

## V. The SIPRI Top 100 arms-producing and military services companies, 2012

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Sales of arms and military services in 2012 by the 100 largest arms-producing and military services companies worldwide (excluding China)—the SIPRI Top 100—totalled \$395 billion, down 4 per cent in real terms since 2011 (see table 4.7). This is the second consecutive fall in sales of the Top 100, but the total is still 29 per cent higher in real terms than in 2003. Indeed, despite the recent falls, the total arms sales of the Top 100 has grown by 45 per cent in real terms since SIPRI's current data series began, in 2002.

The fall in the total arms sales of the Top 100, and the changes for different regions (see table 4.8), closely reflect trends in military spending worldwide, outside China. The United States Government is overwhelmingly the largest customer for US arms companies (and a major customer for some European companies with US subsidiaries, such as BAE Systems and Finmeccanica). Likewise, European governments are major customers for their domestic industries. Overall, falls in the arms sales of US and West European arms industries reflect falls in military spending in the respective country. However, falls in their domestic markets may be partially offset by rising military spending elsewhere.

The identity of the 10 largest companies remained the same in 2012 as in 2011—the most recent change was in 2009 when United Technologies replaced Thales, now ranked 11th. Most of the companies in the top 10 had falling or stable arms sales in 2012. The exception was United Technologies, whose arms sales increased by 13 per cent in real terms, largely as a result of the acquisition of the aerospace company Goodrich (which ranked 42nd in the Top 100 for 2011, with arms sales of \$2.4 billion).

The SIPRI Top 100 for 2012 appears in table 4.9. Although it does not cover all arms-producing countries, the companies in the SIPRI Top 100 account for the majority of the global financial value of sales of military goods and services. Apart from the omission of China (discussed below), analysis of the companies in the Top 100 is sufficient to capture the major trends in the global arms industry.

### **Russian arms companies in the Top 100**

The re-emergence of the Russian arms industry from the remnants of its Soviet predecessor continued apace in 2012. The total arms sales by the six Russian companies in the Top 100 increased by 28 per cent in real terms, to

**Table 4.7.** Trends in arms sales of companies in the SIPRI Top 100 arms-producing and military services companies, 2003–12

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change, 2003–12
<i>Arms sales in current prices and exchange rates</i>											
Total (\$ b.)	236	274	289	313	347	388	399	419	412	395	
Change (%)		16	6	8	11	12	3	5	-2	-4	67
<i>Arms sales in constant (2012) prices and exchange rates</i>											
Total (\$ b.)	306	334	341	358	375	402	427	441	412	395	
Change (%)		9	2	5	5	7	6	3	-7	-4	29

*Note:* The figures in this table refer to the companies in the SIPRI Top 100 in each year, which means that they refer to a different set of companies each year, as ranked from a consistent set of data. In particular, the figures for 2011 differ from those in table 4.8.

*Source:* Table 4.9; and the SIPRI Arms Industry Database.

reach \$19.5 billion, or 5 per cent of total Top 100 arms sales.<sup>1</sup> All except United Aircraft Corporation increased sales by more than 20 per cent, and Almaz-Antei—with a 41 per cent real-terms rise—rose to 14th place in the Top 100, the highest position by a Russian company since data became available in 2002.

In the past, Russian arms companies have been highly dependent on export sales. While Russia continues to maintain high export levels, the increase in estimated arms sales in 2012 mainly reflects large and growing domestic sales, as part of Russia's \$700 billion 2011–20 State Armaments Plan.<sup>2</sup> While there remains widespread scepticism as to whether the aims of the plan can be fully achieved, it is clear that a major increase in Russian military equipment procurement is taking place.

### The United States and Western Europe

As the USA completed its withdrawal of military forces from Iraq at the end of 2011, sales continued to fall in 2012 for companies highly dependent on equipment and services for US forces in Iraq. The largest percentage fall in arms sales in the Top 100 was the 60 per cent fall for KBR, which provided logistic support to US forces in Iraq and worldwide. Several companies with light armoured vehicles as a major part of their portfolio also

<sup>1</sup> Due to the limited availability of financial information on Russian arms companies, the figures for arms sales for most of these companies in 2011 and 2012 are estimated based on total company sales and are subject to substantial margins of error. Nonetheless, there is a high degree of confidence that the overall picture of significant increases in arms sales in 2012 is accurate.

<sup>2</sup> See e.g. Perlo-Freeman, S., 'Russian military expenditure, reform and restructuring', *SIPRI Yearbook 2013*.

**Table 4.8.** Regional and national shares of arms sales for the SIPRI Top 100 arms-producing and military services companies, 2012 compared to 2011

Arms sales figures are in US\$ b., at current prices and exchange rates. Figures do not always add up to totals because of the conventions of rounding.

No. of companies	Region/ country <sup>a</sup>	Arms sales (\$ b.)		Change in arms sales, 2011–12 (%)		Share of Top 100 arms sales, 2012 (%)
		2012	2011 <sup>b</sup>	Nominal <sup>c</sup>	Real <sup>d</sup>	
<b>43</b>	<b>North America</b>	<b>230.8</b>	<b>242.0</b>	<b>-5</b>	<b>-7</b>	<b>58.4</b>
42	United States	230.0	241.1	-5	-7	58.2
1	Canada	0.8	0.9	-7	-7	0.2
<b>30</b>	<b>Western Europe</b>	<b>111.4</b>	<b>118.9</b>	<b>-6</b>	<b>-3</b>	<b>28.2</b>
10	United Kingdom	44.4	46.6	-5	-6	11.2
6	France	22.3	23.0	-3	4	5.6
1	Trans-Europe	15.4	16.4	-6	1	3.9
3	Italy	14.6	16.4	-11	-5	3.7
4	Germany	6.7	7.7	-13	-6	1.7
1	Sweden	2.9	3.1	-6	-2	0.7
1	Spain	1.1	1.7	-32	-27	0.3
1	Norway	1.3	1.4	-10	-7	0.3
1	Switzerland	0.9	1.0	-11	-5	0.2
1	Finland	0.9	0.8	15	23	0.2
1	Poland	0.8	0.8	-1	5	0.2
<b>7</b>	<b>Eastern Europe</b>	<b>21.0</b>	<b>16.5</b>	<b>27</b>	<b>27</b>	<b>5.3</b>
6	Russia <sup>e</sup>	19.5	15.2	28	28	4.9
1	Ukraine	1.4	1.3	14	14	0.4
<b>15</b>	<b>Other OECD</b>	<b>23.7</b>	<b>21.8</b>	<b>9</b>	<b>11</b>	<b>6.0</b>
6	Japan <sup>f</sup>	10.9	9.6	14	14	2.8
3	Israel	7.0	7.1	-2	4	1.8
4	South Korea	4.2	3.6	18	17	1.1
1	Turkey	0.9	0.8	2	1	0.2
1	Australia	0.8	0.7	15	12	0.2
<b>5</b>	<b>Other non-OECD</b>	<b>8.3</b>	<b>8.6</b>	<b>-4</b>	<b>-1</b>	<b>2.1</b>
3	India <sup>g</sup>	5.3	5.8	-8	-3	1.3
1	Singapore	1.9	2.0	-3	-8	0.5
1	Brazil	1.1	0.9	23	36	0.3
<b>100</b>	<b>Total</b>	<b>395.2</b>	<b>407.8</b>	<b>-3</b>	<b>-3</b>	<b>100.0</b>

OECD = Organisation for Economic Co-operation and Development.

<sup>a</sup> Figures for a country or region refer to the arms sales of the Top 100 companies headquartered in that country or region, including those in its foreign subsidiaries. They do not reflect the sales of arms actually produced in that country or region.

<sup>b</sup> Arms sales figures from 2011 refer to companies in the SIPRI Top 100 for 2012.

<sup>c</sup> This column gives the change in arms sales 2011–12 in current US dollars.

<sup>d</sup> This column gives the change in arms sales 2011–12 in constant (2012) US dollars.

<sup>e</sup> The figures for 2011 and 2012 arms sales of most Russian companies in the Top 100 in 2012 are estimates and are subject to considerable uncertainty.

<sup>f</sup> Figures for Japanese companies are for contracts with the Japanese Ministry of Defence.

<sup>g</sup> Figures for India include a rough estimate for Ordnance Factories.

Source: Table 4.9.

had significant decreases: BAE Systems, General Dynamics, Oshkosh Truck, Navistar and AM General.

In most West European countries, the arms sales of their Top 100 companies fell in 2012. The largest fall in company arms sales in the region was the 27 per cent real-terms fall by Navantia, the only Spanish company in the Top 100 for 2012. One other Spanish company, Indra, was in the Top 100 for 2011, but dropped out in 2012 with a real-terms fall of 9 per cent. These falls reflect the 21 per cent decrease in Spanish military expenditure between 2008 and 2012, by far the largest of any of the major West European arms producers (see section VI).

The continuing fall in the demand for major weapon platforms, such as tanks and ships in Western Europe, led to falls in arms sales for several companies, such as the tank producer Krauss-Maffei Wegmann (a 21.3 per cent fall) and the ship producer ThyssenKrupp (a 26.5 per cent fall). Both US and West European companies are actively seeking export markets elsewhere in the world to compensate for falling demand in their home markets.<sup>3</sup>

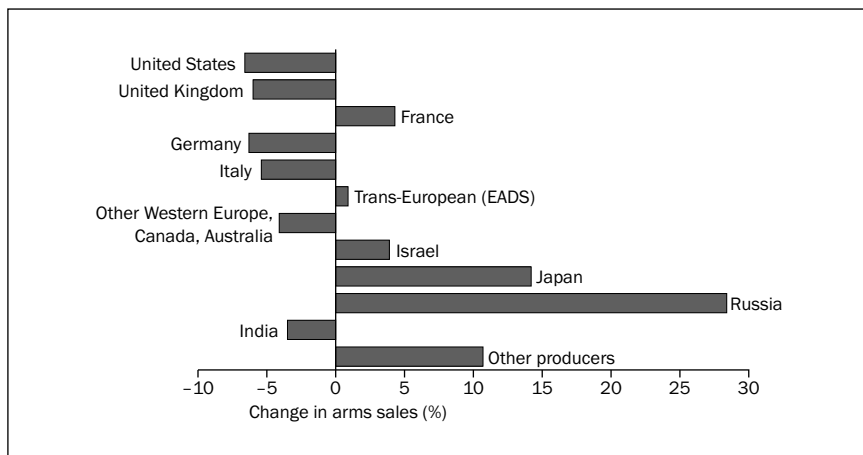
### **The diffusion of the global arms industry**

Companies from North America and Western Europe still dominate the global arms market—they accounted for 87 per cent of the total arms sales of the Top 100 for 2012 (see table 4.8).<sup>4</sup> However, there are increasing signs of the diffusion of the global arms industry—a reduction in the concentration of global arms production in Western countries—with increasing activity and sales by producer countries outside North America and Western Europe. The share of the other regions of the world in the Top 100 for 2012 was higher than at any point since the start of the current coverage of the Top 100, in 2002. Between 2002 and 2010, their share was less than 10 per cent. Moreover, whereas 18 countries were represented in the Top 100 for 2002, 22 countries were represented in 2012.<sup>5</sup>

<sup>3</sup> On the steps taken by governments of the main arms-exporting states to promote and facilitate arms exports see chapter 5, section I, in this volume.

<sup>4</sup> Note that the SIPRI Top 100 does not capture the whole of arms industry in each country it covers, and caution must be exercised in interpreting national shares of the Top 100 arms sales total. E.g. consolidation of several smaller companies into 1 large company may lead to an increase in a country's share, without changing the size of the national industry. In addition, the Top 100 classifies companies according to the country in which they are headquartered. Thus, sales by an overseas subsidiary will be counted towards the total for the parent company's country, not the country where production takes place. E.g. large parts of the Australian, Canadian, Spanish and Swedish arms industry are foreign-owned so these countries' Top 100 presence understates the size of their industry. Conversely, the Top 100 overstates the British and Italian industries due to substantial overseas production by UK- and Italy-headquartered companies.

<sup>5</sup> Comparisons with 2002 are based on current, updated data, which may differ from figures for 2002 published in *SIPRI Yearbook 2004* and elsewhere.



**Figure 4.7.** Changes in the arms sales of the SIPRI Top 100 for 2012, by country. Change for a country or group of countries refers to the real-terms change in arms sales between 2011 and 2012 of the Top 100 companies for 2012 headquartered in that country or group of countries.

Source: Table 4.9.

The 2012 figures clearly exemplify this trend: the arms sales of the 43 North American companies in the Top 100 for 2012 fell by 7 per cent in real terms, and those of the 30 West European countries fell by 3 per cent (see figure 4.7). However, sales by the 27 companies outside these regions rose by 14 per cent in real terms. A further measure of the diffusion of the industry is the top 10 companies' share of total Top 100 arms sales. The share was 59 per cent in 2002. By 2011 it was 53 per cent, and the fall continued in 2012, to reach 52 per cent. While this figure may still seem high, it is low by the standards of other global, capital-intensive industries.<sup>6</sup> In the arms industry, national promotion of domestic arms industries tends to reduce the level of concentration.

The picture for countries elsewhere was mixed in 2012, however. There were sharp increases in arms sales by the largest companies in Australia, Brazil, Japan, South Korea and Ukraine and smaller increases in Israel, but unchanged sales in Turkey and falls in India and Singapore.

The growth in the South Korean arms industry is the result of a drive by the government to increase indigenous arms production as a share of its arms acquisitions. This is also evidenced by growing spending on research and development as a share of military expenditure (see section III). This

<sup>6</sup> E.g. while in civil aviation there are only 2 producers of large, intercontinental passenger jets (Boeing and Airbus), there are 8 producers of advanced major combat aircraft: Lockheed Martin, Boeing and Northrop Grumman in the USA, the Eurofighter consortium, Dassault and Saab in Western Europe, United Aircraft Corporation in Russia, and AVIC in China.

drive has in turn led to an increase in South Korean exports of major arms, which increased by 66 per cent between 2004–2008 and 2009–13.<sup>7</sup>

Brazil's Embraer was one of the biggest climbers in the Top 100: it rose from 84th position in 2011 to 66th in 2012, with a real-terms increase in arms sales of 36 per cent. Embraer remains primarily a maker of civil regional jets, of which it is one of the two main global manufacturers. Embraer's military business was substantial in the 1980s but largely collapsed along with most of the Brazilian arms industry at the end of the cold war.<sup>8</sup> In recent years it has gradually increased, through both domestic and export sales—mostly within South America. While Brazilian military spending has remained largely unchanged in the past few years, Embraer will probably benefit from technology transfer and other offsets associated with the decision by the Brazilian Government in early 2014 to purchase 36 JAS Gripen combat aircraft from Sweden.<sup>9</sup>

Based on newly available data, the Top 100 for the first time includes companies from Poland and the Ukraine, which have grown due to extensive consolidation of these countries' arms industry. Poland's state-owned Bumar Group, around which much of the Polish arms industry has been increasingly consolidated since 2002, is now estimated by SIPRI to have been in the Top 100 since 2005.<sup>10</sup> Ukroboronprom, formed in 2011 to consolidate much of the Ukrainian arms industry, is estimated to have been in the Top 100 for 2011 and 2012.

### Chinese arms-producing companies

Chinese companies are not covered by the SIPRI Top 100 due to the lack of data on which to make even a reasonable estimate of arms sales for most companies. Nonetheless, some information is available on the 10 major state-owned conglomerates that comprise the great bulk of the Chinese arms industry (see box 4.1). These 10 companies had total sales of around 1477 billion yuan (\$233 billion) in 2011, according to information from their financial reports.<sup>11</sup> However, these companies, each comprising hundreds of individual enterprises, produce a wide range of products, of which mili-

<sup>7</sup> See chapter 5, section I, in this volume.

<sup>8</sup> Conca, K., 'Between global markets and domestic politics: Brazil's military-industrial collapse', *Review of International Studies*, vol. 24, no. 4 (Oct. 1998).

<sup>9</sup> 'Sweden offers to buy Brazilian cargo jet', Reuters, 27 Feb. 2014.

<sup>10</sup> Bumar Group was renamed Polish Defence Holding (Polski Holding Obronny, PHO) in May 2013 and in Sep. 2013 it was announced that PHO would form part of a larger group, the Polish Armaments Group (Polska Grupa Zbrojeniowa, PGZ). On the development of the Polish arms industry since the end of the cold war see Kiss, Y., SIPRI, *Arms Industry Transformation and Integration: The Choices of East Central Europe* (Oxford University Press: Oxford, 2014), pp. 38–125.

<sup>11</sup> Cheung, T. (ed.), *The Chinese Defense Economy Takes Off: Sector-by-Sector Assessments and the Role of Military End Users* (University of California Institute on Global Conflict and Cooperation: La Jolla, CA, 2013), p. 18.

**Box 4.1.** The largest Chinese arms-producing and military services companies

- Aviation Industry Corporation of China (AVIC)
- China Aerospace Science and Industry Corporation (CASIC)
- China Aerospace Science and Technology Corporation (CASC)
- China Electronics Technology Group Corporation (CETC)
- China National Nuclear Corporation (CNNC)
- China North Industries Corporation (NORINCO)
- China Nuclear Engineering and Construction Corporation (CNECC)
- China Shipbuilding Industry Corporation (CSIC)
- China South Industries Group Corporation (CSGC)
- China State Shipbuilding Corporation (CSSC)

*Sources:* Cheung, T. (ed.), *The Chinese Defense Economy Takes Off: Sector-by-Sector Assessments and the Role of Military End Users* (University of California Institute on Global Conflict and Cooperation: La Jolla, CA, 2013); and Cheung, T., 'The current state of defense innovation in China and future prospects', Defense Innovation Brief, University of California Institute on Global Conflict and Cooperation (IGCC), Jan. 2014, <<http://www-igcc.ucsd.edu/assets/001/505243.pdf>>, p. 2.

tary products represent a minority of total sales. The military share is not generally known on a company-by-company level, although for the whole industry it was estimated as 26 per cent in 2006 and 22 per cent in 2007.<sup>12</sup>

Based on the overall industry picture and on limited information on individual companies, it is nonetheless possible to state that at least 9 of these 10 companies would almost certainly be in the Top 100 if figures for arms sales were available. Of these, 4–6 would probably be in the top 20, and 1 company—the aviation company AVIC—may rank in the top 10.

China's military spending more than quadrupled in real terms between 2000 and 2012, and the country has engaged in major efforts to develop its domestic arms industry. As a result, China has, since the late 2000s, been decreasing its arms imports in favour of procurement from the Chinese industry. In addition China's arms exports have grown substantially in the past decade, to the extent that the country was the fourth largest arms exporter in 2009–13.<sup>13</sup>

<sup>12</sup> Lu, Z., [Profits of military industrial enterprises last year was 43 billion yuan, double the profit of 3 years ago], *Zhōngguó zhèngquán bào*, 8 Jan. 2008, cited in Cheung, T., 'Rising Chinese defense spending and regional security in Asia: China's rise as a defense technological power and the external strategic implications', Paper presented at IISS conference 'Fiscal Stress, Global Military Balances and Regional Security', Manama, 6–8 Oct. 2013, p. 4.

<sup>13</sup> See chapter 5, section I, in this volume.

**Table 4.9.** The SIPRI Top 100 arms-producing and military services companies in the world excluding China, 2012<sup>a</sup>

Figures for arms sales, total sales and profit are in US\$ million. Dots (.) indicate that data is not available.

Rank <sup>b</sup>	2012	2011	Company <sup>c</sup>	Country	Arms sales		Total sales, 2012	Arms sales as a % of total sales, 2012	Total profit, 2012	Total employment, 2012
					2012	2011				
1	1	1	Lockheed Martin	USA	36 000	36 270	47 182	76	2 745	120 000
2	2	2	Boeing	USA	27 610	30 560	81 698	34	3 900	174 400
3	3	3	BAE Systems	UK	26 850	29 160	28 263	95	2 599	88 200
4	5	5	Raytheon	USA	22 500	22 900	24 414	92	1 900	67 800
5	4	4	General Dynamics	USA	20 940	23 330	31 513	66	-332	92 200
6	6	6	Northrop Grumman	USA	19 400	20 340	25 218	77	1 978	68 100
7	7	7	EADS <sup>d</sup>	Trans-Europe	15 400	16 400	72 596	21	1 580	140 000
8	10	10	United Technologies <sup>e</sup>	USA	13 460	11 640	62 173	22	5 200	218 300
9	8	8	Finmeccanica	Italy	12 530	14 570	22 131	57	-1 010	67 408
10	9	9	L-3 Communications	USA	10 840	12 520	13 146	82	782	51 000
S	S	S	BAE Systems Inc. (BAE Systems, UK)	USA	10 370	13 560	11 305	92	1 171	34 500
11	11	11	Thales	France	8 880	9 480	18 198	49	752	68 325
12	12	12	SAIC	USA	7 820	7 940	11 173	70	525	40 000
13	13	13	Huntington Ingalls Industries	USA	6 440	6 380	6 708	96	146	37 000
14	22	22	Almaz-Antei	Russia <sup>f</sup>	5 510	3 860	6 186	89	168	95 933
15	15	15	Safran	France	5 300	5 240	17 429	30	127	62 558
16	14	14	Honeywell	USA	5 110	5 280	37 665	14	2 926	132 000
17	16	16	Rolls-Royce	UK	5 010	4 730	19 349	26	2 265	42 800
S	S	S	Sikorsky (United Technologies)	USA	4 510	4 970	6 791	66	712	16 591
18	17	17	United Aircraft Corp.	Russia <sup>f</sup>	4 440	4 400	5 545	80	..	..
19	20	20	General Electric	USA	4 100	4 100	147 359	3	13 641	305 000
20	18	18	Oshkosh Truck	USA	3 950	4 370	8 181	48	230	13 200
S	S	S	MBDA (BAE Systems, UK/EADS, trans-Europe/Finmeccanica, Italy)	Trans-Europe	3 860	4 170	3 856	100	..	..
21	19	19	ITT Exelis	USA	3 800	4 150	5 522	69	330	19 900



Rank <sup>b</sup>	2012	2011	Company <sup>c</sup>	Country	Arms sales		Total sales, 2012	Arms sales as a % of total sales, 2012	Total profit, 2012	Total employment, 2012
					2012	2011				
S	S		Pratt & Whitney (United Technologies)	USA	3 720	3 000	13 964	27	1 589	35 847
S	S		Eurocopter Group (EADS, trans-Europe)	France	3 700	3 540	8 051	46	398	22 400
22	21		Computer Sciences Corp.	USA	3 690	3 860	14 993	25	961	90 000
S	S		CASA (EADS, trans-Europe)	Spain	3 640	3 950	4 134	88	205	7 546
23	24		DCNS	France	3 580	3 620	3 766	95	210	13 183
24	25		Textron	USA	3 550	3 500	12 237	29	581	33 000
25	35		Vertolety Rossii (Oboronprom) <sup>g</sup>	Russia <sup>f</sup>	3 520	2 740	4 077	86	306	..
26	26		Booz Allen Hamilton <sup>h</sup>	USA	3 200	3 100	5 758	56	219	24 500
27	31		Babcock International Group	UK	3 190	2 850	5 140	62	356	..
28	36		DynCorp	USA	3 040	2 690	4 044	75	-9	29 000
29	23		Mitsubishi Heavy Industries	Japan <sup>i</sup>	3 010	3 620	35 316	9	1 219	31 111
30	28		Rheinmetall	Germany	3 000	2 980	6 046	50	244	21 767
31	30		CACI International	USA	2 950	2 860	3 774	78	167	14 500
S	S		AgustaWestland (Finmeccanica)	Italy	2 940	3 450	5 454	54	353	13 050
32	27		Saab	Sweden	2 910	3 080	3 543	82	227	13 968
33	38		URS Corporation	USA	2 850	2 670	10 973	26	311	54 000
34	37		Elbit Systems	Israel	2 740	2 680	2 889	95	168	12 134
35	32		Rockwell Collins	USA	2 590	2 810	4 726	55	609	19 000
S	S		EADS Astrium (EADS, trans-Europe)	France	2 540	2 350	7 477	34	398	17 000
36	41		Israel Aerospace Industries	Israel	2 540	2 500	3 345	76	69	16 000
S	S		Sukhoi (United Aircraft Corp.)	Russia <sup>f</sup>	2 530	2 630	2 719	93	..	..
37	29		Hewlett-Packard <sup>j</sup>	USA	2 500	2 960	120 357	2	-12 650	331 800
38	59		United Engine Corp. (Oboronprom) <sup>g</sup>	Russia <sup>f</sup>	2 500	1 440	4 170	60	..	..
39	33		ManTech International	USA	2 470	2 770	2 582	96	95	9 700
40	34		Hindustan Aeronautics	India	2 410	2 740	2 679	90	650	..
41	40		Alliant Techsystems	USA	2 330	2 550	4 362	53	272	14 000
42	45		Fluor <sup>k</sup>	USA	2 260	2 260	27 577	8	456	41 193
43	46		Serco <sup>l</sup>	UK	2 200	2 250	7 786	28	479	120 000

44	44	CEA		France	2 190	2 300	5 420	40	59	15 953
S	5	Alenia Aeronautica (Finmeccanica)		Italy	2 100	2 050	3 821	55	134	11 708
45	60	NEC		Japan <sup>i</sup>	2 050	1 440	38 497	5	381	102 375
46	57	United Shipbuilding Corp.		Russia <sup>f</sup>	1 950	1 570	5 253	37	..	..
47	49	Ordnance Factories <sup>l</sup>		India	1 940	2 120	2 421	80	..	..
48	43	Harris		USA	1 900	2 400	5 451	35	31	15 200
49	48	Cobham		UK	1 890	2 160	2 772	68	326	9 992
50	52	ST Engineering (Temasek)		Singapore	1 890	1 950	5 104	37	461	22 000
51	39	Kawasaki Heavy Industries		Japan <sup>i</sup>	1 860	2 630	16 154	11	387	34 010
S	S	BAE Systems Australia (BAE Systems, UK)		Australia	1 760	1 860	1 957	90	..	5 500
52	53	Rafael		Israel	1 700	1 940	1 732	98	147	6 500
53	67	Uralvagonzavod		Russia <sup>f</sup>	1 630	1 200	4 083	40	..	..
54	54	Samsung		South Korea	1 557	1 860	178 521	1	21 167	369 000
S	S	Samsung Techwin (Samsung)		South Korea	1 560	1 860	3 005	52	130	8 380
55	58	Mitsubishi Electric		Japan <sup>i</sup>	1 550	1 450	44 708	3	871	120 958
56	-	DSN Corp.		Japan <sup>i</sup>	1 530	..	..	..	..	..
57	50	ThyssenKrupp		Germany	1 530	2 080	60 469	3	-6 000	167 961
58	65	Groupe Dassault		France	1 470	1 240	5 066	29	674	11 552
59	63	Ukroboronprom <sup>l</sup>		Ukraine	1 440	1 260	1 599	90	..	..
60	56	QinetiQ		UK	1 410	1 580	2 104	67	-211	9 498
61	66	Fincantieri		Italy	1 300	1 220	3 066	42	19	10 240
62	61	Kongsberg Gruppen		Norway	1 290	1 440	2 690	48	227	6 259
63	62	Diehl		Germany	1 200	1 390	3 637	33	39	14 369
64	55	Navantia		Spain	1 130	1 650	1 255	90	-101	5 537
65	71	Chemring Group		UK	1 130	1 080	1 173	96	..	4 193
66	84	Embraer		Brazil	1 060	860	6 241	17	357	18 032
67	79	Korea Aerospace Industries		South Korea	1 060	890	1 395	76	115	2 970
68	70	Triumph Group		USA	1 030	1 090	3 703	28	297	13 900
69	72	Jacobs Engineering Group <sup>k</sup>		USA	1 020	1 070	10 894	9	379	63 400
70	83	Precision Castparts		USA	1 010	870	8 378	12	1 429	28 500
71	51	Navistar		USA	1 000	2 000	12 948	8	-3 010	18 500
72	77	Meggitt		UK	990	940	2 545	39	575	10 980

Rank <sup>b</sup>	2012	2011	Company <sup>c</sup>	Country	Arms sales		Total sales, 2012	Arms sales as a % of total sales, 2012	Total profit, 2012	Total employment, 2012
					2012	2011				
73	64		Krauss-Maffei Wegmann	Germany	980	1 250	1 031	95	..	..
74	80		Bharat Electronics	India	960	890	1 125	85	167	10 305
75	74		Moog	USA	950	1 000	2 470	39	152	10 976
76	-		IHI Group	Japan <sup>i</sup>	940	440	17 546	5	877	..
77	76		AAR Corp	USA	930	950	2 065	45	68	6 700
S	S		Thales Systèmes Aéroportés (Thales)	France	930	..	929	100	103	..
78	73		RUAG	Switzerland	930	1 040	1 856	50	86	7 739
79	69		Nexter	France	910	1 120	954	95	120	1 791
80	75		GKN	UK	900	970	10 317	9	932	48 000
81	92		Patria Industries	Finland	890	770	981	91	11	3 587
S	S		Selex Galileo SpA (Finmeccanica)	Italy	880	840	1 005	88	72	2 684
82	47		KBR <sup>j</sup>	USA	880	2 180	7 921	11	144	27 000
83	82		Cubic Corporation	USA	870	870	1 381	63	92	8 200
84	91		LIG Nex1	South Korea	870	820	866	100	30	2 690
85	86		Aselsan	Turkey	870	850	909	95	163	5 205
S	S		Thales Australia (Thales, France)	Australia	840	690	1 012	83	..	3 300
86	78		CAE	Canada	840	900	2 107	40	143	7 670
87	81		SRA International <sup>m</sup>	USA	830	870	1 675	50	-68	6 100
88	95		Gencorp	USA	830	740	995	83	-3	3 391
89	89		Bumar Group <sup>n</sup>	Poland	820	830	1 031	80	-5	9 289
90	85		Ultra Electronics	UK	820	860	1 206	68	183	..
91	87		Aerospace Corp.	USA	800	840	903	89	..	..
92	-		Fiat	Italy	800	860	107 913	1	1 814	214 836
S	S		Iveco (Fiat)	Italy	800	660	11 465	7	603	26 307
93	-		Esterline Technologies	USA	800	690	1 992	40	113	12 185
94	94		Mitre <sup>k</sup>	USA	780	770	1 421	55	..	7 613
95	100		Mission Essential <sup>k</sup>	USA	770	700	..	..	..	8 000
S	S		Raytheon Australia (Raytheon, USA)	Australia	760	770	..	..	..	1 480



<sup>l</sup> Arms sales figures for these companies are estimates and are subject to a high degree of uncertainty.

<sup>m</sup> Arms sales figures for SRA International are for 'National Security' revenue. As this category includes sales to the US departments of Homeland Security and Justice, as well as to the Department of Defense, it is an overestimate.

<sup>n</sup> Arms sales figures for Bumar Group are estimates and are subject to a high degree of uncertainty. Bumar Group was renamed Polish Defence Holding (Polski Holding Obronny, PHO) in May 2013 and in Sep. 2013 it was announced that PHO would form part of a larger group, the Polish Armaments Group (Polska Grupa Zbrojeniowa, PGZ).

## Sources and methods

### *Selection criteria and sources of data*

The SIPRI Arms Industry Database includes public and private companies but excludes manufacturing or maintenance units of the armed services. Only companies with operational activities in the field of military goods and services are included; holding or investment companies are not.

The sources of data on the companies include company annual reports and websites, and news published in the business sections of newspapers, in military journals and by Internet news services specializing in military matters. Press releases, marketing reports, government publications of contract awards and country surveys are also consulted. Publicly available financial and employment data on the arms industry worldwide is limited. The scope of the data and the geographical coverage are largely determined by the availability of information.

SIPRI data on arms-producing and military services companies is revised on an ongoing basis as improved data becomes available. For this reason, it is not possible to make a strict comparison between editions of the SIPRI Yearbook. In addition, coverage may differ because of problems with obtaining data to make satisfactory estimates for all companies every year.

Comparable data for the Top 100 from 2002 to 2012 is, however, available on the SIPRI website, <<http://www.sipri.org/research/armaments/production/recent-trends-in-arms-industry/recent-trends-in-arms-industry-2012>>.

### *Definitions*

Arms and military services sales ('arms sales') are defined by SIPRI as sales of military goods and services to military customers, including sales for both domestic procurement and export. Military goods and services are those that are designed specifically for military purposes and include the technologies related to these goods and services. Military goods are military-specific equipment and do not include general-purpose goods, such as oil, electricity, office computers, uniforms and boots. Military services are also military-specific. They include technical services, such as information technology, maintenance, repair and overhaul, and operational support; services related to the operation of the armed forces, such as intelligence, training, logistics and facilities management; and armed security in conflict zones. They do not include the peacetime provision of purely civilian services—such as health care, cleaning, catering and transport—but supply services to operationally deployed forces are included.

The SIPRI definition of arms sales serves as a guideline; in practice it is difficult to apply. Nor is there any good alternative, since no generally agreed standard definition exists. In some cases, the data on arms sales reflects only what a company considers to be the defence share of its total sales. In other cases, SIPRI uses the figure for the total sales of a 'defence' division, although the division may also have some civil sales.

When the company does not report a sales figure for a defence division or similar entity, arms sales are sometimes estimated by SIPRI. Such estimates are based on data on contract awards, information on the company's current arms production and military services programmes, and figures provided by company officials in media or other reports. For all these reasons, the comparability of the company arms sales figures given in table 4.9 is limited.

Data on total sales, profit and employment is for entire companies, not for arms-producing and military services activities alone. All data is for consolidated sales, that is, including those of domestic as well as foreign subsidiaries. The data on profit represents profit after taxes. Employment data represents year-end figures except for those companies that publish only a yearly average. All data is presented on the financial year basis reported by the company in its annual report.

### *Calculations*

All data is collected in local currency and at current prices. For conversion from local currencies to US dollars, SIPRI uses the International Monetary Fund (IMF) annual average of

market exchange rates provided in *International Financial Statistics*. The data in table 4.9 is provided in current dollars. Changes between years in this data are difficult to interpret because the change in dollar values is made up of several components: the change in arms and military services sales; the rate of inflation; and, for sales conducted in local currency, fluctuations in the exchange rate. Sales on the international arms market are often conducted in dollars. Fluctuations in exchange rates thus do not have an impact on the dollar values but affect instead the value in local currency. Calculations in constant dollar terms are difficult to interpret for the same reasons. Without knowing the relative shares of arms and military services sales derived from domestic procurement and from arms exports, it is impossible to interpret the exact meaning and implications of the arms sales data. This data should therefore be used with caution. This is particularly true for countries with strongly fluctuating exchange rates.

*The SIPRI Arms Industry Network*

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