

Appendix 6A. The SIPRI Top 100 arms-producing companies, 2008

SUSAN T. JACKSON AND THE SIPRI ARMS INDUSTRY NETWORK*

I. Selection criteria and sources of data

Table 6A.1 lists the world's 100 largest arms-producing companies (excluding Chinese companies), ranked by their arms sales in 2008—the SIPRI Top 100 for 2008. The table contains information on each company's arms sales in 2007 and 2008 and its total sales, profit and employment in 2008. It 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 listed, not holding or investment companies. Chinese companies are excluded because of the lack of readily available data. Companies from other countries might also have been included at the lower end of the list had sufficient data been available.

Publicly available information on arms sales and other financial and employment data on the arms industry worldwide are limited. The sources of data for table 6A.1 include company annual reports and websites, a SIPRI questionnaire, 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. Where no data is available from these sources, estimates have been made by SIPRI. The scope of the data and the geographical coverage are largely determined by the availability of information. All the data is continuously revised and updated and may change between different editions of the SIPRI Yearbook.

II. Definitions

Arms sales are defined by SIPRI as sales of military goods and services to military customers, including both sales for domestic procurement and sales for export. Military goods and services are those which are designed specifically for military purposes and the technologies related to such 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

* Participants in the network for 2008 were Gülay Günlük-Şenesen (Istanbul University), Jean-Paul Hébert (Centre Interdisciplinaire de Recherches sur la Paix et d'Etudes Stratégiques, Paris), Shinichi Kohno (Mitsubishi Research Institute, Tokyo), Valerie Miranda (Istituto Affari Internazionali, Rome), Pere Ortega (Centre d'Estudis per la Pau J. M. Delàs, Barcelona) and Paek Jae Ok (Korea Institute for Defense Analyses, Seoul).

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 transportation, but supply services to operationally deployed forces are included.¹

This 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. The data on arms sales in table 6A.1 often reflects only what each company considers to be the defence share of its total sales. The comparability of the company arms sales figures given in table 6A.1 is therefore limited.

Data on total sales, profit and employment is for entire companies, not for arms-producing divisions alone. All data is for consolidated sales, including those of national and foreign subsidiaries. The data on profit represents profit after taxes. Employment data is 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.

III. Calculations

Arms sales are sometimes estimated by SIPRI. In some cases SIPRI uses the figure for the total sales of a 'defence' division, although the division may also have some, unspecified, civil sales. When the company does not report a sales figure for a defence division or similar entity, estimates can sometimes be made based on data on contract awards, information on the company's current arms production programmes and figures provided by company officials in media or other reports.

The data for arms sales is used as an approximation of the annual value of arms production. For most companies this is realistic. The main exception is shipbuilding companies. For these companies there is a significant discrepancy between the value of annual production and annual sales because of the long lead (production) time of ships and the low production run (number). Some shipbuilding companies provide estimates of the value of their annual production. This data is then used by SIPRI for those companies.

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 (as provided in *International Financial Statistics*). The data in table 6A.1 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 sales, the rate of inflation and, for sales conducted in local currency, fluctuations in the exchange rate. Sales on the international arms market are

¹ For a more detailed list of the types of activities classified as 'military services' see Perlo-Freeman, S. and Sköns, E., 'The private military services industry', SIPRI Insights on Peace and Security no. 2008/1, Sep. 2008, <http://books.sipri.org/product_info?c_product_id=361>.

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. If the value of the dollar declines, then the company's revenue in local currency falls and, if its production inputs are paid for in local currency—which most often is the case—this has a negative impact on the company's profit margins. Calculations in constant dollar terms are difficult to interpret for the same reasons. Without knowing the relative shares of arms 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.

Table 6A.1. The SIPRI Top 100 arms-producing companies in the world excluding China, 2008^a

Figures for arms sales, total sales and profit are in US\$ m.

Rank ^b	2008	2007	Company ^d	Country	Sector ^e	Arms sales ^c		Total sales, 2008	Arms sales as % of total sales, 2008	Total profit, 2008	Total employment, 2008
						2008	2007				
1	2	BAE Systems	UK	A Ac El MV Mi SA/A Sh	32 420	29 860	34 086	95	3 250	106 400	
2	3	Lockheed Martin	USA	Ac El Mi Sp	29 880	29 400	42 731	70	3 217	146 000	
3	1	Boeing	USA	Ac El Mi Sp	29 200	30 480	60 909	48	2 672	162 200	
4	4	Northrop Grumman	USA	Ac El Mi Ser Sh Sp	26 090	24 600	33 887	77	-1 262	123 600	
5	5	General Dynamics	USA	A El MV SA/A Sh El Mi	22 780	21 520	29 300	78	2 459	92 300	
6	6	Raytheon	USA	A El MV SA/A	21 030	19 540	23 174	91	1 672	73 000	
S	S	BAE Systems Inc. (BAE Systems, UK)	USA	A El MV SA/A Trans-Eur.	19 970	14 910	19 974	100	1 971	55 200	
7	7	EADS	Italy	Ac El Mi Sp A Ac El MV Mi SA/A	17 900	13 100	63 346	28	2 302	118 350	
8	9	Finmeccanica ^f	USA	El Ser	13 240	9 850	25 037	53	996	73 400	
9	8	L-3 Communications	France	A El MV Mi SA/A Sh	12 160	11 240	14 901	82	949	65 000	
10	10	Thales	USA	Ac El Eng	10 760	9 350	18 543	58	952	63 250	
11	11	United Technologies	USA	Ser Comp(MV)	9 980	8 760	58 681	17	4 689	220 000	
12	12	SAIC	USA	Ser	7 350	6 250	10 070	73	452	45 400	
13	16	KBR ^g	USA	Ser	5 730	5 000	11 581	50	319	57 000	
14	13	Computer Sciences Corp.	USA	Ser	5 710	5 420	16 740	34	1 115	92 000	
15	15	Honeywell	USA	El	5 310	5 020	36 556	15	2 792	128 000	
16	19	ITT Corp. ^h	USA	El	5 170	3 850	11 695	44	795	40 800	
17	17	Rolls-Royce ⁱ	UK	Eng	4 720	4 580	16 695	28	-2 472	38 900	
18	23	Almaz-Antei ^j	Russia	Mi	4 340	2 780	4 624	94	100	89 870	
19	25	AM General ^j	USA	MV	4 040	2 670	..	..	..	..
S	S	MBDA (BAE Systems, UK/ EADS, trans-European/ Finmeccanica, Italy)	Trans-Eur. Mi	3 950	4 110	3 953	100	206	..	..
20	-	Navistar ^k	USA	MV	3 900	370	14 724	26	134	17 800	

Rank ^b	2008	2007	Company ^d	Country	Sector ^e	Arms sales ^c		Total sales, 2008	Arms sales as % of total sales, 2008	Total profit, 2008	Total employment, 2008
						2008	2007				
\$	18	DRS Technologies (Finnmeccanica)	Italy	El		3 870	3 230	3 870	100	110	.
21	18	DCNS	France	Sh		3 660	3 860	3 660	100	192	12 240
22	20	General Electric	USA	Eng El		3 650	3 460	182 515	2	17 410	323 000
\$	20	Eurocopter (EADS, trans-European)	France	Ac		3 610	2 800	6 568	55	..	.
\$	22	Pratt & Whitney (United Technologies)	USA	Eng		3 550	3 580	12 695	28	..	37 990
23	27	Textron	USA	Ac El Eng MV		3 420	2 510	14 246	24	486	43 000
\$	24	Sikorsky (United Technologies)	USA	Ac		3 060	2 770	5 368	57	..	16 940
24	22	Mitsubishi Heavy Industries ^f	Japan	Ac MVMi Sh		3 040	2 780	32 660	9	234	67 420
25	14	SAFRAN	France	El		3 020	5 230	15 123	20	375	54 490
26	24	Saab	Sweden	Ac El Mi		3 000	2 770	3 610	83	-37	13 290
27	31	URS Corp.	USA	El		2 680	2 290	10 086	27	220	50 000
28	28	Alliant Techsystems	USA	SA/A		2 680	2 460	4 583	58	155	19 000
29	29	Rheinmetall	Germany	A El MV SA/A		2 660	2 400	5 665	47	198	21 020
30	-	Hewlett-Packard ^m	USA	Ser		2 540	0	136 022	2	7 828	321 000
31	36	Elbit Systems	Israel	El		2 520	1 910	2 638	95	204	10 880
\$	33	CASA (EADS, trans-European)	Spain	Ac		2 510	1 150	2 824	89	99	5 730
32	32	Rockwell Collins	USA	El		2 370	2 230	4 769	50	678	20 300
33	34	Israel Aerospace Industries	Israel	Ac El Mi		2 230	1 960	3 600	62	91	16 000
\$	34	EADS Astrium (EADS, trans-Eur.)	France	Sp		2 200	1 700	6 280	35	..	15 000
34	33	QinetiQ	UK	Ser		2 170	2 160	2 972	73	173	14 060
\$	35	MBDA France (MBDA, trans-Eur.)	France	Mi		2 130	2 050	2 130	100	247	4 290
35	30	Groupe Dassault	France	Ac		2 100	2 380	5 488	38	546	12 440
36	45	Oshkosh Corp.	USA	MV		2 070	1 570	7 138	29	79	14 000
37	41	Sukhoi (UAC) ^j	Russia	Ac		2 040	1 710	2 173	94	-107	29 980
38	35	Babcock International Group	UK	Ser		2 020	1 920	3 496	58	136	16 390
39	38	CEA	France	Orth		2 010	1 760	5 136	39	-479	15 580
40	40	Harris	USA	El		1 980	1 720	5 311	37	444	16 500

41	46	Serco	UK	Ser	1950	1 440	5 743	34	183	42 680
42	42	Krauss-Maffei Wegmann ⁿ	Germany	MV	1 950	1 690	2 050	95	..	3 400
43	51	Cobham	UK	Comp(AcEl)	1 910	1 220	2 697	71	176	12 040
44	43	Hindustan Aeronautics ^o	India	Ac Mi	1 910	1 670	2 384	80	400	30 000
45	48	Navantia	Spain	Sh	1 880	1 390	2 139	88	-82	5 540
46	58	DynCorp International ^p	USA	Ser	1 860	900	3 101	60	70	22 500
S	S	Alenia Aeronautica (Finnmeccanica)	Italy	Ac	1 820	1 780	1 820	100	136	9 200
47	47	CACI International	USA	Ser	1 810	1 390	2 421	75	83	12 000
48	44	Goodrich	USA	Comp(Ac)	1 770	1 600	7 062	25	681	15 300
49	39	ThyssenKrupp	Germany	Sh	1 760	1 740	78 223	2	3 332	199 370
50	49	ManTech International Corp.	USA	Ser	1 760	1 350	1 871	94	90	7 900
51	52	Rafael	Israel	Ac Mi SA/A Oth	1 530	1 140	1 530	100	46	6 000
52	63	Mitsubishi Electric ^j	Japan	El Mi	1 510	820	35 460	4	118	..
53	83	Kawasaki Heavy Industries ^l	Japan	Ac Eng Mi Sh	1 480	580	12 951	11	113	32 270
54	50	Indian Ordnance Factories ^q	India	A SA/A	1 380	1 230	1 679	82	..	112 000
55	60	Force Protection	USA	MV	1 330	890	1 330	100	47	1 170
56	53	ST Engineering (Temasek)	Singapore	Ac El MV SA/A Sh	1 280	1 100	3 777	34	335	19 000
57	37	VT Group	UK	Ser Sh	1 210	1 870	2 015	60	200	13 000
S	S	Thales Air Defence (Thales, France)	UK	Mi	1 200	..	1 200	100	138	..
58	54	TRV Corp. ⁱ	Russia	Mi	1 170	1 050	1 212	96	111	21 200
59	59	Irkut Corp. (UAC) ^j	Russia	Ac	1 150	900	1 248	92	-41	12 140
S	S	BAE Systems Australia (BAE Systems, UK)	Australia	El SA/A Sh	1 090	470	1 090	100	..	5 500
60	56	GKN	UK	Comp(Ac)	1 070	950	8 044	13	-197	40 000
61	55	Samsung	S. Korea	A El MV Sh	1 010	1 030	173 439	1	10 684	276 000
62	61	Indra	Spain	El	1 000	870	3 484	29	266	24 810
63	78	NEC ^j	Japan	El	950	610	40 786	2	-2 870	143 330
64	57	Diehl	Germany	Mi SA/A	940	900	3 117	30	21	11 390
S	S	AgustaWestland (Finnmeccanica)	Italy	Ac	930	930	2 981	31	232	5 750
S	S	Selex Communications (Finnmeccanica)	Italy	Comp(El Oth)	900	890	1 105	82	-95	4 400
65	62	Bharat Electronics	India	El	900	840	1 063	85	171	11 960

Rank ^b	2008	2007	Company ^d	Country	Sector ^e	Arms sales ^c		Total sales, as % of total sales, 2008	Total profit, 2008	Total employment, 2008
						2008	2007			
66	-	Precision Castparts Corp.	USA	Comp(Ac) A MV SA/A		890	..	6 828	13	1 045
67	64	Nexter	France	Ac		850	850	100	145	2 720
68	66	Vertoloty Rossii (OPK Oboronprom) ^j	Russia	Comp(Ac)		850	690	1 660	51	115
69	69	Meggitt	UK	Ser		830	670	2 137	39	182
70	93	VSE Corp.	USA	Comp(Ac)		830	540	1 044	80	19
71	-	SIAE	France	Comp(Ac)		810	470	810	100	1 920
72	-	Shaw Group ^r	USA	Ser		800	450	6 998	11	4 000
73	67	LIG Nex1	S. Korea	El		770	690	770	100	141
S	S	Thales Nederland (Thales, France)	Netherl.	El		770	..	770	100	26 000
74	85	RUAG	Switzerl.	A Ac Eng SA/A		760	580	1 419	54	..
75	77	SRA International	USA	El		750	610	1 507	50	38
S	S	Samsung Techwin (Samsung)	S. Korea	A El Eng MV El Mi SA/A		750	770	2 123	35	2 440
76	94	Kongsberg Gruppen	Norway	El		740	540	1 960	38	..
77	65	Aerospace Corp.	USA	Ser		740	700	839	88	..
S	S	Galileo Avionica (Finmeccanica)	Italy	El		730	670	837	87	4 000
78	76	Ultra Electronics	UK	El		730	620	947	77	6 500
79	68	MTU Aero Engines	Germany	Eng		730	680	3 989	18	133
80	80	Moog	USA	Comp(El) Mi		720	590	1 903	38	104
81	90	ARINC (Carlyle Group) ^s	USA	Ser		700	550	1 163	60	5 240
82	75	Teledyne Technologies	USA	El		680	620	1 893	36	119
83	86	CAE	Canada	El		680	570	1 558	44	8 840
84	91	Fiat ^f	Italy	Eng MV		680	550	86 940	1	2 790
S	S	Iveco (Fiat)	Italy	MV		680	550	15 950	4	..
85	96	Jacobs Engineering Group ^u	USA	Ser		670	520	11 252	6	3 580
86	74	Patria	Finland	Ac MV SA/A		670	640	783	86	2 800
87	70	Fincantieri	Italy	Sh		670	660	4 299	15	1 040
S	S	BAE Systems Hägglunds (BAE Systems, UK)	Sweden	MV		670	460	675	99	..

88	79	Curtiss-Wright Corp.	USA	Comp(Ac Sh)	660	610	1 830	36	109	7 970
89	81	MITRE ^v	USA	Ser	650	590	1 235	53	..	7 010
S	S	Santa Bárbara Sistemas (General Dynamics, USA)	Spain	A MV SA/A	650	620	650	100	26	1 870
90	-	Uralvagonzavod ^d	Russia	MV	640	460	1 851	35	-241	33 140
91	71	Alion Science and Technology	USA	Ser	640	660	740	86	-25	3 270
S	S	Thales Australia (Thales, France)	Australia	A El MV Mi SA/A Sh	630	630	935	68	..	3 510
92	87	Avio (Cirven, UK)	Italy	Eng	630	570	2 426	26	-122	5 090
93	99	Chemring Group	UK	SA/A	620	500	651	96	76	3 000
94	-	Israel Military Industries	Israel	A MV SA/A	620	490	650	95	..	3 200
95	73	Cubic Corp.	USA	Ser	610	640	881	69	37	6 000
96	100	KBP ⁱ	Russia	SA/A	610	490	611	99	..	7 130
97	95	Vought Aircraft Industries (Carlyle Group)	USA	Ac	610	530	1 797	34	94	6 500
98	98	Esterline Technologies	USA	Comp(Ac SA/A)	590	510	1 483	40	121	9 700
99	89	Chugach Alaska Corp. ^w	USA	Ser	570	560	..	..	..	..
100	-	Day & Zimmermann ^x	USA	SA/A Oth	550	490	2 400	23	..	24 000

^a Although several Chinese arms-producing enterprises are large enough to rank among the SIPRI Top 100, it has not been possible to include them because of lack of comparable and sufficiently accurate data. In addition, there are companies in other countries, such as Kazakhstan and Ukraine, that could also be large enough to appear in the SIPRI Top 100 list if data were available, but this is less certain.

^b Companies are ranked according to the value of their arms sales in 2008. An S denotes a subsidiary company. A dash (-) indicates that the company did not rank among the SIPRI Top 100 for 2007. Company names and structures are listed as they were on 31 Dec. 2008. Information about subsequent changes is provided in these notes. The 2007 ranks may differ from those published in SIPRI Yearbook 2009 owing to continual revision of data, most often because of changes reported by the company itself and sometimes because of improved estimations. Major revisions are explained in these notes.

^c Dots (.) indicate that data is not available.

^d For subsidiaries and operational companies owned by a holding or investment company, the name of the parent company is given in parentheses along with its country, where it differs.

^e Key to abbreviations: A = artillery; Ac = aircraft; El = electronics; Eng = engines; Mi = missiles; Sp = space; Oth = other; Comp() = components, services or anything else less than final systems in the sectors within the parentheses—used only for companies that do not produce final systems.

^f Finmeccanica acquired DRS Technologies in Oct. 2008. The figures presented here treat the acquisition as if it had occurred on 1 Jan. 2008.

^g The arms sales figures for KBR are an estimate based on LOGCAP III payments and payments by the British Ministry of Defence (MOD).

^h The arms sales figures for Rolls-Royce are estimates, as the company does not publish information on the civil-military breakdown of its Marine Division's sales and has not responded to requests for this information.

ⁱ This is the 7th year in which Russian companies have been covered by the SIPRI Top 100. There may be other Russian companies that should be in the list but for which insufficient data is available. Figures for Russian companies' total sales and profits are from Expert RA, the Russian rating agency; the figures for arms sales shares estimates and employment are from the Centre for Analysis of Strategies and Technologies (CAST), Moscow. Many Russian arms-producing companies are being consolidated into 4 large state-owned conglomerates: United Aircraft Corporation (UAC), OPK Oboronprom, United Shipbuilding Corporation (USC) and RosTekhnologii. However, comparable data on these conglomerates is not available. Thus, even though Sukhoi and Irkut are part of UAC and Vertolety Rossi is a subsidiary of OPK Oboronprom, these 3 companies are reported as parent companies in the Top 100. For more detail on Russian arms-producing industry consolidation, see section II of chapter 6; and Perlo-Freeman, S. et al., "The SIPRI Top 100 arms-producing companies, 2007," *SIPRI Yearbook 2009*, pp. 286-87.

^j Limited financial data is available for AM General. The SIPRI estimate of arms sales is based on a 2-year average of US Department of Defense (DOD) prime contract awards.

^k In previous years, Navistar's arms sales figures were calculated using an average of DOD contracts. The figures for 2008 and 2007 reported here are based on information on arms sales for those years released by the company. This change revised Navistar's sales downward, and so altered the company's ranking for 2007.

^l Arms sales figures for Japanese companies represent new military contracts rather than arms sales.

^m Hewlett-Packard (HP) acquired EDS in HP's fourth quarter of 2008. The total sales figure presented here is pro forma as if EDS had been part of HP for the company's entire financial year. Prior to the acquisition, HP was not considered an arms-producing company according to the SIPRI definition. Because HP does not report EDS's civil and military sales separately, the arms sales estimate for 2008 is based on EDS's arms sales from 2007.

ⁿ The arms sales figures for Krauss-Maffei Wegmann are based on a small estimate of the company's non-military sales.

^o The arms sales share of total sales for Hindustan Aeronautics is taken from the *Defense News* Top 100 for 2008.

^p The arms sales figure for DynCorp is revenues from the US DOD. This is probably an underestimate, as some security contracts with the US State Department should probably be classified as military business, and are thus 'arms sales' according to the SIPRI definition.

^q All figures for Indian Ordnance Factories are estimates.

^r Limited financial data is available for Shaw Group. The SIPRI estimate of arms sales is based on a 2-year average of US DOD prime contract awards.

^s The arms sales share of total sales for ARINC is taken from the *Defense News* Top 100 for 2008.

^t The arms sales of Fiat are those of its Iveco trucks and commercial vehicles division, which sells some military vehicles.

^u The arms sales figures for Jacobs Engineering Group are based on US DOD prime contract awards.

^v The arms sales figures for MITRE are based on US DOD prime contract awards.

^w The arms sales figures for Chugach Alaska Corporation are based on US DOD prime contract awards.

^x The arms sales figures for Day & Zimmerman are based on US DOD prime contract awards.