

RECENT TRENDS IN THE ARMS TRADE

MARK BROMLEY, PAUL HOLTOM, SAM PERLO-FREEMAN AND
PIETER D. WEZEMAN

I. Introduction

States have widely acknowledged the need to maintain responsible arms export policies that serve to prevent transfers of arms and other military goods that might fuel armed conflicts and promote regional instability. They have also widely recognized the need to implement effective export controls on military goods and to ensure that exported weapons are not diverted into the hands of unauthorized end-users, such as terrorists, criminals and armed groups.

United Nation member states are currently discussing the feasibility of an arms trade treaty (ATT) which would seek to create better controls on international arms transfers. To support this process, the European Union (EU) is funding a series of six regional seminars, hosted by the United Nations Institute for Disarmament Research (UNIDIR), to increase the awareness of the ATT proposal among UN member states, regional organizations, civil society and industry and to promote international discussions about the proposed treaty. This Background Paper is one of a series produced by SIPRI to inform these seminars and discussions.

This paper presents the latest available data on international transfers of major conventional weapons (section II)—including data on the financial value of the international arms trade and on the international trade in small arms and light weapons (SALW)—global military spending (section III) and global arms production (section IV) and describes recent developments in international arms export control policies (section V). Except where stated, information on arms transfers, arms production and military expenditure is derived from the relevant SIPRI databases.¹

II. Recent trends in international arms transfers

The volume of international arms transfers peaked in 1982. Following the end of the cold war there was a steady decline in global arms transfers; they reached their lowest point in 2002, when transfers amounted to only 38 per cent of their cold war high. Since 2002 there has been a more steady increase in transfers (see figure 1). While the overall volume of trade dipped in 2008, this may be a short term drop—the five-year average, which gives a more

SUMMARY

● United Nation member states are currently discussing the feasibility of an arms trade treaty (ATT) which would seek to create better controls on international arms transfers. This Background Paper is one of a series produced by SIPRI to inform these discussions.

Using the latest available data, this paper describes the ongoing growth in international transfers of major conventional weapons, military spending and arms production. It also describes the increasing complexity of international arms export control policies.

The arms trade is global. The trade in major conventional weapons is dominated by a handful of big exporters. However, even small weapon producers and states without an active arms industry can act as suppliers of either second-hand equipment or newly produced but less technologically advanced weapon systems, such as small arms and light weapons and their ammunition. The prevention of illicit and destabilizing arms transfers is a global concern that requires the active engagement of all members of the international community.

¹ These are the SIPRI Arms Transfers Database, <<http://armstrade.sipri.org/>>; the SIPRI Military Expenditure Database, <<http://milexdata.sipri.org/>>; and the SIPRI Arms Industry Database.

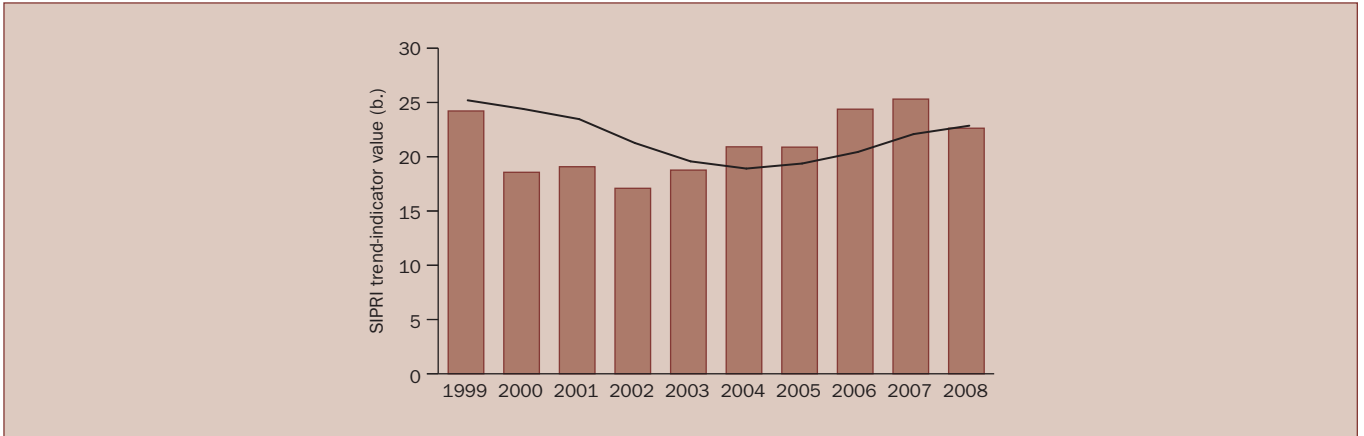


Figure 1. The trend in transfers of major conventional weapons, 1999–2008

The bar graph shows annual totals and the line graph shows the five-year moving average. Five-year averages are plotted at the last year of each five-year period.

Source: SIPRI Arms Transfers Database, <<http://armstrade.sipri.org>>.

stable measure of trends, continues to rise.² The following analysis is based on deals recorded in the SIPRI Arms Transfers Database (see box 1).

Arms exporters

One of the most marked aspects of major arms transfers over time is the stable composition of the list of the five biggest suppliers, with only slight changes in the ordering. For the period 1980–1984, when global arms transfers were at the highest, the Soviet Union, the United States, France, the United Kingdom and Germany accounted for 84 per cent of all exports. The five largest suppliers of major conventional weapons for the period 2004–2008 were the USA, Russia, Germany, France and the UK. These suppliers accounted for 78 per cent of world exports for this period, compared with 81 per cent for the period 1999–2003 (see tables 1 and 2 and figure 2). The USA and Russia remain by far the largest exporters.

More than a third (37 per cent) of US deliveries of major convention weapons for the period 2004–2008 went to the Middle East, including around 207 combat aircraft and over 5000 guided bombs. Several major new deals were under discussion in 2008, including the sale of Patriot Advanced Capability-3 (PAC-3) and Terminal High Altitude Area Defense (THAAD) anti-ballistic missile (ABM) surface-to-air missile systems to the United Arab Emirates (UAE).

Russia’s arms exports were 14 per cent higher in 2004–2008 than in 1999–2003, although its overall share of the global market remained roughly the same. Around 71 per cent of Russian arms were exported to the Asia–Pacific region for 2004–2008, with deliveries of advanced combat aircraft and naval vessels to China and India accounting for a considerable share. At the same

² In addition, the lower annual value for 2008 may be the result of a lack of reliable sources. A 5-year moving average is used as a more reliable measurement of trends because: (a) yearly delivery schedules may vary significantly, (b) data for the most recent year may not be complete, and (c) a 1-year period is too short for reliable conclusions. As new data becomes available the SIPRI Arms Transfers Database is updated for all years covered.



Box 1. The SIPRI Arms Transfers Database

The SIPRI Arms Transfers Database—which is maintained by the SIPRI Arms Transfers Programme—contains information on all international transfers of major conventional weapons (including sales, gifts and transfers of technology) to states, international organizations and non-state armed groups since 1950.^a The database can be used to track changes in the trends in the volume of transfers of major conventional weapons and to answer such questions as:

- Who are the main suppliers and recipients of major conventional weapons?
- How have the relationships between different suppliers and recipients changed over time?
- Where do countries in conflict obtain their weapons?
- How do states implement their export control regulations?
- Where are destabilizing build-ups of weapons occurring today?

The database can be used to generate written reports (trade registers) and statistical data (trend indicator values, TIVs).

Trade registers provide information on each deal included in the database. A deal is only included in a trade register if it has been confirmed that deliveries have begun or that an order has been placed. Deals are divided into two categories: those that concern the physical transfer of military equipment and those that concern the transfer of the technology necessary for the production of military equipment (licensed production). A trade register provides deal details such as the supplier and recipient, the type and number of weapon systems ordered and delivered, the year(s) of deliveries and, where available, the financial value.

Trend-indicator values are a measure of the volume of deliveries of major conventional weapons. SIPRI ascribes a TIV to each weapon or subsystem included in the database. These values are based on the known unit costs of a core set of weapons. Weapons for which a cost is not known are compared with core weapons based on a variety of factors, including performance characteristics and the period in which the weapon was produced. SIPRI then calculates the volume of transfers to, from and between all states, non-state groups and international organizations using the TIV and the number of weapon systems or subsystems delivered in a given year. TIV figures do not represent financial values for weapon transfers; they are an indicator of the volume of transfers.^b

^a The database does not document international transfers of nuclear, biological or chemical weapons or of small arms, although some light weapons are included.

^b The method used to calculate the SIPRI trend-indicator value is described in full on the SIPRI Arms Transfers Programme website at <<http://www.sipri.org/contents/armstrad/atmethods.html>>.

time, deliveries to Africa and Latin America have increased by around 200 per cent and 900 per cent, respectively. The majority of these transfers went to Algeria and Venezuela.

The volume of Germany's arms exports increased by 70 per cent between 1999–2003 and 2004–2008, and its share of the global market rose from 7 per cent to 10 per cent. Much of this increase was due to exports to European destinations, which grew by 123 per cent. Greece and Turkey accounted for nearly a third of German exports. In recent years, both countries have received Leopard-2A4 tanks and licensed produced Type-214 submarines.

For the period 2004–2008, 40 per cent of France's arms exports went to states in the Middle East. For the second year in a row, there were no outstanding orders for newly built French combat aircraft. However, France was reported to be in advance negotiations for deals with Libya and the UAE.

The UK's largest customers in recent years have been the USA and India, which accounted for 21 per cent and 14 per cent, respectively, of British transfers for the period 2004–2008. India is in the process of receiving 66 Hawk-100 trainer aircraft and 20 Jaguar-S combat aircraft from the UK. In 2009 the UK is due to begin the delivery of 72 Typhoon combat aircraft to Saudi Arabia, which will help to cement its position among the top five suppliers.



Table 1. The top 5 suppliers of major conventional weapons and their largest recipients, 2004–2008

Supplier	Share of global arms exports (%)	Total no. of recipients	Main recipients (share of supplier's transfers)		
			1st	2nd	3rd
United States	31	69	South Korea (15%)	Israel (13%)	UAE (11%)
Russia	25	46	China (42%)	India (21%)	Algeria (8%)
Germany	10	47	Turkey (15%)	Greece (13%)	South Africa (12%)
France	8	39	UAE (32%)	Singapore (13%)	Greece (12%)
United Kingdom	4	37	United States (21%)	India (14%)	Chile (9%)

Table 2. The top 5 suppliers of major conventional weapons and their largest recipients, 1999–2003

Supplier	Share of global arms exports (%)	Total no. of recipients	Main recipients (share of supplier's transfers)		
			1st	2nd	3rd
United States	35	77	Taiwan (9%)	Egypt (8%)	Japan (8%)
Russia	26	47	China (44%)	India (23%)	Iran (4%)
Germany	7	56	Turkey (14%)	Australia (11%)	South Korea (7%)
France	7	55	UAE (21%)	Pakistan (12%)	Turkey (11%)
United Kingdom	6	44	Canada (18%)	United States (12%)	Turkey (10%)

Source: SIPRI Arms Transfers Database, <<http://armstrade.sipri.org>>.

While countries in other parts of the world may lack modern defence industries, they can still provide surplus or second-hand equipment, or newly produced but less technologically advanced weapon systems such as SALW and their related ammunition (see section IV).

Arms importers

In contrast to the largest suppliers, the group of the largest recipients of major conventional weapons has varied more over the years. In addition, relative to the largest suppliers, the largest recipients account for a smaller share of the total market due to the large number of minor recipients. For the period 1980–1984 the five largest recipients of military equipment—Iraq, India, Libya, Syria and Egypt—accounted for 26 per cent of total imports. For the period 2004–2008 the top 5—China, India, the UAE, South Korea and Greece—accounted for 35 per cent of all imports (see table 3 and figure 2). This change illustrates a shift in the major arms import markets over the past 30 years from the Middle East to Asia. However, recent data indicates that this process may be reversing, with the Middle East again emerging as a major destination for military equipment (see below).

Nonetheless, in recent years the composition of the list of largest recipients has remained relatively stable. China and India were the world's two largest arms importers for both 1999–2003 and 2004–2008 (see tables 3 and 4). The most significant change in the composition of the five largest arms importers in recent years has been the entry of the UAE, which rose from being the 16th largest importer in the period 1999–2003 to being the third largest for the period 2004–2008.

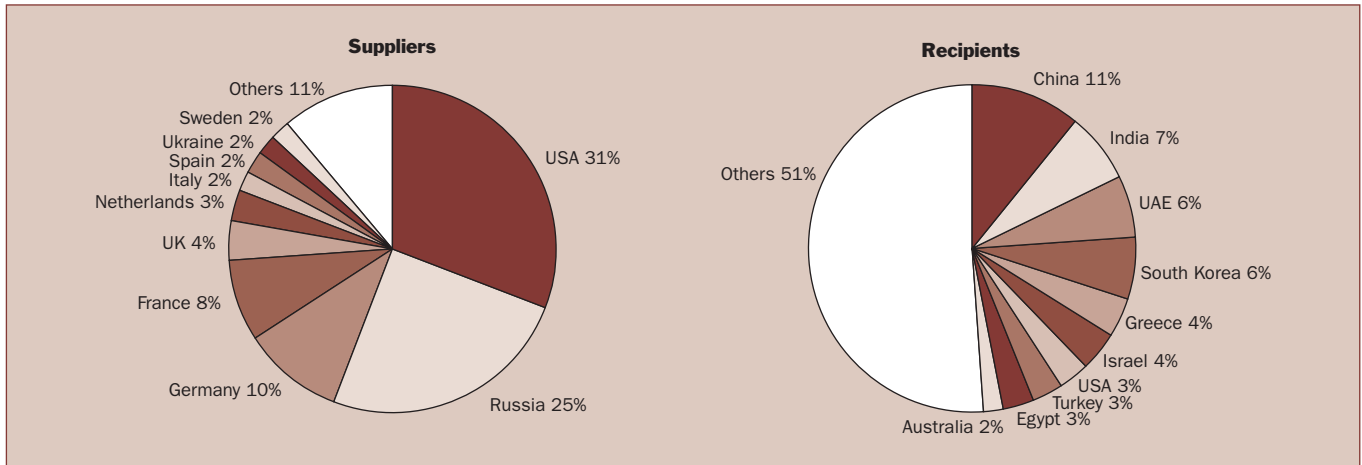


Figure 2. The suppliers and recipients of major conventional weapons, 2004–2008

Source: SIPRI Arms Transfers Database, <<http://armstrade.sipri.org>>.

Africa

African states accounted for 7 per cent of international imports of major conventional weapons over the period 2004–2008, compared with 6 per cent for 1999–2003. During the period 2004–2008, Algeria and South Africa were the two largest arms importers in Africa, accounting for 35 per cent and 27 per cent, respectively, of the continent's imports. The third largest recipient of major conventional weapons was Sudan, which accounted for 8 per cent of Africa's imports. Excluding South Africa, arms transfers to countries in sub-Saharan Africa accounted for only 2 per cent of the world total for the period 2004–2008. However, even small volumes of transfers of major conventional weapons can have a significant impact on conflict dynamics in the region.

Deliveries to Algeria in 2008 included the last of 180 T-90 tanks and an estimated 18 of a total of 28 Su-30MK combat aircraft, both purchased from Russia. Two Project 636 Kilo Class submarines and a significant number of air defence systems are also on order from Russia. Morocco, Algeria's neighbour and long-term rival, embarked on a significant military modernization programme in 2008, ordering 24 F-16C combat aircraft from the USA, 1 large FREMM frigate from France and 3 smaller SIGMA-90 frigates from the Netherlands.

Chad's arms imports were five times higher over the period 2004–2008 than in 1999–2003, although globally it remains a minor recipient. Weapons delivered to Chad in 2008 included the first of 6 Su-25 ground-attack aircraft from Ukraine and the last of approximately 82 armoured vehicles from Belgium. Sudan, which has tense relations with Chad, took delivery of an estimated 10 Su-25 aircraft from Belarus.

During 2007 and 2008 Ukraine delivered an estimated 110 T-72 tanks and 11 BM-21 multiple rocket launchers to Kenya. In September 2008 a consignment of 33 T-72 tanks and 6 BM-21 launchers en route from Ukraine to Kenya was hijacked by Somali pirates. The cargo was held for four months, during which time there was much speculation that its final destination was intended to be the government of Southern Sudan, rather than Kenya, despite Kenyan and Ukrainian protestations.



Table 3. The top 5 recipients of major conventional weapons and their largest suppliers, 2004–2008

Recipient	Share of global arms imports (%)	Total no. of suppliers	Main suppliers (share of recipient's transfers)		
			1st	2nd	3rd
China	11	6	Russia (92%)	France (3%)	Ukraine (2%)
India	7	11	Russia (71%)	United Kingdom (9%)	Israel (6%)
UAE	6	13	United States (54%)	France (43%)	Germany (1%)
South Korea	6	8	United States (73%)	Germany (12%)	France (9%)
Greece	4	13	Germany (31%)	United States (24%)	France (24%)

Table 4. The top 5 recipients of major conventional weapons and their largest suppliers, 1999–2003

Recipient	Share of global arms imports (%)	Total no. of suppliers	Main suppliers (share of recipient's transfers)		
			1st	2nd	3rd
China	12	9	Russia (92%)	France (3%)	Ukraine (2%)
India	8	14	Russia (78%)	Uzbekistan (5%)	Germany (3%)
Greece	5	13	United States (52%)	Russia (17%)	Netherlands (10%)
Turkey	5	10	United States (54%)	France (15%)	United Kingdom (11%)
South Korea	4	10	United States (67%)	Germany (11%)	France (11%)

Source: SIPRI Arms Transfers Database, <<http://armstrade.sipri.org>>.

The Americas

States in the Americas accounted for 11 per cent of imports of major conventional weapons over the period 2004–2008, compared with 8 per cent for 1999–2003. Transfers to South America were 94 per cent higher in 2004–2008 than in 1999–2003. The USA was the largest importer of conventional weapons in the Americas for the period 2004–2008, and the seventh largest in the world, up from 14th place for 1999–2003. Chile was the largest importer of conventional weapons in South America for the period 2004–2008 and the 11th largest in the world, up from 36th for 1999–2003.

Several states in South America are undergoing force modernization programmes, indicating that the volume of transfers to the region will remain high. Most significantly, in December 2008 Brazil signed an €8.6 billion (\$11.3 billion) agreement with France for the licensed production of 50 EC-725 helicopters, 4 conventional submarines and 1 nuclear-powered submarine.

For the period 2004–2008 Venezuela was the world's 18th largest recipient of military equipment, up from 55th place for 1999–2003. In 2008 the final delivery took place of many weapons that had been ordered from Russia in 2006 and 2007, including the last of 24 Su-30MK combat aircraft. During 2008 there was considerable speculation regarding follow-on deals with Russia, but no new contract was signed.

Almost half of US imports for the period 2004–2008 came from EU member states. Nominally, European products have been favoured over rival US products in several recent high-profile competitions, including for EC-145 helicopters and C-27J transport aircraft. However, most of the actual production under these contracts will take place in the USA.



Asia

Asian states received 37 per cent of all transfers of major conventional weapons in the period 2004–2008, compared with 40 per cent for 1999–2003. Transfers to East Asia (including South East Asia) accounted for 67 per cent of transfers to Asia in 2004–2008, those to South Asia for 25 per cent, to Oceania for 7 per cent and to Central Asia for only 1 per cent. Three of the four largest importers for 2004–2008 globally are Asian states: China, India and South Korea.

Transfers of major conventional weapon systems to China in 2007 and 2008 were less than half their average annual volume in 2002–2006. The volume of deliveries to Taiwan has also fallen, dropping by 44 per cent between 1999–2003 and 2004–2008. However, in late 2008 the USA agreed to a long-discussed weapon package for Taiwan.

Transfers of major conventional weapon systems to China in 2007 and 2008 were less than half their average annual volume in 2002–2006

The volume of deliveries to Pakistan has increased significantly in recent years. Forty-one per cent of all transfers to Pakistan over the past 5 years took place in 2008. Over the period 2004–2008, 40 per cent of Pakistan's imports of major conventional weapons came from the USA. Significant deliveries in 2008 included M-109A5 155-mm artillery systems, P-3CUP Orion maritime patrol aircraft and F-16A combat aircraft.

South Korean imports of major conventional weapons were 61 per cent higher in 2004–2008 than in 1999–2003. In 2007 and 2008 South Korea was the world's largest importer of major conventional weapons. The USA accounted for 73 per cent of arms transfers to South Korea for the period 2004–2008, including long-range F-15K combat aircraft along with engines and other components for South Korean-designed aircraft and ships.

Europe

European states received 24 per cent of all transfers of major conventional weapons for the period 2004–2008, compared with 26 per cent for 1999–2003. EU member states accounted for 19 per cent of global arms imports over the period 2004–2008 and 17 per cent over the period 1999–2003. The largest importer of major conventional weapons in Europe in recent years has been Greece. However, it has fallen from being the third largest recipient of major conventional weapons for the period 1999–2003 to fifth place for 2004–2008.

Turkey has fallen from being the fourth largest recipient of major conventional weapons for the period 1999–2003 to eighth place for 2004–2008. Turkey signed a number of significant deals in 2008, including those for 6 Type-214 submarines from Germany and 51 A-129 combat helicopters from Italy, which will be produced under licence in Turkey.

Arms transfers to Georgia received a significant amount of media attention in the run-up to the conflict over South Ossetia in August 2008. Georgian arms imports were nearly four times higher over the period 2004–2008 than for 1999–2003. The largest supplier of arms to Georgia was Ukraine, which accounted for 65 per cent of transfers over the period 2004–2008.

During 2004–2008 states in Europe imported an estimated 211 combat and ground-attack aircraft, compared with total world imports of over 1300.



Figure 3. The financial value of the global arms trade, 1998–2007

Source: The data is based on published information or direct communication with governments or official industry bodies. For a full list of sources and all available financial data on arms exports see <http://www.sipri.org/contents/armstrad/at_gov_ind_data.html>.

During 2008 there were at least 10 European states with ongoing competitions for combat aircraft acquisitions. However, a number of these deals may be delayed, downsized or cancelled as a result of the global financial crisis.

The Middle East

Middle Eastern states received 18 per cent of international transfers of major conventional weapons for the period 2004–2008. Transfers to the region were 38 per cent higher in 2004–2008 than in 1999–2003. During 2004–2008, 34 per cent of all transfers to the Middle East went to the UAE, while Israel received 22 per cent and Egypt 14 per cent. Despite significant speculation about Iran’s arms import plans, it accounted for only 5 per cent of transfers to the Middle East for the period 2004–2008 and was the 27th largest recipient of major conventional weapons worldwide.

During the period 2004–2008 the UAE was the largest recipient of major conventional weapons in the region and the third largest in the world. Imports in this period included around 80 F-16E combat aircraft from the USA and around 50 Mirage-2000-9 combat aircraft from France. The UAE placed a number of significant orders in 2008 and looks set to remain a significant importer in the coming years.

During the period 2004–2008 Iraq was the world’s 28th largest recipient of major conventional weapons, with 40 per cent of its imports coming from the USA. In 2008 Iraq ordered 140 M1A1 tanks from the USA and announced plans to obtain advanced combat aircraft and additional armoured vehicles.

Israel’s arms imports in 2004–2008 consisted primarily of 102 F-16I combat aircraft and related air-to-air and air-to-surface weapons. The vast majority of weapon systems ordered by or transferred to Israel during this period came from the USA, mostly in the form of military aid. Israel also imported components for its weapon systems from a variety of countries, including EU member states.



The financial value of the arms trade

It is not possible to ascribe a precise financial value to the international arms trade. However, by aggregating financial data on the value of their arms exports as released by the main suppliers, it is possible to make an indicative estimate.³ According to official government data, the estimated financial value of the international arms trade in 2007, the last year for which data is available, was \$51.1 billion, which represents 0.3 per cent of world trade.⁴ This figure is likely to be lower than the true figure since a number of significant exporters, including China, do not release data on the financial value of their arms exports. Although the SIPRI data on international arms transfers and official government data on the financial value of the arms trade are based on different methodologies, both have tended to increase since 2001 (see figure 3).

The international arms trade in 2007 represented 0.3 per cent of world trade

According to official government data, the USA was the largest arms exporter in 2007, with exports worth \$12.8 billion; Russia was in second place, with \$7.4 billion; France was in third place, with \$6.2 billion; Israel was in fourth place, with \$4.4 billion; and the UK was in fifth place, with \$4.1 billion.⁵

Comparing SIPRI's data on international arms transfers with national data on the financial value of arms exports reveals some of the differences in the methodologies used to create these data sets. For example, a significant proportion of Israel's arms exports consists of electronics and other components, which are not included in the SIPRI Arms Transfers Database. This partly explains why Israel is among the five largest arms exporters according to reported financial values but not according to SIPRI data on international arms transfers. Meanwhile, a significant proportion of German arms exports consists of military aid and the sale of second-hand equipment. Since the SIPRI data is based on the notional equivalent values of the weapon systems (the TIV), and not their cost at the point of sale, these transfers may be valued more highly in the SIPRI data on international arms transfers than in Germany's national data on the financial value of its arms exports. This may partly explain why Germany appears among the five largest arms exporters according to the SIPRI TIV, but not among the five largest according to reported financial values.

³ There are significant limitations on using official national data for assessing the financial value of the international arms trade. First, there is no internationally agreed definition of what constitutes 'arms', and so governments use different lists when collecting and reporting data on the financial value of their arms exports. Second, there is no standardized methodology concerning how to collect and report such data, with some states reporting on licences issued or used and other states using data collected from customs agencies. Third, a number of states produce more than one data set based on different lists of goods or different methodologies.

⁴ Exports of goods and services in 2007 amounted to \$17 130 billion. International Monetary Fund, International Financial Statistics online, <<http://www.imfstatistics.org/imf/>>.

⁵ The figure for Israel's arms exports refers to 'contracts signed'. Unlike previous years, Israel did not release a figure for the value of actual exports in 2007, only contracts signed. All other figures refer to actual exports as declared by the governments of those countries.

Table 5. Significant exporters of small arms and light weapons based on UNROCA submissions, 2007

State	Croatia	Italy	UK	Ukraine	Romania
SALW units exported	653 378	462 497	255 812	167 151	118 241
Share of all units transferred (%)	29	20	11	7	5

Table 6. Significant importers of small arms and light weapons based on UNROCA submissions, 2007

State	USA	Iraq	Mexico	UK	France
SALW units imported	1 548 253	98 877	72 664	60 557	44 134
Share of all units transferred (%)	68	4	3	3	2

Source: UNROCA online database, <http://disarmament.un.org/UN_REGISTER.nsf>.

International transfers of small arms and light weapons

Since the mid-1990s global attention has become increasingly focused on transfers of SALW, which have come to be regarded as the type of conventional weapon that can cause the most instability in a country or region.⁶ Governmental transparency in international transfers of SALW continues to lag behind transparency levels for other types of conventional weapon transfers, although advances have been made in recent years. For example, in December 2003 the UN General Assembly invited member states to provide information on SALW transfers to the UN Register of Conventional Arms (UNROCA), which had previously covered only major conventional weapons, and in 2006 states were invited to do so using a standardized reporting form.⁷

As of 31 December 2008, 56 states had submitted data to UNROCA on their SALW transfers on at least one occasion since 2003. The major suppliers and recipients according to UNROCA data are presented in tables 5 and 6. However, the information submitted to UNROCA covers only a fraction of international transfers of SALW because many significant exporters (e.g. China, Russia and the USA) have not submitted data.⁸ In addition, since a high proportion of European states have submitted SALW data to the UNROCA, they are over-represented among exporters. (For more on reporting to UNROCA see section V below.)

The only other regularly updated source of information on the global trade in SALW is the customs data that states submit to the UN Commodity Trade Statistics Database (Comtrade). The Norwegian Initiative on Small Arms Transfers (NISAT) collects and collates customs data from Comtrade and compiles an annual register of international SALW transfers (see table 7).⁹

⁶ See UN General Assembly Resolution A/RES/50/70, 15 Jan. 1996.

⁷ UN General Assembly Resolution A/RES/58/54, 8 Dec. 2003; UN General Assembly Resolution 61/77, 6 Dec. 2006; and United Nations, Office of Disarmament Affairs, 'Standardized form for reporting international transfers of conventional arms', <<http://disarmament.un.org/cab/register.html>>.

⁸ See Holtom, P., *Transparency in Transfers of Small Arms and Light Weapons: Reports to the United Nations Register of Conventional Arms, 2003–2006*, SIPRI Policy Paper no. 22 (SIPRI: Stockholm, July 2008); and Holtom, P., 'Reporting transfers of small arms and light weapons to the United Nations Register of Conventional Arms, 2007', SIPRI Background Paper, Feb. 2009, <http://books.sipri.org/product_info?c_product_id=373>.

⁹ On NISAT's annual register of international SALW transfers see <<http://www.prio.no/nisat>>.

**Table 7.** Major exporters of small arms and light weapons, 2005

Countries listed are estimated to have exported more than \$10 m. worth of small arms and light weapons in 2005.

Country	Value of exports of small arms and light weapons (\$ m.)
Austria	>130
Belgium	>192
Bosnia and Herzegovina	'Medium exporter, but little is reported about its exports'
Brazil	>122
Bulgaria	>12
Canada	>67
China	>32
Croatia	19
Czech Republic	>60
Finland	>48
France	>30
Germany	>304
Iran	'Previously a major exporter, but little is reported about its exports'
Israel	>25
Italy	>390
Japan	>85
Korea, North	'Medium exporter, but little is reported about its exports'
Korea, South	21
Mexico	18
Netherlands	14
Norway	34
Poland	22
Portugal	17
Romania	'Medium exporter, but little is reported about its exports'
Russia	>61
Serbia and Montenegro	29
Singapore	'Medium exporter, but little is reported about its exports'
Slovakia	>18
South Africa	'Medium exporter, but little is reported about its exports'
Spain	>56
Sweden	>28
Switzerland	57
Thailand	'Medium exporter, but little is reported about its exports'
Turkey	48
Ukraine	>11
United Kingdom	>79
United States	426

Source: Based on *Small Arms Survey 2008: Risk and Resilience* (Cambridge University Press: Cambridge, 2008), annexe 4.1.

However, this source is also far from complete. For example, many countries omit data related to arms exports in their reports to Comtrade or omit information about the destination of arms exports.¹⁰

¹⁰ On the strengths and weaknesses of the Comtrade data see Haug, M. et al., *Shining a Light on Small Arms Exports: The Record of State Transparency*, Small Arms Survey Occasional Paper no. 4 (Small Arms Survey: Geneva, Jan. 2002), pp. 22–23; and Marsh, N., 'Accounting guns: the methodology used in developing data tables for the Small Arms Survey', Memorandum by Nicholas Marsh, Norwegian Initiative on Small Arms Transfers (NISAT) project at the International Peace Research Institute, Oslo (PRIO), 14 Nov. 2005.

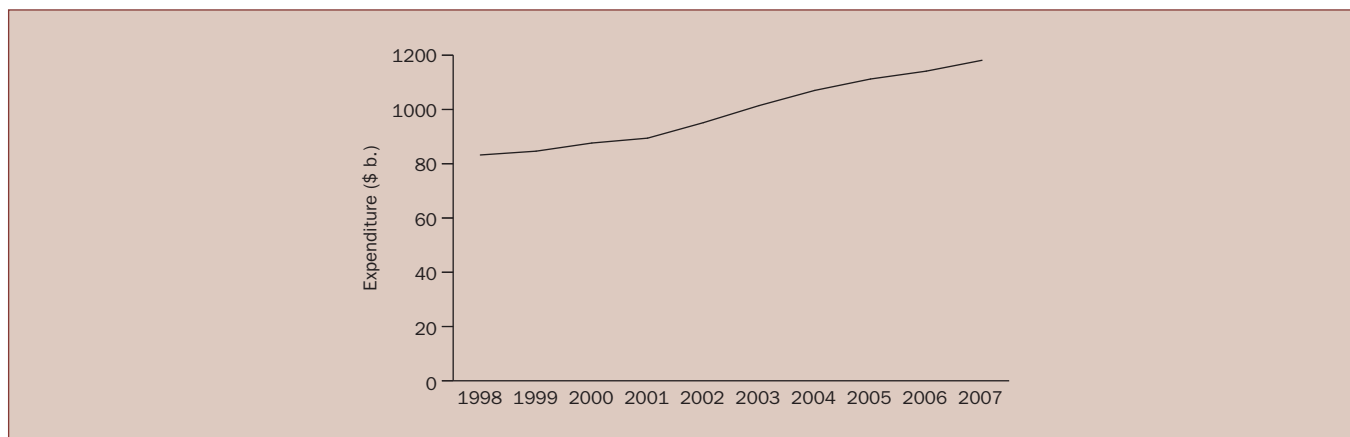


Figure 4. World military expenditure, 1998–2007

Source: SIPRI Military Expenditure Database, <<http://milexdata.sipri.org/>>.

III. Recent trends in world military expenditure

There is no necessary, direct relationship between global military spending and the volume or value of the global arms trade. Movements in one do not necessarily correlate to movements in the other. For example, the majority of most states' military budget is spent on personnel costs, rather than equipment acquisitions. Among member states of the North Atlantic Treaty Organization (NATO), the median share of military spending allocated to equipment purchases was 17.6 per cent in 2008.¹¹ Also, many of the world's biggest spenders, including Russia and the USA, acquire the majority of their equipment domestically, and so increases in their procurement costs will not lead to a rise in international arms transfers. In addition, many states, particularly in the developing world, often exclude money spent on arms acquisitions from published military budgets. Such purchases may be funded through non-military budget lines or simply may not be accounted for in the budget.¹² Finally, many states receive considerable amounts of military equipment in the form of military aid, which would not necessarily be reflected in the recipient states' military budget.

Nonetheless, a general increase in military expenditure in a particular region or worldwide is likely to be a strong indication that arms procurement expenditure has also increased, whether on- or off-budget. In addition, many states, particularly in the developing world, rely on arms imports, rather than domestic production, as their main source of military procurement,

¹¹ NATO, 'Financial and economic data relating to NATO defence', Press Release (2009)009, 19 Feb. 2009, <http://www.nato.int/issues/defence_expenditures/>. The proportion of military spending allocated to equipment purchases varies greatly among NATO states, ranging from 9.3% in Belgium to 32.2% in Luxembourg. Reliable data on the proportion of military spending allocated to equipment acquisitions in other parts of the world is harder to come by. However, according to responses to the SIPRI questionnaire on military spending, which is sent to 168 states every year, the proportion is generally lower in the developing world than it is in the West.

¹² E.g. see Ball, N., *Security and Economy in the Third World* (Princeton University Press: Princeton, NJ, 1988), pp. 107–108; Hendrickson, D. and Ball, N., *Off-budget Military Expenditure and Revenue: Issues and Policy Perspectives for Donors*, Conflict, Security and Development Group Occasional Papers no. 1 (King's College: London, Jan. 2002), p. 18; and Omitoogun, W. and Hutchful, E. (eds), SIPRI, *Budgeting for the Military Sector in Africa: The Processes and Mechanisms of Control* (Oxford University Press: Oxford, 2006).

**Table 8.** Military expenditure by region in constant (2005) US dollars, 1998–2007

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
World total	834	843	875	892	947	1 013	1 071	1 113	1 145	1 214
Africa	11.1	11.9	12.3	13.5	14.3	14.1	15.8	16.0	15.8	16.8
North Africa	4.3	4.0	4.1	5.2	5.2	5.4	5.9	6.2	6.0	6.6
Sub-Saharan Africa	6.8	7.9	8.3	8.4	9.1	8.7	9.9	9.8	9.7	10.1
Americas	367	367	382	387	431	481	522	548	559	598
North America	340	341	354	357	399	453	493	516	525	562
Central America	3.5	3.7	3.9	3.7	3.6	3.6	3.4	3.4	3.6	4.0
South America	23.3	22.1	23.9	26.7	27.5	24.6	25.8	28.1	30.1	32.0
Caribbean	..	..	..	..	..	..	..	..	..	..
Asia and Oceania	132	135	139	146	153	160	166	176	186	200
Central Asia	0.6	0.5	..	0.6	..	0.8	..	..	..	..
East Asia	100	101	104	110	116	122	127	132	140	152
South Asia	19.6	21.9	22.8	23.5	23.6	24.2	25.0	28.2	29.7	30.7
Oceania	11.4	11.9	11.8	12.2	12.7	13.2	13.8	14.3	15.1	16.4
Europe	276	280	287	288	295	302	306	306	311	319
Western Europe	245	250	251	249	253	258	261	257	258	261
Eastern Europe	15.6	15.9	21.4	23.3	25.8	27.6	28.9	32.0	35.6	40.8
Central Europe	15.1	14.7	14.8	15.5	15.8	16.2	16.3	16.8	17.1	18.0
Middle East	48.8	48.1	54.3	56.7	54.3	56.0	60.3	67.2	73.9	79.0

Source: SIPRI Military Expenditure Database, <<http://milexdata.sipri.org/>>.

and increases in their military spending may well translate into increases in the global arms transfers. While patterns over previous time periods vary, since 2001 there have been consistent year-on-year increases in the SIPRI data on both international arms transfers and global military expenditure (see figure 4 and table 8).

Over the first decade following the end of the cold war (1989–98), world military spending fell in real terms by more than one-third.¹³ Many states downsized or restructured their armed forces while making deep cuts in procurement. The deepest cuts took place in Russia and the other former members of the Warsaw Treaty Organization; there were smaller reductions in Africa, the Americas and Western Europe. However, military spending continued to rise in Asia (by 27 per cent) and the Middle East (by 17 per cent).

Since 1998 the downward trend in military spending has reversed. Global military spending increased by 45 per cent in real terms over the 10-year period 1998–2007, reaching \$1339 billion in 2007. This corresponded to 2.5 per cent of world gross domestic product (GDP) or \$202 for each person in the world. The increase in spending has accelerated since 2001, with an annual average increase of 5.3 per cent, compared with 2.2 per cent during the period 1998–2001.¹⁴

The factors driving increases in military spending since 2001 constitute a mixture of foreign policy objectives, real or perceived threats, armed conflict

¹³ Omitoogun, W. and Sköns, E., 'Military expenditure data: a 40-year overview', *SIPRI Yearbook 2006: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2006), p. 280.

¹⁴ Stålenheim, P., Perdomo, C. and Sköns, E., 'Military expenditure', *SIPRI Yearbook 2008 Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2008).



Global military spending increased by 45 per cent in real terms over the 10-year period 1998–2007

and policies to contribute to international peacekeeping operations.¹⁵ However, the primary driver of the high rate of growth has been the USA, which accounted for 63 per cent of the post-2001 increase in global spending and 45 per cent of total global military spending in 2007. While much of this increase is attributable to spending on military operations in Afghanistan and Iraq, the core military budget has also risen significantly.¹⁶ Many other states have also increased their military spending since 2001. Around two-thirds of countries that make data available increased their military spending annually between 2001 and 2006. Of the 121 countries for which such data was available, 88 had higher military spending in real terms in 2007 compared to 2001. The following regional trends can also be observed.

In Eastern Europe military expenditure rose by 162 per cent over the period 1998–2007, the highest increase in any subregion. It was also the region with the highest increase in 2007, at 15 per cent. Russia, with a 13 per cent increase in 2007, accounted for 86 per cent of this regional increase.

In North America military expenditure rose by 59 per cent over the period 1998–2007. This rise was driven almost exclusively by the recent increases in US military spending. By 2007, US spending was higher than at any time since World War II.

In the Middle East military expenditure rose by 62 per cent over the period 1998–2007. There have been strong increases in all Gulf Cooperation Council member states apart from the UAE. There have also been significant increases in military spending in Iran, Jordan and Lebanon.

In South Asia military expenditure rose by 57 per cent over the period 1998–2007. The upward trend was largely due to a real-terms increase of 64 per cent in Indian military spending.

In Africa military expenditure rose by 51 per cent over the period 1998–2007. This increase was largely driven by a 97 per cent increase in Algeria's military spending. While military budgets in much of Africa remain low by global standards, the economic burden that they represent can be considerable. For example, in 2005 military spending in Angola and Burundi represented 5.7 and 6.2 per cent of GDP, respectively, among the highest proportions in the world. Angola and Burundi also have some of the lowest human development indices.¹⁷

In East Asia military expenditure rose by 51 per cent over the period 1998–2007. Three countries increased their military spending by more than 50 per cent during this period: China, by 202 per cent, Indonesia, by 100 per cent, and Malaysia, by 153 per cent. While China increased its military spending threefold over the decade, its rapid economic growth, means that the economic burden of military spending is still moderate, at 2.1 per cent of GDP in 2006.

¹⁵ Stålenheim, Perdomo and Sköns (note 14), pp. 205–206.

¹⁶ Stålenheim, Perdomo and Sköns (note 14), 179–85.

¹⁷ Stålenheim, P., Perdomo, C. and Sköns, E., 'Military expenditure' *SIPRI Yearbook 2007: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2007), pp. 283–84.



The subregions with the lowest growth in military spending over the period 1998–2007 were Western Europe (6 per cent) and Central America (14 per cent).

IV. Recent trends in world arms production

The global arms industry, especially the production of modern major weapon systems and technologies, is dominated by North America and Western Europe, although significant capabilities also exist in Australia, China, Israel, Japan, South Korea and Russia. There are no available reliable estimates for the overall size of the global arms industry. However, SIPRI produces an annual list of the top 100 arms-producing companies (the SIPRI Top 100), which captures the majority of the financial value of the global arms industry.¹⁸

The global arms industry is dominated by North America and Western Europe

The total value of arms sales (military-specific goods and services) by the Top 100 companies was \$315 billion in 2006, a 60 per cent increase on the 2002 value (see table 9). This rapid rise is mostly linked to increases in US military expenditure. US-owned companies accounted for 63.5 per cent of the 2006 total and West European-owned companies accounted for 29.2 per cent. These shares have not changed greatly over the past few years.¹⁹

Following the end of the cold war the global arms industry contracted significantly due to the substantial decreases in military expenditure by both NATO members and former members of the Warsaw Treaty Organization. In the USA and Western Europe, while this decline led to substantial job losses, it took place at a fairly managed pace and was accompanied by large-scale consolidation of the industry. In the USA a few giant companies were formed through mergers such as those of Northrop and Grumman in 1994 and of Boeing and McDonnell-Douglas in 1997. In Europe consolidation led to the creation or rapid growth of BAE Systems in the UK, Thales in France, Finmeccanica in Italy, and the trans-European company EADS. These four companies are the only non-US companies among the world's 10 largest arms producers. In some countries, particularly the UK and the USA, the reductions in spending on military equipment were to some extent mitigated by the growth of outsourcing of services formerly performed by the military.²⁰

The period of post-cold war consolidation in the Western arms industry had largely ended by the early 2000s, which was also when US military expenditure began to increase significantly, especially following the terrorist attacks on the USA of 11 September 2001. The rapid growth of US military expenditure has led to increasing efforts by overseas companies to access the US markets through acquisitions of US companies. British companies, due to the UK's close political relationship with the USA, have been most successful in acquiring US companies. Led by BAE Systems, which is now one of the top 10 suppliers to the US Department of Defense, many British companies now

¹⁸ On the SIPRI Top 100 see <<http://www.sipri.org/contents/milap/>>. The list does not include companies based in China due to a lack of accessible data.

¹⁹ Perlo-Freeman, S. and Sköns, E., 'Arms production', *SIPRI Yearbook 2008* (note 14), pp. 256.

²⁰ On the transformation of the Western arms industries following the end of the cold war see Dunne, J. P. and Surry, E., 'Arms production', *SIPRI Yearbook 2006* (note 13).

Table 9. The total value of arms sales by the SIPRI Top 100 arms-producing companies, 2002–2006

	2002	2003	2004	2005	2006	2002–2006
<i>Arms sales at current prices and exchange rates</i>						
Total (\$ b.)	197	236	275	292	315	
Change (%)		20	16	6	8	60
<i>Arms sales at constant (2006) prices and exchange rates</i>						
Total (\$ b.)	240	268	292	302	315	
Change (%)		12	9	3	4	32

Source: SIPRI Arms Industry Database.

carry out as much or more of their operations in the USA as in the UK.²¹ Continental European companies have been far less able to make acquisitions in the USA, but in 2008 an Italian company broke this pattern with the acquisition for \$5.2 billion of DRS Technologies, a US military electronics company.²²

In Russia, the former Soviet arms industry virtually collapsed as Russian military spending fell to just 6 per cent of the former Soviet level. While in recent years the Russian industry has revived somewhat, helped by strong export performance, and is beginning to receive new injections of state capital and domestic orders, it still suffers from severe problems of aged equipment and obsolescent technologies.²³ The Russian arms industry is currently undergoing a major reorganization, with the creation of a few large state-owned holding companies to consolidate different sectors of the arms industry. These include the United Aircraft Corporation, the United Shipbuilding Corporation and Rostekhnologii.²⁴

Attempts by countries outside the traditional major producers to develop their own modern arms industries have typically had limited success. This is in large part due to the high technological barriers to producing modern major weapons systems and, in many cases, an inadequate civilian industrial base.²⁵ However, many countries are continuing efforts to increase their levels of autonomous capability in arms production, sometimes with increasing success.

China is increasingly able to produce a wide range of modern weapon systems, including fourth generation-plus combat aircraft, although in most areas it is still one to two generations behind the most advanced technology.²⁶ Israel has for some time now maintained an advanced arms industry. In some areas, such as unmanned aerial vehicles (UAVs), its technology is among the best in the world and is sold to major Western powers.²⁷ South Korea has

²¹ See Perlo-Freeman and Sköns (note 19), pp. 254–277. Company information extracted from annual corporate reports.

²² DRS Technologies, ‘Finmeccanica completes acquisition of DRS Technologies for 5.2 billion US dollars’, Press release, 22 Oct. 2008, <<http://www.drs.com/MediaCenter/1022press.aspx>>.

²³ On the state of the Russian arms industry after the cold war see Cooper, J., ‘Developments in the Russian arms industry’, *SIPRI Yearbook 2006* (note 13).

²⁴ On the reorganization of the Russian arms industry see Perlo-Freeman and Sköns (note 19), pp. 275–77.

²⁵ See e.g. Brzoska, M. and Ohlson, T. (eds), *SIPRI, Arms Production in the Third World* (Taylor & Francis: London, 1986).

²⁶ See e.g. Medeiros, E. et al., *A New Direction for China’s Defense Industry* (RAND Corporation: Arlington, VA, 2005).

²⁷ E.g. Israeli UAV technology is a key component of the UK’s Watchkeeper UAV programme.



had considerable success in a number of areas in recent years. In 2007 Turkey signed a \$459 million deal to buy 40 KT-1 Woong-Bee trainer aircraft from South Korea, reflecting the country's emergence as a significant arms exporter. India is pursuing a strategy of offsets to obtain technology transfers when importing arms, as a way of developing its indigenous capabilities. It is too early to judge how successful this strategy will be.²⁸ Brazil had the most successful arms industry in Latin America during the 1980s and was the 11th biggest supplier in the world for the period 1984–88. Its industry contracted rapidly in the early 1990s, but the Brazilian Government is placing a strong emphasis on revitalizing the sector. South Africa developed a significant military industry during the apartheid era and has sought to keep the sector going in the years since. As of 2008, Denel Group, South Africa's largest arms-producing company, had about 7300 employees.²⁹

While countries in other parts of the world may lack modern defence industries, they can still act as sources of surplus or second-hand equipment or of newly produced but less technologically advanced weapon systems, such as SALW and their ammunition. According to one estimate, at least 1249 companies in more than 90 countries are involved in some aspect of SALW production.³⁰ The means of producing weapons and military systems, particularly SALW, has spread through the licensed and unlicensed transfer of production facilities around the world. The level of technological know-how attained by the host country through licensed production is highly variable. In some cases the host country is responsible for no more than the final assembly of components made by the licensing country, while in other cases it may be used as a step towards mastering the full production process.

According to one estimate, 60–80 per cent of all military rifles, assault rifles and carbines are manufactured by producers that acquired the necessary technology from elsewhere.³¹ Examples of countries that lack a significant defence industry, but which nonetheless maintain some level of SALW production capacity, include Colombia, Indonesia, Jordan, Nigeria and Sudan.

The means of producing weapons has spread through the licensed and unlicensed transfer of production facilities

V. Recent trends in export control mechanisms

Arms export policies are policies that govern 'The dispatch of conventional weapons, weapon platforms and related equipment (that would normally be found on a military list of controlled goods) from one country to another'.³² Along with other defence- and security-related issues, the development and implementation of such policies is almost universally considered to be the exclusive prerogative of states. States have traditionally pursued widely

²⁸ On India's offsets policy see Indian Ministry of Defence (MOD), *Defence Procurement Procedure: Capital Procurement* (MOD: New Delhi, 2009).

²⁹ Denel, *Annual Report 2008* (Denel: Irene, n.d.), p. 4.

³⁰ 'Continuity and change: products and producers', *Small Arms Survey 2004: Rights at Risk* (Oxford University Press: Oxford, 2004), p. 7.

³¹ 'Multiplying the sources: licensed and unlicensed military production', *Small Arms Survey 2007: Guns and the City* (Cambridge University Press: Cambridge, 2007), p. 7.

³² Davis, I., SIPRI, *The Regulation of Arms and Dual-Use Exports: Germany, Sweden and the UK* (Oxford University Press: Oxford, 2002), p. xiv.

**Table 10.** Mandatory United Nations arms embargoes in force, as of 1 January 2009

Target	Instrument establishing embargo	Date passed
Al-Qaeda, Taliban and associated individuals and entities	Security Council Resolution 1390	16 Jan. 2002
Côte d'Ivoire	Security Council Resolution 1572	15 Nov. 2004
Democratic Republic of the Congo (NGF)	Security Council Resolution 1493	28 July 2003
Iran (technology related to nuclear weapon delivery systems)	Security Council Resolution 1737	23 Dec. 2006
Iraq (NGF)	Security Council Resolution 1483	22 May 2003
Lebanon (NGF)	Security Council Resolution 1701	11 Aug. 2006
Liberia	Security Council Resolution 1521	22 Dec. 2003
North Korea	Security Council Resolution 1718	14 Oct. 2006
Sierra Leone (NGF)	Security Council Resolution 1171	5 June 1998
Somalia	Security Council Resolution 733	23 Jan. 1992
Sudan (Darfur)	Security Council Resolution 1591	29 Mar. 2005

NGF = non-governmental forces.

Source: United Nations, 'UN Security Council Sanctions Committees', <<http://www.un.org/sc/committees/>>.

divergent arms export policies and, with the exception of multilateral arms embargoes, have been reluctant to give up any element of national control in this area.³³

Nonetheless, numerous states have also sought to increase the level of coordination and harmonization in this area—as a means of both increasing international standards and offsetting the commercial costs of maintaining a more restrictive system than other states. Such efforts have intensified in recent years. While they have largely focused on regional organizations such as the Organization for Security and Co-operation in Europe (OSCE) and the EU, the UN has also made extensive and long-standing efforts. Numerous UN Security Council and General Assembly resolutions have reiterated the importance of states maintaining functioning controls on the export of military goods. For example, under the 2001 Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects (POA), states have agreed to ensure that they have adequate laws, regulations and administrative procedures to control transfers of SALW.³⁴

Transfer prohibitions and guidelines

At present, arms embargoes imposed by the UN Security Council are the only global, legally binding prohibitions on arms transfers. UN arms embargoes are imposed by resolutions adopted under the authority of Chapter VII, Article 41, of the UN Charter. Like all Security Council resolutions, embargoes require the affirmative votes of at least nine of the 15 members of the Security Council, and each of the five permanent members (China, France, Russia, the UK and the USA; the P5) has a veto. As of 1 January 2009 there

³³ See Davis (note 32).

³⁴ United Nations, Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects, A/CONF.192/15, 20 July 2001, section II, para. 2. The POA was agreed during the UN Conference on the Illicit Trade in Small Arms and Light Weapons in All Its Aspects, which took place in New York on 9–20 July 2001. On the 2001 conference and the 2006 review conference see UN Department of Disarmament Affairs, 'Small arms and light weapons', <<http://disarmament.un.org/cab/salw.html>>.



were 11 mandatory UN arms embargoes in force (see table 10). However, according to the sanctions committees and panels of experts monitoring these embargoes, many UN arms embargoes have been repeatedly violated, by both states and private individuals.³⁵

The development of regional and global guidelines for conventional arms transfers has been on the international agenda since the 1920s. In 1925 the League of Nations produced a draft convention on the arms trade, but it was never adopted. While global conventions govern the transfer of nuclear, biological and chemical weapons, there is currently no equivalent, global mechanism covering the transfer of conventional weapons.³⁶

Many UN arms embargoes have been repeatedly violated, by both states and private individuals

During the cold war the two competing blocs and individual countries used conventional weapon transfers in order to establish or maintain spheres of influence. At the regional level, the coordination of export control policies was mainly focused on preventing transfers to members of the opposing bloc. For example, in 1949 the Western bloc formed the Coordinating Committee for Multilateral Export Controls (COCOM) to manage an embargo on transfers of arms and related technologies to the Eastern bloc. COCOM was disbanded in 1994.

In the early 1990s states concluded that the accumulation of major conventional weapons in Iraq in the period preceding the 1990 invasion of Kuwait had contributed to Iraq's decision to invade. Partly as a result, during the early and mid-1990s different state groupings developed several sets of guidelines or principles on arms transfers. Rather than targeting specific groups of states, they sought to lay down rules that would apply to all conventional arms transfers, regardless of their destination (see box 2).

In October 1991 the P5 adopted a set of guidelines for conventional arms transfers which called on the P5 and other arms exporters to export conventional arms only in line with the legitimate self-defence needs of recipients and appropriate and proportionate responses to security threats.³⁷ It was also agreed that transfers that were likely to prolong existing conflicts and tensions, introduce 'destabilizing accumulations' or contravene international commitments, such as arms embargoes, would be avoided. In November 1993 the OSCE reaffirmed its commitment to a similar set of principles governing conventional arms transfers.³⁸

³⁵ On the impact of UN arms embargoes see Fruchart, D. et al., *United Nations Arms Embargoes: Their Impact on Arms Flows and Target Behaviour* (SIPRI/Uppsala University: Stockholm, Nov. 2007).

³⁶ The transfer of nuclear weapons is prohibited by the Treaty on the Non-proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT), which was opened for signature on 1 July 1968 and entered into force on 5 Mar. 1970; the transfer of biological weapons is prohibited by the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (Biological and Toxin Weapons Convention, BTWC), which was opened for signature on 10 Apr. 1972 and entered into force on 26 Mar. 1975; and the transfer of chemical weapons is prohibited by the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (Chemical Weapons Convention, CWC), which was opened for signature on 13 Jan. 1993 and entered into force on 29 Apr. 1997.

³⁷ See Goldblat, J., *Arms Control: The New Guide to Negotiations and Agreements* (PRIO, SIPRI and Sage Publications: London, 2002), pp. 241–46.

³⁸ OSCE, 'Principles governing conventional arms transfers', FSC Journal no. 49, DOC.FSC/3/96, Vienna, 25 Nov. 1993.

**Box 2.** Internationally-agreed commitments to prevent destabilizing accumulations of conventional arms

- Five Powers Communiqué, 8–9 July 1991^a
- Five Power Guidelines for Conventional Arms Transfers, 17–18 October 1991^a
- OSCE Principles Governing Conventional Arms Transfers, 23 November 1993^b
- United Nations Guidelines for International Arms Transfers, 1996^c
- European Union Common Rules Governing Control of Exports of Military Technology and Equipment, 1998/2008^d
- OSCE Document on Small Arms and Light Weapons, 24 November 2000^b

^a Goldblat, J., *Arms Control: The New Guide to Negotiations and Agreements*, 2nd edn (Sage: London, 2002), pp. 242–43.

^b Organization for Security and Co-operation in Europe (OSCE), <<http://www.osce.org/fsc/13281.html>>.

^c United Nations, General Assembly, Report of the Disarmament Commission, A/51/42(SUPP), 22 May 1996, annex I.

^d Council Common Position 2008/944/CFSP of 8 Dec. 2008, *Official Journal of the European Union*, L335, 13 Dec. 2008.

Other principles emphasized in these guidelines include the need to prevent transfers that might contribute to destabilizing military build-ups, prolong or aggravate an armed conflict, or fall into the hands of terrorists. However, the guidelines lack enforcement mechanisms, and their interpretation has been left entirely at the discretion of individual states. Concerns such as these have played a significant role in the recent push for the development of an international arms trade treaty. A 2006 draft UN General Assembly resolution states that the ‘absence of common international standards on the import, export and transfer of conventional arms is a contributory factor to conflict, the displacement of people, crime and terrorism’.³⁹

Export control regimes and other regional mechanisms

The post cold-war period has also seen the development of more formal mechanisms aimed at coordinating the policies of supplier and recipient states. These mechanisms involve the application of guidelines and principles, but they also include some level of coordination between the states involved to try to ensure some level of harmonization in how they are implemented. Other mechanisms cover exports of missiles (e.g. the Missile Technology Control Regime), nuclear technologies (e.g. the Nuclear Suppliers Group) and chemical and biological agents (e.g. the Australia Group).

The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies was established in 1996 in an attempt to replicate some of the benefits of COCOM but on a broader and non-adversarial basis. It currently has 40 participating states, including Russia, the USA, most members of NATO and most former members of the Warsaw Treaty Organization. The Wassenaar Arrangement was designed to promote transparency and responsibility in transfers of arms and dual-use items in order to prevent ‘destabilizing accumulations’.⁴⁰ Participating states exchange information on their exports and discuss policies on particular regions or destinations.

³⁹ United Nations, General Assembly, First Committee, ‘Towards an arms trade treaty: establishing common international standards for the import, export and transfer of conventional arms’, Draft resolution, A/C.1/61/L.55, 12 Oct. 2006.

⁴⁰ Wassenaar Arrangement, ‘Introduction’, <<http://www.wassenaar.org/introduction/>>.



The EU's Common Rules Governing Control of Exports of Military Technology and Equipment (known as the Code of Conduct on Arms Exports until 2008) was first formally adopted in June 1998.⁴¹ It consists of eight criteria on which EU member states should base their export licensing decisions, relating to issues such as conflict prevention, human rights and economic development. Under the EU Common Rules, governments agree to exchange, in confidence, information on any application for an export licence that is denied, including the reasons for the refusal. If a member state is considering granting an export licence for a transaction that it believes might be 'essentially identical' to one that has previously been denied, then it is obliged to consult the state that previously issued the denial in order to clarify the situation.

In 1998 members of the Economic Community of West African States (ECOWAS) adopted a moratorium on the manufacture, importation and exportation of SALW.⁴² A 2002 evaluation report highlighted a number of weaknesses in the moratorium and cases where certain states had failed to uphold its principles.⁴³ In response, the ECOWAS Convention on Small Arms and Light Weapons, Their Ammunition and Other Related Materials was adopted in June 2006. The convention retains the moratorium's prohibition on SALW imports, but states can apply to the ECOWAS Commission for exemptions 'in order to meet legitimate national defence and security needs, or to participate in peace support or other operations'.⁴⁴ The convention also requires that participating states provide detailed information to the ECOWAS Commission on any SALW import.

Transparency mechanisms

According to a 1991 UN report:

There are many types of information of arms transfers that could be included in measures to promote transparency. The most important criteria for the choice of types of information are political acceptability and relevance for the achievement of transparency. Some of the possible characteristics are the following: (a) Supplier and recipient; (b) Final user; (c) Date of agreement and/or date of delivery; (d) Type of arms, components, knowledge or services transferred; (e) Basic performance characteristics of the arms or components transferred;

⁴¹ Council Common Position 2008/944/CFSP of 8 Dec. 2008 defining common rules governing control of exports of military technology and equipment, *Official Journal of the European Union*, L335, 13 Dec. 2008; and Council of the European Union, EU Code of Conduct on Arms Exports, 8675/2/98 Rev. 2, Brussels, 5 June 1998. See also Bromley, M., *The Impact on Domestic Policy of the EU Code of Conduct on Arms Exports: The Czech Republic, the Netherlands and Spain*, SIPRI Policy Paper no. 21 (SIPRI: Stockholm, May 2008).

⁴² ECOWAS, Declaration of a Moratorium on Importation, Exportation, and Manufacture of Light Weapons in West Africa, Abuja, 31 Oct. 1998. The moratorium came into effect on 1 Nov. 1998 for an initial period of 3 years.

⁴³ Berkol, I., 'Analysis of the ECOWAS convention on small arms and light weapons and recommendations for the development of an Action Plan', Note d'Analyse, Groupe de recherche et d'information sur la paix et la sécurité (GRIP), 1 Apr. 2007, <<http://www.grip.org/bdg/pdf/g1071en.pdf>>.

⁴⁴ The ECOWAS Convention on Small Arms, Light Weapons, Their Ammunition and Other Related Materials was adopted by on 14 June 2006; as of 1 Apr. 2009 it had not been ratified by the 9 states required for it to enter into force.

Table 11. Reporting to the UN Register of Conventional Arms, by region, 2005–2007

Region	2005	2006	2007	2005–2007
Africa	17	16	9	23
Americas	23	21	13	27
Asia and Oceania	35	33	25	42
Europe	42	43	43	44
Total	117	113	90	136

Source: UNROCA online database, <http://disarmament.un.org/UN_REGISTER.nsf>.

(f) Quantity of arms or components transferred; (g) Financial terms; (h) Technical support and training arrangements.⁴⁵

Since the early 1990s an increasing number of national, regional and international transparency mechanisms in the field of arms exports have been developed. As well as providing the impetus for the P5 to agree a set of guidelines to prevent destabilizing accumulations of arms and conflict (see above), the 1991 Gulf War also boosted efforts within the UN General Assembly to increase the transparency of international arms transfers.⁴⁶ Meanwhile, several states, particularly in Europe, have responded to parliamentary and public pressure for greater oversight of national arms export policies and have begun to publish national reports on their arms exports.

The UN Register of Conventional Arms was established in December 1991 ‘to prevent excessive and destabilizing accumulation of arms . . . in order to promote stability and strengthen regional or international peace and security [and to] enhance confidence, promote stability, help states to exercise restraint, ease tensions and strengthen regional and international peace and security’.⁴⁷ Each year states are requested to submit to UNROCA information on their imports and exports of certain categories of major conventional weapons. For the years 2005–2007, 23 states from Africa, 27 states from the Americas, 39 states from Asia and the Pacific and 44 states from Europe reported (see table 11). As of 1 January 2009, only 90 states had submitted data on their imports or exports during 2007, almost half of which came from Europe.

As of 1 January 2008, 31 states had published at least one national report on arms exports, compared with 6 states as of January 1998.⁴⁸ For the most part,

⁴⁵ United Nations, General Assembly, ‘Study on ways and means of promoting transparency in international transfers of conventional arms’, Report of the Secretary-General, A/46/301, 9 Sep. 1991, para. 116.

⁴⁶ Wagenmakers, H., ‘The UN Register of Conventional Arms: the debate on the future issues’, *Arms Control Today*, Oct. 1994, p. 8.

⁴⁷ UN General Assembly Resolution A/RES/46/36L, 6 Dec. 1991. Several studies have analysed the rationale for and developments surrounding the establishment of UNROCA. See e.g. Chalmers, M., Donowaki, M. and Greene, O. (eds), *Developing Arms Transparency: The Future of the UN Register*, Bradford Arms Register Studies no. 7 (University of Bradford: Bradford, 1997); Laurance, E. J., Wezeman, S. T. and Wulf, H., *Arms Watch: SIPRI Report on the First Year of the UN Register of Conventional Arms*, SIPRI Research Report no. 6 (Oxford University Press: Oxford, 1993); and Wulf, H., ‘The United Nations Register of Conventional Arms’, *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993). Records of the documents and discussions on UNROCA in the UN General Assembly’s First Committee can be found in Miller, C. D., *The United Nations Register of Conventional Arms: Origins and Evolution 1988–1994* (Monterey Institute of International Studies: Monterey, CA, [1995]).

⁴⁸ Links to national reports on arms exports to UNROCA are available at <http://www.sipri.org/contents/armstrad/atlinks_gov.html>.



the decision to publish these national reports resulted from pressure from parliaments and non-governmental organizations for greater oversight of the governments' implementation of their arms export policies. The force of these demands increased following a spate of arms export related scandals in the 1970s, 1980s and 1990s.⁴⁹ The quality of the information contained in these reports varies, but at a minimum the report tend to include information on the number of licences issued, broken down by destination and value.

Under the EU Common Rules (see above) states are asked to submit data on the financial value of arms export licences issued and actual arms exports, broken down by destination and by EU Military List category. The data on licences and exports, along with aggregated data on denials, is compiled in a publicly available annual report. For the 10th of these annual reports, published in 2008, 16 of the 27 EU member states submitted data for all requested categories.⁵⁰

VI. Conclusions

National governments remain ultimately responsible for permitting or denying the export of arms and military equipment. There is broad international agreement that arms export decision-making processes should take account of the need to guard against diversion and to avoid supplying arms to zones of conflict or contributing to destabilizing accumulations. However, domestic economic and political implications, as well as foreign and security policy priorities and implications, also continue to play a significant role.⁵¹ These are important considerations for those currently promoting the viability of an international arms trade treaty with legally binding guidelines.

The prevention of illicit and destabilizing arms transfers is a global concern

While the international production and trade in weapons is dominated by a number of key suppliers and recipients, several states are devoting significant time and resources to upgrading their arms production capabilities. Meanwhile, a large number of states can, and do, act as suppliers of either second-hand equipment or newly produced but less technologically advanced weapon systems, such as SALW and their related ammunition. The prevention of illicit and destabilizing arms transfers is a global concern that requires the active engagement of all members of the international community.

One of the most innovative outcomes of the ATT initiative could be the development of mechanisms to monitor and verify compliance. If implemented, these measures would remedy one of the major shortcomings of existing transfer control arrangements by increasing levels of international transparency. Considerable advances have been made in this field in recent years with the creation and further development of several national, regional and international reporting mechanisms. However, levels of reporting remain uneven and mostly focused on specific geographic areas, such as Europe.

⁴⁹ Marriano, B. and Urquart, A., 'Transparency and accountability in European arms export controls: towards common standards and best practices' (Saferworld: London, Dec. 2000), p. 3.

⁵⁰ Council of the European Union, Tenth Annual Report according to Operative Provision 8 of the European Code of Conduct on Arms Exports, *Official Journal of the European Union*, C300, 22 Nov. 2008.

⁵¹ See e.g. Stockholm International Peace Research Institute, *The Arms Trade with the Third World* (Almqvist and Wiksell: Stockholm, 1971), pp. 17–41.

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STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

Signalistgatan 9
SE-169 70 Solna, Sweden
Telephone: +46 8 655 97 00
Fax: +46 8 655 97 33
Email: sipri@sipri.org
Internet: www.sipri.org

SIPRI BACKGROUND PAPER

RECENT TRENDS IN THE ARMS TRADE

MARK BROMLEY, PAUL HOLTOM, SAM PERLO-FREEMAN AND
PIETER D. WEZEMAN

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ABOUT THE AUTHORS

Mark Bromley (United Kingdom) is a Researcher with the SIPRI Arms Transfers Programme.

Dr Paul Holtom (United Kingdom) is Leader of the SIPRI Arms Transfers Programme.

Dr Sam Perlo-Freeman (United Kingdom) is a Senior Researcher with the SIPRI Military Expenditure and Arms Production Programme.

Pieter D. Wezeman (the Netherlands) is a Senior Researcher with the SIPRI Arms Transfers Programme.