I. Developments in arms transfers in 2011[1]

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The volume of international arms transfers in the period 2007–11 was 24 per cent higher than in 2002–2006 (see figure 6.1).[2] While the five largest suppliers of arms remained unchanged, China and Spain emerged as significant suppliers during 2007–11. India established its position as the largest recipient of arms, while China continued to fall down the ranking in the list of recipients.

Major supplier developments

The five largest suppliers in 2007–11—the United States, Russia, Germany, France and the United Kingdom—accounted for 75 per cent of the volume of exports of major conventional weapons, down from 78 per cent in 2002–2006 (see tables 6.1 and 6.2).

The United States

The USA was the largest exporter of major conventional weapons in the period 2007–11, accounting for 30 per cent of all transfers. The volume of US arms exports increased by 16 per cent between 2002–2006 and 2007–11 but its share of international arms exports stayed the same. Existing contracts combined with those signed or agreed in 2011 indicate that the USA will maintain its position as the largest exporter in the coming years. As with other states, US arms exports are influenced by a mixture of strategic and economic concerns.

Asia and Oceania received 45 per cent of US deliveries of major conventional weapons in 2007–11, followed by the Middle East and Europe (see

[1] Except where indicated, the information on arms deliveries and contracts referred to in this chapter is taken from the SIPRI Arms Transfers Database, <http://www.sipri.org/databases/armstransfers>. The database contains data on transfers of major conventional weapons between 1950 and 2011. The data for 2007–11 and for 2011, on which most of this chapter is based, is given in the 'Register of major conventional weapon transfers, 2011' and the 'Register of major conventional weapon transfers, 2007–11', which are available at <http://www.sipri.org/databases/armstransfers/recent_trends>. The data on which this chapter is based is valid as of 13 Feb. 2012. The figures in this chapter may differ from those in previous editions of the SIPRI Yearbook because the SIPRI Arms Transfers Database is updated annually.

[2] SIPRI data on arms transfers refers to actual deliveries of major conventional weapons, including sales, licences, aid, gifts and leases. SIPRI uses a trend-indicator value (TIV) to compare the data on deliveries of different weapons and to identify general trends. TIVs give an indication only of the volume of international arms transfers—based on an assessment of the arms' capabilities—and not of their financial values. Since year-on-year deliveries can fluctuate, a 5-year moving average is employed to provide a more stable measure for trends in international transfers of major conventional weapons. For a description of the TIV and its calculation see below.

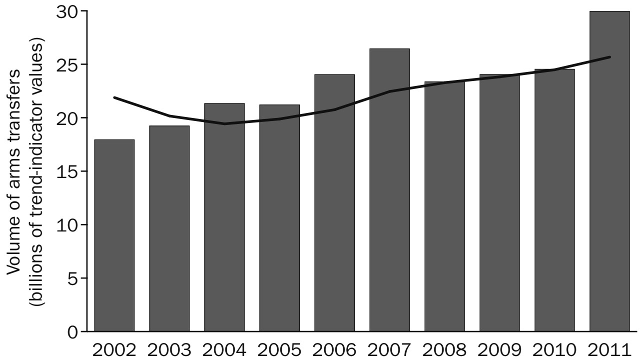

Figure 6.1. The trend in international transfers of major conventional weapons, 2002–11

Note: The bar graph shows annual totals and the line graph shows the five-year moving average (plotted at the last year of each five-year period). See 'Sources and methods' below for an explanation of the SIPRI trend-indicator value.

Source: SIPRI Arms Transfers Database, <http://www.sipri.org/databases/armstransfers/>.

table 6.1). Moreover, of the five largest recipients of US arms in the period—South Korea (13 per cent of US deliveries), Australia (10 per cent), the United Arab Emirates (UAE, 7 per cent), Pakistan (6 per cent) and Singapore (6 per cent)—four are in Asia and Oceania. Deliveries to South Korea in 2011 included the first 2 of a total order of 4 B-737AEW airborne early-warning (AEW) aircraft and 11 of a planned 21 F-15E combat aircraft. Deliveries to Australia in 2011 included 9 of 24 F/A-18E combat aircraft on order, 2 B-737AEW AEW aircraft and the first of an order of 2 C-17A transport aircraft. Despite strains in Pakistani–US relations, deliveries to Pakistan continued in 2011, including 1 Perry frigate and 2 P-3C anti-submarine warfare (ASW) aircraft.

In recent years the USA has focused attention on strategic priorities in Asia and has identified India as a long-term strategic partner in the region. At the same time, it has signalled an interest in acquiring a share of India's substantial spending on arms imports.[3] In 2011 the US–Indian arms transfer relationship developed further with the delivery of the first 6 of 12 ordered C-130J transport aircraft and an order for 10 C-17 transport aircraft. In the case of Taiwan, security and economic concerns sometimes come into conflict. Despite the significant economic benefits at stake, in

[3] US Department of Defense (DOD), *Report to Congress on U.S.–India Security Cooperation* (DOD: Washington, DC, Nov. 2011); and US Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (DOD: Washington, DC, Jan. 2012), p. 2.

August 2011 the US Government decided to refuse—for the time being—a sale of 66 new F-16 combat aircraft to Taiwan, largely to avoid straining ties with China.[4] Instead, the USA agreed to negotiate a deal in which Taiwan's existing fleet of 145 F-16s would be extensively upgraded to the latest standards.[5]

In the Middle East, US arms supplies to member states of the Gulf Cooperation Council (GCC) are an integral part of US security policy—including countering al-Qaeda and a perceived threat from Iran—and, by generating revenue for US industry, they advance US economic policy.[6] In 2011 US deliveries to the UAE—the third largest recipient of US major arms during 2007–11—included 4 C-17 transport aircraft, 15 UH-60 transport helicopters, 20 M-142 High Mobility Artillery Rocket System (HIMARS) multiple rocket launchers and a large number of guided weapons for its aircraft. The most significant deal concluded by the UAE with the USA in 2011 was an order for two Terminal High Altitude Area Defense (THAAD) anti-tactical ballistic missile systems. This was the first export order for the THAAD system.

The single largest arms order placed in 2011 was placed by Saudi Arabia for 154 F-15SA combat aircraft, worth $29.4 billion. The US Government stated that the deal would 'support more than 50 000 American jobs . . . providing $3.5 billion in annual economic impact to the US economy', without indicating the period covered by the deal.[7] Saudi Arabia also ordered other US weapons, including 36 AH-64D combat helicopters. Other major new contracts concluded with countries in the Middle East during 2011 included an order from Iraq for 18 F-16C combat aircraft, an order from Oman for 12 F-16Cs and an order from Egypt for 125 M-1A1 tanks.

Sales of the F-35 (Joint Strike Fighter) combat aircraft will have a strong influence on long-term developments in US arms exports. Turkey confirmed its commitment to the programme by placing an initial order for 2 F-35s, of a planned total of 100, and Japan announced that it will order 42. By early 2012, nine states had ordered or were planning to order a total of over 700 F-35s in addition to US plans.

Russia

Russia accounted for 24 per cent of the volume of international arms exports in the period 2007–11. The volume of Russia's arms exports increased by 12 per cent between 2002–2006 and 2007–11 but its share of

[4] Minnick, W., 'U.S. to deny Taiwan new jets', *Defense News*, 15 Aug. 2011, p. 1.

[5] Enav, P., 'U.S. "no" on Taiwan F-16 bid reveals China sway', *Air Force Times*, 21 Sep. 2011.

[6] For a brief description and list of members of the GCC see annex B in this volume.

[7] White House, 'Statement by Principal Deputy Press Secretary Joshua Earnest on U.S. sale of defense equipment to Saudi Arabia', 29 Dec. 2011, <http://www.whitehouse.gov/the-press-office/2011/12/29/statement-principal-deputy-press-secretary-joshua-earnest-us-sale-defens>.

Table 6.1. The 10 largest suppliers of major conventional weapons and their destinations, by region, 2007–11

Figures are the percentage shares of the supplier's total volume of exports delivered to each recipient region. Figures may not add up because of the conventions of rounding. For the states in each region and subregion see page xx.

	Supplier									
Recipient region	USA	Russia	Germany	France	UK	China	Spain	Netherlands	Italy	Israel
Africa	*2*	*17*	*9*	*10*	*4*	*9*	*2*	*5*	*6*	*4*
North Africa	*2*	*14*	–	*9*	*2*	*0*	–	*5*	*3*	–
Sub-Saharan Africa	*0*	*2*	*9*	*1*	*3*	*8*	*2*	–	*3*	*4*
Americas	*7*	*8*	*12*	*6*	*28*	*6*	*30*	*24*	*19*	*22*
South America	*3*	*8*	*7*	*3*	*7*	*6*	*17*	*20*	*12*	*19*
Asia and Oceania	*45*	*63*	*27*	*51*	*25*	*73*	*9*	*25*	*28*	*31*
Central Asia	*0*	*2*	*0*	–	–	–	–	–	*1*	*1*
East and South East Asia	*25*	*27*	*24*	*39*	*8*	*5*	*9*	*21*	*8*	*9*
Oceania	*10*	–	*1*	*8*	*2*	–	–	*2*	*0*	*2*
South Asia	*10*	*34*	*3*	*4*	*15*	*68*	–	*1*	*20*	*19*
Europe	*18*	*3*	*41*	*21*	*13*	–	*60*	*37*	*33*	*19*
European Union	*17*	*0*	*40*	*19*	*10*	–	*10*	*37*	*31*	*18*
Middle East	*27*	*10*	*11*	*12*	*30*	*12*	*1*	*10*	*13*	*23*
International organizations	*1*	–	–	–	–	–	–	–	–	*1*
Total	***100***	***100***	***100***	***100***	***100***	***100***	***100***	***100***	***100***	***100***

– = nil; 0 = <0.5.

Source: SIPRI Arms Transfers Database, <http://www.sipri.org/databases/armstransfers/>.

total exports fell by 2 percentage points. Asia received 63 per cent of Russian exports, followed by Africa and the Middle East (see table 6.1). The largest individual recipients of Russian weapons in the period were India (33 per cent of Russian deliveries), China (16 per cent), Algeria (14 per cent), Venezuela (7 per cent) and Viet Nam (4 per cent).

In 2011 Russia continued deliveries to India of complete systems, kits and components for assembly under licence, including an estimated 25 Su-30MKI and 12 MiG-29K combat aircraft, the first 10 of a planned 80 Mi-17 helicopters and 100 T-90S tanks. In early 2012 India commissioned a Project-971 nuclear submarine that has been supplied by Russia on a 10-year lease.[8] Although Russia's MiG-35 was not shortlisted for India's Medium Multi-Role Combat Aircraft (MMRCA) programme for the acquisition of 126 combat aircraft, in late 2011 Russia secured an order for the licensed production of 42 more Su-30MKI combat aircraft.

While China was Russia's second largest recipient of major conventional weapons in 2007–11, deliveries of a number of large-ticket items such as combat aircraft, surface-to-air missiles (SAMs) and ships were completed in 2009. China remains interested in buying Russian aircraft engines, SAMs, helicopters, transport and tanker aircraft, and naval technology, but Russia may be reluctant to provide its technology to a potential competitor for arms sales (see below).[9] China's neighbours in South East Asia, in particular Viet Nam, have emerged as major recipients of Russian combat aircraft and naval equipment (see section III below).

Russian weapons received by Algeria in 2011 include the first 8 of an order of 16 Su-30MKA combat aircraft, the first export deliveries of 10 of 16 Yak-130 trainer/light combat aircraft and the second of 2 S-300PMU-2 SAM systems. In 2011 Russia delivered to Uganda the first 4 of a planned 6 Su-30MK2 combat aircraft and it emerged that Uganda had also ordered T-90S tanks as part of a $740 million deal agreed in 2010.[10]

Weapons that Venezuela received from Russia during 2011 included T-72M1M tanks and S-125 Pechora-2M SAM systems ordered in 2010. Russia and Venezuela also agreed a $4 billion line of credit for arms purchases in 2012 and 2013.[11]

During 2011 Russia resisted pressure to end arms deliveries to Syria and back the imposition of sanctions, including an arms embargo, by the United

[8] 'Russia hands over Nerpa nuclear sub to India', RIA Novosti, 23 Jan. 2012, <http://en.rian.ru/mlitary_news/20120123/170896950.html>.

[9] Jakobson, L. et al., *China's Energy and Security Relations with Russia: Hopes, Frustrations and Uncertainties*, SIPRI Policy Paper no. 29 (SIPRI: Stockholm, July 2011), pp. 21–22.

[10] On the decision to buy the combat aircraft see Wezeman, P. D., Wezeman, S. T. and Béraud-Sudreau, L., *Arms Flows to Sub-Saharan Africa*, SIPRI Policy Paper no. 30 (SIPRI: Stockholm, Dec. 2011), pp. 22–23.

[11] Gabuev, A., [Business in a hat with Venezuela], *Kommersant*, 26 Aug. 2011 (in Russian); and 'Russia to lend Venezuela $4 bln to pay for arms deals', RIA-Novosti, 7 Oct. 2011, <http://en.rian.ru/world/20111007/167461572.html>.

Table 6.2. The 50 largest suppliers of major conventional weapons, 2007–11

Ranking is according to the volume of major conventional weapons exported in 2007–11. Figures are SIPRI trend-indicator values (TIVs). Figures may not add up because of the conventions of rounding.

Rank 2007–11	Rank 2002–2006[a]	Supplier	Volume of exports (TIV, millions) 2007	2008	2009	2010	2011	2007–11	Share (%), 2007–11
1	1	United States	7 919	6 463	6 656	8 111	9 984	39 133	*30*
2	2	Russia	5 496	5 980	5 287	5 881	7 874	30 517	*24*
3	4	Germany	3 234	2 383	2 494	2 476	1 206	11 794	*9*
4	3	France	2 400	2 048	2 037	856	2 437	9 778	*8*
5	5	United Kingdom	1 008	998	1 027	1 133	1 070	5 236	*4*
6	7	China	434	593	1 018	1 335	1 356	4 736	*4*
7	12	Spain	594	610	997	280	927	3 408	*3*
8	6	Netherlands	1 235	512	517	440	538	3 242	*3*
9	8	Italy	691	406	505	594	1 046	3 241	*3*
10	9	Israel	511	318	814	528	531	2 703	*2*
11	10	Sweden	348	430	370	653	686	2 488	*2*
12	11	Ukraine	732	367	385	488	484	2 455	*2*
13	14	Switzerland	302	482	256	182	297	1 519	*1*
14	13	Canada	337	230	183	236	292	1 277	*1*
15	20	South Korea	219	78	163	97	225	782	*1*
16	18	South Africa	165	161	186	123	61	696	*1*
17	19	Belgium	19	221	233	8	111	592	*0*
18	23	Norway	55	108	147	141	108	559	*0*
19	25	Belarus	6	226	42	160	59	493	*0*
20	32	Brazil	53	92	37	184	27	394	*0*
21	15	Poland	175	75	81	8	8	347	*0*
22	30	Australia	1	8	57	98	126	290	*0*
23	16	Uzbekistan	–	–	90	90	90	270	*0*
24	24	Finland	47	67	41	46	47	248	*0*
25	29	Austria	97	14	29	34	30	204	*0*
26	27	Turkey	38	61	43	45	6	193	*0*
27	44	Jordan	13	12	60	91	–	176	*0*
28	–	Portugal	–	99	46	–	0	145	*0*
29	43	Montenegro	109	–	–	14	–	123	*0*
30	58	Bosnia and Herzegovina	–	–	–	–	119	119	*0*
31	26	Czech Republic	31	34	21	3	11	100	*0*
32	65	Chile	–	100	–	–	–	100	*0*
33	–	Libya	10	18	32	28	–	87	*0*
34	69	Serbia	4	45	1	30	4	85	*0*
35	36	Moldova	19	29	20	–	–	68	*0*
36	40	India	21	11	23	4	8	67	*0*
37	23	Denmark	6	17	14	10	20	66	*0*
38	41	Singapore	–	–	31	27	4	63	*0*
39	49	Saudi Arabia	–	–	–	1	58	59	*0*
40	33	Iran	–	2	5	5	45	57	*0*
41	60	Syria	–	–	25	25	–	50	*0*
42	48	United Arab Emirates	3	–	–	38	3	44	*0*

Rank 2007–11	Rank 2002–2006[a]	Supplier	Volume of exports (TIV, millions) 2007	2008	2009	2010	2011	2007–11	Share (%), 2007–11
43	54	Venezuela	–	3	40	–	–	43	*0*
44	–	Japan	40	–	–	–	–	40	*0*
45	47	Romania	32	–	2	1	1	36	*0*
46	28	Bulgaria	9	3	14	4	–	31	*0*
47	39	Slovakia	20	8	–	–	–	28	*0*
48	–	Brunei Darussalam	–	–	–	–	24	24	*0*
49	–	Nigeria	–	–	–	–	19	19	*0*
50	35	Kyrgyzstan	–	14	–	–	–	14	*0*
. .	. .	Unknown suppliers	0	35	13	24	8	80	*0*
. .	. .	Others	13	2	2	1	6	25	*0*
Total			**26 448**	**23 362**	**24 044**	**24 535**	**29 954**	**128 343**	

0 = <0.5.

Note: The SIPRI data on arms transfers relates to actual deliveries of major conventional weapons. To permit comparison between the data on such deliveries of different weapons and to identify general trends, SIPRI uses a trend-indicator value. This value is only an indicator of the volume of international arms transfers and not of the financial values of such transfers. Thus, it is not comparable to economic statistics such as gross domestic product or export/import figures. The method for calculating the trend-indicator value is described in 'Sources and methods' below.

[a] The rank order for suppliers in 2002–2006 differs from that published in *SIPRI Yearbook 2007* because of subsequent revision of figures for these years.

Source: SIPRI Arms Transfers Database, <http://www.sipri.org/databases/armstransfers/>.

Nations Security Council (see section II below).[12] During 2007–11, 78 per cent of Syria's imports of major conventional weapons came from Russia, while Syria was Russia's seventh largest recipient, accounting for 3 per cent of its exports. During 2011 Russia completed delivery of Yakhont anti-ship missiles and Pantsir-S1 and Buk-M1 SAM systems. Twenty-four MiG-29M combat aircraft were on order but had not yet been delivered. In December 2011 Syria signed a contract worth $550 million for 36 Yak-130 trainer/combat aircraft.[13]

Other major suppliers

Between 2002–2006 and 2007–11 Germany's arms exports increased by 37 per cent and it rose from being the fourth largest exporter to third place (see table 6.2). Other states in Europe received 41 per cent of German arms exports in 2007–11, followed by Asia and Oceania and the Americas (see table 6.1). In June 2011 the German Federal Security Council approved the

[12] On moves to impose a UN arms embargo on Syria see also chapter 10, section III, in this volume.
[13] Safronov, I., [Syria has secured the next Yak-130], *Kommersant*, 23 Jan. 2012 (in Russian).

potential sale of at least 200 Leopard 2A7+ tanks to Saudi Arabia.[14] Saudi Arabia is believed to have requested versions of the Leopard tank since the 1980s but has always been refused. News of the approval sparked a wide-ranging debate in Germany, largely because it came soon after Saudi Arabia had deployed armoured vehicles in support of Bahrain's crackdown on demonstrators.[15] There was a similar response to the news that Germany had approved the potential sale of TPz-1 armoured personnel carriers, frigates and other equipment to Algeria worth up to €10 billion ($14.5 billion).[16] During 2011 Germany approved a subsidy of €135 million ($180 million)—one-third of the total price—for Israel's purchase of a sixth Dolphin submarine.[17]

While the volume of France's exports of major conventional weapons rose by 12 per cent between 2002–2006 and 2007–11, it fell from being the third largest exporter to fourth place. Asia and Oceania received 51 per cent of the volume of French arms exports, followed by Europe and the Middle East. During 2011 France failed in its efforts to secure the first export order for Rafale combat aircraft. It did not secure an expected order from the UAE for 60 aircraft because of the 'uncompetitive and unworkable' commercial terms of the proposed deal, and the UAE issued requests for alternate proposals to other manufacturers.[18] In addition, the Swiss Government opted for the JAS-39 combat aircraft from Sweden over the Rafale.[19] However, in January 2012 the Indian Government announced that the Rafale had won the competition for the MMRCA programme thanks to Dassault's low tender.[20] Significant orders for French arms in 2011 included an Indian order for the rebuilding of 51 Mirage 2000 combat aircraft as Mirage 2000-5s and a deal with Russia for 2 Mistral amphibious assault ships. Russia and France signed a contract in December 2011 for the construction under licence of 2 more Mistrals.[21]

The volume of the United Kingdom's exports of major conventional weapons rose by 2 per cent between 2002–2006 and 2007–11 and it maintained its position as the 5th largest exporter. The Middle East received 30 per cent of the volume of British arms exports, closely followed by the

[14] 'Germany wants to supply battle tanks to Saudi Arabia', Spiegel Online, 4 July 2011, <http://www.spiegel.de/international/germany/0,1518,772177,00.html>.

[15] German Bundestag, Stenographic report, 119th meeting, Plenarprotokoll 17/119, 6 July 2011. See also section II below and chapter 2, section I, in this volume.

[16] 'Deutschland gibt Rüstung für Algerien frei' [Germany approves arms to Algeria], *Handelsblatt*, 3 July 2011.

[17] Opall-Rome, B., 'Germany redoubles support for Israel', *Defense News*, 5 Dec. 2012.

[18] Tran, P., 'UAE says France's Rafale deal "unworkable" ', *Defense News*, 16 Nov. 2011.

[19] 'Swiss Air Force to get Swedish jets', swissinfo.ch, Swiss Broadcasting Corporation, 1 Dec. 2011, <http://www.swissinfo.ch/eng/politics/internal_affairs/?cid=31673198>.

[20] Kumar, M., 'French Rafale favoured for huge India warplane deal', Reuters, 31 Jan. 2012, <http://www.reuters.com/article/2012/01/31/us-india-defence-idUSTRE80U24620120131>.

[21] 'Russia to build hulls for 2 Mistral-class warships', RIA Novosti, 2 Dec. 2011, <http://en.rian.ru/world/20111202/169255665.html>.

Americas and Asia and Oceania. The most significant deal signed by British companies in 2011 was a $73 million contact for the provision of air-to-air refuelling systems for the US Air Force's KC-46 tanker aircraft. Although this contract is relatively small in value, it is likely to lead to additional orders for air-to-air refuelling systems for all 179 KC-46 tankers that the USA intends to acquire.[22]

While the USA, Russia, Germany, France and the UK have been the five largest arms exporters since the end of the cold war, several states just outside the top 5 significantly increased the volume of deliveries between 2002–2006 and 2007–11. China's share of the volume of international arms exports rose from 2 per cent to 4 per cent. This reflected an increase of 95 per cent in its exports of major conventional weapons and meant that it rose from being the seventh largest exporter to sixth place. Other states in Asia and Oceania received 73 per cent of the volume of Chinese arms exports, followed by the Middle East and Africa. The main recipient of China's exports was Pakistan, with 64 per cent of transfers, thanks primarily to deliveries of MBT-2000 tanks, JF-17 combat aircraft and F-22P frigates. Pakistan is likely to remain the largest recipient of Chinese arms due to ongoing deliveries of these systems as well as outstanding orders for other weapons including two Azmat fast-attack craft and six newly developed submarines.

Spain's exports of major conventional weapons increased by 165 per cent between 2002–2006 and 2007–11 and it rose from being the 12th largest exporter to 7th place. Other states in Europe accounted for 67 per cent of the volume of Spanish deliveries, followed by the Americas and Asia and Oceania. The majority—67 per cent—of Spain's exports during the period 2007–11 were of ships. At the end of 2011 only a limited number of Spain's ship orders remained uncompleted—including three Hobart destroyers and two BPE amphibious assault ships, which are due to be delivered to Australia in 2014–17. Spain had not received a major contract for the export of ships since 2007.

Recipient developments

In the period 2007–11, 44 per cent of imports of major conventional weapons were made by states in Asia and Oceania. The next largest recipient region was Europe (19 per cent), followed by the Middle East (17 per cent), the Americas (11 per cent) and Africa (9 per cent).

The five largest recipients of major conventional weapons—India, South Korea, Pakistan, China and Singapore (see tables 6.3 and 6.4)—were all in

[22] Cobham, 'Cobham awarded USAF KC-46 tanker engineering subcontracts in excess of US $73 million', Press release, 26 July 2011, <http://www.cobham.com/media/news.aspx>.

Table 6.3. The 10 largest recipients of major conventional weapons and their suppliers, 2007–11

Figures are the percentage shares of the recipient’s total volume of imports received from each supplier. Only suppliers with a share of 1 per cent or more of total imports of any of the 10 largest recipients are included in the table. Smaller suppliers are grouped together under ‘Other suppliers’. Figures may not add up because of the conventions of rounding.

	Recipient									
Supplier	India	South Korea	Pakistan	China	Singapore	Australia	Algeria	USA	UAE	Greece
Australia	–	–	–	–	*1*	. .	–	*2*	–	–
Canada	–	*0*	–	–	*0*	–	–	*17*	*1*	–
China	–	–	*42*	. .	–	–	*0*	–	–	–
France	*1*	*7*	*5*	*12*	*39*	*15*	*3*	*5*	*15*	*22*
Germany	*1*	*17*	*2*	*0*	*8*	*3*	–	*11*	*1*	*35*
Israel	*4*	*0*	–	–	*4*	*1*	–	*1*	–	–
Italy	*3*	*0*	*2*	–	–	–	*1*	*4*	*1*	*2*
Netherlands	*0*	*1*	–	–	–	–	–	–	–	*2*
Norway	–	–	–	–	–	*0*	–	*10*	–	–
Russia	*80*	–	*2*	*78*	–	–	*93*	*0*	*14*	–
South Africa	*0*	–	–	–	–	–	*0*	*9*	*0*	–
Spain	–	–	–	–	–	–	–	*5*	–	–
Sweden	–	*1*	*5*	–	*2*	*0*	–	*0*	*2*	*3*
Switzerland	–	–	*2*	*5*	*2*	–	–	*9*	*2*	–
Ukraine	*0*	–	*4*	*2*	–	–	*1*	–	–	–
United Kingdom	*6*	–	–	–	–	*2*	*2*	*25*	–	*2*
United States	*3*	*74*	*36*	–	*43*	*79*	*0*	. .	*62*	*32*
Uzbekistan	*2*	–	–	–	–	–	–	–	–	–
Other suppliers	–	*0*	*0*	*3*	*1*	–	–	*2*	*2*	*2*
Total	***100***	***100***	***100***	***100***	***100***	***100***	***100***	***100***	***100***	***100***

– = nil; 0 = <0.5.

Source: SIPRI Arms Transfers Database, <http://www.sipri.org/databases/armstransfers/>.

Asia and Oceania. Moreover, some of the largest increases in the volume of arms imports between 2002–2006 and 2007–11 were made by states in South East Asia (see section III below). A range of security, political and economic factors explain the increase in the volume of deliveries to Asian recipients. Several major importers in Asia are seeking to develop their own arms industries and decrease reliance on external sources of supply.[23] However, they continue to rely on external suppliers for designs, technologies and components for the production of arms and military equipment. Licensed production thus represents a considerable share of the volume of deliveries to many of these major recipients. However, China has rapidly developed an indigenous arms industry to meet its needs and this is one of the main factors behind the decline in the volume of deliveries to China in recent years: between 2002–2006 and 2007–11, its imports of major arms decreased by 58 per cent.

There was a notable increase in the volume of deliveries to North Africa between 2002–2006 and 2007–11.[24] The volume of deliveries to Algeria increased by 307 per cent, and it rose from being 24th largest recipient to 7th place (see table 6.4). Morocco rose from 51st place to 25th, with an increase of 440 per cent in deliveries. There were also big increases in imports by Afghanistan and Iraq as they rebuilt their armed forces with supplies from major arms suppliers in North America and Europe. The volume of deliveries to Iraq increased by 301 per cent between 2002–2006 and 2007–11, moving it from 40th place to 19th.[25] The volume of deliveries to Afghanistan increased more dramatically, by 2000 per cent, as it rose from 78th place to 24th.

[23] On efforts to establish or maintain national arms industries, and the examples of India and South Korea, see chapter 6, section III, in this volume; and Jackson, S. T., 'Arms production', *SIPRI Yearbook 2011*, pp. 233–36, 240–44.

[24] See also Holtom, P. et al., 'International arms transfers', *SIPRI Yearbook 2010*, pp. 296–302.

[25] See also Holtom et al. (note 24), pp. 302–305.

Table 6.4. The 50 largest recipients of major conventional weapons, 2007–11

Ranking is according to the volume of major conventional weapons imported in 2007–11. Figures are SIPRI trend-indicator values (TIVs). Figures may not add up because of the conventions of rounding.

Rank 2007–11	Rank 2002–2006[a]	Recipient	Volume of imports (TIV, millions) 2007	2008	2009	2010	2011	2007–11	Share (%), 2007–11
1	2	India	2 213	1 804	2 200	2 851	3 582	12 650	*10*
2	5	South Korea	1 767	1 710	874	1 320	1 422	7 093	*6*
3	11	Pakistan	636	1 037	1 124	2 450	1 675	6 923	*5*
4	1	China	1 758	1 683	1 054	718	1 112	6 325	*5*
5	22	Singapore	384	1 178	1 697	946	921	5 126	*4*
6	8	Australia	640	385	649	1 386	1 749	4 808	*4*
7	24	Algeria	489	1 444	1 093	836	783	4 644	*4*
8	10	United States	818	880	947	881	946	4 473	*3*
9	3	United Arab Emirates	970	762	565	569	1 444	4 309	*3*
10	4	Greece	1 708	521	1 230	664	177	4 299	*3*
11	12	Saudi Arabia	195	369	818	1 025	1 095	3 502	*3*
12	9	Turkey	613	583	642	390	1 010	3 238	*3*
13	28	Malaysia	568	540	1 577	404	14	3 102	*2*
14	13	United Kingdom	740	550	496	601	412	2 800	*2*
15	46	Venezuela	785	743	357	207	560	2 652	*2*
16	35	Norway	552	612	570	168	650	2 551	*2*
17	7	Egypt	678	247	174	676	545	2 321	*2*
18	16	Chile	697	407	339	480	323	2 246	*2*
19	40	Iraq	269	380	402	455	722	2 228	*2*
20	15	Japan	517	641	392	370	254	2 174	*2*
21	20	Poland	987	601	157	135	144	2 023	*2*
22	25	South Africa	880	486	128	174	175	1 842	*1*
23	6	Israel	859	653	153	43	76	1 784	*1*
24	78	Afghanistan	41	152	344	371	835	1 743	*1*
25	51	Morocco	29	47	39	63	1 558	1 735	*1*
26	45	Portugal	60	145	414	978	115	1 711	*1*
27	37	Indonesia	576	238	461	228	201	1 704	*1*
28	23	Canada	463	458	107	270	342	1 641	*1*
29	18	Spain	342	370	273	304	248	1 537	*1*
30	32	Viet Nam	2	166	56	152	1 009	1 385	*1*
31	17	Italy	498	192	90	73	311	1 165	*1*
32	29	Brazil	204	193	169	289	266	1 120	*1*
33	68	Syria	–	253	192	299	291	1 035	*1*
34	48	Colombia	236	112	310	202	155	1 015	*1*
35	36	Jordan	176	161	237	114	263	952	*1*
36	31	Netherlands	260	146	233	156	145	939	*1*
37	64	Austria	306	220	330	5	6	867	*1*
38	53	Azerbaijan	211	30	147	147	277	812	*1*
39	19	Iran	385	79	79	94	94	732	*1*
40	70	Belgium	174	204	94	33	22	526	*0*
41	21	Yemen	151	40	5	234	77	507	*0*
42	43	Thailand	8	13	37	82	360	499	*0*

Rank 2007–11	Rank 2002–2006[a]	Recipient	Volume of imports (TIV, millions) 2007	2008	2009	2010	2011	2007–11	Share (%), 2007–11
43	103	Qatar	–	–	285	26	181	491	*0*
44	44	Finland	115	157	43	79	97	491	*0*
45	26	Germany	81	103	122	66	112	484	*0*
46	77	Kuwait	279	5	20	73	58	435	*0*
47	34	Peru	172	–	139	46	74	431	*0*
48	50	Myanmar	7	45	1	38	331	423	*0*
49	72	NATO	–	–	420	–	–	420	*0*
50	33	Sudan	33	106	77	137	63	415	*0*
. .	. .	Others	1 951	1 623	1 763	2 366	2 745	10 438	*8*
. .	. .	Unknown recipients	–	12	–	8	5	25	*0*
Total			**26 448**	**23 362**	**24 044**	**24 535**	**29 954**	**128 343**	

0 = <0.5; NATO = North Atlantic Treaty Organization.

Note: The SIPRI data on arms transfers relates to actual deliveries of major conventional weapons. To permit comparison between the data on such deliveries of different weapons and to identify general trends, SIPRI uses a trend-indicator value. This value is only an indicator of the volume of international arms transfers and not of the financial values of such transfers. Thus, it is not comparable to economic statistics such as gross domestic product or export/import figures. The method for calculating the trend-indicator value is described in ‘Sources and methods’ below.

[a] The rank order for recipients in 2002–2006 differs from that published in *SIPRI Yearbook 2007* because of subsequent revision of figures for these years.

Source: SIPRI Arms Transfers Database, <http://www.sipri.org/databases/armstransfers/>.

Sources and methods

The SIPRI Arms Transfers Database, <http://www.sipri.org/databases/armstransfers/>, contains information on deliveries of major weapons to states, international organizations and non-state armed groups from 1950 to 2011. Data collection and analysis are continuous processes: the database is updated as new data becomes available and a new set of data is published annually. Revisions of coverage are applied retroactively for the whole period covered by the database. Data from several editions of the SIPRI Yearbook or other SIPRI publications cannot be combined or compared. Readers who require time-series TIV data for years prior to 2007 should contact the SIPRI Arms Transfers Programme via the above URL.

Sources and estimates

Data on arms transfers are collected from a wide variety of sources. The common criterion for all these sources is that they are open; that is, published and available to the public. Such open information cannot, however, provide a comprehensive picture of world arms transfers. Sources often provide only partial information, and substantial disagreement between them is common. Since publicly available information is inadequate for the tracking of all weapons and other military equipment, SIPRI covers only what it terms major conventional weapons. Order and delivery dates and the exact numbers (or even types) of weapons ordered and delivered, or the identity of suppliers or recipients, may not always be clear. Exercising judgement and making informed cautious estimates are therefore important elements in compiling the SIPRI Arms Transfers Database.

Types of transfer

SIPRI's definition of an arms transfer includes sales of weapons, including manufacturing licences, as well as aid, gifts, and most loans or leases. The recipient of the arms must be the armed forces, paramilitary forces or intelligence agencies of another country, a non-state armed group, or an international organization. In cases where deliveries are identified but it is not possible to identify either the supplier or the recipient with an acceptable degree of certainty, transfers are registered as coming from an 'unknown supplier' or going to an 'unknown recipient'.

Types of weapon: major conventional weapons

The SIPRI Arms Transfers Database only includes 'major conventional weapons', which are defined as (*a*) most aircraft (including unmanned), (*b*) most armoured vehicles, (*c*) artillery over 100 millimetres in calibre, (*d*) sensors (radars, sonars and many passive electronic sensors), (*e*) air defence missile systems and larger air defence guns, (*f*) guided missiles, torpedoes, bombs and shells, (*g*) most ships, (*h*) engines for combat-capable aircraft and other larger aircraft, for combat ships and larger support ships, and for armoured vehicles, (*i*) most gun or missile-armed turrets for armoured vehicles and ships, (*j*) reconnaissance satellites, and (*k*) air refuelling systems.

The transferred item must have a military purpose. In cases where a sensor, turret or refuelling system (items *d*, *i* and *k*) is fitted on a platform (vehicle, aircraft or ship), the transfer only appears as a separate entry in the database if the item comes from a different supplier than that of the platform.

The SIPRI trend indicator

SIPRI has developed a unique system to measure the volume of transfers of major conventional weapons using a common unit, the trend-indicator value (TIV). The TIV is based on the known unit production costs of a core set of weapons and is intended to represent the transfer of military resources rather than the financial value of the transfer. Weapons for which a production cost is not known are compared with core weapons based on size and performance characteristics (weight, speed, range and payload); type of electronics, loading or unloading arrangements, engine, tracks or wheels, armament and materials; and, finally, the year in which the weapon was produced. A weapon that has been in service in another armed force is given a value of 40 per cent of that of a new weapon; a used weapon that has been significantly refurbished or modified by the supplier before delivery is given a value of 66 per cent of the value when new.

SIPRI calculates the volume of transfers to, from and between all parties using the TIV and the number of weapon systems or subsystems delivered in a given year. This quantitative data is intended to provide a common unit to allow the measurement of trends in the flow of arms to particular countries and regions over time. Therefore, the main priority is to ensure that the pricing system remains consistent over time, and that any changes introduced are backdated.

SIPRI TIV figures do not represent sales prices for arms transfers. They should therefore not be compared with gross domestic product (GDP), military expenditure, sales values or the financial value of export licences in an attempt to measure the economic burden of arms imports or the economic benefits of exports. They are best used as the raw data for calculating trends in international arms transfers over periods of time, global percentages for suppliers and recipients, and percentages for the volume of transfers to or from particular states.