

8. International arms transfers

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I. Introduction

The SIPRI Arms Transfers Project identifies trends in international *transfers* of major conventional weapons using the SIPRI trend indicator.¹ The trend-indicator value represents the volume of international transfers of both major conventional weapons and military technology for the foreign licensed production of these weapons. As shown by the five-year moving averages presented in figure 8.1, global arms transfers for the period 1997–2001 continued to decline. This is explained mainly by a reduction in the deliveries by the United States.² Section II presents the dominant trends of individual suppliers and recipients of major weapons in 1997–2001.

Section III gives examples of transfers of all types of weapons to regions of conflict and discusses the effects of arms transfers and planned acquisitions to India, Pakistan and countries in West Africa. Certain countries are prohibited from receiving arms, some because they are involved in armed conflicts. Information on multilateral arms embargoes in force in the period 1997–2001 is also presented.

Section IV provides, first, an account of SIPRI's estimate of the value of the global *arms trade* in 2000 and a discussion of the major suppliers based on their own national reporting.³ Second, it presents the factors which influence the international arms trade in the short- and long-term perspective. The future supply of advanced major weapons is affected by the uncertainty concerning the organization of transatlantic production and trade. Section V examines the Joint Strike Fighter (JSF) project as a case study of transatlantic cooperation and the effects it may have on transfers of military technology and combat aircraft.

¹ SIPRI data on arms *transfers* refer to actual deliveries of major conventional weapons. To permit comparison between the data on such deliveries of different weapons and identification of general trends, SIPRI uses a *trend-indicator value*. The SIPRI values are therefore only an indicator of the volume of international arms transfers and not of the actual financial values of such transfers. Thus they are not comparable to economic statistics such as gross domestic product or export/import figures. The method used in calculating the trend-indicator value is described in appendix 8D. A more extensive description of the methodology used, including a list of sources, is available on the SIPRI Internet site, URL <<http://www.sipri.se/projects/armstrade/atmethods.html>>. The figures may differ from those given in previous SIPRI Yearbooks; the SIPRI arms transfers database is constantly updated as new data become available, and the trend-indicator values are revised each year.

² Five-year moving averages are calculated as a more stable measure of the trend in arms transfers than the often erratic year-to-year figures.

³ The value of the arms *trade* refers to the financial values of arms transfers.

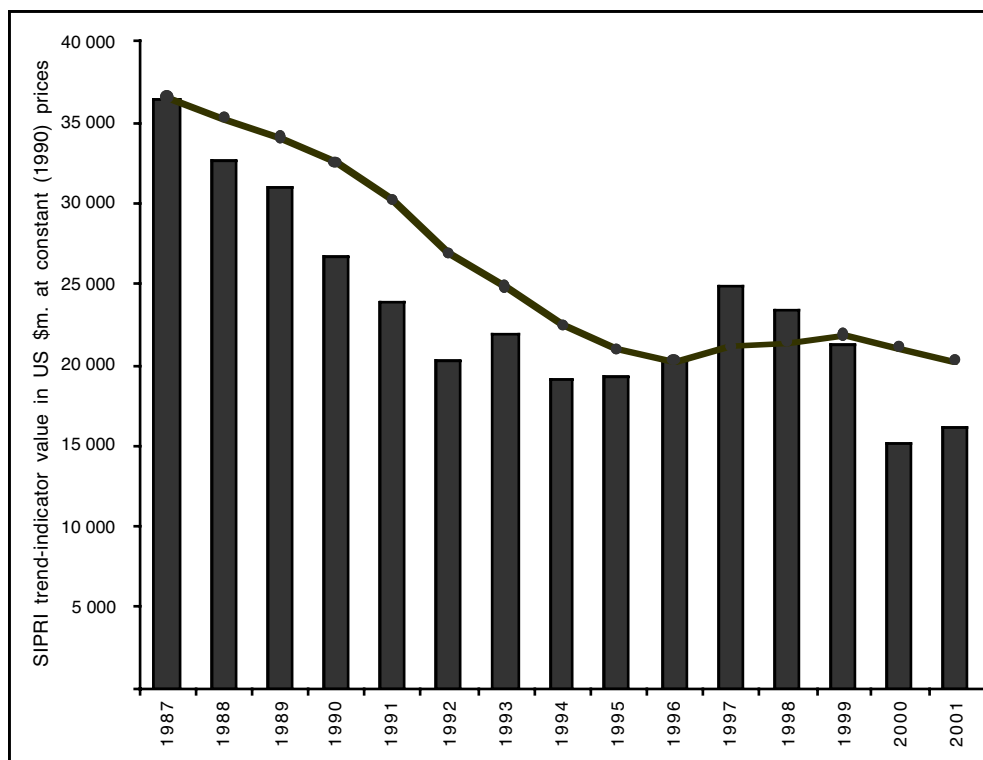


Figure 8.1. The trend in international transfers of major conventional weapons, 1987–2001

Note: The histogram shows annual totals and the curve denotes the five-year moving average. Five-year averages are plotted at the last year of each five-year period.

Section VI reports on national and international transparency in arms transfers in 2001. Section VII summarizes the main findings of the chapter.

II. The suppliers and recipients

The major suppliers

The United States was the largest supplier (44.5 per cent) in the period 1997–2001 (see table 8A.2) with deliveries to a large number of recipients. However, the USA experienced its third consecutive year of reduced deliveries. In 2001 the USA accounted for 28 per cent of global arms transfers. From 1998 to 2001 its deliveries fell by 65 per cent, caused mainly by a drop in deliveries of combat aircraft to major recipients. The major recipients of US weapons in 1997–2001 were Saudi Arabia and Taiwan. Known foreign orders will result in an increased volume of US deliveries. Such orders include expensive weapon systems that have a strong impact on the trend-indicator value, such as approximately 350 F-16 combat aircraft as well as helicopters and early-warning and transport aircraft.⁴

⁴ After 11 Sep. 2001, the US Department of Defense's Defense Security Cooperation Agency, which handles all government-to-government arms transfers, established an Enduring Freedom Response Cell. Its purpose is to put on a fast track weapon requests from allies and friends in the fight against terrorism. 'New war, old weapons', *The Nation*, 29 Oct. 2001, URL <<http://www.thenation.com>>. See also

The US arms embargo on India was lifted after September 2001, and in 2001 there were indications that India's acquisition policy may change in a way that could strengthen the US position among the major suppliers.⁵ India's long-standing arms transfer relationship with Russia makes it unlikely that the USA, at least in the short term, will threaten Russia's strong position as India's main supplier. Instead, a change in India's policy is likely to involve the USA as a supplier of military sub-systems and components for Indian indigenous projects, many of which have experienced technological difficulties and delays.⁶ The new US policy will also permit previously embargoed US sub-systems and components to be included in weapons delivered to India by other Western suppliers (see below).⁷

Russia was the second-largest supplier in 1997–2001, accounting for 17 per cent of total arms transfers for the period and 30.7 per cent for 2001. After a 24 per cent increase in arms transfers from 2000 to 2001 Russian deliveries exceeded that of the USA—Russia therefore became the largest supplier in 2001.⁸ (The USA ranked second.) The increase is explained by the greater volume of weapons delivered by Russia to China and India, in particular.

Russian military–industrial reorganization could lead to the more efficient use of available resources for arms production. This, in turn, could lead to the availability of more advanced weapons for sale, supported also by the December 2001 Russian (Rosoboronexport)–Ukrainian (Ukrspetsexport) agreement to promote joint military projects and regulate their relationship as arms exporters.⁹ In addition, better after-delivery support could result in more satisfied customers, who would continue to order Russian weapons. However, the small number of major recipients of weapons from Russia—basically China and India—and Russia's limited investment in military research and development (R&D) are major drawbacks for its long-term competitiveness with regard to the most advanced weapons.¹⁰ The known outstanding orders cannot sustain the level of Russian arms transfers beyond 2001.

India's role as a major Russian recipient may also change. In the period 1997–2001 it accounted for 37 per cent of Russia's combined deliveries to China and India. Despite a June 2001 Indian–Russian agreement that listed a number of possible joint projects and future Russian deliveries, the lifting of

Federation of American Scientists, 'America's war on terrorism', URL <<http://www.fas.org/terrorism/at/index.html>>.

⁵ Powell, C., 'US looks to its allies for stability in Asia and the Pacific', *International Herald Tribune*, 27–28 Jan. 2001, p. 8.

⁶ In early 2002 the US administration accepted sales of jet engines, advanced avionics, weapon-locating radar, ground sensors and other military items to India. Bedi, R., 'Bush clears sale of 20 military items to India', *Jane's Defence Weekly*, 13 Feb. 2002, p. 3.

⁷ Luce, E., 'India to ask US for speedy military equipment sales', *Financial Times*, 17 Jan. 2002, p. 5.

⁸ Makienko, K., 'Preliminary estimates of Russian performance in military–technical cooperation with foreign states in 2000', *Eksport Vooruzhenii*, no. 1 (Jan./Feb. 2001), p. 5.

⁹ Svyatko, S., 'Ukrainian–Russian military cooperation: from rivalry to partnership', *Military Parade*, Jan. 2002, URL <<http://www.milparade.com/cgi-milparade/reader.cgi?>>; and Lake, D., 'Russia reports strong arms exports in 2001', *Jane's Defence Weekly*, 9 Jan. 2002, p. 20.

¹⁰ Saradzhyan, S., 'Experts: Russian firms must break out of current "client ghetto"', *Air Defence*, 28 May–3 June 2001, p. 38.

Table 8.1. Transfers of major conventional weapons from the 10 leading suppliers to the 38 leading recipients, 1997–2001

Figures are trend-indicator values expressed in US \$m. at constant (1990) prices. Figures may not add up because of the conventions of rounding.

Recipients	Suppliers								
	USA	Russia	France	UK	FRG	Ukraine	Netherlands	Italy	Cl
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^a Includes the UN and NATO (as non-state actors, not as combinations of all member states) and unknown recipients.

Note: The SIPRI data on arms transfers refer to actual deliveries of major conventional weapons. To permit comparison between the data on such deliveries of different weapons and identification of general trends, SIPRI uses a *trend-indicator value*. The SIPRI values are only an indicator of the volume of international arms transfers and not of the actual financial values of such transfers. Thus they are not comparable to economic statistics such as gross domestic product or export/import figures.

Source: SIPRI arms transfers database.

the US embargo makes it easier for India to acquire military supplies from France and Israel—both important suppliers to India—and from other European suppliers and the USA.¹¹ An April 2001 Indian parliamentary report noted that Russia no longer grants India ‘friendship prices’ based on a fixed exchange rate, an arrangement that also allowed barter deals. This change, in addition to the high Russian commission fees, is part of the reason for the proposal that India should request global bids for all its defence procurements.¹² If this report results in a change of India’s acquisition policy, in the long term it could permit India to play off Russia against other suppliers in an attempt to get better deals with regard to price, content and delivery schedules. For India this illustrates the difficulty of having one major supplier that defines the conditions. For Russia it illustrates the problems connected with having few major recipients in a situation where friendship prices no longer provide an incentive to purchase Russian weapons.¹³

Both France and the United Kingdom are major suppliers of combat aircraft. The distribution of new combat aircraft orders between France, the UK, the USA and possibly Russia will be important for their future positions among the major suppliers.¹⁴ Apart from Russia only *France* showed a marked increase in arms deliveries in 2001, thereby reversing the decline since 1998. France accounted for 10 per cent of global arms transfers in 1997–2001, ranking as the third-largest supplier. The main recipients were Taiwan and the United Arab Emirates.

Ranking fourth, in 1997–2001 *the UK* accounted for 7 per cent of international arms transfers, showing only a slight increase in 2001, when it ranked fourth. Saudi Arabia was the UK’s only major recipient. *Germany*, the fifth-largest supplier in the period 1997–2001 as well as for 2001, showed a similar dependence on deliveries to Turkey. Germany experienced a drop in arms deliveries by 46 per cent from 2000 to 2001 and accounted for 5 per cent of international arms transfers in 1997–2001. Total arms transfers from *Ukraine*, the sixth-largest supplier for the period 1997–2001 and the eighth-largest supplier for 2001, were only 54 per cent of German arms transfers in 1997–2001. However, deliveries to Ukraine’s main recipient, Pakistan, were roughly equivalent to German and British deliveries to their main

¹¹ One example is India’s co-development of a light attack helicopter with France that is equipped with a French engine. Taverna, M. A., ‘New Turbomeca engine to power India’s LAH’, *Aviation Week & Space Technology*, 7 Jan. 2002, p. 30; Raghuvanshi, V., ‘Absent sanctions, India may shift weapon buys’, *Defense News*, 1–7 Oct. 2001, p. 3; *Interavia*, Sep. 2001, p. 12; Luce, E., ‘US seeks to strengthen military links with India’, *Financial Times*, 6 Nov. 2001, p. 2; and Rajagopalan, R. P., ‘Indo-US relations in the Bush White House’, *Strategic Analysis*, vol. 25, no. 4 (2001), pp. 545–56.

¹² Raghuvanshi, V., ‘Report urges India to widen contracting process’, *Defense News*, 30 Apr. 2001, p. 6.

¹³ A bilateral agreement on military–technological cooperation signed in Oct. 2001 might make Iran the third most important Russian recipient. Pronina, L., ‘Tehran turns to Moscow to fulfill weapon needs’, *Defense News*, 22–28 Oct. 2001, p. 18. US–Iranian relations, which seemed to improve in 2001, might worsen as a result of the alleged linkage to Iran of the arms shipment seized by Israel in Jan. 2002. Hockstader, L., ‘Freighter captain implicates Iran in weapons shipment’, *International Herald Tribune*, 10 Jan. 2002, p. 6.

¹⁴ ‘France isolated in military aircraft programs’ (translation from *Le Monde*), 24 Feb. 2002, in Foreign Broadcast Information Service, *Daily Report–West Europe (FBIS-WEU)*, FBIS-WEU-2002-0225, 25 Feb. 2002.

recipients. Ukraine accounted for 2.6 per cent of global arms transfers in 1997–2001, as well as in 2001.

With increasing cooperation being the main European industrial strategy, the global share of international arms transfers of individual European countries as well as the *European Union* (EU) as a whole will remain low. Cooperation in the development and production of major weapons for common European procurement reduces the number of weapons being produced and the number of countries in Europe from which transfers are made. Taken together, EU transfers to non-European countries (in effect, accounted for by France, Germany, Italy, Spain, Sweden and the UK, the six countries of the Framework Agreement Concerning Measures to Facilitate the Restructuring and Operation of the European Defence Industry) added up to 23 per cent of global arms transfers in 1997–2001 (appendix 8B).¹⁵

The major recipients

The long-term relative stability of the positions of the major suppliers is reflected among the major recipients. The nine largest recipients in the period 1996–2000 were also the largest recipients in 1997–2001 (appendix 8A), although their internal ranking altered. As a result of the continuous increase in China's arms imports since 1999 and a 44 per cent increase in 2001—including Russian combat aircraft and the second *Sovremenny* destroyer—China was the second-largest recipient in the period 1997–2001 and by far the largest recipient in 2001. Imports by India increased by 50 per cent but from a much lower level than for China, making India the third-largest recipient in 2001 after the UK. The reduction in South Korean imports in 2000 continued in 2001. As a result, the ranking order of the five major importers in 1997–2001 was Taiwan, China, Saudi Arabia, Turkey and India. These five recipients accounted for 35 per cent of global arms imports in 1997–2001.

Taiwan remained the largest recipient in 1997–2001 partly because of deliveries of 150 F-16 combat aircraft from the USA in 1997–99; 66 per cent of Taiwan's imports in this period were supplied by the USA and the rest were mainly from France. Another factor explaining Taiwan's high ranking is the decrease in mainly Saudi Arabia's imports.

Taiwan's 'wish list' is long, but the US Government has been restrictive in its deliveries of certain weapons in order not to complicate relations with China. However, the George W. Bush Administration has indicated a less restrictive position on arms transfers to Taiwan. In 2001 it declared its support for Taiwan and proposed that Taiwan should receive the same benefits as important non-NATO allies, a controversial proposal in Congress.¹⁶ The administration's proposal was further complicated by the US offer of conventional submarines that are not produced in the USA and which would require

¹⁵ The Framework Agreement is available at URL <<http://projects.sipri.se/expcon/loi/indrest02.htm>>.

¹⁶ Sherman, J., 'Proposal gives Taiwan US defense privileges', *Defense News*, 21 May 2001, p. 4.

the involvement of European producers and possibly Australia.¹⁷ A European–US combined effort to provide Taiwan with such submarines was discussed in late 2001, but no agreement was reported.¹⁸

There is international and regional concern over the effects of the nuclear and conventional weapon programmes in India and Pakistan—Pakistan was the 10th-largest importer in the period 1997–2001. Acquisitions and plans by India and Pakistan to acquire major weapon systems, some capable of delivering nuclear weapons, and their threat perceptions are described below.

III. Arms transfers to areas of conflict

Arms deliveries may strengthen military capabilities and influence bilateral or regional stability. They are of particular concern when made to recipients in regions where there is military–political tension, conflict or war. While India and Pakistan have been in the focus of concern largely because of their nuclear programmes they are also examples of countries which receive major conventional weapons despite a long-lasting military conflict. Moreover, in some cases the line between nuclear and conventional weapons is not clear in that acquisitions of conventional weapons can also support nuclear ambitions.

In other types of conflict, such as armed conflicts involving less well-armed actors, a focus on only major conventional weapons is insufficient for an understanding of how weapons may influence the development of a conflict.¹⁹ This is illustrated below by the discussion of the transfer of all types of arms to actors in intra-state wars in Guinea, Liberia and Sierra Leone.

Governments and groups in countries located in areas of conflict receive arms—sometimes legally and sometimes illegally and in breach of international arms embargoes. While suppliers have different reasons for supplying weapons, the arms suppliers cannot control whether arms deliveries will stabilize or destabilize a particular relationship. Sometimes the weapons help to end a war; in other situations the acquisition of new weapons increases insecurity and could thereby reduce the likelihood of a peaceful solution.

Arms imports by India and Pakistan

Arms transfers to India and Pakistan are probably the most disturbing examples of the failure to restrict the transfer of weapons to areas of tension and war. For most of the period since their independence in 1947 India and Pakistan have been fighting a low-intensity war. In 1965 and 1971 they fought intensive wars, and on several other occasions they have been very close to

¹⁷ Pomfret, J. and Mufson, S., ‘Submarines for Taipei opposed by Europeans’, *International Herald Tribune*, 26 Apr. 2001, p. 4.

¹⁸ Sherman, J., ‘Pentagon seeks European sub designs for Taiwan’, *Defense News*, 22–23 Oct. 2001, p. 6.

¹⁹ See also chapter 5 in this volume. For the texts of the UN embargoes see URL <http://projects.sipri.se/expcon/un_d3.htm>; and the EU embargoes see URL <<http://projects.sipri.se/expcon/euframe/euembargo.htm>>. See also table 8.2 in this chapter.

full-scale war. In recent years the threat of all-out war has again emerged. In 1999 the intensity of the fighting increased when Kashmiri rebels, supported by and operating from Pakistan, occupied a small area in the Kargil region of Kashmir. In December 2001 the situation became even more volatile after an attack on the Indian Parliament by terrorists. India accused Pakistan of having organized the attack and vowed to combat terrorists and their supporters everywhere, if necessary attacking Pakistan, quoting the US-led 'war on terrorism' as just as valid for India and its war against Kashmiri rebels as it is for the US attacks on Afghanistan and the Taliban.²⁰

Despite the half-century of tension and fighting between India and Pakistan, arms exporters have largely been willing to supply India and Pakistan with weapons, even weapons that could be deemed offensive. While all of the major arms suppliers have national guidelines cautioning against arms exports to regions of tension and/or countries at war or have signed international policy declarations to that effect, many have not perceived the existing tension between India and Pakistan as a strong reason to forbid exports. One exception is the USA, which imposed a national embargo on Pakistan in 1992, when it refused to stop its nuclear weapon programme, and imposed sanctions in 1998 on India after India tested nuclear weapons. The embargo on Pakistan was not supported by any other country and, although the sanctions on India were supported by most EU countries, they were limited to equipment directly linked to nuclear weapon development and production.

India and Pakistan have for many years been large importers of major weapons, usually ranking among the highest 15 importers. Both countries are dependent on imports to a high degree. With the exception of ballistic missiles, almost none of the weapons in service in India is of Indian design despite India's long-standing policy to establish an indigenous arms industry capable of developing and producing even the most advanced major weapons. Pakistan has a more modest arms industrial policy, largely focused on the assembly, maintenance and modification of major weapons and the production of ammunition and foreign-designed light weapons. Even Pakistan's ballistic missiles are dependent on technology from China and North Korea.

In the period 1997–2001 India acquired 80 per cent of its imports from Russia. Russia is willing to supply the most advanced weapons and to transfer technology under licence-production or cooperation programmes. However, India has other options.²¹ France, Germany and the UK are other major suppliers, for example, of combat aircraft and submarines as well as components and technologies for several Indian indigenous programmes (e.g., LCA combat aircraft and the Arjun tank) and for several weapons bought from Russia (e.g., Su-30MKI combat aircraft and Kilo Class submarines). In recent years Israel has become an important supplier, mainly of electronics.

²⁰ 'Indien ser sig som terroroffer' [India sees itself as a victim of terror], *Svenska Dagbladet* (Stockholm), 20 Dec. 2001, p. 20; 'India feels rival will not resort to nuclear weapons', *Financial Times*, 29–30 Dec. 2001, p. 3; and Slater, J. and Rashid, A., 'Dangerous manoeuvres', *Far Eastern Economic Review*, 10 Jan. 2002, pp. 14–18.

²¹ See also the discussion below of changes in US policy and possible influences.

Pakistan is in a more difficult position. Its lack of financial resources and Indian pressure on possible suppliers have left it with few options. Its three main suppliers are China, France and the USA. The USA embargoed all sales of military equipment to Pakistan in 1992 and has shown little interest in supplying large amounts of weapons even after Pakistan's assistance in the US fight against the Taliban. French weapons are expensive, and Pakistan considers Chinese weapons as second rate.²²

Tactical or strategic systems

Because India and Pakistan are neighbours, large parts of both countries are within easy reach of combat aircraft and medium-range ground- and sea-launched missiles. While the effectiveness of such conventional systems in the past was rather limited, new technology has increased their potential to destroy critical strategic targets such as central military and government headquarters or bases for weapons of mass destruction. In addition, both countries have developed and tested nuclear weapons that are or can be used to arm combat aircraft, air-, sea- and land-based missiles.²³ For these reasons, such weapons may be considered 'strategic weapons'.

India and Pakistan have made clear that they want to acquire additional means of delivering nuclear weapons and more long-range precision weapons, most of which must be imported. India has advanced and ambitious plans. In recent years it has ordered 180 Su-30MKI combat aircraft from Russia and has ordered or is evaluating several types of precision-guided weapons for these aircraft. The Su-30MKI has a range which enables it to reach all of Pakistan, and with the support of four recently ordered Il-78 tanker aircraft (from Uzbekistan) the Su-30MKI is able to reach deep into the Middle East, possibly deterring an attack on India by the Arab states that support Pakistan. Older submarines that are being modernized and new submarines (including nuclear-powered submarines from Russia) are planned to be equipped with Russian and indigenous land-attack missiles. Nuclear warheads are planned to be added to some of these missiles.²⁴

The Pakistani Navy has countered with a plan for submarine-launched missiles with nuclear warheads, possibly modifying SM-39 Exocet missiles supplied by France or UGM-84 Harpoon missiles supplied by the USA.²⁵ The navy is also still seeking to acquire advanced combat aircraft. Plans for 44 Mirage 2000-5s from France were cancelled for financial reasons in 1994,

²² 'Pakistan Air Force said planning to buy 52 planes, arms, surveillance radars', *The News* (Islamabad), 5 Sep. 2001, in Foreign Broadcast Information Service, *Daily Report-China (FBIS-CHI)*, FBIS-CHI-2001-0905, 7 Sep. 2001.

²³ See also appendix 10A in this volume.

²⁴ *NAVINT*, vol. 13, no. 6 (15 Mar. 2001), p. 5; and Siddiqu-Agha, A., 'Nuclear navies?', *Bulletin of the Atomic Scientists*, Sep./Oct. 2000, pp. 12-14.

²⁵ 'Pakistan intends to equip its three armed services with nuclear weapons', *Pravda*, 11 June 2001, URL <<http://english.pravda.ru/world/2001/06/11/7498.html>>; and 'Pakistan's nuclear navy', *Bulletin of the Atomic Scientists*, 22 Feb. 2002, URL <<http://www.bullatomsci.org/bulletinwirearchive/BulletinWire010222.html>>. An option to modify US-supplied RGM-84 Harpoon missiles has also been mentioned. Siddiqu-Agha (note 24).

but the plan may be revived.²⁶ There is, however, no evidence that Pakistan plans to arm its aircraft with long-range conventional missiles as India plans to do.

Air defence systems

In addition to building up an offensive capability, India has sought to acquire an anti-ballistic missile defence system and to improve its air defences against aircraft.²⁷

India has an ambitious air defence and anti-ballistic missile (ABM) programme. In recent years Indian air defences have been strengthened with new surface-to-air missile (SAM) systems acquired mainly from Russia, and other SAM systems in Indian service have been modernized.²⁸ Reports claim that more SAM systems are planned.²⁹ Plans for an air-defence system with a secondary ABM role—based on the Russian S-300/SA-10 SAM system—were drawn up in the early 1990s, primarily to counter Pakistani aircraft and short-range surface-to-surface missiles (SSMs). Pakistan's development of both nuclear weapons and medium-range SSMs in the late 1990s has been closely matched by Indian plans, which now include several different SAM systems to be bought from Russia and integrated with locally developed Akash and Trishul SAM systems and Green Pine early-warning radars bought from Israel.³⁰ The Russian systems include the latest version of the S-300/SA-10 with a limited ABM capability, the S-300V/SA-12 with a more pronounced ABM capability and another system, possibly the new S-400, which has even more ABM capabilities.³¹

If the argument that defences against ballistic missiles (armed with nuclear warheads) undermine deterrence is true for the Russian–US relationship, it should also be valid for India and Pakistan. An Indian defence against ballistic missiles and aircraft could, on the one hand, be perceived as purely defensive and guarantee an Indian second-strike capability. It could also, on the other hand, be perceived by Pakistan as part of an offensive policy to defeat any possible Pakistani retaliation after an Indian first strike.

²⁶ 'Pakistan Air Force said planning to buy 52 planes, arms, surveillance radars' (note 22).

²⁷ Pakistan has no stated requirements for ABMs, and its air defences are mainly based on combat aircraft and limited numbers of short-range missiles.

²⁸ *Asian Defence Journal*, Nov. 2000, p. 52; and 'India plans to update air defenses', *Defense News*, 9–15 July 2001, p. 20.

²⁹ Sengupta, P. K., 'China, India in new arms buying spree', *Asian Defence Journal*, Aug. 2001, p. 16.

³⁰ The Green Pine radar was developed by Israel for its Arrow ABM system. While there is little debate in Israel about the deal, it is unclear if the USA will allow Israel to export the Green Pine radar since it includes US technology. *Jane's Defence Weekly*, 12 July 2000, p. 3; and *Aviation Week & Space Technology*, 25 Sep. 2000, p. 19.

³¹ Sengupta, P. K., 'More military hardware flows into South, Southeast Asia', *Asian Defence Journal*, Nov. 2001, p. 12; 'India may acquire Russian "missile shield"', *Jane's Defence Weekly*, 14 Nov. 2001, p. 5; and Sengupta (note 29).

The significance of small transfers of arms

In many current armed conflicts there are poorly armed actors, including both non-state and government actors. Even limited transfers of conventional arms (e.g., small quantities of arms or of relatively simple or old arms) can be an important addition to the military capabilities of such actors. Small transfers can significantly affect how conflicts develop. This significance is poorly reflected, if at all, in the SIPRI arms transfers statistics because the arms involved either contribute to a low SIPRI arms transfer trend-indicator value or are not included in the trend-indicator value, as in the case of small arms.³²

Arms transfers to conflict areas are common but often small. As a result few non-state actors in current conflicts appear in SIPRI's list of arms recipients, while government actors in current conflicts usually rank low. The latter is illustrated with the following examples of governments involved in armed conflicts and their rank in the SIPRI list of recipients of major conventional weapons in the period 1997–2001: Algeria (23), Angola (31), Colombia (40), Indonesia (42), Sri Lanka (51), Macedonia (61), the Democratic Republic of the Congo, DRC (63), the Philippines (67), Sudan (70) and Rwanda (87).

How small transfers of arms are perceived to be significant as they either fuel conflicts or contribute to the resolution of conflicts is illustrated below with examples of recent arms transfers to actors in the conflicts in Guinea, Liberia and Sierra Leone. For the period 1997–2001 the government actors in these conflicts rank 96, 110 and 115, respectively, in the SIPRI list of recipients of major conventional weapons. The non-state actors in these conflicts do not appear in the SIPRI list.

Arms transfers to Guinea, Liberia and Sierra Leone

In the UN the constant flow of small arms from abroad to the Revolutionary United Front (RUF) was considered as fuelling the conflict in *Sierra Leone* and led to a UN embargo on arms supplies to the RUF.³³ *Liberia* was accused of acquiring small arms from Eastern Europe by circumventing normal controls and then supplying them to the RUF to sustain its war effort. In order to cut off these supplies to the RUF, in March 2001 the UN placed an arms embargo on Liberia.³⁴

While the arms supplies to the RUF were generally considered as fuelling the conflict in West Africa, opinions were mixed about the effect of arms supplies to *Guinea*, another actor in the conflict. When the conflict spread from

³² For a discussion of the UN Conference on the Illicit Trade in Small Arms and Light Weapons see appendix 13A in this volume. Of the weapons generally considered to fall in the category of small arms and light weapons the SIPRI arms transfers trend-indicator value includes only man-portable SAMs and anti-tank missiles.

³³ UN Security Council Resolution 1171, 5 June 1998.

³⁴ United Nations, Report of the Panel of Experts appointed pursuant to Security Council Resolution 1306 (2000), paragraph 19 in relation to Sierra Leone, contained in 'Note by the President of the Security Council', UN Document S/2000/1195, 20 Dec. 2000; and United Nations, Report of the Panel of Experts pursuant to Security Council Resolution 1343 (2001), paragraph 19, concerning Liberia, 26 Oct. 2001.

Sierra Leone to Guinea the Guinean Government acquired small batches of weapons, including mortars from Croatia in 2000, artillery from Moldova and Romania in 2000, ammunition and weapon upgrade packages from Russia in 2001, and four second-hand combat helicopters from Ukraine in 2001.³⁵ On the one hand, these arms supplies caused concern because their use in indiscriminate attacks on the RUF caused civilian casualties and because, in reaction to the acquisition of combat helicopters by Guinea, Liberia and Côte d'Ivoire sought to procure similar combat helicopters.³⁶ On the other hand, the newly acquired weapons were an important element of the successful Guinean Government offensive against the RUF. The resulting defeat of the RUF in Guinea contributed to the weakening of the RUF in Sierra Leone to such an extent that it was prepared to agree to a peace agreement and disarmament.³⁷

Many of the weapons supplied to the actors in the conflicts in Guinea, Liberia and Sierra Leone came from East European countries and former Soviet republics. They were sold via arms brokers and dealers, often operating through companies with unclear ownership, and were shipped through both willing and unknowing transit countries.³⁸ The financial turnover of such arms is, at most, in the range of millions of dollar. Nevertheless, profit has been a sufficient motive for individuals and cash-strapped governments to engage in this type of trade, regardless of the possible detrimental effect on conflicts. While the supplies of weapons to Guinea may have helped to end a conflict, this was not the specific objective of the suppliers.

In other cases, however, governments have intentionally supplied weapons as one element of the efforts to resolve a conflict. In the case of the Sierra Leone conflict the British Government has adopted such a policy. It donated small arms to the Sierra Leone Government in 2000 and continued training the Sierra Leone armed forces in 2001.³⁹ Military assistance to Sierra Leone was considered part of a strategy to 'repel the RUF, to restore the peace process and to rebuild Sierra Leone' and a 'key factor in helping transform the security situation in the country'.⁴⁰

British support was only possible when, in 1998, the UN limited its 1997 arms embargo on the whole of Sierra Leone to an arms embargo on the RUF

³⁵ SIPRI database; and Agence France-Presse, 'Guinean president inks military deal with Russia', 27 July 2001, URL <http://www.iansa.org/news/2001/jul_01/index.htm>.

³⁶ Human Rights Watch, 'Guinean forces kill, wound civilians in Sierra Leone', 28 Feb. 2001, URL <<http://www.hrw.org/press/2001/02/guinea0227.htm>>; and Report of the Panel of Experts pursuant to Security Council Resolution 1343 (note 34), pp. 38–39.

³⁷ See chapter 1 in this volume.

³⁸ Report of the Panel of Experts pursuant to Security Council Resolution 1343 (note 34).

³⁹ Wezeman, P. D., Wezeman, S. T. and Chipperfield, N., 'Transfers of small arms and other weapons to armed conflicts', *SIPRI Yearbook 2001: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2001), p. 417; and British Ministry of Defence, 'Sierra Leone Army to receive more British military training', 26 Jan. 2001, URL <<http://www.mod.uk/index.php3?page=2&nid=1059&view=870&cat=0#news1059>>.

⁴⁰ 'Statement by the Foreign Secretary Robin Cook, House of Commons, London, Tuesday, 6 June 2000', UKOnline, URL <<http://www.fco.gov.uk/news/newstext.asp?3753>>; and 'UK military assistance in Sierra Leone', 10 Downing Street Newsroom, 3 Sep. 2001, URL <<http://www.pm.gov.uk/news.asp?NewsId=2497>>.

alone. The UN made the change because the Sierra Leone Government was considered to have legitimate military needs.⁴¹

In general, the challenge in such cases is to determine whether and under which circumstances arms supplies can be a responsible policy instrument as part of a broader set of conflict resolution instruments.

The ECOWAS moratorium on small arms and light weapons

On the recipient side, the governments of West Africa have recognized the need to control the proliferation of arms in the region. The focus of the ensuing effort has been on small arms and light weapons. In order to stem the spread of such weapons in West Africa, on 31 October 1998 the member states of the Economic Community of Western African States (ECOWAS) declared a three-year Moratorium on the Importation, Exportation and Manufacture of Small Arms and Light Weapons.⁴² The moratorium was extended for another three years on 5 July 2001. A code of conduct for the implementation of the moratorium was adopted on 10 December 1999. It calls for the ECOWAS member states to: exchange information on procurement of small arms and develop a regional register on small arms stocks, improve and harmonize the control of transfers of small arms, cooperate with other members in border controls, destroy all small arms surplus to national requirements and small arms confiscated or collected in the context of peace accords, and establish national commissions to implement the moratorium.⁴³

Even though several ECOWAS states have made efforts to fulfil their commitments, the implementation of the moratorium has proved difficult.⁴⁴ The plans for a regional arms register have not been successful, and only three national commissions had been set up by early 2001. If the implementation of the moratorium were to improve it would have an important function as a first step in regional arms control. The exchange of information on military matters between governments, in particular, is a new development in the region.⁴⁵

⁴¹ UN Security Council Resolution 1171, 5 June 1998. For a broader discussion of how even-handedness and a general call for peaceful resolution have increasingly been replaced by a determination of responsibility see chapter 5 in this volume.

⁴² The Declaration of a Moratorium on the Importation, Exportation and Manufacture of Small Arms and Light Weapons in West Africa is contained in 'Letter dated 17 December 1998 from the Permanent Representative of Togo to the United Nations addressed to the Secretary-General', UN document A/53/763, S/1998/1194, 18 Dec. 1998.

⁴³ Haddad, M. N., 'West Africa and the moratorium on small arms', *The Perspective*, URL <<http://www.theperspective.org/moratorium.html>>. For a full description of the moratorium see the UN Regional Centre for Peace and Disarmament in Africa, in cooperation with the Norwegian Institute of International Affairs (NUPI) and the Norwegian Initiative on Small Arms Transfers (NISAT), *The Making of a Moratorium on Light Weapons* (NUPI: Oslo, 2000), URL <<http://www.nisat.org/publications/moratorium/default.htm>>. The Code of Conduct for the Implementation of the Moratorium is reproduced on pp. 49–54.

⁴⁴ Small Arms Survey, 'Tackling the small arms problem: multilateral measures and initiatives', *Small Arms Survey 2001: Profiling the Problem* (Oxford University Press: Oxford, 2001), p. 260; and Edwards, S., 'UN's African gun control program firing blanks', *National Post*, Apr. 14 2001, URL <http://www.nisat.org/west%20africa/news%20from%20the%20region/Critique_of_PCASSED.htm>.

⁴⁵ United Nations Office for the Coordination of Humanitarian Affairs (OCHA), Integrated Regional Information Network for Western Africa (IRIN-WA), 'West Africa: IRIN focus on renewal of small

However, in practice the moratorium is limited in scope. It does not stop all imports of weapons by ECOWAS countries because it provides for exemptions which allow countries to import small arms to meet legitimate national security needs.⁴⁶ Because the moratorium does not define ‘legitimacy’ each government can interpret it as it sees fit and procure the weapons it wants. While the moratorium appears to address small arms proliferation to all actors in the region, in reality it is mainly an instrument for cooperation between governments to keep weapons under state control.

Another limitation of the moratorium is the focus on small arms and light weapons. Major conventional weapons played a role in the build-up of tension in the region, and the UN report on Liberia therefore suggested that, for reasons of transparency and confidence building, the moratorium should be broadened to an information exchange for all weapon types procured by ECOWAS states.⁴⁷

International arms embargoes

There were 36 partial or complete international embargoes (on 21 countries, 1 territory and 3 rebel groups) on arms transfers, military services or other military-related transfers in the period 1997–2001 (table 8.2).⁴⁸ At the end of 2001, 12 countries, 1 territory and 3 rebel groups were under international arms embargoes. Of these, 7 were under mandatory UN Security Council embargoes—legally binding for all UN members.

A peace agreement was signed between *Eritrea* and *Ethiopia* in December 2000, and the mandatory one-year arms embargo (imposed on 17 May 2000 by the UN on both countries) came to an end in May 2001. The EU embargoes on both countries were also lifted at that time.⁴⁹

The UN arms embargo imposed in 1998 on *Yugoslavia* was lifted on 10 September 2001 when the Security Council announced that it was satisfied that Yugoslav actions against Albanians in Kosovo had come to an end. The EU lifted its sanctions on Yugoslavia in October 2001.

The terrorist attacks of 11 September 2001 and the US attacks on Afghanistan increased support for the mandatory embargo on arms transfers to *Afghan territory held by the Taliban* imposed by the UN Security Council on 19 December 2000. The purpose was to force the Taliban to stop supporting and training ‘international terrorists’ and to cease harbouring Usama bin Laden. By the end of 2001, however, the embargo had become almost meaningless since the Taliban held little or no Afghan territory. The voluntary UN

arms moratorium’, IRIN-WA, 11 June 2001, URL <<http://www.reliefweb.int/w/rwb.nsf/6686f15dbc852567ae00530132/311c56442257003585256a690077a1ca?OpenDocument>>.

⁴⁶ *The Making of a Moratorium on Light Weapons* (note 43), p. 17.

⁴⁷ Report of the Panel of Experts pursuant to Security Council Resolution 1343 (note 34), p. 12.

⁴⁸ See chapter 1, appendix 1A in this volume for descriptions of some of the relevant conflicts. For the texts of UN embargoes and relevant documents see URL <<http://www.un.org/Docs/scinfo.htm#SANCTIONS>>. See also the texts of EU and UN embargoes (note 19).

⁴⁹ Arms deliveries to Eritrea from Russia were resumed as soon as the embargo was lifted.

Table 8.2. International arms embargoes, 1997–2001

Target	Entry into force	Lifted	Legal basis
<i>Mandatory UN embargoes</i>			
Afghanistan (Taliban)	19 Dec. 2000	–	UNSCR 1333
Angola (UNITA)	15 Sep. 1993	–	UNSCR 864
Eritrea	17 May 2000	15 May 2001	UNSCR 1298
Ethiopia	17 May 2000	15 May 2001	UNSCR 1298
Iraq	6 Aug. 1990	–	UNSCR 661
Liberia ^a	19 Nov. 1992	7 Mar. 2001 ^b	UNSCR 788
	7 Mar. 2001 ^b	–	UNSCR 1343
Libya	31 Mar. 1992	5 Apr. 1999 ^c	UNSCR 748
Rwanda (rebels) ^d	16 Aug. 1995	–	UNSCR 1011
Sierra Leone	8 Oct. 1997	5 June 1998	UNSCR 1132
Sierra Leone (rebels) ^e	5 June 1998	–	UNSCR 1171
Somalia ^f	23 Jan. 1992	–	UNSCR 733
Yugoslavia (FRY)	31 Mar. 1998	10 Sep. 2001	UNSCR 1160
<i>Non-mandatory UN embargoes^g</i>			
Afghanistan	22 Oct. 1996	(Oct. 2001) ^h	UNSCR 1076
Armenia	29 July 1993	–	UNSCR 853
Azerbaijan	29 July 1993	–	UNSCR 853
Eritrea	12 Feb. 1999	17 May 2000 ⁱ	UNSCR 1227
Ethiopia	12 Feb. 1999	17 May 2000 ⁱ	UNSCR 1227
<i>EU embargoes (mandatory)</i>			
Afghanistan ⁱ	17 Dec. 1996	(5 Nov. 2001) ^k	96/746/CFSP
Bosnia and Herzegovina ^{l,m}	5 July 1991	–	–
China	27 June 1989	–	–
Croatia ^l	5 July 1991	20 Nov. 2000	–
DRC ^j	7 Apr. 1993	–	–
Eritrea ^l	15 Mar. 1999	31 May 2001	1999/206/CFSP
Ethiopia ^l	15 Mar. 1999	31 May 2001	1999/206/CFSP
Indonesia ^l	17 Sep. 1999	17 Jan. 2000	1999/624/CFSP
Iraq	4 Aug. 1990	–	–
Libya	27 Jan. 1986	–	–
Myanmar (Burma) ^j	29 July 1991 ⁿ	–	–
Nigeria ^j	20 Nov. 1995	1 June 1999	95/515/CFSP
Sierra Leone (rebels) ^{e,l}	8 Dec. 1997	–	98/409/CFSP
Slovenia	5 July 1991	26 Feb. 1996 ^o	–
Sudan ^j	15 Mar. 1994	–	94/165/CFSP
Yugoslavia ^l	5 July 1991	8 Oct. 2001	–
<i>Other international embargoes (non-mandatory)</i>			
Nagorno-Karabakh (Azerbaijan) ^p	28 Feb. 1992	–	–
Burundi ^q	6 Aug. 1996	23 Jan. 1999	–
Nigeria ^r	24 Apr. 1996	Nov. 1999	–

Acronyms: CFSP = Common Foreign and Security Policy; DRC = Democratic Republic of the Congo; EU = European Union; FRY = Federal Republic of Yugoslavia; UNITA = União Nacional Para a Independência Total de Angola (National Union for the Total Independence of Angola); UNSCR = UN Security Council Resolution.

^a Does not apply to deliveries to Economic Community of West African States Monitoring Group (ECOMOG) forces in Liberia.

^b The arms embargo imposed by UNSCR 788 was terminated by UNSCR 1343 and replaced by a new embargo imposed for different reasons.

^c The embargo was suspended on this date, not lifted.

^d Does not apply to deliveries to government forces in Rwanda. The embargo is also on equipment for persons in neighbouring states if the equipment is for use in Rwanda.

^e Does not apply to deliveries to government or ECOMOG forces in Sierra Leone.

^f Modified in June 2001 to allow certain non-lethal equipment for UN, humanitarian and media workers in Somalia.

^g UN voluntary embargoes are in the form of a non-binding 'call' or 'urge' not to supply weapons. The dates when UN voluntary embargoes end are difficult to assess since there is generally no formal time limit or announcement of the end. The embargoes mentioned here are those deemed by the authors to still be in effect in the period 1997–2001 since the original grounds for the resolution have not been resolved.

^h The voluntary UN embargo on Afghanistan was not officially lifted but ceased to have any effect around Oct. 2001 when several countries began supplying the Northern Alliance as part of the war on terrorism.

ⁱ On 17 May 2000 the UN Security Council implemented a mandatory embargo.

^j Does not apply to deliveries under existing contracts.

^k The embargo was modified on 5 Nov. 2001 by Council decision 2001/771/CFSP to include only deliveries to Taliban-held territory, in line with the UN mandatory embargo.

^l The EU associate members, the candidate country Cyprus and the European Free Trade Association (EFTA) countries (Iceland, Liechtenstein, Norway and Switzerland), members of the European Economic Area, have declared that they share the objectives of these embargoes.

^m The embargo was modified on 17 July 1999 (99/481/CFSP) to exclude small arms for the police and demining equipment.

ⁿ A 'decision to refuse the sale of any military equipment' was made by the EU General Affairs Council on 29 July 1991. On 28 Oct. 1996 a decision confirming the embargo (96/635/CFSP) was made by the EU Council of Ministers for Foreign Affairs.

^o On this date the embargo was changed to a case-by-case evaluation governed by the EU common criteria on arms exports adopted in 1991. The embargo was officially lifted on 10 Aug. 1998.

^p Organization for Security and Co-operation in Europe embargo only on deliveries to forces engaged in combat in Nagorno-Karabakh (i.e., the local forces of Nagorno-Karabakh and those of Armenia and Azerbaijan in Nagorno-Karabakh).

^q Embargo by the Democratic Republic of the Congo, Eritrea, Ethiopia, Kenya, Rwanda, Tanzania, Uganda and Zambia.

^r Commonwealth embargo.

Source: SIPRI arms transfers archives.

embargo on all parties in the conflict in Afghanistan since 1996 was not implemented when the USA and its allies joined the Northern Alliance in the fight against the Taliban.⁵⁰

On 7 March 2001, UN Security Council Resolution 1343 lifted the 1992 embargo against Liberia after the civil war ended. The UN imposed a new embargo to force Liberia to cease its support of the RUF in Sierra Leone.⁵¹

⁵⁰ The 1996 embargo was meant as a signal of concern regarding the war in Afghanistan. The war was not mentioned as a reason for the 2000 mandatory embargo.

⁵¹ UN Security Council Resolution 1343, 7 Mar. 2001.

Several media reports have claimed that there were continuing breaches of the arms embargoes, including the mandatory UN embargoes. The reports focused on continued deliveries mainly by East European countries and former Soviet republics to UNITA (União Nacional Para a Independência Total de Angola, National Union for the Total Independence of Angola) in *Angola* and to the RUF in *Sierra Leone*.⁵² These claims were supported by the United Nations' 2001 report investigating its embargo on *Liberia*.⁵³

IV. Arms trade and competition

The value of the arms trade

The SIPRI trend indicator cannot be used to assess the economic scale of the global arms market or national arms markets. For this purpose, data are needed on the financial value of international sales of weapons, here called the arms trade.

Most of the major supplier governments release data on the value of their arms trade (appendix 8E). By adding these together, it is possible to arrive at a rough estimate of the total financial value of the global arms trade. The value of the global arms trade in 2000 (the latest available year) is estimated at \$27–33 billion.⁵⁴ This is a rough estimate because the available data are not entirely reliable or comparable, as explained in appendix 8E. Since 1999, when SIPRI began to estimate this global financial value from the national financial values, it has accounted for less than 1 per cent of total world trade.⁵⁵

The national reports differ with regard to the definition of arms and the sources used. Some nations publish reports using different definitions (see appendix 8E for a presentation of these problems). It is therefore not possible to make a completely reliable comparison. Table 8.3 provides the best comparison that can be made of the value of arms deliveries in 1996–2000 as reported by the major suppliers and converted to constant 1998 prices.⁵⁶ The lower US value of 'arms deliveries' is compiled by the Congressional Research Service (CRS), while the higher values of 'arms transfer deliveries' are compiled by the Department of State. Both British values for deliveries of 'defence equipment' are compiled by the Ministry of Defence (MOD), but the

⁵² For earlier reports on Angola and Sierra Leone see Hagelin, B., Wezeman, P. D., Wezeman, S. T. and Chipperfield, N., 'Transfers of major conventional weapons', *SIPRI Yearbook 2001* (note 39), pp. 323–52; and Human Rights Watch, *Neglected Arms Embargo on Sierra Leone Rebels* (Human Rights Watch: Washington, DC, 15 May 2000).

⁵³ Report of the Panel of Experts pursuant to Security Council Resolution 1343 (note 34).

⁵⁴ The lower estimate is the aggregation of reported minimum values; the higher estimate is the aggregation of reported maximum values of delivered arms. The US Department of State figure for 2000 is not available but the Department of State always reports a higher value than the one reported by the CRS. For some smaller countries, only data on arms licences are available. When this is the case, these values have been used. For the 1998 values see Hagelin, Wezeman, Wezeman and Chipperfield (note 52), p. 350.

⁵⁵ Total world trade in 2000 amounted to \$6310.1 billion. International Monetary Fund (IMF), *International Financial Statistics Yearbook* (IMF: Washington, DC, 2001), p. 131.

⁵⁶ The conversion to constant prices was made according to the methodology used by the SIPRI military expenditure project. See appendix 6C in this volume.

higher values include items which are not distinguished as either military or civil aerospace equipment by the official commodity classifications. The definitions also differ between the other suppliers: the Russian values represent exports of 'military equipment', while France reports on deliveries of 'arms and associated services' and Germany on 'weapons of war'.

The USA was by far the largest supplier in 1996–2000 even when using the low values (table 8.3). For Russia, however, these values create a different position than that usually reported. Russia ranks fourth, before Germany, although there is a substantial gap between the total values for Russia and Germany. Consequently, this also affects the other major suppliers. The high values for the UK made it the second-largest supplier. If the lower values are used for the UK, France becomes the second-largest supplier.

Table 8.3 also shows arms exports as a share of total national exports. Russia, the UK and the USA show significant arms export shares. Using the higher arms export values, the shares for both Russia and the USA were over 4 per cent for individual years, while the share for the UK—even with the high values—has been on the decline from close to 4 per cent in 1996 and 1997 to less than 3 per cent by 1999.

With the exception of the USA (even using the low figures), the UK in 1996 and 1997, and France in 1997 and 1998 the shares are less than 2 per cent of total exports. German arms exports accounted for less than 1 per cent of total exports for each year. The conclusion is that arms exports did not contribute significantly to the national economy.

This conclusion is supported by a study of the economic costs and benefits from a 50 per cent reduction in British defence exports. It concludes that the economic costs are limited and that the discussion of defence exports should focus mainly on non-economic considerations.⁵⁷

Competition

For the buyer, competition between two or more suppliers is important in order to obtain the lowest price. Success in international competition for larger contracts has become more important for supplier company survival because such contracts have become fewer and infrequent. The existence of several suppliers that are eager to sell gives the buyer a strong bargaining position. The buyer may receive benefits which would not otherwise be available, such as a lower price or access to military technology. The examples given below show how compensation arrangements affect the trade in arms and military technology.

⁵⁷ Chalmers, M. *et al.*, *The Economic Costs and Benefits of UK Defence Exports* (Centre for Defence Economics, University of York: York, Nov. 2001). Nationally available data on the number of weapons exported can also be compared with data reported by other sources. Such a comparison of Russian data with data presented by the CRS was made by Makienko, K., 'US Congressional Research Service report on Russia's place on arms market', *Eksport Vooruzhenii*, no. 5 (Sep./Oct. 2001), pp. 2–6. The conclusion was that the CRS report was not a reliable source of information, nor did it present an accurate evaluation of Russia's position in the international arms market.

Table 8.3. Arms deliveries according to national reporting, 1996–2000

Figures are in US \$m. at constant (1998) prices.

	1996	1997	1998	1999	2000	1996–2000
USA: High values (1)	23 708	32 212	27 000	32 306	..	115 226
USA: Low values (2)	15 410	16 537	16 482	17 558	13 434	79 421
% of total US exports (1)	3.7	4.6	4.0	4.7
% of total US exports (2)	2.4	2.4	2.4	2.6	1.8	2.3
UK: High values (1)	10 911	11 449	9 988	6 932	6 985	46 265
UK: Low values (2)	6 009	5 754	3 260	1 598	2 728	19 349
% of total UK exports (1)	3.9	3.9	3.7	2.6	2.6	3.3
% of total UK exports (2)	2.2	2.0	1.2	0.6	1.0	1.4
France	5 621	8 176	7 728	4 633	3 298	29 457
% of total French exports	1.9	2.8	2.5	1.6	1.1	2.0
Russia	4 055	3 658	2 700	3 328	3 485	17 227
% of total Russian exports	4.4	4.1	3.6	4.5	3.5	4.0
Germany	588	794	760	1 607	737	4 486
% of total UK exports	0.1	0.2	0.1	0.3	0.1	0.2

Sources: Nationally reported arms export values as listed in appendix 8E converted to constant prices and International Monetary Fund (IMF) total national export figures. IMF, *International Financial Statistics Yearbook* (IMF: Washington, DC, 2001), p. 131.

Inventive approaches by the recipient may influence the price and terms of a deal. The main contenders to sell new combat helicopters to South Korea are companies from the USA and Russia. Usually, US weapons are purchased under the Foreign Military Sales (FMS) programme, involving US Government guarantees, or they are bought directly from the producing company (commercial sale). US policy has been that a potential buyer may request an FMS programme or a commercial sale, but not both. However, South Korea has asked for three separate offers from each of two different US companies: one under the FMS programme, one for a commercial sale, and one for Korean licence manufacture.⁵⁸

Compensation and arms transfers

While competition can result in the best price for the buyer, the purpose of compensation arrangements is for the supplier to help ‘offset’ the buyer’s acquisition costs. Such offset deals are often long-term arrangements involving the purchasing country in a mix of trade and industrial arrangements.⁵⁹

Offsets can be used as a competitive tool to win an export contract. The specific offset arrangement may involve the transfer of military equipment and technologies. First, it is not uncommon today to include military technology

⁵⁸ Sherman, J., ‘South Korea driving hard bargain for choppers, analysts say’, *Defense News*, 2–8 July 2001, p. 8.

⁵⁹ For more information see Sköns, E. and Weidacher, R., ‘Arms production’, *SIPRI Yearbook 2000: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2000), pp. 311–14; and Hagelin, Wezeman, Wezeman and Chipperfield (note 52), pp. 334–38.

transfers to the buyer in addition to the weapon system itself. For instance, in South Korea, French Dassault in cooperation with other French companies offered the Rafale combat aircraft with 70–100 per cent offsets, including the transfer of technologies to build air-to-air and air-to-surface missiles. Its US competitor, Boeing, offered the F-15K with 70 per cent offsets, including technology transfers that would enable South Korea to produce its own aircraft by 2015.⁶⁰ Similarly, Italian Agusta transferred some production of A-109 helicopters to South Africa as part of a South African order of 30 A-109s.⁶¹

Second, some arrangements involve transfers of military equipment from the buyer. As part of their offer to sell 24 JAS-39 Gripen aircraft to the Czech Republic, in December 2001 BAE Systems agreed to attempt to find buyers for 36 L-159 light combat/trainer aircraft being produced for but no longer wanted by the Czech Republic.⁶² Third, more common than such direct military export support are military transfers from the recipient country that result from co-production arrangements. As a result of the selection of NH-90 transport helicopters by Finland, Norway and Sweden under the Nordic Standard Helicopter Programme (NSHP), industry in all three countries will be involved in NH-90 production not only for NSHP countries but also for other customers.⁶³ The Dassault and Eurofighter International offers to South Korea also included local production of components for aircraft not ordered by South Korea.⁶⁴ Parts of the order of Italian A-109 helicopters ordered by Sweden are to be supplied from the South African production line.⁶⁵

International ownership of companies in the most advanced arms-producing countries is part of defence industrial strategy, but foreign investment may also be a particular form of offset. As such, it is mainly found in the less advanced arms-producing countries and in countries that want to privatize state-owned companies.⁶⁶ For the buyer's company it brings work and preserves skills, for the government it sustains military-industrial capacity, and for both it secures employment.

⁶⁰ 'France to provide missile technology for fighter contract', *Korean Herald* (Internet edn), 17 Sep. 2001; 'Dogfight over Seoul', *Interavia*, Oct. 2001, pp. 43–44; and *Jane's Defence Weekly*, 24 Oct. 2001, p. 22. In addition, the French Government has agreed to sell SCALP 300-km range air-to-surface missiles for the Rafale, while the US Government has agreed to sell the similar SLAM for the F-15K.

⁶¹ 'Sweden orders A109s', *AirForces Monthly*, Aug. 2001, p. 23; and *Aviation Week & Space Technology*, 25 Jan. 2002, p. 21.

⁶² Anderson, R., 'Czechs give jet fighter deal to UK–Swedish consortium', *Financial Times*, 11 Dec. 2001, p. 6. The additional demand to participate in the L-159 exports was mentioned before the government's decision. 'Spänd väntan på Saab' [Tense wait at Saab], *Svenska Dagbladet* (Stockholm), 6 Dec. 2001, p. 16; and 'Spänd väntan på Gripenbesked' [Tense wait for Gripen decision], *Dagens Nyheter* (Stockholm), 6 Dec. 2001, p. C2.

⁶³ *Defence Industry*, Nov. 2001, p. 13; and 'NSHP offset will boost Saab's earnings', *Countertrade & Offsets*, vol. 19, no. 20 (22 Oct. 2001), pp. 5–6.

⁶⁴ *Air Letter*, 11 June 2001; and Taverna, M. A., 'United order lifts Dassault', *Aviation Week & Space Technology*, 5 Nov. 2001, p. 61.

⁶⁵ 'Sweden orders A109s', *AirForces Monthly*, Aug. 2001, p. 23, URL <www.airforcesmonthly.com>.

⁶⁶ See Sköns and Weidacher (note 59), pp. 311–14; and Hagelin, Wezeman, Wezeman and Chipperfield (note 52), pp. 335–38.

Table 8.4. Examples of reportedly offered or demanded offsets

Weapon system	Customer	Offset share (%)
Demanded in combat aircraft deal by	Brazil	100
Demanded in combat aircraft deal by	Slovakia	100
Gripen combat aircraft offer to	Hungary	100
Gripen combat aircraft offer to	Poland	100
C-235/295 transport aircraft deal with	Poland	100
Gripen combat aircraft offer to	Czech Republic	150
Eurofighter combat aircraft offer to	South Korea	70
NH-90 helicopter deal with	Sweden	100
Zuzana howitzer deal with	Greece	65
PzH2000 howitzer deal with	Greece	120
US tank offer with	Greece	100

Source: SIPRI files.

However, arrangements such as these may be controversial from a competitive point of view. Dassault is a minority owner in Brazil's main aircraft company Embraer. Dassault is also one of the competitors for a Brazilian combat aircraft order involving offsets in the form of co-production. It has been questioned whether Dassault's minority share gives it an unfair advantage over its competitors.⁶⁷

The future of offsets

In the light of the increasing use of offsets since the 1980s the question of what demands are 'reasonable' has been raised. Paradoxically, increasing recipient demands could lead to less competition in some cases. While offsets covering 100 per cent of the contract value seem to be acceptable to major arms suppliers (table 8.4), higher offsets might be controversial. The 150 per cent of value demanded by the Czech Republic in 2001 caused the French and US companies to withdraw their offers before a contract had been negotiated, claiming that the conditions were unfair. The one remaining alternative was the Saab–BAE Systems Gripen aircraft. In such a situation the buyer cannot play off different supplier offers against each other in an attempt to reduce the price or to get other benefits. In other words, Saab–BAE Systems could have revised their offer. However, they accepted the demands and in addition reportedly offered a 100 per cent financing package spread over 15 years.⁶⁸

⁶⁷ *Countertrade & Offset*, vol. 19, no. 20 (22 Oct. 2001), p. 6.

⁶⁸ Fiorenza, N., 'Integration challenges: Czech Republic stretches its defense budget to meet NATO standards', *Armed Forces Journal*, Aug. 2001, pp. 18–19. An Irish spokesman is quoted as saying that countertrade is not allowable under EU procurement regulations. *Countertrade & Offset*, vol. 19, no. 20 (22 Oct. 2001), p. 5. If the plan presented by the Belgian Prime Minister in 2001 not to link Belgian procurements directly to industrial offset agreements becomes policy it will be the exception to the rule. *Aviation Week & Space Technology*, 2 July 2001, p. 21. In early 2001 Turkey changed its offset policy. *Air Letter*, 22 Jan. 2001, p. 4. However, as a result of the focus on terrorism, after Sep. Turkey sought speedy deliveries rather than maximum industrial benefits. Bekdil, B. E. and Enginsoy, U., 'Turkish pol-

While there has been criticism by supplier companies of the increasing use of offsets as a distortion of the competitive market—companies are not equally able to offer offsets—it has also been regarded as necessary to accept offsets in order to compete for contracts. The 2001 Status Report by the US Presidential Commission on Offsets in International Trade downgraded the overall negative effect of offsets in military trade when valued against the benefits.⁶⁹ The conclusions are likely to reduce the impact of the general criticism of offsets in the USA and other countries and focus debate on policies to reduce the most negative consequences of offsets.

A more specific discussion of offsets is found in a 2001 European Defence Industries Group (EDIG) policy paper. The EDIG arguments reflect the criticism of offsets as a market-distorting mechanism.⁷⁰ Basically, only when exporting to developing nations is it acknowledged that offsets must be accepted for the benefits they bring to the buyer. If there were a single defence market in Europe, offsets would no longer be used. This would also apply to the Central and East European countries, especially with regard to direct (military) offsets, when these countries are fully engaged in European multinational projects.

With regard to the USA, European offset demands are presented as a compensation—or as a punitive response—for the lack of European access to the US defence market. EDIG suggests a policy similar to the ‘Buy American’ policy. Europe should implement policies which exclude non-European companies from bidding for work (i.e., European preference) unless: (a) the technology or goods/services are not available at an affordable price within Europe; and (b) comparable and effective reciprocal access to markets and other methods of control over trade have been agreed. Until these conditions are met, according to EDIG, European nations should not abolish offset requirements when buying from the USA.

V. New weapons and transatlantic cooperation: the JSF

Transatlantic cooperation in the development of major military platforms is rare—especially European involvement in the development of US military equipment to be acquired by US forces. The Joint Strike Fighter (JSF) combat aircraft is an exception in that it attempts to meet the need of three US military services and foreign customers for a common platform. It is a continuation of the US JAST (Joint Advanced Strike Technology) project of the early 1990s, which aspired to develop avionics systems, components and propulsion tech-

icy shift aims to meet wartime needs’, *Defense News*, 15–21 Oct. 2001, p. 10; and Anderson, R., ‘BAE–Saab in move for stake in Czech group’, *Financial Times*, 22 Oct. 2001, p. 16.

⁶⁹ Presidential Commission on Offsets in International Trade, Status Report, Washington, DC, 2001, approved by the Commission, 18 Jan. 2001. Because of the change of the US administration, and the fact that the acting Commission Director left in Oct. 2001, the Final Report was not published in Oct. 2001 as planned. Shumskas, J., Presidential Commission on Offsets, Private communication with the authors; and Barrie, D. and Svitak, A., ‘Global look at offsets could alter future trade’, *Defense News*, 3–9 Dec. 2001 (Special report), pp. 27–28.

⁷⁰ *EDIG Policy Paper on Offsets*, EPP/00/18, Brussels, 26 June 2001.

nologies to be used in future joint service combat aircraft designs.⁷¹ In November 1996 Lockheed Martin and Boeing were selected as the prime competing contractors to develop prototypes by 2000.⁷² In June 1997 BAe (which became BAE Systems in December 1999) joined the new Lockheed Martin–Northrop Grumman team,⁷³ but there is also significant British participation in the competing team.⁷⁴ In October 2001 the JSF entered the engineering and manufacturing development (EMD) phase as the F-35 after the US Government chose the Lockheed Martin version of the aircraft.

If, as has been argued, the project is a model for the future organization of transatlantic cooperation, it appears that the transatlantic market will remain unbalanced with regard to the involvement of governments and industries on both sides of the Atlantic, that the US and European markets will remain unequally accessible and that future European aircraft projects may even suffer from the close British–US cooperation.

The arguments for the JSF

There appear to be four main reasons why the JSF combat aircraft is considered an important project. First, the initial competitive development phase (CDP) involved a specified and difficult balance between advanced design (including new manufacturing procedures), high performance and fixed cost. An important point is that foreign industrial participation has been accepted only according to ‘best value’ based on competition. There is no *juste retour* principle, common in earlier international projects (guaranteed industrial involvement in relation to the national financial contribution), and no offset arrangement.

⁷¹ In 1995 the design concepts were so promising that the project refocused on producing the next-generation strike fighter through competitive development. It thus became the JSF, where ‘joint’ refers to joint US services use.

⁷² *Naval Forces*, no. 1 (1996), p. 62. BAe joined the JSF shortly after it entered an agreement with French Dassault on future fighter technology. In 1995 it also created the JAS Gripen joint venture together with Saab, giving BAe a strong position in both the US and the European combat aircraft programmes. The long-term cooperation between the UK and the USA—including the AV-8B Harrier, the T-45 Hawk programmes and BAe participation in the ARPA (Advanced Research Project Agency) Common Affordable Lightweight Fighter programme in 1994—led the Pentagon in 1996 to ‘commit’ Lockheed Martin and Boeing to restructure their work to include BAe.

⁷³ ‘McDonnell Douglas out of JSF programme’, *NAVINT*, vol. 8, no. 24 (29 Nov. 1996), p. 7. The Pentagon choice of prime contractors in Nov. 1996 resulted in the elimination of BAe’s partner McDonnell Douglas–Northrop. Lockheed Martin is or has been involved with the UK in several projects, such as the Royal Navy Merlin helicopter (see Cook, N., ‘US know-how exported to Europe’, *Interavia*, May 1999, pp. 41–42), the Tomahawk submarine integration, and the Tracer/Future Scout and Cavalry System programme. In the summer of 1999 it created Lockheed Martin UK Ltd, a new company based in London, combining all of its British defence and commercial business interests under a single UK-registered company. ‘Lockheed Martin sets up new UK company’, *World Aerospace & Defense Intelligence*, 9 July 1999, p. 11. In early 2000 Sanders selected BAE Systems as an electronic warfare and countermeasures subcontractor. ‘BAE SYSTEMS joins Sanders Litton JSF team’, *Defence Systems Daily*, 1 Feb. 2000.

⁷⁴ The British participation includes Flight Refuelling Ltd (fuel system), BAe (vehicle management system, cockpit display and flight-control systems for the Boeing team), Messier-Dowty Ltd (main and nose landing gear system), and Rolls-Royce plc (vertical lift propulsion system, attitude control system). ‘Boeing establishes JSF industry team’, *Defence Systems Daily*, 1 Oct. 1998; and ‘Small firms also gain’, *Defense News*, 23–29 Nov. 1999, p. 8.

Second, as noted above, the JSF is the first US combat aircraft project that attempts to meet the need of three US military services and foreign customers for a common platform. Designs for the US Air Force, Navy and Marine Corps as well as the British Air Force and Navy are to be produced from the same production line. There is therefore an initial market of over 3000 aircraft because the JSF is planned to replace the A-6, A-10, AV-8B, F-16 and, to some extent, the F/A-18 combat aircraft in the USA and the Harrier and Tornado combat aircraft in the UK.⁷⁵

Third, foreign countries are given the opportunity to be involved in the programme at different levels of involvement and costs. For the EMD phase—which could last for more than 10 years—the types of association are defined as levels 1–3 plus a fourth, ‘major participant’, level with basically the same costs as in the four types of association during the CDP phase (table 8.5).⁷⁶

1. Full partner (10 per cent of the cost) participation permitted direct influence on requirements. Only the UK signed as a non-US CDP full partner for the Navy in 1995 and, in 1999, for the Air Force.

2. The associate partners (2–5 per cent of the cost) were Denmark, the Netherlands and Norway. Associate partner status enabled them to influence the requirements for the conventional take-off and landing (CTOL) variant as long as the results were perceived to be mutually beneficial. Each financial contribution was matched by an equal US contribution.

3. The informed partners (1–2 per cent of the cost) were Canada and Italy, but they were not permitted to influence the requirements. The USA contributed \$50 million to joint activities related to the Canadian CTOL version.

4. The ‘major participants’—Israel, Singapore and Turkey—were countries that want to receive extensive unclassified and non-proprietary information in order to evaluate the JSF as a possible future acquisition.

Fourth, for the UK in general and BAE Systems in particular (as the major foreign participant) the JSF is the only combat aircraft under development that involves transatlantic technology exchange and the potential for future British–US cooperation. The UK was the only full foreign partner in the initial CDP, and it has signed up for full participation in the EMD phase. For the British Government the JSF may also be seen as a means to insure against unsuccessful European combat aircraft projects in the future.

The JSF as a model for transatlantic cooperation

The JSF project is regarded as a blueprint for future transatlantic cooperation because it has included foreign government and industry participation from the beginning and because acquisitions by European nations are planned. The

⁷⁵ Garamone, J., ‘Lockheed-Martin team wins Joint Strike Fighter competition’, American Forces Information Service, 26 Oct. 2001, URL <http://www.defenselink.mil/news/Oct2001/n10262001_200110266.html>.

⁷⁶ Holzer, R., ‘Joint Strike Fighter draws international interest’, *Defense News*, 10–16 June 1996, p. 4.

Table 8.5. International participation in the Joint Strike Fighter competitive development phase, 1995–2001

Figures are in US \$m.

Country	Date joined	Status	Foreign financial contribution	US contribution
UK	Dec. 1995	Full partner	200	–
Netherlands	Apr. 1997	Associate partner	10	10
Norway	Apr. 1997	Associate partner	10	10
Denmark	Sep. 1997	Associate partner	10	10
Canada	Jan. 1998	Informed partner	10	50
Italy	Dec. 1998	Informed partner	10	–
Singapore	Mar. 1999	Major participant	3.6	–
Turkey	Jun. 1999	Major participant	6.2	–
Israel	Sep. 1999	Major participant	0.75	–

Source: Birkler, J. *et al.*, *Assessing Competitive Strategies for the Joint Strike Fighter: Opportunities and Options*, RAND report MR-1362.0 (RAND Corporation: Washington, DC, 2001), p. 14.

EMD phase is likely to include most of the foreign CDP participants and possibly some additional participants. When analysing the JSF project as a model, a number of issues that provide financial, technological, military and political lessons should be considered.

The cost paid by foreign partners, and thus the financial risk taken, is expressed as a percentage of the total cost of the specific project phase. The higher the level of participation, the higher the financial involvement and financial risk. The major industrial argument in Europe for involvement in the project is the potential technology gain, but only the British Government has agreed to pay the price for full foreign partnership in both the CDP and the EMD phase. BAE Systems has invested so much in the JSF that it announced in 1999 that it would remain involved even if the British Government does not order any aircraft.⁷⁷

Since there is no *juste retour* all foreign companies compete for JSF contracts. Specific technological benefits may be important for participating companies but the benefits to states may be more difficult to calculate. One possible exception is British aerospace competence.⁷⁸ In 2001 a RAND Corporation study concluded that British industry is likely to gain more from its JSF involvement than the proportional value of the British financial contribution.⁷⁹ A 2001 British–US agreement allegedly defines a set of principles that provide a framework for long-term British involvement in the programme: safeguarding the UK's 'national interests' and ensuring that the military capabilities of the aircraft are properly managed and maintained throughout the lifetime of

⁷⁷ 'BAe–Lockheed link to stay regardless of UK orders', *Financial Times*, 23 July 1999, p. 10.

⁷⁸ James, B., 'Lockheed fighter award also cheered in Britain', *International Herald Tribune*, 29 Oct. 2001, p. 13; and Jones, S., 'Something for everyone in the industry', *Financial Times*, 29 Oct. 2001, p. 2.

⁷⁹ Birkler, J. *et al.*, *Assessing Competitive Strategies for the Joint Strike Fighter: Opportunities and Options*, RAND report MR-1362.0 (RAND Corporation: Washington, DC, 2001), p. 75.

the aircraft.⁸⁰ Officials and industry executives have stated that technical data would include stealth technology, software codes and the ability to integrate British weapons on the JSF.⁸¹

Even when the benefits of participating in the JSF are acknowledged by foreign governments, they have been reluctant to allocate funds from hard-pressed defence budgets to a project with no guaranteed national industrial involvement and for which there may not be a military requirement and thus no acquisition. Although there are different association alternatives, there is a fairly high cost for becoming a foreign partner with the right to influence the technical requirements. This is especially true in the EMD phase, when the costs are substantially higher than in the CDP. For example, had Turkey become an EMD associate partner the estimated cost would have been between \$500 million and \$1.2 billion.⁸² Turkey therefore decided to become an informed partner, and at the end of 2001 there were no associate partners.

Although there is transfer of US technology to foreign JSF partners, the major beneficiary is US industry. It is the USA that defines which foreign companies are to be allowed to participate and bring their skills into the project. As the JSF is a US project, European or other industrial participation is defined as foreign participation, with the exception of that of BAE Systems. Technology transfer as part of the project is a crucial political issue. Because of US re-export restrictions the British MOD cannot allow British companies to share stealth technology with European companies. In the light of the future US export of the JSF aircraft the issue of technology transfer has surfaced, including the transfer of stealth technology in particular, and also with regard to technologies for receiving intelligence and sensor data from aircraft and satellites.⁸³

Long-term considerations

The limited acquisition budgets in European countries indicate that only a few new development projects can be selected. There is therefore competition in Europe between the JSF and current as well as future aircraft projects. If the JSF Joint Program Office is successful in its attempt to bring more countries into the project this could reduce the European Typhoon/Eurofighter market and British funding of future European aircraft. This as well as the restrictions in sharing stealth technology could complicate cooperation in the European Technology Acquisition Plan (ETAP), the 2001 agreement by the six major European aerospace producers to develop future air-platform technologies.⁸⁴

⁸⁰ The Right Honourable Baroness Symons of Vernham Dean (Minister of State for Defence Procurement, UK), US Department of Defense News Briefing, 17 Jan. 2001, URL <<http://www.defense-aerospace.com/data/verbatim/data/ve156/index.htm>>.

⁸¹ Nicoll, A., 'Fighter deal will allow UK access to stealth secrets', *Financial Times*, 18 Jan. 2001, p. 8.

⁸² Bekdil, B. E., 'Turkey remains committed to JSF', *Defense News*, 30 Apr. 2001, p. 12.

⁸³ Sweetman, B., *Interavia*, Feb. 1999, pp. 42–43; and Fulghum, D. A., 'Tech gap affects JSF exports', *Aviation Week & Space Technology*, 14 June 1999, p. 205.

⁸⁴ French Ministry of Defence, 'Press notice on behalf of the defence ministries of France, Germany, Italy, Spain, Sweden and the UK', 19 Nov. 2001, URL <<http://www.defense.gouv.fr/english/news/>>

The transatlantic market is still characterized by political and industrial mistrust. As with other US exports, compromises will be made concerning JSF transfers as regards the sharing and transfer of technology. This will be balanced against military interoperability and the political risks of transatlantic discord. It is therefore too early to conclude that the JSF is the best model for a new, more efficient and open transatlantic arms market.

VI. Arms transfer reporting and transparency

International transparency

The UN Register of Conventional Arms

The year 2000 (the latest reported year) was a success for the UN Register of Conventional Arms with regard to participation and timely reporting. The UN Secretary-General's report included responses from 105 countries.⁸⁵ In the period 1992–99 only about 80–90 countries responded to the request for information. However, many of the countries reporting for the first time in 2000 were of little or no significance for the purpose of the register—to provide early warning against a possible destabilizing build-up of weapons—nor did the quality of data provided improve.

EU transparency

The EU published aggregate values of arms exports as submitted by its members in the third annual review of the implementation of the 1998 EU Code of Conduct for Arms Exports.⁸⁶ There were few changes compared with the report for 2000. Denmark supplied data for the first time, and a number of countries followed the Swedish example and provided data on both arms export deliveries and licences issued. The report noted that, in order to make national reports on arms exports more comparable and to improve transparency, a matrix containing statistical data from the national reports had been compiled.⁸⁷ However, as the matrix was not published, apparently only inter-governmental transparency is intended.

shortnews/620110/201101.htm>; and Cook, N., 'UK's JSF MoU deal with USA infuriates Europe', *Jane's Defence Weekly*, 24 Jan. 2001, p. 2. See also Morocco, J. D., 'ETAP to harvest Europe's technological expertise', *Aviation Week & Space Technology*, 2 July 2001, p. 63. The systems now studied include unmanned combat aircraft (UCAV) that are restricted under the Missile Technology Control Regime and conventional air-launched cruise missiles (CALCMs). 'Europe's future fighter quandary', *Interavia*, May 2001, pp. 40–41.

⁸⁵ The 9th UN Secretary-General's report containing information received from governments on their arms export and/or imports was released on 31 July 2001. United Nations Register of Conventional Arms: Report of the Secretary-General. UN document A/56/257, 31 July 2001. The document and its addenda and corrigenda are at URL <<http://www.un.org/Depts/dda/CAB/register.htm>>. A database containing all import and export data from reports between 1993 and 2001 is at URL <http://domino.un.org/UN_REGISTER.nsf>.

⁸⁶ Council of the European Union, *The Third Annual Report according to Operative Provision 8 of the European Union Code of Conduct on Arms Exports*, Brussels, 7 Nov. 2001. The Code of Conduct is reproduced in *SIPRI Yearbook 1999: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 1999), pp. 503–505, and at URL <<http://projects.sipri.se/expcon/eucode.htm>>.

⁸⁷ Council of the European Union (note 86), p. 4.

The court case concerning a 1997 report on arms exports prepared for the EU Council of Ministers demonstrated the division within the EU on the extent of transparency. The Council was supported by Spain in an appeal against a judgement from the EU Court of First Instance ruling that the Council could not refuse a member of the European Parliament (MEP) access to the report. The Council argued that disclosure of sensitive information in the report would harm EU relations with other countries. The MEP was supported in her request for access by Denmark, Finland and the UK. In 2001 the European Court of Justice upheld the decision of the Court of First Instance and ruled that partial disclosure of the document must be considered.⁸⁸

National transparency

Government and industry statistics on annual values of national arms exports are presented in appendix 8E. Compared to the major increase in arms export transparency in previous years there were few new developments in 2001, although the increased openness which has developed in Western Europe is spreading to Central Europe. By late 2001 the Polish Government had prepared a report on arms exports but its publication was delayed.⁸⁹ It was also announced that the Czech Republic intends to work towards compliance with EU requirements concerning transparency in arms exports.⁹⁰

France, Germany and the UK provided details of the transfer of small arms and light weapons. In late 2001 the Ministry of Foreign Affairs of the Czech Republic also published a report detailing the quantities and types of imports and exports of small arms and light weapons.

In a report published in 2001 the US State Department failed to comply with the mandate of the US Security Assistance Act of 2000, namely, to provide details on arms delivered directly from the producer to the recipient foreign company.

As noted in the *SIPRI Yearbook 2001*, with more arms projects becoming multinational rather than national, especially in Europe, there is a risk that national transparency in transfers of arms and arms-related equipment will be reduced.⁹¹ No government reports in detail about its involvement in multinational programmes.

⁸⁸ European Court of Justice, Judgement of the Court of Justice in Case C-353/99 P. The Court of Justice upholds the judgement of the Court of First Instance annulling the Council's decision to refuse Ms Hautala access to a report on arms exports, 6 Dec. 2001, URL <<http://europa.eu.int/cj/en/cp/aff/cp0163en.htm>>.

⁸⁹ Wyganowski, P., Polish Ministry of Foreign Affairs, Personal communication with the authors.

⁹⁰ Czech Ministry of Foreign Affairs, 'Report on the Czech Republic's approach to international negotiations concerning small arms and light weapons', 2001, URL <http://www.mzv.cz/_dokumenty/rucnialehkezbraneeng.pdf>.

⁹¹ Hagelin, Wezeman, Wezeman and Chipperfield (note 52), p. 350.

VII. Conclusions

The five-year moving average level of global arms transfers fell in the period 1997–2001. The USA was the largest supplier in 1997–2001 despite a 65 per cent reduction in its arms deliveries since 1998. Russia was the second-largest supplier in the period. A 24 per cent increase in arms transfers from 2000 to 2001 made Russia the largest supplier in 2001.

China was by far the largest recipient in 2001 after an increase by 44 per cent from 2000. Imports by India increased by 50 per cent, making it the third-largest recipient in 2001. The other major recipients in the period 1997–2001 were Saudi Arabia, Taiwan and Turkey.

It is impossible for the arms supplier to control whether arms deliveries will stabilize or destabilize a particular bilateral relationship. The possibly destabilizing effect of arms transfers or acquisition plans is illustrated by India and Pakistan. Even relatively minor acquisitions, as illustrated by three countries in West Africa, may influence war-fighting and affect the acquisition behaviour of neighbouring countries. The United Nations continues to criticize the efficiency of arms embargoes.

Competition on the global arms market has strengthened new forms of marketing and transfer arrangements. Offset arrangements granted to the buyer may include military technology transfers in addition to the weapon system itself. Some arrangements involve transfers of military equipment from the buyer. In both cases offsets stimulate international military transfers.

If the JSF project is treated as an example of the future organization of transatlantic cooperation, the transatlantic market will remain unbalanced with regard to the involvement of government and industry on both sides of the Atlantic. Only the UK has been willing to participate fully and pay the cost of influencing JSF requirements. The cost of the highest form of participation in JSF development will remain too high for most European countries to afford.