,386,723,454
4. Greece	51	\$7,464,342,343	\$8,522,872,271
5. Canada	28	\$4,627,362,694	\$4,488,332,872
6. Israel	49	\$4,356,730,606	\$2,102,176,627
7. Saudi Arabia	W	\$4,091,600,000	\$1,427,400,000
8. Turkey	20	\$3,860,043,000	\$1,837,850,000
9. Poland	3	\$3,731,600,000	\$6,259,600,000
10. Australia	17	\$3,499,462,000	\$1,603,885,000
11. Italy	9	\$2,680,257,000	\$2,515,257,000
12. Switzerland	11	\$2,557,612,040	\$2,017,612,040
13. Netherlands	48	\$2,149,566,176	\$2,522,126,176
14. Spain	26	\$1,955,992,588	\$1,743,813,004
15. Norway	31	\$1,347,751,824	\$1,372,651,824
16. NATO	W	\$989,749,000	\$552,000,000
17. Denmark	35	\$874,619,000	\$874,629,000
18. Kuwait	11	\$871,353,822	\$284,537,066
19. France	4	\$785,200,000	\$664,200,000
20. Malaysia	4	\$759,100,000	\$283,500,000
21. United Arab Emirates	9	\$733,300,000	\$424,200,000
22. Portugal	4	\$615,961,000	\$297,293,000
23. Thailand	6	\$539,729,463	\$143,696,539
24. EPG	W	\$539,500,000	\$150,200,000
25. Czech Republic	W	\$312,600,000	\$62,500,000
Total	529	\$82,762,793,434	\$58,556,590,546
All Countries	582	\$84,300,929,656	\$60,008,016,768

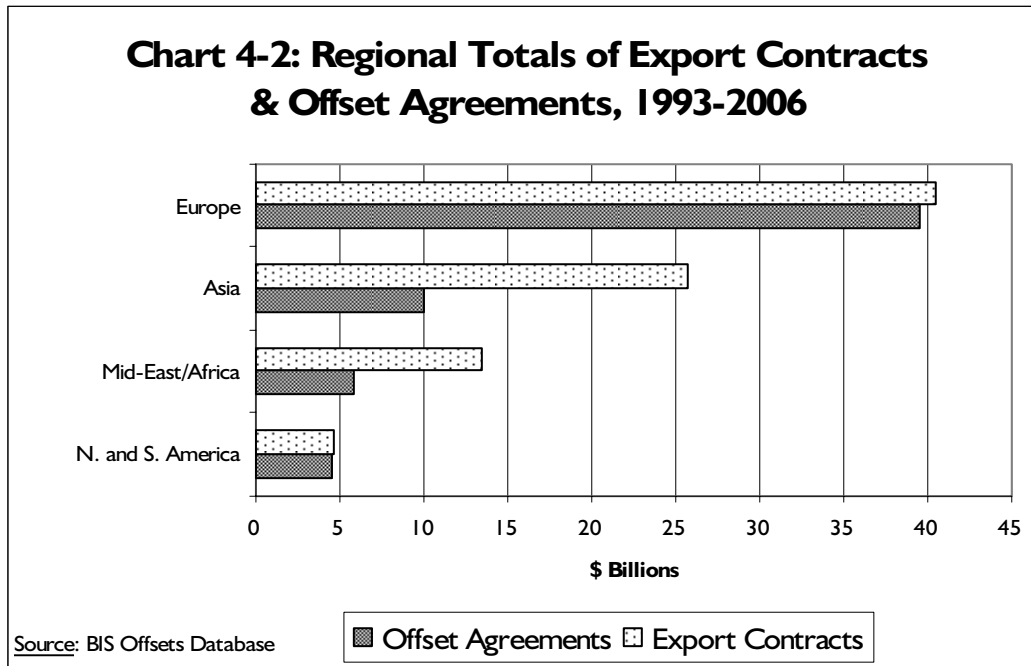
Source: BIS Offsets Database

W =Withheld

* For the purposes of this report, when "country" is mentioned and Taiwan is included in the discussion, "country" refers to both countries and economies.

4-3 Regional Distributions

Chart 4-2 shows offset agreements and export contracts by region for 1993-2006. European countries accounted for the majority of offset activity and defense system exports, accounting for 48 percent of the reported value of U.S. defense export contracts and 65.9 percent of the value of offset agreements. Asia-Pacific countries ranked second in both categories, with 30.5 percent of related U.S. export contract values and 16.7 percent of the value of offset agreements.



During 1999-2006, contracts and agreements with the Middle East and Africa increased significantly as compared with the preceding years. In 2003, 2005 and again in 2006, the Middle East/Africa's share of annual offset defense systems sales and associated agreements exceeded those of Asia-Pacific.

Countries in the Western Hemisphere have consistently had lower contract and offset values, signing only 31 contracts in the 14-year reporting period. In sum, North and South America make up 5.6 percent of defense system exports, at a value of \$4.7 billion, and 7.6 percent of the total offset agreements, at a value of \$4.5 billion from 1993-2006.

4-4 Europe Compared to the Rest of World

As discussed above, Europe alone accounted for roughly 65.9 percent of total offset agreements (by value), but less than half (48 percent) of the value of U.S. defense export contracts during the 14-year period of this report. *See Table 4-1.* During 1993-2006, U.S. firms reported entering into 313 offset agreements with European countries with a total value of \$39.5 billion. The value of these offset agreements ranged from just under \$2 million to a little more than \$6 billion in offset demands, and averaged \$103.1 million per agreement. The average offset agreement with a European country had a term of just less than 85 months. These figures show the impact of the high offset percentages typically demanded by European nations in connection with U.S. defense export sales.

Despite annual fluctuations of various degrees, the average offset percentage demanded by the 25 European countries involved in offset activity during the 14-year reporting period was 97.7 percent of the export contract values. These percentages reached a peak of 153.3 percent in 2003. In 2006, the European average offset percentage increased from 83.7 percent in 2005 to 85.5 percent, after declining to its lowest point in 10 years at 63.9 percent in 2004.²⁸

Many European governments require a minimum of 100 percent offsets on purchases of foreign defense systems. Of the 313 offset agreements with Europe during the 14-year period, 206 (65.8 percent) had offset percentages of 100 percent. Another 27 agreements specified offset percentages of more than 100 percent, including two for which the offset percentage was at least 200 percent. In sum, 74.4 percent (by number) of offset agreements with Europe featured offset percentages of 100 percent or more during the period of 1993-2006.

The 18 countries representing non-European countries shown in Table 4-2 accounted for 34.2 percent of offset agreements (by value), but more than half (52.1 percent) of the value of reported U.S. defense export contracts. U.S. prime contractors reported that they had entered into 269 offset agreements with non-European countries totaling \$20.5 billion from 1993-2006. The non-European countries' average offset requirement for

²⁸ One large weapon system export in 2003 with an offset percentage of more than 170 percent skewed the data for that year. Without this export and its related offset agreement, the average offset percentage for 2003 would fall to 81.3 percent (from 124.9 percent with the sale). This export also affected the average offset percentage for the entire period. With this sale and offset, the average offset percentage for 1993-2006 is 71.2 percent; without it, the percentage is 66.8 percent.

the 14-year reporting period was 46.7 percent of contract value. The average offset agreement for these countries was valued at \$76.4 million and had an average performance term of 76.9 months.

Only three countries, Canada, Chile and Brazil, in the Western Hemisphere group have been involved with offset arrangements with U.S. defense firms, with Canada accounting for the bulk of the offset contracts. The average offset percentage demanded by the three countries in the 14-year reporting period was 97 percent of the export contract values. This percentage reached a peak of 168.4 percent in 1998, as compared to the region's lowest offset percent of 73.6 in 1994. During 2002-2006, the offset percentage averaged 100 percent.

Out of 94 offset agreements with the Middle East and Africa during 1993-2006, 49 have been made with Israel. Offset demands of U.S. defense firms by the Middle East and Africa region ranged between 35.3 percent and 55.3 percent, with an average percentage during the 14-year period of 43.7 percent of the export contract values. The Middle Eastern and African average offset percentage increased from 43.2 percent in 2005 to 50.3 percent in 2006.

The average offset percentage demanded of U.S. defense firms from the Asia-Pacific region was 39 percent during the 14-year period. While the average Asia-Pacific offset demand ranked the lowest among the four regional groupings, they experienced the greatest annual fluctuations. These percentages reached a peak of 78.4 percent in 2002, from a low of 14 percent in 1993. The region's average offset percentage decreased from 48.9 percent in 2005 to 30.9 percent in 2006.

Table 4-2: Offset Agreements: Europe Compared to the Rest of World 1993-2006						
Year	Region	# of Agreements	Export Contracts	Offset Agreements	Percent Offsets	Avg. Duration (months)
1993	Europe	13	\$2,975,011,352	\$2,328,047,085	78.30%	85.2
	Non-Europe	15	\$10,959,987,068	\$2,456,381,450	22.40%	84.3
	World	28	\$13,934,998,420	\$4,784,428,535	34.30%	84.7
1994	Europe	20	\$1,508,233,660	\$764,829,660	50.70%	87.6
	Non-Europe	29	\$3,284,186,291	\$1,283,885,998	39.10%	71.2
	World	49	\$4,792,419,951	\$2,048,715,658	42.70%	77.9
1995	Europe	28	\$5,072,223,272	\$5,227,714,629	103.10%	103.8
	Non-Europe	19	\$2,457,697,200	\$874,868,816	35.60%	77.3
	World	47	\$7,529,920,472	\$6,102,583,445	81.00%	92.6
1996	Europe	36	\$2,001,002,040	\$2,063,592,040	103.10%	104.4
	Non-Europe	17	\$1,118,668,414	\$368,032,595	32.90%	65.9
	World	53	\$3,119,670,454	\$2,431,624,635	77.90%	92.1
1997	Europe	30	\$3,760,090,000	\$3,065,000,000	81.50%	81.3
	Non-Europe	30	\$2,165,379,255	\$760,531,633	35.10%	78.4
	World	60	\$5,925,469,255	\$3,825,531,633	64.60%	79.9
1998	Europe	20	\$1,384,538,811	\$1,183,174,983	85.50%	83.7
	Non-Europe	21	\$1,644,663,336	\$584,971,899	35.60%	83.7
	World	41	\$3,029,202,147	\$1,768,146,882	58.40%	83.7
1999	Europe	22	\$3,453,509,184	\$2,546,662,710	73.70%	72.3
	Non-Europe	23	\$2,203,110,302	\$910,226,500	41.30%	80.5
	World	45	\$5,656,619,486	\$3,456,889,210	61.10%	76.4
2000	Europe	24	\$3,892,796,045	\$4,324,000,090	111.10%	87.9
	Non-Europe	19	\$2,683,417,953	\$1,380,814,850	51.50%	66.4
	World	43	\$6,576,213,998	\$5,704,814,940	86.70%	80.4
2001	Europe	18	\$3,972,372,462	\$3,808,280,100	95.90%	82.7
	Non-Europe	16	\$3,044,924,355	\$1,652,574,355	54.30%	77.3
	World	34	\$7,017,296,817	\$5,460,854,455	77.80%	80.4
2002	Europe	23	\$2,168,281,468	\$2,045,362,683	94.30%	79
	Non-Europe	18	\$5,237,949,615	\$4,049,449,367	77.30%	92.6
	World	41	\$7,406,231,083	\$6,094,812,050	82.30%	85
2003	Europe	17	\$5,322,590,122	\$8,159,639,137	153.30%	73.9
	Non-Europe	15	\$1,970,463,350	\$950,800,350	48.30%	80.7
	World	32	\$7,293,053,472	\$9,110,439,487	124.90%	77.1
2004	Europe	22	\$898,000,000	\$574,250,000	63.90%	61.1
	Non-Europe	18	\$4,029,513,954	\$3,755,441,750	93.20%	73.1
	World	40	\$4,927,513,954	\$4,329,691,750	87.90%	66.5
2005	Europe	13	\$804,842,020	\$673,302,020	83.66%	80.2
	Non-Europe	12	\$1,455,027,544	\$790,827,544	54.35%	79.3
	World	25	\$2,259,869,564	\$1,464,129,564	64.79%	79.8
2006	Europe	27	\$3,198,670,499	\$2,734,670,499	85.49%	80.4
	Non-Europe	17	\$1,633,780,084	\$690,684,025	42.28%	64.8
	World	44	\$4,832,450,583	\$3,425,354,524	70.88%	74.4
Totals	Europe	313	\$40,412,160,935	\$39,498,525,636	97.74%	84.3
	Non-Europe	269	\$43,888,768,721	\$20,509,491,132	46.73%	77.5
	World	582	\$84,300,929,656	\$60,008,016,768	71.18%	81.2

Source: BIS Offsets database

Although the data show that Europe still accounts for the preponderance of offset agreements by value, non-European countries' offset requirement percentages are increasing. For the period of 1993-2000, the average offset requirement for non-European countries was only 32.5 percent of contract value. However, for the period of 2001-2006, the average offset requirement was 67.4 percent.

Middle Eastern countries, as well as many countries in Asia and in the Western Hemisphere, generally demand lower offset levels than European countries. Of the 269 reported offset agreements with non-European countries, 184 (68.4 percent) had offset percentages of 50 percent or less. Only 85 of the offset agreements (31.6 percent) had percentages of more than 50 percent; and 10 of these had offset requirements in excess of 100 percent.

4-5 Are Offset Demands Increasing?

The data show that offset demands are increasing over time in all regions. Chart 4-3 shows that, although historically lower than Europe on demands, offset requirements outside Europe are increasing over time. From 1993-1999, 11 percent of all non-European offset agreements during this time frame were valued at 100 percent or more of the export contract value. In comparison, during 2000-2006, 21.7 percent (25 agreements) of all non-European offset agreements were valued at 100 percent or more of the export contract value. Of 25 agreements valued at 100 percent or more, nine (36 percent) were with Canada.

Agreements entered into by the Republic of Korea and Taiwan illustrate the growing trend in non-European offset demands. From 1993 to 1999, the total average offset requirement (by value) that the Republic of Korea demanded of U.S. firms was 36.6 percent. In contrast, from 2000 to 2006, that requirement almost doubled, to 63.7 percent. From 1993 to 1999, offset percentages (by value) demanded by Taiwan of U.S. firms averaged 18.4 percent. However, Taiwan's offset requirements more than doubled in 2000-2006 to 48.7 percent.

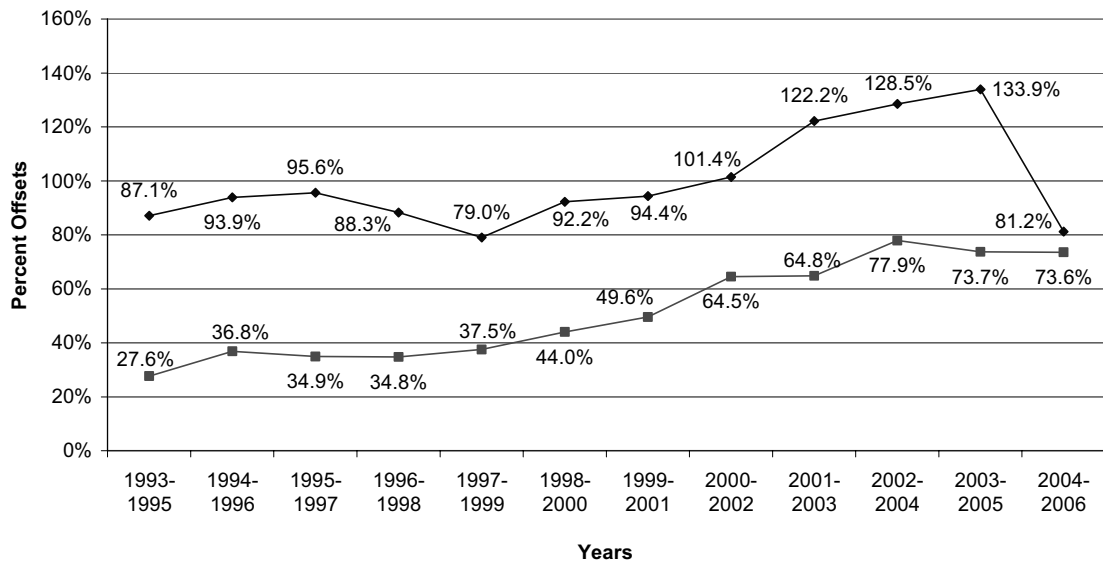
Despite the lower offset percentages reported between 2004 and 2006, European offset demands have trended upward over the 14-year period, although more slowly than offset demands from the rest of the world. From 2005-2006 there was a sizeable (52.7 percentage points or 39.3 percent) decrease in the weighted European trend in offset percentages. This was due to the sharp decrease on offset agreement values from 2004-

2006, as is depicted in Table 4-2. From 2000-2003, the offset percentages ranged from 94.3 percent (2002) to 153.3 percent (2003). However, from 2004-2006, the offset percentages fell significantly and ranged from 63.9 percent (2004) to 85.49 percent (2006).

Offset requirement trends are more representative when viewed as a moving weighted average because the average smoothes the annual fluctuations in defense system sales and related offset agreements.²⁹ The weighted world trend in offset percentages rose from 49.3 percent to 102.9 percent during the 2003-2005 period and then decreased to 76.7 percent during the weighted period of 2004-2006. From 1993-2005, European weighted offset percentages rose by 46.8 percentage points (from 87.1 percent to 133.9 percent); however, from 1993-2006, the overall trend in offset percentages decreased by 5.83 percent (see Chart 4-3). (The sharp rise does not necessarily reflect an upward trend, but rather an anomalous spike in offset agreements in 2003, skewing the 2001-2005 weighted averages.) In comparison, the rest of the world more than doubled its offset requirements, from 27.6 percent to 73.6 percent in a gradual fashion over the 14-year period.

²⁹ Here, the value of export contracts and offset agreements is totaled for each successive three-year period, beginning with 1993-1995, followed by 1994-1996, and so forth; then the offset percentage is determined. This leads to twelve three-year observations over the 14-year reporting period.

**Chart 4-3: Offset Percentages for Europe vs. Rest of the World
(Weighted Moving Average, 1993-2006)**



Source: BIS Offsets Database

—◆— Europe —■— Rest of World

5 Offset Transaction Activity, 1993-2006

In order to fulfill the terms of offset agreements, prime contractors engage in a variety of activities (called transactions) over the life of the agreement. For the purpose of analysis, offset transactions are grouped by type (i.e., direct, indirect, and unspecified), and then grouped again into the nine categories described in Chapter 2 (Purchases, Subcontracts, Technology Transfer, Credit Assistance, Training, Overseas Investment, Co-production, Licensed Production, and Miscellaneous).

5-1 Overview

From 1993 to 2006, 42 U.S. defense companies reported engaging in 8,660 offset transactions of varying value, category, and type. The activities were in fulfillment of offset agreements with 42 countries and three country groups and had a total value of \$42.0 billion. The value and percentages of offset transactions by type are reflected in Table 5-1.

Table 5-1: Offset Transactions Analysis 1993 - 2006	
Offset Transaction Comparisons	
Data Element	All Transactions
Total Value	\$41,967,650,233
Direct Offsets	\$16,635,418,323
Indirect Offsets	\$25,068,526,735
Unspecified Offsets	\$263,705,175
Percent Distribution	
Direct Offsets	39.6%
Indirect Offsets	59.7%
Unspecified Offsets	0.6%

Source: BIS Offsets Database.

In 2006, U.S. companies reported offset transactions with a total actual value of \$4.69 billion, a slight decline of 0.5 percent from the \$4.71 billion recorded in 2005. The 2006 figure was the third highest annual value reported during the 14-year period behind 2004 and 2005. The 2003-2006 elevated levels of transactions reflect the fulfillment of offset agreements signed in 1999 - 2003. During 2006, indirect offset transactions accounted for 59.7 percent of the value of offset transactions, a slight decrease from the 61.8 percent reported in 2005. Direct offset transactions accounted for 39.6 percent of the value of offset transactions in 2006.

Table 5-2 shows the countries receiving the highest value of offset transactions during 1993-2006, along with the actual and credit values and multipliers for the transactions, and the portion of transactions granted multipliers. As shown in Table 5-2, U.S. firms received a total of \$48.9 billion in credit for these transactions toward open offset obligations during the reporting period. The yearly credit value (the value of the obligations plus the multiplier) of offset transactions averaged \$3.5 billion.

For the reporting period of 1993-2006, the United Kingdom and Israel were the two largest beneficiaries of offset transactions, receiving offset transactions with *total actual* values of \$7.2 billion and \$4.2 billion, respectively. The two countries combined accounted for 28.7 percent of the total *actual value* of all offset transactions during the reporting period. At the same time, the United Kingdom and Greece were the two largest *credit value* recipients accounting for 31.7 percent of the total credit value.

The fifth column in Table 5-2 shows as a percentage the number of each country's transactions with multipliers greater than one – in other words, offset transactions for which the credit value received was greater than the actual value. Poland led, with 76.8 percent of the transactions having multipliers greater than one, followed by the United Arab Emirates with 58.3 percent, and Kuwait with 50.0 percent.

However, instances with multipliers greater than one are not typical. For all countries, only 12.2 percent of the transactions had a multiplier greater than one. Conversely, almost 87.8 percent of the number of transactions did not have a multiplier (or had a negative multiplier) applied. For the 25 countries listed in Table 5-2, the overall percentage of transactions with multipliers greater than one was 11.4 percent, slightly lower than the percentage for all countries (12.2 percent) involved in offsets with U.S. defense contractors.

**Table 5-2: Offset Transactions by Countries with Highest Total Actual Value
(Total, 1993-2006)**

Country	Actual Value	Credit Value	Multiplier	% of Transactions with Multiplier > 1
1. United Kingdom	\$7,247,637,813	\$7,114,246,409	0.982	1.0%
2. Israel	\$4,203,586,252	\$4,356,583,424	1.036	5.3%
3. Finland	\$3,500,957,518	\$3,737,767,114	1.068	20.6%
4. Poland	\$3,337,709,000	\$4,374,190,000	1.311	76.8%
5. South Korea	\$2,841,206,220	\$3,155,189,170	1.111	17.3%
6. Italy	\$2,423,539,035	\$2,443,539,287	1.008	4.0%
7. Netherlands	\$2,335,085,015	\$2,641,820,923	1.131	9.4%
8. Greece	\$2,311,057,718	\$4,610,889,808	1.995	39.7%
9. Canada	\$1,986,149,155	\$1,956,089,447	0.985	1.2%
10. Australia	\$1,641,061,283	\$1,693,122,110	1.032	3.4%
11. Switzerland	\$1,381,467,504	\$1,387,122,885	1.004	1.3%
12. Spain	\$1,237,986,175	\$1,484,175,543	1.199	25.0%
13. Turkey	\$1,128,587,322	\$1,189,401,253	1.054	8.6%
14. Taiwan	\$1,115,984,683	\$2,033,425,228	1.822	37.4%
15. Norway	\$1,002,126,424	\$1,289,495,728	1.287	22.2%
16. Germany	\$933,526,022	\$933,526,022	1.000	0.0%
17. Denmark	\$628,353,693	\$764,035,467	1.216	15.6%
18. France	\$582,160,577	\$990,507,940	1.701	48.3%
19. Belgium	\$335,225,267	\$356,716,945	1.064	4.3%
20. Malaysia	\$294,807,399	\$341,629,000	1.159	15.4%
21. Austria	\$230,754,215	\$255,080,387	1.105	7.3%
22. Chile	\$191,184,000	\$207,319,000	1.084	42.9%
23. United Arab Emirates	\$191,097,426	\$329,757,982	1.726	58.3%
24. Sweden	\$174,103,176	\$202,393,278	1.162	9.1%
25. Kuwait	\$124,118,368	\$189,388,913	1.526	50.0%
Total Or Average	\$41,379,471,261	\$48,037,413,263	1.161	11.4%
All Countries	\$41,967,650,233	\$48,909,641,541	1.165	12.2%

Source: BIS Offsets Database.

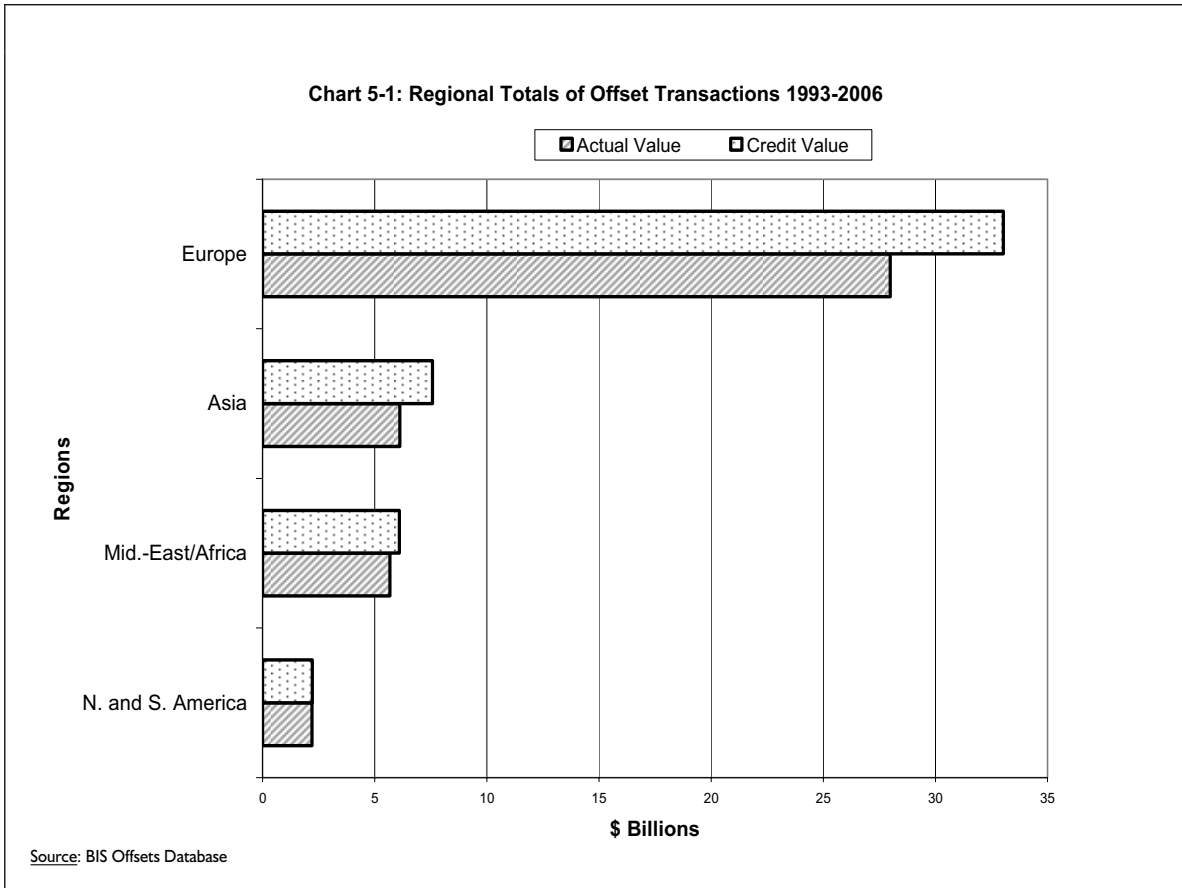
5-2 Regional Distributions

The regional distribution of offset transactions, by value, mirrors the pattern of offset agreements (see Chart 5-1). As with offset agreements, European countries dominated related offset transactions, receiving 66.7 percent of the actual value of offset transactions during 1993-2006. The region's multiplier was slightly above average (1.180), and the multiplier was applied to only 12.4 percent of the number of transactions (87.6 percent of transactions had no multiplier or a negative multiplier applied). Adjusting the value to take account of all multipliers, European countries accounted for 67.5 percent of the total credit value applied toward outstanding offset agreements.

Asia-Pacific countries were ranked second with 14.6 percent of the total actual value of the offset transactions. Asia-Pacific's average multiplier was 1.265 with 17.3 percent of the Asia-Pacific transactions having multipliers greater than 1 and 82.7 percent of transactions having no multipliers or negative multipliers. Adjusting the value to take account of multipliers, the region accounted for 15.5 percent of the total credit value of offset transactions.

Middle Eastern and African countries together accounted for 13.5 percent of the total actual value of offset transactions and 12.5 percent of the credit value. The multiplier for Middle Eastern and African countries was 1.074. Multipliers were applied to 8.8 percent of the region's transactions (91.2 percent of transactions had no multiplier or a negative multiplier applied).

Countries in North and South America ranked fourth, with just 5.6 percent of the actual value of transactions and 4.5 percent of the credit value. The multiplier for North and South America was 1.007. In North America, 1.2 percent of transactions received multipliers (98.8 percent of transactions did not receive multipliers or had negative multipliers). Approximately 73.3 percent of transactions by number in South America received multipliers, while 26.7 percent had no multipliers.



5-3 Role of Multipliers

Multipliers make it easier for prime contractors to fulfill their offset obligations by allowing for higher offset credit levels than normally granted. However, further inspection of multipliers by region indicates that purchasing nations use multipliers infrequently to reward prime contractors for certain types of offset transactions. *See Chapter Two, Table 2-1 for annual utilization of multipliers related to reprinted offset transactions.*

Over the 14-year reporting period, the usage and value of multipliers have fluctuated from year-to-year but have trended lower in recent years. *See Chart 5-2.* In 2001, 18.6 percent of offset transactions had a multiplier greater than one (the peak percentage during the 14-year period), dropping to 8.5 percent in 2005 and to 5.2 percent in 2006. In the latter year, only 34 out of the 653 reported transactions received multipliers greater than one.

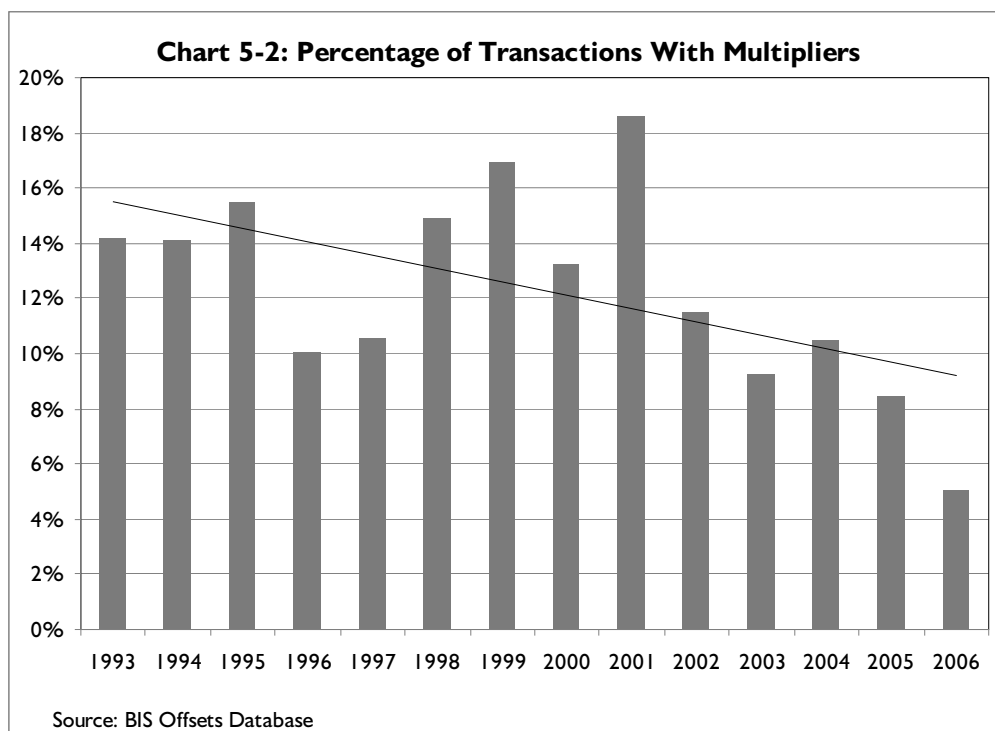


Table 5-3 highlights the use of multipliers by region as a percentage of the number of all transactions for the 1993-2006 period. In Europe, 85.8 percent of offset transactions by number had no multiplier (multiplier = 1) during 1993-2006. This is a slight increase from the 1993-2005 date range when 85.6 percent of transactions had no multipliers. For North and South America, 86.8 percent of transactions by number had no multiplier involved; for the Asia-Pacific, the figure was 80.4 percent, and the number for the Middle East and Africa combined was 88.5 percent.

Table 5-3: Multipliers by Region, by Number, 1993-2006

	% Multipliers < 1	% Multipliers = 1 (No Multiplier)	% Multipliers > 1
Europe	1.7%	85.8%	12.5%
Mid-East/Africa	2.6%	88.5%	8.9%
Asia-Pacific	2.3%	80.4%	17.2%
N. and S. America	6.3%	86.8%	6.9%

Source: BIS Offsets Database

In reviewing European multiplier data further, 12.5 percent of the European transactions (by number) had a multiplier greater than one, and 1.7 percent of transactions had a multiplier of less than one during the 14-year period. Multipliers of less than one mean

that prime contractors are only credited a portion of the total actual value of a transaction, and that the actual value of contracts will be higher than the credit value.

In the Asia-Pacific region, 17.2 percent of the number of offset transactions had multipliers greater than one during 1993-2006, while 2.3 percent of transactions had multipliers of less than one. For the Middle East/Africa, only 8.9 percent of transactions had multipliers greater than one applied, while 2.6 percent of transactions had multipliers of less than one. In North and South America, offset transactions with multipliers exceeding one accounted for 6.9 percent of the number of offset transactions within that region, while those receiving less than full credit (*i.e.*, multiplier was less than one) accounted for 6.3 percent of transactions by number.

Reviewing the value of offset transactions with multipliers further highlights the small role multipliers play in offset transactions. Table 5-4 classifies multiplier usage by region and by value. It should be noted that transactions with multipliers less than one further add to the costs of fulfilling offsets because a negative multiplier means that for those transactions, countries give less than full credit for offset transactions completed.

For Europe, transactions with a multiplier greater than one accounted for 13.7 percent of the value of all European transactions; transactions with a multiplier greater than one accounted for 5.3 percent in the Middle East/Africa, 5.2 percent in the Asia-Pacific region, and two percent in North and South America.

	Value of transactions with multiplier < 1	Value of transactions with multiplier = 1 (no multiplier)	Value of transactions with multiplier > 1	Total Value
Asia-Pacific	\$291,218,331	\$5,501,053,394	\$319,320,082	\$6,111,591,807
Percentage	4.8%	90.0%	5.2%	
Europe	\$963,215,160	\$23,190,394,757	\$3,828,301,401	\$27,981,911,318
Percentage	3.4%	82.9%	13.7%	
Middle East/Africa	\$93,688,049	\$5,278,839,092	\$302,849,227	\$5,675,376,368
Percentage	1.7%	93.0%	5.3%	
N. and S. America	\$133,587,461	\$2,020,767,476	\$44,415,803	\$2,198,770,740
Percentage	6.1%	91.9%	2.0%	

Source: BIS Offsets Database

Table 5-5 highlights the use of multipliers by category of offset transaction. Purchases and Subcontracts accounted for the largest number of offset transactions with 4,120 and

1,970 transactions, respectively. Within these categories, only 8.5 percent and 7.4 percent of transactions, respectively, had multipliers greater than one. Almost 90 percent of Purchase transactions and more than 91 percent of Subcontract transactions had no multiplier applied. At the other extreme, 34.9 percent of Overseas Investment transactions and 39.0 percent of Training transactions had multipliers greater than one.

Offset Category	Number of Transactions	Number & Percent with Multipliers < 1	Number & Percent with Multipliers = 1 (no multiplier)	Number & Percent with Multipliers > 1
Co-production	407	3	387	17
		0.7%	95.1%	4.2%
Credit Assistance	147	4	120	23
		2.7%	81.6%	15.6%
Licensed Production	42	2	31	9
		4.8%	73.8%	21.4%
Overseas Investment	149	6	91	52
		4.0%	61.1%	34.9%
Purchases	4,120	107	3664	349
		2.6%	88.9%	8.5%
Subcontracts	1,970	18	1807	145
		0.9%	91.7%	7.4%
Technology Transfer	997	37	721	239
		3.7%	72.3%	24.0%
Training	277	9	160	108
		3.2%	57.8%	39.0%
Miscellaneous	551	12	417	122
		2.2%	75.7%	22.1%

Source: BIS Offsets Database

Tables 5-6 and 5-7 review the categories of offset transactions and the number of transactions and multipliers required by Europe and the Asia-Pacific, respectively. For Europe, Training transactions received the most multipliers greater than one (38.6 percent), while Co-production received the fewest multipliers (4.7 percent) greater than one.

Table 5-6 also highlights the infrequency of use of multipliers for offset transactions in Europe, even for high value-added transactions such as Technology Transfer (76.9 percent received no multipliers greater than one) and Subcontracts (92.1 percent received no multipliers greater than one).

Offset Category	Number of Transactions	Number & Percent with Multipliers < 1	Number & Percent with Multipliers = 1 (no multiplier)	Number & Percent with Multipliers > 1
Co-production	192	2	181	9
		1.0%	94.3%	4.7%
Credit Assistance	114	4	91	19
		3.5%	79.8%	16.7%
Licensed Production	16	1	11	4
		6.3%	68.8%	25.0%
Overseas Investment	73	0	48	25
		0.0%	65.8%	34.2%
Purchases	3,000	49	2,657	294
		1.6%	88.6%	9.8%
Subcontracts	1,261	11	1,150	100
		0.9%	91.2%	7.9%
Technology Transfer	560	22	409	129
		3.9%	73.0%	23.0%
Training	114	1	69	44
		0.9%	60.5%	38.6%
Miscellaneous	367	7	277	83
		1.9%	75.5%	22.6%

Source: BIS Offsets Database

Offset Category	Number of Transactions	Number & Percent with Multipliers < 1	Number & Percent with Multipliers = 1 (no multiplier)	Number & Percent with Multipliers > 1
Co-production	146	1	141	4
		0.7%	96.6%	2.7%
Credit Assistance	10	0	8	2
		0.0%	80.0%	20.0%
Licensed Production	23	1	18	4
		4.3%	78.3%	17.4%
Overseas Investment	15	1	10	4
		6.7%	66.7%	26.7%
Purchases	233	4	205	24
		1.7%	88.0%	10.3%
Subcontracts	283	3	257	23
		1.1%	90.8%	8.1%
Technology Transfer	353	14	249	90
		4.0%	70.5%	25.5%
Training	106	3	64	39
		2.8%	60.4%	36.8%
Miscellaneous	84	2	55	27
		2.4%	65.5%	32.1%

Source: BIS Offsets Database

As illustrated in Table 5-7, training was the offset category with the highest percentage of multipliers greater than one for the Asia-Pacific region. Almost 37 percent of Training transactions in the Asia-Pacific were credited with multipliers greater than one. Co-production transactions received the fewest positive multipliers with only 2.7 percent of transactions having multipliers greater than one.

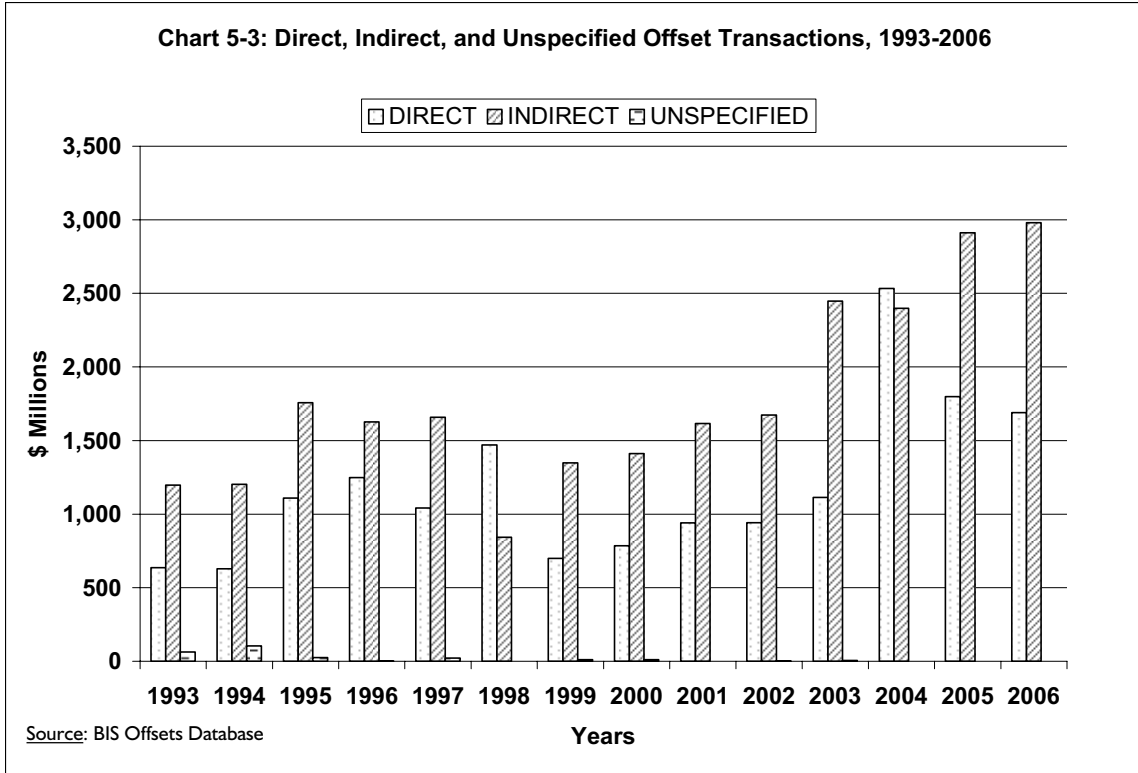
5-4 Offset Transactions by Type

Offset transaction data is categorized in this report by direct, indirect and unspecified transactions. From 1993-2006, direct offset transactions accounted for 39.7 percent, or \$16.6 billion, of the total value of all offset transactions, and indirect offset transactions totaled 59.8 percent, or \$25.1 billion of all transactions. The remaining 0.6 percent of transactions, valued at \$245.0 million, was categorized as unspecified transactions.

In 2006, direct offset transactions (i.e., related to defense systems sold) accounted for 36.2 percent (\$1.7 billion) of the value of all transactions, a decline from the 38.2 percent reported in the previous year. Indirect offsets (i.e., not related to defense systems sold) comprised 63.8 percent (\$3.0 billion) of offset transactions, an increase from 61.8 percent in 2005. The mix of direct and indirect offset transactions changes from year to year. However, for 12 out of the 14 years in the reporting period, indirect offsets have accounted for significantly more than half of all offset transactions. Only in 1998 and 2004 did direct offset transactions account for more than indirect offset transactions.

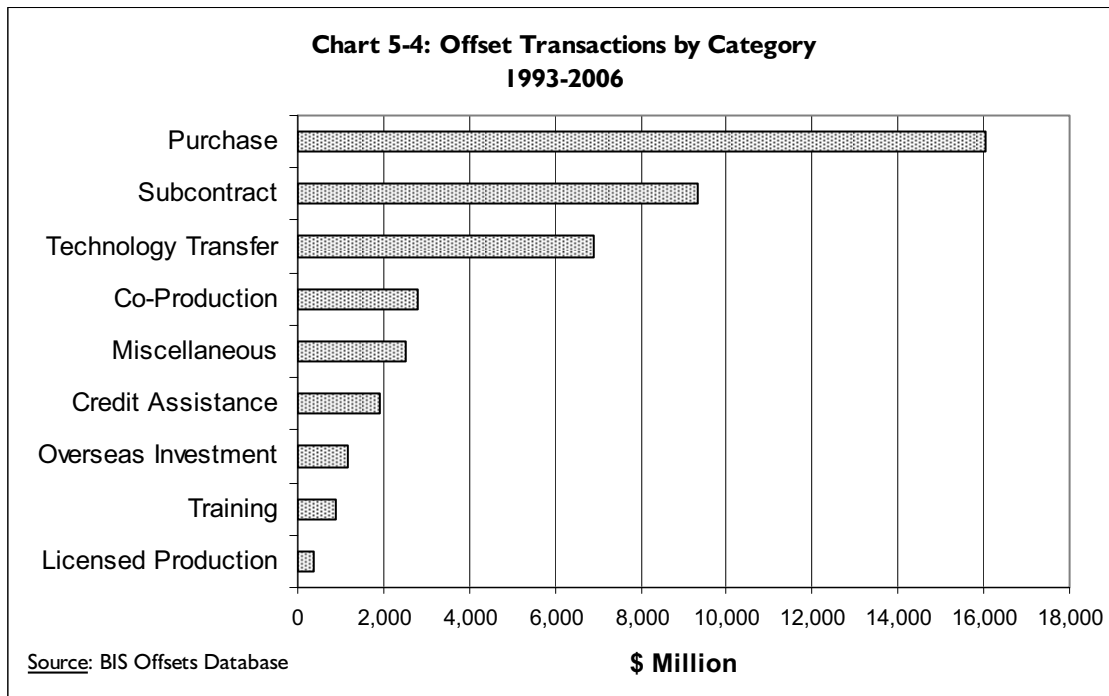
The United Kingdom, the largest purchaser of U.S. defense systems and products, was also the largest recipient of indirect offsets for the 14-year period, with 17.5 percent (\$4.4 billion) of the total value of indirect offset transactions. Of these indirect offset transactions required by the United Kingdom, almost 66 percent by value were aerospace-related. The United Kingdom also led all countries in the value of direct offset transactions received from 1993-2006, with 17.1 percent (\$2.9 billion) of the direct offset total. Of the direct offset total for the United Kingdom, 74.5 percent of these transactions were aerospace-related.

Calculated on an annual basis, the value of all direct offsets ranged from a low of \$636.7 million in 1993 to a high of \$2.5 billion in 2004, averaging \$1.2 billion for 1993-2006. The value of indirect offset transactions was lowest in 1998 at \$842.4 million, and highest in 2006 at \$3.0 billion. The value for indirect offset transactions for the 1993-2006 reporting period averaged \$1.8 billion annually. The distribution of direct and indirect offset transactions for the 14-year period is presented in Chart 5-3.



5-5 Offset Transactions by Category

Another method for evaluating offset transaction activity is to classify the transactions by category. As in previous years, in 2006 the categories of Purchases, Subcontracts, and Technology Transfer accounted for the majority of offset activity; for the 14-year period, these categories accounted for 76.9 percent of the total value of offset transactions. Purchases during 1993-2006 accounted for 38.2 percent of the total value and Subcontracts accounted for 22.2 percent. The value of Technology Transfer offset transactions was 16.5 percent of the total value. Chart 5-4 shows the distribution of offset transactions by category and dollars.

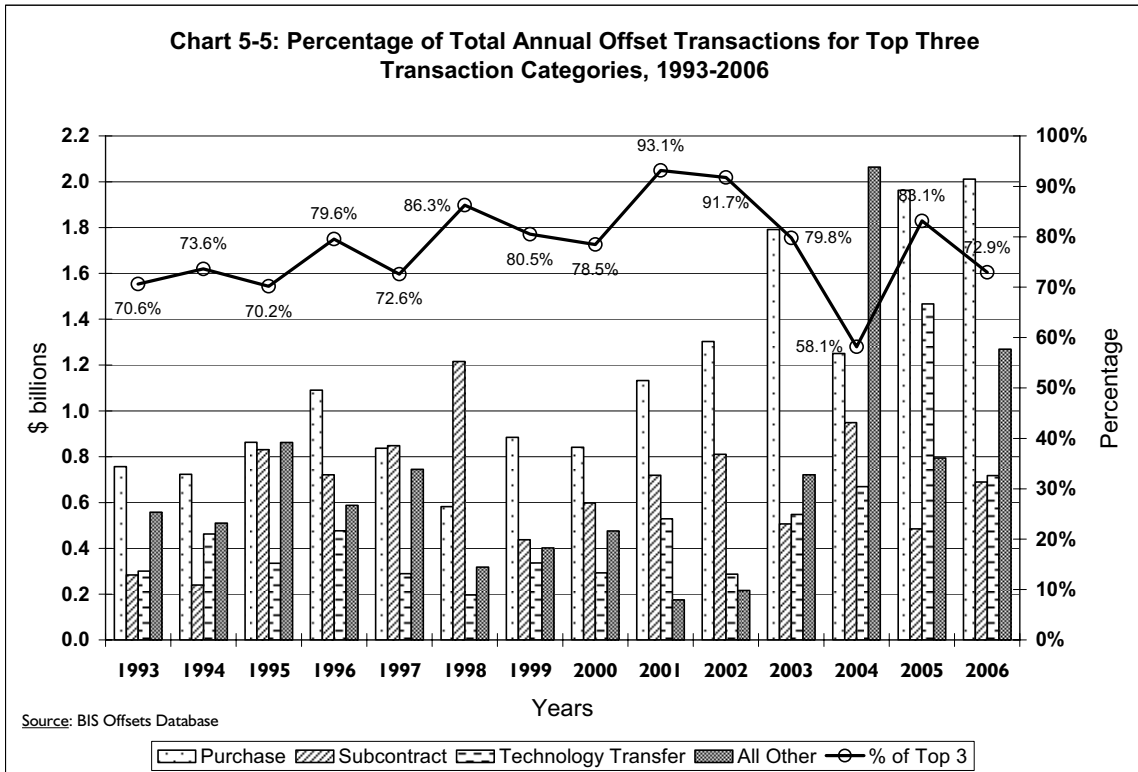


Data showing the percentage of total offset transactions accounted for by Purchases, Subcontracts, and Technology Transfer are shown in Chart 5-5. The dominance of these three categories ranged from a low of 58.1 percent of the total value of transactions in 2004 to a high of 93.1 percent in 2001. In 2006, these three transactions types accounted for 72.9 percent of total transactions.

Of the 42 countries and three country groups in which offset transactions were carried out during the 14-year period of this report (see Table 2-3), 39 participated in and received the benefit of offset transactions categorized as Purchases, which were classified as indirect offsets. These Purchases were comprised mostly of manufactured goods and services, including metal castings and forgings, aircraft parts, night vision components, agricultural equipment, software, machined parts, electronic components, and educational and consulting services. The United Kingdom had the most Purchases, with 21.8 percent of the value of all Purchases, followed by Poland with 12.9 percent, Israel with 10.2 percent, Switzerland with 5.6 percent, and Finland with 5.4 percent. Of all offset transactions categorized as Purchases, more than half were aerospace-related.

During 1993-2006, 34 countries engaged in offset transactions classified as Subcontracts. As discussed earlier, Subcontracts are considered direct offset transactions. The vast

majority of subcontracts involved aerospace-related manufactured parts, components, and services. Aerospace related transactions accounted for the majority of the total value of all Subcontract transactions. The United Kingdom accounted for 27.0 percent of the value of all Subcontracts, followed by Israel with 16.5 percent, and Italy with 7.1 percent. Together, these three countries accounted for 50.7 percent of the value of all offset transactions categorized as Subcontracts.



* Bar portion measured in dollar value.

** Line reflects annual percentage of the top three transaction categories.

5-6 Offset Transactions by Category and Type

Another way to examine the effects of offsets on the U.S. defense industrial base is to analyze the distribution of offset transactions by category and by type. In particular, offsets in the area of Subcontracts, Co-production, and Licensed Production may result in a U.S. supplier being displaced from participation in the manufacture and/or assembly of a U.S. defense system as well as its future maintenance requirements.

Subcontracts, Co-production, and Licensed Production each involve the foreign production of goods or services related to the U.S. defense systems sold. For 1993-

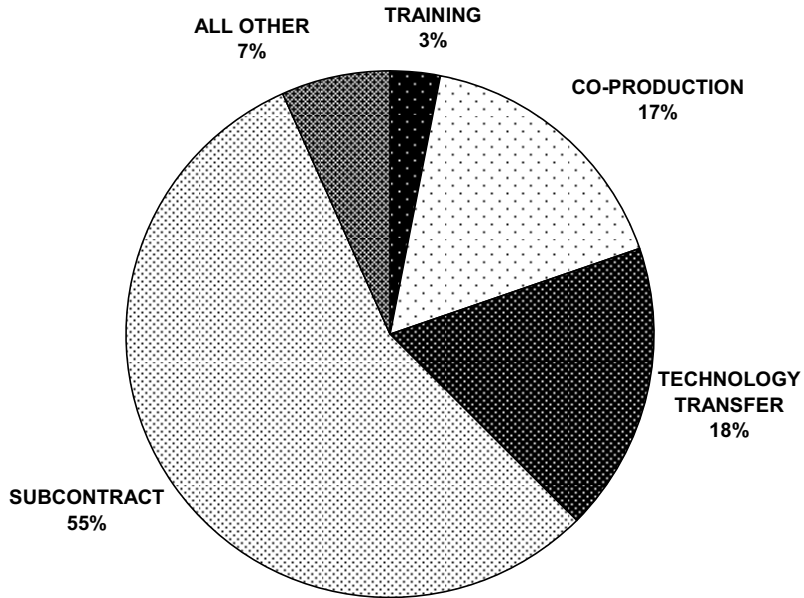
2006, these three categories totaled 75.8 percent of the value of all direct offset transactions. Offset transactions in these three categories totaled \$12.3 billion during the 14-year period; subcontracts alone accounted for \$9.3 billion.

Similarly, the Purchases category of indirect offsets involves the foreign production of goods and services. The value of Purchases offsets totaled \$16.0 billion during 1993-2006, or 64.0 percent of the total value of indirect offset transactions. As a result, direct or indirect offset transactions combined, involving overseas production of goods or services, totaled \$28.5 billion – or an average of \$2.04 billion per year.

While Technology Transfer, Training, Credit Assistance, and Overseas Investment offset transactions do not directly involve foreign production of goods and services, these offsets can enhance the manufacturing and competitiveness of foreign industry. These categories of offset transactions can be either direct or indirect. The value of direct offset transactions for these four categories was \$4.0 billion for 1993-2006, 74.5 percent of which was accounted for by Technology Transfer. The value of indirect offset transactions for these four categories in the same time frame was \$6.7 billion, with Technology Transfer accounting for 56.8 percent of this total. In sum, Technology Transfers, Training, Credit Assistance, and Overseas Investment contributed 23.8 percent of the actual value of all direct offset transactions for 1993-2006, and 26.8 percent of the total indirect offset transactions for the same reporting period.

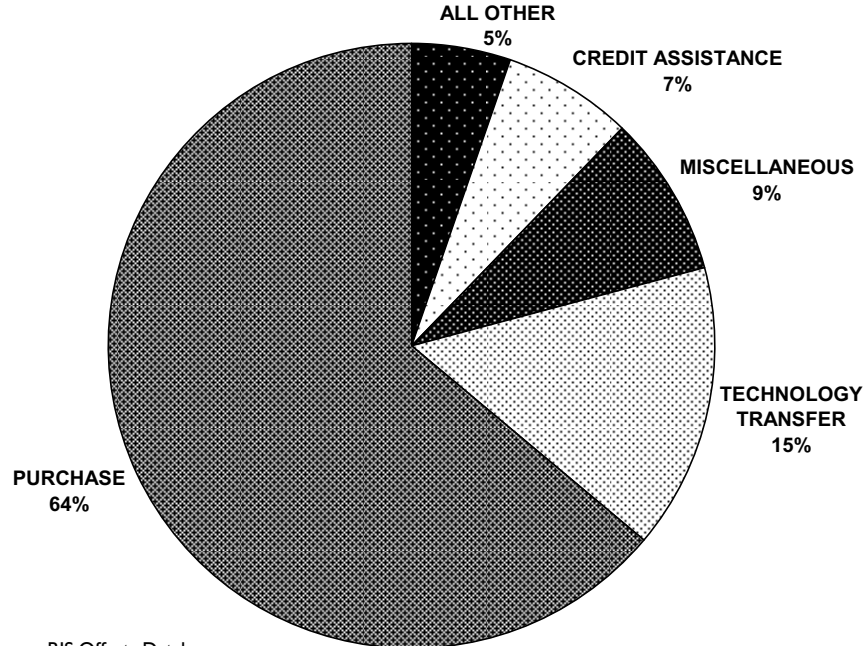
For direct and indirect transactions combined, Technology Transfer, Training, Credit Assistance, and Overseas Investment, accounted for \$10.7 billion during 1993-2006, an annual average of \$763.1 million. The distribution of offset transactions by category is shown in Charts 5-6 and 5-7.

Chart 5-6: Direct Offset Transactions by Category, 1993-2006



Source: BIS Offsets Database

Chart 5-7: Indirect Offset Transactions by Category, 1993-2006



Source: BIS Offsets Database

5-7 Offset Transactions by Industrial Sector

Identifying offset transactions by industry sector allows for a detailed analysis of the effect of offsets on the U.S. industrial base. According to the BIS Offsets Database, during the 1993-2006 period, offset transactions generally fell into a small number of major industries associated with defense production, as shown by the data in Table 5-8. The offset transactions for each industry shown are both direct and indirect. More detailed data by Standard Industrial Classification (SIC) code appear in Appendix E.

SIC	Sector Description	Number of Offset Transactions	Value in Millions	% Of Total Value
37	Transportation Equipment	3,928	\$22,338.8	53.2%
36	Electronic/Electrical	1,334	\$5,428.6	12.9%
87	Technical Services & Consultants	556	\$2,325.7	5.5%
35	Industrial Machinery	759	\$1,877.4	4.5%
38	Measuring & Analyzing	405	\$1,814.9	4.3%
73	Business Services	411	\$1,455.2	3.5%
Subtotal		7,393	\$35,240.6	84.0%
Total Value - All Transactions		8,660	\$41,967.7	

Source: BIS Offsets Database.

As shown in Table 5-8, offset transactions related to transportation equipment dominated both the value and number of transactions. Transportation equipment transactions accounted for 45.4 percent of the total number of offset transactions and 53.2 percent of the value of all offset transactions. Between 1993 and 2006, offset transactions related to transportation equipment were worth \$22.3 billion. Direct transportation equipment transactions accounted for 58.7 percent, or approximately \$9.8 billion, of the total value of direct offsets. Indirect transportation equipment transactions made up 49.2 percent, or \$12.3 billion, of the value of all indirect offset transactions. Transactions in this sector were composed mostly of aerospace products, including aircraft parts and components, jet engines and parts, hydraulic subsystems, and guided missiles and components.

The electronic and electrical equipment sector was a distant second to the transportation equipment sector. Offset transactions in this sector made up 15.4 percent of the number of all transactions and 12.9 percent of their total value. This sector includes products such as radar, communications equipment, and material inputs for avionics, such as circuit boards.³⁰

Transactions involving technical services and consultants accounted for 5.5 percent of the total, or \$2.3 billion.

Transactions in the industrial machinery sector accounted for 4.5 percent, or \$1.9 billion, of the value of all offset transactions from 1993 to 2006 and 8.8 percent of the number of all offset transactions. Industrial machinery includes capital equipment used in the production of both defense and non-defense items, such as metal-working machine tools, conveyors, air and gas compressors, textile machinery, mining equipment, off-road vehicles, and welding equipment.

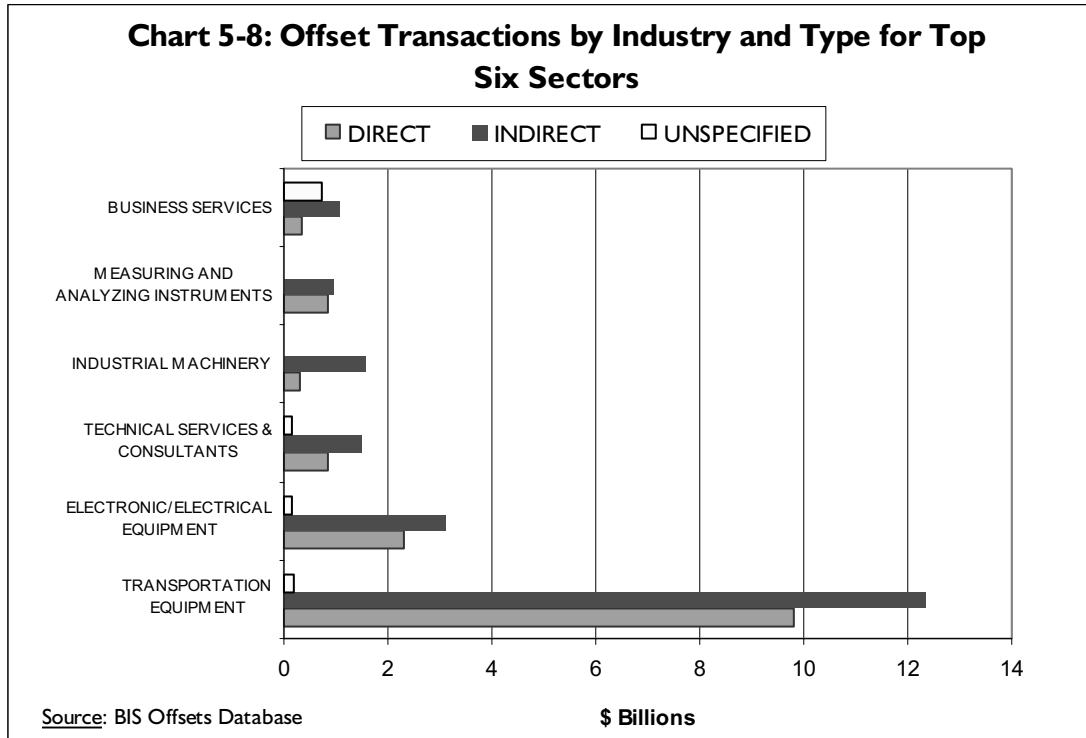
The 40 sectors not specifically listed in Table 5-8 accounted for approximately 16.0 percent of the total value of all offset transactions. All but six of these sectors accounted for less than one percent of the total value of offset transactions. The six were Fabricated Metal Products (SIC 34) at 3.0 percent, Unclassifiable Establishments (SIC 99) at 2.8 percent, Educational Services (SIC 82) at 2.1 percent, Non-Depository Credit Institutions (SIC 61) at 2.0 percent, Holding and Other Investment Offices (SIC 67) at 2.0 percent and Chemical and Allied Products (SIC 28) at 1.1 percent. These six sectors accounted for an additional 13.0 percent, or \$5.4 billion, of the total value of offset transactions.

Two other sectors contributed between 0.4 and 0.8 percent of the total value of offset transactions. These were Primary Metal Industries (SIC 33) accounting for 0.7 percent, and Communications (SIC 48) at 0.5 percent. Together, these two sectors accounted for 1.2 percent, or \$488 million, of the total value offset transactions.

Of the remaining 30 sectors, none had values totaling more than \$132.4 million over the 14-year period. Together, these sectors totaled \$805 million, roughly 1.9 percent of the total value of offset transactions for 1993-2006.

³⁰ The completed avionics equipment arguably could be part of sector SIC 38 – Measuring and Analyzing Instrumentation, but the appropriate sector could not be determined based on the data provided.

\$33.6 billion, or 80.1 percent, of all transactions were manufacturing related (SIC 20-39). Service-related transactions (SIC 70-89) accounted for \$4.8 billion, or 11.5 percent, of the total value of offset transactions. Financial, insurance, and real estate industries (SIC 60-67) totaled \$1.8 billion, approximately 4.2 percent of transactions for 1993-2006. Chart 5-8 shows the top six sectors where offset transactions occurred.



6 Background on the Interagency Team on Consultation with Foreign Nations on Limiting the Adverse Effects of Offsets in Defense Procurement

In December 2003, President Bush signed into law a reauthorization of, and amendments to, the Defense Production Act of 1950 (DPA). Section 7 (c) of P.L. 108-195 amended Section 123 (c) of the DPA by recommending that the President designate a chairman of an interagency team to consult with foreign nations on limiting the adverse effects of offsets in defense procurement without damaging the economy or the defense industrial base of the United States, or United States defense production or defense preparedness. The statute provides that the interagency team be comprised of the Secretaries of Commerce, Defense, Labor, and State, and the United States Trade Representative. A staff level Interagency Working Group was also established.

The interagency team submitted its third and final report on limiting the adverse effects of offsets on defense procurement to Congress in December 2006. However, the interagency group has continued its dialogue with foreign partners regarding how to limit the adverse effects of offsets in defense trade. As a result, the interagency team submitted a progress report on this dialogue for 2007, which is attached in Appendix H of this report.

**Appendix A:
Section 309 of the Defense
Production Act of 1950,
as amended**

**DEFENSE PRODUCTION ACT OF 1950,
AS AMENDED
(50 U.S.C. App. 2061, et seq.)**

Section 309.

(a) Annual Report on Impact of Offsets--

(1) Report Required -- Not later than 18 months after the date of the enactment of the Defense Production Act Amendments of 1984, and annually thereafter, the President shall submit to the Committee on Banking, Finance and Urban Affairs of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate, a detailed report on the impact of offsets on the defense preparedness, industrial competitiveness, employment, and trade of the United States.

(2) Duties of the Secretary of Commerce (hereafter in this subsection referred to as 'the Secretary' shall--

(A) prepare the report required by paragraph (1);

(B) consult with the Secretary of Defense, the Secretary of the Treasury, the Secretary of State, and the United States Trade Representative in connection with the preparation of such report; and

(C) function as the President's Executive Agent for carrying out this section.

(b) Interagency Studies and Related Data—

(1) Purpose of Report-- Each report required under subsection (a) shall identify the cumulative effects of offset agreements on—

(A) the full range of domestic defense productive capability (with special attention paid to the firms serving as lower-tier subcontractors or suppliers); and

(B) the domestic defense technology base as a consequence of the technology transfers associated with such offset agreements.

(2) Use of Data--Data developed or compiled by any agency while conducting any interagency study or other independent study or analysis shall be made available to the Secretary to facilitate the execution of the Secretary's responsibilities with respect to trade offset and counter trade policy development.

(c) Notice of Offset Agreements--

(1) In General--If a United States firm enters into a contract for the sale of a weapon system or defense-related item to a foreign country or foreign firm and such contract is subject to an offset agreement exceeding \$5,000,000 in value, such firm shall furnish to the official designated in the regulations promulgated pursuant to paragraph (2) information concerning such sale.

(2) Regulations--The information to be furnished under paragraph (1) shall be prescribed in regulations promulgated by the Secretary. Such regulations shall provide protection from public disclosure for such information, unless public disclosure is subsequently specifically authorized by the firm furnishing the information.

(d) Contents of Report--

(1) In General--Each report under subsection (a) shall include--

(A) a net assessment of the elements of the industrial base and technology base covered by the report;

(B) recommendations for appropriate remedial action under the authority of this Act, or other law or regulations;

(C) a summary of the findings and recommendations of any interagency studies conducted during the reporting period under subsection (b);

(D) a summary of offset arrangements concluded during the reporting period for which information has been furnished pursuant to subsection (c); and

(E) a summary and analysis of any bilateral and multilateral negotiations relating to the use of offsets completed during the reporting period.

(2) Alternative Findings or Recommendations--Each report required under this section shall include any alternative findings or recommendations offered by any departmental Secretary, agency head, or the United States Trade Representative to the Secretary.

(e) Utilization of Annual Report in Negotiations—

The findings and recommendations of the reports required by subsection (a), and any interagency reports and analyses shall be considered by representatives of the United States during bilateral and multilateral negotiations to minimize the adverse effects of offsets.

Appendix B:
U.S. Department of
Commerce Regulations
Regarding Reporting of
Offset Activity

TITLE 15--COMMERCE AND FOREIGN TRADE

CHAPTER VII--BUREAU OF INDUSTRY AND SECURITY, DEPARTMENT OF COMMERCE

PART 701 REPORTING OF OFFSETS AGREEMENTS IN SALES OF WEAPON SYSTEMS OR DEFENSE-RELATED ITEMS TO FOREIGN COUNTRIES OR FOREIGN FIRMS

Sec.

701.1 Purpose.

701.2 Definitions.

701.3 Applicability and scope.

701.4 Procedures.

701.5 Confidentiality.

Authority: Title I, sec. 124, Pub. L 102-558, 106 Stat. 4207 (50 U.S.C App. 2099).

Source: 59 FR 61796, Dec. 2, 1994, unless otherwise noted.

Sec. 701.1 Purpose.

The Defense Production Act Amendments of 1992 require the Secretary of Commerce to promulgate regulations for U.S. firms entering into contracts for the sale of defense articles or defense services to foreign countries or foreign firms that are subject to offset agreements exceeding \$5,000,000 in value to furnish information regarding such agreements. The Secretary of Commerce has designated the Bureau of Industry and Security as the organization responsible for implementing this provision. The information provided by U.S. firms will be aggregated and used to determine the impact of offset transactions on the defense preparedness, industrial competitiveness, employment, and trade of the United States. Summary reports will be submitted annually to the Congress pursuant Section 309 of the Defense Production Act of 1950, as amended.

Sec. 701.2 Definitions.

(a) Offsets--Compensation practices required as a condition of purchase in either government-to-government or commercial sales of defense articles and/or defense services as defined by the Arms Export Control Act and the International Traffic in Arms Regulations.

(b) Military Export Sales--Exports that are either Foreign Military Sales (FMS) or commercial (direct) sales of defense articles and/or defense services as defined by the Arms Export Control Act and International Traffic in Arms Regulations.

(c) Prime Contractor--A firm that has a sales contract with a foreign entity or with the U.S. Government for military export sales.

(d) United States--Includes the 50 states, the District of Columbia, Puerto Rico, and U.S. territories.

(e) Offset Agreement--Any offset as defined above that the U.S. firm agrees to in order to conclude a military export sales contract. This includes all offsets, whether they are "best effort" agreements or are subject to penalty clauses.

(f) Offset Transaction--Any activity for which the U.S. firm claims credit for full or partial fulfillment of the offset agreement. Activities to implement offset agreements may include, but are not limited to, co-production, licensed production, subcontractor production, overseas investment, technology transfer countertrade, barter, counterpurchase, and buy back.

(g) Direct Offset--Contractual arrangements that involve defense articles and services referenced in the sales agreement for military exports.

(h) Indirect Offset--Contractual arrangements that involve defense goods and services unrelated to the exports referenced in the sales agreement.

Sec. 701.3 Applicability and scope.

(a) This rule applies to U.S. firms entering contracts for the sale of defense articles or defense services (as defined in the Arms Export Control Act and International Traffic in Arms Regulations) to a foreign country or foreign firm for which the contract is subject to an offset agreement exceeding \$5,000,000 in value.

(b) This rule applies to all offset transactions completed in performance of existing offset commitments since January 1, 1993 for which offset credit of \$250,000 or more has been claimed from the foreign representative, and new offset agreements entered into since that time.

Sec. 701.4 Procedures.

(a) To avoid double counting, firms should report only offset transactions for which they are directly responsible for reporting to the foreign customer (i.e., prime contractors should report for their subcontractors if the subcontractors are not a direct party to the offset agreement).

(b) Reports should be delivered to the Offsets Program Manager, U.S. Department of Commerce, Office of Strategic Industries and Economic Security, Bureau of Industry and Security, Room 3878, 14th Street and Pennsylvania Avenue, N.W., Washington DC 20230. The first industry reports should be submitted to the Bureau of Industry and Security not later than March 15, 1995 and should cover offset transactions completed during the calendar year 1993, as well as information regarding unfulfilled offset agreements. After this initial submission,

companies should provide information once yearly not later than June 15 covering the preceding calendar year. All submissions should include a point of contact (name and telephone number) and should be by a company official authorized to provide such information.

(c) Companies may submit this information in computerized spreadsheet/database format (e.g., Lotus 1-2-3, Quattro Pro, dbase IV) using a 3.5 inch 1.44 megabyte diskette, accompanied by a printed copy.

(d) Offset Transaction Reporting.

(1) Reports should include an itemized list of offset transactions completed during the reporting period, including the following data elements (Estimates are acceptable when actual figures are unavailable; estimated figures should be followed by the letter "E"):

(i) Name of Country--Country of entity purchasing the weapon system, defense item or service subject to offset.

(ii) Name or Description of Weapon system, Defense Item, or Service Subject to Offset.

(iii) Name of Offset Fulfilling Entity--Entity fulfilling offset transaction (including first tier subcontractors).

(iv) Name of Offset Receiving Entity--Entity receiving benefits from offset transaction.

(v) Offset Credit Value--Dollar value credits claimed by fulfilling entity including any intangible factors/multipliers.

(vi) Actual Offset Value--Dollar value of the offset transaction without multipliers/intangible factors.

(vii) Description of Offset Product/Service--Short description of the type of offset (e.g., co-production, technology transfer, subcontract activity, training, purchase, cash payment, etc.).

(viii) Broad Industry Category--Broad classification of the industry in which the offset transaction was fulfilled (e.g., aerospace, electronics, chemicals, industrial machinery, textiles, etc.). Firms may request a list of the Standard Industry Classification (SIC) codes to assist in identifying an appropriate industry category. Forward such requests to the Offsets Program Manager, U.S. Department of Commerce, Office of Strategic Industries and Economic Security, Bureau of Industry and Security, Room 3878, 14th Street and Pennsylvania Avenue, N.W., Washington, D.C. 20230 or Fax 202-482-5650.

(ix) Direct or Indirect Offset--Specify whether the offset transaction was direct or indirect offset.

(x) Name of Country in Which Offset was Fulfilled--United States, purchasing country, or third country.

(2) Offset transactions of the same type (same fulfilling entity, receiving entity, and offset product/service) completed during the same reporting period may be combined.

(3) Any necessary comments or explanations relating to the above information should be footnoted and supplied on separate sheets attached to the report.

(e) Reporting on Offset Agreements Entered Into. (1) In addition to the itemized list of offset transactions completed during the year as specified above, U.S. firms should provide information regarding new offset agreements entered into during the year, including the following elements:

(i) Name of Country--Country of entity purchasing the weapon system, defense item, or service subject to offset;

(ii) Name or Description of Weapon System, Defense Item, or Service Subject to Offset;

(iii) Names/Titles of Signatories to the Offset Agreement;

(iv) Value of Export Sale Subject to Offset (approximate);

(v) Total Value of the Offset Agreement;

(vi) Term of Offset Agreement (months);

(vii) Description of Performance Measures--(e.g., "Best Efforts," Liquidated Damages, (describe)).

(2) [Reserved]

Sec. 701.5 Confidentiality.

(a) As provided by Sec. 309(c) of the Defense Production Act of 1950, as amended, BIS shall not publicly disclose the information it receives pursuant to this Part, unless the firm furnishing the information subsequently specifically authorizes public disclosure.

(b) Public disclosure must be authorized in writing by an official of the firm competent to make such an authorization.

(c) Nothing in this provision shall prevent the use of data aggregated from information provided pursuant to this part in the summary report to the Congress described in Sec. 701.1.

Appendix C:
Executive Order 12919,
As Amended

Executive Order 12919 of June 3, 1994

NATIONAL DEFENSE INDUSTRIAL RESOURCES PREPAREDNESS

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Defense Production Act of 1950, as amended (64 Stat. 798; 50 U.S.C. App. 2061, et seq.), and section 301 of title 3, United States Code, and as Commander in Chief of the Armed Forces of the United States, it is hereby ordered as follows:

PART I - PURPOSE, POLICY AND IMPLEMENTATION

Section 101. Purpose. This order delegates authorities and addresses national defense industrial resource policies and programs under the Defense Production Act of 1950, as amended ("the Act"), except for the amendments to Title III of the Act in the Energy Security Act of 1980 and telecommunication authorities under Executive Order No. 12472.

Sec. 102. Policy. The United States must have an industrial and technology base capable of meeting national defense requirements, and capable of contributing to the technological superiority of its defense equipment in peacetime and in times of national emergency. The domestic industrial and technological base is the foundation for national defense preparedness. The authorities provided in the Act shall be used to strengthen this base and to ensure it is capable of responding to all threats to the national security of the United States.

Sec. 103. General Functions. Federal departments and agencies responsible for defense acquisition (or for industrial resources needed to support defense acquisition) shall: (a) Identify requirements for the full spectrum of national security emergencies, including military, industrial, and essential civilian demand; (b) Assess continually the capability of the domestic industrial and technological base to satisfy requirements in peacetime and times of national emergency, specifically evaluating the availability of adequate industrial resource and production sources, including subcontractors and suppliers, materials, skilled labor, and professional and technical personnel; (c) Be prepared, in the event of a potential threat to the security of the United States, to take actions necessary to ensure the availability of adequate industrial resources and production capability, including services and critical technology for national defense requirements; more (d) Improve the efficiency and responsiveness, to defense requirements, of the domestic industrial base; and (e) Foster cooperation between the defense and commercial sectors for research and development and for acquisition of materials, components, and equipment to enhance industrial base efficiency and responsiveness.

Sec. 104. Implementation. (a) The National Security Council is the principal forum for consideration and resolution of national security resource preparedness policy. (b) The Director, Federal Emergency Management Agency ("Director, FEMA") shall: (1) Serve as an advisor to the National Security Council on issues of national security resource preparedness and on the use of the authorities and functions delegated by this order; (2) Provide for the central coordination of the plans and programs incident to authorities and functions delegated under this order, and provide guidance and procedures approved by the Assistant to the President for National Security Affairs to the Federal departments and agencies under this order; (3) Establish procedures, in consultation with Federal departments and agencies assigned functions under this order, to resolve in a timely and effective manner conflicts and issues that may arise in implementing the authorities and functions delegated under this order; and (4) Report to the President periodically concerning all program activities conducted pursuant to this order. (c) The head of every Federal department and agency assigned functions under this order shall ensure that the performance of these functions is consistent with National Security Council policy and guidelines.

PART II - PRIORITIES AND ALLOCATIONS

Sec. 201. Delegations of Priorities and Allocations. (a) The authority of the President conferred by section 101 of the Act to require acceptance and priority performance of contracts or orders (other than contracts of employment) to promote the national defense over performance of any other contracts or orders, and to allocate materials, services, and facilities as deemed necessary or appropriate to promote the national defense, is delegated to the following agency heads: (1) The Secretary of Agriculture with respect to food resources, food resource facilities, and the domestic distribution of farm equipment and commercial fertilizer; (2) The Secretary of Energy with respect to all forms of energy; (3) The Secretary of Health and Human Services with respect to health resources; (4) The Secretary of Transportation with respect to all forms of civil transportation; more 3 (5) The Secretary of Defense with respect to water resources; and (6) The Secretary of Commerce for all other materials, services, and facilities, including construction materials. (b) The Secretary of Commerce, in consultation with the heads of those departments and agencies specified in subsection 201(a) of this order, shall administer the Defense Priorities and Allocations System ("DPAS") regulations that will be used to implement the authority of the President conferred by section 101 of the Act as delegated to the Secretary of Commerce in subsection 201(a)(6) of this order. The Secretary of Commerce will redelegate to the Secretary of Defense, and the heads of other departments and agencies as appropriate, authority for the priority rating of contracts and orders for all materials, services, and facilities needed in support of programs approved under

section 202 of this order. The Secretary of Commerce shall act as appropriate upon Special Priorities Assistance requests in a time frame consistent with the urgency of the need at hand. (c) The Director, FEMA, shall attempt to resolve issues or disagreements on priorities or allocations between Federal departments or agencies in a time frame consistent with the urgency of the issue at hand and, if not resolved, such issues will be referred to the Assistant to the President for National Security Affairs for final determination. (d) The head of each Federal department or agency assigned functions under subsection 201(a) of this order, when necessary, shall make the finding required under subsection 101(b) of the Act. This finding shall be submitted for the President's approval through the Assistant to the President for National Security Affairs. Upon such approval the head of the Federal department or agency that made the finding may use the authority of subsection 101(a) of the Act to control the general distribution of any material (including applicable services) in the civilian market. (e) The Assistant to the President for National Security Affairs is hereby delegated the authority under subsection 101(c)(3) of the Act, and will be assisted by the Director, FEMA, in ensuring the coordinated administration of the Act.

Sec. 202. Determinations. The authority delegated by section 201 of this order may be used only to support programs that have been determined in writing as necessary or appropriate to promote the national defense: (a) By the Secretary of Defense with respect to military production and construction, military assistance to foreign nations, stockpiling, outer space, and directly related activities; (b) By the Secretary of Energy with respect to energy production and construction, distribution and use, and directly related activities; and (c) By the Director, FEMA, with respect to essential civilian needs supporting national defense, including civil defense and continuity of government and directly related activities.

Sec. 203. Maximizing Domestic Energy Supplies. The authority of the President to perform the functions provided by subsection 101(c) of the Act is delegated to the Secretary of Commerce, who shall redelegate to the Secretary of Energy the authority to make the findings described in subsection 101(c)(2)(A) that the materials (including equipment), services, and facilities are critical and essential. The Secretary of Commerce shall make the finding described in subsection 101(c)(2)(A) of the Act that the materials (including equipment), services, or facilities are scarce, and the finding described in subsection 101(c)(2)(B) that it is necessary to use the authority provided by subsection 101(c)(1).

Sec. 204. Chemical and Biological Warfare. The authority of the President conferred by subsection 104(b) of the Act is delegated to the Secretary of Defense. This authority may not be further delegated by the Secretary.

PART III - EXPANSION OF PRODUCTIVE CAPACITY AND SUPPLY

Sec. 301. (a) Financing Institution Guarantees. To expedite or expand production and deliveries or services under government contracts for the procurement of industrial resources or critical technology items essential to the national defense, the head of each Federal department or agency engaged in procurement for the national defense (referred to as "agency head" in this part) and the President and Chairman of the Export-Import Bank of the United States (in cases involving capacity expansion, technological development, or production in foreign countries) are authorized to guarantee in whole or in part any public or private financing institution, subject to provisions of section 301 of the Act. Guarantees shall be made in consultation with the Department of the Treasury as to the terms and conditions thereof. The Director of the Office of Management and Budget ("OMB") shall be informed when such guarantees are to be made. (b) Direct Loan Guarantees. To expedite or expand production and deliveries or services under government contracts for the procurement of industrial resources or critical technology items essential to the national defense, each agency head is authorized to make direct loan guarantees from funds appropriated to their agency for Title III. (c) Fiscal Agent. Each Federal Reserve Bank is designated and authorized to act, on behalf of any guaranteeing agency, as fiscal agent in the making of guarantee contracts and in otherwise carrying out the purposes of section 301 of the Act. (d) Regulations. The Board of Governors of the Federal Reserve System is authorized, after consultation with heads of guaranteeing departments and agencies, the Secretary of the Treasury, and the Director, OMB, to prescribe regulations governing procedures, forms, rates of interest, and fees for such guarantee contracts.

Sec. 302. Loans. (a) To expedite production and deliveries or services to aid in carrying out government contracts for the procurement of industrial resources or a critical technology item for the national defense, an agency head is authorized, subject to the provisions of section 302 of the Act, to submit to the Secretary of the Treasury or the President and Chairman of the Export-Import Bank of the United States (in cases involving capacity expansion, technological development, or production in foreign countries) applications for loans. more 5 (b) To expedite or expand production and deliveries or services under government contracts for the procurement of industrial resources or critical technology items essential to the national defense, each agency head may make direct loans from funds appropriated to their agency for Title III. (c) After receiving a loan application and determining that financial assistance is not otherwise available on reasonable terms, the Secretary of the Treasury or the President and Chairman of the Export-Import Bank of the United States (in cases involving capacity expansion, technological development, or production in foreign countries) may make loans, subject to provisions of section 302 of the Act.

Sec. 303. Purchase Commitments. (a) In order to carry out the objectives of the Act, and subject to the provisions of section 303 thereof, an agency head is authorized to make provision for purchases of, or commitments to purchase, an industrial resource or a critical technology item for government use or resale. (b) Materials acquired under section 303 of the Act that exceed the needs of the programs under the Act may be transferred to the National Defense Stockpile, if such transfer is determined by the Secretary of Defense as the National Defense Stockpile Manager to be in the public interest.

Sec. 304. Subsidy Payments. In order to ensure the supply of raw or non-processed materials from high-cost sources, an agency head is authorized to make subsidy payments, after consultation with the Secretary of the Treasury and the Director, OMB, and subject to the provisions of section 303(c) of the Act.

Sec. 305. Determinations and Findings. When carrying out the authorities in sections 301 through 303 of this order, an agency head is authorized to make the required determinations, judgments, statements, certifications, and findings, in consultation with the Secretary of Defense, Secretary of Energy or Director, FEMA, as appropriate. The agency head shall provide a copy of the determination, judgment, statement, certification, or finding to the Director, OMB, to the Director, FEMA, and, when appropriate, to the Secretary of the Treasury.

Sec. 306. Strategic and Critical Materials. (a) The Secretary of the Interior, in consultation with the Secretary of Defense as the National Defense Stockpile Manager and subject to the provisions of section 303 of the Act, is authorized to encourage the exploration, development, and mining of critical and strategic materials and other materials. (b) An agency head is authorized, pursuant to section 303(g) of the Act, to make provision for the development of substitutes for strategic and critical materials, critical components, critical technology items, and other industrial resources to aid the national defense. (c) An agency head is authorized, pursuant to section 303(a)(1)(B) of the Act, to make provisions to encourage the exploration, development, and mining of critical and strategic materials and other materials.

Sec. 307. Government-owned Equipment. An agency head is authorized, pursuant to section 303(e) of the Act, to install additional equipment, facilities, processes, or improvements to facilities owned by the government and to install government-owned equipment in industrial facilities owned by private persons.

Sec. 308. Identification of Shortfalls. Except during periods of national emergency or after a Presidential determination in accordance with sections 301(e)(1)(D)(ii), 302(c)(4)(B), or 303(a)(7)(B) of the Act, no guarantee, loan or other action pursuant to sections 301, 302, and 303 of the Act to correct an industrial shortfall shall be taken unless the shortfall has been identified in the Budget of the United States or amendments thereto.

Sec. 309. Defense Production Act Fund Manager. The Secretary of Defense is designated the Defense Production Act Fund Manager, in accordance with section 304(f) of the Act, and shall carry out the duties specified in that section, in consultation with the agency heads having approved Title III projects and appropriated Title III funds.

Sec. 310. Critical Items List. (a) Pursuant to section 107(b)(1)(A) of the Act, the Secretary of Defense shall identify critical components and critical technology items for each item on the Critical Items List of the Commanders-in-Chief of the Unified and Specified Commands and other items within the inventory of weapon systems and defense equipment. (b) Each agency head shall take appropriate action to ensure that critical components or critical technology items are available from reliable sources when needed to meet defense requirements during peacetime, graduated mobilization, and national emergency. "Appropriate action" may include restricting contract solicitations to reliable sources, restricting contract solicitations to domestic sources (pursuant to statutory authority), stockpiling critical components, and developing substitutes for critical components or critical technology items.

Sec. 311. Strengthening Domestic Capability. An agency head, in accordance with section 107(a) of the Act, may utilize the authority of Title III of the Act or any other provision of law, in consultation with the Secretary of Defense, to provide appropriate incentives to develop, maintain, modernize, and expand the productive capacities of domestic sources for critical components, critical technology items, and industrial resources essential for the execution of the national security strategy of the United States.

Sec. 312. Modernization of Equipment. An agency head, in accordance with section 108(b) of the Act, may utilize the authority of Title III of the Act to guarantee the purchase or lease of advance manufacturing equipment and any related services with respect to any such equipment for purposes of the Act.

PART IV - IMPACT OF OFFSETS

Sec. 401. Offsets. (a) The responsibilities and authority conferred upon the President by section 309 of the Act with respect to offsets are delegated to the Secretary of Commerce, who shall function as the President's Executive Agent for carrying out this authority. more 7 (b) The Secretary of Commerce shall prepare the annual report required by section 309(a) of the Act in consultation with the Secretaries of Defense, Treasury, Labor, State, the United States Trade Representative, the Arms Control and Disarmament Agency, the Director of Central Intelligence, and the heads of other departments and agencies as required.

The heads of Federal departments and agencies shall provide the Secretary of Commerce with such information as may be necessary for the effective performance of this function. (c) The offset report shall be subject to the normal interagency clearance process conducted by the Director, OMB, prior to the report's submission by the President to Congress.

PART V - VOLUNTARY AGREEMENTS AND ADVISORY COMMITTEES

Sec. 501. Appointments. The authority of the President under sections 708(c) and (d) of the Act is delegated to the heads of each Federal department or agency, except that, insofar as that authority relates to section 101 of the Act, it is delegated only to the heads of each Federal department or agency assigned functions under section 201(a) of this order. The authority delegated under this section shall be exercised pursuant to the provisions of section 708 of the Act, and copies and the status of the use of such delegations shall be furnished to the Director, FEMA.

Sec. 502. Advisory Committees. The authority of the President under section 708(d) of the Act and delegated in section 501 of this order (relating to establishment of advisory committees) shall be exercised only after consultation with, and in accordance with, guidelines and procedures established by the Administrator of General Services.

PART VI - EMPLOYMENT OF PERSONNEL

Sec. 601. National Defense Executive Reserve. (a) In accordance with section 710(e) of the Act, there is established in the Executive Branch a National Defense Executive Reserve ("NDER") composed of persons of recognized expertise from various segments of the private sector and from government (except full-time federal employees) for training for employment in executive positions in the Federal Government in the event of an emergency that requires such employment. (b) The head of any department or agency may establish a unit of the NDER in the department or agency and train members of that unit. (c) The head of each department or agency with an NDER unit is authorized to exercise the President's authority to employ civilian personnel in accordance with section 703(a) of the Act when activating all or a part of its NDER unit. The exercise of this authority shall be subject to the provisions of subsections 601(d) and (e) of this order and shall not be redelegated. (d) The head of a department or agency may activate an NDER unit, in whole or in part, upon the written determination that an emergency affecting the national security or defense preparedness of the United States exists and that the activation of the unit is necessary to carry out the emergency program functions of the department or agency. (e) At least 72 hours prior to activating the NDER unit, the head of the department or agency shall notify, in writing, the Assistant to the President for National Security Affairs of the impending activation and provide a copy of the determination required under subsection 601(d) of this order. (f) The Director, FEMA, shall coordinate the NDER program activities of departments and agencies in establishing units of the Reserve; provide for appropriate guidance for recruitment, training, and activation; and issue necessary rules and guidance in connection with the program. (g) This order suspends any delegated authority, regulation, or other requirement or condition with respect to the activation of any NDER unit, in whole or in part, or appointment of any NDER member that is inconsistent with the authorities delegated herein, provided that the aforesaid suspension applies only as long as sections 703(a) and 710(e) of the Act are in effect.

Sec. 602. Consultants. The head of each department or agency assigned functions under this order is delegated authority under sections 710(b) and (c) of the Act to employ persons of outstanding experience and ability without compensation and to employ experts, consultants, or organizations. The authority delegated by this section shall not be redelegated.

PART VII - LABOR SUPPLY

Sec. 701. Secretary of Labor. The Secretary of Labor, identified in this section as the Secretary, shall: (a) Collect, analyze, and maintain data needed to make a continuing appraisal of the nation's labor requirements and the supply of workers for purposes of national defense. All agencies of the government shall cooperate with the Secretary in furnishing information necessary for this purpose, to the extent permitted by law; (b) In response to requests from the head of a Federal department or agency engaged in the procurement for national defense, consult with and advise that department or agency with respect to (1) the effect of contemplated actions on labor supply and utilization, (2) the relation of labor supply to materials and facilities requirements, and (3) such other matters as will assist in making the exercise of priority and allocations functions consistent with effective utilization and distribution of labor; (c) Formulate plans, programs, and policies for meeting defense and essential civilian labor requirements; (d) Project skill shortages to facilitate meeting defense and essential civilian needs and establish training programs; (e) Determine the occupations and skills critical to meeting the labor requirements of defense and essential civilian activities and, with the assistance of the Secretary of Defense, more 9 the Director of Selective Service, and such other persons as the Director, FEMA, may designate, develop policies regulating the induction and deferment of personnel for the armed services, except for civilian personnel in the reserves; and (f) Administer an effective labor-management relations policy to support the activities and programs under this order with the cooperation of other Federal agencies, including the National Labor Relations Board and the Federal Mediation and Conciliation Service.

PART VIII - DEFENSE INDUSTRIAL BASE INFORMATION AND REPORTS

Sec. 801. Foreign Acquisition of Companies. The Secretary of the Treasury, in cooperation with the Department of State, the Department of Defense, the Department of Commerce, the Department of Energy, the Department of Agriculture, the Attorney General, and the Director of Central Intelligence, shall complete and furnish a report to the President and then to Congress in accordance with the requirements of section 721(k) of the Act concerning foreign efforts to acquire United States companies involved in research, development, or production of critical technologies and industrial espionage activities directed by foreign governments against private U.S. companies.

Sec. 802. Defense Industrial Base Information System. (a) The Secretary of Defense and the heads of other appropriate Federal departments and agencies, as determined by the Secretary of Defense, shall establish an information system on the domestic defense industrial base in accordance with the requirements of section 722 of the Act. (b) In establishing the information system required by subsection (a) of this order, the Secretary of Defense, the Secretary of Commerce, and the heads of other appropriate Federal departments and agencies, as determined by the Secretary of Defense in consultation with the Secretary of Commerce, shall consult with each other for the purposes of performing the duties listed in section 722(d)(1) of the Act. (c) The Secretary of Defense shall convene a task force consisting of the Secretary of Commerce and the Secretary of each military department and the heads of other appropriate Federal departments and agencies, as determined by the Secretary of Defense in consultation with the Secretary of Commerce, to carry out the duties under section 722(d)(2) of the Act. (d) The Secretary of Defense shall report to Congress on a strategic plan for developing a cost-effective, comprehensive information system capable of identifying on a timely, ongoing basis vulnerability in critical components and critical technology items. The plans shall include an assessment of the performance and cost-effectiveness of procedures specified in section 722(b) of the Act. (e) The Secretary of Commerce, acting through the Bureau of the Census, shall consult with the Secretary of Defense and the Director, FEMA, to improve the usefulness of information derived from the Census of Manufacturers in carrying out section 722 of the Act. (f) The Secretary of Defense shall perform an analysis of the production base for not more than two major weapons systems of each military department in establishing the information system under section 722 of the Act. Each analysis shall identify the critical components of each system. (g) The Secretary of Defense, in consultation with the Secretary of Commerce, and the heads of other Federal departments and agencies as appropriate, shall issue a biennial report on critical components and technology in accordance with section 722(e) of the Act.

PART IX - GENERAL PROVISIONS

Sec. 901. Definitions. In addition to the definitions in section 702 of the Act, the following definitions apply throughout this order: (a) "Civil transportation" includes movement of persons and property by all modes of transportation in interstate, intrastate, or foreign commerce within the United States, its territories and possessions, and the District of Columbia, and, without limitation, related public storage and warehousing, ports, services, equipment and facilities, such as transportation carrier shop and repair facilities. However, "civil transportation" shall not include transportation owned or controlled by the Department of Defense, use of petroleum and gas pipelines, and coal slurry pipelines used only to supply energy production facilities directly. As applied herein, "civil transportation" shall include direction, control, and coordination of civil transportation capacity regardless of ownership. (b) "Energy" means all forms of energy including petroleum, gas (both natural and manufactured), electricity, solid fuels (including all forms of coal, coke, coal chemicals, coal liquification, and coal gasification), and atomic energy, and the production, conservation, use, control, and distribution (including pipelines) of all of these forms of energy. (c) "Farm equipment" means equipment, machinery, and repair parts manufactured for use on farms in connection with the production or preparation for market use of food resources. (d) "Fertilizer" means any product or combination of products that contain one or more of the elements -- nitrogen, phosphorus, and potassium -- for use as a plant nutrient. (e) "Food resources" means all commodities and products, simple, mixed, or compound, or complements to such commodities or products, that are capable of being ingested by either human beings or animals, irrespective of other uses to which such commodities or products may be put, at all stages of processing from the raw commodity to the products thereof in vendible form for human or animal consumption. "Food resources" also means all starches, sugars, vegetable and animal or marine fats and oils, cotton, tobacco, wool, mohair, hemp, flax fiber, and naval stores, but does not mean any such material after it loses its identity as an agricultural commodity or agricultural product. (f) "Food resource facilities" means plants, machinery, vehicles (including on-farm), and other facilities required for the production, processing, distribution, and storage (including more || cold storage) of food resources, livestock and poultry feed and seed, and for the domestic distribution of farm equipment and fertilizer (excluding transportation thereof). (g) "Functions" include powers, duties, authority, responsibilities, and discretion. (h) "Head of each Federal department or agency engaged in procurement for the national defense" means the heads of the Departments of Defense, Energy, and Commerce, as well as those departments and agencies listed in Executive Order No. 10789. (i) "Heads of other appropriate Federal departments and agencies" as used in part VIII of this order means the heads of such other Federal agencies and departments that acquire information or need information with respect to making any determination to exercise any authority under the Act.

(j) "Health resources" means materials, facilities, health supplies, and equipment (including pharmaceutical, blood collecting and dispensing supplies, biological, surgical textiles, and emergency surgical instruments and supplies) required to prevent the impairment of, improve, or restore the physical and mental health conditions of the population. (k) "Metals and minerals" means all raw materials of mineral origin (excluding energy) including their refining, smelting, or processing, but excluding their fabrication. (l) "Strategic and Critical Materials" means materials (including energy) that (1) would be needed to supply the military, industrial, and essential civilian needs of the United States during a national security emergency, and (2) are not found or produced in the United States in sufficient quantities to meet such need and are vulnerable to the termination or reduction of the availability of the material. (m) "Water resources" means all usable water, from all sources, within the jurisdiction of the United States, which can be managed, controlled, and allocated to meet emergency requirements.

Sec. 902. General. (a) Except as otherwise provided in subsection 902(c) of this order, the authorities vested in the President by title VII of the Act may be exercised and performed by the head of each department and agency in carrying out the delegated authorities under the Act and this order. (b) The authorities which may be exercised and performed pursuant to subsection 902(a) of this order shall include (1) the power to redelegate authorities, and to authorize the successive redelegation of authorities, to departments and agencies, officers, and employees of the government, and (2) the power of subpoena with respect to authorities delegated in parts II, III, and IV of this order, provided that the subpoena power shall be utilized only after the scope and purpose of the investigation, inspection, or inquiry to which the subpoena relates have been defined either by the appropriate officer identified in subsection 902(a) of this order or by such other person or persons as the officer shall designate. (c) Excluded from the authorities delegated by subsection 902(a) of this order are authorities delegated by parts V, VI, and VIII of this order and the authority with respect to fixing compensation under section 703(a) of the Act.

Sec. 903. Authority. All previously issued orders, regulations, rulings, certificates, directives, and other actions relating to any function affected by this order shall remain in effect except as they are inconsistent with this order or are subsequently amended or revoked under proper authority. Nothing in this order shall affect the validity or force of anything done under previous delegations or other assignment of authority under the Act.

Sec. 904. Effect on other Orders. (a) The following are superseded or revoked: (1) Section 3, Executive Order No. 8248 of September 8, 1939, (4 FR 3864). (2) Executive Order No. 10222 of March 8, 1951 (16 FR 2247). (3) Executive Order No. 10480 of August 14, 1953 (18 FR 4939). (4) Executive Order No. 10647 of November 28, 1955 (20 FR 8769). (5) Executive Order No. 11179 of September 22, 1964 (29 FR 13239). (6) Executive Order No. 11355 of May 26, 1967 (32 FR 7803). (7) Sections 7 and 8, Executive Order No. 11912 of April 13, 1976 (41 FR 15825, 15826-27). (8) Section 3, Executive Order No. 12148 of July 20, 1979 (44 FR 43239, 43241). (9) Executive Order No. 12521 of June 24, 1985 (50 FR 26335). (10) Executive Order No. 12649 of August 11, 1988 (53 FR 30639). (11) Executive Order No. 12773 of September 26, 1991 (56 FR 49387), except that part of the order that amends section 604 of Executive Order 10480. (b) Executive Order No. 10789 of November 14, 1958, is amended by deleting "and in view of the existing national emergency declared by Proclamation No. 2914 of December 16, 1950," as it appears in the first sentence. (c) Executive Order No. 11790, as amended, relating to the Federal Energy Administration Act of 1974, is amended by deleting "Executive Order No. 10480" where it appears in section 4 and substituting this order's number. more 13 (d) Subject to subsection 904(c) of this order, to the extent that any provision of any prior Executive order is inconsistent with the provisions of this order, this order shall control and such prior provision is amended accordingly.

Sec. 905. Judicial Review. This order is not intended to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any person.

Executive Order 13286 of February 28, 2003

Executive Order Amendment of Executive Orders, and Other Actions, in Connection with the Transfer of Certain Functions to the Secretary of Homeland Security

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Homeland Security Act of 2002 (Public Law 107-296) and section 301 of title 3, United States Code, and in order to reflect the transfer of certain functions to, and other responsibilities vested in, the Secretary of Homeland Security, the transfer of certain agencies and agency components to the Department of Homeland Security, and the delegation of appropriate responsibilities to the Secretary of Homeland Security, it is hereby ordered as follows:

Section 1. Executive Order 13276 of November 15, 2002 ("Delegation of Responsibilities Concerning Undocumented Aliens Interdicted or Intercepted in the Caribbean Region"), is amended by: (a) striking "The Attorney General" wherever it appears in section 1 and inserting "The Secretary of Homeland Security" in lieu thereof; and (b) striking "the Attorney General" wherever it appears in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 2. Executive Order 13274 of September 18, 2002 ("Environmental Stewardship and Transportation Infrastructure Project Reviews"), is amended by inserting "Secretary of Homeland Security," after "Secretary of Defense," in section 3(b).

Sec. 3. Executive Order 13271 of July 9, 2002 ("Establishment of the Corporate Fraud Task Force"), is amended by: (a) inserting "(b) the Secretary of Homeland Security;" after "(a) the Secretary of the Treasury;" in section 4; and (b) relettering the subsequent subsections in section 4 appropriately.

Sec. 4. Executive Order 13260 of March 19, 2002 ("Establishing the President's Homeland Security Advisory Council and Senior Advisory Committees for Homeland Security"), is amended by: (a) striking "the Assistant to the President for Homeland Security (Assistant)" in section 1(c) and inserting "the Secretary of Homeland Security (Secretary)" in lieu thereof; (b) striking "the Assistant" wherever it appears in sections 2 and 3 and inserting "the Secretary" in lieu thereof; (c) striking "the Office of Administration" in section 3(d) and inserting "the Department of Homeland Security" in lieu thereof; (d) striking "the Administrator of General Services" in section 4(a) and inserting "the Secretary of Homeland Security" in lieu thereof; and (e) inserting "of General Services" after "Administrator" in section 4(a). Executive Order 13260 of March 19, 2002, is hereby revoked effective as of March 31, 2003.

Sec. 5. Executive Order 13257 of February 13, 2002 ("President's Interagency Task Force to Monitor and Combat Trafficking in Persons"), is amended by: (a) inserting "(v) the Secretary of Homeland Security;" after "(iv) the Secretary of Health and Human Services;" in section 1(b); and (b) renumbering the subsequent subsections in section 1(b) appropriately.

Sec. 6. Executive Order 13254 of January 29, 2002 ("Establishing the USA Freedom Corps"), is amended by striking "Director of the Federal Emergency Management Agency;" in section 3(b)(viii) and inserting "Secretary of Homeland Security;" in lieu thereof.

Sec. 7. Executive Order 13231 of October 16, 2001 ("Critical Infrastructure Protection in the Information Age"), as amended, is further amended to read in its entirety as follows: "Critical Infrastructure Protection in the Information Age By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to ensure protection of information systems for critical infrastructure, including emergency preparedness communications and the physical assets that support such systems, in the information age, it is hereby ordered as follows: Section 1. Policy. The information technology revolution has changed the way business is transacted, government operates, and national defense is conducted. Those three functions now depend on an interdependent network of critical information infrastructures. It is the policy of the United States to protect against disruption of the operation of information systems for critical infrastructure and thereby help to protect the people, economy, essential human and government services, and national security of the United States, and to ensure that any disruptions that occur are infrequent, of minimal duration, and manageable, and cause the least damage possible. The implementation of this policy shall include a voluntary public-private partnership, involving corporate and nongovernmental organizations. Sec. 2. Continuing Authorities. This order does not alter the existing authorities or roles of United States Government departments and agencies. Authorities set forth in 44 U.S.C. chapter 35, and other applicable law, provide senior officials with responsibility for the security of Federal Government information systems. (a) Executive Branch Information Systems Security. The Director of the Office of Management and Budget (OMB) has the responsibility to develop and oversee the implementation of government-wide policies, principles, standards, and guidelines for the security of information systems that support the executive branch departments and agencies, except those noted in section 2(b) of this order. The Director of OMB shall advise the President and the appropriate department or agency head when there is a critical deficiency in the security practices within the purview of this section in an executive branch department or agency. (b) National Security Information Systems. The Secretary of Defense and the Director of Central Intelligence (DCI) shall have responsibility to oversee, develop, and ensure implementation of policies, principles, standards, and guidelines for the security of information systems that support the operations under their respective control. In consultation with the Assistant to the President for National Security Affairs and the affected departments and agencies, the Secretary of Defense and the DCI shall develop policies, principles, standards, and guidelines for the security of national security information systems that support the operations of other executive branch departments and agencies with national security information. (i) Policies, principles, standards, and guidelines developed under this subsection may require more stringent protection than those developed in accordance with section 2(a) of this order. (ii) The Assistant to the President for National Security Affairs shall advise the President and the appropriate department or agency when there is a critical deficiency in the security practices of a department or agency within the purview of this section. (iii) National Security Systems. The National Security Telecommunications and Information Systems Security Committee, as established by and consistent with NSD-42 and chaired by the Department of Defense, shall be designated as the "Committee on National Security Systems." (c) Additional Responsibilities. The heads of executive branch departments and agencies are responsible and accountable for providing and maintaining adequate levels of security for information systems, including emergency preparedness communications systems, for programs under their control. Heads of such departments and agencies shall ensure the development and, within available appropriations, funding of programs that adequately address these mission

systems, especially those critical systems that support the national security and other essential government programs. Additionally, security should enable, and not unnecessarily impede, department and agency business operations. Sec. 3. The National Infrastructure Advisory Council. The National Infrastructure Advisory Council (NIAC), established on October 16, 2001, shall provide the President through the Secretary of Homeland Security with advice on the security of information systems for critical infrastructure supporting other sectors of the economy: banking and finance, transportation, energy, manufacturing, and emergency government services. (a) Membership. The NIAC shall be composed of not more than 30 members appointed by the President. The members of the NIAC shall be selected from the private sector, academia, and State and local government. Members of the NIAC shall have expertise relevant to the functions of the NIAC and generally shall be selected from industry Chief Executive Officers (and equivalently ranked leaders of other organizations) with responsibilities for security of information infrastructure supporting the critical sectors of the economy, including banking and finance, transportation, energy, communications, and emergency government services. Members shall not be full-time officials or employees of the executive branch of the Federal Government. The President shall designate a Chair and Vice Chair from among the members of the NIAC. (b) Functions of the NIAC. The NIAC will meet periodically to: (i) enhance the partnership of the public and private sectors in protecting information systems for critical infrastructures and provide reports on this issue to the Secretary of Homeland Security, as appropriate; (ii) propose and develop ways to encourage private industry to perform periodic risk assessments of critical information and telecommunications systems; (iii) monitor the development of private sector Information Sharing and Analysis Centers (ISACs) and provide recommendations to the President through the Secretary of Homeland Security on how these organizations can best foster improved cooperation among the ISACs, the Department of Homeland Security, and other Federal Government entities; (iv) report to the President through the Secretary of Homeland Security, who shall ensure appropriate coordination with the Assistant to the President for Homeland Security, the Assistant to the President for Economic Policy, and the Assistant to the President for National Security Affairs under the terms of this order; and (v) advise lead agencies with critical infrastructure responsibilities, sector coordinators, the Department of Homeland Security, and the ISACs. (c) Administration of the NIAC. (i) The NIAC may hold hearings, conduct inquiries, and establish subcommittees, as appropriate. (ii) Upon request of the Chair, and to the extent permitted by law, the heads of the executive departments and agencies shall provide the NIAC with information and advice relating to its functions. (iii) Senior Federal Government officials may participate in the meetings of the NIAC, as appropriate. (iv) Members shall serve without compensation for their work on the NIAC. However, members may be reimbursed for travel expenses, including per diem in lieu of subsistence, as authorized by law for persons serving intermittently in Federal Government service (5 U.S.C. 5701-5707). (v) To the extent permitted by law and subject to the availability of appropriations, the Department of Homeland Security shall provide the NIAC with administrative services, staff, and other support services, and such funds as may be necessary for the performance of the NIAC's functions. (d) General Provisions. (i) Insofar as the Federal Advisory Committee Act, as amended (5 U.S.C. App.) (Act), may apply to the NIAC, the functions of the President under that Act, except that of reporting to the Congress, shall be performed by the Department of Homeland Security in accordance with the guidelines and procedures established by the Administrator of General Services. (ii) The NIAC shall terminate on October 15, 2003, unless extended by the President. (iii) Executive Order 13130 of July 14, 1999, was revoked on October 16, 2001. (iv) Nothing in this order shall supersede any requirement made by or under law. Sec. 4. Judicial Review. This order does not create any right or benefit, substantive or procedural, enforceable at law or in equity, against the United States, its departments, agencies, or other entities, its officers or employees, or any other person."

Sec. 8. Executive Order 13228 of October 8, 2001 ("Establishing the Office of Homeland Security and the Homeland Security Council"), as amended, is further amended by: (a) amending section 3(g) to read "(g) Incident Management. Consistent with applicable law, including the statutory functions of the Secretary of Homeland Security, the Assistant to the President for Homeland Security shall be the official primarily responsible for advising and assisting the President in the coordination of domestic incident management activities of all departments and agencies in the event of a terrorist threat, and during and in the aftermath of terrorist attacks, major disasters, or other emergencies, within the United States. Generally, the Assistant to the President for Homeland Security shall serve as the principal point of contact for and to the President with respect to the coordination of such activities. The Assistant to the President for Homeland Security shall coordinate with the Assistant to the President for National Security Affairs, as appropriate."; and (b) inserting ", including the Department of Homeland Security" after "Government departments and agencies" in section 7.

Sec. 9. Executive Order 13223 of September 14, 2001 ("Ordering the Ready Reserve of the Armed Forces to Active Duty and Delegating Certain Authorities to the Secretary of Defense and the Secretary of Transportation"), as amended, is further amended by: (a) striking "the Secretary of Transportation" in the title and wherever it appears in sections 1, 5, 6, and 7, and

inserting "the Secretary of Homeland Security" in lieu thereof; and (b) striking "the Department of Transportation" in section 7 and inserting "the Department of Homeland Security" in lieu thereof.

Sec. 10. Executive Order 13212 of May 18, 2001 ("Actions to Expedite Energy-Related Projects"), is amended by inserting "Homeland Security," after "Veterans Affairs," in section 3.

Sec. 11. Executive Order 13165 of August 9, 2000 ("Creation of the White House Task Force on Drug Use in Sports and Authorization for the Director of the Office of National Drug Control Policy to Serve as the United States Government's Representative on the Board of the World Anti-Doping Agency"), is amended by inserting "the Department of Homeland Security," after "the Department of Transportation," in section 2.

Sec. 12. Executive Order 13154 of May 3, 2000 ("Establishing the Kosovo Campaign Medal"), is amended by striking "the Secretary of Transportation" in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 13. Executive Order 13133 of August 5, 1999 ("Working Group on Unlawful Conduct on the Internet"), is amended by: (a) inserting "(6) The Secretary of Homeland Security." after "(5) The Secretary of Education." in section 3(a); and (b) renumbering the subsequent subsections in section 3(a) appropriately.

Sec. 14. Executive Order 13120 of April 27, 1999 ("Ordering the Selected Reserve and Certain Individual Ready Reserve Members of the Armed Forces to Active Duty"), is amended by striking "the Secretary of Transportation" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 15. Executive Order 13112 of February 3, 1999 ("Invasive Species"), is amended by inserting "the Secretary of Homeland Security," after "Secretary of Transportation," in section 3(a).

Sec. 16. Executive Order 13100 of August 25, 1998 ("President's Council on Food Safety"), is amended by inserting "and Homeland Security," after "Health and Human Services," in section 1(a).

Sec. 17. Executive Order 13076 of February 24, 1998 ("Ordering the Selected Reserve of the Armed Forces to Active Duty"), is amended by striking "the Secretary of Transportation" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 18. Executive Order 13011 of July 16, 1996 ("Federal Information Technology"), as amended, is further amended by: (a) striking "17. Federal Emergency Management Agency;" in section 3(b); and (b) renumbering the subsequent subsections in section 3(b) appropriately.

Sec. 19. Executive Order 12989 of February 13, 1996 ("Economy and Efficiency in Government Procurement through Compliance with Certain Immigration and Naturalization Act Provisions"), is amended by: (a) striking "Naturalization" in the title and inserting "Nationality" in lieu thereof; (b) striking ", the Attorney General" in section 3; (c) inserting "the Secretary of Homeland Security" before "may" in section 3(a); (d) inserting "the Secretary of Homeland Security" before "shall" in section 3(b); (e) inserting "the Attorney General" before "shall" in section 3(c); (f) inserting "Secretary of Homeland Security or the" before "Attorney General" wherever it appears in section 4; (g) striking "The Attorney General's" in section 4(b) and inserting "Such" in lieu thereof; (h) striking "the Attorney General" wherever it appears in the first two sentences of section 5(a) and inserting "the Secretary of Homeland Security and Attorney General" in lieu thereof; (i) striking "the responsibilities of the Attorney General" in section 5(a) and inserting "their respective responsibilities" in lieu thereof; (j) inserting "Secretary of Homeland Security or the" before "Attorney General" wherever it appears in the third sentence of section 5(a); (k) inserting "Secretary of Homeland Security and the" before "Attorney General" in section 6; (l) striking "the Attorney General's" in section 6 and inserting "their respective" in lieu thereof; and (m) inserting "Secretary of Homeland Security, the" before "Attorney General" in section 7.

Sec. 20. Executive Order 12985 of January 11, 1996 ("Establishing the Armed Forces Service Medal"), is amended by striking "the Secretary of Transportation" in section 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 21. Executive Order 12982 of December 8, 1995 ("Ordering the Selected Reserve of the Armed Forces to Active Duty"), is amended by striking "the Secretary of Transportation" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 22. Executive Order 12978 of October 21, 1995 ("Blocking Assets and Prohibiting Transactions with Significant Narcotics Traffickers"), is amended by inserting ", the Secretary of Homeland Security," after "the Attorney General" wherever it appears in sections 1 and 4.

Sec. 23. Executive Order 12977 of October 19, 1995 ("Interagency Security Committee"), is amended by: (a) striking "the Administrator of General Services ("Administrator")" in section 1(a) and inserting "the secretary of Homeland Security ("Secretary")" in lieu thereof; (b) striking "and" after "(16) Central Intelligence Agency;" in section 1(b); (c) inserting "and (18) General Services Administration;" after "(17) Office of Management and Budget;" in section 1(b); (d) striking section 1(c)(2) and redesignating sections 1(c)(3) and 1(c)(4) as sections 1(c)(2) and 1(c)(3), respectively; (e) striking "Administrator" wherever it appears in sections 2, 5(a)(3)(E), 6(a), and 6(c), and inserting "Secretary" in lieu thereof; and (f) striking ", acting by and through the Assistant Commissioner," in section 6(c).

Sec. 24. Executive Order 12919 of June 3, 1994 ("National Defense Industrial Resources Preparedness"), is amended by: (a) striking "The Director, Federal Emergency Management Agency ("Director, FEMA")" in section 104(b) and inserting "The Secretary of Homeland Security ("the Secretary")" in lieu thereof; (b) striking "The Director, FEMA," in sections 201(c) and 601(f) and inserting "The Secretary" in lieu thereof; (c) striking "the Director, FEMA," wherever it appears in sections 201(e), 202(c), 305, 501, 701(e), and 802(e), and inserting "the Secretary" in lieu thereof; and (d) inserting "the Department of Homeland Security," after "Attorney General," in section 801.

Sec. 25. Executive Order 12906 of April 11, 1994 ("Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure"), is amended by: (a) striking "and" in section 7(b)(ii); (b) striking the period at the end of section 7(b)(iii) and inserting "; and" in lieu thereof; and (c) inserting a new section 7(b)(iv) to read "(iv) the national security-related activities of the Department of Homeland Security as determined by the Secretary of Homeland Security."

Sec. 26. Executive Order 12870 of September 30, 1993 ("Trade Promotion Coordinating Committee"), is amended by: (a) inserting "(j) Department of Homeland Security;" after "(i) Department of the Interior;" in section 1; and (b) relettering the subsequent subsections in section 1 appropriately.

Sec. 27. Executive Order 12835 of January 25, 1993 ("Establishment of the National Economic Council"), is amended by: (a) inserting "(k) Secretary of Homeland Security;" after "(j) Secretary of Energy;" in section 2; and (b) relettering the subsequent subsections in section 2 appropriately.

Sec. 28. Executive Order 12830 of January 9, 1993 ("Establishing the Military Outstanding Volunteer Service Medal"), is amended by striking "the Secretary of Transportation" wherever it appears and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 29. Executive Order 12824 of December 7, 1992 ("Establishing the Transportation Distinguished Service Medal"), is amended by: (a) striking "Transportation" in the title and inserting "Homeland Security" in lieu thereof; and (b) striking "Transportation" wherever it appears and inserting "Homeland Security" in lieu thereof. Sec. 30. Executive Order 12807 of May 24, 1992 ("Interdiction of Illegal Aliens"), is amended by striking "the Attorney General" in section 2(c)(3) and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 31. Executive Order 12793 of March 20, 1992 ("Continuing the Presidential Service Certificate and Presidential Service Badge"), is amended by striking "the Secretary of Transportation" in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 32. Executive Order 12789 of February 10, 1992 ("Delegation of Reporting Functions Under the Immigration Reform and Control Act of 1986"), is amended by striking "The Attorney General" in section 1 and inserting "The Secretary of Homeland Security" in lieu thereof.

Sec. 33. Executive Order 12788 of January 15, 1992 ("Defense Economic Adjustment Program"), is amended by: (a) inserting "(15) Secretary of Homeland Security;" after "(14) Secretary of Veterans Affairs;" in section 4(a); and (b) renumbering the subsequent subsections in section 4(a) appropriately.

Sec. 34. Executive Order 12777 of October 18, 1991 ("Implementation of Section 311 of the Federal Water Pollution Control Act of October 18, 1972, as Amended, and the Oil Pollution Act of 1990"), is amended by: (a) inserting "and the Secretary of the Department in which the Coast Guard is operating" after "the Secretary of Transportation" in sections 2(b)(2) and 2(d)(2); (b) striking "the Secretary of Transportation" in section 2(e)(2) and wherever it appears in sections 5 and 8 and inserting "the Secretary of the Department in which the Coast Guard is operating" in lieu thereof; and (c) inserting "the Secretary of the Department in which the Coast Guard is operating," after "Agriculture," in section 10(c).

Sec. 35. Executive Order 12743 of January 18, 1991 ("Ordering the Ready Reserve of the Armed Forces to Active Duty"), is amended by: (a) striking "the Department of Transportation" in section 1 and inserting "the Department of Homeland Security" in lieu thereof; and (b) striking "the Secretary of Transportation" in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 36. Executive Order 12742 of January 8, 1991 ("National Security Industrial Responsiveness"), is amended by: (a) inserting "Homeland Security," after "Transportation," in section 104(a); and (b) striking "the Director of the Federal Emergency Management Agency" in section 104(d) and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 37. Executive Order 12733 of November 13, 1990 ("Authorizing the Extension of the Period of Active Duty of Personnel of the Selected Reserve of the Armed Forces"), is amended by striking "the Secretary of Transportation" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 38. Executive Order 12728 of August 22, 1990 ("Delegating the President's Authority to Suspend any Provision of Law Relating to the Promotion, Retirement, or Separation of Members of the Armed Forces"), is amended by striking "the Secretary of Transportation" in sections 1 and 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 39. Executive Order 12727 of August 27, 1990 ("Ordering the Selected Reserve of the Armed Forces to Active Duty"), is amended by striking "the Secretary of Transportation" in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 40. Executive Order 12699 ("Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction"), is amended by: (a) striking "Federal Emergency Management Agency (FEMA)" in section 3(d) and inserting "Department of Homeland Security" in lieu thereof; (b) striking "The Director of the Federal Emergency Management Agency" in section 4(a) and inserting "The Secretary of Homeland Security" in lieu thereof; and (c) striking "The Federal Emergency Management Agency" and "The FEMA" in section 5 and inserting "The Department of Homeland Security" in lieu thereof (in both places).

Sec. 41. Executive Order 12657 of November 18, 1988 ("Federal Emergency Management Agency Assistance in Emergency Preparedness Planning at Commercial Nuclear Power Plants"), is amended by: (a) striking "Federal Emergency Management Agency" in the title and inserting "Department of Homeland Security" in lieu thereof; (b) striking "Federal Emergency Management Agency ("FEMA")" in section 1(b) and inserting "Department of Homeland Security ("DHS")" in lieu thereof; (c) striking "FEMA" wherever it appears in sections 1(b), 2(b), 2(c), 3, 4, 5, and 6, and inserting "DHS" in lieu thereof; and (d) striking "the Director of FEMA" in section 2(a) and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 42. Executive Order 12656 of November 18, 1988 ("Assignment of Emergency Preparedness Responsibilities"), as amended, is further amended by: (a) striking "The Director of the Federal Emergency Management Agency" wherever it appears in sections 104(c) and 1702 and inserting "The Secretary of Homeland Security" in lieu thereof; (b) striking "the Director of the Federal Emergency Management Agency" wherever it appears in sections 104(c), 201(15), 301(9), 401(10), 501(4), 501(7), 502(7), 601(3), 701(5), 801(9), 1302(4), 1401(4), 1701, and 1801(b), and inserting "the Secretary of Homeland Security" in lieu thereof; (c) striking "consistent with current National Security Council guidelines and policies" in section 201(15) and inserting "consistent with current Presidential guidelines and policies" in lieu thereof; (d) striking "Secretary" in section 501(9) and inserting "Secretaries" in lieu thereof; (e) inserting "and Homeland Security" after "Labor" in section 501(9); (f) striking "and" after "State" in section 701(6) and inserting a comma in lieu thereof; (g) inserting ", and Homeland Security" after "Defense" in section 701(6); (h) striking "the Director of the Federal Emergency Management Agency," in section 701(6); and (i) striking "Federal Emergency Management Agency" in the title of Part 17 and inserting "Department of Homeland Security" in lieu thereof. Without prejudice to subsections (a) through (i) of this section, all responsibilities assigned to specific Federal officials pursuant to Executive Order 12656 that are substantially the same as any responsibility assigned to, or function transferred to, the Secretary of Homeland Security pursuant to the Homeland Security Act of 2002 (regardless of whether such responsibility or function is expressly required to be carried out through another official of the Department of Homeland Security or not pursuant to such Act), or intended or required to be carried out by an agency or an agency component transferred to the Department of Homeland Security pursuant to such Act, are hereby reassigned to the Secretary of Homeland Security.

Sec. 43. Executive Order 12580 of January 23, 1987 ("Superfund Implementation"), as amended, is further amended by: (a) inserting "Department of Homeland Security," after "Department of Energy," in section 1(a)(2); and (b) striking "Federal Emergency Management Agency" in section 1(a)(2).

Sec. 44. Executive Order 12555 of November 15, 1985 ("Protection of Cultural Property"), as amended, is further amended by: (a) striking "the Secretary of the Treasury" in sections 1, 2, and 3, and inserting "the Secretary of Homeland Security" in lieu thereof; and (b) striking "The Department of the Treasury" in the heading of section 3 and inserting "The Department of Homeland Security" in lieu thereof.

Sec. 45. Executive Order 12501 of January 28, 1985 ("Arctic Research"), is amended by: (a) inserting "(i) Department of Homeland Security;" after "(h) Department of Health and Human Services;" in section 8; and (b) relettering the subsequent subsections in section 8 appropriately.

Sec. 46. Executive Order 12472 of April 3, 1984 ("Assignment of National Security and Emergency Preparedness Telecommunications Functions"), is amended by: (a) inserting "the Homeland Security Council," after "National Security Council," in sections 1(b), 1(e)(4), 1(f)(3), and 2(c)(4); (b) striking "The Secretary of Defense" in section 1(e) and inserting "The Secretary of Homeland Security" in lieu thereof; (c) striking "Federal Emergency Management Agency" in sections 1(e)(3) and 3(j) and inserting "Department of Homeland Security" in lieu thereof; (d) inserting ", in consultation with the Homeland Security Council," after "National Security Council" in section 2(b)(1); (e) inserting ", the Homeland Security Council," after "National Security Council" in sections 2(d) and 2(e); (f) striking "the Director of the Federal Emergency Management Agency" in section 2(d)(1) and inserting "the Secretary of Homeland Security" in lieu thereof; (g) striking "Federal Emergency Management Agency. The Director of the Federal Emergency Management Agency shall:" in section 3(b) and inserting "Department of Homeland Security. The Secretary of Homeland Security shall:" in lieu thereof; and (h) adding at the end of section 3(d) the following new paragraph: "(3) Nothing in this order shall be construed to impair or otherwise affect the authority of the Secretary of Defense with respect

to the Department of Defense, including the chain of command for the armed forces of the United States under section 162(b) of title 10, United States Code, and the authority of the Secretary of Defense with respect to the Department of Defense under section 113(b) of that title."

Sec. 47. Executive Order 12382 of September 13, 1982 ("President's National Security Telecommunications Advisory Committee"), as amended, is further amended by: (a) inserting "through the Secretary of Homeland Security," after "the President," in sections 2(a) and 2(b); (b) striking "and to the Secretary of Defense" in section 2(e) and inserting ", through the Secretary of Homeland Security," in lieu thereof; and (c) striking "the Secretary of Defense" in sections 3(c) and 4(a) and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 48. Executive Order 12341 of January 21, 1982 ("Cuban and Haitian Entrants"), is amended by: (a) striking "The Attorney General" in section 2 and inserting "The Secretary of Homeland Security" in lieu thereof; and (b) striking "the Attorney General" in section 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 49. Executive Order 12208 of April 15, 1980 ("Consultations on the Admission of Refugees"), as amended, is further amended by: (a) striking "the following functions: (a) To" in section 1101 and inserting "to" in lieu thereof; (b) striking "the Attorney General" in section 1-101(a) and inserting "the Secretary of Homeland Security" in lieu thereof; (c) striking sections 1-101(b) and 1-102; and (d) redesignating sections 1-103 and 1-104 as sections 1-102 and 1-103, respectively.

Sec. 50. Executive Order 12188 of January 2, 1980 ("International Trade Functions"), as amended, is further amended by: (a) inserting "(12) The Secretary of Homeland Security" after "(11) The Secretary of Energy" in section 1-102(b); and (b) renumbering the subsequent subsections in section 1102(b) appropriately.

Sec. 51. Executive Order 12160 of September 26, 1979 ("Providing for Enhancement and Coordination of Federal Consumer Programs"), as amended, is further amended by: (a) inserting "(m) Department of Homeland Security." after "(l) Department of the Treasury." in section 1-102; (b) striking "(s) Federal Emergency Management Agency." in section 1-102; and (c) relettering the subsequent subsections in section 1-102 appropriately.

Sec. 52. Executive Order 12148 of July 20, 1979 ("Federal Emergency Management"), as amended, is further amended by: (a) striking "the Federal Emergency Management Agency" whenever it appears and inserting "the Department of Homeland Security" in lieu thereof; and (b) striking "the Director of the Federal Emergency Management Agency" wherever it appears and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 53. Executive Order 12146 of July 18, 1979 ("Management of Federal Legal Resources"), as amended, is further amended by: (a) striking "15" in section 1-101 and inserting "16" in lieu thereof; (b) inserting "(n) The Department of Homeland Security." after "(m) The Department of the Treasury." in section 1-102; and (c) relettering the subsequent subsections in section 1-102 appropriately.

Sec. 54. Executive Order 12002 of July 7, 1977 ("Administration of Export Controls"), as amended, is further amended by inserting ", the Secretary of Homeland Security," after "The Secretary of Energy" in section 3.

Sec. 55. Executive Order 11965 of January 19, 1977 ("Establishing the Humanitarian Service Medal"), is amended by striking "the Secretary of Transportation" wherever it appears in sections 1, 2, and 4, and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 56. Executive Order 11926 of July 19, 1976 ("The Vice Presidential Service Badge"), is amended by striking "the Secretary of Transportation" in section 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 57. Executive Order 11858 of May 7, 1975 ("Foreign Investment in the United States"), as amended, is further amended by: (a) inserting "(8) The Secretary of Homeland Security." after "(7) The Attorney General." in section 1(a); and (b) redesignating subsection (8) as subsection (9) in section 1(a).

Sec. 58. Executive Order 11800 of August 17, 1974 ("Delegating Certain Authority Vested in the President by the Aviation Career Incentive Act of 1974"), as amended, is further amended by striking "the Secretary of Transportation" in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 59. Executive Order 11645 of February 8, 1972 ("Authority of the Secretary of Transportation to Prescribe Certain Regulations Relating to Coast Guard Housing"), is amended by striking "the Secretary of Transportation" in the title and in sections 1 and 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 60. Executive Order 11623 of October 12, 1971 ("Delegating to the Director of Selective Service Authority to Issue Rules and Regulations under the Military Selective Service Act"), as amended, is further amended by: (a) striking "the Secretary of Transportation" in section 2(a) and inserting "the Secretary of Homeland Security" in lieu thereof; and (b) striking "the Department of Transportation" in section 2(a) and inserting "the Department of Homeland Security" in lieu thereof.

Sec. 61. Executive Order 11448 of January 16, 1969 ("Establishing the Meritorious Service Medal"), as amended, is further amended by striking "the Secretary of Transportation" in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 62. Executive Order 11446 of January 16, 1969 ("Authorizing the Acceptance of Service Medals and Ribbons from Multilateral Organizations Other Than the United Nations"), is amended by striking "the Secretary of Transportation" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 63. Executive Order 11438 of December 3, 1968 ("Prescribing Procedures Governing Interdepartmental Cash Awards to the Members of the Armed Forces"), as amended, is further amended by: (a) striking "the Secretary of Transportation" in sections 1 and 2 and inserting "the Secretary of Homeland Security" in lieu thereof; and (b) striking "the Department of Transportation" wherever it appears in sections 2 and 4 and inserting "the Department of Homeland Security" in lieu thereof.

Sec. 64. Executive Order 11366 of August 4, 1967 ("Assigning Authority to Order Certain Persons in the Ready Reserve to Active Duty"), is amended by striking "The Secretary of Transportation" in sections 2 and 3(b) and inserting "The Secretary of Homeland Security" in lieu thereof.

Sec. 65. Executive Order 11239 of July 31, 1965 ("Enforcement of the Convention for Safety of Life at Sea, 1960"), as amended, is further amended, without prejudice to section 1-106 of Executive Order 12234 of September 3, 1980 ("Enforcement of the Convention for the Safety of Life at Sea"), by: (a) striking "the Secretary of Transportation" in sections 1, 3, and 4, and inserting "the Secretary of Homeland Security" in lieu thereof; and (b) striking "The Secretary of Transportation" in sections 2 and 3 and inserting "The Secretary of Homeland Security" in lieu thereof.

Sec. 66. Executive Order 11231 of July 8, 1965 ("Establishing the Vietnam Service Medal"), as amended, is further amended by striking "the Secretary of Transportation" in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 67. Executive Order 11190 of December 29, 1964 ("Providing for the Screening of the Ready Reserve of the Armed Forces"), as amended, is further amended by striking "the Secretary of Transportation" in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 68. Executive Order 11139 of January 7, 1964 ("Authorizing Acceptance of the United Nations Medal and Service Ribbon"), is amended by striking "the Secretary of the Treasury" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 69. Executive Order 11079 of January 25, 1963 ("Providing for the Prescribing of Regulations under which Members of the Armed Forces and Others May Accept Fellowships, Scholarships or Grants"), as amended, is further amended by striking "the Secretary of Transportation" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 70. Executive Order 11046 of August 24, 1962 ("Authorizing Award of the Bronze Star Medal"), as amended, is further amended by striking "the Secretary of Transportation" in section 1 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 71. Executive Order 11016 of April 25, 1962 ("Authorizing Award of the Purple Heart"), as amended, is further amended by striking "the Secretary of Transportation" in sections 1 and 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 72. Executive Order 10977 of December 4, 1961 ("Establishing the Armed Forces Expeditionary Medal"), as amended, is further amended by striking "the Secretary of Transportation" in section 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 73. Executive Order 10789 of November 14, 1958 ("Authorizing Agencies of the Government To Exercise Certain Contracting Authority in Connection With National-Defense Functions and Prescribing Regulations Governing the Exercise of Such Authority"), as amended, is further amended by: (a) striking "The Federal Emergency Management Agency" in paragraph 21 and inserting "Department of Homeland Security" in lieu thereof; and (b) inserting at the end thereof the following new Part: "Part III -- Coordination with Other Authorities 25. After March 1, 2003, no executive department or agency shall exercise authority granted under paragraph 1A of this order with respect to any matter that has been, or could be, designated by the Secretary of Homeland Security as a qualified anti-terrorism technology as defined in section 865 of the Homeland Security Act of 2002, unless-- (a) in the case of the Department of Defense, the Secretary of Defense has, after consideration of the authority provided under subtitle G of title VIII of the Homeland Security Act of 2002, determined that the exercise of authority under this order is necessary for the timely and effective conduct of United States military or intelligence activities; and (b) in the case of any other executive department or agency that has authority under this order, (i) the Secretary of Homeland Security has advised whether the use of the authority provided under subtitle G of title VIII of the Homeland Security Act of 2002 would be appropriate, and (ii) the Director of the Office and Management and Budget has approved the exercise of authority under this order."

Sec. 74. Executive Order 10694 of January 10, 1957 ("Authorizing the Secretaries of the Army, Navy, and Air Force to Issue Citations in the Name of the President of the United States to Military and Naval Units for Outstanding Performance in Action"),

is amended by adding at the end thereof the following new section: "5. The Secretary of the Department in which the Coast Guard is operating may exercise the same authority with respect to the Coast Guard under this order as the Secretary of the Navy may exercise with respect to the Navy and the Marine Corps under this order."

Sec. 75. Executive Order 10637 of September 16, 1955 ("Delegating to the Secretary of the Treasury Certain Functions of the President Relating to the United States Coast Guard"), is amended by: (a) striking "The Secretary of the Treasury" in sections 1 and 2 and inserting "The Secretary of Homeland Security" in lieu thereof; (b) striking "the Secretary of the Treasury" in the title and in subsections 1(j), 1(k), and 5, and inserting "the Secretary of Homeland Security" in lieu thereof; and (c) striking subsection 1(r) and redesignating subsection 1(s) as subsection 1(r).

Sec. 76. Executive Order 10631 of August 17, 1955 ("Code of Conduct for Members of the Armed Forces of the United States"), as amended, is further amended by: striking "the Secretary of Transportation" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 77. Executive Order 10554 of August 18, 1954 ("Delegating the Authority of the President to Prescribe Regulations Authorizing Occasions Upon Which the Uniform May Be Worn by Persons Who Have Served Honorably in the Armed Forces in Time of War"), is amended by striking "the Secretary of the Treasury" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 78. Executive Order 10499 of November 4, 1953 ("Delegating Functions Conferred Upon the President by Section 8 of the Uniformed Services Contingency Option Act of 1953"), as amended, is further amended by striking "the Treasury" in sections 1 and 2 and inserting "Homeland Security" in lieu thereof.

Sec. 79. Executive Order 10448 of April 22, 1953 ("Authorizing the National Defense Medal"), as amended, is further amended by striking "the Secretary of Transportation" in sections 1 and 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 80. Executive Order 10271 of July 7, 1951 ("Delegating the Authority of the President to Order Members and Units of Reserve Components of the Armed Forces into Active Federal service"), is amended by striking "the Secretary of the Treasury" and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 81. Executive Order 10179 of November 8, 1950 ("Establishing the Korean Service Medal"), as amended, is further amended by striking "the Secretary of the Treasury" in sections 1 and 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 82. Executive Order 10163 of September 25, 1950 ("The Armed Forces Reserve Medal"), as amended, is further amended by striking "the Secretary of the Treasury" in sections 2 and 7 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 83. Executive Order 10113 of February 24, 1950 ("Delegating the Authority of the President to Prescribe Clothing Allowances, and Cash Allowances in lieu thereof, for Enlisted Men in the Armed Forces"), as amended, is further amended by striking "the Secretary of the Treasury" in sections 1 and 2 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 84. Executive Order 4601 of March 1, 1927 ("Distinguished Flying Cross"), as amended, is further amended by: (a) striking "The Secretary of War, the Secretary of the Navy," in sections 2 and 12 and inserting "The Secretary of Defense" in lieu thereof; and (b) striking "the Secretary of the Treasury" in sections 2 and 12 and inserting "the Secretary of Homeland Security" in lieu thereof.

Sec. 85. Designation as a Defense Agency of the United States. I hereby designate the Department of Homeland Security as a defense agency of the United States for the purposes of chapter 17 of title 35 of the United States Code.

Sec. 86. Exception from the Provisions of the Government Employees Training Act. Those elements of the Department of Homeland Security that are supervised by the Under Secretary of Homeland Security for Information Analysis and Infrastructure Protection through the Department's Assistant Secretary for Information Analysis are, pursuant to section 4102(b)(1) of title 5, United States Code, and in the public interest, excepted from the following provisions of the Government Employees Training Act as codified in title 5: sections 4103(a)(1), 4108, 4115, 4117, and 4118, and that part of 4109(a) that provides "under the regulations prescribed under section 4118(a)(8) of this title and".

Sec. 87. Functions of Certain Officials in the Coast Guard. The Commandant and the Assistant Commandant for Intelligence of the Coast Guard each shall be considered a "Senior Official of the Intelligence Community" for purposes of Executive Order 12333 of December 4, 1981, and all other relevant authorities.

Sec. 88. Order of Succession. Subject to the provisions of subsection (b) of this section, the officers named in subsection (a) of this section, in the order listed, shall act as, and perform the functions and duties of, the office of Secretary of Homeland Security ("Secretary") during any period in which the Secretary has died, resigned, or otherwise become unable to perform the functions and duties of the office of Secretary. (a) Order of Succession. (i) Deputy Secretary of Homeland Security; (ii) Under Secretary for Border and Transportation Security; (iii) Under Secretary for Emergency Preparedness and Response; (iv) Under Secretary for

Information Analysis and Infrastructure Protection; (v) Under Secretary for Management; (vi) Under Secretary for Science and Technology; (vii) General Counsel; and (viii) Assistant Secretaries in the Department in the order of their date of appointment as such. (b) Exceptions. (i) No individual who is serving in an office listed in subsection (a) in an acting capacity shall act as Secretary pursuant to this section. (ii) Notwithstanding the provisions of this section, the President retains discretion, to the extent permitted by the Federal Vacancies Reform Act of 1998, 5 U.S.C. 3345 et seq., to depart from this order in designating an acting Secretary.

Sec. 89. Savings Provision. Except as otherwise specifically provided above or in Executive Order 13284 of January 23, 2003 ("Amendment of Executive Orders, and Other Actions, in Connection With the Establishment of the Department of Homeland Security"), references in any prior Executive Order relating to an agency or an agency component that is transferred to the Department of Homeland Security ("the Department"), or relating to a function that is transferred to the Secretary of Homeland Security, shall be deemed to refer, as appropriate, to the Department or its officers, employees, agents, organizational units, or functions.

Sec. 90. Nothing in this order shall be construed to impair or otherwise affect the authority of the Secretary of Defense with respect to the Department of Defense, including the chain of command for the armed forces of the United States under section 162(b) of title 10, United States Code, and the authority of the Secretary of Defense with respect to the Department of Defense under section 113(b) of that title.

Sec. 91. Nothing in this order shall be construed to limit or restrict the authorities of the Central Intelligence Agency and the Director of Central Intelligence pursuant to the National Security Act of 1947 and the CIA Act of 1949.

Sec. 92. This order shall become effective on March 1, 2003.

Sec. 93. This order does not create any right or benefit, substantive or procedural, enforceable at law or in equity, against the United States, its departments, agencies, or other entities, its officers or employees, or any other person.

Appendix D:
Offsets-Related Provisions of
the Defense Production Act
Reauthorization of 2003
(Pub. L. 108-195)

Defense Production Act Reauthorization of 2003

(Pub. L. 108-195)

SEC. 7. REPORT ON IMPACT OF OFFSETS ON DOMESTIC CONTRACTORS AND LOWER TIER SUBCONTRACTORS.

(a) EXAMINATION OF IMPACT REQUIRED.--

(1) **IN GENERAL.**--As part of the annual report required under section 309(a) of the Defense Production Act of 1950 (50 U.S.C. App. 2099(a)), the Secretary of Commerce (in this section referred to as the "Secretary") shall--

(A) detail the number of foreign contracts involving domestic contractors that use offsets, industrial participation agreements, or similar arrangements during the preceding 5-year period;

(B) calculate the aggregate, median, and mean values of the contracts and the offsets, industrial participation agreements, and similar arrangements during the preceding 5-year period; and

(C) describe the impact of international or foreign sales of United States defense products and related offsets, industrial participation agreements, and similar arrangements on domestic prime contractors and, to the extent practicable, the first 3 tiers of domestic contractors and subcontractors during the preceding 5-year period in terms of domestic employment, including any job losses, on an annual basis.

(2) **USE OF INTERNAL DOCUMENTS.**--To the extent that the Department of Commerce is already in possession of relevant data, the Department shall use internal documents or existing departmental records to carry out paragraph (1).

(3) INFORMATION FROM NON-FEDERAL ENTITIES.--

(A) **EXISTING INFORMATION.**--In carrying out paragraph (1), the Secretary shall only require a non-Federal entity to provide information that is available through the existing data collection and reporting systems of that non-Federal entity.

(B) **FORMAT.**--The Secretary may require a non-Federal entity to provide information to the Secretary in the same form that is already provided to a foreign government in fulfilling an offset arrangement, industrial participation agreement, or similar arrangement.

(b) REPORT.--

(1) **IN GENERAL.**--Before the end of the 8-month period beginning on the date of enactment of this Act, the Secretary shall submit to Congress a report containing the findings and conclusions of the Secretary with regard to the examination made pursuant to subsection (a).

(2) **COPIES OF REPORT.**--The Secretary shall also transmit copies of the report prepared under paragraph (1) to the United States Trade Representative and the interagency team established pursuant to section 123(c) of the Defense Production Act Amendments of 1992 (50 U.S.C. App. 2099 note).

(c) **RESPONSIBILITIES REGARDING CONSULTATION WITH FOREIGN NATIONS.**--Section 123(c) of the Defense Production Act Amendments of 1992 (50 U.S.C. App. 2099 note) is amended to read as follows:

``(c) **NEGOTIATIONS.**--

``(1) **INTERAGENCY TEAM.**--

``(A) **IN GENERAL.**--It is the policy of Congress that the President shall designate a chairman of an interagency team comprised of the Secretary of Commerce, Secretary of Defense, United States Trade Representative, Secretary of Labor, and Secretary of State to consult with foreign nations on limiting the adverse effects of offsets in defense procurement without damaging the economy or the defense industrial base of the United States or United States defense production or defense preparedness.

``(B) **MEETINGS.**--The President shall direct the interagency team to meet on a quarterly basis.

``(C) **REPORTS.**--The President shall direct the interagency team to submit to Congress an annual report, to be included as part of the report required under section 309(a) of the Defense Production Act of 1950 (50 U.S.C. App. 2099(a)), that describes the results of the consultations of the interagency team under subparagraph (A) and the meetings of the interagency team under subparagraph (B).

``(2) **RECOMMENDATIONS FOR MODIFICATIONS.**--The interagency team shall submit to the President any recommendations for modifications of any existing or proposed memorandum of understanding between officials acting on behalf of the United States and 1 or more foreign countries (or any instrumentality of a foreign country) relating to--

``(A) research, development, or production of defense equipment; or

``(B) the reciprocal procurement of defense items.".

Appendix E:
Offset Transactions by
Economic Sector

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)	Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
	Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
07 Agriculture Services		\$53,637,954		\$53,637,954		\$69,091,954		\$69,091,954
07 Agriculture		\$53,595,954		\$53,595,954		\$68,668,954		\$68,668,954
721 Crop Planting And Cultivating		\$42,000		\$42,000		\$423,000		\$423,000
09 Fishing, Hunting, And Preserves		\$7,908,000		\$7,908,000		\$13,051,000		\$13,051,000
0921 Fish Hatcheries And Preserves		\$7,908,000		\$7,908,000		\$13,051,000		\$13,051,000
10 Metal Mining		\$3,244,000		\$3,244,000		\$3,244,000		\$3,244,000
1081 Metal Mining Services		\$3,244,000		\$3,244,000		\$3,244,000		\$3,244,000
13 Oil And Gas Extraction		\$51,342,000		\$51,342,000		\$98,591,000		\$98,591,000
13 Oil And Gas Extraction		\$2,178,000		\$2,178,000		\$49,427,000		\$49,427,000
138 Oil and Gas Field Services		\$1,600,000		\$1,600,000		\$1,600,000		\$1,600,000
1311 Crude Petroleum & Natural Gas		\$47,564,000		\$47,564,000		\$47,564,000		\$47,564,000
15 Building Construction	\$20,840,446	\$15,089,359		\$35,929,805	\$33,580,446	\$15,541,359		\$49,121,805
15 Building Construction	\$12,222,000	\$7,800,000		\$20,022,000	\$24,962,000	\$7,800,000		\$32,762,000
1521 General Contractors, Family Houses		\$870,000		\$870,000		\$1,322,000		\$1,322,000
154 General Building Contractors-Nonresidential	\$8,021,446			\$8,021,446	\$8,021,446			\$8,021,446
1541 General Contractors, Industrial Buildings	\$597,000	\$6,419,359		\$7,016,359	\$597,000	\$6,419,359		\$7,016,359
16 Heavy Construction	\$1,217,000	\$259,867		\$1,476,867	\$14,706,000	\$259,867		\$14,965,867
16 Heavy Construction		\$259,867		\$259,867		\$259,867		\$259,867
1611 Highway Construction	\$1,217,000			\$1,217,000	\$14,706,000			\$14,706,000
17 Construction Special Trade Contractors	\$1,011,000	\$20,163,542		\$21,174,542	\$1,011,000	\$20,163,542		\$21,174,542
1711 Mechanical Contractors	\$1,011,000			\$1,011,000	\$1,011,000			\$1,011,000
1731 Electrical Work		\$16,289,542		\$16,289,542		\$16,289,542		\$16,289,542
1761 Roofing, Siding, & Sheet Metal Work		\$3,874,000		\$3,874,000		\$3,874,000		\$3,874,000
20 Food And Kindred Products		\$15,466,000		\$15,466,000		\$15,665,000		\$15,665,000
20 Food And Kindred Products		\$9,556,000		\$9,556,000		\$9,556,000		\$9,556,000
2033 Canned Fruits And Vegetables		\$2,145,000		\$2,145,000		\$2,144,000		\$2,144,000
2079 Shortening And Oils		\$1,068,000		\$1,068,000		\$1,268,000		\$1,268,000
2084 Wine, Brandy, And Brandy Spirits		\$2,697,000		\$2,697,000		\$2,697,000		\$2,697,000
22 Textile Mill Products		\$6,362,020		\$6,362,020		\$6,363,020		\$6,363,020
22 Textile Mill Products		\$6,067,000		\$6,067,000		\$6,068,000		\$6,068,000

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)	Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
	Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
2211 Broadwoven Fabric Mills, Cotton		\$295,020		\$295,020		\$295,020		\$295,020
23 Apparel & Other Finished Products		\$3,813,418		\$3,813,418		\$3,813,418		\$3,813,418
23 Apparel & Other Finished		\$3,813,418		\$3,813,418		\$3,813,418		\$3,813,418
24 Lumber And Wood Products, Exc. Furniture		\$338,417		\$338,417		\$338,417		\$338,417
2441 Fabricated Metal Products		\$338,417		\$338,417		\$338,417		\$338,417
25 Office Furniture		\$253,691		\$253,691		\$253,691		\$253,691
252 Office Furniture		\$253,691		\$253,691		\$253,691		\$253,691
26 Paper Mills & Allied Products	\$850,000	\$26,089,000		\$26,939,000	\$850,000	\$30,484,000		\$31,334,000
26 Paper Mills & Allied Products	\$850,000			\$850,000	\$850,000			\$850,000
2621 Paper Mills		\$7,819,000		\$7,819,000		\$16,964,000		\$16,964,000
2655 Fiber Cans, Tubes, Drums, Etc.		\$289,000		\$289,000		\$289,000		\$289,000
267 Plastics, Foil and Coated Paper Bags		\$5,000,000		\$5,000,000		\$250,000		\$250,000
2671 Packaging Paper		\$5,981,000		\$5,981,000		\$5,981,000		\$5,981,000
2672 Coated And Laminated Paper		\$7,000,000		\$7,000,000		\$7,000,000		\$7,000,000
27 Printing & Publishing	\$23,911,008	\$52,970,341		\$76,881,349	\$23,886,624	\$52,970,341		\$76,856,965
2741 Technical Publications	\$23,911,008	\$10,059,800		\$33,970,808	\$23,886,624	\$10,059,800		\$33,946,424
2759 Commercial Printing, NEC		\$42,910,541		\$42,910,541		\$42,910,541		\$42,910,541
28 Chemicals And Allied Products	\$20,255,000	\$429,301,187		\$449,556,187	\$25,835,000	\$705,439,297		\$731,274,297
28 Chemicals And Allied Products	\$14,675,000	\$356,695,566		\$371,370,566	\$14,675,000	\$623,831,566		\$638,506,566
281 Industrial Inorganic Chemicals		\$11,727,202		\$11,727,202		\$11,727,202		\$11,727,202
2819 Industrial Inorganic Chemicals		\$604,890		\$604,890				\$0
282 Plastics		\$3,863,000		\$3,863,000		\$3,863,000		\$3,863,000
2834 Pharmaceutical Preparations		\$3,181,000		\$3,181,000		\$6,170,000		\$6,170,000
2851 Paints, Varnishes And Liated Products		\$5,000,000		\$5,000,000		\$5,000,000		\$5,000,000
286 Industrial Organic Chemicals		\$18,822,246		\$18,822,246		\$18,822,246		\$18,822,246
2865 Cyclic Organic, Crude/Intermediate		\$2,470,000		\$2,470,000		\$2,470,000		\$2,470,000

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)		Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
		Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
289	Miscellaneous Chemical Products		\$6,411,578		\$6,411,578		\$6,411,578		\$6,411,578
2892	Explosives	\$5,580,000	\$9,056,447		\$14,636,447	\$11,160,000	\$15,674,447		\$26,834,447
2895	Carbon Black		\$8,600,000		\$8,600,000		\$8,600,000		\$8,600,000
2899	Chemicals And Preparations, Nec		\$2,869,258		\$2,869,258		\$2,869,258		\$2,869,258
29	Petroleum Refining		\$3,160,000		\$3,160,000		\$3,160,000		\$3,160,000
2911	Petroleum Refining		\$3,160,000		\$3,160,000		\$3,160,000		\$3,160,000
30	Rubber And Miscellaneous Plastics Products	\$1,234,096	\$6,774,849		\$8,008,945	\$1,234,096	\$6,774,849		\$8,008,945
30	Rubber And Miscellaneous Plastics Products	\$679,096	\$2,464,547		\$3,143,643	\$679,096	\$2,464,547		\$3,143,643
3053	Gaskets, Packing, And Sealing Devices		\$2,947,734		\$2,947,734		\$2,947,734		\$2,947,734
3069	Fabricated Rubber Products	\$555,000			\$555,000	\$555,000			\$555,000
3089	Plastics Products, Nec		\$1,362,568		\$1,362,568		\$1,362,568		\$1,362,568
32	Cut Stone & Stone Products		\$13,415,074		\$13,415,074		\$13,374,074		\$13,374,074
3229	Roofing, Siding, And Insulation Materials		\$1,036,074		\$1,036,074		\$1,009,074		\$1,009,074
3241	Cement, Hydraulic		\$1,035,000		\$1,035,000		\$1,021,000		\$1,021,000
3264	Porcelain Electrical Supplies		\$9,710,000		\$9,710,000		\$9,710,000		\$9,710,000
3281	Cut Stone And Stone Products		\$1,164,000		\$1,164,000		\$1,164,000		\$1,164,000
3291	Abrasive Products		\$470,000		\$470,000		\$470,000		\$470,000
33	Primary Metal Industries	\$11,063,255	\$259,696,980		\$270,760,235	\$15,963,255	\$264,538,450		\$280,501,705
33	Primary Metal Industries	\$318,477	\$106,518,304		\$106,836,781	\$318,477	\$106,520,304		\$106,838,781
331	Steel Pipes and Tubes		\$2,856,000		\$2,856,000		\$2,856,000		\$2,856,000
3312	Steel Blast Furnaces And Mills		\$33,770,750		\$33,770,750		\$34,447,220		\$34,447,220
3315	Steel Wiredrawing		\$1,091,000		\$1,091,000		\$1,091,000		\$1,091,000
3316	Cold-Rolled Steel Sheet, Strip And Bars		\$2,368,000		\$2,368,000		\$1,539,000		\$1,539,000
332	Iron And Steel Foundries		\$21,915,823		\$21,915,823		\$21,874,823		\$21,874,823
3324	Investment Castings		\$165,000		\$165,000		\$5,197,000		\$5,197,000
3325	Steel Foundries, Nec		\$310,000		\$310,000		\$310,000		\$310,000
3334	Primary Aluminum	\$4,203,000	\$33,880,858		\$38,083,858	\$4,203,000	\$33,880,858		\$38,083,858

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)	Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
	Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
3339 Primary Metal, Exc. Alum. & Copper	\$5,321,778	\$11,373,000		\$16,694,778	\$5,321,778	\$11,374,000		\$16,695,778
3341 Secondary Smelting And Refining Of Nonferrous		\$5,375,543		\$5,375,543		\$5,375,543		\$5,375,543
3351 Copper Drawing And Extruding		\$4,735,000		\$4,735,000		\$4,735,000		\$4,735,000
3357 Drawing And Insulating Of Nonferrous Wire		\$558,000		\$558,000		\$558,000		\$558,000
336 Nonferrous Foundries		\$301,408		\$301,408		\$301,408		\$301,408
3366 Copper Foundries		\$121,500		\$121,500		\$121,500		\$121,500
3369 Nonferrous Foundries, Except Aluminum & Copper		\$840,492		\$840,492		\$840,492		\$840,492
3399 Primary Metal Products, Nec	\$1,220,000	\$33,516,302		\$34,736,302	\$6,120,000	\$33,516,302		\$39,636,302
34 Fabricated Metal Products	\$769,427,280	\$505,871,466		\$1,275,298,746	\$837,056,511	\$510,704,052		\$1,347,760,563
34 Fabricated Metal Products	\$57,710,274	\$177,234,034		\$234,944,308	\$57,710,274	\$181,267,034		\$238,977,308
3411 Fabricated Structural Metal	\$432,000			\$432,000	\$432,000			\$432,000
3423 Hand And Edge Tools	\$270,201			\$270,201	\$270,201			\$270,201
3429 Hardware, Nec		\$565,923		\$565,923		\$1,071,173		\$1,071,173
3433 Heating Equipment, Except Electric And Warm Air		\$680,000		\$680,000		\$680,000		\$680,000
3441 Fabricated Structural Metal		\$12,319,000		\$12,319,000		\$12,319,000		\$12,319,000
3443 Fabricated Plate Work (Boiler Shops)	\$27,374,184	\$25,024,073		\$52,398,257	\$27,374,184	\$25,367,073		\$52,741,257
3444 Sheet Metal Work		\$6,571,000		\$6,571,000		\$6,571,000		\$6,571,000
3451 Screw Machine Parts		\$4,472,676		\$4,472,676		\$4,472,676		\$4,472,676
3452 Industrial Fasteners		\$3,114,160		\$3,114,160		\$3,114,160		\$3,114,160
346 Metal Forgings And Stampings		\$2,139,700		\$2,139,700		\$1,881,700		\$1,881,700
3462 Iron And Steel Forgings	\$7,000,000	\$15,582,072		\$22,582,072	\$7,000,000	\$15,582,072		\$22,582,072
3463 Nonferrous Forgings	\$13,578,210	\$130,556,159		\$144,134,369	\$13,578,210	\$130,556,159		\$144,134,369
3465 Automotive Stampings		\$1,320,000		\$1,320,000		\$1,320,000		\$1,320,000
3469 Metal Stampings, Nec		\$601,881		\$601,881		\$601,881		\$601,881
3471 Electroplating, Plating, Etc.		\$378,000		\$378,000		\$378,000		\$378,000
3479 Coating, Engraving, & Allied		\$3,177,333		\$3,177,333		\$3,177,333		\$3,177,333
348 Ordnance And Accessories	\$636,576,926	\$17,071,503		\$653,648,429	\$677,001,926	\$17,071,503		\$694,073,429
3482 Small Arms Amunition	\$11,353,000			\$11,353,000	\$38,587,000			\$38,587,000

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)		Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
		Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
3483	Ammunition, Except For Small Arms	\$255,562	\$15,106,200		\$15,361,762	\$255,562	\$15,106,200		\$15,361,762
3484	Small Arms Manufacturing	\$726,440	\$22,694,958		\$23,421,398	\$726,440	\$22,694,958		\$23,421,398
3489	Ordnance And Accessories, Nec	\$6,564,782	\$41,636,734		\$48,201,516	\$6,535,013	\$41,846,070		\$48,381,083
349	Valves		\$1,722,000		\$1,722,000		\$1,722,000		\$1,722,000
3491	Industrial Valves	\$2,190,000			\$2,190,000	\$2,190,000			\$2,190,000
3499	Machined Parts, Not Specified	\$5,395,701	\$23,904,060		\$29,299,761	\$5,395,701	\$23,904,060		\$29,299,761
35	Industrial Machinery	\$297,293,502	\$1,579,614,736	\$500,000	\$1,877,408,238	\$335,246,467	\$1,906,171,606	\$500,000	\$2,241,918,073
35	Industrial Machinery	\$165,010,745	\$546,724,014		\$711,734,759	\$199,940,293	\$563,184,294		\$763,124,587
351	Engines And Turbines		\$1,411,000		\$1,411,000		\$1,411,000		\$1,411,000
3511	Hydraulic Generator Components								
3519	Internal Combustion Engines		\$11,843,000		\$11,843,000		\$11,843,000		\$11,843,000
3523	Farm Machinery And Equipment	\$84,367,446			\$84,367,446	\$105,069,446			\$105,069,446
3531	Constuction Machinery	\$392,000	\$4,298,000		\$4,690,000	\$2,940,000	\$4,516,000		\$7,456,000
3532	Mining Machinery	\$4,691,000	\$15,706,211	\$500,000	\$20,897,211	\$4,691,000	\$41,946,211	\$500,000	\$47,137,211
3533	Oil And Gas Field Machinery And Equipment		\$14,199,000		\$14,199,000		\$17,009,000		\$17,009,000
3535	Conveyors And Conveying Eqmt.		\$3,000,000		\$3,000,000		\$3,000,000		\$3,000,000
3537	Industrial Trucks, Tractors, Etc.		\$3,544,954		\$3,544,954		\$3,544,954		\$3,544,954
354	Metalworking Machinery And Equipment		\$41,270,596		\$41,270,596		\$58,456,596		\$58,456,596
3541	Metal Cutting Machine Tools	\$6,843,857	\$66,220,871		\$73,064,728	\$6,843,857	\$66,220,874		\$73,064,731
3541	Metal Cutting Machine Tools	\$6,477,167	\$177,064,992		\$183,542,159	\$6,483,557	\$194,247,182		\$200,730,739
3542	Metal Forming Machine Tools	\$1,349,917	\$43,608,374		\$44,958,291	\$1,349,917	\$44,313,374		\$45,663,291
3544	Special Dies & Tools, Die Sets, Jigs & Fixtures	\$20,671,000	\$15,359,963		\$36,030,963	\$20,671,000	\$15,359,963		\$36,030,963
3545	Metal Cutting Tools & Equipment		\$4,966,041		\$4,966,041		\$4,966,041		\$4,966,041
3547	Rolling Mill Machinery And Equipment		\$3,037,136		\$3,037,136		\$3,037,136		\$3,037,136
3548	Welding Equipment		\$25,913,000		\$25,913,000		\$40,225,000		\$40,225,000
3549	Metalworking Machinery, Nec		\$4,089,949		\$4,089,949		\$4,089,949		\$4,089,949

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)		Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
		Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
	3552 Textile Machinery		\$93,946,568		\$93,946,568		\$93,946,568		\$93,946,568
	3553 Woodworking Machinery		\$605,000		\$605,000		\$1,885,000		\$1,885,000
	3554 Paper Industries Machinery		\$25,158,000		\$25,158,000		\$26,240,000		\$26,240,000
	3555 Printing Trades Machinery		\$7,830,000		\$7,830,000		\$8,039,000		\$8,039,000
	3559 Special Industry Machinery, Nec	\$1,466,000	\$11,924,521		\$13,390,521	\$1,466,000	\$35,244,581		\$36,710,581
	356 General Industrial Machinery And Equipment	\$12,655,264	\$12,371,170		\$25,026,434	\$12,655,264	\$12,371,170		\$25,026,434
	3561 Pumps And Pumping Equipment		\$5,124,245		\$5,124,245		\$5,124,245		\$5,124,245
	3562 Ball And Roller Bearings	\$1,340,000	\$447,000		\$1,787,000	\$1,340,000	\$448,000		\$1,788,000
	3563 Air And Gas Compressors		\$52,350,737		\$52,350,737		\$52,350,737		\$52,350,737
	3564 Industrial Fans And Blowers		\$1,076,734		\$1,076,734		\$1,076,734		\$1,076,734
	3565 Packaging Machinery		\$190,000		\$190,000		\$190,000		\$190,000
	3566 Speed Changers And Gears		\$402,000		\$402,000		\$402,000		\$402,000
	3567 Industrial Furnaces & Ovens		\$35,208,000		\$35,208,000		\$35,340,000		\$35,340,000
	3568 Mechanical Power Transmission Equipment		\$368,494		\$368,494		\$368,494		\$368,494
	3569 General Industrial Machinery,		\$27,117,031		\$27,117,031		\$113,280,031		\$113,280,031
	357 Computer And Office Equipment	\$15,323,177	\$79,463,733		\$94,786,910	\$16,454,177	\$99,806,183		\$116,260,360
	3571 Electronic Computers	\$28,401,660	\$18,414,920		\$46,816,580	\$28,930,660	\$25,086,920		\$54,017,580
	3572 Computer Peripheral Equipment	\$1,935,946			\$1,935,946	\$967,973			\$967,973
	3575 Computer Peripheral Equipment	\$13,625,314	\$10,492,525		\$24,117,839	\$13,625,314	\$39,596,525		\$53,221,839
	3577 Computer Peripheral Equipment	\$10,817,000	\$37,459,713		\$48,276,713	\$10,594,000	\$38,783,713		\$49,377,713
	358 Refrigeration And Service Industry Machinery	\$2,350,406	\$7,631,512		\$9,981,918	\$2,350,406	\$7,631,512		\$9,981,918
	3585 Air-Conditioning And Warm Air Heating Equipment		\$45,537,727		\$45,537,727		\$80,439,614		\$80,439,614
	3589 Service Industry Machinery		\$6,092,000		\$6,092,000		\$10,817,000		\$10,817,000
	359 Misc. Industrial And Commercial Machinery		\$2,902,331		\$2,902,331		\$2,902,331		\$2,902,331
	3593 Fluid Power Cylinders And Actuators		\$1,768,228		\$1,768,228		\$1,768,228		\$1,768,228

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)	Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
	Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
3594 Fluid Power Pumps And Motors		\$2,400,000		\$2,400,000		\$2,400,000		\$2,400,000
3599 Industrial Machinery And Equipment, Nec	\$3,943,049	\$26,708,000		\$30,651,049	\$3,943,049	\$28,193,000		\$32,136,049
36 Electronic/Electrical Equipment	\$2,301,185,891	\$3,110,879,824	\$16,528,800	\$5,428,594,515	\$2,350,424,804	\$3,431,557,435	\$20,278,800	\$5,802,261,039
36 Electronic/Electrical Equipment	\$769,690,795	\$678,980,437		\$1,448,671,232	\$820,633,508	\$757,771,161		\$1,578,404,669
361 Electric Transmission & Distr. Eqmt.	\$18,900,000			\$18,900,000	\$18,900,000			\$18,900,000
3612 Power Distribution Transformers								
3613 Switchgear And Switchboard Apparatus		\$1,209,000		\$1,209,000		\$1,209,000		\$1,209,000
362 Electrical Industrial Apparatus	\$450,042	\$3,311,793		\$3,311,793		\$3,561,963		\$3,561,963
3621 Electric Motors And Generators		\$678,483		\$1,128,525	\$450,042	\$678,483		\$1,128,525
3625 Relays And Industrial Controls		\$27,700,712		\$27,700,712		\$27,700,712		\$27,700,712
3629 Electrical Industrial Apparatus, Nec		\$1,727,000		\$1,727,000		\$1,727,000		\$1,727,000
363 Household Appliance Stores		\$1,499,129		\$1,499,129		\$2,998,258		\$2,998,258
3632 Household Refrigerators		\$4,743,046		\$4,743,046		\$4,838,000		\$4,838,000
3639 Household Appliances, Nec		\$10,002,000		\$10,002,000		\$12,670,000		\$12,670,000
364 Electrical Lighting & Wiring Eqmt.		\$22,000,000		\$22,000,000		\$22,000,000		\$22,000,000
3641 Electric Lamp Bulbs And Tubes		\$833,000		\$833,000		\$833,000		\$833,000
3643 Contacts, Electrical		\$921,000		\$921,000		\$800,000		\$800,000
3644 Noncurrent-Carrying Wiring Devices		\$4,501,314		\$4,501,314		\$4,501,314		\$4,501,314
3648 Lighting Equipment, N.E.C.	\$1,750,000	\$1,800,000		\$1,800,000		\$1,800,000		\$1,800,000
3651 Household Audio And Video Equipmen, And Audio		\$3,200,000		\$4,950,000	\$1,750,000	\$3,200,000		\$4,950,000
366 Telecommunications Equipment	\$28,430,210	\$6,959,925		\$6,959,925		\$6,959,925		\$6,959,925
3661 Telephone And Telegraph Apparatus	\$429,135.00	\$215,664,650	\$4,228,800	\$248,323,660	\$67,278,210	\$279,664,650	\$4,228,800	\$351,171,660
3663 Radio And Television Broadcasting Equipment	\$165,482,387	\$16,398,644		\$16,827,779	\$429,135.00	\$16,423,046		\$16,852,181
		\$64,863,557	\$12,300,000	\$242,645,944	\$54,222,387	\$65,648,657	\$12,300,000	\$132,171,044

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)		Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
		Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
3669	Communications Equipment, Not Elsewhere Classified		\$12,161,357		\$12,161,357		\$12,161,357		\$12,161,357
367	Electronic Components	\$1,203,081,313	\$1,696,193,414		\$2,899,274,727	\$1,254,325,513	\$1,841,689,711		\$3,096,015,224
3671	Electron Tubes		\$18,845,045		\$18,845,045		\$20,147,246		\$20,147,246
3672	Printed Circuit Boards	\$1,532,821	\$92,632,028		\$94,164,849	\$1,532,821	\$108,253,629		\$109,786,450
3674	Semiconductors And Related Devices	\$3,991,000	\$52,676,199		\$56,667,199	\$3,991,000	\$52,676,199		\$56,667,199
3677	Electronic Coils, Transformers, & Other Inductors		\$644,925		\$644,925		\$644,925		\$644,925
3678	Electronic Connectors		\$930,000		\$930,000		\$930,000		\$930,000
3679	Electronic Components, Nec	\$55,537,576	\$128,304,995	\$0	\$183,842,571	\$70,850,576	\$136,131,995	\$3,750,000	\$210,732,571
369	Batteries, Not Specified By Type	\$4,426,168	\$914,000		\$5,340,168	\$8,577,168	\$914,000		\$9,491,168
3691	Storage Batteries		\$872,172		\$872,172		\$872,172		\$872,172
3694	Electrical Equip For Internal Combustion Engines		\$2,952,291		\$2,952,291		\$2,992,291		\$2,992,291
3699	Electrical Equipment & Supplies, Nec	\$47,484,444	\$36,759,708		\$84,244,152	\$47,484,444	\$39,158,741		\$86,643,185
37	Transportation Equipment	\$9,786,622,403	\$12,338,390,441	\$213,751,375	\$22,338,764,219	\$11,405,042,109	\$14,294,971,501	\$284,908,521	\$25,984,922,131
37	Transportation Equipment	\$462,323,366	\$528,222,460		\$990,545,826	\$472,016,533	\$596,522,670		\$1,068,539,203
371	Motor Vehicles And Motor Vehicle Equipment	\$20,022,568	\$1,038,728,405		\$1,058,750,973	\$20,022,568	\$1,158,485,405		\$1,178,507,973
3711	Motor Vehicles And Passenger Car Bodies	\$64,308,389	\$1,180,602,844	\$6,000,000	\$1,250,911,233	\$86,808,389	\$1,408,960,844	\$1,500,000	\$1,497,269,233
3713	Truck And Bus Bodies		\$740,837		\$740,837		\$740,837		\$740,837
3714	Motor Vehicle Parts And Accessories	\$4,034,000	\$311,553,735		\$315,587,735	\$4,034,000	\$313,828,735		\$317,862,735
3715	Truck Trailers	\$15,830,322	\$26,868,572		\$42,698,894	\$15,830,322	\$37,351,560		\$53,181,882
372	Aircraft And Parts	\$5,022,207,428	\$4,289,363,250	\$206,422,375	\$9,517,993,053	\$6,241,790,907	\$5,384,443,589	\$282,079,521	\$11,908,314,017
3721	Aircraft	\$835,928,868	\$721,536,020		\$1,557,464,888	\$897,521,405	\$884,741,791		\$1,782,263,196
3724	Aircraft Engines And Engine Parts	\$729,686,330	\$491,896,524	\$1,329,000	\$1,222,911,854	\$899,738,288	\$547,364,724	\$1,329,000	\$1,388,432,012
3728	Aircraft Parts And Auxiliary Equipment, Nec	\$2,357,714,973	\$2,669,207,370		\$5,026,922,343	\$2,535,949,712	\$2,787,176,894		\$5,323,126,606
3731	Ship Building And Repairing	\$41,869,215	\$754,280,461		\$796,149,676	\$54,528,215	\$803,669,489		\$858,197,704
3743	Railroad Equipment		\$35,092,901		\$35,092,901		\$35,092,901		\$35,092,901

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)		Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
		Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
	3759 Auxiliary Equipment	\$5,093,561	\$68,353,141		\$73,446,702	\$5,093,561	\$68,353,141		\$73,446,702
	376 Guided Missiles And Space Vehicles And Parts	\$37,346,160	\$50,935,454		\$88,281,614	\$37,676,160	\$88,885,454		\$126,561,614
	3761 Guided Missile & Space Vehicles	\$110,573,564	\$39,175,331		\$149,748,895	\$110,573,564	\$39,175,331		\$149,748,895
	3764 Guided Missile And Space Vehicle Propulsion Units		\$13,414,855		\$13,414,855		\$16,209,855		\$16,209,855
	3769 Guided Missile And Space Vehicle Parts, Nec	\$11,694,104	\$53,892,281		\$65,586,385	\$10,598,930	\$53,892,281		\$64,491,211
	3795 Tanks And Tank Components	\$55,435,000	\$64,526,000		\$119,961,000	\$60,305,000	\$70,076,000		\$130,381,000
	3799 Transportation Equipment, Nec	\$12,554,555			\$12,554,555	\$12,554,555			\$12,554,555
	38 Measuring, Analyzing, And Controlling Instruments;	\$842,130,006	\$972,813,207		\$1,814,943,213	\$1,053,028,009	\$1,197,156,407		\$2,250,184,416
	38 Measuring, Analyzing, And Controlling Instruments;	\$16,396,448	\$93,275,572		\$109,672,020	\$16,396,448	\$93,342,342		\$109,738,790
	381 Search, Detection, Navigation, Guidance,	\$12,363,495	\$27,053,581		\$39,417,076	\$33,225,424	\$27,053,581		\$60,279,005
	3812 Search, Detection Navigation, Guidance Instruments	\$721,590,580	\$623,833,773		\$1,345,424,353	\$808,872,225	\$800,471,261		\$1,609,343,486
	382 Laboratory Apparatus And Analytical, Optical,		\$5,424,536		\$5,424,536		\$40,424,536		\$40,424,536
	3823 Instruments For Display, Measure, And Control	\$3,158,988	\$3,272,605		\$6,431,593	\$1,528,988	\$3,272,605		\$4,801,593
	3825 Instruments For Measuring And Testing Electrical	\$25,270,658	\$1,140,955		\$26,411,613	\$121,126,658	\$1,140,955		\$122,267,613
	3826 Laboratory Analytical Instruments	\$1,639,200	\$11,048,180		\$12,687,380	\$1,639,200	\$11,048,180		\$12,687,380
	3827 Optical Instruments And Lenses	\$36,845,121	\$79,225,340		\$116,070,461	\$43,845,121	\$79,072,340		\$122,917,461
	3829 Measuring And Controlling Devices, Nec	\$323,516	\$2,312,842		\$2,636,358	\$1,851,945	\$2,312,842		\$4,164,787
	384 Medical Instruments And Equipment	\$17,966,000	\$86,424,495		\$104,390,495	\$17,966,000	\$97,790,437		\$115,756,437
	3841 Surgical Instruments		\$1,467,000		\$1,467,000		\$1,607,000		\$1,607,000
	3842 Orthopedic, Prosthetic, And Surgical Appliances		\$2,573,000		\$2,573,000		\$3,859,000		\$3,859,000
	3844 X-Ray Apparatus And Tubes		\$28,400,000		\$28,400,000		\$28,400,000		\$28,400,000

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)		Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
		Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
3861	Photographic Equipment And Supplies	\$6,576,000	\$1,457,273		\$8,033,273	\$6,576,000	\$1,457,273		\$8,033,273
3873	Watches, Clocks, Timing		\$5,904,055		\$5,904,055	\$5,904,055	\$5,904,055		\$5,904,055
39	Printing & Publishing	\$645,807	\$17,636,968		\$18,282,775	\$645,807	\$17,636,968		\$18,282,775
39	Miscellaneous Manufacturing Industries		\$3,125,000		\$3,125,000		\$3,125,000		\$3,125,000
399	Miscellaneous Manufacturing Industries		\$9,394,768		\$9,394,768		\$9,394,768		\$9,394,768
3944	Games, Toys, Children's		\$4,500,000		\$4,500,000		\$4,500,000		\$4,500,000
3999	Manufacturing Industries, Nec	\$645,807	\$617,200		\$1,263,007	\$645,807	\$617,200		\$1,263,007
42	Motor Freight And Warehousing		\$2,771,000		\$2,771,000		\$2,771,000		\$2,771,000
422	Public Warehousing And Storage		\$2,771,000		\$2,771,000		\$2,771,000		\$2,771,000
44	Water Transportation		\$60,608,237		\$60,608,237		\$68,768,237		\$68,768,237
444	Water Transportation Of Freight, Nec		\$35,000,000		\$35,000,000		\$35,000,000		\$35,000,000
4412	Ocean Freight Shipping		\$25,608,237		\$25,608,237		\$33,768,237		\$33,768,237
45	Transportation By Air	\$54,746,189	\$16,976,369		\$71,722,558	\$54,746,189	\$30,996,369		\$85,742,558
4512	Arrangement Of Passenger Transportation		\$1,258,669		\$56,004,858	\$54,746,189	\$1,258,669		\$56,004,858
4581	Airports, Flying Fields, And Airport Terminal Serv		\$15,717,700		\$15,717,700		\$29,737,700		\$29,737,700
47	Transportation Services	\$29,284	\$3,445,637		\$3,474,921	\$29,284	\$3,445,637		\$3,474,921
47	Transportation Services		\$277,832		\$277,832		\$277,832		\$277,832
472	Tourist Transportation Services		\$2,500,000		\$2,500,000		\$2,500,000		\$2,500,000
4724	Travel Agencies	\$29,284			\$29,284	\$29,284			\$29,284
4731	Arrangement Of Transportation Of Freight & Cargo		\$667,805		\$667,805		\$667,805		\$667,805
48	Communications	\$106,115,601	\$111,179,552		\$217,295,153	\$143,669,783	\$120,979,552		\$264,649,335
48	Communications		\$61,696,787		\$61,696,787		\$61,696,787		\$61,696,787
481	Telephone Communications		\$17,607,000		\$17,607,000		\$27,407,000		\$27,407,000
4812	Radiotelephone Communications	\$91,957,145	\$5,435,600		\$97,392,745	\$79,954,327	\$5,435,600		\$85,389,927
4813	Telephone Communications, Except Radio Type	\$5,425,238	\$1,902,501		\$7,327,739	\$5,425,238	\$1,902,501		\$7,327,739
4899	Satellite Communications	\$8,733,218	\$24,537,664		\$33,270,882	\$58,290,218	\$24,537,664		\$82,827,882
49	Power Generation		\$3,826,688		\$3,826,688		\$3,826,688		\$3,826,688

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)	Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
	Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
49 Power Generation		\$1,341,488		\$1,341,488		\$1,341,488		\$1,341,488
493 Combination Electric And Gas And Other Utilities		\$1,699,200		\$1,699,200		\$1,699,200		\$1,699,200
4941 Water Supply		\$786,000		\$786,000		\$786,000		\$786,000

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)		Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
		Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
61	Credit Extension	\$17,095,349	\$803,302,694		\$820,398,043	\$83,912,157	\$898,242,232		\$982,154,389
	61 Credit Extension	\$17,095,349	\$785,318,736		\$802,414,085	\$83,912,157	\$880,258,274		\$964,170,431
	615 Business Credit Institutions		\$17,983,958		\$17,983,958		\$17,983,958		\$17,983,958
62	Security Brokers, Dealer, Exchanges And Services	\$2,099,136	\$130,294,884		\$132,394,020	\$2,099,136	\$157,414,276		\$159,513,412
	62 Security Brokers, Dealer, Exchanges And Services	\$2,099,136	\$82,587,051		\$84,686,187	\$2,099,136	\$102,306,443		\$104,405,579
	6282 Financial Advice, Investment		\$47,707,833		\$47,707,833		\$55,107,833		\$55,107,833
67	Holding & Other Investment Offices	\$229,633,054	\$567,593,549	\$23,556,000	\$820,782,603	\$260,710,054	\$849,873,715	\$74,261,000	\$1,184,844,769
	67 Holding & Other Investment Offices	\$32,426,510	\$406,285,506	\$19,843,000	\$458,555,016	\$42,058,510	\$609,160,814	\$39,687,000	\$690,906,324
	679 Investment Operations	\$194,481,544	\$130,294,504	\$3,713,000	\$328,489,048	\$213,301,544	\$204,025,362	\$34,574,000	\$451,900,906
	6794 Patent Owners And Lessors	\$2,725,000	\$2,500,000		\$5,225,000	\$5,350,000	\$2,500,000		\$7,850,000
	6799 Venture Capital		\$28,513,539		\$28,513,539		\$34,187,539		\$34,187,539
70	Hotels, Rooming Houses, Camps, And Other Lodging Places	\$869,186	\$403,485		\$1,272,671	\$869,186	\$403,485		\$1,272,671
	7011 Hotels And Motels	\$869,186	\$403,485		\$1,272,671	\$869,186	\$403,485		\$1,272,671
73	Business Services	\$350,338,834	\$1,097,129,729	\$7,715,000	\$1,455,183,563	\$414,890,986	\$1,322,858,244	\$32,000,000	\$1,769,749,230
	73 Business Services	\$20,136,669	\$460,574,879		\$480,711,548	\$24,848,719	\$466,293,385		\$491,142,104
	731 Advertising		\$28,005,488		\$28,005,488		\$35,684,121		\$35,684,121
	7319 Advertising, Nec		\$450,000		\$450,000		\$450,000		\$450,000
	734 Services To Dwellings And Other Buildings		\$1,386,000		\$1,386,000		\$1,386,000		\$1,386,000
	7359 Equipment Rental And Leasing, Nec	\$2,919,207	\$572,000		\$3,491,207	\$2,919,207	\$1,272,000		\$4,191,207
	7361 Employment Agencies		\$7,500,000		\$7,500,000		\$7,500,000		\$7,500,000
	737 Software And Data Processing	\$161,431,828	\$324,184,557		\$485,616,385	\$191,248,930	\$504,543,105		\$695,792,035
	7371 Computer Programming Services	\$58,106,491	\$113,841,892		\$171,948,383	\$58,106,491	\$113,804,892		\$171,911,383
	7372 Prepackaged Software	\$16,700,000	\$31,752,823		\$48,452,823	\$1,400,000	\$37,221,573		\$38,621,573
	7373 Computer Integrated Systems Design	\$32,781,538	\$56,546,315		\$89,327,853	\$45,918,538	\$72,819,315		\$118,737,853
	7374 Computer Prossing And Data Preparation		\$3,064,522		\$3,064,522		\$3,064,522		\$3,064,522
	7376 Computer Facilities Management Services	\$32,374,829	\$871,000		\$33,245,829	\$32,374,829	\$7,742,000		\$40,116,829

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)	Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
	Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
7378 Computer Maintenance And		\$5,336,608		\$5,336,608		\$5,336,608		\$5,336,608
7379 Computer Related Services, Nec	\$16,626,640	\$31,077,355		\$47,703,995	\$34,812,640	\$31,077,355		\$65,889,995
7389 Business Services, Nec	\$9,261,632	\$31,966,290	\$7,715,000	\$48,942,922	\$23,261,632	\$34,663,368	\$32,000,000	\$89,925,000
76 Miscellaneous Repair Shops	\$17,856,467	\$11,684,379		\$29,540,846	\$9,111,467	\$11,684,379		\$20,795,846
76 Miscellaneous Repair Shops	\$426,467	\$2,336		\$428,803	\$426,467	\$2,336		\$428,803
7629 Electrical and Electronic Repair Shops, Nec	\$15,080,000	\$5,571,486		\$20,651,486	\$6,335,000	\$5,571,486		\$11,906,486
769 Misc. Repair Shops And Related Services		\$691,270		\$691,270		\$691,270		\$691,270
7699 Repair Shops And Services, Nec	\$2,350,000	\$5,419,287		\$7,769,287	\$2,350,000	\$5,419,287		\$7,769,287
80 Health Services		\$28,000		\$28,000		\$28,000		\$28,000
8099 Health And Allied Services, Nec		\$28,000		\$28,000		\$28,000		\$28,000
81 Legal Services		\$75,000		\$75,000		\$3,125,000		\$3,125,000
8111 Legal Services		\$75,000		\$75,000		\$3,125,000		\$3,125,000
82 Educational Services	\$305,520,224	\$578,792,375		\$884,312,599	\$316,884,079	\$705,431,700		\$1,022,315,779
82 Educational Services	\$250,664,520	\$217,927,891		\$468,592,411	\$261,524,359	\$292,724,946		\$554,249,305
8221 Colleges, Universities, And Professional Schools	\$500,000	\$169,148,155		\$169,648,155	\$500,000	\$228,148,135		\$228,648,135
8249 Vocational Schools, Nec	\$5,800,000	\$3,500,000		\$9,300,000	\$5,800,000	\$3,500,000		\$9,300,000
829 School And Educational Services, Nec		\$4,000,000		\$4,000,000		\$4,000,000		\$4,000,000
8299 Schools And Educational Services, Nec	\$48,555,704	\$184,216,329		\$232,772,033	\$49,059,720	\$177,058,619		\$226,118,339
87 Technical Services & Consultants	\$838,533,418	\$1,485,523,094	\$1,654,000	\$2,325,710,512	\$915,791,822	\$1,889,602,618	\$1,654,000	\$2,807,048,440
87 Technical Services &	\$80,974,631	\$275,634,480		\$356,609,111	\$108,286,631	\$409,606,166		\$517,892,797
871 Engineering And Architectural Services	\$293,721,820	\$238,969,338		\$532,691,158	\$295,933,342	\$269,668,338		\$565,601,680
8711 Engineering Services	\$355,417,068	\$447,137,630		\$802,554,698	\$391,625,700	\$551,121,990		\$942,747,690
8712 Nuclear Engineering Services		\$4,448,527		\$4,448,527		\$4,448,527		\$4,448,527
872 Accounting, Auditing, And Bookkeeping Services		\$3,067,000		\$3,067,000		\$3,067,000		\$3,067,000
873 Research, Development, And Testing Services	\$8,456,705	\$36,393,509		\$44,850,214	\$8,456,705	\$67,915,509		\$76,372,214
8731 Commercial Research, Physical Science	\$3,077,744	\$22,825,000		\$25,902,744	\$3,807,744	\$28,715,000		\$32,522,744

SIC Broad Economic Sectors 2-Digit SIC economic Sector 2-4 Digit Industry Detailed Sector (Available Data)	Actual Value of Offset Transactions 1993-2006 by Detailed Economic Sector				Credit Value of Offset Transactions 1993-2006 by Detailed Economic Sector			
	Direct	Indirect	Unspecified	Total	Direct	Indirect	Unspecified	Total
8732 Commercial Economic, Sociological & Ed Research		\$21,716,000		\$21,716,000		\$21,716,000		\$21,716,000
8733 Noncommercial Research Organizations		\$1,000,000		\$1,000,000		\$1,000,000		\$1,000,000
8734 Testing Laboratories		\$18,540,963		\$18,540,963		\$18,540,963		\$18,540,963
874 Management And Public Relations Services		\$480,500	\$330,000	\$810,500		\$480,500	\$330,000	\$810,500
8741 Management Services	\$14,378,832	\$36,303,009		\$50,681,841	\$14,531,082	\$55,236,209		\$69,767,291
8742 Management Consulting	\$78,046,019	\$293,710,763	\$1,324,000	\$373,080,782	\$88,690,019	\$372,790,041	\$1,324,000	\$462,804,060
8743 Public Relations Services		\$62,500,000		\$62,500,000		\$62,500,000		\$62,500,000
8744 Facilities Support Management Services	\$4,460,599	\$9,180,000		\$13,640,599	\$4,460,599	\$9,180,000		\$13,640,599
8748 Business Consulting, Nec		\$13,616,375		\$13,616,375		\$13,616,375		\$13,616,375
89 Miscellaneous Services	\$39,618,818	\$85,099,606		\$124,718,424	\$39,584,818	\$85,099,606		\$124,684,424
89 Miscellaneous Services	\$39,618,818	\$85,099,606		\$124,718,424	\$39,584,818	\$85,099,606		\$124,684,424
96 Administration Of Economic Programs		\$12,000,000		\$12,000,000		\$12,000,000		\$12,000,000
9621 Regulation & Admin Of Transportation Programs		\$12,000,000		\$12,000,000		\$12,000,000		\$12,000,000
97 National Security and International Affairs	\$1,094,216	\$14,410,000		\$15,504,216	\$1,094,216	\$40,038,000		\$41,132,216
9711 National Security	\$1,094,216	\$14,410,000		\$15,504,216	\$1,094,216	\$40,038,000		\$41,132,216
99 Undetermined	\$599,135,589	\$583,936,380		\$1,183,071,969	\$568,715,383	\$697,262,546		\$1,265,977,929
99 Undetermined	\$569,559,182	\$508,000,495		\$1,077,559,677	\$549,637,726	\$609,340,661		\$1,158,978,387
9999 Not Classifiable	\$29,576,407	\$75,935,885		\$105,512,292	\$19,077,657	\$87,921,885		\$106,999,542

Source: BIS Offsets Database

Appendix F:

Background Information on 15 Countries' Offset Policies

The official offset policies of the 15 countries (Australia, Canada, Finland, Greece, Israel, Italy, The Netherlands, Norway, Poland, Republic of Korea, Spain, Switzerland, Taiwan, Turkey, and the United Kingdom) listed in this appendix have been confirmed through communications with the staff of these countries' embassies in the United States.

Australia

Title of Policy:	Australia Industry Involvement (AII) Programme
Agency Handling	Department of Defence, Defense Material Organization
Part of Procurement Decision	Yes, for military procurement
Offset Sector	Defense
Minimum Value of Contract	Civilian – A\$10 million (US \$7.5 million); Defense – A\$5 million (US \$3.75 million)
Minimum Offset Required	No Specific Min. or Max.
Term	7 years unless otherwise defined in agreement
Multipliers	None in policy
Penalties	Penalties negotiated in each agreement, but generally more than 10% of contract value
Focus	Long-term partnerships with an emphasis on operational requirements, life support systems and research and development – all defense-related
Direct vs. Indirect	Both
Eligible Offset Activities	Subcontract, R&D, tech transfer, training and skills transfer, export sales, infrastructure, venture capital
Website	http://www.defence.gov.au/dmo/id/aii/manual_inclanexes_5Feb00_contactsremoved.pdf

Canada

Title of Policy:	Industrial & Regional Benefits Policy (IRB)
Agency Handling	Industry Canada under the Ministry of Industry
Part of Procurement Decision	Yes
Offset Sector	Civilian and Defense
Minimum Value of Contract	Discretionary for contracts over C \$2 million (US \$1.7 million); C \$100M required (US \$84 million)
Minimum Offset Required	100%
Term	From release of Letter of Interest or RFP to the end of the export contract
Multipliers	None in policy
Penalties	Liquidated damages are applied for non-compliance
Focus	Investment in the high-tech sectors of the economy
Direct vs. Indirect	Both
Eligible Offset Activities	Investment, Technology Transfer, co-production, R&D, Both major and non-major Crown projects. See: http://strategis.ic.ca/epic/internet/inad-ad.nsf/en/ad03662e/html
Website	www.irb-rir.gc.ca

Finland

Title of Policy:	Policy on Industrial Participation
Agency Handling	Finnish Committee on Industrial Participation, Ministry of Trade and Industry
Part of Procurement Decision	Yes
Offset Sector	Defense
Minimum Value of Contract	10€ million
Minimum Offset Required (%)	100%
Term	To be negotiated
Multipliers	0.3-3 for exports of Finnish products; tech transfer, and marketing assistance multipliers are negotiated
Penalties	3-5%, exclusion from future procurements
Focus	Participation of domestic defense industry, technology, export, internationalization of exports
Direct vs. Indirect	Both
Eligible Offset Activities	Subcontract, exports and internationalization of SMEs, technology transfer, co-production, marketing assistance
Website	New Offset Guidelines: http://www.ktm.fi (Select English, Promotion of Export, Industrial Participation)

Greece

Title of Policy:	Policy of Offsets Benefits (OB)
Agency Handling	Hellenic Ministry of National Defense/General Armaments Directorate (GAD), Division of Offsets (DO)
Part of Procurement Decision	Yes
Offset Sector	Defense
Minimum Value of Contract	10€ million
Minimum Offset Required (%)	100% (often exceeds this, average is understood to be around 120%)
Term	Same as period of procurement contract
Multipliers	Very complex, depends on value of offset & recipient, up to 10
Penalties	10% of unfulfilled benefits, 1.5% penalty late fee per month
Focus	Upgrade production and technology infrastructure, reinforce armed forces, reduce procurement costs
Direct vs. Indirect	Both
Eligible Offset Activities	Required: local subcontracting, purchase and/or co-production; Other options: direct investment, material/services to armed forces directly, others defined in specific agreement (training and technical support do not count)
Website	Hellenic Defense Contracts Bulletin 2002 (Part 1): http://www.mod.gr/ENGLISH/newver/BULLETIN1.rtf

Israel

Title of Policy:	Industrial Cooperation (Industrial Cooperation Program – ICP)
Agency Handling	Industrial Cooperation Authority (ICA), Ministry of Trade and Industry
Part of Procurement Decision	Yes (Mandatory Tenders Law Regulations require ICP)
Offset Sector	Civilian (Under GPA) and Defense
Minimum Value of Contract	US \$500,000
Minimum Offset Required (%)	35%
Term	Length of time of the contract, may be extended
Multipliers	1-1.5 times, dependent upon type of offset
Penalties	No liquidated damages clause
Focus	Development of close, long-term working relationships
Direct vs. Indirect	Both
Eligible Offset Activities	Subcontract (preferred), purchase, direct investment, R&D
Website	Industrial Cooperation Authority: http://www.moit.gov.il/

Italy

Title of Policy:	Not codified
Agency Handling	National Armament Directorate, Ministry of Defense
Part of Procurement Decision	Armed Services
Offset Sector	Defense
Minimum Value of Contract	5€ million (about \$6.6m) unless the seller's country has obligations with the Italian industry
Minimum Offset Required (%)	100% target, but no less than 70%
Term	-
Multipliers	Negotiable, maximum of 3
Penalties	Maximum penalty of 10%
Focus	Provide export opportunities for Italian defense companies
Direct vs. Indirect	Both
Eligible Offset Activities	Export of Italian military products
Website	None

Netherlands

Title of Policy:	Industrial Benefits and Offsets Policy
Agency Handling	Ministry of Economic Affairs – Commissariat for Military Production (CMP)
Part of Procurement Decision	Yes
Offset Sector	Civilian and Defense
Minimum Value of Contract	5€ million
Minimum Offset Required	100%
Term	Generally 5-7 years from date agreement is in effect, but not to exceed 10
Multipliers	Negotiable, ranges of 1-5,5-10, and 10-30
Penalties	15% or 30%, must still fulfill obligation
Focus	Technological innovation, marketing support for innovative products
Direct vs. Indirect	Both
Eligible Offset Activities	Co-production, licensed production, technology transfer, R&D, Investment, marketing assistance.
Website	Limited information available on: http://www.cmp.ez.nl Use the left-hand navigation to view the English-language page, not the icon in the top, right-hand corner

Norway

Title of Policy:	Guidelines for the Establishment and Implementation of Offsets in Connection With Defense Procurements
Agency Handling	Ministry of Economic Affairs – Commissariat for Military Production (CMP)
Part of Procurement Decision	Yes
Offset Sector	Civilian and Defense
Minimum Value of Contract	50 NoK (\$6.7 million)
Minimum Offset Required	100%
Term	Length of Contract
Multipliers	0-5
Penalties	15% or 30%, must still fulfill obligation
Focus	Strengthen and maintaining the technical capability of Norwegian Defense industry
Direct vs. Indirect	Both (Indirect preferred)
Eligible Offset Activities	Technology transfer, investment, co-production, R&D
Website	http://www.regjeringen.no/fd/html/fdhowtos/sider/how1.htm

Poland*

Title of Policy:	Polish Act on Offset Programs
Agency Handling	Committee for Offset Agreements, Ministry of Economy
Part of Procurement Decision	Yes
Offset Sector	Civilian and Defense
Minimum Value of Contract	5€ million
Minimum Offset Required	100% (direct must account for 50%)
Term	Minimum of 36 Months, Max 10 years
Multipliers	0.5-2% (Negotiable up to 2-5%)
Penalties	Pay additional multiplier or credit value of commitment
Focus	Technological innovation, marketing support for innovative products
Direct vs. Indirect	Both
Eligible Offset Activities	Technology Transfer, investment, co-production, or other agreed upon activities(pending approval)
Website	

*This is the new policy enacted in December 2006.

Republic of Korea (South Korea)

Title of Policy:	Korean Defense Offset Program
Agency Handling	Defense Acquisition Program Administration, Defense Procurement Agency, MND-Korea
Part of Procurement Decision	Yes
Offset Sector	Defense
Minimum Value of Contract	\$10 million
Minimum Offset Required (%)	30%
Term	Usually Contract length
Multipliers	Determined by MND
Penalties	Per case but usually 10%
Focus	Defense
Direct vs. Indirect	Both
Eligible Offset Activities	Technology Transfer, Co-production, R&D, and other flexible activities
Website	http://www.d2b.go.kr/ (click on DAPA, major businesses, then Foreign Procurement)

Spain

Title of Policy:	Policy of Armament and Material Agency
Agency Handling	Ministry of Defense - General Direction of Armaments and Material (DGAM); Industrial Cooperation Agency of Spain (ICA)
Part of Procurement Decision	Yes
Offset Sector	Civilian and Defense
Minimum Value of Contract	NA
Minimum Offset Required	100%, but may vary
Term	Within term of supply contract
Multipliers	Generally not used (between 2 and 5 when used)
Penalties	Negotiated individually, usually 5-10%
Focus	Technology similar to product purchased, improve armed forces and defense-related industry, increase research and development, increase employment
Direct vs. Indirect	Both
Eligible Offset Activities	Direct purchases, cooperative agreements, licensed technologies, training services to armed forces, technology transfer
Website	www.isdefe.es (select English, then ICA)

Switzerland

Title of Policy:	Swiss Offset Policy
Agency Handling	Armasuisse (part of the Federal Department of Defense, Civil Protection and Sports – DDPS)
Part of Procurement Decision	Yes
Offset Sector	Defense and Civilian
Minimum Value of Contract	Sfr 20 million (US \$17 million) and on a case-by-case basis
Minimum Offset Required	100%
Term	No later than 3 years after completion of the defense contract
Multipliers	Maximum of 2-3
Penalties	Penalties are levied, range 2-6% payment
Focus	Swiss manufacturing industries and technology transfer and cooperation with universities.
Direct vs. Indirect	Both, but direct is preferred
Eligible Offset Activities	Co-production, cooperation and technology transfer with universities, export assistance/purchase, international marketing
Website	http://www.ar.admin.ch/internet/armasuisse/en/home.html

Taiwan

Title of Policy:	Industrial Cooperation Program (ICP)
Agency Handling	Ministry of Economic Affairs (MOEA)
Part of Procurement Decision	No
Offset Sector	Military (Civilian procurement follows guidelines “in principle”)
Minimum Value of Contract	Defense: \$10 million; Civilian: US \$50 million but Case-by-Case
Minimum Offset Required	40%, higher for Defense Contracts (Will be increasing to 70%)
Term	Not stipulated
Multipliers	1-10
Penalties	3-5% of procurement contract
Focus	Upgrade industries and industrial infrastructure, stimulation for domestic investment, introduce high-tech and critical technologies, support export growth
Direct vs. Indirect	Both
Eligible Offset Activities	Local procurement, technology transfer, training, R&D, international marketing, local investment
Website	http://www.cica.com.tw Select English

Turkey

Title of Policy:	Industrial Participation/ Offset Directive
Agency Handling	Undersecretariat for Defense Industries (SSM)
Part of Procurement Decision	Yes
Offset Sector	Defense and Civilian
Minimum Value of Contract	US \$10 million
Minimum Offset Required	50%
Term	Maximum 2 years more than period of procurement agreement
Multipliers	1-5, specific breakdown in the Directive
Penalties	1% for each month assessed every 6 month period, report on agreement changes
Focus	Increase Turkish defense exports, compensate deficit of balance of payments, strengthen defense industrial infrastructure, expanded investment and R&D cooperation
Direct vs. Indirect	Both
Eligible Offset Activities	Exports, technology transfer, R&D, training, investments, co-production, technical cooperation
Website	http://www.ssm.gov.tr

United Kingdom

Title of Policy:	Industrial Participation Policy
Agency Handling	Industrial Participation Unit, Defense Export Services Organization (DESO), MoD
Part of Procurement Decision	No
Offset Sector	Defense
Minimum Value of Contract	£10 million (\$17.2 million); £50 million for French and German companies in conformity with bilateral agreements ("reciprocal waiver agreements")
Minimum Offset Required (%)	No minimum established (100% target)
Term	Over period of procurement contract
Multipliers	No multipliers for IP credit
Penalties	None, however strict enforcement of IP program
Focus	Competitive and leading-edge domestic industry and added overseas business
Direct vs. Indirect	Both
Eligible Offset Activities	Must be defense related: Technology transfers, R&D, Marketing Assistance, Subcontracts, Purchases
Website	http://www.deso.mod.uk/ip.htm

Appendix G:

Glossary and Offset Example

GLOSSARY AND OFFSET EXAMPLE

Actual Value of Offset Transactions: The market value of the offset transaction measured in U.S. dollars.

Best efforts clauses: With a “best efforts” clause, there is no penalty for non-fulfillment of the contract; the firm is judged to be acting in good faith to meet its obligations. However, firms’ reputations can be jeopardized if offset obligations are not fulfilled as stated in the contract; non-fulfillment would likely result in the U.S. defense firm being excluded from future procurements by that purchasing government.

Co-production: Overseas production based upon government-to-government agreement that permits a foreign government or producer(s) to acquire the technical information to manufacture all or part of a U.S.-origin defense article. Co-production includes government-to-government licensed production, but excludes licensed production based upon direct commercial arrangements by U.S. manufacturers.

Credit Value of Offset Transactions: The value credited for the offset transaction by application of a multiplier or other method. The credit value may be greater than or equal to the actual value of the offset.

Direct Offsets: Offset transactions that are directly related to the defense items or services exported by the defense firm. These are usually in the form of co-production, subcontracting, training, production, licensed production, or possibly technology transfer or financing activities.

Indirect Offsets: Offset transactions that are not directly related to the defense items or services exported by the defense firm. The kinds of offsets that are considered “indirect” include purchases, investment, training, financing activities, marketing/exporting assistance, and technology transfer.

Investment: Investment arising from the offset agreement, taking the form of capital invested to establish or expand a subsidiary or joint venture in the foreign country.

Licensed Production: Overseas production of a U.S.-origin defense article based upon transfer of technical information under direct commercial arrangements between a U.S. manufacturer and a foreign government or producer.

Liquidated damages: If a firm fails to fulfill all required offsets by the stipulated deadline, it must pay a percentage (usually 5-20 percent) of the total value of the export contract. The percentage for liquidated damages is specified in the contract.

Marketing: Marketing assistance to foreign companies in either defense or unrelated industries. In some cases, countries require marketing in addition to the offsets. Also encompasses export assistance.

Multiplier: A factor applied to the actual value of certain offset transactions to calculate the credit value earned. Foreign governments use multipliers to provide firms with incentives to offer offsets in targeted areas of economic growth. When a multiplier is applied to the off-the-shelf price of a more desirable service or product offered as an offset, the defense firm receives a higher credit value toward fulfilling an offset obligation.

Example: A foreign government interested in a specific technology may offer a multiplier of “six” for offset transactions providing access to that technology. A U.S. defense company with a 120 percent offset obligation from a \$1 million sale of defense systems ordinarily would be required to provide technology transfer through an offset equaling \$1.2 million. With a multiplier of six, however, the U.S. company could offer only \$200,000 (actual value) in technology transfer and earn \$1.2 million in credit value, fulfilling its entire offset obligation under the agreement.

Non-performance penalties: Firms must pay a prearranged percent (2-10 percent) of all obligations not fulfilled within the allotted time.

Offset Agreement: Contract specifying the percentage of the total sale to be offset, the forms of industrial compensation required, the duration of the agreement, and penalty clauses, if any.

Offset Fulfiller: The company that provides the offset compensation, which is usually the defense firm who signed the offset agreement. However, there are times when the obligation is not related to the defense firm’s specialty and therefore is contracted out. For example, if marketing is a component of the offset requirement, the defense firm may hire a marketing company to satisfy the obligation. The marketing firm would then be the “offset fulfiller.”

Offset Recipients: Foreign firms that receive the benefits of offset transactions from defense firms. For example, a U.S. company sells a defense item to a foreign country, with an offset obligation requiring that components worth 50 percent of the export contract be built in the foreign country. The foreign companies manufacturing these components would be the “offset recipients.”

Offset Transaction: Any activity for which the defense prime contractor claims credit in fulfillment of the offset agreement. For the purpose of analysis, BIS divides offset transactions into nine different categories. These are also the required categories for the offset reporting requirement.

Offsets: Industrial compensation practices required as a condition of purchase in sales of defense articles and/or defense services.

Other: Any other form of offset required or offered by a defense company/foreign government.

Penalties: Measures used to motivate defense firms to fulfill their offset obligation within the timeframe allotted by the contract.

Purchases: Procurement of off-the-shelf items from the offset recipient. Often, but not always, purchases are indirect by nature. Indirect purchases are similar in definition to countertrade, while direct purchases are analogous to buy-backs.

Subcontractor Production: Overseas production of a part or component of a U.S.-origin defense article. The subcontract does not necessarily involve license of technical information and is usually a direct commercial arrangement between the defense prime contractor and a foreign producer.

Technology Transfer: Transfer of technology that occurs as a result of an offset agreement and that may take the form of research and development conducted abroad, technical assistance provided to the subsidiary or joint venture of overseas investment, or other activities under direct commercial arrangement between the defense prime contractor and a foreign entity.

Training: Generally includes training related to the production or maintenance of the exported defense item. Training may be required in unrelated areas, such as computer training, foreign language skills, or engineering capabilities.

OFFSET EXAMPLE

This example is for illustrative purposes only and in no way represents an actual offset agreement. The fictitious nation of Atlantis purchased ten KS-340 jet fighters from a U.S. defense firm, PJD Inc. (PJD), for a total of \$500 million with 100 percent offset. In other words, the offset agreement obligated PJD to fulfill offsets equal to the value of the contract, or \$500 million. The government of Atlantis decided what would be required of PJD in order to fulfill its offset obligation, which would include both direct and indirect compensation. The government also assigned the credit value for each category.

Direct Offsets (i.e., related to the production of the export item, the KS-340 jet fighter)

Technology Transfer: The technology transfer requirement was assigned 36 percent of the total offset obligation. PJD agreed to transfer all the necessary technology and know-how to Atlantis firms in order to repair and maintain the jet fighters. The Atlantis government deemed this capability to be vital to national security and, therefore, gave a multiplier of six. As a result, the transfer of technology actually worth \$30 million was given a credit value of \$180 million.

Co-production: Atlantis firms manufactured some components of the KS-340 jet fighters, totaling \$220 million, which accounted for 44 percent of the offset obligation.

Indirect Offsets (i.e., not related to the production of the export item, the KS-340 jet fighter)

Purchase: PJD purchased marble statues from Atlantis manufacturers for eventual resale. These purchases accounted for 7 percent of the offset obligation, or \$35 million.

Financing Activities: PJD made investments in non-defense related industries in Atlantis; this accounted for 4 percent of the offset obligation, or \$20 million.

Technology Transfer: PJD provided submarine technology to Atlantis firms, which accounted for 6 percent of the offset obligation, or \$30 million.

Marketing: Commercial assistance was provided for Atlantis fisheries to market their fish in the United States, which fulfilled the remaining 3 percent, or \$15 million of the offset obligation. In this example, the Atlantis fisheries are *offset recipients* because they received marketing services for their product. PJD hired an American advertising firm, the *offset fulfiller*, to market the Atlantis fish.

The duration of the offset agreement was 10 years with a three-year grace period. A timetable was created by the Atlantis government outlining which obligations should be fulfilled, to what extent, and when. If PJD did not meet the deadlines given, the company was required to pay the Atlantis government 5 percent of the unfulfilled offset amount in liquidated damages. For example, if after 10 years, only 98.5 percent of the offset obligation of \$500 million was fulfilled, PJD would be required to pay liquidated damages in the amount of 5 percent of the 1.5 percent unfulfilled portion of the offset obligation, or \$375,000.

Appendix H:

Interagency Team Progress Report on Consultation with Foreign Nations on Limiting the Adverse Effects of Offsets in Defense Procurement



**Report of the Interagency Team on Consultation with Foreign Nations
on Limiting the Adverse Effects of Offsets in Defense Procurement**

December 17, 2007

2007 Interagency Team Annual Report on Offsets

Table of Contents

	<u>Page No.</u>
Mandate, Purpose and Practice of the Interagency Team	2
Section One Preparations for Continuing the Dialogue on Limiting the Adverse Effects of Offsets	2
Section Two Briefings of the Final Report	3
Section Three Identifying Options	4
Section Four Defining the Approach	4
Section Five Statement of Principles for Best Practices Development	5
Section Six Continuing the Dialogue <ul style="list-style-type: none">• Australian Bi-lateral discussions• LOI 6 Multilateral discussions	6
Section Seven Milestones	8
Annex 1 Briefings of the Final Report: Participating Embassies and Domestic Entities	9

Annual Report

Interagency Working Group

Continued Dialogue on Limiting the Adverse Effects of Offsets in Defense Procurement

Mandate, Purpose and Practice of the Interagency Team

In December 2003, President Bush signed into law a reauthorization of, and amendments to, the Defense Production Act of 1950 (DPA). Section 7 (c) of Public Law 108-195 amended Section 123 (c) of the DPA by requiring the President to designate a chairman of an interagency team to consult with foreign nations on limiting the adverse effects of offsets in defense procurement without damaging the economy or the defense industrial base of the United States, or United States defense production or defense preparedness. The statute also provides that the interagency team be comprised of the Secretaries of Commerce, Defense, Labor, and State, and the United States Trade Representative (USTR).

The DPA, as amended, requires the interagency team to send to Congress an annual report describing the results of consultations and meetings. On August 6, 2004, President Bush formally established the interagency team chaired by the Secretary of Defense. Within the Department of Defense, chairmanship was delegated to the Under Secretary of Defense for Acquisition Technology and Logistics. The interagency team subsequently established an Interagency Working Group (IaWG) to conduct the background research and prepare for the consultations, execute the consultations, analyze the results, and write the final annual reports, all with oversight and approval by the interagency team.

Preparations for Continuing the Dialogue on Limiting the Adverse Effects of Offsets

In February 2007, the third and final report of the interagency team was submitted to Congress. This final report was a comprehensive account of interagency team findings and recommendations. Since no new findings or recommendations are anticipated, progress reports shall be submitted annually as long as progress continues on limiting the adverse effects of offsets in defense procurement. The interagency team was able to conclude that the United States is not alone in its concerns about the use of offsets in defense procurement. Other nations, which also are major providers of offsets, expressed concerns about the adverse effects of offsets on their sales of defense weapons systems.

These provider nations expressed interest in a multinational dialogue to address their concerns. From both providers and demanders of offsets, most nations agree with the United States' view that there is a real cost associated with offsets.

A key recommendation of the interagency team report was that the United States government should continue to dialogue with nations and international organizations promoting the global understanding of how the different types of offsets impact the industrial base; encourage the development of global offset Best Practices Principles, to limit the adverse effects of offsets; and encourage countries to provide contractors with maximum flexibility in fulfilling offset requirements. Building upon this recommendation, the Inter-Agency Working Group (IaWG) has undertaken a comprehensive strategy of engagement with relevant parties to facilitate the dialogue on reducing the adverse effects of offsets in defense procurement.

In fulfilling its legislative mandate, the IaWG embarked upon a multi-faceted strategy designed to allow various foreign and domestic entities to inform the IaWG of their views regarding offsets and to offer suggestions on possible ways to help limit the adverse effects of offsets in defense procurement.

In order to develop a focused foreign dialogue, the IaWG reviewed its mandate, briefed the Final Report, and researched and developed a collaborative approach on how to articulate a Statement of Principles, which will assist in promoting the development of global offset guidelines to help limit the adverse effects of offsets in defense procurement.

Briefings of the Final Report

In accordance with recommendations to continue the dialogue, the IaWG briefed the third and final report on limiting the adverse effects of offsets to various domestic and international entities. The briefings were designed to be informational in content and provide a common understanding of the United States' view of offsets in defense trade. These initial briefings served as an important first step in the way ahead and provided a common reference for continuing the dialogue on limiting the adverse effects of offsets in defense procurement.

Briefings of the Final Report:

Participating Embassies & Domestic Entities – Dec 12, 2006 (ANNEX 1)

National Defense Industrial Association – Jan 29, 2007

India High Technology Cooperation Group – Feb 23, 2007

Office of U.S. Senator Christopher Dodd – Mar 9, 2007

Security Cooperation Industry Group – Apr 9, 2007

Defense Industry Offset Association – Apr 18, 2007

Identifying Options

In preparation for foreign dialogue, the IaWG set out to prepare a White Paper to specify exactly how this continuing dialogue would proceed. As a prelude to the more definitive White Paper, a Green Paper was developed to outline all avenues of consideration for future engagement on limiting the adverse effects of offsets in defense procurement.

It was agreed that the White Paper would specify the who, where, and what to include:

Reasons for continuing dialogue:

How to build on what was done over the last two years, and

What is the expected outcome of this additional dialogue?

Identifying perspective countries, with the exception of the United States, that would consider assuming the lead for continuing this dialogue

Goals that must be mutually achievable and of benefit to all participating agencies, organizations and countries participating.

In developing a strategy for foreign dialogue, the IaWG agreed that any discussion on offsets should be initiated with the intention of rendering the offset process more transparent so that defense contractors can better understand what will be expected under the offset requirement. Additionally, the dialogue should include: an emphasis on allowing contractors much more flexibility in fulfilling offset demands; and afford contractors the greatest possible latitude in use of credits for future offset agreements. Ultimately, the IaWG's goal for continuing the dialogue should be to achieve multi-lateral endorsement of Best Practices Principles which will serve to limit the adverse effects of offsets in defense procurement.

Defining the Approach

Given the increasing use of offsets in defense procurement and the scrutiny accorded their potentially adverse effects, it was agreed that the IaWG should formulate a strategy for future efforts for continuing the dialogue with a select number of countries on offsets in defense procurement. The IaWG decided that it should pursue engagement with offset demanders and suppliers alike, with the intention of achieving multi-lateral agreement on Best Practices Principles which will serve to reduce the adverse effects of offsets and encourage flexibility, competition, best value and equitable treatment to all participating nations.

Focusing upon the options from the Green Paper, the IaWG articulated the following two-tiered approach for continuing the dialogue on limiting the adverse effects of offsets:

- 1) The United States should continue to engage offset providers that espouse similar views to those of the United States to build consensus and further common goals, then leverage combined efforts of offset providers in further dialogue with offset demanders.
- 2) Engage offset demanders bilaterally to encourage flexibility in offset demands.

Further augmenting this approach, it was recommended that the United States comprehensively engage multi-national organizations through the Declaration of Principles (DoP), and discussions with the Letter of Intent 6 (LOI 6) nations, the North Atlantic Treaty Organization (NATO) and the European Defense Agency (EDA) with the intent of seeking consensus among the member countries on offset practices and to identify specific areas of agreement and harmonization of efforts. Additionally, the United States should consider further avenues of dialogue with other multi-national organizations, government agencies/ministries, industry representatives and academia willing to work with the United States in continuing this dialogue.

Any further dialogue will include all potentially affected national ministries and departments, and always include the ministries or departments of defense. As offsets are frequently demanded for political reasons by the executive branches in offset demanding nations, the IaWG will seek to identify and target the agencies and actors responsible for offset policies in key nations.

Statement of Principles for Best Practices Development

It is of fundamental importance that the IaWG works in conjunction with foreign nations, defense industry representatives and multi-national organizations to articulate a mutually agreeable Statement of Principles (SoP) for the understanding of “best practices” for limiting the adverse effects of offsets. Clear and collaborative definitions and the understanding of offsets and their effects, is a vital first step in the articulation of a Statement of Principles for Best Practices for seeking to limit the adverse effects of certain offsets practices.

During the development of the SoP, the IaWG was mindful of the perceived statutory nature of such a document. There is no intention for any articulation of Best Practices Principles to be a regulation, create legal obligations, or change any existing law or statute for any participating country. The SoP will be advisory in nature, informational in content, and will be intended to assist in the limiting of particularly adverse effects of offsets in defense procurement. However, should a nation choose to accept this

information and act upon this advice to limit the adverse effects of offsets, the United States Government should view this positively.

To assist in fulfilling its legislative mandate, the IaWG has structured foreign dialogue around the following discussion questions:

1. Do you agree or disagree with the findings of the interagency team on offsets? Did the interagency team overlook anything in the findings? Have you observed any adverse effects of offsets in addition to those identified by the interagency team?
2. Would it be useful among offset providing nations to develop a Statement of Principles for limiting the adverse effects?
3. What specific principles would you like to see included in the Statement of Principles?
4. What additional steps could be taken to limit the adverse effects of offset arrangements?
5. What is your reaction to the diverse findings of the EDA Final Report? How do you see the EDA and LOI nations moving forward on direct and indirect offsets with regards to defense industry?

Continuing the Dialogue

Australian Bi-lateral Discussions

As part of interagency efforts to reduce the adverse effects of offsets in defense procurement, the IaWG engaged in bi-lateral discussions with Australia in May 2007. The IaWG sought to enter into discussions with Australia as it espouses similar concerns about the role of adverse offset practices in defense procurement. The IaWG began by briefing the Australian Representatives on the third and Final Report of the Interagency Team on Consultations with Foreign Nations on Limiting the Adverse Effects of Offsets in Defense Procurement. This led to a fruitful discussion, highlighting general consensus that there is a real cost associated with particularly adverse offset demands.

One of the Australian Government's key objectives is to secure the best possible value-for-money for the more than \$12 billion Australian dollars allotted for the procurement of defense goods. The rising real cost of military capability, both at acquisition and in terms of sustainment, underscores the challenge facing Australia's defense procurement establishment. On the subject of procurement policies in general, and offset policies in particular, Australia does not view any of its procurement policies as being overtly 'offset demanding'. However, definitional differences exist between the United States and Australia with regards to what *is* considered 'offset demanding'. Defense procurement activities in Australia are based on "maximal cost effective local content" criteria, with

particular attention paid to follow-on service and supply support, which is consistent with their overall key objectives in defense procurement.

With defense exports exceeding \$600 million Australian dollars per annum, Australia has a growing, interest in reducing the adverse effects of offsets in defense procurement. Australian representatives were keen to highlight the market distorting effects of offsets and were receptive to pursuing a mutually agreeable “Best Practices” for limiting the adverse effects of offsets in defense procurement, but noted that as a small defense exporter, their overall market interest in this field was limited.

LOI 6 Multilateral Discussions

On November 6, 2007, the Interagency Working Group, comprised of representatives of the Departments of Defense, Commerce, and State, and the Office of the United States Trade Representative, engaged in dialogue on limiting the adverse effects of offsets in defense procurement with the six Letter of Intent countries: France, Germany, Italy, Spain, Sweden and the United Kingdom (hereafter referred to as the “LOI 6”).³¹ Two representatives of the European Defence Agency (EDA) were in attendance as observers. The dialogue was conducted in Madrid, Spain, as Spain currently chairs the LOI 6. This meeting was the first time the U.S. Government has engaged with the LOI 6, albeit informally on the margin of their formal meeting. The U.S. Government briefed the LOI 6 on the content of the IaWG’s Final Report and requested their input regarding the development of a statement of principals (SOP).

At the conclusion of the dialogue, there appeared to be a consensus that the development of a SOP among offset providing nations was an idea worth pursuing, bearing in mind the following key considerations regarding offsets raised by the LOI 6 members:

1. There currently is no agreement on terminology;
2. There is no common national view. There are differences in views between national defense sectors and government departments/agencies;
3. There is no complete articulation of the rationale for demanding offsets or consensus on whether or not various rationales have been measured and proven successful; and
4. There are countries in addition to the United States and LOI 6 that provide offsets when making defense sales.

Additionally, the following comments were made by LOI 6 members or the EDA observers:

³¹ The LOI 6 members are the six leading European arms manufacturing countries and share a desire to establish a cooperative framework to facilitate the restructuring of the European defense industry. As arms producers, these countries tend to be providers of offsets when making defense sales.

1. No nation called for elimination of offsets, but the view was that “over the top” offset demands are a problem;
2. The EDA considers offsets to be market distorting and is considering a Code of Conduct on offsets. The EDA is limited by the interests of the 26 member states, and would have difficulty in engaging externally with the USG on offsets; and
3. While it is possible for the United States and LOI 6 to work together to harmonize their view on offsets, it will be difficult and time consuming to produce concrete results, such as an SOP.

In conclusion, the IaWG agreed to provide additional information and clarification regarding an SOP on offsets, and re-engage the LOI 6 at a later date.

Milestones

Notional measures of success will be largely contingent upon the outcomes of these meetings, and nations’ responsiveness to these cooperative endeavors. Ultimately, our goal for continuing the dialogue is to achieve multi-lateral agreement on the creation of Principles for Best Practices which will serve to limit the adverse effects of offsets and encourage flexibility and equitable treatment for all participating nations.

Dialogue should take place through the remainder of 2007 and into 2008, with importance being placed on increasing transparency in offsets policies and taking mutually agreeable steps towards the creation of a Statement of Best Practices. It is hoped that the first round of meetings with foreign nations and organizations can be concluded by February 2008, at which time the United States can assess progress and recalibrate future efforts if necessary.

The United States’ goal is to produce a preliminary Statement of Best Practices in association with consulted nations and organizations by the latter half of 2008, with a final model agreed upon by mid 2009.

ANNEX 1
Briefings of the Final Report
Participating Embassies and Domestic Entities

Domestic Entities

- United Automobile, Aerospace and Agricultural Implement Workers of America
- American Shipbuilding Association
- Aerospace Industries Association
- Small Manufactures Associating of California
- US Business and Industry Council
- International Association of Machinists and Aerospace Workers
- AFL-CIO
- Lockheed Martin
- The General Aviation Manufactures Association
- National Defense Industrial Association
- Seafarers International, Union of North America

Foreign Entities

- Canada
- Denmark
- France
- Germany
- Greece
- India
- Italy
- Netherlands
- Republic of Korea
- Spain
- Sweden
- United Kingdom

