I. Developments in arms transfers, 2014[1]

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Over the past 10 years the trend in the volume of international arms transfers has been slowly increasing (see figure 10.1).[2] The volume in the five-year period 2010–14 was 16 per cent higher than in 2005–2009. From the early 1980s, which has the highest recorded level of transfers since 1950–54, the volume of transfers almost continuously declined until 2000–2004, when it amounted to only 45 per cent of the volume in 1980–84. However, since 2000–2004 the volume of transfers has increased every year and in 2010–14 it was 45 per cent higher than in 2000–2004. The volume in 2010–14 was the highest since the end of the cold war in 1989–1993. While annual fluctuations are common and experience has shown that they are not good indicators of future developments, it is noteworthy that the annual volumes in the past four years (2011–14) have been relatively stable.

Major supplier developments

The five largest suppliers of major weapons in 2010–14—the United States, Russia, China, Germany and France—accounted for around 74 per cent of the global total volume of exports (see table 10.1). The USA and Russia were by far the largest exporters, together accounting for almost 58 per cent of global exports. The share of the top five suppliers changed little from 2005–2009, when it was 73 per cent, but the USA and Russia significantly increased their combined share from 52 per cent in 2005–2009. The composition of the five largest suppliers of arms changed between 2005–2009 and 2010–14. In 2005–2009 the United Kingdom was still among the largest suppliers, but in 2010–14 it was replaced by China, with the latter becoming the third largest supplier for 2010–14, narrowly surpassing Germany and France. Of the top 20 arms

[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 weapons between 1950 and 2014. The data on which this chapter is based is valid as of 16 Mar. 2015. The figures in this chapter may differ from those in previous editions of the SIPRI Yearbook because the Arms Transfers Database is updated annually.

[2] SIPRI data on arms transfers refers to actual deliveries of major weapons, including sales, production under licence, 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 transfers of major weapons. For a description of the TIV and its calculation, see 'Sources and methods' below.

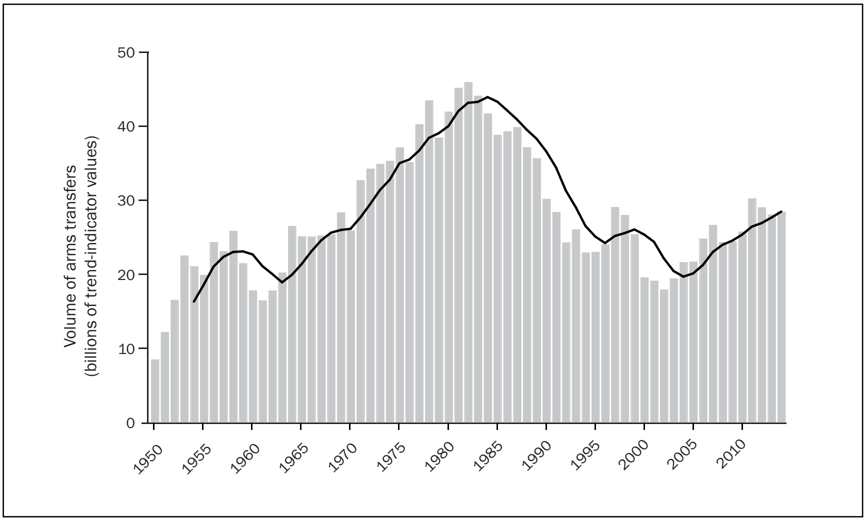

Figure 10.1. The trend in international transfers of major weapons, 1950–2014

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/>.

exporting countries for 2010–14, 15 were located in North America and Europe (including Russia), 3 in Asia and Oceania, 1 in the Middle East and 1 in Africa.

The United States

The USA was the largest exporter of major weapons in the period 2010–14, accounting for 31.1 per cent of the global volume of deliveries. US arms exports increased by 23 per cent between 2005–2009 and 2010–14. The USA delivered major weapons to at least 94 countries in 2010–14. Existing contracts and those agreed in principle or planned, especially several large orders for F-15 and F-35 combat aircraft, indicate that the USA will maintain its position as the largest exporter in the coming years.

Asia and Oceania received 48 per cent of US deliveries of major weapons in 2010–14, followed by the Middle East (32 per cent) and Europe (11 per cent, see table 10.2). Deliveries to Asia and Oceania increased by 59 per cent between 2005–2009 and 2010–14. Moreover, three of the five largest recipients of US arms in 2010–14 are in Asia and Oceania: the Republic of Korea (South Korea, 9.4 per cent of total US deliveries), Australia (7.9 per cent) and India (5.7 per cent). US arms trading relations with India have rapidly grown in size and scope in the past few years, during which India

Table 10.1. The 50 largest suppliers of major weapons, 2010–14

The table includes all countries and non-state actors that exported major weapons in the five-year period 2010–14. Ranking is according to 2010–14 total exports. Figures are SIPRI trend-indicator values (TIVs). Percentages in the 'share' column are rounded to 1 decimal place, those in the 'change' column are rounded to the nearest full number. Figures and percentages may not add up because of the conventions of rounding.

Rank, 2010–14	Rank, 2005–2009[a]	Supplier	Volume of exports (TIV, millions) 2014	Volume of exports (TIV, millions) 2010–14	Share (%), 2010–14	Change (%), since 2005–2009
1	1	United States	10 194	43 876	*31.1*	*23*
2	2	Russia	5 971	37 383	*26.5*	*37*
3	7	China	1 083	7 612	*5.4*	*143*
4	3	Germany	1 200	7 387	*5.2*	*–43*
5	4	France	1 978	7 304	*5.2*	*–27*
6	5	United Kingdom	1 704	6 228	*4.4*	*23*
7	8	Spain	1 110	4 102	*2.9*	*32*
8	9	Italy	786	4 030	*2.9*	*37*
9	11	Ukraine	664	3 826	*2.7*	*73*
10	10	Israel	824	3 345	*2.4*	*33*
11	12	Sweden	394	2 657	*1.9*	*23*
12	6	Netherlands	561	2 619	*1.9*	*–32*
13	14	Canada	234	1 395	*1.0*	*16*
14	13	Switzerland	350	1 341	*1.0*	*–12*
15	15	South Korea	153	1 134	*0.8*	*14*
16	21	Norway	127	723	*0.5*	*110*
17	22	Turkey	274	721	*0.5*	*149*
18	18	South Africa	59	641	*0.5*	*10*
19	20	Belarus	–	589	*0.4*	*61*
20	29	Australia	104	490	*0.3*	*175*
21	25	Uzbekistan	–	418	*0.3*	*96*
22	19	Finland	84	374	*0.3*	*–4*
23	23	Brazil	47	301	*0.2*	*29*
24	35	Jordan	114	246	*0.2*	*137*
25	47	Romania	2	220	*0.2*	*400*
26	17	Poland	27	218	*0.2*	*–64*
27	16	Belgium	–	207	*0.1*	*–70*
28	30	Iran	42	205	*0.1*	*24*
29	24	Austria	19	157	*0.1*	*–30*
30	51	Singapore	2	116	*0.1*	*231*
31	42	Serbia	29	103	*0.1*	*81*
32	32	Ireland	8	90	*0.1*	*–29*
33	41	United Arab Emirates	2	87	*0.1*	*34*
34	64	New Zealand	–	75	*0.1*	..
35	26	Czech Republic	17	75	*0.1*	*–63*
36	34	India	55	74	*0.1*	*–33*
37	47	Denmark	13	73	*0.1*	*62*
38	55	Saudi Arabia	–	64	*<0.05*	*256*
39	40	Hungary	–	41	*<0.05*	*–55*
40	33	Bulgaria	4	37	*<0.05*	*–69*
41	27	Libya	–	28	*<0.05*	*–85*

Rank, 2010–14	Rank, 2005–2009[a]	Supplier	Volume of exports (TIV, millions) 2014	2010–14	Share (%), 2010–14	Change (%), since 2005–2009
42	. .	Brunei Darussalam	–	24	*<0.05*	. .
43	37	Chile	20	20	*<0.05*	*–80*
44	53	Syria	–	20	*<0.05*	*–13*
45	31	Portugal	18	18	*<0.05*	*–88*
46	28	Montenegro	–	18	*<0.05*	*–90*
47	. .	Bosnia and Herzegovina	–	14	*<0.05*	. .
48	41	Moldova	–	11	*<0.05*	*–88*
49	. .	Sudan	–	11	*<0.05*	. .
50	. .	Botswana	–	8	*<0.05*	. .
. .	. .	Others (8)	35	110	*0.1*	*–42*
		Total	**28 308**	**140 866**	***100***	***16***

. . = not available or not applicable; – = no deliveries.

Note: The SIPRI data on arms transfers relates to actual deliveries of major weapons. To permit comparison between the data on such deliveries of different weapons and to identify general trends, SIPRI uses a trend-indicator value (TIV). 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 TIV is described in ‘sources and methods’ below.

[a] The rank order for suppliers in 2005–2009 differs from that published in *SIPRI Yearbook 2010* because of subsequent revision of figures for these years.

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

has placed several larger orders for advanced weapons. These include 12 P-8A anti-submarine warfare (ASW) aircraft and 10 C-17 large transport aircraft. India has also approved plans for more orders, including 22 AH-64E combat helicopters and 15 CH-47F transport helicopters, which were chosen ahead of rival offers from Russia. India has shown interest in a wide variety of US weapons and in US technologies for use in indigenously produced weapons. The USA is, for example, assisting India with its programme to produce its own aircraft carriers.[3] US arms sales are an important aspect of US relations with India and were central to US President Barack Obama’s visit to India in January 2015. During the visit the two parties concluded a deal to extend and expand the Defence Framework Agreement for military science and technology collaboration, which has been in effect for 10 years.[4]

The Middle East was the second-most important recipient region for US major arms, accounting for 32 per cent of total US deliveries in 2010–14. US

[3] Sisk, R., ‘US to aid India in building aircraft carriers’, DoD Buzz, 26 Jan. 2015, <http://www.dodbuzz.com/2015/01/26/u-s-to-aid-india-in-building-aircraft-carriers/>.

[4] Sisk (note 3); and ‘India, US renew their 10 year Defence Framework Agreement’, DNA India, 25 Jan. 2015, <http://www.dnaindia.com/india/report-india-us-renew-their-10-year-defence-frame work-agreement-2055607>.

deliveries to the Middle East increased by just 8 per cent over 2005–2009, but the volume is expected to grow significantly in the coming years based on recent agreements for the supply of large orders of major weapons to Saudi Arabia, the United Arab Emirates (UAE) and other Arab states of the Gulf. Some of the more significant sales include advanced long-range combat aircraft and associated long-range air-to-ground missiles and support aircraft, which provide the USA's allies in the Gulf with long-range strike capabilities. In addition, the USA has supplied or plans to supply advanced air- and ballistic-missile defence systems, such as the Terminal High Altitude Area Defense (THAAD) and Patriot PAC-3 systems, to certain states in the region (see below).[5] However, in early 2015 US Under Secretary of Defense Frank Kendall stated that the USA does not expect to make 'any near-term' sales of the most advanced US combat aircraft—the fifth generation F-35—to Arab states of the Gulf, since the fourth generation aircraft recently delivered or on order meet the level of threat in the region.[6] This indicates that the USA is exercising some degree of restraint over its exports to its Gulf allies. The situation with Israel is different. Israel ordered 19 fifth generation F-35 aircraft in 2010 and in early 2015 ordered 14 more. It also has plans to order another 17 aircraft in the coming years.[7] Turkey, another of the USA's allies in the Middle East, ordered the first 2 of a planned procurement of 100 fifth generation F-35 aircraft in 2014.[8]

In 2014 the USA continued to implement export-licensing reforms, which aim to ease export licensing for many weapons and technologies, especially to US allies. There are indications that the simplified procedures may have helped to boost arms sales to European states in 2014.[9]

Russia

The volume of Russia's exports of major weapons increased by 37 per cent between 2005–2009 and 2010–14, and its share of total exports rose from 22 to 26.5 per cent. Asia and Oceania received 66 per cent of Russian exports, followed by Africa (12 per cent) and the Middle East (10 per cent, see table 10.2). Russia exported to 56 states but its exports were highly

[5] For further discussion on acquisitions of long-range strike weapons see Wezeman, S. T. et al., 'International arms transfers', *SIPRI Yearbook 2014*.

[6] Hoffman, M., 'Israel buys 14 more F-35s as US denies JSF sales to Gulf states', DoD Buzz, 24 Feb. 2015, <http://www.dodbuzz.com/2015/02/24/israel-buys-more-14-more-f-35s-as-us-denies-jsf-sales-to-gulf-states/>.

[7] Lappin, Y., 'Israel signs contract to purchase additional 14 F-35 fighter jets', *Jerusalem Post*, 22 Feb. 2015.

[8] 'Turkey to order first two F-35 fighter jets', Reuters, 6 May 2014; and 'Turkey to order four more F-35 fighter jets', *Today's Zaman*, 8 Jan. 2015.

[9] Tigner, B., 'ITAR reforms begin to show uptick in trade', *Jane's Defence Weekly*, 8 Oct. 2014, p. 18.

Table 10.2. The 10 largest suppliers of major weapons and their destinations, by region, 2010–14

Figures are the percentage shares of the supplier's total volume of exports delivered to each recipient region. Percentages have been rounded to the nearest full number. Figures may not add up because of the conventions of rounding. For the states in each region and subregion see page xxiii.

	Supplier									
Recipient region	USA	Russia	China	Germany	France	UK	Spain	Italy	Ukraine	Israel
Africa	3	12	19	1	21	2	2	11	29	3
North Africa	2	8	5	<0.5	19	2	–	9	2	–
Sub-Saharan Africa	1	3	14	1	2	<0.5	2	2	28	3
Americas	6	6	5	24	14	14	21	16	2	18
South America	3	6	5	12	6	2	12	4	2	13
Asia and Oceania	48	66	73	26	29	29	28	28	49	58
Central Asia	<0.5	1	–	<0.5	<0.5	–	1	1	2	<0.5
North East Asia	18	11	–	5	14	5	–	1	22	3
Oceania	8	–	–	1	5	2	24	<0.5	–	1
South Asia	13	41	56	2	4	12	<0.5	19	12	46
South East Asia	8	13	17	17	5	10	3	6	13	7
Europe	11	6	–	30	16	6	17	22	13	17
European Union	11	<0.5	–	30	14	5	7	18	1	15
Middle East	32	10	3	20	20	49	32	23	6	3
Other	<0.5	–	–	–	–	–	–	<0.5	<0.5	1

– = nil; <0.5 = between 0 and 0.5.

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

concentrated, with just two clients—China and India—accounting for half of Russia's exports. In 2014 Russia also delivered major weapons to pro-Russian rebels in eastern Ukraine.[10] Russia has seen significant growth in its arms exports in the past five years, even to the extent that some producers, such as a particular manufacturer of air defence systems, have reportedly had problems meeting export orders on top of the growing and prioritized demand from the Russian armed forces.[11]

Partly due to Western pressure on Russia over Ukraine and on China over maritime issues, Russia's military relations with China markedly improved in 2014. Both countries share an aversion to US-led international intervention, which is driving the pair closer together. Despite its rapidly developing arms design and production capabilities, China retains a strong interest in procuring various advanced Russian weapons and is still dependent on Russian engines for most of its combat aircraft. The general expectation, therefore, is that Russian arms sales to China are likely to increase.[12] However, negotiations between the two countries over the supply of some major arms have proved difficult. At the end of 2014 there appeared to have been no breakthrough in the ongoing discussions over the sale of advanced Russian S-400 surface-to-air missile (SAM) systems and Su-35 combat aircraft.[13]

While India remains Russia's largest export market, Russia has also started selling major arms to Pakistan—historically India's main rival in the South Asia region. In 2014 Russia agreed delivery of RD-93 engines for the JF-17 combat aircraft Pakistan acquires from China. Towards the end of the year Russia and Pakistan also began negotiations on contracts for the supply of Mi-35 and Mi-28NE combat helicopters.[14]

Over the years Russia has endeavoured to establish itself as a major supplier in the Middle East market, but with only limited success. However, 2014 may mark a slight shift in the market in favour of Russia. Russia moved rapidly to issue proposals for arms supplies to Iraq following the capture by the Islamic State (IS) of large parts of the country in June and July 2014 (see below). This was in contrast to the USA's delayed response and the withdrawal from Iraq of US contractors assisting in the operation

[10] For further discussion of the crisis in Ukraine see chapter 3 in this volume.

[11] Johnson, R. F., 'PLA may finally receive S-400 SAMs', *Jane's Defence Weekly*, 16 Apr. 2014, p. 8. On the growing internal demand see also the discussion on Russian military expenditure in chapter 3, section IV, of this volume.

[12] Bodner, M., 'Russia-China military ties deepen amid Western pressure over Ukraine', *Moscow Times*, 1 Dec. 2014.

[13] Johnson, R. F., 'Specialists question true depth of Sino–Russian ties', *Jane's Defence Weekly*, 10 Dec. 2014, p. 8.

[14] Bokhari, F., 'Pakistani officials confirm "Havoc" helicopter talks', *Jane's Defence Weekly*, 10 Dec. 2014, p. 15.

of US-supplied helicopters.[15] Russia was also quick to confirm its continued willingness to sell to Egypt when the latter's traditional suppliers, the USA and several European states, banned some deliveries of major weapons in 2013 after the Egyptian military coup. However, Russia's slightly more aggressive approach to seeking new contracts in the Middle East has not yet resulted in any substantial orders. Only a few weapons were delivered to Iraq and by the end of 2014 Egypt had taken up only one of several proposed deals for major weapons—for S-300VM (SA-23 or Antey-2500) SAM systems.[16] By that time the USA and European suppliers had regained the initiative on supplies to Iraq and Egypt.[17] This was highlighted by Egypt's decision to order 24 French combat aircraft rather than take up a competing Russian offer (see below).

China

Between 2005–2009 and 2010–14 China's exports of major arms increased by 143 per cent, and its share of the volume of arms exports rose from 2.6 to 5.4 per cent, putting it at a similar level to, and in fact slightly above, both France and Germany.[18] Asia and Oceania received 73 per cent of China's exports, followed by Africa (19 per cent) and the Americas (5 per cent, see table 10.2). China exported to 35 states but, like Russia, its exports were highly concentrated. Bangladesh, Myanmar and Pakistan accounted for over 68 per cent of China's exports, and Pakistan alone accounted for 40.6 per cent. China has built up long-standing arms supply relations with all three states, but it also began to increase its global presence as an arms supplier in 2010–14. Major deals included contracts with: Venezuela for armoured vehicles, and transport and trainer aircraft; Algeria for 3 frigates; and Indonesia for the supply of possibly hundreds of anti-ship missiles. China overcame competition from Russia in the case of the deal with Venezuela, and partly in the case of Algeria. China also exported major arms to 18 African states, generally in small volumes. Among the deliveries to African states were armoured vehicles to Cameroon, Chad and Nigeria, all of which used them in 2014 against the jihadist group Boko Haram. China also delivered a number of CH-3 armed unmanned combat aerial vehicles

[15] Kitfield, J., 'How Putin outmaneuvered the US in resupplying the Iraqi military', Yahoo News, 9 July 2014, <https://news.yahoo.com/how-the-u-s--is-letting-russia-beat-them-to-the-punch-on-military-aid-to-iraq-203343350.html>.

[16] Binnie, J., 'Egypt reveals air defence upgrades', *Jane's Defence Weekly*, 19 Nov. 2014, p. 21.

[17] On the armed conflict in Iraq, and the use of arms transfers try to contain and roll back the advance of IS, see chapter 2, section III, in this volume.

[18] China is also a significant supplier of small arms and light weapons. Bromley, M., Duchâtel, M. and Holtom, P., *China's Exports of Small Arms and Light Weapons*, SIPRI Policy Paper no. 38 (SIPRI: Stockholm, Oct. 2013).

(UCAV) to Nigeria in 2014 for use against Boko Haram. The CH-3 delivery is only the second known export of armed UCAVs by any country.[19]

Germany

Germany's exports of major weapons decreased by 43 per cent between 2005–2009 and 2010–14. It is now the fourth largest exporter, slightly below China. States in Europe received 30 per cent of German arms exports in 2010–14, followed by Asia and Oceania (26 per cent), the Americas (24 per cent) and the Middle East (20 per cent, see table 10.2).

Over a period of several years up to 2014, Germany loosened its export policy, specifically in relation to arms exports to the Middle East. A new German coalition government was formed in December 2013, which includes the Social Democratic Party (SPD) as a minority party. The SPD had in its election manifesto promised to implement a more restrictive arms export policy.[20] In particular, the new SPD Minister of Economic Affairs, Sigmar Gabriel, whose ministry is in charge of implementing German arms export policy, criticized the arms export decisions made by the previous government and indicated that Germany should rigorously apply existing regulations.[21] Such remarks raised expectations that the German Government would adopt a more restrictive arms export policy. In November 2014 an opinion poll of a representative sample of the German public found that 74 per cent of respondents were in favour of a more restrictive arms export policy.[22] On the other hand, there are reports that the majority party in the German Government, the Christian Democratic Union (CDU), opposes Gabriel's view.[23]

Data for Germany's deliveries of major arms in 2014 does not give an indication of whether the new government has adopted a more restrictive policy, as such a change would not apply to weapons ordered before 2014. However, there are indications that Germany may be taking a new approach. For example, it was reported in 2014 that Gabriel had voiced

[19] The first and, until 2014, only deliveries of armed unmanned aerial combat vehicles (UCAV) were US supplies of MQ-9 Reapers to the UK in 2007–14.

[20] Wezeman, S. T., Béraud-Sudreau, L. and Wezeman, P. D., 'Developments in arms transfers 2013', *SIPRI Yearbook 2014*, pp. 263–64.

[21] 'Keine waffengeschäfte mit Russland' [No arms deals with Russia], Tagesschau, 27 July 2014, <https://www.tagesschau.de/inland/sommerinterview-gabriel-100.html>; and 'Rede von Bundesminister Gabriel zu den grundsätzen deutscher rütsungsexportpolitik' [Speech of Federal Minister Gabriel about the principles of the German arms export policy], Bundesministerium für Wirtschaft und Energie [Federal Ministry for Economic Affairs and Energy], 8 Oct. 2014.

[22] 'Deutsche gegen waffenexporte' [Germans against arms exports], Greenpeace Magazin Online, 28 Nov. 2014, <https://www.greenpeace-magazin.de/deutsche-gegen-waffenexporte>.

[23] 'Gabriel will Rüstungs-deal mit Saudi-Arabien stoppen' [Gabriel wants to halt arms deal with Saudi Arabia], *Handelsblatt*, 6 May 2014; and 'Beschränkung bei waffenexporten: CDU–Politiker wirft Gabriel gefährdung der nationalen sicherheit vor' [Restriction on arms exports: CDU politician accuses Gabriel of endangering national security], Spiegel Online, 19 Aug. 2014, <http://www.spiegel.de/politik/deutschland/ruestungsexporte-cdu-kritisiert-gabriels-beschraenkungen-a-986814.html>.

strong opposition to a German company's proposed deal to supply tanks to Saudi Arabia, meaning that the deal would be unlikely to go through.[24] In another case, Tom Enders, chief executive officer of Airbus, the largest arms-producing company in Germany, claimed that a decision by the German Government to block the export to Uzbekistan of components for helicopters produced in France was an example of a restrictive German export policy that could lead Airbus to move parts of its military production programme out of Germany.[25] In neither case was the claimed export denial confirmed in an official public document or statement, so the extent to which German arms policy has shifted remains largely unclear.

Some indication of the limits of the restrictions on arms exports was provided in February 2015 when Gabriel clarified that the current policy was aimed at specific weapons, such as small arms and armoured vehicles, being exported to certain destinations. Gabriel stated that small arms are used extensively in civil wars and that armoured vehicles can be used in the repression of a state's population. He made these comments while announcing that Germany had approved a production licence for two submarines for Egypt.[26] Other deals signed in 2014 provide evidence that the German Government does not perceive the export of naval ships to the Middle East as problematic. These include agreements to supply a large number of patrol craft to Saudi Arabia and four MEKO-A100 frigates to Israel.

France

France was the fifth largest exporter of major weapons in 2010–14. Its level of exports was 27 per cent lower than in 2005–2009. France exported arms to 74 countries in 2010–14: 29 per cent of its exports went to states in Asia and Oceania, 21 per cent to Africa, 20 per cent to the Middle East, 16 per cent to other states in Europe, and 14 per cent to the Americas.

In response to Russia's involvement in the Ukraine crisis, in September 2014 France halted the planned delivery of the first of two Mistral amphibious assault ships ordered by Russia in 2011 for €1.1 billion ($1.6 billion). France did so only after significant pressure from other states and in the light of the deepening security crisis in Ukraine.[27] The initial reluctance to stop the delivery is in line with the French Government's general policy of

[24] Nassauer, O., 'Siegmar Gabriel und die Leoparden, Versuch einer Sachstandsklärung' [Siegmar Gabriel and the Leopards, attempt to explain the situation], Berlin Information Center for Transatlantic Security, 19 Apr. 2014, <http://www.bits.de/public/unv_a/orginal-190414.htm>.

[25] 'Nach kritik an rüstungsprojekten Airbus-Chef Enders legt nach' [After criticism of armaments projects Airbus chief Enders adds more], Tagesschau, 14 Oct. 2014, <http://www.tagesschau.de/wirtschaft/ruestungsindustrie-107.html>.

[26] 'Bau weiterer U-Boote für Ägypten genehmigt' [Construction of more submarines for Egypt licensed], NDR, 12 Feb. 2015, <https://www.ndr.de/nachrichten/schleswig-holstein/Bau-weiterer-U-Boote-fuer-Aegypten-genehmigt,thyssenkrupp108.html>.

[27] On the Mistral case see also chapter 3, section III, in this volume.

strongly supporting arms exports, a policy which seems to be supported by the French public. In January 2015 an opinion poll showed 64 per cent of respondents in favour of delivering the Mistrals to Russia, in particular to protect jobs in the arms industry and the reputation of France as a reliable trading partner.[28]

In 2014 the French Government was especially successful in its efforts to support arms exports to the Middle East. Contracts were signed to supply a variety of weapons to Lebanon, financed by $3 billion in military aid from Saudi Arabia, and with Egypt to supply four Gowind frigates. At the same time, France undertook secret negotiations on another major deal with Egypt worth €5.2 billion ($5.9 billion), which was signed in February 2015. The deal included 1 FREMM frigate and 24 Rafale combat aircraft—the first ever export sale of such aircraft since France began marketing them over two decades ago. The French Government appears eager to complete the deal, as the frigate and some of the aircraft included in the sale were already in production and originally intended for domestic use. France plans to deliver the frigate and the first batch of Rafales in 2015.[29]

Other European suppliers

The UK's exports of major weapons increased by 23 per cent during the period 2010–14 compared to 2005–2009, but the UK fell from fifth largest arms supplier to sixth, with 4.4 per cent of the world total. Around 40 per cent of UK exports over the period went to Saudi Arabia, followed by 12 per cent to the USA and 11 per cent to India. In 2014 deliveries of 13 Typhoon combat aircraft to Saudi Arabia and 3 frigates to Indonesia accounted for the bulk of the volume of major arms exported by the UK. The UK did not sign any major new contracts for arms exports in 2014.

Exports by the other three main Western European arms producers also increased in the period 2010–14 compared to 2005–2009: Spain by 32 per cent, Italy by 37 per cent and Sweden by 23 per cent—accounting for 2.9, 2.9 and 1.9 per cent of the world total, respectively. Total arms exports by the European Union (EU) member states as a whole declined by 16 per cent in 2010–14 compared with 2005–2009, falling from 35 per cent of the world total to 25 per cent. Thus, including exports from one EU member state to another, the EU was collectively only the third largest exporter worldwide.

Ukraine, the ninth largest exporter in 2010–14, halted supplies to Russia—one of its main customers—after Russia supported rebels in eastern Ukraine from early 2014. In September 2014 it also suspended deliveries to

[28] Cabirol, M., 'Mistral: 64% des Français favorables à une livraison à la Russie' [Mistral: 64% of the French favourable towards delivery to Russia], *La Tribune*, 20 Jan. 2015.

[29] Lert, F., 'Egypt officially signs for 24 Rafales, FREMM frigate, and missiles', *Jane's Defence Weekly*, 16 Feb. 2015.

other foreign customers as its industry was mobilized to produce for the Ukrainian armed forces fighting against the rebels. As of early 2015 this suspension remained in force.[30]

Major recipient developments

In the period 2010–14 Asia and Oceania was the largest recipient region of major weapons, accounting for 48 per cent of global imports. The next largest recipient region was the Middle East (22 per cent), followed by Europe (12 per cent), the Americas (10 per cent) and Africa (9 per cent). Compared to 2005–2009 there was a notable increase in share for Asia and Oceania (up from 40 per cent in 2005–2009), the Middle East (up from 20 per cent) and Africa (up from 7 per cent). There was a significant decrease for Europe (down from 21 per cent). The volume of transfers to the Americas increased in absolute terms but was less than the global average of 16 per cent and its share of the total volume in 2010–14 therefore decreased slightly (from 11 per cent).

Asia and Oceania

Of the five largest recipients of major weapons in 2010–14, three were in Asia: India, China and Pakistan (see tables 10.3 and 10.4). Several East Asian countries featured among the list of top importers in this period—China, South Korea and Singapore were among the top 10 importers—and many countries in the region either significantly increased their arms acquisitions or made plans to do so in the coming years, often through imports. The rising tension between China and other littoral states around the East and South China seas is a major factor driving acquisitions.[31] States in South Asia accounted for 46 per cent of the regional total, North East Asia for 23 per cent, South East Asia for 22 per cent, Oceania for 8 per cent and Central Asia for 1 per cent. India was globally the largest importer of major weapons in 2010–14, accounting for almost 15 per cent of the world total. Between 2005–2009 and 2010–14 India's imports increased by 140 per cent; its imports in the latter period were more than three times higher than those of either of its regional rivals, China and Pakistan. This contrasts with 2005–2009, when India's imports were 23 per cent below China's and just over double those of Pakistan. India has so far largely failed to produce advanced indigenously designed weapons and remains dependent on imports. In 2010–14 Russia supplied around 70 per cent of India's arms imports, the USA 12 per cent and Israel just over 7 per cent. The acquisitions from the USA are a break with the recent past. Prior to

[30] Anderson, G., 'Ukrainian arms exports remain suspended', *Jane's Defence Weekly*, 3 Feb. 2015. See also chapter 3, section III, in this volume.

[31] See also Holtom, P. et al., 'International arms transfers', *SIPRI Yearbook 2012*.

2005–2009 India barely received any major weapons from the USA. However, there is now a noticeable upward trend. The volume of deliveries from the USA was 14 times higher in 2010–14 than in 2005–2009.

Middle East

Arms imports by states in the Middle East increased by 25 per cent between 2005–2009 and 2010–14. In 2010–14, 23 per cent of arms transfers to the region went to Saudi Arabia, 20 per cent to the UAE and 16 per cent to Turkey. Saudi Arabia's arms imports fell from a high point in the late 1990s to their lowest point in around 2005. However, arms imports have steadily grown since then and Saudi Arabia became the second largest arms importer globally in 2010–14. The UAE continued to modernize and expand its armed forces in 2010–14. It has increased its arms imports since the early 1990s and was the fourth largest arms importer worldwide in 2010–14. Neighbouring Qatar entered the list of top 50 importers in 2010–14 as the 46th largest importer worldwide. Historically, Qatar has not been a major importer of arms and even considered disbanding its small force of 12 combat aircraft in 2008. However, it has taken a more active role in military operations in recent years and in 2011 sent combat aircraft to participate in the military actions against Libya. In 2014 it placed orders with the USA for 24 AH-64D combat helicopters and 3 Boeing-737 airborne early warning and control (AEW&C) aircraft, and with a European consortium for 2 A330 MRTT tanker/transport aircraft. Qatar also plans to purchase between 24 and 72 new combat aircraft, indicating that it has radically changed its military posture.

Arms procured by states in the Middle East are mainly deployed for direct territorial defence or internal use. However, due to the ever-increasing volumes and level of sophistication of the latest imports, several states in the region now have the means to use military force beyond their borders. The UAE is the most active member of the Gulf Cooperation Council in deploying its forces in international operations. It deployed combat aircraft to Afghanistan and to Libya as part of North Atlantic Treaty Organization-led operations in 2011.[32] In 2014 the UAE used F-16E combat aircraft, supported by A330 MRTT tanker aircraft and C-17 transport aircraft, in strikes against IS in Syria.[33] It took delivery of 80 F-16E combat aircraft from the USA in 2004–2008 and plans to acquire 30 more, and it received 3 A330 MRTT from Spain in 2013 and 6 C-17 transport aircraft from the USA in 2011–12.

[32] Chandrasekaran, R., 'In the UAE, the United States has a quiet, potent ally nicknamed "little Sparta"', *Washington Post*, 9 Nov. 2014.

[33] Binnie, J., 'UAE deploys F-16s to Jordan', *Jane's Defence Weekly*, 9 Feb. 2015; and 'Jordan says it has carried out 56 air strikes against ISIS', *The Guardian*, 9 Feb. 2015.

Table 10.3. The 50 largest recipients of major weapons, 2010–14

The table includes all countries and non-state actors that imported major weapons in the five-year period 2010–14. Ranking is according to 2010–14 total imports. Figures are SIPRI trend-indicator values (TIVs). Percentages in the 'share' column are rounded to 1 decimal place, those in the 'change' column are rounded to the nearest full number. Figures and percentages may not add up because of the conventions of rounding.

Rank			Volume of imports (TIV, millions)			
2010–14	2005–2009[a]	Recipient	2014	2010–14	Share 2010–14 (%)	Change since 2005–2009, (%)
1	2	India	4 243	21 036	*14.9*	*140*
2	22	Saudi Arabia	2 629	6 955	*4.9*	*317*
3	1	China	1 357	6 680	*4.7*	*–42*
4	4	United Arab Emirates	1 031	6 186	*4.4*	*–4*
5	8	Pakistan	659	6 102	*4.3*	*64*
6	12	Australia	842	5 144	*3.7*	*65*
7	9	Turkey	1 550	4 912	*3.5*	*34*
8	7	United States	581	4 736	*3.4*	*2*
9	3	South Korea	530	4 620	*3.3*	*–31*
10	10	Singapore	717	4 272	*3.0*	*16*
11	11	Algeria	463	3 649	*2.6*	*3*
12	35	Viet Nam	1 058	3 453	*2.5*	*496*
13	61	Morocco	594	3 173	*2.3*	*1 125*
14	20	Venezuela	207	2 853	*2.0*	*25*
15	26	Indonesia	1 200	2 714	*1.9*	*101*
16	15	Egypt	292	2 518	*1.8*	*–6*
17	24	Iraq	627	2 505	*1.8*	*63*
18	28	Taiwan	1 039	2 340	*1.7*	*82*
19	21	United Kingdom	251	2 251	*1.6*	*12*
20	43	Afghanistan	296	2 101	*1.5*	*260*
21	42	Azerbaijan	640	2 072	*1.5*	*249*
22	16	Japan	436	1 754	*1.2*	*–34*
23	44	Myanmar	72	1 641	*1.2*	*182*
24	31	Brazil	352	1 573	*1.1*	*65*
25	57	Bangladesh	268	1 467	*1.0*	*343*
26	41	Syria	10	1 408	*1.0*	*126*
27	39	Oman	738	1 398	*1.0*	*113*
28	29	Canada	318	1 298	*0.9*	*9*
29	65	Thailand	191	1 188	*0.8*	*488*
30	32	Portugal	4	1 146	*0.8*	*20*
31	30	Netherlands	13	1 063	*0.8*	*–4*
32	6	Israel	184	1 055	*0.7*	*–73*
33	19	Norway	18	1 035	*0.7*	*–55*
34	5	Greece	213	1 024	*0.7*	*–78*
35	14	Chile	107	1 003	*0.7*	*–66*
36	38	Colombia	179	994	*0.7*	*50*
37	23	Spain	124	988	*0.7*	*–39*
38	25	Italy	151	917	*0.7*	*–36*
39	60	Kuwait	591	885	*0.6*	*186*
40	18	Poland	265	876	*0.6*	*–63*
41	27	Germany	120	791	*0.6*	*–41*

Rank			Volume of imports (TIV, millions)		Share	Change since
2010–14	2005–2009[a]	Recipient	2014	2010–14	2010–14 (%)	2005–2009, (%)
42	53	Sudan	124	791	*0.6*	*77*
43	40	Jordan	166	756	*0.5*	*16*
44	98	Uganda	–	747	*0.5*	*1 637*
45	66	Mexico	73	743	*0.5*	*295*
46	59	Qatar	55	676	*0.5*	*116*
47	48	Finland	201	653	*0.5*	*23*
48	13	Malaysia	73	616	*0.4*	*–79*
49	56	Sweden	51	551	*0.4*	*62*
50	17	South Africa	–	526	*0.4*	*–79*
. .		Others (112)	2405	11 031	*7.8*	. .
Total			**28 308**	**140 866**	***100***	***16***

. . = not available or not applicable; – = no deliveries.

Note: The SIPRI data on arms transfers relates to actual deliveries of major weapons. To permit comparison between the data on such deliveries of different weapons and to identify general trends, SIPRI uses a trend-indicator value (TIV). 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 TIV is described in 'Sources and methods' below.

[a] The rank order for suppliers in 2005–2009 differs from that published in *SIPRI Yearbook 2010* because of subsequent revision of figures for these years.

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

A number of other states in the Middle East were involved in the US-led operations against IS in 2014, also using recently acquired weapons. Saudi Arabia attacked targets in Syria using Typhoon combat aircraft supplied by the UK between 2009 and 2014. The aircraft were equipped with Paveway-4 guided bombs supplied by the UK in 2014.[34] Saudi Arabia also deployed F-15S combat aircraft.[35] A total of 72 of these aircraft where supplied by the USA in the late 1990s and 70 are to be rebuilt in the coming years as the more advanced F-15SA version. Another 84 F-15SA will be delivered from 2015. Jordan attacked IS targets in Syria with F-16MLU combat aircraft.[36] Belgium and the Netherlands supplied 31 of these aircraft second-hand in 2008–11; the Netherlands will supply a further 15 in 2015.

Africa

Between 2005–2009 and 2010–14 imports by states in Africa increased by 45 per cent. The three largest importers in Africa in 2010–14 were Algeria (30 per cent of imports), Morocco (26 per cent) and Sudan (6 per cent). By

[34] Chuter, A., 'Saudi Typhoons use Paveway IV bombs on ISIS', *Defense News*, 25 Feb. 2015.
[35] Lake, J., 'Gulf air forces display new-found confidence', *IHS Jane's 360*, 21 Feb. 2015.
[36] Lake (note 35).

Table 10.4. The 10 largest recipients of major weapons and their suppliers, 2010–14

Figures are the 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 to 100 because of the conventions of rounding.

	Recipient									
Supplier	India	Saudi Arabia	China	UAE	Pakistan	Australia	Turkey	USA	South Korea	Singapore
Australia	0.2	–	–	–	–	–	–	5.2	–	1.9
Belarus	–	–	2.5	–	–	–	–	–	–	–
Canada	0.2	2.8	–	0.7	–	–	0.6	13	–	–
China	–	–	. .	–	50.6	–	–	–	–	–
France	1.2	6.1	15.5	9.1	0.5	6	0.5	8.3	0.1	1.6
Germany	0.7	4.2	0.4	1.9	0.2	1.7	4.6	17.6	4.7	10
Ireland	–	–	–	–	–	1.7	–	–	–	–
Israel	7.3	–	–	–	–	0.4	2.4	2.5	1.9	4.8
Italy	1.6	–	–	5.9	4.4	–	6.5	6.4	0.9	4.5
Jordan	–	–	–	–	1.9	–	–	–	–	–
Netherlands	0.2	1.3	–	–	–	–	4	2.9	0.4	–
New Zealand	–	–	–	–	–	–	–	1.6	–	–
Norway	–	–	–	–	–	0.5	0.2	9	–	–
Poland	0.1	–	–	–	–	–	–	3	–	–
Russia	69.8	–	60.9	9	2.2	–	0.3	0.3	–	–
Saudi Arabia	–	–	–	–	–	–	1.3	–	–	–
South Africa	0.3	0.1	–	0.3	–	–	–	2.6	–	0
South Korea	–	–	–	–	–	–	13.1	–	. .	–
Spain	–	–	–	–	–	18.8	7.9	3.6	–	–
Sweden	–	2.4	–	4.5	4.5	0.6	–	0.6	2.1	5.8
Switzerland	0.3	2.6	4.9	2	–	–	–	7.7	–	–
Turkey	–	2.3	–	2.5	1.1	–	. .	–	–	–
Ukraine	1	–	12.7	–	3.5	–	–	–	–	–
United Kingdom	3.3	36.4	3	1.1	0	2.8	0.5	15.3	0.8	–
United States	12	35.2	–	57.7	30.4	67.5	58.1	. .	89.3	71.3
Uzbekistan	2	–	–	–	–	–	–	–	–	–
Others	0	1.2	0	0.4	0.5	0	0	0.2	0	0

. . = not available or not applicable; – = nil; 0 = deliveries that account for less than 0.05 per cent of total deliveries.

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

the end of 2014 Morocco had few major arms imports outstanding. Algeria, on the other hand, will continue to receive high levels of arms imports over the next few years. Deliveries to Algeria in 2014 included an amphibious assault ship from Italy, the last of 48 Pantsyr S-1 air defence systems from Russia and an estimated 50 PZL-45 self-propelled guns from China. On order from previous years were 2 MEKO-A200 frigates from Germany and 3 C-28A frigates from China. In 2014 it ordered 2 Project-636E submarines and 42 Mi-28N combat helicopters from Russia, and 926 Tpz-1 armoured personnel carriers from Germany.

States in sub-Saharan Africa received 42 per cent of the imports by African states. Sudan was the largest and Uganda the second largest importer in the subregion, accounting for 15 per cent and 14 per cent of the subregional total, respectively.

Nigeria was the fifth largest arms importer in Africa. Nigeria made a series of emergency acquisitions from a range of countries to meet its urgent demand for weapons to fight the Boko Haram rebels. For example, it ordered and/or received tanks and other armoured vehicles from China, the Czech Republic, South Africa and Ukraine. Canadian companies also supplied armoured vehicles from production lines based in Nigeria and the UAE. In 2014 imports also included the second-ever international transfer of UCAVs, involving an unknown number of CH-3 UCAVs from China.

Latin America and the Caribbean

Latin America and the Caribbean accounted for 6 per cent of global arms imports in 2010–14 (5 per cent for South America and 1 per cent for Central America and the Caribbean), down from 7 per cent in 2005–2009. The overall volume of imports to Latin America was unchanged but while imports to South America fell by 9 per cent, those to Central America—chiefly Mexico—increased by 242 per cent.

Venezuela was the top arms importer in Latin America over the period 2010–14. However, although Venezuela's imports were 25 per cent higher in 2010–14 than in 2005–2009, deliveries fell sharply in 2014. Its outstanding orders were also much lower in volume by the end of 2014 than those that had been implemented in previous years. A total of 69 per cent of Venezuela's imports during 2010–14 came from Russia, 12 per cent from China and 10 per cent from Spain.

Brazil's arms imports increased by 65 per cent in 2010–14 compared to 2005–2009, even though its military expenditure decreased slightly from its 2010 peak due to the weakening of Brazil's economy. Brazil had several significant outstanding orders in 2014, in particular for 4 Scorpene submarines and 1 nuclear-powered submarine from France. Brazil signed a contract worth $5.8 billion in 2014 for 36 Gripen-E combat aircraft from Sweden.

Sources and methods

The SIPRI Arms and Military Expenditure Programme maintains the SIPRI Arms Transfers Database, <http://www.sipri.org/databases/armstransfers/>, which contains information on deliveries of major weapons to states, international organizations and non-state armed groups from 1950 to 2014. Data collection and analysis are continuous processes: a new set of data is published annually. Thus, data from several editions of the SIPRI Yearbook or other SIPRI publications cannot be combined or compared.[37] Revisions of coverage are applied retroactively for the whole period covered by the database.

Sources and estimates

Data on arms transfers is 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 complete 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 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, aid, gifts and most loans or leases. The transferred item must have a military purpose: 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 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 weapons

The SIPRI Arms Transfers Database only includes 'major 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; (*j*) reconnaissance satellites; (*k*) air refuelling systems; and (*l*) naval guns, missile launch systems and anti-submarine weapons.

In cases where a sensor, turret, refuelling system or naval gun or other system (items *d*, *i*, *k* and *l*) 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 weapons using a common unit, the trend-indicator value (TIV). The TIV is intended to represent the transfer of military resources rather than the financial value of the transfer. It is based on the known unit production costs of a core set of weapons. All other weapons are compared with the core weapons based on: size and performance characteristics, such as weight, speed, range and payload; type of electronics, loading or unloading arrangements, propulsion, armament and materials; and the year in which the weapon was produced. A second-hand weapon is given a value 40 per cent of that of a new weapon; a used weapon that has been significantly

[37] Readers who require time-series TIV data for years prior to 2010 should contact the SIPRI Arms Transfers Programme via <http://www.sipri.org/>.

modernized 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. The measurement system remains consistent over time, and any changes introduced are backdated.

SIPRI TIV figures do not represent the sale price of arms transfers. They should therefore not be compared with gross domestic product, 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 time, and the relative importance of specific suppliers, recipients and supplier-recipient relations, and of specific weapon categories or types.