Offsets in Defense Trade

Thirteenth 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

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Table of Contents

Executive Summary

This is the thirteenth annual report to Congress on the impact of offsets in defense trade prepared by the U.S. Department of Commerce's Bureau of Industry and Security (BIS) pursuant to Section 309 of the Defense Production Act (DPA) of 1950,[1] as amended. 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 foreign governments or foreign firms as a condition of the purchase of 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 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 articles 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 defense sales – sales which help support the U.S. industrial base.

In order to assess the impact of offsets in defense trade, BIS collects data from U.S. firms involved in defense exports with related offset agreements. These firms report their offset activities to BIS annually.[3] This report covers offset agreements entered into and the offset transactions carried out to fulfill these offset obligations from 1993 through 2007. This report also includes a progress report on the work of the Interagency Working Group on Offsets, 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. firms and foreign governments or foreign firms in

[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.

connection with U.S. defense-related exports, and offset transactions concluded to satisfy these offset agreements.

Offset Agreements

In 2007, U.S. defense contractors reported entering into 43 new offset agreements with 18 countries valued at $5.44 billion. The value of these agreements equaled 80.73 percent of the $6.74 billion in reported defense-related export contracts.

During 1993-2007, U.S. firms reported entering into 625 offset agreements with 44 countries valued at $65.46 billion. The value of these agreements equaled 71.89 percent of the $91.06 billion in defense-related export contracts reported during the period.[4]

Offset Transactions

In 2007, U.S. firms reported 589 offset transactions in 30 countries with an actual value of $3.76 billion, and an offset credit value of $4.70 billion.

In 2007, direct offsets (transactions that are directly related to the specific defense system export contract) accounted for 49.95 percent of the actual value of offset transactions reported. Indirect offsets (transactions that are not directly related to the specific defense system export contract) accounted for 49.81 percent of the actual value of offset transactions.[5]

During 1993-2007, U.S. defense firms reported 9,249 offset transactions in 48 countries with an actual value of $45.73 billion, and the offset credit value of $53.61 billion. Direct offsets accounted for 40.49 percent of the actual value of the offset transactions during this period, with indirect offsets accounting for 58.92 percent.

Impact of Offsets on the U.S. Industrial Base

Defense export sales are an important component of U.S. defense contractors' revenues and to U.S. foreign policy and economic interests. Exports of major defense systems help lower overhead costs to the Department of Defense (DOD) on common defense programs and help

[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).

[5] The total does not equal 100 percent because a small number of reported offset transactions are not specified as direct or indirect.

maintain production facilities and workforce expertise for current and future U.S. defense requirements. Exports also provide additional business to many U.S. subcontractors and lower-tier suppliers, promote interoperability of defense systems between the United States and friends and allies, and contribute positively to U.S. international trade account balances.

However, when an offset agreement requires a high proportion of subcontracting, co-production, licensed production, or purchases, it can negate some of the economic and industrial base benefits accrued through the defense export sale. U.S. defense subcontractors and suppliers, and in some cases portions of the prime contractor's business, may also be displaced by offset transactions.

1 Background

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' then-Committee on Banking, Finance, and Urban Affairs of the House of Representatives[7] 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 enacted. 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.[8] See Annex D 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. firms. The Secretary of Commerce delegated this authority to the Bureau of Industry and Security (BIS). BIS published its offset regulations in 1994.[9] In 2008, BIS initiated a rulemaking to update this regulation (RIN 0694-AE40).

This is the thirteenth report to Congress on offsets in defense trade prepared by BIS. This report reviews offset data for the 15-year period from 1993-2007.[10] This report was prepared in consultation with the Departments of Defense (DOD), State, and Labor, and the Office of the United States Trade Representative. These agencies are also members of the interagency working group chartered to consult with foreign nations on limiting the adverse effects of offsets in defense procurement.[11] In preparing this report, BIS made some changes to the report's structure. The chapters were re-ordered to correspond, in a logical fashion, with the sequence of events that occur in defense sales involving offsets. BIS has also incorporated data from other U.S. Government sources, such as DOD, the Census Bureau (Census) and the Bureau of Economic Analysis (BEA).

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[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.

[10] 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.

[11] See Pub. L. 108-195, Dec. 19, 2003, 117 Stat. 2892.

BIS published a notice on May 20, 2008 reminding the public that U.S. firms are required to report annually on contracts for the sale of defense articles or defense services to foreign governments or foreign firms that are subject to offset agreements exceeding $5,000,000 in value and to report on offset transactions completed in performance of existing offset commitments for which offset credit of $250,000 or more has been claimed from the foreign representative.[12]

This report examines offset data for calendar year 2007, and examines the overall offset activity from 1993 to 2007. Nineteen firms reported offset agreement and transaction data to BIS for calendar year 2007. The data elements collected each year from industry are listed in Section 701.4 of the Department's offset regulations. BIS maintains a database with data collected from industry on offset activity from 1993-2007. This data was analyzed in preparing this report to Congress. In addition, BIS utilized economic, procurement, and international trade data published by other U.S. Government agencies, including BEA, Census and DOD.

[12] See 73 Fed. Reg. 29108, May 20, 2008.

2 Defense Export Sales with Offset Agreements

In 2007, ten U.S. defense contractors reported entering into 43 defense export sales contracts valued at $6.74 billion with 18 countries that had related offset agreements.[13] In 2006, 12 U.S. firms reported entering into 44 defense export sales contracts valued at $4.83 billion with 20 countries that had related offset agreements.

During 1993-2007, 46 U.S. firms reported entering into 625 defense export sales contracts with related offset agreements totaling $91.06 billion with 44 countries. See Table 2-1.

Table 2-1: Summary of Defense Export Sale Contract Values with Related Offset Agreements, 1993-2007

Year	Contract Value ($ millions)	Companies (Number)	Agreements (Number)	Countries (Number)
1993	$13,935.00	17	28	16
1994	$4,792.42	18	49	20
1995	$7,529.92	20	47	18
1996	$3,119.67	16	53	19
1997	$5,925.47	15	60	20
1998	$3,029.20	12	41	17
1999	$5,656.62	10	45	11
2000	$6,576.21	10	43	16
2001	$7,017.30	11	34	13
2002	$7,406.23	12	41	17
2003	$7,293.05	11	32	13
2004	$4,927.51	14	40	18
2005	$2,259.87	8	25	18
2006	$4,832.45	12	44	20
2007	$6,735.74	10	43	18
Total	**$91,061.67**	**46**	**625**	**44**

Source: BIS Offset Database
Note: Due to rounding, totals may not add up exactly.

[13] U.S. firms are required to report annually to BIS on contracts for the sale of defense-related items or defense-related services to foreign governments or foreign firms that are subject to offset agreements exceeding $5,000,000 in value.

3 Offset Agreements

In 2007, ten U.S. defense contractors reported entering into a total of 43 new offset agreements with 18 countries valued at $5.44 billion. These agreements equaled 80.73 percent of the $6.74 billion in related defense export contracts. In 2006, 12 U.S. defense contractors had reported entering into 44 new offset agreements with 20 countries valued at $3.43 billion (accounting for 70.88 percent of the value of the related export contracts).

During 1993-2007, a total of 46 U.S. firms reported entering into 625 offset agreements with 44 countries related to defense export sales totaling $91.04 billion. These offset agreements were valued at $65.46 billion and equaled 71.89 percent of the related defense export contract value. See Table 3-1.

Table 3-1 : Summary of Offset Agreements, 1993-2007

Year	Contract Value ($ millions)	Offset Agreement Value ($ millions)	% Offset	Companies (Number)	Agreements (Number)	Countries (Number)
1993	$13,935.00	$4,784.43	34.33%	17	28	16
1994	$4,792.42	$2,048.72	42.75%	18	49	20
1995	$7,529.92	$6,102.58	81.04%	20	47	18
1996	$3,119.67	$2,431.62	77.94%	16	53	19
1997	$5,925.47	$3,825.53	64.56%	15	60	20
1998	$3,029.20	$1,768.15	58.37%	12	41	17
1999	$5,656.62	$3,456.89	61.11%	10	45	11
2000	$6,576.21	$5,704.81	86.75%	10	43	16
2001	$7,017.30	$5,460.85	77.82%	11	34	13
2002	$7,406.23	$6,094.81	82.29%	12	41	17
2003	$7,293.05	$9,110.44	124.92%	11	32	13
2004	$4,927.51	$4,329.69	87.87%	14	40	18
2005	$2,259.87	$1,464.13	64.79%	8	25	18
2006	$4,832.45	$3,425.35	70.88%	12	44	20
2007	$6,735.74	$5,437.57	80.73%	10	43	18
Total	**$91,061.67**	**$65,460.58**	**71.89%**	**46**	**625**	**44**

Source: BIS Offset Database

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

4 Offset Transactions

In 2007, 18 U.S. firms reported concluding 589 offset transactions in 30 countries.[14] Offset transactions reported by U.S. firms had an actual value of $3.76 billion in 2007. In 2006, 15 U.S. defense contractors reported 653 offset transactions in 29 countries with an actual value of $4.69 billion. During 1993-2007, a total of 53 U.S. firms reported 9,249 offset transactions in 48 countries. The actual value of the offset transactions from 1993-2007 was $45.73 billion. See Table 4-1.

Table 4-1: Summary of Offset Transactions, 1993-2007

Year	Actual Offset Transaction Value ($ millions)	Companies (Number)	Transactions (Number)	Countries (Number)
1993	$1,897.88	22	444	27
1994	$1,934.86	21	566	26
1995	$2,890.49	21	711	26
1996	$2,875.82	22	634	26
1997	$2,720.58	19	578	26
1998	$2,312.17	20	582	29
1999	$2,059.73	13	513	25
2000	$2,208.18	16	627	24
2001	$2,555.80	15	617	25
2002	$2,616.04	17	729	26
2003	$3,565.50	16	689	31
2004	$4,933.07	15	706	33
2005	$4,709.56	12	611	30
2006	$4,687.96	15	653	29
2007	$3,764.81	18	589	30
Total	**$45,732.45**	**53**	**9,249**	**48**

Source: BIS Offset Database

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

[14] U.S. firms are required to report annually on offset transactions completed in performance of existing offset agreements for which offset credit of $250,000 or more has been claimed from the foreign representative. To avoid double counting, prime contractors report offset transactions to BIS for which they are directly responsible for reporting to the foreign customer (i.e., prime contractors report for their subcontractors).

In 2007, U.S. industry reported that 88 offset transactions (14.94 percent) had a multiplier[15] applied, compared to 33 transactions (5.05 percent) in 2006. The offset credit value of reported offset transactions was $4.70 billion in 2007. In 2006, industry reported offset transactions with a credit value of $4.89 billion. The total credit value of reported offset transactions for 1993-2007 was $53.61 billion based on those transactions that included a multiplier.

In 2007, direct offsets (transactions that are directly related to the specific defense system subject to the offset agreement) accounted for 49.95 percent of the actual value of reported offset transactions. Indirect offsets (transactions that are not related to the specific defense system subject to the offset agreement) accounted for 49.81 percent of the actual value of reported offset transactions.[16] In 2006, direct offsets had accounted for 36.03 percent of the actual value of reported offset transactions, with indirect offsets accounting for 63.58 percent. During 1993-2007, direct offsets accounted for 40.49 percent of the actual value of the reported offset transactions, with indirect offsets accounting for 58.92 percent.

Table 4-2 presents reported offset transaction data by value and type (direct, indirect, or unspecified) for each year from 1993 to 2007. Table 4-2 also shows the total actual and credit values of the reported offset transactions for each year.

[15] A multiplier is a factor applied to the actual value of certain offset transactions to calculate the offset credit value. Foreign governments use multipliers to provide firms with incentives to offer offsets in targeted areas of economic growth.

[16] The total does not equal 100 percent because a small number of reported offset transactions are not specified as direct or indirect.

Table 4-2 Offset Transactions by Type, 1993-2007							
Year	**Total**	**Direct**	**Indirect**	**Unspecified**	**Direct**	**Indirect**	**Unspecified**
	Actual Value ($ millions)				**% Distribution**		
1993	$1,897.88	$636.65	$1,197.37	$63.85	33.55%	63.09%	3.36%
1994	$1,934.86	$628.17	$1,202.38	$104.32	32.47%	62.14%	5.39%
1995	$2,890.49	$1,108.76	$1,756.84	$24.89	38.36%	60.78%	0.86%
1996	$2,875.82	$1,248.79	$1,625.64	$1.40	43.42%	56.53%	0.05%
1997	$2,720.58	$1,041.70	$1,657.52	$21.37	38.29%	60.93%	0.79%
1998	$2,312.17	$1,469.68	$842.37	$0.13	63.56%	36.43%	0.01%
1999	$2,059.73	$699.79	$1,348.52	$11.43	33.97%	65.47%	0.55%
2000	$2,208.18	$785.63	$1,411.91	$10.63	35.58%	63.94%	0.48%
2001	$2,555.80	$940.88	$1,614.93	-	36.81%	63.19%	-
2002	$2,616.04	$941.76	$1,672.95	$1.33	36.00%	63.95%	0.05%
2003	$3,565.50	$1,112.98	$2,446.96	$5.56	31.22%	68.63%	0.16%
2004	$4,933.07	$2,534.25	$2,398.33	$0.50	51.37%	48.62%	0.01%
2005	$4,709.56	$1,797.48	$2,912.09	-	38.17%	61.83%	-
2006	$4,687.96	$1,688.92	$2,980.74	$18.30	36.03%	63.58%	0.39%
2007	$3,764.81	$1,880.66	$1,875.28	$8.87	49.95%	49.81%	0.24%
Total	**$45,732.45**	**$18,516.08**	**$26,943.81**	**$272.57**	**40.49%**	**58.92%**	**0.60%**
	Credit Value ($ millions)				**% Distribution**		
1993	$2,213.62	$737.40	$1,407.54	$68.68	33.31%	63.59%	3.10%
1994	$2,206.09	$802.47	$1,294.81	$108.82	36.38%	58.69%	4.93%
1995	$3,592.59	$1,302.57	$2,250.70	$39.31	36.26%	62.65%	1.09%
1996	$3,098.02	$1,182.01	$1,880.00	$36.00	38.15%	60.68%	1.16%
1997	$3,272.31	$1,183.49	$2,039.12	$49.71	36.17%	62.31%	1.52%
1998	$2,623.21	$1,629.41	$991.27	$2.54	62.12%	37.79%	0.10%
1999	$2,808.33	$1,133.99	$1,604.02	$70.32	40.38%	57.12%	2.50%
2000	$2,846.44	$1,146.35	$1,689.46	$10.63	40.27%	59.35%	0.37%
2001	$3,274.43	$1,292.33	$1,982.10	-	39.47%	60.53%	-
2002	$3,284.51	$1,111.24	$2,171.94	$1.33	33.83%	66.13%	0.04%
2003	$4,010.65	$1,215.46	$2,783.23	$11.96	30.31%	69.40%	0.30%
2004	$5,364.28	$2,663.35	$2,700.43	$0.50	49.65%	50.34%	0.01%
2005	$5,426.61	$1,870.89	$3,555.72	-	34.48%	65.52%	-
2006	$4,888.54	$1,634.95	$3,239.78	$13.80	33.44%	66.27%	0.28%
2007	$4,701.98	$2,489.36	$2,195.95	$16.67	52.94%	46.70%	0.35%
Total	**$53,611.61**	**$21,395.27**	**$31,786.08**	**$430.27**	**39.91%**	**59.29%**	**0.80%**

Source: BIS Offset Database
Note: Due to rounding, totals may not add up exactly.

Table 4-3 presents offset transaction data by number, type (direct, indirect, or unspecified), and which included multipliers for each year from 1993-2007.

Table 4-3: Number of Offset Transactions by Type and with Multipliers, 1993-2007

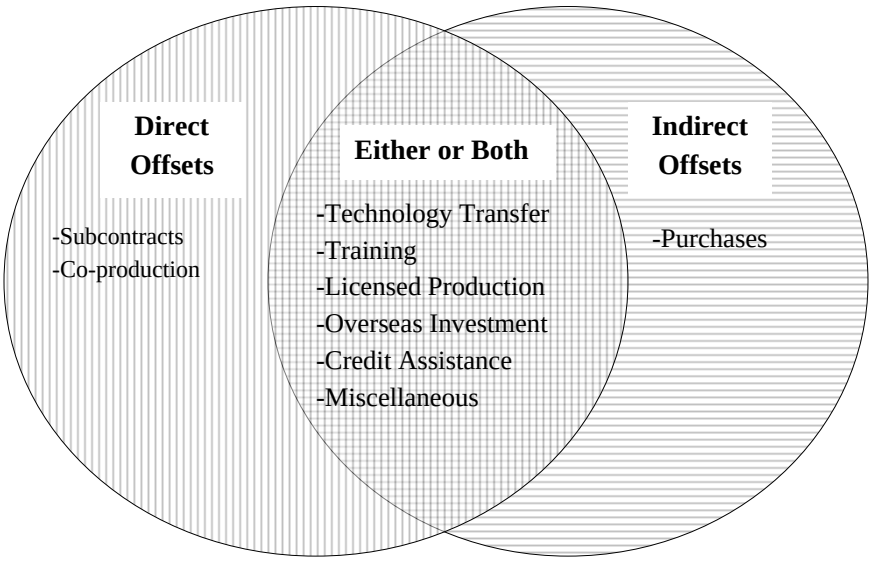
Year	Number of Transactions				Transactions with Multipliers	
	Total	Direct	Indirect	Unspecified	Number of Transactions	Percent of Total Transactions
1993	444	160	280	4	63	14.2%
1994	566	178	383	5	80	14.1%
1995	711	204	505	2	110	15.5%
1996	634	228	404	2	64	10.1%
1997	578	202	372	4	61	10.6%
1998	582	241	340	1	87	14.9%
1999	513	212	296	5	87	17.0%
2000	627	216	409	2	83	13.2%
2001	617	224	393	-	115	18.6%
2002	729	194	534	1	84	11.5%
2003	689	179	506	4	64	9.3%
2004	706	371	334	1	74	10.5%
2005	611	206	405	-	52	8.5%
2006	653	287	364	2	33	5.1%
2007	589	290	297	2	88	14.9%
Total	**9,249**	**3,392**	**5,822**	**35**	**1,145**	**12.4%**

Source: BIS Offset Database
Note: Because of rounding, totals may not add up exactly.

In addition to classifying offset transactions by type (direct or indirect), offset transactions can be identified by various categories, which more specifically describe the nature of the transaction. For the purposes of this report, BIS has categorized offset transactions as purchases, subcontracts, technology transfers, credit assistance, training, overseas investment, co-production, licensed production, and miscellaneous.[17] The diagram on the following page illustrates how each category may be classified as direct and/or indirect. See Annex E for definitions of offset transaction categories.

[17] With respect to any export of product or technology from the United States, U.S. export control laws apply. Whether or not an 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 ensure that the proposed export of an item (commodity, software or technology) or a service is consistent with U.S. laws, regulations, and foreign policy and national security considerations. Where no license is required, U.S. exporters must comply with end-use and end-user restrictions.

Classification of Offset Transaction Categories



Source: BIS Offset Database

The top five offset transaction categories reported by industry for 2007, based on number, actual value, and credit value were purchases, subcontracts, co-production, miscellaneous, and technology transfer. In 2007, the top three offset transaction categories, based on the total number reported, were purchases (30.39 percent), subcontracts (28.01 percent), and co-production (14.09 percent). The top three offset transaction categories based on actual value were purchases (23.55 percent), subcontracts (23.11 percent), and technology transfer (18.86 percent), and the top three offset transaction categories based on credit value were miscellaneous (22.25 percent), purchases (19.84 percent), and subcontracts (19.39 percent). The top three offset transaction categories that included multipliers were purchases, technology transfer, and miscellaneous. Purchases accounted for 35.22 percent of all transactions that included a multiplier, technology transfers accounted for 25.00 percent and miscellaneous accounted for 14.77 percent.

Similar to 2007, the top five offset transaction categories reported by industry for the 15-year reporting period (1993-2007) based on number, actual value, and credit value, were purchases, subcontracts, technology transfer, miscellaneous, and co-production, in that order. Based on the number of total offset transactions, purchases, subcontracts, technology transfer, miscellaneous, and co-production accounted for 46.48 percent, 23.08 percent, 11.37 percent, 6.95 percent and 5.31 percent, respectively. Based on actual value, the same offset transaction categories accounted for 37.00 percent, 22.30 percent, 16.69 percent, 7.37 percent and 7.03 percent, respectively, and based on credit value, they accounted for 34.99 percent, 20.82 percent, 16.67

percent, 9.13 percent and 6.20 percent, respectively. The top five offset transaction categories that included multipliers were purchases, technology transfer, subcontract, miscellaneous, and training. Purchases accounted for 33.01 percent of all transactions that included a multiplier, technology transfers accounted for 22.53 percent, subcontracts accounted for 13.01 percent, miscellaneous accounted for 11.97 percent and training accounted for 9.69 percent.

Table 4-4 presents a summary of reported offset transactions by category, type, and value for the 15-year reporting period (1993-2007).

Table 4-5 presents the number of reported offset transactions by category and type and with multipliers for the 15-year reporting period (1993-2007).

Table 4-4: Offset Transactions by Category, Type, and Value, 1993-2007

Transaction Category	Actual Values ($ millions)				Percent by Column Total			
	Total	**Dir.**	**Ind.**	**Unsp.**	**Total**	**Dir.**	**Ind.**	**Unsp.**
Co-production	$3,213.30	$3,213.30	-	-	7.03%	17.35%	-	-
Credit Assistance	$1,931.75	$202.27	$1,729.49	-	4.22%	1.09%	6.42%	-
Licensed Production	$354.07	$155.85	$174.19	$24.03	0.77%	0.84%	0.65%	8.82%
Miscellaneous	$3,372.36	$568.16	$2,786.40	$17.81	7.37%	3.07%	10.34%	6.53%
Overseas Investment	$1,161.42	$318.26	$765.71	$77.46	2.54%	1.72%	2.84%	28.42%
Purchase	$16,920.87	-	$16,920.87	-	37.00%	-	62.80%	-
Subcontract	$10,197.17	$10,197.17	-	-	22.30%	55.07%	-	-
Technology Transfer	$7,630.51	$3,343.24	$4,135.86	$151.41	16.69%	18.06%	15.35%	55.55%
Training	$951.00	$517.84	$431.30	$1.86	2.08%	2.80%	1.60%	0.68%
Total	**$45,732.45**	**$18,516.08**	**$26,943.81**	**$272.57**	**100.00%**	**100.00%**	**100.00%**	**100.00%**
Transaction Category	**Credit Values ($ millions)**				**Percent by Column Total**			
	Total	**Dir.**	**Ind.**	**Unsp.**	**Total**	**Dir.**	**Ind.**	**Unsp.**
Co-production	$3,324.78	$3,324.78	-	-	6.20%	15.54%	-	-
Credit Assistance	$2,145.40	$271.52	$1,873.88	-	4.00%	1.27%	5.90%	-
Licensed Production	$547.26	$172.81	$343.22	$31.23	1.02%	0.81%	1.08%	7.26%
Miscellaneous	$4,895.08	$1,373.95	$3,440.68	$80.45	9.13%	6.42%	10.82%	18.70%
Overseas Investment	$2,248.01	$621.12	$1,498.72	$128.16	4.19%	2.90%	4.72%	29.79%
Purchase	$18,756.26	-	$18,756.26	-	34.99%	-	59.01%	-
Subcontract	$11,160.10	$11,160.10	-	-	20.82%	52.16%	-	-
Technology Transfer	$8,937.40	$3,577.17	$5,183.17	$177.06	16.67%	16.72%	16.31%	41.15%
Training	$1,597.36	$893.82	$690.16	$13.37	2.98%	4.18%	2.17%	3.11%
Total	**$53,611.61**	**$21,395.27**	**$31,786.08**	**$430.27**	**100.00%**	**100.00%**	**100.00%**	**100.00%**

Source: BIS Offset Database
Note: Due to rounding, totals may not add up precisely.

Table 4-5: Number of Offset Transactions by Category and Type and with Multipliers, 1993-2007					
Transaction Category	**# of Transactions**				**Number of Transactions with Multipliers**
	Total	**Direct**	**Indirect**	**Unspecified**	
Co-production	491	491	-	-	20
Credit Assistance	147	12	135	-	24
Licensed Production	43	29	12	2	9
Miscellaneous	643	119	518	6	139
Overseas Investment	150	30	115	5	57
Purchase	4,299		4,299	-	378
Subcontract	2,135	2,135		-	149
Technology Transfer	1,052	439	596	17	258
Training	289	137	147	5	111
Total	**9,249**	**3,392**	**5,822**	**35**	**1,145**
Source: BIS Offset Database					

Annex C presents a summary of reported offset transactions by category, value, and number on an annual basis during the 15-year reporting period (1993-2007).

5 Impact of Offsets on the U.S. Industrial Base

Revenue generated by defense export sales is important to U.S. defense contractors and to U.S. foreign policy and economic interests. Exports of major defense systems help lower overhead costs to DOD on common defense programs and help maintain production facilities and workforce expertise for current and future U.S. defense requirements. Defense exports also provide additional business to many U.S. subcontractors and lower-tier suppliers, promote interoperability of weapon systems between the United States and friends and allies, and contribute positively to U.S. international trade account balances.

However, when an offset agreement requires a high proportion of subcontracting, co-production, licensed production, or purchases, it can negate some of the economic and industrial base benefits accrued through the defense export sale. U.S. defense subcontractors and suppliers, and in some cases portions of the prime contractor's business, may also be displaced by offset transactions that provide for these forms of transactions.

Previous studies and discussions between industry and U.S. Government officials indicate that, at times, U.S. prime contractors develop long-term supplier relationships with overseas subcontractors based on short-term offset requirements.[18] These new relationships, combined with mandatory offset requirements, can endanger future business opportunities for U.S. subcontractors and suppliers, with possible negative consequences for the domestic industrial base. Other kinds of offsets, such as technology transfer, can increase research and development spending and capital investment 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. However, DOD points out that another consequence of offsets can be increased global defense industrial base capabilities available to compete to satisfy DOD requirements.

[18] For example, 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.

Export and Offset Activity Trends

According to Census, U.S. merchandise exports totaled $1.16 trillion in 2007. Based on end-use export data published by Census, defense-related merchandise exports totaled $16.68 billion in 2007[19], accounting for approximately 1.43 percent of total U.S. merchandise exports.

For purposes of context, in 2007 U.S. industry reported entering into defense export sales contracts valued at $6.74 billion that had related offset agreements valued at $5.44 billion, and completing offset transactions with an actual value of $3.76 billion. The value of U.S. merchandise exports cannot be directly compared with the value of defense contracts, offset agreements, and offset transactions because export data reflect actual shipments during the calendar year, while it may take several years for shipments to be made that are related to defense export contracts and offset agreements. In addition, not all offset transactions are defense related. See Table 5-1 for defense-related merchandise exports and offset activity trends from 2003–2007.

Table 5-1: U.S. Merchandise Exports and Reported Offset Activity Trends, 2003-2007

Year	Total Merchandise Exports ($ millions)	Defense-Related Merchandise Exports ($ millions)	Defense-Related Exports as a Percentage of Total Merchandise Exports	Value of Reported Defense Export Sale Contracts with Related Offset Agreements ($ millions)	Value of Reported Offset Agreements ($ millions)	Actual Value of Reported Offset Transactions ($ millions)
2003	$724,770.98	$11,564.51	1.60%	$7,293.05	$9,110.44	$3,565.50
2004	$818,774.86	$11,844.30	1.45%	$4,927.51	$4,329.69	$4,933.07
2005	$905,977.63	$12,834.77	1.42%	$2,259.87	$1,464.13	$4,709.56
2006	$1,036,634.65	$16,628.72	1.60%	$4,832.45	$3,425.35	$4,687.96
2007	$1,162,708.29	$16,676.38	1.43%	$6,735.74	$5,437.57	$3,764.81

Sources: BIS Offset Database and the U.S. Census Bureau, End-Use Export Data

[19] This figure includes the exports categorized under the following export end-use codes: (50000) Military aircraft, complete; (50010) Aircraft launching gear, parachutes, etc; (50020) Engines and turbines for military aircraft; (50030) Military trucks, armored vehicles, etc.; (50040) Military ships and boats; (50050) Tanks, artillery, missiles, rockets, guns, and ammunition; (50060) Military apparel and footwear; and (50070) Parts for military-type goods. The end-use data series does not include exports of defense services. See www.census.gov/foreign-trade/statistics.

Economic Impact of Offsets on U.S. Industrial Activity and Employment

Given the variety of defense systems exported and the number of reported offset transactions, it is not possible to determine precisely the impact of defense export contracts, offset agreements, and offset transactions on industrial activity and employment with the limited data available. BIS has developed an estimate by utilizing reported aerospace-related defense export sale and offset transaction data, BEA's *Benchmark Input-Output Accounts of the United States* (I/O accounts)[20], and Census' *Annual Survey of Manufactures*.[21]

During 2004-2007, industry reported aerospace-related defense export sales contracts with offset agreements valued at $15.8 billion. BIS has categorized these sales into three subsectors of the aerospace industry: aircraft manufacturing; aircraft engine and engine parts manufacturing; and other aircraft parts and auxiliary equipment manufacturing. The I/O accounts demonstrate how these defense export sales have a positive multiplier effect on hundreds of other U.S. economic sectors that supply inputs to the aerospace sector, the major economic sectors of which are shown in Table 5-2.

Conversely, for the purpose of this analysis, offset transactions are considered to have a "negative" impact on U.S. inputs because these transactions represent activity that would not be provided by sectors of the U.S. economy (see Table 5-3).[22] In addition, only reported offset transactions related to subcontracting, co-production, licensed production, and purchases were considered in BIS's analysis because these four categories of offset transactions provide for the most direct and measurable displacement of U.S. input opportunities.

[20] The I/O accounts show the dollar value of inputs from all industries required to produce a dollar worth of an industry's output. The I/O accounts provide an extensive accounting of the production of goods and services by each industry, which includes the goods and services purchased by each industry, the income earned in each industry, and the distribution of sales for all goods and services to industries and final uses.

[21] BIS limited the measurement of impact of offsets to this industrial sector since sales of aerospace-related weapon systems accounted for more than 80 percent of the value of defense sales contracts with related offset agreements and offset transactions reported by industry during 2004-2007. A four-year data set was used to evaluate impact in order to account for annual fluctuations in reported defense sales contracts, offset agreements, and offset transactions.

[22] For purposes of this analysis, BIS has assumed that this work would be conducted in the United States if there were no offset agreements in place. This is not necessarily an accurate assumption.

Table 5-2: Inputs from Selected Industry Sectors Related to Reported Defense Export Sales Contracts, 2004-2007			
	Aircraft manufacturing	**Aircraft engine and engine parts manufacturing**	**Other aircraft parts and auxiliary equipment manufacturing**
	Outputs		
Total Value of Reported Aerospace-Related Defense Export Sale Contracts	$11,804,905,650	$371,861,955	$3,667,115,752
Number of Reported Aerospace-Related Defense Export Sale Contracts	24	6	62
Inputs from Selected Industries	**Inputs**		
Air transportation	$92,740,519	$503,689,026	$33,127,990
Aircraft engine and engine parts manufacturing	$43,358,238	$1,198,474	$119,512,402
Aircraft manufacturing	$12,056,233,272	$72,923,394	$483,176,238
Couriers and messengers	$25,430,128	$192,922	$2,799,476
General Federal defense government services[23]	$367,533,933	$3,422,617	$32,766,779
General Federal nondefense government services[23]	$8,671,884	$304,927	$1,929,636
Guided missile and space vehicle manufacturing	$27,343,703	$1,030,169	$2,527,376
Other aircraft parts and auxiliary equipment manufacturing	$56,541,957	$5,119,498	$3,801,090,159
Propulsion units and parts for space vehicles and guided missiles	$14,910,776	$1,044,374	$1,816,322
Transportation and support activities for transportation	$10,980,923	$394,769	$21,288,340
Secondary smelting and alloying of aluminum	$3,216,837	$183,030	$4,419,608
All Other Industries	$294,035,409	$20,398,562	$243,486,585
Total Inputs[24]	**$13,000,997,578**	**$609,901,762**	**$4,747,940,913**
Sources: BIS Offset Database and BEA's *Benchmark Input-Output Accounts of the United States*.			

[23] The I/O accounts treat general government (both Federal and state) as an intermediate industry that produces services available for final consumption.

[24] Aerospace manufacturers produce goods and services that are both aerospace (outputs) and non-aerospace related, but the I/O accounts data do not break out the "inputs" between aerospace and non-aerospace. Therefore the sum of "inputs" exceeds the $11.8 billion in "outputs" because the value of the "inputs" includes goods and services not directly related to aerospace output.

Table 5-3: Inputs from Selected Industry Sectors Related to Reported Offset Transactions in Aerospace Industrial Sectors, 2004-2007			
	Aircraft manufacturing	**Aircraft engine and engine parts manufacturing**	**Other aircraft parts and auxiliary equipment manufacturing**
	Outputs		
Total Value of Reported Aerospace-Related Offset Transactions	$2,235,293,819	$131,776,870	$5,037,979,027
Number of Reported Aerospace-Related Offset Transactions	224	28	952
Inputs from Selected Industries	**Inputs**		
Air transportation	$17,560,692	$178,492,482	$45,512,095
Aircraft engine and engine parts manufacturing	$8,210,011	$424,704	$164,189,248
Aircraft manufacturing	$2,282,883,448	$25,841,892	$663,800,086
Couriers and messengers	$4,815,270	$68,366	$3,845,993
General Federal defense government services	$69,593,638	$1,212,874	$45,015,854
General Federal nondefense government services	$1,642,047	$108,057	$2,650,985
Guided missile and space vehicle manufacturing	$5,177,611	$365,061	$3,472,175
Other aircraft parts and auxiliary equipment manufacturing	$10,706,387	$1,814,199	$5,222,036,552
Propulsion units and parts for space vehicles and guided missiles	$2,823,400	$370,095	$2,495,311
transportation and support activities for transportation	$2,079,270	$139,894	$29,246,476
Secondary smelting and alloying of aluminum	$609,118	$64,861	$6,071,772
All Other Industries	$55,676,475	$7,228,647	$334,508,205
Total Inputs	**$2,461,777,365**	**$216,131,132**	**$6,522,844,752**
Sources: BIS Offset Database and BEA's *Benchmark Input-Output Accounts of the United State*s.			

Table 5-4 shows the net impact in terms of inputs across sectors resulting from defense export sales with related offset agreements, derived by subtracting the reported offset transaction-related data (Table 5-3) from the reported defense export sales contracts-related data presented in Table 5-2. In the aircraft manufacturing and aircraft engine and engine parts manufacturing sectors, the results indicate a highly favorable net gain on U.S. manufacturing opportunities. The results

indicate a net loss in manufacturing opportunity in the other aircraft parts and auxiliary equipment manufacturing sector. Across the three aerospace subsectors, the net impact amounted to a positive $9.2 billion in added "input" opportunity for the U.S. industrial base.

Table 5-4: Net Inputs from Selected Industry Sectors Related to Reported Defense Export Sales Contracts and Offset Transactions in Aerospace Industrial Sectors, 2004-2007

	Aircraft manufacturing	Aircraft engine and engine parts manufacturing	Other aircraft parts and auxiliary equipment manufacturing
	Outputs		
Total Value of Reported Aerospace-Related Defense Export Sale Contracts Less Value of Reported Aerospace-Related Offset Transactions	$9,569,611,831	$240,085,085	$(1,370,863,275)
Net Inputs from Selected Industries	**Inputs**		
Air transportation	$75,179,828	$325,196,544	$(12,384,105)
Aircraft engine and engine parts manufacturing	$35,148,227	$773,770	$(44,676,845)
Aircraft manufacturing	$9,773,349,824	$47,081,501	$(180,623,848)
Couriers and messengers	$20,614,858	$124,556	$(1,046,517)
General Federal defense government services	$297,940,295	$2,209,743	$(12,249,075)
General Federal nondefense government services	$7,029,837	$196,870	$(721,348)
Guided missile and space vehicle manufacturing	$22,166,092	$665,108	$(944,799)
Other aircraft parts and auxiliary equipment manufacturing	$45,835,570	$3,305,299	$(1,420,946,394)
Propulsion units and parts for space vehicles and guided missiles	$12,087,377	$674,279	$(678,989)
Scenic and sightseeing transportation and support activities for transportation	$8,901,653	$254,874	$(7,958,135)
Secondary smelting and alloying of aluminum	$2,607,719	$118,170	$(1,652,164)
All Other Industries	$238,358,935	$13,169,915	$(91,021,620)
Total Net Inputs	**$10,539,220,213**	**$393,770,630**	**$(1,774,903,839)**
Total Net Value of Inputs for all Aerospace Industry Sectors			**$9,158,087,004**

Sources: BIS Offset Database and BEA's *Benchmark Input-Output Accounts of the United States*.

According to Census's *Annual Survey of Manufactures*, the annual average value added per employee in the U.S. aerospace manufacturing sector during 2003-2006 was $185,957.[25] Dividing value added per employee into the net total value of inputs (export contracts less value of offset transactions as shown in Table 5-5), results in a positive net employment opportunity of 44,282 for the four-year period or an annual average of 11,071. The aircraft manufacturing subsector benefited from an employment opportunity gain of 53,307 and the aircraft engine and engine parts manufacturing subsector from an employment opportunity gain of 1,980. A net employment opportunity loss of 11,005 occurred in the other aircraft parts and auxiliary equipment manufacturing subsector. See Table 5-5.

Table 5-5: Net Employment Impact Related to Reported Aerospace-Related Defense Export Sales with Offset Agreements, 2004-2007

	Aerospace Industry Sectors			
	Aircraft manufacturing	**Aircraft engine and engine parts manufacturing**	**Other aircraft parts and auxiliary equipment manufacturing**	**Net Impact for All Aerospace Industry Sectors**
Net Total Value of Inputs: Export Contracts Less Value of Offset Transactions	$10,539,220,213	$393,770,630	$(1,774,903,839)	$9,158,087,004
Average Value Added per Employee (2003-2006)	$197,708	$198,883	$161,280	
Net Employment Opportunity Gain or Loss (Number of Employees)	53,307	1,980	(11,005)	44,282

Sources: BIS Offset Database, BEA's *Benchmark Input-Output Accounts of the United States*, and Census's *Annual Survey of Manufactures.*

Aerospace-Related Research and Development and Offset Technology Transfer Trends

Comparing reported aerospace-related offset transactions involving technology transfer to U.S. aerospace-related research and development (R&D) expenditures provides, for purposes of context, a measure of the magnitude of this type of offset activity. Table 5-6 provides such data

[25] BIS used the four-year period of 2003-2006 to calculate the annual average value added per employee because the 2007 *Annual Survey of Manufactures* data was not released in time for inclusion in this analysis.

for the 2002-2006 period.[26] For example, in 2006, the value of reported aerospace-related offset transactions that involved technology transfers was $715.7 million, equivalent to 4.4 percent of total R&D spending for the U.S. aerospace industry based on National Science Foundation data.[27]

Table 5-6: Trends in Aerospace-Related R&D Spending and Reported Offset Transactions Involving Technology Transfer, 2002-2006

Year	Reported Aerospace-Related Technology Transfer Offset Transactions ($)	Aerospace Industry R&D Spending (Federal and Industry)($)	Technology Transfer Transactions as a Percentage of R&D Spending
2002	$287,464,704	$9,654,000,000	3.0%
2003	$547,446,305	$15,731,000,000	3.5%
2004	$669,457,809	$13,086,000,000	5.1%
2005	$1,479,648,075	$15,005,000,000	9.9%
2006	$715,679,906	$16,367,000,000	4.4%

Sources: BIS Offset Database and the National Science Foundation, Division of Science Resources Statistics, *R&D: 2006.*

BIS does not collect data from industry on the specific technologies transferred as a result of offset agreements and offset transactions. However, anecdotal information obtained from industry suggests that "cutting edge" or nascent technologies under development in the United States are 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 processes. The existence of an offset agreement provides no circumvention of the established licensing process for the Departments of Commerce and State to rule on applications for the transfer of sensitive technologies.

Domestic Defense Productive Capability

DOD reports that it "desires that the industrial base on which it draws be reliable, cost-effective, and sufficient to meet strategic objectives." DOD's ultimate objective is not an "infinitely robust industrial base," but to have reliable, cost-effective, and sufficient industrial capabilities to develop, produce, and support defense material necessary to support national defense.[28]

[26] 2006 aerospace R&D data is the latest available from the National Science Foundation.

[27] This figure does not mean that U.S. industry lost 4.4 percent of its R&D spending in 2006. Rather, the number indicates that the actual value of aerospace-related offset transactions involving technology transfer was equivalent to 4.4 percent of domestic R&D spending in this sector.

[28] See Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), Industrial Policy, *Annual Industrial Capabilities Report to Congress*, March 2008.

DOD is willing to use reliable foreign suppliers when such use offers comparative advantages in performance, cost, schedule, or coalition operations. DOD has negotiated bilateral Reciprocal Defense Procurement Memoranda of Understandings (RDP MOUs) with 21 countries. The RDP MOUs include procurement principles and procedures that provide transparency and access for each country's industry to the other country's defense market. Consequently, the RDP MOU relationship facilitates defense cooperation and promotes rationalization, standardization, and interoperability of defense equipment. For example, based on these RDP MOUs, the Secretary of Defense or Deputy Secretary of Defense has made blanket public interest exceptions to the Buy American Act (BAA) (41 U.S.C. 10a-d) for 19 of the 21 RDP MOU partners. As a result of these blanket exceptions, end-products of these 19 countries are evaluated on the same basis as domestic products in competitive DOD procurements for purposes of the BAA. Even so, DOD reports it is only acquiring a small number of defense articles, at the prime contract level, from foreign entities.[29]

According to DOD, its prime contract purchases of manufactured items categorized under DOD Claimant Program codes A1A-A7 (which exclude most commercial manufactured items) totaled $105.73 billion in Fiscal Year 2007. Of the $105.73 billion, contracts made with U.S. entities totaled $104.25 billion, while DOD prime contracts made with foreign entities totaled $1.48 billion, accounting for approximately 1.58 percent of the total.

DOD reports that in Fiscal Year 2007, based on data from the Federal Procurement Data System – Next Generation, its prime contract purchases of manufactured items overall totaled approximately $140 billion. DOD reports that its procurement of U.S. manufactured goods from U.S. sources totaled approximately $129.68 billion in Fiscal Year 2007, compared to DOD purchases of manufactured goods from foreign sources which totaled $10.32 billion, accounting for approximately 7.37 percent of the total.[30]

Table 5-7 presents an overview of DOD's Fiscal Year 2007 prime contract purchases of manufactured items from U.S. and foreign firms, by Claimant Program codes.

[29] For example, see Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), Deputy Under Secretary of Defense (Industrial Policy), *Foreign Sources of Supply FY 2007 Report, Annual Report of United States Industrial Base Capabilities and Acquisitions of Defense Items and Components Outside the United States,* September 2008.

[30] See Deputy Under Secretary of Defense (Acquisition and Technology), Report to Congress – *Department of Defense FY 2007 Purchases of Supplies Manufactured Outside the United States*, July 2008.

Table 5-7: Department of Defense Prime Contract Purchases of Manufactured Items, Fiscal Year 2007				
DOD Claimant Program	**Total Purchases ($ millions)**	**U.S. Purchases ($ millions)**	**Foreign Purchases ($ millions)**	**Foreign Purchases as Percent of Total**
A1A – Air Frames & Spares	$28,485.60	$28,386.34	$99.26	0.35%
A1B – Aircraft Engine & Spares	$5,253.21	$5,204.17	$49.04	0.93%
A1C- Other Aircraft Equipment	$5,674.70	$5,592.66	$82.04	1.45%
A2 – Missile & Space Systems	$9,853.29	$9,846.45	$6.84	0.07%
A3 – Ships	$10,338.24	$10,316.61	$21.63	0.21%
A4A – Combat Vehicles	$11,885.82	$11,444.90	$440.92	3.71%
A4B – Non Combat Vehicles	$8,897.52	$8,726.20	$171.32	1.92%
A5 – Weapons	$3,449.96	$3,343.90	$106.06	3.07%
A6 – Ammunition	$3,869.82	$3,654.63	$215.19	5.56%
A7 – Electronic & Communication Equipment	$18,021.80	$17,736.60	$285.20	1.58%
A8C – Separately Procured Containers and Handling Equipment	$63.74	$63.51	$0.23	0.36%
A9 – Textiles, Clothing, and Equipage	$2,515.33	$2,490.59	$24.74	0.98%
B1 – Building Supplies	$31.87	$30.77	$1.10	3.45%
B3 – Transportation Equipment	$1.76	$1.06	$0.70	39.77%
B9 – Production Equipment	$513.38	$512.11	$1.27	0.25%
C9A – Construction Equipment	$755.13	$736.70	$18.43	2.44%
C9B – Medical & Dental Supplies and Equipment	$3,532.07	$3,510.55	$21.52	0.61%
C9C – Photographic Supplies and Equipment	$46.38	$44.49	$1.89	4.08%
C9D – Materials Handling Equipment	$158.45	$154.11	$4.34	2.73%
C9E – All Other Supplies and Equipment	$26,660.41	$17,887.53	$8,772.88	32.91%
Total	**$140,008.48**	**$129,683.88**	**$10,324.60**	**7.37%**

Source: Table 7, "DOD Purchases of Manufactured Items – Fiscal Year 2007", *Department of Defense Fiscal Year 2007 Purchases of Supplies Manufactured Outside the United States – Report to Congress*, Deputy Under Secretary of Defense (Acquisition and Technology), July 2008.

6 Utilization of Annual Report

BIS is an active participant in the Interagency Working Group on Offsets' (IaWG) work to engage foreign nations on ways to minimize the adverse effects of offsets. BIS consulted with members of the IaWG in completing this report, and has briefed the IaWG on the report. The data contained in this report will also be considered by representatives of the United States during bilateral and multilateral discussions with friends and allies to minimize the adverse effects of offsets in the coming year.

See Annex F for the IaWG's 2008 progress report on consultations with foreign nations on limiting the adverse effects of offsets in defense procurement.

Annex A – Not for Public Release

Annex B – Not for Public Release

Annex C – Overview of Offset Transactions by Category, 1993-2007 (*In thousands of dollars*)

	Co-Production			Credit Assistance			Licensed Production			Miscellaneous			Overseas Investment		
Year	Actual Value	Credit Value	No. of Transactions	Actual Value	Credit Value	No. of Transactions	Actual Value	Credit Value	No. of Transactions	Actual Value	Credit Value	No. of Transactions	Actual Value	Credit Value	No. of Transactions
1993	$35,550	$35,550	6	$340,492	$366,794	12	$37,851	$41,451	8	$50,967	$68,168	17	$41,499	$41,500	13
1994	$111,895	$112,185	10	$3,494	$21,639	3	$45,424	$67,629	15	$148,742	$163,370	36	$93,265	$98,474	17
1995	$86,898	$86,898	11	$374,248	$468,930	20	$5,110	$4,965	2	$197,760	$295,647	51	$117,152	$363,556	9
1996	$16,952	$22,052	3	$244,270	$258,970	15	$26,425	$26,425	1	$113,266	$257,647	42	$10,656	$10,656	2
1997	$28,339	$28,339	22	$168,410	$168,410	20	$0	$0	0	$454,159	$487,010	64	$85,126	$271,538	6
1998	$94,332	$98,283	30	$43,920	$43,920	4	$0	$0	0	$144,550	$157,246	54	$0	$0	0
1999	$47,803	$47,803	19	$16,888	$16,888	3	$460	$23,000	2	$303,704	$713,077	65	$28,475	$219,079	9
2000	$27,691	$27,691	15	$9,952	$9,952	2	$9,816	$9,816	1	$302,950	$388,093	50	$56,233	$108,521	8
2001	$16,575	$80,300	2	$4,726	$8,027	3	$25,000	$25,000	1	$48,656	$82,960	14	$61,825	$91,837	8
2002	$0	$0	0	$29,453	$29,453	1	$0	$0	0	$135,848	$149,847	28	$24,484	$85,234	12
2003	$260,250	$266,465	18	$51,610	$51,610	6	$1,500	$0	1	$145,262	$297,232	34	$175,281	$228,813	14
2004	$1,395,766	$1,268,666	105	$141,234	$170,453	20	$13,679	$13,679	3	$211,266	$273,924	33	$162,077	$393,819	15
2005	$309,409	$322,204	74	$61,028	$76,828	10	$123,836	$268,326	5	$95,146	$152,360	34	$185,819	$192,387	19
2006	$383,587	$432,089	93	$442,028	$453,521	28	$62,000	$64,000	3	$174,010	$136,966	29	$118,733	$124,593	17
2007	$398,250	$496,255	83	$76,997	$84,164	8	$2,972	$2,972	1	$662,926	$1,046,377	64	$800	$18,000	21

Overview of Offset Transactions by Category, 1993-2007 (Continued)

	Purchase			Subcontract			Technology Transfer			Training		
Year	Actual Value	Credit Value	No. of Transactions	Actual Value	Credit Value	No. of Transactions	Actual Value	Credit Value	No. of Transactions	Actual Value	Credit Value	No. of Transactions
1993	$703,850	$865,524	226	$336,368	$405,101	109	$300,307	$320,504	32	$50,994	$69,027	21
1994	$694,506	$735,909	288	$267,518	$319,081	95	$462,569	$495,849	68	$107,448	$191,956	34
1995	$863,425	$932,133	367	$830,419	$887,985	147	$334,328	$395,024	71	$81,146	$157,453	33
1996	$1,090,104	$1,116,434	298	$721,298	$733,511	175	$476,657	$426,849	60	$176,196	$245,478	38
1997	$837,071	$894,517	245	$848,489	$868,412	141	$289,527	$492,451	67	$9,460	$61,636	13
1998	$582,198	$595,910	253	$1,215,476	$1,244,506	164	$196,765	$413,335	63	$34,929	$70,007	14
1999	$869,591	$883,930	203	$452,464	$476,331	140	$336,018	$396,856	69	$4,330	$31,370	3
2000	$840,845	$915,622	299	$598,427	$832,488	149	$293,377	$430,962	76	$68,887	$123,299	27
2001	$1,132,958	$1,250,367	331	$718,294	$918,340	154	$529,343	$788,885	89	$18,427	$28,710	15
2002	$1,302,590	$1,690,401	453	$809,852	$913,498	157	$287,465	$383,076	66	$26,344	$33,004	12
2003	$1,790,932	$1,835,692	422	$506,050	$602,280	100	$547,446	$563,306	75	$87,170	$165,247	19
2004	$1,351,878	$1,463,620	213	$847,191	$848,427	203	$669,458	$782,957	85	$140,524	$148,739	29
2005	$1,963,024	$2,380,682	277	$485,182	$508,394	87	$1,479,648	$1,504,264	100	$6,473	$21,167	5
2006	$2,011,351	$2,262,492	245	$690,014	$690,014	149	$717,680	$637,598	75	$88,558	$87,265	14
2007	$886,541	$933,024	179	$870,126	$911,726	165	$709,925	$905,483	56	$50,120	$162,998	12

Source: BIS Offset Database

Annex D – Statutory Provisions

Section 309 of the 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 --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 pubic 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.

Defense Production Act Reauthorization of 2003
(Pub. L. 108-195)

* * * *

(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.

Annex E – Glossary And Offset Example

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

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 Assistance: Credit assistance includes direct loans, brokered loans, loan guarantees, assistance in achieving favorable payment terms, credit extensions, and lower interest rates. Credit assistance is nearly always classified as an indirect offset transaction but can be either direct or indirect.

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 may be considered "indirect" include purchases, investment, training, credit 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. In addition, licensed production almost always involves a part or component for a defense system, rather than a complete defense system. These transactions can be either direct or indirect.

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. Conversely, a negative multiplier can be applied to discourage certain types of transactions not thought to be in the best economic interest of the receiving country.

> 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.

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 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.

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).

Miscellaneous: An offset transaction other than co-production, credit assistance, licensed production, overseas investment, purchase, subcontract, technology transfer, or training.

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.

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.

Subcontract: In the offset context, 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, which can be either direct or indirect, 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 offsets. The government also assigned the credit value for each category.

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

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 $240 million, which accounted for 48 percent of the offset obligation. There was no multiplier associated with this activity.

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

Purchase: PJD purchased marble statues from Atlantis manufacturers for eventual resale. These purchases accounted for 9 percent of the offset obligation, or $45 million. There was no multiplier associated with this activity.

Technology Transfer: PJD provided submarine technology to Atlantis firms, which accounted for 7 percent of the offset obligation, or $35 million. There was no multiplier associated with this activity.

Annex F – 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

November 7, 2008

2008 Interagency Team Annual Report on Offsets

Table of Contents

Annual Progress 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.

The DPA, as amended, requires the interagency team to send to Congress an annual report describing the results of its 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 annual reports.

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 as Appendix H to the Department of Commerce's 11th Report to Congress on Offsets in Defense Trade. The final report was a comprehensive account of the interagency team's findings and recommendations. In the past year, these same IaWG findings have been briefed to the Foreign Procurement Group and the Defense Industry Offset Association. Since no new findings or recommendations are anticipated, progress reports will be submitted annually as long as progress continues on limiting the adverse effects of offsets in defense procurement. This is the second annual progress report submitted since the issuance of the final report. 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 industrialized 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 (USG) should continue a dialogue with nations and international organizations to promote global understanding of how the different types of offsets impact the industrial base; encourage the development of global offset principles to limit the adverse effects of offsets; and encourage countries to provide defense contractors with maximum flexibility in fulfilling offset requirements. Building upon this recommendation, the IaWG on offsets has continued a 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.

Continuing the Approach

The IaWG articulated the following two-tiered approach for the United States to continue the dialogue on limiting the adverse effects of offsets: (1) 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; and (2) to engage offset demanders bilaterally to encourage flexibility in offset demands.

The IaWG also concluded that the United States should actively engage multinational organizations and continue discussions with the Letter of Intent 6 (LOI 6) nations[31], the North Atlantic Treaty Organization and the European Defense Agency (EDA). The intent of these engagements is to limit the adverse affects of offsets in defense trade. Additionally, the United States should consider further avenues of dialogue with other multinational organizations, ministries/departments of defense, other government agencies/ ministries, industry representatives, academia, and other actors responsible for offset policies in key nations having an interest in working with the United States to continue this dialogue.

[31] The Letter of Intent countries (France, Germany, Italy, Spain, Sweden and the United Kingdom) 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.

LOI 6 Multilateral Dialogue

As reported in the December 2007 report, on November 6, 2007 the IaWG engaged in dialogue on limiting the adverse effects of offsets in defense procurement with the LOI 6. Two representatives of the EDA were in attendance as observers. The dialogue was conducted in Madrid, Spain, as Spain then chaired the LOI 6. This meeting was the first time the IaWG engaged with the LOI 6, albeit informally and on the margin of a formal meeting. The IaWG, as direct representatives of the USG, briefed the LOI 6 on the contents of the IaWG's February 2007 report. At the conclusion of the dialogue, there appeared to be a consensus that further dialogue among offset providing nations was warranted. In conclusion, the IaWG agreed to provide additional information and clarification regarding continued dialogue on offsets, and re-engage the LOI 6 at a later date.

During the Spring of 2008, the IaWG developed a document titled: Framework for Dialogue between the Department of Defense of the United States of America and the Ministries of Defence of the Letter of Intent-6 Countries of Europe Concerning Limiting the Adverse Effects of Offsets in Defense Procurement (hereafter referred to as the "Framework for Dialogue"). This document would be used to guide the multilateral dialogue between the IaWG and the LOI 6. In May 2008, the chairman of the IaWG officially forwarded the "Framework for Dialogue" to the chairman of the LOI 6, asking for distribution to the national representatives at the June 2008 LOI 6 meeting.

In July 2008, the former chairman of the LOI 6 wrote back to the chairman of the IaWG concerning the proposal of the "Framework for Dialogue". The former LOI 6 chairman stated that he is in favor of further USG/LOI 6 engagement on offsets. He also informed the IaWG chairman that as of July 1, 2008, Italy assumed the chair of the LOI 6 from Spain. The IaWG intends to engage the LOI 6 at the margin of their meeting in the spring 2009, which has not been scheduled as of the date of this report.

European Union Dialogue

As part of the Department of Commerce's (Commerce) ongoing efforts to monitor policies of foreign partners affecting the U.S. defense industrial base, Commerce led an interagency delegation to Brussels in September 2008 to meet with European Union officials to discuss offsets in defense procurement in the context of the European Union's proposed defense procurement initiative in order to increase understanding of the initiative, assess its impact on the U.S. defense industrial base, and to continue a dialogue with European Union officials as the directives moved through the legislative process. The Commerce-led team met representatives of the European Union's Commission and Parliament, and with EDA officials. The meetings in Brussels provided an opportunity for the delegation to expand the dialogue with the European

Union on the issue of offsets in defense procurement, in addition to its defense procurement initiative. Commerce held similar meetings in Washington, D.C. with visiting European officials throughout 2008.[32]

Future Activities

Dialogue with foreign nations should take place into 2009 and beyond on limiting the adverse effects of offsets in defense procurement. It is hoped that the second round of meetings with the LOI 6 can be concluded in the near future to allow the IaWG to assess progress and recalibrate future efforts if necessary.

Notional measures of success will be largely contingent upon the outcome of such meetings, and nations' responsiveness to these cooperative endeavors. Ultimately, the goal for continuing the dialogue is to achieve multilateral agreement on the creation of principles which will serve to limit the adverse effects of offsets and encourage flexibility and equitable treatment for all participating nations.

[32] On October 24, 2008, the Steering Board of the European Defence Agency agreed to a voluntary Code of Conduct on Offsets in order to evolve towards more transparent use of offsets that can also help shape the European Defense Technological and Industrial base, while reducing reliance on them. The Code applies to all compensation practices required as a condition of purchase or resulting from a purchase of defence goods or defence services and will take effect from July 1, 2009.