

7. International arms transfers

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I. Introduction

The volume of international transfers of major conventional weapons continues to increase. The upward trend in the volume of deliveries that began in 2005 continued in 2009, and the average annual level for the period 2005–2009 was 22 per cent higher than the annual average for 2000–2004 (see figure 7.1).¹

The five largest suppliers for 2005–2009—the United States, Russia, Germany, France and the United Kingdom—accounted for 76 per cent of the volume of exports of major conventional weapons, down from 80 per cent in 2000–2004 (see table 7.1). Although the dominant position of the USA and Russia as by far the largest suppliers of arms is unlikely to be challenged in the near future, the number of second-tier arms suppliers is growing. Several governments in major arms-exporting states are making high-level political visits to potential recipients and establishing or reorganizing arms export promotion agencies to assist their domestic arms industries in securing export contracts.² Section II of this chapter details significant developments among the main supplier states in 2009.

The major recipient region for the period 2005–2009 was Asia and Oceania (41 per cent of all imports), followed by Europe (24 per cent), the Middle East (17 per cent), the Americas (11 per cent) and Africa (7 per cent). The major recipient countries for 2005–2009 were China (9 per cent), India (7 per cent), South Korea (6 per cent), the United Arab Emirates (UAE, 6 per cent) and Greece (4 per cent). In the period 2005–2009 the volume of arms transferred to China was 20 per cent lower than in 2000–2004 and to India was 7 per cent lower.

Recent acquisitions by certain states in Latin America, the Middle East, North Africa and South East Asia suggest that a pattern of reactive arms

¹ SIPRI data on arms transfers refers to actual deliveries of major conventional weapons. SIPRI uses a trend-indicator value (TIV) to compare the data on deliveries of different weapons and to identify general trends. TIVs give an indication only of the volume of international arms transfers and not of the actual financial values of such transfers. Since year-on-year deliveries can fluctuate, a 5-year moving average is employed to provide a more stable measure of trends. For a description of the TIV and its calculation see appendix 7A and the SIPRI Arms Transfers Programme website at <<http://www.sipri.org/databases/armstransfers/background>>.

² On developments in arms production see chapter 6 in this volume.

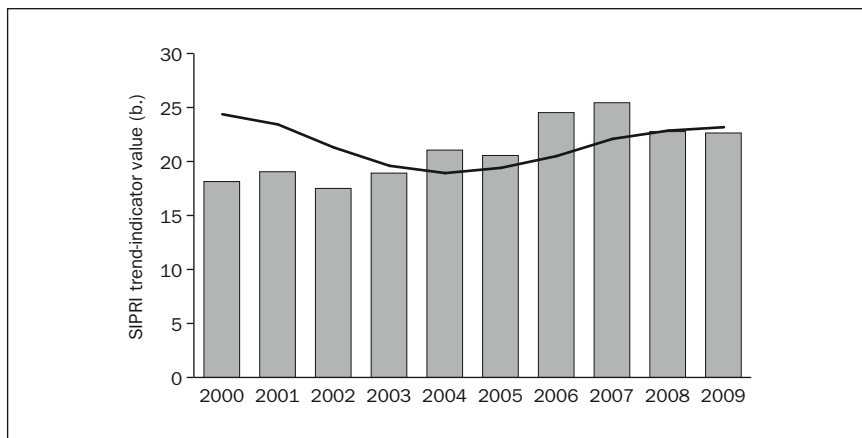


Figure 7.1. The trend in international transfers of major conventional weapons, 2000–2009

Note: 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. See appendix 7A for an explanation of the SIPRI trend-indicator value.

Source: SIPRI Arms Transfers Database, as of 12 Feb. 2010, <<http://www.sipri.org/databases/armstransfers/>>.

acquisitions is emerging, that could develop into regional arms races. There have been significant increases in the volume of arms imported by Israel (102 per cent), Singapore (147 per cent) and Algeria (102 per cent). While these three states were not among the 10 largest arms importers for the period 2000–2004, they ranked sixth, seventh and ninth for 2005–2009, respectively. To illustrate the concerns raised by these trends, section III of this chapter examines arms transfers to North Africa.

Iraqi armed forces are re-equipping themselves following the 2003 invasion and subsequent conflict. The United Nations arms embargo on the Iraqi Government was lifted in 2004, and in 2005–2009 Iraq was the 24th largest recipient of major conventional arms.³ As the country prepares for the final withdrawal of foreign armed forces, section IV discusses international transfers to the Iraqi armed forces.

Section V presents conclusions.

Appendix 7A explains the methodology behind SIPRI's data collection and the trend-indicator value used to measure the volume of arms transfers. It provides trend-indicator value (TIV) data on all recipients and suppliers of major conventional weapons for the period 2005–2009.⁴ Although an estimate of the total financial value of the global arms trade in 2008

³ On developments in multilateral arms embargoes see appendix 12A in the volume.

⁴ On TIV see note 1.

Table 7.1. The five largest suppliers of major conventional weapons and their main recipients, 2005–2009

| Supplier | Share of global arms exports (%) | Main recipients (share of supplier's transfers, %) | | |
|----------|----------------------------------|--|----------------|-------------------|
| | | 1st | 2nd | 3rd |
| USA | 30 | South Korea (14) | UAE (11) | Israel (11) |
| Russia | 23 | China (35) | India (24) | Algeria (11) |
| Germany | 11 | Turkey (14) | Greece (13) | South Africa (12) |
| France | 8 | UAE (25) | Singapore (21) | Greece (12) |
| UK | 4 | USA (23) | India (15) | Saudi Arabia (10) |

UAE = United Arab Emirates.

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

cannot be given, appendix 7B presents official data on the financial value of orders, export licences and arms exports for 1999–2008. Appendix 7C describes the current status of existing mechanisms for international public transparency in arms transfers. Except where indicated, the information on deliveries and contracts referred to in this chapter is taken from the SIPRI Arms Transfers Database.⁵

II. Major supplier developments, 2009

The United States

In August 2009 US President Barack Obama initiated a comprehensive review of the US export control system.⁶ It remains unclear when this review will be completed or what impact it will have on US transfers of arms, military equipment and related technologies. In its first year in office, the Obama Administration showed little sign of departing from the preceding Administration of President George W. Bush regarding the supply of arms to states long-regarded as allies in regions of tension or involved in efforts to combat international terrorism. The USA continues to restrict transfers of technology to key allies (e.g. technology associated with the F-35 Joint Strike Fighter, JSF, combat aircraft programme). By early 2010

⁵ The SIPRI Arms Transfers Database, available at <http://www.sipri.org/databases/arms_transfers/>, contains data on all transfers of major conventional weapons between 1950 and 2009. The data for 2005–2009 and for 2009 on which most of this chapter is based is given in the 'Register of major conventional weapon transfers, 2009' and the 'Register of major conventional weapons, 2005–2009', which are available at <http://www.sipri.org/databases/armstransfers/recent_trends>. The data on which this chapter is based is valid as of 12 Feb. 2010. The figures in this chapter may differ from those in previous editions of the SIPRI Yearbook because the SIPRI Arms Transfers Database is updated annually.

⁶ White House, Statement of the press secretary, 13 Aug. 2009, <http://www.whitehouse.gov/the_press_office/Statement-of-the-Press-Secretary/>.

the US Congress had still not ratified defence cooperation treaties agreed in 2007 with the UK and Australia.

For 2005–2009, Asia and Oceania accounted for 39 per cent of US deliveries of major conventional weapons, followed by the Middle East (36 per cent) and Europe (18 per cent).⁷ South Korea was the largest recipient of US exports of major conventional weapons for 2005–2009 (see table 7.1). The USA delivered 40 F-15K combat aircraft and advanced air-to-air and air-to-surface missiles to South Korea in this period, with 21 more F-15Ks on order. In addition, it continues to provide equipment for South Korea's indigenously built destroyers and frigates.

Pakistan accounted for around 3 per cent of US exports for 2005–2009. Most of these deliveries were provided as aid for use in counterterrorism efforts. US military (and economic) aid to Pakistan was secured with the Enhanced Partnership with Pakistan Act in October 2009.⁸ This act makes the provision of aid conditional on Pakistan increasing its cooperation with the USA in combating al-Qaeda and the Taliban. This conditionality has drawn criticism from the Pakistani military leadership and media, which have expressed concern that it infringes on Pakistan's sovereignty.⁹ Although the USA accounted for 35 per cent of Pakistan's arms imports for 2005–2009, China was Pakistan's largest supplier for this period, accounting for 37 per cent of imports. China's share is likely to grow in the future. In 2009, for example, while the USA delivered the first of 18 F-16C combat aircraft, China delivered the first of 42 JF-17 combat aircraft, with Pakistan planning to acquire up to a total of 300 JF-17 and 36 J-10 combat aircraft from China.

The Obama Administration approved upgrades for Taiwan's Patriot surface-to-air missile (SAM) systems and the delivery of associated Patriot Advanced Capability-3 (PAC-3) missiles, which have an anti-ballistic missile (ABM) capability.¹⁰ These sales were agreed by the Bush Administration in 2008 and are part of a package of deals that have been under discussion since 2001.¹¹ The USA has not yet decided on a further Taiwan-

⁷ See table 7A.4 in appendix 7A.

⁸ Enhanced Partnership with Pakistan Act, US Public Law 111-73, signed into law 15 Oct. 2009. US aid is either in the form of donations of surplus equipment or as financing of Pakistani orders for new equipment from the USA. For the latter, the USA budgeted in 2005–2009 c. \$1.5 billion in aid. Lum, T., *U.S. Foreign Aid to East and South Asia: Selected Recipients*, Congressional Research Service (CRS) Report for Congress RL31362 (US Congress, CRS: Washington, DC, 8 Oct. 2008).

⁹ Bokhari, F., 'Pakistan generals voice concern over US accord', *Jane's Defence Weekly*, 21 Oct. 2009, p. 7; and Rizvi, H.-A., 'Limited options', *Daily Times* (Lahore), 4 Oct. 2009.

¹⁰ White, A., 'US, Taiwan agree \$3.2bn Patriot deal', *Jane's Defence Weekly*, 26 Aug. 2009, p. 15.

¹¹ See Wezeman, S. T., Bromley, M. and Wezeman, P. D., 'International arms transfers', *SIPRI Yearbook 2009*, p. 303.

ese request for 66 F-16C combat aircraft. As in previous cases of US arms sales to Taiwan, China has strongly protested.¹²

Israel and the UAE were the main destinations of US arms exports to the Middle East, each accounting for 11 per cent of US deliveries for 2005–2009. The last of 102 F-16I combat aircraft ordered by Israel in 1999 and 2001 was delivered in 2009. Although Israel currently has no outstanding orders of comparable size, negotiations are ongoing for an order for up to 100 F-35 combat aircraft. Israel will remain a major recipient of US arms and military equipment because it receives substantial financial aid to buy US military equipment.¹³

In 2009 the USA delivered 18 AH-64D combat helicopters to the UAE. The UAE also placed preliminary orders for 12 C-130J and 6 C-17 transport aircraft that could be used to support coalition troops in Afghanistan.¹⁴ In 2008 it ordered Patriot SAM systems with PAC-3 missiles and is close to signing an order for the more advanced Terminal High-Altitude Area Defence (THAAD) ABM SAM system—acquisitions that have been made in response to a perceived threat from Iranian ballistic missiles. Several other Middle Eastern countries have recently ordered or announced plans to buy ABM SAM systems from the USA. Kuwait has ordered a modernization of its Patriot SAM systems and requested PAC-3 missiles. The Patriot SAM systems with PAC-3 missiles are among the systems being offered for Turkey's long-range air and missile defence systems (T-LORAMIDS) programme.¹⁵

Aircraft accounted for around 70 per cent of US exports of major conventional weapons in the period 2005–2009. The USA delivered 292 F-16 and 48 F-15 combat aircraft to 11 countries in 2005–2009.¹⁶ The USA is currently the only country offering a fifth-generation combat aircraft already

¹² Phipps, G., 'US to outline Taiwan defence package'; and Grevatt, J., '... as China raises spectre of embargo over Patriot sale', *Jane's Defence Weekly*, 13 Jan. 2010, p. 5.

¹³ US President Obama requested \$2.775 billion in foreign military financing (FMF) aid for Israel for US FY 2010, in line with an agreement made by the Bush Administration in 2007 to increase FMF aid annually to reach \$3 billion in 2012. Sharp, J. M., *U.S. Foreign Aid to Israel*, Congressional Research Service (CRS) Report for Congress RL33222 (US Congress, CRS: Washington, DC, 4 Dec. 2009). See also Stålenheim, P., Perdomo, C. and Sköns, E., 'Military expenditure', *SIPRI Yearbook 2008*, pp. 202–205.

¹⁴ US Defense Security Cooperation Agency, 'United Arab Emirates: logistics support for C-17 Globemaster Aircraft', Transmittal no. 09-61, News release, 18 Dec. 2009; and US Defense Security Cooperation Agency, 'United Arab Emirates: logistics support and training for 12 C-130J-30 Aircraft', Transmittal no. 09-67, News release, 28 Dec. 2009, <http://www.dsca.mil/PressReleases/36-b/36b_index.htm>.

¹⁵ There have been conflicting reports over whether or not China and Russia would participate in this project. France is reportedly interested. Kemal, L., 'China, Russia decline to bid for Turkey's missile project', *Today's Zaman*, 8 Dec. 2009; and 'European manufacturer to enter Turkish missile tender', *Today's Zaman*, 6 Feb. 2010.

¹⁶ The recipients were Chile, Greece, Israel, Jordan, South Korea, Oman, Pakistan, Poland, Portugal, Singapore and the UAE.

in production for export—the F-35 combat aircraft.¹⁷ In 2009 the Netherlands and the UK ordered their first F-35s as part of the final development phase, while Australia selected the F-35 as its future combat aircraft.¹⁸

Access to US technology remains a problem in the USA's relations with close allies. Several partners in the F-35 programme have been informed that they would not be granted access to software to maintain or modify their F-35s.¹⁹ Despite these restrictions, both the Dutch and Norwegian defence ministries continue to support the purchase of the F-35 over other combat aircraft.²⁰ The USA's refusal to share technology gives other suppliers an edge over the USA in competitions for combat aircraft. For example, in the ongoing competitions for new combat aircraft in Brazil and India, competitors from Western Europe and Russia are willing to offer extensive technology transfers and access to software codes.²¹ Suppliers that are able to offer combat aircraft without any US components may win orders from countries interested in developing an indigenous aircraft industry with export potential.²²

Russia

Asia and Oceania accounted for 69 per cent of the volume of major conventional weapons exported from Russia for the period 2005–2009, followed by Africa (14 per cent), the Americas (8 per cent) and the Middle East (6 per cent). Combat aircraft accounted for 40 per cent of the volume of Russian exports during this period. It is expected that deliveries of major

¹⁷ Although there is no agreed definition for '5th generation' combat aircraft, it is generally agreed that its key attributes are a high level of stealth (including weapons carried internally), advanced sensors integrated into a wider network and a 'super cruise' ability (i.e. the ability to fly a prolonged period faster than the speed of sound). Currently, the only aircraft in service meeting those requirements is the US F-22, which is not available for export. The Russian Sukhoi PAK FA, to be produced in cooperation with India, made its first flight in late 2009. For a brief discussion of the scope of the F-35 programme see Wezeman, S. T. et al., 'International arms transfers', *SIPRI Yearbook 2007*, pp. 390–91.

¹⁸ Australian Department of Defence (DOD), *Defending Australia in the Asia Pacific Century: Force 2030, Defence White Paper 2009* (DOD: Canberra, 2009), p. 78.

¹⁹ Kerr, J., 'Australia orders first batch of F-35As', *Jane's Defence Weekly*, 2 Dec. 2009, p. 5. Countries that have contributed funding to the programme include Australia, Canada, Denmark, Italy, the Netherlands, Norway, Turkey and the UK.

²⁰ Norwegian Ministry of Defence, 'The Joint Strike Fighter recommended to replace the F-16', Press Release no. 80/2009, 20 Nov. 2008, <<http://www.regjeringen.no/en/dep/smk/press-center/Press-releases/2008/the-joint-strike-fighter-recommended-to-.html?id=537010>>; and 'Minister says not buying JSF could cost millions', *Radio Netherlands*, <<http://www.defpro.com/news/details/6843/>>, 16 Apr. 2009.

²¹ Anderson, G. and Caffrey, C., 'Final offers submitted for Brazil's F-X2', *Jane's Defence Weekly*, 14 Oct. 2009, p. 10; and Leclercq, M., 'Brazil to assemble French fighters for Latin market', *Agence France-Presse*, 7 Sep. 2009.

²² E.g. the fact that the Swedish Gripen-NG offered to Brazil has a US engine was brought up as a liability in the Brazilian combat aircraft competition. In 2005 the USA prevented Brazil from selling 24 Super Tucano light combat aircraft to Venezuela because they contained US-made components. 'Brazil won't buy off-the-shelf arms like Venezuela: minister', *Agence France-Presse*, 16 Sep. 2009.

conventional weapons to China will continue to decline as its domestic arms industries are increasingly able to meet domestic procurement needs. In addition, Russia faces increased competition for Indian orders from Israel, the USA and European suppliers. Russian President Dmitry Medvedev has announced his support for the joint development and production of military products with other countries to help 'strengthen our ties with these states'.²³ Russia has also attempted to increase its competitiveness in Latin America, the Middle East and North Africa by offering payments through barter, Russian participation in economic projects, credit and exchanges of debt for arms.²⁴

Despite decreasing arms sales to China, Rosoboronexport—the Russian state arms export agency—announced in 2009 that China remains interested in Russian military transport and tanker aircraft, aircraft engines, and air-defence and naval systems.²⁵ Yet the November 2009 meeting of the Russian–Chinese Joint Commission on Military-Technical Cooperation concluded with no significant new deals.²⁶ In contrast, Ukraine signed a contract worth an estimated \$350 million to supply four Zubr air-cushion landing craft to China.²⁷ Earlier reports had suggested that China planned to order up to 10 of these craft from Russia.²⁸

Russia accounted for 77 per cent of India's arms imports for 2005–2009, followed by the UK (8 per cent) and Israel (5 per cent). In March 2010 it was announced that the Indian Government had agreed to pay \$2.3 billion for the modernized *Gorshkov* aircraft carrier, with delivery rescheduled for 2012.²⁹ Russia will also deliver an Akula-II nuclear submarine on a lease to the Indian Navy in the second half of 2010.³⁰ In October 2009 India and Russia concluded a 10-year bilateral agreement on military-technical cooperation (for 2011–20) under which commitments were made for the joint development of helicopters, infantry fighting vehicles and a fifth-

²³ 'Medvedev backs co-production of Russian arms with other countries', RIA Novosti, 11 June 2009, <<http://en15.rian.ru/russia/20090611/121955938.html>>; and 'Russian arms exports to grow by up to \$800 mln in 2009', RIA Novosti, 27 May 2009, <<http://en.rian.ru/russia/20090527/155102926.html>>.

²⁴ Chernyak, I., [Kalashnikov series: the general director of Rosoboronexport, Anatoly Isaikin: despite the crisis, our arms exports set records], *Rossiiskaya gazeta*, 10 Apr. 2009.

²⁵ Solovev, V., [Rosoboroneksport strengthens its position], *Nezavisimoe Voennoe Obozrenie*, 6 Feb. 2009.

²⁶ Mukhin, V., [Russian–Chinese arms embargo], *Nezavisimaya gazeta*, 30 Nov. 2008.

²⁷ Two will be built in Ukraine and two in China. [FSC More' to build Zubr amphibious hovercraft for PRC: minister of industrial policy], Interfax, 7 Aug. 2009.

²⁸ Minnick, W., 'China to buy armed hovercraft', *Defense News*, 11 Sep. 2006, p. 48.

²⁹ The sum had reportedly been agreed in Dec. 2009. 'Aircraft carrier Admiral *Gorshkov*', Press Information Bureau of India, 15 Mar. 2010, <<http://www.pib.nic.in/release/release.asp?relid=59626&kwid=/fn>>; and Luthra, G. R., '*Gorshkov* price is settled with Russia at \$2.3 billion', *Thaindian News*, 17 Dec. 2009 <http://www.thaindian.com/newsportal/business/gorshkov-price-is-settled-with-russia-at-23-billion_100290643.html>.

³⁰ Solovyov, D., 'Russia to lease nuclear submarine to India—report', Reuters, 12 Jan. 2010.

generation combat aircraft.³¹ At the same time, the USA's efforts to increase its share of the Indian defence market were rewarded in 2009 when India and the USA overcame disagreements over end-use monitoring provisions for contracts for six C-130J transport aircraft and eight P-8A maritime patrol aircraft agreed in 2008. This demonstrated that India and the USA can accommodate each other's requirements to facilitate arms transfers, increasing competition for Indian defence orders.

Russia secured deals with Viet Nam in 2009 for eight Su-30MK combat aircraft and six Type-636 (Kilo Class) submarines. Viet Nam exercised an option to purchase 12 more Su-30MKs in February 2010.³² The arrangement for securing orders from Viet Nam is believed to be comparable to that used to secure a major deal with Algeria in 2006.³³ In this case, Russia is cancelling Viet Nam's debt and helping the country to modernize its shipbuilding industry; in exchange, Viet Nam will purchase Russian arms and provide Russia with access to oil.³⁴

Venezuela accounted for 7 per cent of Russian arms exports for 2005–2009 and was Russia's fourth largest recipient. In September 2009 Venezuela received a \$2.2 billion credit for arms purchases after officially recognizing the independence of Abkhazia and South Ossetia. While most reports mention a firm deal for 92 T-72M1M tanks, it is not clear what the remainder of the credit will be used to purchase. Much attention has been paid to statements by Venezuelan President Hugo Chávez that suggest that air-defence systems are a priority, while other armoured vehicles and various artillery systems are also rumoured to be covered by the credit arrangement.³⁵

Russia has targeted the Middle East as a potential market for air defence equipment, armoured vehicles and aircraft. In 2009 it announced high hopes for a deal worth at least \$2 billion to supply helicopters, tanks, armoured vehicles and air-defence systems to Saudi Arabia.³⁶ Saudi Arabia is reportedly tying the deal to a Russian guarantee not to deliver five S-300

³¹ The 10-year agreement was signed by Indian Prime Minister Manmohan Singh and President Medvedev in Dec. 2009. 'Defence pact with Russia to boost defence capability: India', *Hindustan Times*, 8 Dec. 2009; Majumdar, B., 'India, Russia agree arms pact likely worth \$5 bln', Reuters, 15 Oct. 2009; and 'Russia, India to jointly develop 5th-generation fighter', RIA Novosti, 15 Oct. 2009, <<http://en.rian.ru/russia/20091015/156475971.html>>.

³² 'Russia, Vietnam sign fighter jet deal—report', Agence France-Presse, 10 Feb. 2010.

³³ Wezeman et al. (note 18), p. 395.

³⁴ Grevatt, J., 'Oil, debt underpin Russian submarine sale to Vietnam', *Jane's Defence Weekly*, 6 May 2009, p. 19.

³⁵ 'Chavez announces Russian missile purchase', Agence France-Presse, 11 Sep. 2009; Toothtaker, C., 'Venezuela gets \$2.2B in credit for Russian arms', Associated Press, 13 Sep. 2009; Daniel, F. J. and Rondon, P., 'Venezuela buys powerful missiles with Russian loan', Reuters, 13 Sep. 2009; 'Venezuela to build strong air defenses with Russian aid', RIA Novosti, 14 Sep. 2009, <http://en.rian.ru/military_news/20090914/156118402.html>; and Nikol'skii, A., [Smerch to shield Venezuela], *Vedomosti*, 15 Sep. 2009. See also chapter 5, section III, in this volume.

³⁶ 'Russia, Saudi Arabia "set to finalise arms deal"', Agence France-Presse, 30 Aug. 2009.

(SA-20) long-range SAM systems to Iran—with French, Israeli and US leaders also publicly appealing to the Russian Government to stop the delivery.³⁷ Russia and Israel have reportedly discussed the impact of each other's arms exports on their respective security, with Russia highlighting concerns about Israeli exports of military equipment to Georgia and Israel highlighting Russian arms sales to Iran.³⁸ Apart from international pressure, other factors that have been given to explain the delay in Russian deliveries of S-300s to Iran include the lack of payment and technical problems.³⁹ However, reports in early 2010 indicated that Russia intends to press ahead with the deliveries to Iran.⁴⁰

Germany, France and the United Kingdom

Germany, France and the UK have traditionally formed a second tier of suppliers after the USA and Russia. They collectively accounted for 23 per cent per cent of global arms exports for the period 2005–2009. As a group, their largest recipient regions for the period 2005–2009 were Europe (36 per cent), Asia (29 per cent) and the Middle East (12 per cent). In recent years there have been ongoing efforts at the European Union (EU) level to both harmonize member states' arms export policies and integrate the activities of its arms manufacturers.⁴¹ However, states continue to maintain final control on all aspects of export licensing and promote the products of their indigenous arms producers abroad. This continues to lead to differences between EU member states regarding the acceptability of certain destinations and the amount of technology transfer attached to individual deals.⁴²

³⁷ Clover, C. and England, A., 'Saudis seek Russian pledge on missiles', *Financial Times*, 29 Sep. 2009; [Barack Obama grabs Russia's arms], *Kommersant*, 23 Sep. 2009; 'Russia to review air defence sale to Iran: Peres', Agence France-Presse, 19 Aug. 2009; and Ravid, B., 'France implores Moscow to cancel sale of missiles to Iran', *Ha'aretz*, 11 Sep. 2009.

³⁸ Keinon, H., 'Russia unlikely to sell S-300s to Iran', *Jerusalem Post*, 17 Feb. 2009. In Jan. 2009 Russia imposed a unilateral arms embargo on Georgia, prohibiting transfers from Russia and threatening sanctions against foreign entities that contribute to a 'destabilizing build-up' of arms and military equipment in Georgia. [Decree of the President of the Russian Federation on measures to prohibit deliveries to Georgia of military and dual-use goods], Russian Presidential Decree no. 64s, 16 Jan. 2009, <<http://graph.document.kremlin.ru/doc.asp?ID=50420>>.

³⁹ Similar reasons have been given to explain the delay in Russia's delivery of 8 MiG-31E combat aircraft to Syria. At the same time, Russia has begun deliveries of Pantsyr-S1 short- to medium-range air-defence systems. 'Iran "has not paid Russia" in "frozen" missile deal', Agence France-Presse, 21 Oct. 2009.

⁴⁰ [Vladimir Nazarov: military strike against Iran would be a huge mistake], *Kommersant*, 15 Feb. 2010; and 'Russia "fixing" technical issues delaying S-300 deliveries to Iran', RIA Novosti, 15 Feb. 2010, <<http://en.rian.ru/world/20100215/157891672.html>>.

⁴¹ 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 On EU transfer controls and technology transfers see chapter 12 in this volume.

The volume of Germany's arms exports for 2005–2009 was more than twice the volume for 2000–2004. Armoured vehicles and ships accounted for 71 per cent of Germany's exports in this period. A significant proportion of German exports of armoured vehicles were transfers of surplus German equipment. In the period 2005–2009, Germany exported 1116 second-hand armoured vehicles, compared to 636 newly built armoured vehicles.⁴³

During the period 2005–2009 Germany delivered three Type-209 submarines to South Africa and an additional ten submarines were built under licence in Brazil, Italy, South Korea and Turkey. During 2009, Turkey signed a €2 billion (\$2.8 billion) deal with Germany for the licensed production of six Type-214 submarines, but there was no reported progress on the contract for the transfer of Type-214 submarines to Pakistan.⁴⁴ A contract for four Type-214 submarines for Greece was cancelled because of Greece's outstanding €545 million (\$758 million) debt to the supplier.⁴⁵ However, later reports indicated that Greece was willing to accept three Type-214 submarines in an effort to resolve the dispute.⁴⁶

The volume of France's arms exports was 30 per cent higher in 2005–2009 than in 2000–2004. French exports have been boosted by deliveries of 25 Mirage-2000 combat aircraft to Greece and 34 to the UAE and of 6 La Fayette frigates to Singapore.⁴⁷ Aircraft accounted for about 37 per cent of France's arms exports for the period 2005–2009. During 2009 French companies signed a €1 billion (\$1.4 billion) deal with India for the modernization of around 51 Mirage-2000 combat aircraft, a €360 million (\$500 million) deal with Iraq for 24 EC-135 light helicopters, a €212 million (\$294 million) deal with Mexico for 6 EC-225 helicopters and a deal with Saudi Arabia for 3 A-330 multi-role tanker transport (MRTT) aircraft in addition to the 3 ordered in 2008.

There are indications that French arms exports are being boosted by two interlinked factors: strong political support for arms exports and a willingness to engage in far-reaching technology transfer agreements. In September 2009, during French President Nicolas Sarkozy's visit to Brazil, France reached final agreement with Brazil on the transfer of 4 conventionally

⁴³ Countries that either received German armoured vehicles or had them on order during 2005–2009 include Australia, Austria, Belgium, Brazil, Canada, Chile, the Czech Republic, Denmark, Greece, Lithuania, Luxembourg, Netherlands, Pakistan, Romania, Singapore, Spain, Sweden, Switzerland, Turkey and the UAE.

⁴⁴ Bokhari, F., 'Pakistan displays naval offensive capabilities', *Jane's Defence Weekly*, 17 Mar. 2010, p. 32.

⁴⁵ 'ThyssenKrupp cancels Greek submarine order', Reuters, 21 Sep. 2009.

⁴⁶ Fish, T. and Valmas, T. L., 'Hellenic Navy accepts Greek-built submarines', *Jane's Defence Weekly*, 25 Nov. 2009, p. 6.

⁴⁷ Transfers to Greece, Singapore and the UAE accounted for 58% of France's arms exports during 2005–2009. The UAE is reportedly interested in selling its fleet of 60 Mirage-2000 combat aircraft, recently supplied by France, in order to help finance the acquisition of new combat aircraft, with French Rafale and US F-35 combat aircraft in the running. Trimble, S., 'Dubai 09: UAE reveals fifth-generation fighter ambitions', *Flightglobal*, 15 Nov. 2009.

powered submarines and technology to assist in the development of Brazil's first nuclear-powered submarine, valued at almost €7 billion (\$9.7 billion), and 50 EC-725 helicopters, worth around €2 billion (\$2.8 billion). In both deals, French offers of technology transfer appear to have been a major influence on Brazil's decision, with the conventional submarines and helicopters to be manufactured in Brazil.⁴⁸ Brazil's national defence strategy of December 2008 stresses the development of an 'autonomous technological capacity', and Brazil is seeking to leverage advantages for its domestic arms industry via extensive technology transfer agreements in arms import deals.⁴⁹ In December 2009 Brazil signed a €2.5 billion (\$3.5 billion) deal with Italy's Iveco Defence Vehicles for 2044 armoured personnel carriers, with production also due to take place in Brazil.⁵⁰

The volume of British arms exports was 13 per cent lower in 2005–2009 than in 2000–2004. During 2009 British companies signed several agreements, including a deal with Norway for 200 Sting Ray anti-submarine torpedoes, a deal with Canada for 25 UFH/M-777 155-mm towed guns and a £500 million (\$775 million) contract with Saudi Arabia to service the Saudi fleet of Eurofighter Typhoon combat aircraft.⁵¹ Transfers of aircraft accounted for 44 per cent of British arms exports for the period 2005–2009. The 24th and final British-built Hawk trainer aircraft for India was delivered in 2009. The first 5 of 42 Hawk trainer aircraft to be built under licence in India were also produced.⁵² Also during 2009, the first 8 of 72 Eurofighter Typhoons were delivered to Saudi Arabia.⁵³ Sales of additional Eurofighter Typhoons from the UK to Saudi Arabia were discussed in 2009, although Saudi Arabia was also said to be considering purchases of F-15 combat aircraft from the USA.⁵⁴

There are calls in the UK for the government to play a more active role in promoting British arms exports, similar to the role the French Government has played in arms sales since 2007. In 2008 the British Government made the Department for Business, Innovation and Skills responsible for pro-

⁴⁸ Zibechi, R., 'Brazil emerges as a military power', *Americas Program Special Report* (Washington, DC: Center for International Policy, 14 Oct. 2009), <<http://americas.irc-online.org/am/6494>>.

⁴⁹ Brazilian Ministry of Defence (MOD), *National Strategy of Defence* (MOD: Brasília, 8 Dec. 2008).

⁵⁰ Kington, T., 'Brazil inks deal for Iveco personnel carriers', *Defence News*, 21 Dec. 2009.

⁵¹ Jennings, G. and Gelfand, L., 'Saudi Arabia and UK agree RSAF Typhoon support deal', *Jane's Defence Weekly*, 21 Oct. 2009, p. 17.

⁵² BAE Systems, 'BAE Systems completes Indian Hawk aircraft deliveries', Press Release no. 209/2009, 5 Nov. 2009, <http://www.baesystems.com/Newsroom/NewsReleases/autoGen_109105114126.html>.

⁵³ 'Britain delivers first Eurofighter jets to Saudi', *Agence France-Presse*, 12 June 2009. On BAE Systems see chapter 6, section II, in this volume.

⁵⁴ Hepher, T. and Shalal-Esa, A., 'Saudi weighs Eurofighter, F-15 for new fighter deal', *Reuters*, 18 June 2009.

moting arms exports abroad.⁵⁵ Although the main opposition party called for this responsibility to be returned to the Ministry of Defence, senior executives within the British defence industry have stated that the current system is working well for them and may not need to be changed.⁵⁶ Sweden is also exploring the possibility of better coordinating the government's role in promoting arms exports and in late 2009 announced plans to create a new arms export authority.⁵⁷

III. Arms transfers to North Africa

In recent years concerns have been expressed that regional rivals Algeria and Morocco are engaged in an 'arms race', which is also influencing Libya's arms acquisition plans.⁵⁸ Although Algeria, Libya, Morocco and Tunisia accounted for only 3 per cent of global arms imports for the period 2005–2009, their total imports were 62 per cent higher than 2000–2004.⁵⁹ Algeria accounted for 89 per cent of transfers to North Africa during 2005–2009, but Morocco, which accounted for less than 6 per cent of the volume for the same period, has placed significant orders in 2008 and 2009, lending weight to arms race fears. The likelihood of interstate conflict between Algeria and Morocco is low. However, these reactive acquisitions do not contribute to an improvement in Algerian–Moroccan relations or improve the chances of an acceptable political settlement being reached in the UN-

⁵⁵ Holtom, P., Bromley, M. and Wezeman, P. D., 'International arms transfers', *SIPRI Yearbook 2008*, p. 302.

⁵⁶ Chuter, A., 'U.K Tories aim to boost arms exports', *Defence News*, 13 Sep. 2009.

⁵⁷ Tolgfors, S., Swedish minister for Defence, 'Ny myndighet ska driva på den svenska vapen-exporten' [New authority should run Swedish weapons exports], *Dagens Industri*, 25 June 2009.

⁵⁸ The classic arms race model defines an arms race as a situation in which a state's build-up of weaponry is positively related to the amount of weaponry its rival has and to the grievance felt towards the rival and negatively related to the amount of arms it has already. Richardson, L. F., *Arms and Insecurity: A Mathematical Study of Causes and Origins of War* (Boxwood Press: Pittsburgh, Pa., 1960). However, this model is designed for situations in which 20–30 years of time series data are available. For situations that are developing as the analysis is undertaken, the only approach is to analyse the motivations behind specific arms acquisitions and look for evidence of competitive behaviour. 'North African arms race', Al-Jazeera, 15–16 Apr. 2008, <<http://english.aljazeera.net/programmes/insidestory/2008/04/20086150573511579.html>>; 'L'Algérie et le Maroc augmentent leur budget défense. Maghreb: les dessous d'une course à l'armement' [Algeria and Morocco increased their defence budget. Maghreb: an arms race revealed], *El Watan*, 12 May 2009; 'Libya fuels North African "arms race"', United Press International, 20 Oct. 2009; 'Morocco doubles military budget', Afrol News, 9 Dec. 2009, <<http://www.afrol.com/articles/31948>>; Sorenson, D. S., 'Civil–military relations in North Africa', *Middle East Policy*, vol. 14, no. 4 (2007), p. 108; Tran, P., 'North Africa emerging as hungry defense market', *Defense News*, 11 Sep. 2006; and Vatanka, A. and Weitz, R., 'Russian roulette: Moscow seeks influence through arms exports', *Jane's Intelligence Review*, Jan. 2007, p. 39.

⁵⁹ These 4 countries comprise North Africa. Egypt is considered to be in the Middle East and Mauritania to be in sub-Saharan Africa. Tunisia was not a significant importer of major conventional weapons for the period 2005–2009 and has not announced plans to procure significant quantities of major conventional weapons.

backed talks on the future status of Western Sahara.⁶⁰ This section provides an overview of recent and upcoming international transfers of arms and military equipment to Algeria, Morocco and Libya to help assess arms race claims. It considers a number of the factors driving these acquisitions and the concerns regarding them. It also highlights the competition between major suppliers to secure contracts in the region.

Recent orders for arms by Algeria, Libya and Morocco are influenced by a perceived need to carry out extensive modernization of their armed and security forces. Various political and security reasons—such as national prestige, regional rivalry, internal security and counterterrorism—are also at play.⁶¹ It is also assumed that these acquisitions and procurement plans reflect the continued influence of the armed forces in these states.⁶² In the cases of Algeria and Libya, increased oil and gas revenues have been cited as providing the means to upgrade existing holdings and acquire new weapons, which has attracted the attention of a number of major arms suppliers.⁶³ The correlation between increased resource revenues and spending on arms imports raises questions about whether windfall revenues from natural resources would deliver more security in these countries if invested in development, education and health programmes.⁶⁴

In addition to receiving financial rewards and gaining access to natural resources, European states and the USA supply arms to North Africa in order to maintain political influence with and the stability of favourable regimes, as well as to support counterterrorism operations and assist with improving border security capabilities to prevent illicit trafficking of arms and drugs and irregular migration.

Algeria

Military spending has increased dramatically in Algeria over the past decade, and it is estimated to have had the highest military expenditure in

⁶⁰ Western Sahara is a largely Moroccan-controlled territory in North Africa. A Spanish colony until 1976, it is a disputed territory claimed by Morocco and the Polisario Front, a nationalist independence group supported by Algeria. Its legal status remains unresolved.

⁶¹ Cordesman, A. H. and Nerguizian, A., *The North African Military Balance: Force Developments in the Maghreb* (Center for Strategic and International Studies: Washington, DC, Jan. 2009), pp. 2–3; and Wezeman, P. D., ‘Arms transfers to Central, North and West Africa’, SIPRI Background Paper, Apr. 2009, <http://books.sipri.org/product_info?c_product_id=377>, pp. 3–4.

⁶² Cook, S. A., *Ruling but not Governing: The Military and Political Development in Egypt, Algeria, and Turkey* (Johns Hopkins University Press: Baltimore, MD, 2007); Gelfand, L., ‘Spending to thrive’, *Jane’s Defence Weekly*, 28 Jan. 2009, pp. 22–27; Joffé, G., ‘Political dynamics in North Africa’, *International Affairs*, vol. 85, no. 5 (2009), pp. 931–49; and Sorenson (note 58).

⁶³ On the relationship between resource revenues and military expenditure see chapter 5 in this volume.

⁶⁴ ‘Challenges to economic security’, *Arab Human Development Report 2009: Challenges to Human Security in the Arab Countries* (United Nations Development Programme, Regional Bureau for Arab States: New York, 2009), pp. 99–119; and Spencer, C., ‘North Africa: the hidden risks to regional stability’, Chatham House Middle East and North Africa Briefing Paper 2009/01, Apr. 2009.

Africa in 2009.⁶⁵ The increase in military spending has accompanied strong economic growth, based on increased oil and gas production and prices. The volume of Algerian imports of major conventional weapons for the period 2005–2009 increased by 102 per cent in comparison with 2000–2004, with Algeria rising from the 18th to the 9th largest recipient of major conventional weapons globally. During the period 2005–2009, Russia accounted for an estimated 92 per cent of these transfers. Other suppliers included China, France, South Africa, Spain, Ukraine and the UK.

In March 2006 Algeria and Russia concluded an arms deal reported to be worth \$6.5 billion. Under the deal, Russia agreed to cancel \$4.5 billion of Algeria's Soviet-era debt, much of which was due to arms imports, in exchange for orders for arms.⁶⁶ Russia has delivered to Algeria an estimated 15 of 38 Pantsyr mobile air-defence systems and 28 Su-30MKA combat aircraft in 2008–2009, 185 T-90S tanks in 2006–2008, and missiles for these platforms. Delivery of 16 Yak-130 trainer aircraft and 2 Type-636E (Kilo Class) submarines are expected in 2010–11.

Algeria is seeking to acquire helicopters and naval equipment from France, Germany, Italy or the UK. Reports in 2009 suggested that Algeria will follow up its 2007 order for six EH-101-400 helicopters and four Super Lynx-300 helicopters from AgustaWestland with an order for up to 100 helicopters for Algerian border security forces.⁶⁷ Algeria's major naval procurement plans relate to the acquisition of four frigates, two of which are to be built in Algeria. British, French, German and Italian shipbuilders are competing for the order.⁶⁸

This military modernization programme marks a shift in Algeria's procurement priorities, as it focuses on the upgrading and replacement of major conventional platforms acquired in the 1970s and 1980s rather than the acquisition of equipment for counterinsurgency operations.⁶⁹ The continuing influence of the military in Algerian politics has played a role in the acquisition of new weapons.⁷⁰

Morocco

Unlike neighbouring Algeria, Morocco does not have significant oil and gas fields and has therefore not benefited from the high prices for these commodities. Nevertheless, military spending in Morocco increased by 127 per

⁶⁵ See appendix 5A in this volume.

⁶⁶ Vatanaka and Weitz (note 58), p. 39.

⁶⁷ Ghimrassa, B., 'Algeria and Italy in major arms deal', *Asharq Alawsat*, 17 Sep. 2009; and O'Connell, D. and Ripley, T., '\$5 billion Algerian helicopter deal for UK plant', *Sunday Times*, 27 Sep. 2009.

⁶⁸ 'Algeria seeks European stealth frigates', United Press International, 2 Oct. 2009.

⁶⁹ Gelfand (note 62), p. 24.

⁷⁰ Gelfand (note 62), pp. 22–27; and Sorenson (note 58).

cent during the period 2000–2009, in contrast to an increase of 105 per cent for Algeria.⁷¹ The volume of transfers to Morocco for the period 2005–2009 declined by around 25 per cent in comparison with 2000–2004, ranking it the 64th largest arms importer in the world. During 2005–2009, 78 per cent of Moroccan imports came from Russia, followed by Belgium (8 per cent), Switzerland (7 per cent) and the USA (7 per cent). Transfers to Morocco in 2005–2009 included 12 Tunguska mobile air-defence systems from Russia, and surplus artillery and armoured personnel carriers from Belgium, Switzerland and the USA.

In recent years, a number of significant orders for the Moroccan armed forces have been announced. France is modernizing 27 Moroccan Mirage F-1 combat aircraft with RC400 radar and MICA air-to-air missiles. Although Morocco was expected to be the first export customer for France's Rafale combat aircraft, it instead opted for 24 F-16C combat aircraft and missiles from the USA. In 2009 Morocco also ordered 24 PC-9 trainer aircraft and 3 CH-47D helicopters from the USA. Particular attention has been paid to whether Moroccan orders for advanced combat aircraft are in direct response to Algerian combat aircraft received from Russia.⁷²

Despite losing its first export order for Rafale, France secured a €470 million (\$653 million) deal with Morocco in 2008 for the first export of the FREMM frigate, with delivery scheduled for 2013. Also in 2008, Morocco ordered three SIGMA frigates from the Netherlands in a €510 million (\$709 million) deal, to be delivered in 2012–14.

Factors behind Morocco's acquisitions are its regional rivalry with Algeria, the placating of the armed forces with the procurement of new equipment and the dormant conflict in Western Sahara.⁷³ Mohamed Abdelaziz, the president of the Polisario Front, has stated that he is concerned that Moroccan arms acquisitions could have a negative impact on UN-backed talks to resolve the Western Sahara issue.⁷⁴ In early 2009 the UN Mission for the Referendum in Western Sahara (MINURSO) reported an improved situation on the ground with regard to Moroccan and Polisario forces in Western Sahara.⁷⁵ Although talks continued in 2009, there was

⁷¹ See appendix 5A in this volume.

⁷² Sorenson (note 58), p. 108.

⁷³ Cordesman and Nerguizian (note 61), p. 24; and Sorenson (note 58), p. 108.

⁷⁴ 'Morocco arms move may hit Sahara talks: Polisario', Reuters, 2 Mar. 2008. On background to the conflict and Polisario Front see note 60.

⁷⁵ United Nations, Security Council, Report of the Secretary-General on the situation concerning Western Sahara, S/2009/200, 13 Apr. 2009, paras 13–26. On MINURSO see also appendix 3A, table 3A.2, in this volume.

little change in positions from the main protagonists (Algeria, Morocco and the Polisario Front).⁷⁶

Libya

Following the lifting of the UN arms embargo in 2003, it was expected that Libya would seek to modernize, upgrade and replace a significant quantity of the major conventional weapons that it had acquired in the 1970s and 1980s.⁷⁷ Libya, like Algeria, has both the desire to modernize its armed forces and the means to pay for it; thus, Libya has come to be regarded as a promising market for a number of major arms suppliers.⁷⁸ The heads of government of France, Italy, Russia and the UK have visited Libyan leader Muammar Qadhafi in recent years, accompanied by arms company representatives and rumours of multi-billion dollar arms deals.⁷⁹ To date these efforts have not resulted in significant orders. For the period 2005–2009, Libya was ranked as the 110th largest arms importer in the world, and its only imports of major conventional weapons in 2005–2009 were the first 6 of 10 A-109K helicopters from Italy for border patrols and the first consignment of MILAN-3 anti-tank missiles from France.

In August 2008 Italy and Libya signed a Treaty of Friendship, Partnership and Cooperation, under which Italian companies will assist Libya in the strengthening of its border controls to combat terrorism, organized crime, drug trafficking and irregular migration.⁸⁰ Italy has concluded a number of deals with Libya in recent years to assist with the development of Libyan border security capabilities, and in January 2008 Libya signed a contract for an ATR-42MP maritime patrol aircraft for border control purposes.⁸¹ By equipping Libyan border security agencies, Italian companies

⁷⁶ Moroccan Embassy, 'Moroccan initiative for negotiating an autonomy statute for the Sahara Region', Washington, DC, [n.d.], <http://dcusa.themoroccanembassy.com/moroccan_embassy_moroccan_sahara_initiative.aspx>; and United Nations (note 68), para. 12.

⁷⁷ See Hart, J. and Kile, S. N., 'Libya's renunciation of nuclear, biological and chemical weapons and ballistic missiles', *SIPRI Yearbook 2005*.

⁷⁸ Cowan, G. and Smith, M., 'Suitors eye Libyan market', *Jane's Defence Weekly*, 2 Jan. 2008, p. 19.

⁷⁹ Holtom, Bromley and Wezeman (note 55), pp. 303–304; and Wezeman, Bromley and Wezeman (note 11), pp. 305–306.

⁸⁰ Human Rights Watch (HRW), *Pushed Back, Pushed Around: Italy's Forced Return of Boat Migrants and Asylum Seekers, Libya's Mistreatment of Migrants and Asylum Seekers* (HRW: New York, 2009).

⁸¹ 'Italian customs service delivers three FPB to Libyan Coast Guard', *Al Defaiya*, 20 June 2009; Finmeccanica, 'Finmeccanica and AgustaWestland JV in Libya in the aeronautics and security systems sector EUR 80 million contract signed for ten A109 Power helicopters', Press release, 17 Jan. 2006, <http://www.finmeccanica.it/Holding/EN/Corporate/Sala_stampa/Comunicati_stampa/Anno_2006/>; Finmeccanica, 'Agreement signed with the Libyan Government to create a joint venture in the sector of electronics for defence and security', Press release, 2 Apr. 2007, <http://www.finmeccanica.com/Holding/EN/Corporate/Sala_stampa/Comunicati_stampa/Anno_2007/>; Finmeccanica, 'SELEX Sistemi Integrati signed an agreement with Libya, worth EUR 300 million, for border security and control', Press release, 7 Oct. 2009, <http://www.finmeccanica.it/Holding/EN/Corporate/Sala_stampa/Comunicati_stampa/Anno_2009/>; and Alenia Aeronautica, 'Libya signs

appear to hope that they will benefit from the prospective modernization of the Libyan armed forces.⁸²

In November 2006 Libya signed a contract with France worth €140 million (\$195 million) to refurbish Libyan Mirage F-1 combat aircraft.⁸³ Reports appeared in 2007 that Libya and France were negotiating a €4.5 billion (\$6.3 billion) arms deal for Rafale combat aircraft, helicopters, Gowind corvettes and patrol vessels.⁸⁴ However, the only order placed with France since 2007 has been for an undisclosed number of MILAN-3 anti-tank missiles, although contradictory reports on the planned sale of 14 Rafales appeared in 2009.⁸⁵

Vladimir Putin failed to replicate Russia's 2006 Algerian 'arms-for-debt cancellation' arrangement in Libya during a presidential visit in April 2008.⁸⁶ Russian hopes for the conclusion of a deal for \$2 billion worth of arms faded in October–November 2008 as Qadhafi stressed during his visits to Russia, Ukraine and Belarus that Libya was being presented with a lot of offers for military equipment. However, in 2009 the Russian media claimed that Russia had concluded deals with Libya for 3 BPS-500 (Project-12418) fast attack craft and the overhaul of 145 Libyan T-72 tanks.⁸⁷ In January 2010, during the visit of Libyan Defence Minister Younis Jaber to Moscow, there were premature reports that Libya had ordered 12–15 Su-35 combat aircraft, 4 Su-30 combat aircraft, 6 Yak-130 trainer aircraft and air-defence systems.⁸⁸ Negotiations continue on a package of arms worth an estimated \$2 billion.⁸⁹

As demonstrated by its courting by major suppliers and a potential loosening of restrictions on arms exports to Libya by the USA, Libya is no longer considered a threat to international peace and security but rather a potentially lucrative market.⁹⁰ Libya does not face significant external threats to its national security that would justify large-scale acquisitions

order for ATR-42MP maritime patrol aircraft', Press release, 17 Jan. 2008, <<http://www.alenia-aeronautica.it/Eng/Media/Pages/PressReleases.aspx?btnPagX=6&anno=2008&tip=&tst=>>.

⁸² Gething, M. J., 'Aermacchi wins overhaul work on Libyan trainers', *Jane's Defence Weekly*, 15 Aug. 2007, p. 18.

⁸³ Lewis, J. A. C., 'France to refurbish Libyan Mirages', *Jane's Defence Weekly*, 29 Nov. 2006, p. 19.

⁸⁴ 'Libya, France sign MOU for purchase of 14 Rafale fighters', Agence France-Presse, 10 Dec. 2007; and Lewis, J. A. C., 'Libyan–French accord offers promise of major acquisitions', *Jane's Defence Weekly*, 19 Dec. 2007, p. 5.

⁸⁵ 'Deal near on Libya Rafale buy', *Defense News*, 23 Mar. 2009, p. 3; and Johnson, R. F., 'Dassault denies sale of Rafale to Libya is imminent', *Jane's Defence Weekly*, 1 Apr. 2009, p. 21.

⁸⁶ Wezeman, Bromley and Wezeman (note 11), pp. 305–306.

⁸⁷ 'Russia, Libya sign warship contract worth up to \$200 mln', RIA Novosti, 10 Mar. 2009, <<http://en.rian.ru/russia/20090310/120495201.html>>; and 'Russia set to modernize Libya's Soviet-era tanks', RIA Novosti, 17 Aug. 2009, <http://en.rian.ru/military_news/20090817/155830388.html>.

⁸⁸ Nikol'skii, A., [Qadhafi did not disappoint], *Vedomosti*, 26 Jan. 2010.

⁸⁹ 'Russia says talk of \$2 bln arms contract with Libya premature', RIA Novosti, 30 Jan. 2010, <<http://en.rian.ru/russia/20100130/157722762.html>>.

⁹⁰ Wolf, J., 'U.S. eyes arms sales to Libya', Reuters, 6 Mar. 2009; and Seetharaman, D. and Wolf, J., 'U.S. eyes Vietnam, Libya arms sales', Reuters, 14 Dec. 2009.

and has therefore not been under pressure to buy, but has rather been able to play suppliers against each other. However, it has been suggested that Qadhafi and Libya's influential armed and security forces are unlikely to accept lagging behind their North African neighbours and new orders for major conventional weapons will be placed soon.⁹¹

IV. Arms transfers to Iraq

Arms supplies have played a significant role in the conflict in Iraq and have the potential to further destabilize the country's fragile political situation. This section discusses arms flows—including both major conventional weapons and small arms and light weapons (SALW)—to Iraq during the past five years, with a particular focus on Iraq's efforts in 2009 to rebuild its armed forces and exert greater control over arms acquisitions and limit its dependence on the USA for its security needs and arrangement of arms supplies.

Since 2003 Iraqi and US officials have alleged that armed non-state groups in Iraq have received arms and training from sources in Iran and Syria.⁹² In mid-2009 US intelligence sources suggested that it had become increasingly difficult to smuggle weapons from Iran to Iraq, but that those weapons entering Iraq tended to be more sophisticated than before.⁹³ However, an analysis of the weapons captured from these armed groups suggests that a large proportion of their holdings have been taken from Iraqi stockpiles.⁹⁴ The US Government has established new accountability procedures for SALW supplies to Iraq to prevent diversion to these groups.⁹⁵ Nonetheless, concerns remain that non-state actors continue to steal or buy weapons from Iraqi armed forces personnel and therefore the risk of post-shipment diversion remains and with it the potential for increased armed violence in Iraq in the future.⁹⁶ The instability that these armed groups could cause has not only affected acquisitions by the Iraqi armed forces and US troops in Iraq, but also influenced Saudi Arabia's decision to invest in an advanced border security system along its border with Iraq.⁹⁷

⁹¹ Lutterbeck, D., 'Arming Libya: transfers of conventional weapons past and present', *Journal of Contemporary Security Policy*, vol. 30, no. 3 (Dec. 2009).

⁹² Felter, J. and Fishman, B., *Iranian Strategy in Iraq, Politics and 'Other Means'*, Occasional Paper Series (Combating Terrorism Center: West Point, NY, 13 Oct. 2008), pp. 71–82; and Muir, J., 'All quiet on Iraq's western front', BBC News, 18 Nov. 2009, <<http://news.bbc.co.uk/2/hi/8363899.stm>>.

⁹³ US Department of Defense (DOD), *Measuring Stability and Security in Iraq*, Report to Congress (US DOD: Washington, DC, Sep. 2009), pp. 26–27.

⁹⁴ Felter and Fishman (note 92), appendix C.

⁹⁵ US DOD (note 93), p. 59; and Williams, P., *Criminals, Militias, and Insurgents: Organized Crime in Iraq* (Strategic Studies Institute: Carlisle, PA, June 2009), p. 183.

⁹⁶ US DOD (note 93), p. 59; and Williams (note 95).

⁹⁷ Irish, J., 'EADS near \$1 billion Saudi–Iraq border deal: executives', Reuters, 24 June 2008; and Taverna, M. A., 'Saudi win will help EADS lessen dependence on commercial aircraft', *Aviation Week & Space Technology*, 13 July 2009, p. 27.

Iraq was subject to a UN arms embargo during the 1990s, which was lifted in June 2004 for transfers to the Iraqi Government.⁹⁸ Iraq ranked as the 24th largest arms importer for the period 2005–2009, with more than 11 000 light armoured personnel carriers (APCs) accounting for the majority of its major conventional weapon imports. The USA was the largest supplier of major conventional weapons to Iraq during this period, accounting for 52 per cent of the volume of deliveries, followed by Russia (14 per cent), Ukraine (7 per cent), Hungary (6 per cent), Italy (5 per cent), Poland (4 per cent) and Turkey (4 per cent).⁹⁹ Large numbers of SALW were also delivered during 2005–2009, including over 600 000 SALW from several European countries arranged by the USA and significant numbers supplied directly from China, Serbia and the USA.¹⁰⁰ The Iraqi armed forces have been increasingly able to pursue a military campaign to defeat a range of armed non-state groups but have remained dependent on foreign forces, mainly US, for support from combat aircraft and other major conventional weapons.¹⁰¹

Developments in 2009 and the future

The level of violence in Iraq in 2009 showed a marked drop in comparison to 2007–2008.¹⁰² However, with the withdrawal of US combat forces from Iraqi cities in June 2009, the planned withdrawal of US troops from Iraq by 2011 and the risk that violence could flare up again, the Iraqi Government has focused attention on rebuilding its armed forces and acquiring more major conventional weapons.¹⁰³ By the end of 2009, Iraq had placed orders for 280 M-1A1 tanks, 24 Bell-407 helicopters and 6 C-130J transport aircraft from the USA; over 400 BTR-4 APCs and 6 An-32 transport aircraft from Ukraine; 24 EC-135 helicopters from France; and 22 Mi-17 helicopters

⁹⁸ On the embargo see appendix 12A in this volume.

⁹⁹ As of 30 Sep. 2009 the US had provided \$20.72 billion to develop the Iraqi security forces since 2003, but only part of this money was used to fund weapons. US Special Inspector General for Iraq Reconstruction (SIGIR), *Quarterly Report to the United States Congress* (SIGIR: Arlington, VA, 30 Oct. 2009), p. 45. See also chapter 5, section IV, in this volume.

¹⁰⁰ 'Probing the grey area: irresponsible small arms transfers', *Small Arms Survey 2007: Guns and the City* (Cambridge University Press: Cambridge, 2007) pp. 81–85; 'Serbia, Iraq agree on \$100 m weapons deal', Agence France-Presse, 28 Aug. 2009; and Wright, R. and Tyson, A. S., 'Iraqis to pay China \$100 million for weapons for police', *Washington Post*, 4 Oct. 2007.

¹⁰¹ E.g. when Iraqi troops launched a major offensive against opposition forces in Mar. 2008, aircraft from Multinational Force–Iraq provided air support. Cordesman, A. H. and Mausner, A., *Withdrawal from Iraq: Assessing the Readiness of Iraqi Security Forces* (Center for Strategic and International Studies: Washington, DC, Aug. 2009), pp. 21–22.

¹⁰² SIGIR (note 99), pp. 44–45. See also appendix 2A, section III, in this volume.

¹⁰³ The extent of the Iraqi plans was reflected in Iraqi discussions with the USA about possible arms purchases, details of which can be found in US notifications to Congress about possible FMS contracts. These are published on the website of the US Defense Security Cooperation Agency (DSCA), <<http://www.dsc.osd.mil/>>. See also Perlo-Freeman, S. et al., 'Military expenditure', *SIPRI Yearbook 2009*, pp. 208–209.

bought from Russia via the USA and upgraded by a US company. While these weapons can play a role in internal military operations, they are also a major step in rebuilding Iraq's military capabilities for responding to external threats.

A major and costly next step will be to re-establish an air force and air-defence system. In 2007 Iraq revealed long-term plans to build an air force with 38 squadrons.¹⁰⁴ However, in 2009 the air force was still small and equipped with only a few light aircraft and helicopters suitable for attacking ground targets. Iraq still lacks combat aircraft and land-based air-defence systems to defend its air space, although in late 2009 Iraq received an air surveillance radar from the USA to enable it to begin to monitor its air space. During 2009 discussions about the possible procurement of combat aircraft continued, although no orders have been placed.¹⁰⁵ In preparation for the acquisition of combat aircraft, Iraq ordered 15 T-6A trainer aircraft from the USA in 2009 and has received the first 4.

It remains to be seen when, and to what extent, Iraq's significant arms procurement plans will be fulfilled. The economic crisis and drop in oil prices have drastically curtailed Iraq's ability to finance its own arms procurement plans, and as a result of a lower security budget, the level of US military assistance has also been cut.¹⁰⁶ Based on what is known about current orders and procurement plans, it seems reasonable to assume that the USA will remain the main supplier of arms to Iraq for the coming years. According to the US Government, during the period September 2006 to August 2008 Iraq ordered \$3.6 billion worth of goods and services via the US Government Foreign Military Sales (FMS) programme, and in 2009 it was reported that FMS contracts with Iraq valued at \$5.5 billion were being executed.¹⁰⁷ However, Iraq is experiencing problems fulfilling the specific financial requirements and procedures for using this programme. Iraq's poor credit rating and inability to pay for military equipment and services in advance in 2009 has held up the signing and implementation of contracts for weapons from or via the USA.¹⁰⁸

To avoid the problems associated with the FMS programme and to decrease dependence on the USA, Iraq continues to seek other suppliers. Other advantages for buying from non-US suppliers include lower prices and quicker deliveries of weapons. For example, in 2009 Iraq was discuss-

¹⁰⁴ US Department of Defense (DOD), *Measuring Stability and Security in Iraq*, Report to Congress (US DOD: Washington, DC, Dec. 2007), p. 49.

¹⁰⁵ Wall, R., 'Iraqi Air Force advisers pressed to complete their work', *Aviation Week & Space Technology*, 5 Oct. 2009, p. 39; and Al-Nidawi, O. F. and Bay, A., 'Iraq needs a real air force', *Wall Street Journal*, 11 Sep. 2009, p. 17.

¹⁰⁶ See chapter 5, section IV, in this volume.

¹⁰⁷ Financial Policy and Internal Operations Business Operations, US Defense Security Cooperation Agency, 'Historical facts book', 30 Sep. 2008, <<http://www.dsca.mil/programs/biz-ops/facts-book/default.htm>>, p. 3; and SIGIR (note 99), p. 49.

¹⁰⁸ Chon, G., 'Iraq is struggling to buy equipment', *Wall Street Journal*, 30 Sep. 2009.

ing the procurement of light and medium combat aircraft not only with the USA but also with France, the Czech Republic and South Korea, as well as exploring possible arms deals with Brazil, Russia, Serbia and Ukraine.¹⁰⁹

V. Conclusions

Since the end of the cold war, the five largest suppliers of major conventional weapons have remained the same: the USA, Russia, Germany, France and the UK. However, their share of global arms exports is slowly declining as a number of states are challenging the established second tier of arms suppliers. It has become increasingly difficult to compare the official data on export orders and actual arms exports published by the major arms suppliers, demonstrating the continued utility of SIPRI data for monitoring and measuring international arms transfers. It is expected that in the coming years SIPRI data will show a change with regard to the largest importer, as China will drop from the top spot. Asian and Middle Eastern countries are expected to remain among the world's largest importers.

SIPRI data shows that the overwhelming majority of arms transfers to North Africa for the period 2005–2009 were destined for Algeria. However, Morocco has placed significant orders for combat aircraft, missiles and naval vessels that will lead to a significant increase in its volume of arms imports. The timing of the conclusion of deals for major conventional weapons by regional rivals Algeria and Morocco is worrying for a region that lacks security- and confidence-building transparency mechanisms. Although it is unlikely that these acquisitions in themselves will lead to conflict, they do not help to improve relations between the two countries. Furthermore, their acquisitions are likely to influence Libyan plans.

Despite problems accessing US military assistance for arms procurement, Iraq continues to rely on the USA for the provision of arms and military equipment to rebuild its armed forces. It has made arrangements for the acquisition of arms and military equipment from other suppliers using its own funds, but its ambitious procurement plans have been hit by the economic crisis and declining oil prices. Nevertheless, the timetable for the withdrawal of US forces from Iraq lends a sense of urgency to international efforts to provide Iraq with the arms and military equipment it seeks to meet its perceived internal and external security needs.

¹⁰⁹ Kim, J. K., 'Iraq Asks for Korea's T-50 trainer jets', *Korea Times*, 15 Mar. 2009; Cody, E., 'France hopes to jump start its arms sales with new Iraqi Government', *Washington Post*, 4 July 2009; Rolfsen, B., 'Iraq may get used U.S. F-16s', *Defense News*, 7 Sep. 2009; Kominek, J., 'Czech Republic courts Iraq with L-159 trainers', *Jane's Defence Weekly*, 11 Nov. 2009; 'Iraq signs weapons deals with foreign countries to improve security', 15 Apr. 2009, BBC Monitoring Middle East, Text of report by Iraqi Media Network weekly newspaper *Al-Sabah* on 15 Apr. 2009; and Interfax, 'Ukraine signs first of set of contracts for supplying arms worth \$550 m to Iraq', *Kyiv Post*, 11 Dec. 2009.