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Buying the Bullet: Authorized Small Arms Ammunition Transfers Anne-Kathrin Glatz

Introduction

In 2003 Uganda paid the Croatian state agency responsible for arms transfers, Alan, a little more than USD 1 million for the manufacturing technology for 40 mm RGB-6 grenades. This was in spite of the fact that Uganda was involved indirectly in the conflict in the Democratic Republic of the Congo (DRC) by supporting non-state armed groups fighting there (HRW, 2003). This and other transfers from Croatia to Uganda in 2002 and 2003 led to accusations by Amnesty International and others that Croatia was acting in contradiction of the *European Union Code of Conduct on Arms Exports* (EU, 1998).¹ It thus became possible for Uganda to transfer locally produced light weapons ammunition to non-state armed groups fighting in DRC (SEESAC, 2005).²

Transfers of ammunition for small arms and light weapons often take place separate from the production and transfer of small arms and light weapons. The example above highlights the importance of examining ammunition transfer patterns independently in order to assess the impact these transfers can have in the destination countries or in third countries after retransfer. This is especially important for conflict areas or for countries where human rights violations have taken place.

To date, however, small arms ammunition³ transfers have not been studied in detail. The predominant approach in the literature has been to examine authorized small arms transfers as a whole, with ammunition included under this general rubric. This chapter begins to address this gap by looking specifically at authorized small arms ammunition transfers.⁴

It is important to do this because the share of the trade in small arms ammunition—even when light weapons ammunition is excluded—as part of the trade in small arms and light weapons reported to the United Nations Commodity Trade Statistics (UN Comtrade) database is considerable (see Figure 1 below; Small Arms Survey, 2005, pp. 98–99). Furthermore, once sufficient weapons stocks are in place in conflict areas, transfers of ammunition to these areas may be even more important than additional weapons transfers, since the availability of ammunition directly determines the dynamics of armed conflict. This has been the case in West Africa, for example, where craft production of small arms and light weapons is oriented towards the kinds of ammunition that can be imported (Small Arms Survey, 2006, p. 255). In Angola, Côte d’Ivoire, and Liberia, for example, volumes of ammunition imports increased prior to an expected arms embargo or a military offensive.⁵ Finally, what is true for small arms also applies to small arms ammunition—the distinction between authorized and illicit transfers becomes artificial as soon as ammunition initially transferred on an authorized basis enters the illicit sphere. This may happen more easily than in the case of small arms because some ammunition, such as shotgun cartridges,⁶ is more difficult to trace than small arms and light weapons themselves.⁷

Furthermore, the trade dynamics for ammunition may be different because it is a consumption good rather than a durable good. Small arms procurement for armed forces routinely occurs on a long-term basis. Major procurement initiatives often involve high levels of weapons procurement over several years (Small Arms Survey, 2006, pp. 6–35). Ammunition procurement patterns reflect a country’s military activities, such as involvement in a conflict, much more immediately. Trade patterns over several years are likely to be influenced by this. For example, the shortage of ammunition in the US military in recent years because of US military involvement in Afghanistan and Iraq has led the US government to import increased amounts of small arms ammunition from abroad (including from Israel, South Korea, Sweden, and the United Kingdom) in addition to increasing domestic production.⁸

The main findings of this chapter are the following:

- For the period 1999–2003, the average global value in annual authorized small arms ammunition exports (excluding light weapons ammunition exports)

Box 1 Definitions of exporters and importers used in this chapter

Top exporters:

Countries with a reported* annual value of authorized small arms ammunition exports equal to or greater than USD 30 million (average 1999–2003)

Top importers:

Countries with a reported* annual value of authorized small arms ammunition imports equal to or greater than USD 30 million (average 1999–2003)

Major exporters:

Countries with a reported* annual value of authorized small arms ammunition exports equal to or greater than USD 3 million (average 1999–2003)

Major importers:

Countries with a reported* annual value of authorized small arms ammunition imports equal to or greater than USD 3 million (average 1999–2003)

* 'Reported' refers to countries reporting to UN Comtrade.

did not fluctuate significantly, hovering around USD 700 million, a value that is almost certainly underestimated as a result of underreporting.

- For the period 1999–2003, the *top exporters* (with an annual average export value of at least USD 30 million according to UN Comtrade data) were the United States, Italy, Brazil, Belgium, the United Kingdom, Russia, and Germany.
- The *top importers* for 1999–2003 (with an annual average import value of at least USD 30 million according to UN Comtrade data) were the United States, Saudi Arabia, and Germany.

Section 2 of this chapter addresses data issues and the main impediments to a better understanding of authorized small arms ammunition transfers. Section 3 describes the top and major importers and exporters of small arms ammunition based on UN Comtrade data. The chapter concludes with a discussion of questions to be addressed in future research and some key implications for policy.

Data issues

The calculations in this chapter are based on UN Comtrade data,⁹ with 2003 as the latest year for which data on small arms ammunition transfers was available at the time of writing, and were provided in part by the Norwegian Initiative on Small Arms Transfers (NISAT) (Marsh, 2005). The UN Comtrade database

records customs data (i.e. data recorded by national customs authorities about the goods that cross their borders). The data used here includes mirror data: export data for a given country is calculated based on the country's own reporting as well as on other countries' reporting on their imports from that country (and vice versa for import data). In this way, some information can be obtained on transfers by countries that either underreport or do not report their small arms ammunition transfers to UN Comtrade.¹⁰

Box 2 Customs categories of the Harmonized System (HS) for small arms and light weapons ammunition: a disclaimer

Transfers data used in this chapter is based on information provided by the United Nations Commodity Trade Statistics (UN Comtrade) database. This information is derived from statistics provided by customs officers from around the world. One of its advantages is that it uses globally standardized codes to classify categories of products. The classifications sometimes conflate disparate material, however. The global classification is known as the Harmonized System (HS) and is administered by the World Customs Organisation.

Small arms and light weapons ammunition is covered by four HS categories. Only two of these are used in this chapter:

930621: shotgun cartridges and parts

930630: small arms ammunition, that is, ammunition for revolvers, pistols, and military firearms (including cartridges with calibres of 12.7 mm and above, i.e. some light weapons ammunition)

Category 930630 presents relatively negligible problems: of its 22 sub-categories, one is ambiguous,¹¹ and two are not ammunition for either small arms or light weapons.¹²

Two categories that contain ammunition for small arms and/or light weapons but also other ammunition have not been included in the calculations in this chapter:

930690: light weapons and larger ammunition

930629: airgun pellets, lead shot and other parts of shotgun cartridges

Category 930690 covers a variety of military equipment including large calibre ammunition, some of which could be used in light weapons (such as mortars). It contains 86 sub-categories,¹³ only some of which cover ammunition for small arms and/or light weapons. The sub-categories exhibit varying degrees of specificity. For example 'grenades, being munitions of war (e.g., hand and rifle grenades) and parts thereof' is very specific, while 'parts of projectiles, excluding propellant powders, fuses, caps, igniters and detonators' could include a wide variety of components for material not defined as small arms or light weapons. It is thus not possible to quantify the share of small arms and light weapons ammunition as part of the 930690 value for a given country.

Category 930629, which covers airgun pellets, lead shot, and other parts of shotgun cartridges, is also excluded since it covers both small arms ammunition (lead shot and other parts of shotgun cartridges) and non-small arms ammunition (airgun pellets). Based on UN Comtrade data, it is not possible to tell how much of a given transfer in that category included small arms ammunition.

Sources: UN Comtrade (2005); NISAT (2005); email correspondence with Nicholas Marsh, NISAT, 2 February 2006.



Boxes of Russian-made ammunition collected during the disarmament process after Burundi's civil war.
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UN Comtrade data and information from national arms export reports mostly provide values rather than quantities of ammunition transferred. Information on quantities would be more useful in terms of assessing the importance of a transfer, but this kind of data is only rarely available. Comparisons across countries are thus to date only possible based on transfer values. This chapter attempts to complement UN Comtrade data with examples from other sources in order to provide a fuller picture of recent worldwide authorized small arms ammunition transfers.

Some countries do not report at all on any small arms ammunition category, in spite of the fact that they are important traders of small arms ammunition. The values provided in this chapter—an averaged annual total of USD 700 million in global exports of small arms ammunition reported to UN Comtrade in 1999–2003—are thus partly the result of mirror data calculations (Marsh, 2005) and therefore likely to be underestimated. Importers' and exporters' reports

can differ for a variety of reasons—including exchange rate fluctuations, different levels of coverage, as well as inclusion or exclusion of transit trade, foreign aid, and transfers to the respective country's armed forces and diplomatic representatives (for further details see Small Arms Survey, 2005, p. 100, Box 4.1).

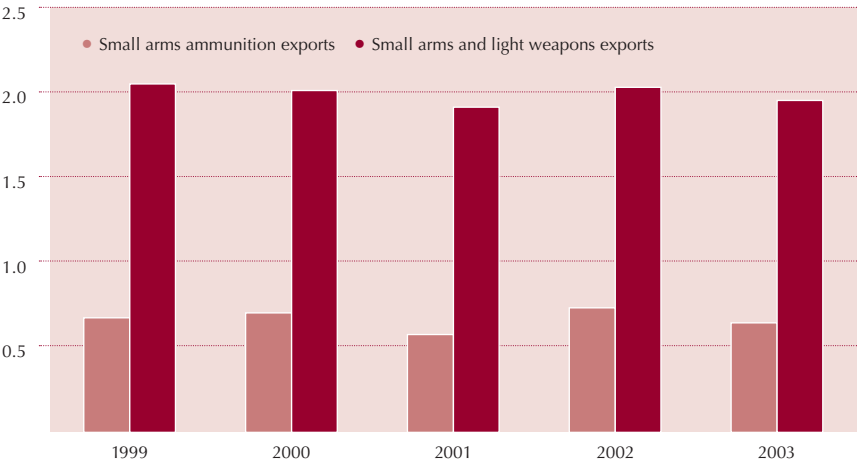
A second source of information on authorized small arms transfers, including transfers of ammunition, is data from national arms export reports. A majority of major exporters published such a report (see Annexe 1), but all of their reports are problematic for at least one of the following reasons: (a) they often provide data only on licences granted rather than actual deliveries; and (b) many reports do not distinguish between the different categories of ammunition—small arms, light weapons, and larger ammunition. A widely used system of categorization is the Wassenaar Arrangement Munitions List (ML), on which the EU Common Military List is based. This system is problematic for assessing small arms ammunition transfers because category ML3¹⁴ includes ammunition for small arms and light weapons as well as for larger weapons.

Reports by the media, NGOs, and UN expert panels are also possible sources of information about authorized transfers of small arms ammunition. Only rarely, however, do these contain specific details—such as quantities and financial values—of authorized transfers of small arms ammunition.

Small arms ammunition exporters and importers

This section discusses the *top* and *major exporters* and *importers* of small arms ammunition and their main trading partners for the period 1999–2003 (the last five years for which data from UN Comtrade was available at the time of writing). Top and major exporters and importers are determined by averaging each country's trade values for 1999–2003. *Major* exporters and importers are those with a reported annual trade value equal to or greater than USD 3 million. *Top* exporters and importers are defined as those with a reported annual export or import value that is equal to or greater than USD 30 million.¹⁵ The data is adjusted for inflation using 2000 as the base year.¹⁶ About one-third, in terms of value, of the authorized small arms and light weapons exports reported to UN Comtrade in the period 1999–2003 were exports of small arms ammunition (see Figure 1). In common with worldwide small arms and light weapons

Figure 1 Worldwide small arms ammunition exports as a share of total small arms and light weapons exports, 1999–2003



Customs categories included: 930630 (small arms ammunition) and 930621 (shotgun cartridges).

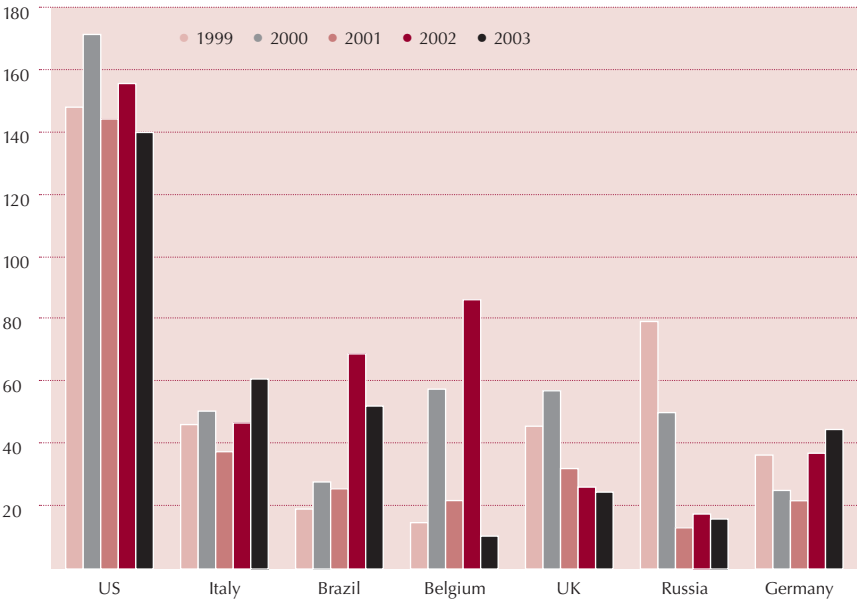
Source: UN Comtrade (2005); NISAT (2005).

exports, fluctuations in the total annual value of worldwide small arms ammunition exports over the five-year period were minimal.

Exporters

Annual averages during the period 1999–2003 reveal that the *top exporters* were the United States, Italy, Brazil, Belgium, the United Kingdom, Russia, and Germany (see Figure 2). The five-year total export value of the largest exporter, the United States, was more than three times as high as that of the second-largest exporter, Italy (NISAT, 2005). The differences in total value between the other top exporters for the five-year period are small in comparison. China was not among the top exporters for the 1999–2003 average, according to UN Comtrade. In 1998, however, its reported value of exports of category 930630 items (small arms ammunition) was USD 36,244,000 (UN Comtrade, 2005). It is likely that the country changed its way of reporting to UN Comtrade rather than its actual exports, and it can be assumed that it ranked among the top exporters of small arms ammunition also in the period 1999–2003.

Figure 2 Top exporters of small arms ammunition, annual breakdown, 1999–2003



Customs categories included: 930630 (small arms ammunition) and 930621 (shotgun cartridges).

Sources: UN Comtrade (2005); NISAT (2005).

Figure 2 shows that for countries such as Belgium and Russia, the variations are significant—falling below the USD 30 million threshold and even below USD 20 million in some years but over USD 70–80 million in others. This could be explained by changes in reporting, but these variations could also be linked to real differences in ammunition exports, possibly resulting from procurement decisions on the part of major recipients.

Table 1 lists the major exporters of small arms ammunition (annual average for 1999–2003). Main recipients are countries that appear among the five largest recipients of any given exporter for at least one out of the five years, and whose trade value was higher than 1 per cent of the total trade value for the respective exporter.¹⁷ The top exporters are shown in red. The table is based exclusively on customs data from UN Comtrade. National arms export reports—whenever available—usually do not distinguish between small arms ammu-

Table 1 Authorized small arms ammunition exports for major exporters, annual average, 1999–2003 (annual average export value equal to or greater than USD 3 million)

Country	USD value (UN Comtrade customs data)	Main recipients (number of years for which country has been among main recipients)
Australia	6 million	Belgium (5), France (4), Japan (5), Kuwait (2), New Zealand (5), UK (1), US (3)
Austria	7 million	Belgium (1), Brunei (1), Croatia (1), Finland (2), Germany (5), Latvia (1), Lithuania (1), Malaysia (1), Nepal (1), Norway (1), Sweden (1), Switzerland (2), Tunisia (1), United Kingdom (1), United Arab Emirates (2), US (3)
Belgium	38 million	Australia (1), France (3), Germany (3), Luxembourg (2), Netherlands (3), New Zealand (1), Norway (2), Saudi Arabia (4), UK (2), US (2)
Bosnia and Herzegovina	5 million	Australia (2), Austria (4), Bulgaria (1), France (1), Germany (5), Nepal (1), New Zealand (2), Turkey (2), UK (2), US (2)
Brazil	39 million	Algeria (2), Angola (1), Belgium (1), Colombia (4), Germany (5), Malaysia (1), Norway (1), Peru (2), Saudi Arabia (1), United Arab Emirates (1), US (5), Zimbabwe (1)
Bulgaria	4 million	Austria (3), Czech Republic (1), Estonia (1), Georgia (2), Germany (1), Macedonia (3), Poland (2), Russia (1), Saudi Arabia (1), Slovakia (1), South Korea (1), Sri Lanka (1), Switzerland (1), Turkey (1), US (3)
Canada	18 million	Australia (1), Belgium (5), Denmark (3), France (4), Netherlands (4), Norway (3), US (5)
Czech Republic	23 million	Austria (1), France (3), Georgia (1), Germany (5), Malaysia (1), Poland (5), Slovakia (3), Sri Lanka (1), US (5)
Finland	11 million	Denmark (2), Germany (4), Italy (1), Lithuania (2), Netherlands (1), Norway (3), South Korea (1), Sweden (4), UK (3), US (4)
France	12 million	Brazil (3), Canada (1), Côte d'Ivoire (2), Germany (1), Guinea (3), New Zealand (1), Norway (3), Saudi Arabia (1), Senegal (2), Taiwan (1), Turkey (2), US (5)
Germany	33 million	Austria (5), Denmark (1), France (5), Japan (1), Netherlands (2), Switzerland (5), UK (2), US (4)

Hungary	5 million	Austria (4), Germany (5), Italy (4), Japan (4), Norway (1), Slovakia (2), US (5)
Israel	6 million	Australia (1), Austria (2), Botswana (1), Czech Republic (1), Denmark (1), Germany (5), Mexico (1), Poland (1), Singapore (1), Trinidad and Tobago (3), Turkey (1), UK (2), US (5)
Italy	48 million	Belgium (1), France (4), Germany (4), Japan (3), Mexico (1), Norway (1), Spain (1), Turkey (5), US (5)
Mexico	4 million	Argentina (2), Belgium (1), France (2), Guatemala (3), Honduras (1), Nicaragua (2), Panama (1), Paraguay (3), Peru (1), Uruguay (1), US (5), Venezuela (3)
Netherlands	5 million	Belgium (1), Brazil (1), Czech Republic (1), France (1), Germany (2), Luxembourg (2), Norway (1), Poland (1), Saudi Arabia (1), Switzerland (5), United Arab Emirates (1), UK (1), US (3), Venezuela
Norway	17 million	Belgium (1), Canada (1), France (1), Italy (3), Singapore (2), Spain (2), Sweden (5), Switzerland (5), Turkey (1), UK (2), US (2)
Portugal	4 million	Bangladesh (1), Belgium (3), Chile (1), Germany (3), Greece (3), Guinea (2), Guinea-Bissau (3), Ireland (1), Lebanon (1), Mexico (1), Mozambique (1), Spain (1), US (4)
Russia	35 million	Angola (1), Austria (1), China (2), Ethiopia (1), Germany (1), Greece (1), India (2), Kazakhstan (2), Mongolia (2), New Zealand (1), Poland (1), South Korea (2), Slovakia (1), United Arab Emirates (1), US (5), Yemen (1)
Slovakia	3 million	Austria (2), Cyprus (1), Czech Republic (2), Germany (5), Hungary (4), Indonesia (1), Israel (1), Macedonia (1), Poland (1), Serbia and Montenegro (1), Sri Lanka (1), Turkey (1), Uganda (1), US (1)
South Africa	13 million	Austria (1), Botswana (1), Brazil (2), Germany (5), India (2), Mexico (3), Poland (1), Singapore (1), South Korea (1), Switzerland (2), UK (1), US (5)
South Korea	17 million	Australia (5), Germany (1), Indonesia (2), Israel (4), Pakistan (1), Thailand (1), Turkey (2), US (5), Venezuela (4)

Spain	27 million	Argentina (2), France (1), Germany (1), Ghana (5), Japan (3), Peru (1), Saudi Arabia (1), Turkey (5), UK (1), US (2), Venezuela (3)
Sweden	20 million	Austria (2), Belgium (1), Denmark (4), Finland (1), France (1), Germany (4), Mexico (2), Norway (5), US (5)
Switzerland	26 million	Argentina (1), Austria (2), Bahrain (1), Canada (3), Ethiopia (1), Finland (1), Germany (3), Italy (1), Netherlands (1), Romania (4), Singapore (2), United Arab Emirates (3), UK (1), US (1)
Turkey	5 million	Armenia (1), Azerbaijan (1), Botswana (1), Cameroon (1), Cyprus (2), France (1), Germany (2), Jordan (1), Macedonia (1), Netherlands (1), Romania (1), Rwanda (1), South Africa (1), Switzerland (1), Ukraine (1), US (4)
United Kingdom	37 million	Canada (1), Denmark (5), Germany (4), Ghana (1), Ireland (2), Japan (2), unspecified countries (5), US (5)
United States	152 million	Australia (3), Canada (5), Israel (3), Italy (1), Kuwait (2), Netherlands (2), Saudi Arabia (3), South Korea (3), Taiwan (2), United Arab Emirates (1)

munition, light weapons ammunition, and other types of ammunition. It is thus not possible to compare UN Comtrade data on ammunition exports with data from national arms export reports. Annexe 1 lists major exporters for 2003 only, with remarks regarding the respective national arms export reports, where applicable, and the types of ammunition traded.

There are two main scenarios in which authorized ammunition exports become problematic¹⁸: (a) transfers directly to countries involved in internal or international conflict or to countries where human rights violations have been reported; and (b) transfers to neighbouring or other third countries, which may then be transferred through illicit channels to a country involved in internal or international conflict or where human rights violations have been reported.¹⁹ If a regional arms embargo exists for a particular country, it can also be circumvented through retransfer or by the transfer of manufacturing equipment and technology.²⁰

In most cases hard evidence is lacking, and the ultimate link between a transfer of small arms ammunition and its problematic final destination can often only be speculated on. As stated above, authorized small arms *ammunition* transfers can be more important than those of small arms and light weapons: if sufficient small arms stocks are available, resupply of ammunition is more crucial to sustaining a conflict, for example, than new supplies of weapons.

An example of self-restraint on the part of countries supplying small arms ammunition to a country involved in conflict points to both the importance of such transfers to sustaining conflict and the possible influence of self-restraint. Australia and New Zealand, traditionally Papua New Guinea's main suppliers of small arms and ammunition, introduced severe restrictions on their exports of small arms ammunition (and small arms) to Papua New Guinea in 2002 because of the conflict there. By 2004 the price of ammunition in the Southern Highlands of Papua New Guinea had doubled. While there may be several reasons for this price rise, it could indicate that previous ammunition exports from Australia and New Zealand had played an important role in satisfying demand for ammunition in Papua New Guinea (Alpers, 2005, pp. 77–79).

Transfers of ammunition production equipment do not appear in data on ammunition transfers. They are, however, important for explaining patterns of worldwide ammunition production and, by extension, in assessing authorized ammunition supplies to conflict regions or countries where human rights violations have been reported—which may happen in spite of the fact that embargoes bind those countries that supply production equipment to third countries. The Eldoret factory in Kenya, supplied with small arms ammunition production technology by the Belgian manufacturer FN Herstal, is an example of how a transfer of small arms ammunition production technology can create concerns about the supply of ammunition to a conflict region. Belgian parliamentarians, NGOs, and journalists raised concerns about possible ammunition transfers from Eldoret to conflict regions, in particular the Great Lakes region. The Independent Commission of Inquiry (ICOI) on Rwanda established by the UN Security Council, however, did not visit the factory and was thus unable to substantiate allegations that ex-FAR (Armed Forces of Rwanda) and Interahamwe members were supplied with ammunition (and small arms) produced at the Eldoret factory (Berman, 2000, p. 5).²¹

Table 2 Small arms instruments and their provisions for small arms ammunition transfers

Instrument	Reference to transfers of small arms and light weapons ammunition
OAS Inter-American Convention (OAS, 1997)	Arts. IX (Export, Import, and Transit Licenses or Authorizations) and X (Strengthening of Controls at Export Points) apply to ‘firearms, ammunition, explosives, and other related materials’.
OAS Model Regulations (OAS, 1998)	Chapter II is exclusively devoted to ammunition; specific sections cover export, import, and in-transit shipments.
EU Code of Conduct (EU, 1998; 2003)	Ammunition is covered by the entire text. Category ML3 of the Common Military List includes ammunition for small arms, light weapons, and larger weapons.
ECOWAS Moratorium and Code of Conduct (ECOWAS, 1998; 1999)	Ammunition is covered by the entire text.
OSCE Document on Small Arms and Light Weapons (OSCE, 2000)	Section III on export controls does not make reference to ammunition.
OAU Bamako Declaration (OAU, 2000)	Section 3.B.ii calls for harmonization of legislation on trade, including ammunition, on the regional level.
UN Firearms Protocol (UNGA, 2001a)	Art. 10 on export, import, and transit covers ‘firearms, their parts and components and ammunition’.
UN Programme of Action (UNGA, 2001b)	No reference to ammunition transfers.
SADC Firearms Protocol (SADC, 2001)	No specific section on transfers; only broad reference to ammunition transfers in sections on Legislative Measures and State-Owned Firearms.
Wassenaar Arrangement (WA, 2002; 2005)	No specific reference to ammunition transfers; ammunition is only mentioned regarding marking and tracing. Category ML3 of the Munitions List includes ammunition for small arms, light weapons, and larger weapons.
Nairobi Protocol (Nairobi Protocol, 2004)	Art. 10 on Import, Export, Transfer and Transit does not specifically mention ammunition.

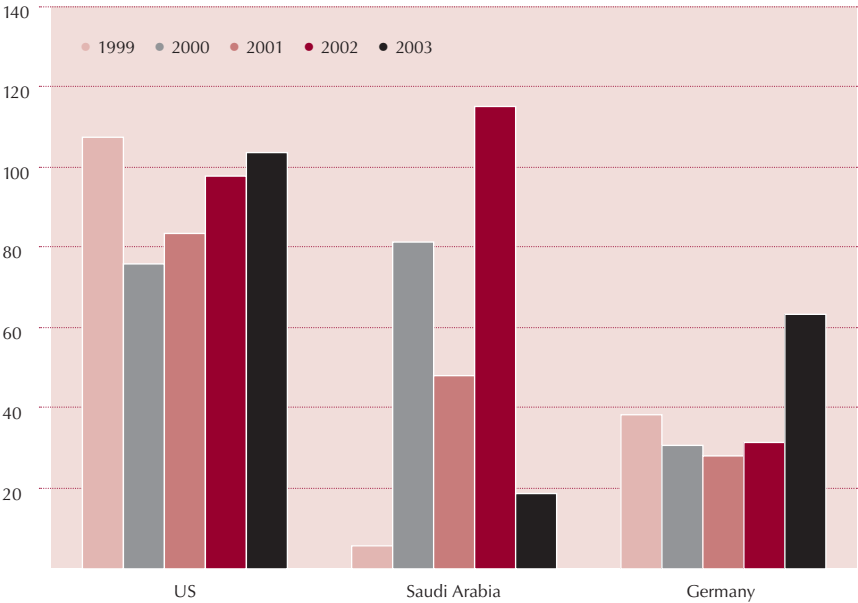
Sources: Small Arms Survey (2005, pp. 23–25); McDonald (2005)

Importers

The *top importers* of small arms ammunition (annual average 1999–2003) were the United States, Saudi Arabia, and Germany (see Figure 3). The five-year total import value of the largest importer, the United States, is 1.7 times as high as that of the second-largest importer, Saudi Arabia, and 2.5 times as high as that of the third-largest importer, Germany (NISAT, 2005). Data for Saudi Arabia shows large variations, from below USD 10 million in 1999 to above USD 110 million in 2002. As in the case of exports, varying procurement decisions as well as changes in reporting could explain these fluctuations.

Table 3 lists the major importers of small arms ammunition (annual average 1999–2003). Main suppliers are countries that appear among the five largest suppliers for any given importer for at least one out of the five years, and whose trade value was higher than 1 per cent of the total trade value for the respective

Figure 3 Top importers of small arms ammunition, annual breakdown, 1999–2003



Customs categories covered: 930630 (small arms ammunition), 930621 (shotgun cartridges).

Source: UN Comtrade (2005); NISAT (2005)

Table 3 Authorized small arms ammunition imports for major importers, annual average 1999–2003 (annual average import value equal to or greater than USD 3 million)

Country	USD value (UN Comtrade customs data)	Main suppliers (number of years for which country has been among main suppliers)
Argentina	3 million	Austria (1), Brazil (5), China (1), France (1), Israel (1), Italy (5), Mexico (1), Spain (4), Switzerland (1), US (5)
Australia	22 million	Belgium (1), Bosnia and Herzegovina (1), Brazil (1), Canada (1), Italy (4), Norway (1), Serbia and Montenegro (1), South Korea (4), Spain (1), unspecified countries (5), US (5)
Austria	11 million	Bosnia and Herzegovina (2), Bulgaria (1), Czech Republic (3), Germany (5), Hungary (1), Italy (4), South Africa (1), Sweden (2), Switzerland (4), US (2)
Belgium	13 million	Australia (2), Austria (1), Brazil (3), Canada (5), Italy (5), Portugal (2), Sweden (1), UK (1), US (5)
Brazil	3 million	Canada (1), Finland (2), France (5), Italy (1), Netherlands (1), South Africa (5), Spain (1), Switzerland (2), UK (2), US (5)
Canada	25 million	Czech Republic (1), France (2), Germany (1), Norway (1), Sweden (4), Switzerland (4), UK (2), US (5)
China	4 million	Canada (2), Finland (3), Germany (4), Italy (2), Russia (2), Spain (2), UK (5), US (3)
Colombia	7 million	Brazil (5), Italy (3), Spain (1), UK (1), US (5)
Denmark	10 million	Canada (3), Finland (3), Germany (5), Norway (1), Spain (2), Sweden (5), Switzerland (1), UK (5)
Egypt	4 million	Canada (2), Czech Republic (1), France (1), Germany (2), Italy (4), Spain (1), Switzerland (2), UK (1), US (5)
Finland	6 million	Austria (2), Czech Republic (2), Germany (5), Italy (5), Norway (1), Singapore (1), Sweden (4), Switzerland (1), US (4)
France	19 million	Belgium (3), Canada (2), Czech Republic (1), Germany (5), Italy (5), Netherlands (1), Spain (1), Sweden (2), US (5)

Germany	38 million	Belgium (1), Brazil (5), Czech Republic (4), Italy (5), Sweden (1), Switzerland (2), Turkey (1), UK (1), US (5)
Ghana	3 million	Burkina Faso (1), France (2), Germany (1), Russia (1), South Africa (1), Spain (5), UK (3), US (2)
Greece	4 million	Belgium (1), Czech Republic (1), Germany (3), Iran (3), Italy (5), Portugal (2), Russia (1), South Africa (1), Spain (3), US (5)
India	12 million	Austria (2), Czech Republic (2), France (1), Germany (1), Israel (1), Italy (3), Russia (2), South Africa (2), Switzerland (1), UK (3)
Israel	10 million	Canada (1), Czech Republic (2), South Africa (1), South Korea (5), Slovakia (1), UK (1), US (5)
Italy	13 million	Belgium (2), Czech Republic (1), Finland (1), Germany (5), Hungary (4), Norway (4), Switzerland (2), UK (1), US (5)
Japan	12 million	Australia (4), Germany (2), Italy (5), Spain (5), UK (4), US (5)
Kuwait	8 million	Australia (3), Bosnia and Herzegovina (1), Cyprus (5), France (4), Italy (5), Poland (3), US (4)
Malaysia	10 million	Austria (1), Brazil (3), China (1), Czech Republic (4), Finland (2), Germany (2), Italy (3), Norway (1), South Africa (1), Switzerland (1), UK (2), US (2)
Mexico	7 million	Belgium (2), Cuba (1), Czech Republic (3), Greece (1), Israel (1), Italy (1), South Africa (3), Spain (3), Sweden (2), UK (1), US (5)
Netherlands	14 million	Belgium (4), Canada (3), Finland (1), Germany (5), Spain (2), Switzerland (3), Turkey (1), UK (1), US (5)
New Zealand	5 million	Australia (5), Belgium (2), Bosnia-Herzegovina (1), Brazil (3), Canada (1), Finland (1), France (1), Italy (3), Spain (1), Switzerland (1), UK (1), US (5)
Norway	15 million	Brazil (1), Canada (2), Finland (3), France (3), Germany (1), Italy (3), Sweden (5), Switzerland (1), UK (1), US (5)
Poland	4 million	Bulgaria (1), Czech Republic (5), Finland (1), Germany (5), Hungary (1), Israel (1), Italy (3), Russia (2), South Africa (1), Spain (2), Switzerland (2), Ukraine (1)

Romania	6 million	Austria (1), Czech Republic (1), Germany (3), Greece (1), Italy (4), Spain (1), Switzerland (5), Turkey (1)
Saudi Arabia	54 million	Belgium (4), Brazil (1), Bulgaria (1), Egypt (1), France (2), Germany (1), Netherlands (1), South Africa (1), Spain (2), UK (1), US (5)
Singapore	5 million	Austria (1), Brazil (3), Canada (2), China (1), Germany (2), Israel (1), Norway (4), South Africa (1), Switzerland (4), Thailand (1), US (5)
South Korea	17 million	Finland (4), Germany (4), Italy (3), Russia (4), Spain (3), UK (2), US (5)
Spain	7 million	Belgium (2), Brazil (2), Czech Republic (1), Germany (4), Italy (5), Norway (2), Sweden (3), Switzerland (1), US (5)
Sweden	8 million	Austria (1), Czech Republic (1), Finland (5), Germany (5), Italy (2), Norway (5), Spain (1), US (5)
Switzerland	12 million	Austria (2), Germany (5), Italy (2), Netherlands (3), Norway (5), South Africa (2), Sweden (1), UK (3), US (2)
Taiwan	5 million	France (1), Greece (1), Italy (3), Malaysia (1), South Korea (3), Spain (2), UK (1), US (5)
Turkey	21 million	Bosnia and Herzegovina (1), China (1), Cyprus (1), France (1), Germany (2), Italy (5), Norway (1), Romania (1), South Korea (1), Spain (5), US (5)
United Arab Emirates	10 million	Austria (3), Brazil (4), Canada (1), Czech Republic (1), Finland (2), France (1), Netherlands (1), Russia (1), South Africa (1), Switzerland (4), UK (1), US (5)
UK	27 million	Belgium (2), Brazil (1), Cyprus (1), Finland (2), Germany (3), Italy (2), Norway (1), Spain (2), Switzerland (1), unspecified countries (5), US (5)
US	94 million	Brazil (2), Canada (4), Czech Republic (4), Israel (1), Italy (2), Russia (5), South Africa (1), South Korea (4), Sweden (1), UK (1)
Venezuela	7 million	Brazil (2), Czech Republic (2), Italy (3), Mexico (4), South Korea (4), Spain (5), US (4)

importer.²² The top importers (the United States, Saudi Arabia, and Germany) are shown in red. The largest importer over the five-year period was either the United States (1999, 2001, 2003) or Saudi Arabia (2000, 2002) (NISAT, 2005). While there were 27 major annual exporters on average for 1999–2003, there were 39 major importers. Also, seven countries exported small arms ammunition of a value of more than USD 30 million, whereas only three countries imported ammunition of a value of more than USD 30 million. This indicates that exports are much more concentrated among a small number of countries, which mostly are also producers of ammunition. By contrast, imports are spread more widely among a larger number of countries.

Conclusions

This chapter provides a starting point for research on authorized transfers of ammunition for small arms and light weapons. It is complemented by Chapter 4 in this volume on illicit transfers of ammunition for small arms and light weapons. The chapter demonstrates that there are still important gaps in reporting and data availability that need to be filled. Increased transparency is a crucial precondition for addressing the possible negative effects of authorized transfers. Customs data from UN Comtrade makes possible an analysis of small arms ammunition only (excluding light weapons ammunition) only because ammunition for light weapons is included in a customs category that also contains larger ammunition. National arms export reporting could be improved in order to allow for an assessment of the scope of ammunition transfers for both small arms and light weapons ammunition, as opposed to transfers of other ammunition.

Since small arms (and light weapons) ammunition is of crucial importance in fuelling conflict or in facilitating human rights violations, authorized transfers of this ammunition must be made more transparent and the subject of greater scrutiny. Small arms ammunition transferred with authorization can be misused by states as well as non-state armed groups and individuals. Improvements in transparency—including developing a universal marking and tracing regime and strengthening international and regional instruments—are crucial to preventing undesirable transfers of small arms ammunition. ■

Annexe 1 Authorized small arms ammunition exports for major exporters for 2003 (annual export value equal to or greater than USD 3 million) (top exporters shown in red)

Country	USD value (UN Comtrade customs data)	Main recipients (trade value above 1%) in order of importance	Remarks
Australia	8 million	US, Japan, New Zealand, Belgium, France	930630: USD 5 million; 930621: USD 3 million. Has not published a national arms export report for 2003.
Austria	7 million	Germany, Switzerland, Finland, US, Latvia	Value almost exclusively concerns category 930630. Does not publish a national arms export report.
Belgium	11 million	France, US, Luxembourg, Norway, Netherlands	930630: two-thirds; 930621: one-third. National arms export report has been replaced since 2003 by three regional reports: Brussels (1 Sept 2003–31 Dec 2004): only licences granted, not actual deliveries; no separate ammunition figures. Flanders (30 Aug 2003–29 Feb 2004): actual deliveries, but no separate ammunition figures. Wallonia (1 Sept to 31 Dec 2003): only licences granted, not actual deliveries; no separate ammunition figures.
Bosnia and Herzegovina	7 million	Bulgaria, Germany, US, UK, Nepal	Value almost exclusively concerns category 930630. First national arms export report (for 2004) only provides information on the overall category 9306, which includes the problematic categories 930690 and 930629 in addition to 930630 and 930621.

Brazil	52 million	Colombia, Saudi Arabia, US	930630: one-fifth; 930621: four-fifths. Does not publish national arms export report.
Canada	18 million	US, Belgium, France, Norway, Netherlands	Value almost exclusively concerns category 930630. National arms export report for 2002 does not distinguish between ammunition for small arms and ammunition for light weapons.
Croatia	5 million	Macedonia, Serbia and Montenegro, Afghanistan	930630: USD 5 million Does not publish national arms export report.
Czech Republic	15 million	US, Germany, France, Poland, Austria	930630: two-thirds; 930621: one-third. National arms export report does not distinguish between small arms ammunition, light weapons ammunition, and other types of ammunition.
Finland	12 million	Sweden, Norway, Germany, US, UK	Value almost exclusively concerns category 930630. National arms export report does not distinguish between small arms ammunition, light weapons ammunition, and other types of ammunition.
France	12 million	Côte d'Ivoire, ²³ US, Germany, Guinea, Canada	Value almost equally divided between categories 930630 and 930621. National arms export report does not distinguish between small arms ammunition, light weapons ammunition, and other types of ammunition.
Germany	44 million	Austria, UK, France, Netherlands, Switzerland	Four-fifths concern category 930630; one-fifth 930621. National arms export report only includes information on licences granted, not on actual deliveries, which may be lower.

Hungary	6 million	US, Italy, Germany, Slovakia, Japan	<p>Value almost equally divided between categories 930630 and 930621.</p> <p>National report on the implementation of the <i>UN Programme of Action</i> only contains information on exports and imports of small arms and light weapons, not their ammunition.</p>
Israel	At least 6 million	US, Mexico, Germany, Denmark, Trinidad and Tobago	<p>Value almost exclusively concerns category 930630. Does not report on its small arms ammunition exports to UN Comtrade. Figure is based on importers' reports only and therefore likely to be an underestimate.</p> <p>Does not publish national arms export report.</p>
Italy	61 million	Spain, France, US, Mexico, Turkey	<p>930630: one-quarter; 930621: three-quarters.</p> <p>National arms export report only includes information on licences granted, not on actual deliveries, which may be lower.</p>
Mexico	5 million	US, Honduras, Peru, Guatemala, Panama	<p>930630: two-thirds; 930621: one-third.</p> <p>Does not publish national arms export report.</p>
Norway	18 million	Sweden, Italy, Switzerland, US, UK	<p>Value almost exclusively concerns category 930630.</p> <p>National arms export report does not clearly distinguish small arms, light weapons, and their ammunition from arms exports as a whole.</p>
Russia	16 million	US, Poland, Austria, New Zealand, Mongolia	<p>Value almost exclusively concerns category 930630.</p> <p>Does not publish national arms export report.</p>

South Africa	At least 4 million	US, Brazil, Germany, Austria, UK	<p>Value almost exclusively concerns category 930630. Does not report small arms ammunition exports to UN Comtrade. Figure is based on importers' reports only and therefore likely to be underestimated.</p> <p>No longer publishes national arms export report (Honey, 2005); last report (covering 2000–02) did not distinguish between small arms and their ammunition and grouped light weapons and their ammunition together with larger weapons.</p>
South Korea	19 million	US, Venezuela, Australia, Indonesia, Thailand	<p>Value almost exclusively concerns category 930630. Does not publish national arms export report.</p>
Spain	30 million	US, Ghana, Turkey, UK, France	<p>930630: one-quarter; 930621: three-quarters.</p> <p>National arms export report does not distinguish between small arms ammunition, light weapons ammunition, and other ammunition.</p>
Sweden	25 million	US, Norway, Germany, Denmark, Mexico	<p>930630: nine-tenths; 930621: one-tenth.</p> <p>National arms export report does not distinguish between small arms ammunition, light weapons ammunition, and other ammunition.</p>
Switzerland	40 million	Germany, Austria, United Arab Emirates, Finland, US	<p>Value almost exclusively concerns category 930630.</p> <p>National arms export report does not distinguish between small arms ammunition, light weapons ammunition, and other ammunition.</p>

Turkey	18 million	Germany	Value almost exclusively concerns category 930630. Does not publish national arms export report.
UK	24 million	Unspecified countries, US, Denmark, Germany, Japan	930630: two-thirds; 930621: one-third. National arms export report provides details on ammunition types exported by destination, but no values by types.
US	140 million	South Korea, Canada, United Arab Emirates, Israel, Netherlands	930630: nine-tenths; 930621: one-tenth. National arms export report mostly includes information on licences granted, not on actual deliveries, which may be lower.

Customs categories covered: 930630 (small arms ammunition), 930621 (shotgun cartridges).

Note: This table provides values for exports of small arms ammunition in 2003 based on UN Comtrade. The remarks column details the share of the two ammunition categories covered and indicates what kind of information is provided by a national arms export report, as applicable.

List of abbreviations

BICC	Bonn International Center for Conversion
DRC	Democratic Republic of the Congo
ECOWAS	Economic Community of West African States
GAO	Government Accountability Office (United States)
HRW	Human Rights Watch
HS	Harmonized System (UN Comtrade)
ICOI	International Commission of Enquiry (Rwanda)
ML	Munitions list (Wassenaar Arrangement); Military list (EU)
NISAT	Norwegian Initiative on Small Arms Transfers
NGO	Non-governmental organization
OAS	Organization of American States
OAU	Organization of African Unity (now African Union)
OSCE	Organization for Security and Co-operation in Europe
PRIO	International Peace Research Institute, Oslo

SADC	Southern African Development Community
SEESAC	South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons
UN Comtrade	United Nations Commodity Trade Statistics
WA	Wassenaar Arrangement on Export Controls for Conventional Weapons and Dual-Use Goods

Endnotes

- 1 Although not a member of the EU, '[o]n 9 May 2002 the Republic of Croatia aligned itself with the Code by announcing its acceptance of the principles contained in the Code' (EC, 2002, p. C 31 9/1). Relevant to the situation discussed here are Criterion Four ('Preservation of regional peace, security and stability') and Criterion Seven ('The existence of a risk that the equipment will be diverted within the buyer country or re-exported under undesirable conditions') (EU, 1998).
- 2 Uganda has been facing a long-standing domestic threat and has thus been in need of small arms and light weapons imports, including the corresponding ammunition (see e.g. Small Arms Survey, 2006, pp. 272–93), but the possibility of retransfers exists nonetheless.
- 3 The term 'small arms ammunition' as it is used in this chapter refers to small arms ammunition in the strict sense, excluding light weapons ammunition. For details on UN Comtrade customs categories for different kinds of ammunition and on the issue of mixed categories, see Box 2.
- 4 Authorized transfers are those transfers authorized by a government. On illicit small arms ammunition transfers, see Chapter 4 in this volume.
- 5 Email communication with Alex Vines, Arms Expert and Chair, UN Group of Experts on Côte d'Ivoire, 27 February 2006.
- 6 Although shotgun cartridges are classified as sporting ammunition, they are routinely used in conflicts in Africa (email communication with Alex Vines, Arms Expert and Chair, UN Group of Experts on Côte d'Ivoire, 27 February 2006).
- 7 Firearms have serial numbers, while ammunition has only a rudimentary marking that does not usually make it possible to identify its source (see Chapter 7 in this volume). 7.62 mm ammunition, however, is quite easy to trace (email communication with Alex Vines, Arms Expert and Chair, UN Group of Experts on Côte d'Ivoire, 27 February 2006).
- 8 Buncombe (2005); US GAO (2005, p. 12, fns. 6 and 8, and p. 17); Pappalardo (2005); Goure (2005).
- 9 The download date for all UN Comtrade data used in this chapter is 6 May 2005. For a detailed discussion of UN Comtrade data see Small Arms Survey (2005, Box 4.1, pp. 99–100).
- 10 NISAT has developed a reliability index for each country in order to assess whether, for a given transfer, a country's reported data or the respective mirror data reported by its trading partners is more reliable. This index is used in all calculations. For further details see Marsh (2005).
- 11 'Shells, incendiary cartridges, not for riveting or similar tools, captive-bolt humane killers or shotguns' could refer to small arms ammunition, light weapons ammunition, or larger ammunition.

- 12 'Slugs, for air, gas or spring guns, carbines or pistols, but not for shotguns, being parts of cartridges' and 'starting cartridges, blank, for compression ignition internal combustion piston engines (e.g., Diesel or semi-Diesel)'.
- 13 The sub-groups of the four categories mentioned here are not classified further in terms of UN Comtrade customs categories. It is therefore impossible to calculate the share of a particular sub-group in a given transfer value.
- 14 'Ammunition and fuse setting devices, and specially designed components therefor' (WA, 2005).
- 15 Since small arms ammunition transfers make up roughly one-third of total small arms and light weapons transfers, these cut-off values correspond to roughly one-third of the corresponding cut-off values for determining top and major traders of small arms and light weapons as a whole, which are USD 100 million and USD 10 million, respectively (these thresholds are used in Small Arms Survey, 2004, 2005, 2006, TRANSFERS).
- 16 The inflation adjustment was carried out on the basis of the GDP Chained Price Index that is used in the US budget (see US Government, 2005, Section 10).
- 17 Main recipients were determined based on the actual—not the average—trade value for each year for each exporting country.
- 18 For an overview of provisions relating to small arms ammunition transfers in regional and international small arms instruments, see Table 2.
- 19 For an analysis of the links between transfers of small arms as a whole and human rights violations, see Small Arms Survey (2004, pp. 125–33). Chapter 4 in this volume provides an overview of the illicit side of these kinds of diversion processes.
- 20 An important reason why authorized transfers can easily become illicit is the current system of end-user certificates, which is clearly ineffective (see Anders, 2004).
- 21 Neither the *Interim report* (UNSC, 1998a) nor the *Final report* of the ICOI (UNSC, 1998b) mentions the Eldoret factory. Some members of the ICOI are reported to have been highly critical of Kenyan officials concerning the possibility that Eldoret could have supplied small arms ammunition to conflict parties in Rwanda (Berkol, 2002, p. 11).
- 22 Main suppliers were determined based on the actual—not the average—trade value for each year for each importing country.
- 23 The small arms ammunition declared by Côte d'Ivoire may be related to the transfer of French equipment to France's 'Operation Licorne', which was supporting the Economic Community of West Africa States (ECOWAS) peacekeeping mission in Côte d'Ivoire at the time (phone conversation between the Small Arms Survey and an official from the French Mission in Geneva, 1 December 2005).

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A Thai policeman inspects a large number of pistol bullets recovered from a canal near the Grand Palace in Bangkok, May 2003. © Pornchai Kittiwongsakul/AFP/Getty Images