

# **TRADE UPDATE 2020**

An Eye on Ammunition Transfers to Africa

Nicolas Florquin, Elodie Hainard, and Benjamin Jongleux



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### **Credits**

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## List of abbreviations and acronyms

AEC Arms Embargo Cell
ATT Arms Trade Treaty

BarometerSmall Arms Trade Transparency BarometerC4ADSCenter for Advanced Defense StudiesDRCDemocratic Republic of the Congo

**EU** European Union

FARDC Armed Forces of the Democratic Republic of the Congo

**GGE** Group of Governmental Experts

**GoE** Group of Experts

ITI International Tracing Instrument

MANPADS Man-portable air defence system(s)

NDF Namibian Defence Forces

**NISAT** Norwegian Initiative on Small Arms Transfers

NPC National People's Congress

**OSCE** Organization for Security and Co-operation in Europe

**PKO** Peacekeeping operation

PoA UN Programme of Action to Prevent, Combat and Eradicate the Illicit

Trade in Small Arms and Light Weapons in All Its Aspects

**RevCon** Review Conference of the UN Small Arms Programme of Action

SAF Sudan Armed Forces

**SECAD** State Export Control Administrative Department

SEESAC South Eastern and Eastern Europe Clearinghouse for the Control of

Small Arms and Light Weapons

UAE United Arab Emirates
UAH Ukrainian hryvnia

UN Comtrade United Nations Commodity Trade Statistics Database

UNODA United Nations Office for Disarmament Affairs
UN Register United Nations Register of Conventional Arms

**USD** United States dollar(s)

## **Executive summary**

The lack of transparency among small arms exporters restrains our understanding of the scope of and trends in international small arms transfers. This year's Trade Update reviews the authorized small arms trade in 2017, as reported in the UN Commodity Trade Statistics Database (UN Comtrade), to reveal the scale of and trends in transfers that states voluntarily declared. The 2020 edition of the Small Arms Trade Transparency Barometer (Barometer) assesses the world's top and major small arms exporters' reporting practices—also based on their reporting of their arms trade activities in 2017—and therefore helps shed light on those countries and regions for which publicly available data sources are subject to significant limitations. The report then focuses on case studies that examine the unrecorded ammunition trade between China and Ukrainetwo exporters that have regularly had among the ten least transparent scores in the Barometer—and Africa—a region with an uneven record of reporting on its small arms trade. The focus on ammunition is justified by the existence of alternative data sources that help shed light on transfers to conflict areas and their subsequent diversion, and by the international momentum generated by the work of the UN General Assembly's Group of Governmental Experts (GGE) on Problems Arising from the Accumulation of Conventional Ammunition Stockpiles in Surplus.

## **Key findings**

- According to UN Comtrade, the international small arms trade was worth at least USD 6.5 billion in 2017. While this is a slight decrease of USD 88 million (or 1.35 per cent) compared to 2016, the value of global small arms exports has nonetheless doubled since the Survey started monitoring the small arms trade in 2001. Ammunition remains the largest category, with exports worth USD 2.7 billion in 2017.
- While the United States still accounted for 32 per cent of all global small arms imports in 2017, the absolute value of its imports decreased by 19 per cent compared with 2016, constituting a significant factor in the slight decline of the global small arms trade in 2017. Conversely, the combined value of imports by the Middle East's top six importers—Saudi Arabia, the United Arab Emirates (UAE), Turkey, Oman, Kuwait, and Qatar—has doubled between 2016 and 2017 to account for 20 per cent of global small arms imports in 2017, including 57 per cent of all imported light weapons, 49 per cent of imported military firearms, and 29 per cent of the world's ammunition imports.
- The average score for the 2020 Small Arms Trade Transparency Barometer (Barometer) is 12.36 out of a possible 25 points—almost unchanged from the 2019 edition. The 2020 Barometer identifies, in descending order, Switzerland, Germany, the Netherlands, Serbia, and the United Kingdom as the most transparent small arms exporters in 2017. The least transparent exporters in that year were, in ascending order, Iran, North Korea (both with scores of zero), Saudi Arabia, Israel, and the UAE.
- The exporting countries examined in the case studies—China and Ukraine—ranked, respectively, as the ninth¹ and eighth least transparent states in this year's Barometer. The value of ammunition exports to Africa that these countries reported to UN Comtrade between 2008 and 2017 represents only 3 per cent and 0 per cent, respectively, of the amounts declared as imports by their African trading partners.
- Other sources, including datasets of ammunition found in conflict areas and export records compiled by commercial entities, suggest a broader range of ammunition transfer than those recorded in UN Comtrade—including to countries subject to UN armed embargoes—and help to identify probable cases of diversion after delivery. Such diversion often occurs as the result of the seizure of national stockpiles by armed groups, battlefield capture, and unauthorized retransfers by end users in Africa and the Middle East.

This year's Trade Update
... both examines variations in
the global small arms trade as
reported by states and delves
deep into under-reported transfers
between less transparent states."

## Introduction

n 2020 the UN Group of Experts (GoE) on the Democratic Republic of the Congo (DRC) reported that Chinese entities made eight large arms transfers to the DRC between 2015 and 2019, including various types of rockets and several hundred thousand rounds of small arms ammunition (UNSC, 2020, paras. 154–65). In spite of the size of these transfers, China did not notify the UN Sanctions Committee, which constitutes a violation of the exemption procedures established under the UN arms embargo on the DRC (UNSC, 2020, paras. 154–65). In addition, neither China as the exporter nor the DRC as the importer voluntarily reported these ammunition transfers

#### Box 1 UN Comtrade data

The international small arms trade figures given in Section I (and parts of Section III) of this report are based on analysis of customs data that states contribute voluntarily to UN Comtrade. UN Comtrade captures much international commercial activity, but it does not capture all small arms transfers, because many states do not report them to UN Comtrade, or do so only partially. If neither the exporter nor importer involved in a specific transaction reports details of a transfer to UN Comtrade, the transfer will not be reflected in the estimates of the global small arms trade contained in Section I of this report. Moreover, transfers of some light weapons, light weapons ammunition, and accessories for small arms and light weapons are not discernible from transfers of other items recorded in the same categories, and therefore are not covered in this analysis. As a result, this Trade Update is skewed towards documenting more transparent countries and particular categories of items, and most certainly underestimates the total value and extent of the global authorized trade in small arms.

To compensate for non-reporting and to help resolve discrepancies between exporter and importer data, the analysis uses the Norwegian Initiative on Small Arms Transfers (NISAT) Reliability Index (Marsh, 2005). This index assigns a 'reliability score' for each data

State

2017
EXPORT

STATE

STATE

AND THE STATE OF THE ST

point, which, in turn, determines whether the data that the exporter or importer provides to UN Comtrade is used when their figures diverge.

The analysis of the documented trade in 2017 reflects data entered in the UN Comtrade database as of 22 January 2020. This is in line with established practice whereby the Survey and NISAT give countries two full calendar years in which to make and revise their respective UN Comtrade submissions.

to UN Comtrade (UN Comtrade, n.d.). Such cases highlight the challenges associated with monitoring the global authorized trade in small arms: it is often investigations into cases of diversion rather than voluntary forms of reporting that generate information on transactions between non-transparent states.

The 2020 Trade Update comprises three main sections. Section I looks at the value of the reported authorized global small arms trade, as well as trends across years and regions. These statistics are based on UN Comtrade—a database that relies on reporting by states and therefore does not fully capture arms-trading activities (see Box 1). Nonetheless, reporting through various instruments remains the baseline from which analyses can be undertaken, and as a result the Small Arms Survey encourages states to be as open as possible in this regard. Section II examines the reporting transparency of the top and major exporters identified in Section I, including the results and rankings of the 2020 Barometer.

While the Barometer identifies changes that states can make to improve their reporting practices, it can also be utilized as a tool to spot countries with low transparency scores whose trade is therefore most probably not fully captured in databases such as UN Comtrade, and for which alternative data sources are needed. In the 2017 edition of the Trade Update the Small Arms Survey endeavoured to investigate in more depth the nature and scope of exports from five of the less transparent states that year— Iran, North Korea, Saudi Arabia, South Africa, and the UAE (Holtom and Pavesi, 2017, pp. 59-74). In the 2020 edition the Survey picks up on this thread by looking at two additional states whose transparency scores are regularly among the bottom ten—China and Ukraine.<sup>2</sup> Furthermore, a consistent finding over the years has been that ammunition represents the most traded small arms category. Combining the need to delve further into states with opaque practices and the significant value of ammunition in global small arms transfers, Section III of the 2020 Trade Update focuses on China's and Ukraine's ammunition exports specifically to Africa, a continent whose countries—as shown in the 2018 edition of the Trade Update—have an uneven record of reporting on their small arms imports (Holtom and Pavesi, 2018, pp. 50–70). This year's Trade Update therefore both examines variations in the global small arms trade as reported by states and delves deep into under-reported transfers between less transparent states.

More specifically, the 2020 Trade Update addresses the following key questions:

- Who were the top and major exporters and importers throughout the world in 2017?
- Who are the most and least transparent top and major exporters?
- What other sources of data are available to assess the scale of the authorized ammunition trade between the least transparent major exporters and Africa?
- Are ammunition exports from the least transparent exporters prone to diversion?
- What are examples of ways in which ammunition supplied by the least transparent exporters is diverted in Africa?

### **Section endnotes**

- In the 2020 Barometer (see Table 4) China is in tenth position; however, its score is the same as Pakistan's, which is in ninth position simply because of alphabetic ordering, so effectively China is also in ninth position.
- 2 China had the 14<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> least transparent scores in 2017, 2018, and 2019, respectively; and Ukraine the 10<sup>th</sup>, 10<sup>th</sup>, and 9<sup>th</sup> least transparent scores for the same years (Holtom and Pavesi, 2017, p. 46; 2018, p. 42; Picard, Holtom, and Mangan, 2019, p. 36).

The financial value of reported small arms exports in 2017 was USD 6.5 billion. While this represents a slight decrease compared to 2016, the reported trade remains at a high level when compared with the previous 15 years."

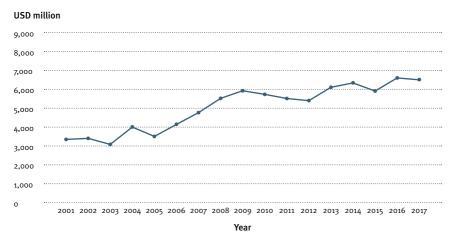
## I. Reported authorized transfers

his section analyses reported authorized small arms transfers undertaken in 2017 and discusses trends during the period 2015–17. It uses the financial value of small arms imports and exports that states reported to UN Comtrade, as compiled by NISAT.¹ According to this data, top and major exporters, as the Survey defines them (see Box 2), accounted for more than 98 per cent of the reported global authorized small arms trade in 2017 (as documented by UN Comtrade; see Figure 3). UN Comtrade data for these states indicates that the financial value of reported small arms exports in 2017 was USD 6.5 billion.² While this represents a slight decrease compared to 2016 (one of USD 88 million), the reported trade remains at a high level when compared with the previous 15 years (see Figure 1).

### Top and major exporters in 2017

In 2017 global small arms exports decreased by USD 88 million, suggesting that they reached a plateau after an increase from 2015 to 2016 by USD 692 million. In 2017, 38 states were major exporters—i.e. they exported at least USD 10 million worth of small arms and light weapons, including their parts, accessories, and ammunition—the same number as in 2016. Among them, 17 were top exporters—with small arms exports equal to or above USD 100 million (see Figure 2 and Table 2).

**Figure 1** Financial value of the global small arms trade, measured in exports (USD million), 2001–17



Note: All values are expressed in constant 2017 US dollars.

Source: NISAT (n.d.)

#### **Box 2** Defining top and major small arms exporters and importers

The Small Arms Survey identifies top and major exporters and importers by assessing the financial value of their annual documented small arms exports and imports, based on UN Comtrade data as compiled by NISAT (Marsh, 2005). Top exporters and importers are those trading at least USD 100 million worth of small arms and light weapons, including their parts, accessories, and ammunition, in a calendar year. Major exporters and importers are those trading at least USD 10 million worth of small arms and light weapons, including their parts, accessories, and ammunition, in a calendar year. For the purposes of this analysis, top and major exporters and importers are classified according to a tier system (see Table 1).

**Table 1** Tier classification of top and major exporters and importers of small arms

Category of exporter or importer		Value traded (USD)
Тор	Tier 1	≥500 million
	Tier 2	100-499 million
Major	Tier 3	50-99 million
	Tier 4	10-49 million



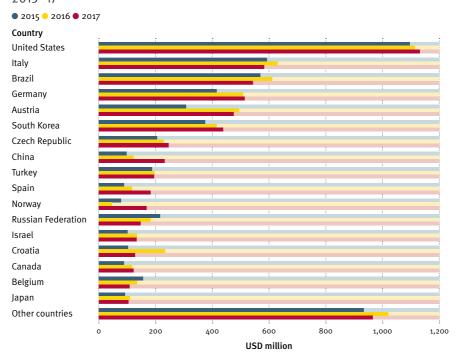
### Top exporters in 2017

The number of top exporters decreased from 18 to 17 between 2016 and 2017. While Norway became a new top exporter, the United Kingdom and Switzerland dropped a tier to become major exporters. The top exporters increased the value of their overall exports by USD 45 million between 2016 and 2017—in 2017, the total value of exports by the top exporters represented more than 84 per cent of the global trade (see Figure 3).

Compared with 2016, top exporters have consolidated their share of the global small arms trade. There were four first tier top exporters in 2017, whose small arms exports were worth USD 2.8 billion, which is an overall decrease of USD 91 million compared to 2016. For the fourth year in a row starting in 2014, the United States, Italy, and Brazil remain the three largest exporters. Germany joined the first tier of the top exporters for the first time since 2013. The United States exported USD 1.1 billion worth of small arms, Italy USD 583 million, Brazil USD 544 million, and Germany USD 514 million. While both the United States and Germany increased their exports by 1 per cent compared to 2016, Italy and Brazil exported respectively 7 per cent and 11 per cent less than the year before.

The most notable increases in exports came from Norway (a 269 per cent increase) and China (an 89 per cent increase), respectively exporting USD 123 million and USD 109 million worth more of small arms than in 2016. In 2017, in addition to Italy and Brazil,

**Figure 2** Financial value of small arms exports (USD million), by top exporters, 2015–17\*



Note: All values are expressed in constant 2017 US dollars. \* The combined value of the small arms exports of all other countries that are not top exporters is included partly to indicate the total value of global small arms exports, and partly to indicate the extent to which the top exporters dominate global small arms exports. This also applies to Figure 3.

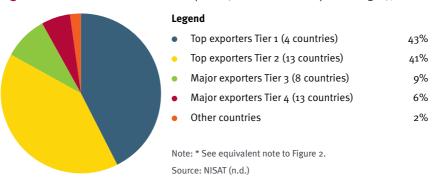
Source: NISAT (n.d.)

Table 2 Top and major small arms exporters, as reported to UN Comtrade, 2017

Category	Value (USD)	Top exporters (listed in descending order of	value exported)
Tier 1	≥500 million	<ol> <li>United States</li> <li>Italy</li> </ol>	<ul><li>3. Brazil</li><li>4. Germany</li></ul>
Tier 2	100–499 million	<ol> <li>Austria</li> <li>South Korea</li> <li>Czech Republic</li> <li>China</li> <li>Turkey</li> <li>Spain</li> <li>Norway</li> </ol>	<ul><li>8. Russian Federation</li><li>9. Israel</li><li>10. Croatia</li><li>11. Canada</li><li>12. Belgium</li><li>13. Japan</li></ul>
Category	Value (USD)	Major exporters (listed in descending order of value exported)	
Tier 3	50-99 million	<ol> <li>Bosnia and Herzegovina</li> <li>Finland</li> <li>United Kingdom</li> <li>Switzerland</li> </ol>	<ol> <li>Serbia</li> <li>France</li> <li>Slovakia</li> <li>Sweden</li> </ol>
Tier 4	10–49 million	<ol> <li>Mexico</li> <li>India</li> <li>Portugal</li> <li>South Africa</li> <li>Taiwan, China</li> <li>Australia</li> <li>Hungary</li> </ol>	8. Bulgaria 9. Lithuania 10. Philippines 11. Singapore 12. Poland 13. Denmark

Source: NISAT (n.d.)

Figure 3 Share of total small arms exports (USD million and percentages), 2017\*



seven other top exporters saw a decline in the value of their exports, and collectively exported USD 307 million less than in 2016 (in order of descending percentage variation):

- Croatia (USD 128 million in 2017, a 45 per cent decrease);
- Belgium (USD 109 million in 2017, a 19 per cent decrease);
- Russian Federation (USD 148 million in 2017, an 18 per cent decrease);
- Brazil (USD 544 million in 2017, an 11 per cent decrease);
- Italy (USD 583 million in 2017, a 7 per cent decrease);
- Austria (USD 475 million in 2017, a 4 per cent decrease);
- Japan (USD 105 million in 2017, a 4 per cent decrease);
- Turkey (USD 194 million in 2017, a 2 per cent decrease); and
- Israel (USD 134 million in 2017, a 1 per cent decrease).

### Major exporters in 2017

This Trade Update identifies 21 major exporters for the year 2017 (Tiers 3–4 in Table 1), which collectively accounted for the export of USD 946 million worth of small arms. Fifteen of these countries were also major exporters in 2016. Two former top exporters—the United Kingdom and Switzerland—dropped to become major exporters in 2017. Four countries crossed the USD 10 million threshold to become major exporters in 2017 (in order of descending percentage variation):

- South Africa (USD 35 million total exports in 2017, a 353 per cent increase);
- Singapore (USD 19 million total exports, a 283 per cent increase);
- Lithuania (USD 23 million total exports, a 229 per cent increase) became a major exporter for the first time since the Small Arms Survey started collecting this data. Lithuanian exports in 2017 principally consisted of a military firearms transfer worth USD 15 million to Angola. This single transfer accounted for 65 per cent of Lithuanian exports in 2017; and
- Denmark (USD 12 million total exports, a 95 per cent increase).

In 2017 Bosnia and Herzegovina increased its exports by 320 per cent compared to 2016, reaching USD 98 million, drawing near the top exporters' threshold of USD 100 million. Its 2017 exports consisted almost exclusively (more than 99 per cent) of small arms ammunition, and its reported trading partners were (in decreasing order of value) Saudi Arabia, Afghanistan, and Turkey.

Finally, Argentina, the Netherlands, Thailand, and the UAE, all major exporters in 2016, recorded exports worth less than USD 10 million in 2017.

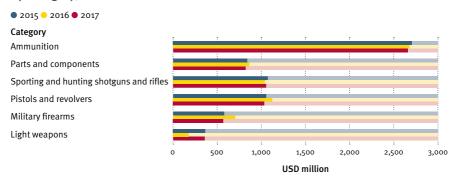
#### Box 3 Global small arms exports by UN Comtrade category, 2015–17

Among the small arms-related categories that UN Comtrade identified,<sup>3</sup> ammunition remained the most traded category by value, with USD 2.7 billion worth exported in 2017. As in 2015 and 2016, ammunition accounted for about 41 per cent of the reported global small arms trade. In 2017 ammunition exports witnessed only a negligible decrease in value of less than 1 per cent compared with 2016 (see Figure 4). The main exporters of small arms ammunition in 2017 were, in descending order, the United States (accounting for 15 per cent of reported global small arms ammunition exports), Brazil (14 per cent), South Korea (14 per cent), Germany (8 per cent), Italy (6 per cent), and the Russian Federation (5 per cent). The main recipients were the United States (accounting for 20 per cent of all reported global small arms ammunition imports), followed by Saudi Arabia (15 per cent), Turkey (7 per cent), Germany (5 per cent), and Canada (4 per cent).

In 2017 the global value of exports of sporting and hunting shotguns and rifles (USD 1.05 billion) increased by 16 million. This category replaces that of pistols and revolvers (USD 1.03 billion) as the second-most-traded category behind ammunition. Together these two categories accounted for 32 per cent of all authorized small arms exports. Italy was the largest exporter of sporting and hunting shotguns and rifles (USD 258 million), followed by Turkey (USD 121 million) and the United States (USD 116 million). Austria accounted for 33 per cent of global exports of pistols and revolvers in 2017.

The Annexe to this Trade Update contains information on the total value of exports, types of small arms exported, and main trading partners for each top and major exporter (see Table A1).

**Figure 4** Financial values of global small arms exports (USD million), by category, 2015–17



Note: All values are expressed in constant 2017 US dollars.

Source: NISAT (n.d.)

#### Comparing top and major exporters in 2015, 2016, and 2017

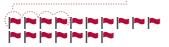
From 2016 to 2017, the number of top and major exporters was stable and remained 38.



#### Top exporters in 2017

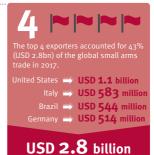


USD 5.4 billion



The 17 top exporters accounted for 84% (USD 5.4bn) of the global small arms trade in 2017.

The number of top exporters dropped from 18 to 17 between 2016 and 2017, with the United Kingdom and Switzerland dropping a tier to become major exporters and Norway becoming a top exporter.



#### Major exporters in 2017



USD 946 million 21

major exporters accounted for 15% of the global small arms trade.

## States with USD 10-49 million worth of exports:

la Lithuania

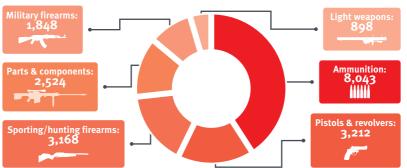
Poland

- Mexico India
- Portugal
- Taiwan, China Denmark
- Hungary
  Bulgaria

## States with USD 50-99 million worth of exports:

- Bosnia-Herzegovina
- Finland
- United Kingdom
  Switzerland
- Switzeriano
- France Slovakia
- Slovakia
  Sweden

#### Financial value of global small arms exports (USD million), 2015–17



### Top and major importers in 2017

In 2017 global small arms imports decreased by USD 212 million. In that year 69 countries—five more than the previous year—qualified as top and major importers, having recorded at least USD 10 million worth of imports. Among them, 13 were top importers—with small arms imports equal to or above USD 100 million (Table 3).

### Top importers in 2017

The 13 top importers—countries that each imported at least USD 100 million worth of small arms in 2017—accounted for 68 per cent of the global small arms trade. In 2017, and for the first time, the UAE joined the five largest importers, alongside the United States, Saudi Arabia, Canada, and Germany. In addition Turkey, Oman, Kuwait, Thailand, and Qatar also became top importers. Conversely, Indonesia, Iraq, and Ghana imported less than USD 100 million worth of small arms in 2017, dropping out of the group of top importers. Overall, the global value of small arms imports in 2017 amounted to USD 6.6 billion, a decrease of USD 212 million compared to 2016.4

In 2017 the United States remained the only country importing more than USD 500 million worth of small arms (Figure 5). It imported USD 2.1 billion worth of small arms, light weapons, and ammunition, which accounts for 32 per cent of the reported authorized global small arms trade (Figure 6). US imports nevertheless decreased by USD 483 million (or 19 per cent) compared with 2016 and therefore contributed greatly to the plateauing of the value of the global small arms trade in 2017. The reduction in the value of US imports of ammunition, which amounted to only USD 531 million in 2017 (a decrease of 34 per cent since 2016), accounted for most of this decrease. The import of pistols and revolvers—the largest small arms commodity imported into the United States by its value (35 per cent of all US small arms imports)—also decreased from USD 805 million in 2016 to USD 716 million in 2017.

### Major importers in 2017

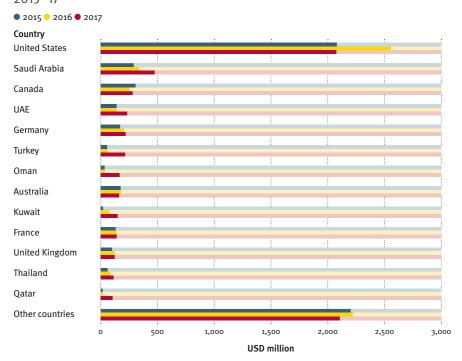
In 2017 the 56 major importers accounted for 29 per cent of the global small arms trade, which is similar to the figures for the previous year (30 per cent) (Picard, Holtom, and Mangan, 2019, p. 29). The composition of the category major importers changed significantly between 2016 and 2017, with nine countries becoming new major importers. Four of the nine were African countries: Angola, Egypt, Senegal, and Sudan. Sudan imported USD 17 million worth of small arms, an increase of 1,185 per cent compared to 2016. Another new major importer, Honduras, imported USD 13 million worth of small arms in 2017; the value of its imports for the period 2014–16 was only USD 12 million.

**Table 3** Top and major small arms importers, as reported to UN Comtrade, 2017

Category	Value (USD)	Top importers (listed in descending order of value imported)
Tier 1	≥500 million	1. United States
Tier 2	100-499 million	<ol> <li>Saudi Arabia</li> <li>Canada</li> <li>Kuwait</li> <li>UAE</li> <li>Germany</li> <li>Turkey</li> <li>Qatar</li> </ol>
Category	Value (USD)	Major importers (listed in descending order of value imported)
Tier 3	50–99 million	<ol> <li>Indonesia</li> <li>Belgium</li> <li>Netherlands</li> <li>Austria</li> <li>Poland</li> <li>Switzerland</li> <li>Spain</li> </ol> 8. Sweden 9. Philippines 10. Italy 11. Israel 12. Jordan 13. Iraq 7. Spain
Tier 4	10-49 million	1. Norway 2. Czech Republic 2. Czech Republic 2. Lithuania 2. Slovakia 2. Hungary 2. Pakistan 2. Kenya 2. Mexico 2. Angola 2. Paraguay 2. South Africa 2. Paraguay 2. South Africa 2. Sudan 2. New Zealand 2. Tunisia 2. Denmark 2. Bulgaria 2. Ghana 2. Ghana 2. Morocco 3. South Korea 3. Brazil 3. South Korea 3. Honduras 3. Honduras 3. Finland 3. Chile 3. Croatia 3. Luxembourg 3. Guatemala 4. Russian Federation 3. Egypt 3. Chile 3. Croatia 4. Rusenbourg 4. Rusenbou

Source: NISAT (n.d.)

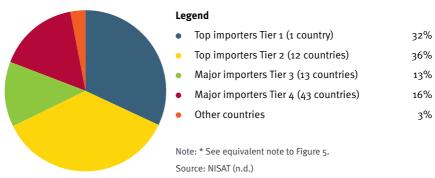
**Figure 5** Financial value of small arms imports (USD million) by top importers, 2015–17\*



Note: All values are expressed in constant 2017 US dollars. \* The combined value of the small arms imports of all other countries that are not top importers is included partly to indicate the total value of global small arms imports, and partly to indicate the extent to which the top importers dominate global small arms imports. This also applies to Figure 6.

Source: NISAT (n.d.)

Figure 6 Share of total small arms imports (USD million and percentages), 2017\*



#### Box 4 A steep increase of small arms imports in Western Asia

Small arms imports by Western Asian states—the UN classification for the Middle East; see Annexe Table A3—represented 59 per cent of the Asia and Pacific region's imports in 2017. Even though Iraq moved from top importer in 2016 to major importer in 2017, four other Western Asian countries—Kuwait, Oman, Qatar, and Turkey—newly became top importers in 2017, and both Saudi Arabia (second) and the UAE (fourth) featured among the world's top five importers.

In 2017 six of the world's 13 top importers were Western Asian countries. They account for 20 per cent of the global imports, which was USD 1.3 billion worth of small arms, light weapons, and their ammunition. These six countries are:

- Oman (USD 165 million imports in 2017, a 416 per cent increase compared with 2016);
- Qatar (USD 102 million, a 402 per cent increase);
- Turkey (USD 212 million, a 260 per cent increase);
- Kuwait (USD 148 million, a 97 per cent increase);
- UAE (USD 233 million, a 68 per cent increase); and
- Saudi Arabia (USD 474 million, a 40 per cent increase).

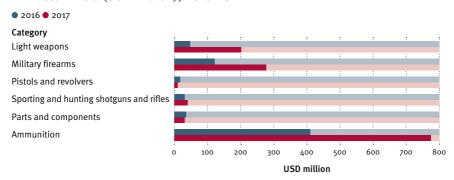
Between 2016 and 2017 the overall value of imports by these six countries doubled. These countries principally imported ammunition worth USD 774 million in 2017, an 89 per cent increase compared with 2016 (see Figure 7). Twenty-nine per cent of the world's ammunition imports were concentrated in the hands of these six countries.

They also imported USD 202 million worth of light weapons (a 319 per cent increase compared to 2016), which represented 57 per cent of all light weapons imported globally in 2017. These six countries also increased their imports of military firearms by 126 per cent in 2017. They accounted for 49 per cent of the global imports of this category, for an overall value of USD 277 million.

On the other end of the scale, the three categories pistols and revolvers, parts and components, and sporting and hunting shotguns and rifles, represented only 8 per cent of their imports.

Increasing small arms imports in the region are of concern. Previous editions of the Trade Update have highlighted reports that Middle Eastern countries such as Saudi Arabia and the UAE have been used as intermediaries for small arms shipments that were re-exported to armed forces and non-state actors in the region, including in conflict-affected areas such as Libya, Syria, and Yemen (Holtom, Pavesi, and Rigual, 2014, pp. 119–120, 126; Holtom and Rigual, 2015, pp. 92, 106–11; Holtom and Pavesi, 2017, pp. 72–73). Section III of this report also reviews UN investigations into the UAE's role in shipments made to Libya in violation of the UN arms embargo.

**Figure 7** Value of categories of small arms imported by the six top importers in Western Asia (USD million), 2016–17



Note: All values are expressed in constant 2017 US dollars.

Source: NISAT (n.d.)

Afghanistan also became a major importer, with imports of small arms reaching USD 41 million in 2017, an increase of USD 32 million compared to 2016.

Indonesia and Iraq went from being top importers to major importers in 2017. Indonesia, which has been routinely placed among the five largest major importers since 2014, imported USD 90 million worth of small arms in 2017, a decrease of 69 per cent compared to 2016. As the 2019 Trade Update noted, however, the high value of Indonesian imports of military firearms from Brazil between 2014 and 2016 may have been due to an error and the miscategorization of larger weapons systems (Picard, Holtom, and Mangan, 2019, p. 71, Box 9). Iraq, which has also been ranked among the top importers since 2014, imported only USD 51 million worth of small arms in 2017, or USD 72 million less than in 2016.

Ghana dropped from being a top importer in 2016 to a major importer in 2017, with USD 14 million worth of imports in that year—USD 186 million less than what was reported in 2016. A Ghanaian official noted that part of the large imports recorded in 2016 were in fact related to international peacekeeping assistance and remained 'under the control of Ghana'. Other major importers that imported at least 50 per cent less than in 2016 include Croatia, India, Iraq, Peru, and South Korea.

Figure 8 presents import data by region between 2001 and 2017, based on UN Comtrade data. After an increase in 2016, small arms imports to the Americas experienced a dip in 2017 to USD 2.5 billion (a 16 per cent decrease compared with 2016), while Europe remained stable at USD 1.5 billion (a 1 per cent decrease). Asia and the Pacific remained the second-largest small-arms-importing region with USD 2.3 billion worth of imports, which was a significant increase of 24 per cent compared with 2016. This

**Figure 8** Regional trends in small arms imports, as reported to UN Comtrade (USD million), 2001–17

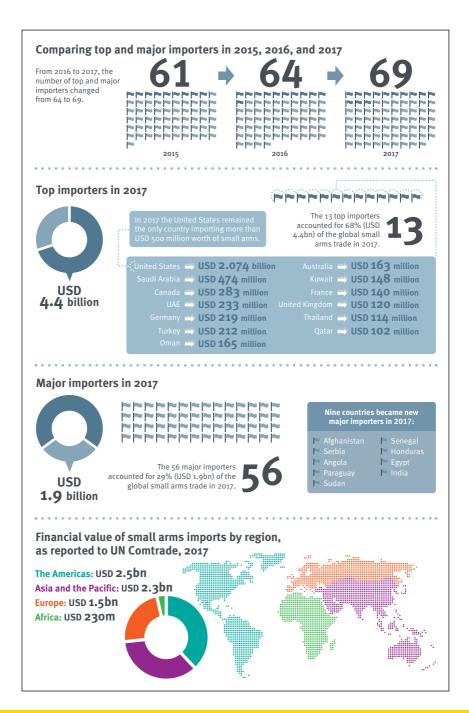


Note: All values are expressed in constant 2017 US dollars.

Source: NISAT (n.d.)

increase can largely be explained by increased imports into the Western Asian subregion (Box 4). This figure is the highest recorded for the Asian region since 2001 (Figure 8). African imports decreased by 40 per cent from 2016 to reach USD 230 million in 2017.

The Annexe to this Trade Update contains information on the total value of imports, types of small arms imported, and the main trading partners of each top and major importer (see Table A2).



#### Section endnotes

- NISAT uses countries' self-reported exports and mirror data—that is, imports reported by destination countries—to generate a single value by transaction; see Marsh (2005).
- 2 All USD values in this section are expressed in constant 2017 US dollars.
- The UN Comtrade commodity categories used in the analysis of the small arms trade are the following: 930120 (military weapons: rocket launchers, flame-throwers, grenade launchers, torpedo tubes, and similar projectors), 930190 (military weapons other than revolvers and pistols), 930200 (revolvers and pistols), 930320 (firearms: sporting, hunting, or target-shooting shotguns, including combination shotgun-rifles), 930330 (firearms: sporting, hunting, or target-shooting rifles), 930510 (firearms: parts and accessories of revolvers or pistols), 930520 (firearms: parts and accessories of shotguns or rifles other than shotgun barrels), 930621 (ammunition: shotgun cartridges), and 930630 (ammunition: cartridges and parts thereof). In 2017 no state used the category 930521 to report the export or import of parts and accessories of shotgun barrels. See Box 1 for more information on UN Comtrade data use in the Trade Update 2020.
- 4 A number of states report inconsistently on their exports and imports, sometimes not specifying their trading partners, but providing a single figure to account for their trade with all countries. This can make it challenging to cross-check importer and exporter data. As a result, global import and export figures do not match exactly.
- 5 Author written correspondence with Leonard Tettey, Ghana National Commission on Small Arms and Light Weapons, 9 September 2020.

On average, the 50 top and major small arms exporters reviewed for the 2020 Barometer scored 12.36 points out of a maximum of 25 points."

# II. The Small Arms Trade Transparency Barometer

he Small Arms Trade Transparency Barometer presents an annual assessment of countries' reporting on their small arms trade activities in reports of various kinds (see the list below) issued before the Barometer's cut-off date, which for 2017 trade activities was 31 January 2019. The 2020 edition of the Barometer identifies the most and least transparent top and major exporters of small arms, based on their reporting of their arms trade activities in 2017 and whether they qualified as a top or major exporter at least once during the 2001–17 calendar years. With one additional state—Lithuania—qualifying as a major exporter through its small arms trade activities in 2017,¹ the 2020 Barometer reviews 50 countries. The score for each top and major exporter is based on an evaluation of information on arms transfer control systems and small arms exports made publicly available by countries via the following national and multilateral reporting instruments:

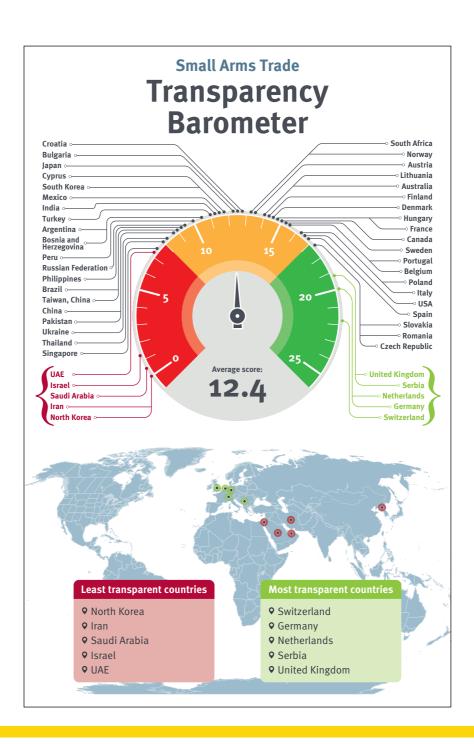
- national arms exports reports, including submissions to regional reports;
- submissions to the UN Register of Conventional Arms (UN Register), including those to the Organization for Security and Co-operation in Europe (OSCE);
- national reports on countries' implementation of the UN Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects (PoA);
- UN Comtrade submissions;<sup>2</sup> and
- Arms Trade Treaty (ATT) initial and annual reports.

Top and major exporters can attain a maximum score of 25 points in the 2020 Barometer, based on the application of standardized scoring guidelines to assess 42 criteria across seven transparency parameters: *timeliness, access and consistency, clarity, comprehensiveness, deliveries, licences granted,* and *licences refused.* The more points a country receives, the higher its ranking in the Barometer. Table A4 in the Annexe provides the detailed scoring guidelines.

After a brief overview of the main trends observed in the 2020 Barometer, this edition will examine recent developments in online reporting tools and databases of small arms exports, and will conclude with a discussion of the largest increases and decreases in scores among the top and major exporters of small arms. It is important to note that the Barometer does not verify the accuracy of the information that countries provide in their various reports.

### **Overview**

On average, the 50 top and major small arms exporters reviewed for the 2020 Barometer scored 12.36 points out of a maximum of 25 points. Of these, 27 achieved a score above



or equal to this average, 21 scored below it, and 2 exporters scored zero points. Overall, the Barometer recorded a marginally higher average than last year's average of 12.3 points. Between 2016 and 2017, 22 small arms exporters (44 per cent) increased their Barometer scores, while 21 (42 per cent) saw their scores decrease. This is a negative development in comparison with the 2019 Barometer, where 23 exporters (47 per cent) increased their scores and 19 (39 per cent) saw their scores decrease compared to the previous year.

States could increase their scores by providing more information on licences granted and refused, by reporting to multiple mechanisms, and by ensuring consistency in their reporting practices. The 2019 GGE report on the UN Register has cemented the '7+1' formula after a trial period started in 2016. The '7+1' formula means that

the standardized reporting form for international transfers of SALW [small arms and light weapons] is upgraded from background information as UN Member States report on such transfers in parallel with the seven categories of the [UN] Register (ATT-BAP, 2017).

This may not be sufficient to address the decline in reporting to the UN Register, however. What seems to be a growing trend among states parties to the ATT is that of requesting that their reports not be made publicly available. The low reporting rates to the ATT and UN Register mechanisms need to be monitored in future Barometer editions.

## **Box 5** Recent developments in online reporting tools and databases of small arms exports

Previous editions of the Barometer have noted that multilateral reporting instruments on small arms transfers have shown a decline in levels of participation and delays in making information provided by countries publicly available in a timely manner.<sup>3</sup> For example, the EU's *Nineteenth Annual Report* on arms exports, which contained data on trade that occurred in 2016 (CoEU, 2018a), was published on 31 October 2018—22 months after the calendar year covered, while the South Eastern and Eastern Europe Regional Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC) regional report containing data for 2017 was published in July 2019—19 months after the calendar year that it covered (SEESAC, 2019).

The revised EU Common Position (CoEU, 2019c) and *User's Guide* (CoEU, 2019b) include provisions to address reporting challenges for EU member states in terms of timeliness, access, and consistency. The revised Article 8 of the EU Common Position and its *User's Guide* provide guidelines for the development of a user-friendly searchable online database

that will allow all stakeholders to consult and analyse the data on Member States' arms exports and which will contain information on export licences granted, denied and actual exports broken down by destination and Military List category (CoEU, 2019b).

It also lays down an obligation for member states to publish a national report if they export conventional arms (CoEU, 2019a; 2019b; 2019c). This new searchable online database could further assist efforts to assess the consistency of EU member states' reporting practices and the quality of the information that they provide to the various transparency mechanisms.

The experience of online reporting tools for other multilateral instruments has thus far not yielded positive trends in countries' annual reporting on their international small arms transfers. The UN Register online reporting tool was launched in 2012 (UNGA, 2016, para. 38), more than a decade after the UN GGE recommended that national submissions should be made 'available electronically through a user-friendly database with a searchable facility' (UNGA, 2000, para. 79) and in a timely manner, with translations into all UN languages (UNGA, 2019a, paras. 76, 121). Overall, 46 states used the tool between 2012 and 2016 (UNGA, 2016, para. 38), a period in which the overall level of reporting to the UN Register was among the lowest in its history. Fewer than 50 states have reported for the years 2016 and 2017 (UNROCA, n.d.).

ATT states parties asked the ATT Secretariat to develop an online reporting tool, which was launched in 2019. It enables states parties to submit initial and annual reports that can be made publicly available on the ATT Secretariat website while satisfying the security concerns of states submitting the reports and the security of the information (ATT Secretariat, 2018, para. 24.f). By February 2020 only 12 states parties had used the online tool to submit annual reports for their 2019 activities (ATT Secretariat, 2020, para. 47). Of the 89 ATT states parties required to submit their mandatory annual reports for 2017 by the 31 May 2018 deadline, 35 had not done so by the Barometer's 31 January 2019 cut-off date (ATT Monitor, 2019). This represents the lowest reporting rate for the period 2015–17 (ATT Monitor, 2019). Moreover, of the 54 annual reports that states parties submitted for 2017,417 (31 per cent) contained aggregated totals, which prevented any effective analysis of some or all of a country's small arms exports or imports (ATT Monitor, 2019). As of 31 May 2019 only two states—Japan and Sweden—had provided the ATT Secretariat with relevant updates or changes to their national arms transfer control systems, as required by Article 13.1 of the Arms Trade Treaty (ATT Monitor, 2019).

In 2011 the UN Office for Disarmament Affairs (UNODA) began providing UN member states with an online tool for creating and uploading a report on their implementation of the PoA and International Tracing Instrument (ITI) (Holtom and Ben Hamo Yeger, 2018, p. 16). The UNODA PoA website makes states' submissions available online in PDF format and provides 'country profiles' for states that use the reporting template format and quantitative data relating to several key provisions in the PoA, including provisions on the regulation of transfers of small arms and brokering (UNODA, n.d.). Those UN member states that have previously used the online reporting tool can now simply 'update' their reports, thus simplify reporting in areas where changes do not take place frequently (for example, information on a country's legislative framework or administrative procedures). It is not clear if this measure was a key factor in helping to enable 119 UN member states to submit such reports in 2018, a record high for national reports on implementation of the PoA and ITI. It should be noted that this was the year of the Third Review Conference (RevCon3) of the UN PoA—with previous 'peaks' of reporting having occurred during previous RevCons5 and also coincided with a series of regional symposiums organized in preparation for RevCon3 by UNODA in cooperation with the Small Arms Survey.

### The 2020 Small Arms Trade Transparency Barometer

The 2020 Barometer provides an assessment of the reporting practices of 50 top and major exporters—countries that are believed to have exported at least USD 10 million worth of small arms and light weapons during any calendar year from 2001 to 2017, including parts, accessories, and ammunition. This assessment is based on an examination of information that these small arms exporters made publicly available in national and international transparency instruments during the period 2017–18 regarding trade activities that were conducted during 2017 (see Table 4). Providing comprehensive reporting for all instruments increases a country's likelihood of receiving a high score. For detailed scoring guidelines, see Table A4 in the Annexe.

For the second year in a row the Barometer identifies Switzerland, Germany, the Netherlands, Serbia, and the United Kingdom as the five most transparent exporters. The five least transparent exporters, also for the second year in a row, are North Korea, Iran, Saudi Arabia, Israel, and the UAE.

The top five most transparent small arms exporters were in exactly the same order in the Barometer as in last year's edition, with all five increasing their overall scores. Switzerland ranked in first place for the third consecutive year, scoring 21.75 out of a possible maximum of 25 points. Switzerland is followed by Germany and the Netherlands in joint second place with 20.0 points, and Serbia and the United Kingdom in joint fourth place with 19.25 points. All five countries published a national report; provided information to the UN Register, the PoA, and UN Comtrade; and also submitted an ATT annual report and initial report with information on their transfer control systems and small arms exports occurring in 2017. While all five countries increased their scores in comparison to the 2019 Barometer, only Germany and Serbia surpassed their 2018 Barometer scores in the current edition.

Previous editions of the Barometer have noted that Switzerland could increase its score by providing information on temporary exports and intangible transfers (that is, transfers of technology, blueprints, and expertise) and consistently reporting on licences refused or clearly stating that no licences were refused in a particular calendar year (if this were indeed the case). Switzerland provided information on intangible transfers in its national report for its 2017 activities, resulting in an additional 0.5 points in the comprehensiveness parameter compared to the 2019 Barometer score. Switzerland could further increase its score for the licences refused parameter by providing the value of the small arms and ammunition that were denied an export authorization.

Germany and the Netherlands increased their Barometer scores by 0.5 points compared to the previous edition of the Barometer by reporting for the first time on brokering authorizations for small arms. In the comprehensiveness parameter Germany continues to have the lowest score of the top five most transparent small arms exporters due to a lack of information on intangible transfers, re-exports, and transits/transhipments.

Providing information on the origin and destination of re-exports and transits/transhipments of small arms in national reports or submissions to multilateral instruments could boost its score and transparency in this regard.

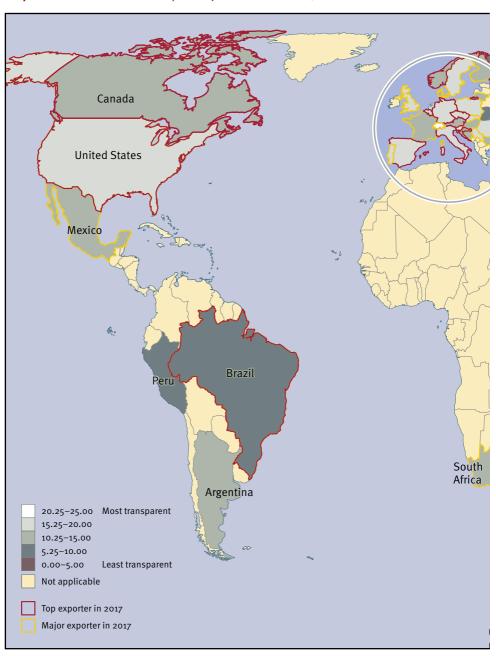
The Netherlands has traditionally provided the most comprehensive information on small arms transfers according to Barometer scoring, but fell behind Switzerland in this category in the 2020 Barometer (although its score of 6.0 is the same as in the 2019 edition). It is the only major exporter to score 5.0 out of 5.0 for clarity, thanks to its having begun reporting on brokering authorizations for small arms. As with many major small arms exporters, greater transparency with regard to information on the value and quantity of small arms and ammunition in the parameters licences granted and denied could provide more points and a higher score for the Netherlands.

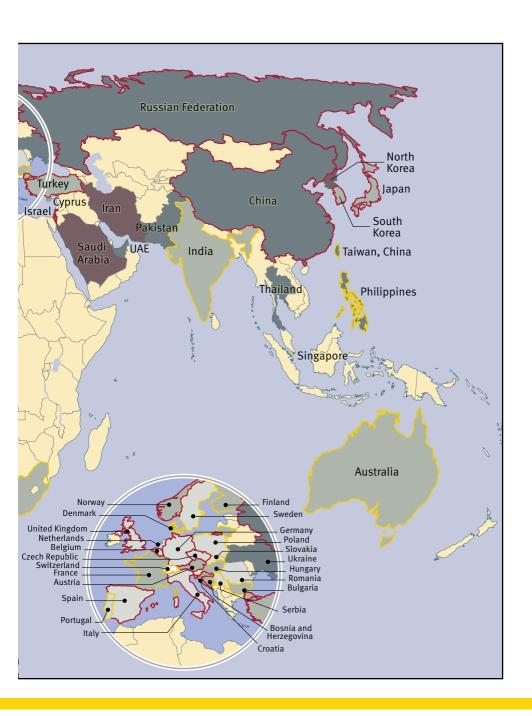
Serbia and the United Kingdom are tied in fourth place for the second year in a row, but both increased their scores by 1.0 point compared to the previous edition of the Barometer—although the United Kingdom is still short of the 20.0 points score it obtained in the 2018 Barometer. The 2019 edition of the Barometer noted that Serbia could increase its score by sharing information on small arms that transited through its territory. As a result of providing such information in its national report and UN Register submission for its 2017 activities, Serbia increased its score in the comprehensiveness parameter. It also increased its score by 2.0 points by clearly stating that it had not denied any export licences in 2017. Serbia could gain additional points by providing information on the intended destination countries and end users for licences that were granted, or any information on brokering authorizations, intangible transfers, or temporary exports.

The United Kingdom remains the only country to provide an online searchable tool for providing information on its exports of controlled military items and technologies, including small arms (UK DIT, n.d.). It gained points for information provided on transits/transhipments and the country of import and end users for exports. It could further increase its score by reporting on intangible transfers and re-exports, and by consistently indicating the origin and destination of transits/transhipments. The United Kingdom provides some information on licence denials, but does not reveal the quantities and values of these licence applications. As highlighted in previous editions of the Barometer, the United Kingdom would also gain points by providing information on deliveries.

According to the 2020 Barometer, the five least transparent major small arms exporters in 2017 were North Korea (o points), Iran (o points), Saudi Arabia (0.5 points), Israel (1.25 points), and the UAE (7.25 points). Neither Iran nor North Korea reported any information to the national or multilateral mechanisms used to compile the 2020 edition of the Barometer. Israel maintained its score of 1.25 points, with a nil report on exports of light weapons in categories III and VII of the UN Register. The UAE failed to report to UN Comtrade on its 2017 activities and thus lost points for timeliness. The UAE had not submitted data to UN Comtrade between 2012 and 2017, but had resumed reporting in 2018 and 2019. Future editions of the Barometer will show if this absence

Map 1 Small Arms Trade Transparency Barometer 2020, based on 2017 trade





of reporting for the country's 2017 activities is just an isolated incident. The UAE gained points by reporting to the PoA, but this was not sufficient to reach as high a score as in the 2019 Barometer, with 7.25 points in the 2020 Barometer against 8.0 points in the previous edition. Because the Barometer attempts to encourage increased transparency and indicates where states can improve their reporting, the example of the UAE demonstrates the importance of reporting to multiple transparency mechanisms, because the various mechanisms do not necessarily cover the same categories, as well as the importance of consistency in reporting practices across the years.

## Largest score decreases and increases between the 2019 and 2020 Transparency Barometers

The top and major small arms exporters with the largest point *decreases* in this edition of the Barometer, as compared to the previous one, are, in decreasing order of points lost, Thailand, Mexico, Croatia, and Hungary.

- Thailand (-2.25 points overall): Thailand lost 2.0 points for timeliness and consistency, because it did not provide information via UN Comtrade within the Barometer's scoring timeframe. It also provided less information than it did for its 2016 trade activities to UN Comtrade on its subregional, regional, and international commitments relating to the control of international small arms transfers.
- Mexico (-2.25 points overall): Mexico gained 0.5 points for access and consistency by submitting data to UN Comtrade for the third year in a row. This gain was neutralized, however, by the points Mexico lost for not reporting to the UN Register for the second year in a row. This in turn led to a further loss of points in other categories. This means that after recording one of the largest increases in its score from the 2018 to the 2019 editions of the Barometer, Mexico's 2020 Barometer score is now below the 11.75 points it scored in 2018.
- Croatia (-1.75 points overall): Croatia lost 1.0 point for deliveries because it did not report to UN Comtrade the quantities of weapons and ammunition that it had exported in 2017. Croatia also did not provide information on the intended country of import for granted licences, losing a further 0.5 points. Croatia also did not provide any information on licences refused in its national report. For comparison purposes, in its 2015 national report Croatia scored 2.0 points for clearly indicating that it had refused no licences in that year. This shows the importance of countries' providing as much information as possible in their reporting. Croatia could gain 4.5 points solely by providing more complete information on licences refused and granted in its national and/or regional (EU) reports.
- Hungary (-1.5 points overall): Hungary lost 2.5 points by failing to report any information on licences refused and by providing information only on the country of

import for licences granted and on the value of the weapons and ammunitions that were granted a licence, albeit in aggregated form. This loss was slightly mitigated by a 0.5 point increase in the deliveries category through information provided on the specific end user in Hungary's report to the UN Register. Hungary also increased its score by 0.5 in the comprehensiveness category because it provided data specifically on exports of sporting guns and rifles in its reports to the UN Register and UN Comtrade, and in its annual report to the ATT.

Five countries warrant mention for their *increased* transparency scores from 2019 to 2020 (listed here in decreasing order of points gained): Cyprus, Bosnia and Herzegovina, Romania, Slovakia, and South Korea.

- Cyprus (+2.5 points overall): Cyprus recorded the largest scoring increase between the 2019 and 2020 Barometers, gaining 1.75 points for providing more information on export licences granted and refused. However, it scored fewer points than in the 2018 Barometer in two categories—clarity and comprehensiveness—mainly because it did not report on its UN PoA implementation. Although Cyprus submitted its initial report on ATT implementation in 2017 and its first ATT annual report for its 2017 activities in 2018, neither can be scored for the purposes of the 2020 Barometer because both reports have been posted only on the restricted area of the ATT website. In order to improve transparency on its arms exports and transfer control system, Cyprus should make both its initial and annual ATT reports publicly available—as many other major exporters that are ATT states parties have done.
- Bosnia and Herzegovina (+1.5 points overall): Bosnia and Herzegovina increased its score by 1.5 points, thus improving over its 2018 Barometer score of 10.25 points, which had previously been its highest score. The country equalled its 2018 score in the comprehensiveness and deliveries categories, where it had lost 0.5 and 1.0 points, respectively, in the previous edition.
- Romania (+1.5 points overall): Romania increased its score by 1.5 points. It gained 0.25 points for providing information on brokering authorizations in its national report and another 0.75 points for reporting on licences refused.
- Slovakia (+1.5 points overall): Slovakia gained 2.0 points for declaring in its national report that no licence applications were denied in the 2017 calendar year. It did, however, lose 0.5 points by providing aggregated data on its permanent re-exports and not identifying the destinations of these re-exports.
- South Korea (+1.5 points overall): The increase in South Korea's score was achieved in part in the comprehensiveness category, because it submitted its 2017 data to the PoA. South Korea also submitted its first ATT annual report, which covered its 2018 transfer activities. This report will be scored in the 2021 Barometer. South Korea had scored 0.5 points in the category of licences granted to intended countries of import in the 2019 Barometer and 1.0 point in the 2018 Barometer, thus showing a downward trend that could be reversed in later editions.

Table 4 Small Arms Trade Transparency Barometer 2020, covering top and major exporter activities in 2017\*

major exporter activities in		1	1			
Exporter	Total points, 2020 Barometer	Total points, 2019 Barometer	National report **/ regional report ***	UN Comtrade**	UN Register**	0SCE**
Switzerland	21.75	21.25	Х	Х	Х	0
Germany	20.00	19.50	X/EU	Χ	Χ	Χ
Netherlands	20.00	19.50	X/EU	Χ	Χ	Χ
Serbia	19.25	18.25	X/SEE	Χ	Χ	Χ
United Kingdom	19.25	18.25	X/EU	Χ	Χ	Χ
Czech Republic	17.25	17.00	X/EU	Χ	Χ	Χ
Romania	17.25	15.75	X/EU	0	Χ	Χ
Slovakia	17.25	15.75	X/EU	Χ	Χ	Χ
Spain	16.75	16.75	X/EU	Χ	Χ	0
United States	16.50	16.25	Xª	Χ	Χ	Χ
Italy	16.25	15.50	X/EU	Χ	Χ	Χ
Poland	16.25	17.00	X/EU	Χ	Χ	Χ
Belgium	15.50	15.50	X/EU	Χ	Χ	Χ
Portugal	15.50	15.75	o/EU	Χ	Χ	Χ
Sweden	15.25	15.50	X/EU	Χ	Χ	Χ
Canada	15.00	14.50	Х	Χ	Χ	Χ
France	14.75	15.50	X/EU	Χ	Χ	0
Hungary	14.75	16.25	X/EU	Χ	Χ	Χ
Denmark	14.50	14.00	X/EU	Χ	0	Χ
Finland	14.25	14.75	X/EU	Χ	Χ	0
Australia	14.00	13.50	Х	Χ	Χ	n/a
Lithuania <sup>c</sup>	14.00		o/EU	Χ	Χ	Χ
Austria	13.50	14.00	o/EU	Χ	X(16)	Χ
Norway	13.25	13.75	Х	Χ	0	Χ

ATT annual report**	ATT initial report**	PoA**	Total timeliness (1.50 max.)	Total access and consistency (2.00 max.)	Total clarity (5.00 max.)	Total comprehensiveness (6.50 max.)	Total deliveries (4.00 max.)	Total licences granted (4.00 max.)	Total licences refused (2.00 max.)
Χ	Χ	Χ	1.50	1.50	4.50	6.25	3.00	3.50	1.50
Χ	Χ	Χ	1.50	2.00	4.50	3.75	3.50	3.00	1.75
Χ	Χ	Χ	1.50	2.00	5.00	6.00	3.00	1.50	1.00
Χ	Χ	Χ	1.50	1.50	3.25	5.50	3.50	2.00	2.00
Χ	Χ	Χ	1.50	2.00	4.50	4.25	2.50	3.50	1.00
X	Χ	Χ	1.50	1.50	3.50	4.25	3.00	1.50	2.00
X	Χ	Χ	1.50	1.50	3.00	4.50	3.50	2.50	0.75
Χ	Χ	Χ	1.50	1.50	3.50	4.25	3.00	1.50	2.00
X	Χ	Χ	1.50	2.00	3.00	3.75	3.00	1.50	2.00
n/a	n/a	Χ	1.50	2.00	3.75	4.25	3.00	2.00	0.00
Χ	Χ	Χ	1.50	1.50	4.25	5.00	2.50	1.50	0.00
X	Χ	Χ	1.50	1.50	3.00	3.75	3.00	1.50	2.00
X	Χ	Χ	1.50	2.00	3.50	2.25	3.00	2.50	0.75
X	Χ	Χ	1.50	1.50	2.75	3.75	3.50	2.50	0.00
Χ	Χ	Χ	1.50	1.50	3.25	4.75	2.50	1.50	0.25
n/a <sup>b</sup>	n/a <sup>b</sup>	Χ	1.50	1.50	3.25	4.25	3.50	0.00	1.00
X	Χ	Χ	1.50	1.50	3.00	4.00	3.00	1.50	0.25
X	Χ	Χ	1.50	1.50	2.75	4.50	3.00	1.50	0.00
X	Χ	Χ	1.50	1.50	2.75	4.75	2.50	1.50	0.00
X	Χ	Χ	1.50	1.50	2.75	3.25	3.00	2.00	0.25
X	Χ	Χ	1.50	2.00	2.75	3.25	3.00	1.50	0.00
X	Χ	Χ	1.50	1.50	2.75	3.75	3.00	1.50	0.00
X	Χ	0	1.50	1.00	2.75	3.25	3.00	2.00	0.00
Χ	Χ	Χ	1.50	1.50	3.75	3.50	3.00	0.00	0.00

Exporter	Total points, 2020 Barometer	Total points, 2019 Barometer	National report **/ regional report ***	UN Comtrade**	UN Register**	OSCE**
South Africa	13.25	13.50	$X^d$	0	Χ	n/a
Croatia	12.75	14.50	Х	Χ	0	0
Bulgaria	12.50	12.00	X/EU	0	Χ	0
Japan	12.25	11.75	0	Χ	Χ	n/a
Cyprus	11.75	9.25	0	Χ	Χ	Χ
South Korea	11.75	10.25	Х	Χ	Χ	0
Mexico	11.50	13.75	0	Χ	0	n/a
India	11.25	11.25	0	Χ	Χ	n/a
Turkey	11.00	11.25	Og	Χ	Χ	Χ
Argentina	10.50	11.00	0	Χ	Χ	n/a
Bosnia and Herzegovina	10.50	9.00	o/SEE	0	Χ	0
Peru	10.00	9.25	0	Χ	0	n/a
Russian Federation	9.50	9.25	0	Χ	Χ	Χ
Philippines	9.25	10.25	0	Χ	0	n/a
Brazil	9.00	9.50	0	Χ	Χ	n/a
Taiwan, China	9.00	10.00	$\mathbf{X}^{k}$	Χ	n/a	n/a
China	8.75	8.75	0	Χ	Χ	n/a
Pakistan	8.75	8.00	0	Χ	0	n/a
Ukraine	8.25	9.00	Х	0	Χ	Χ
Thailand	8.00	10.25	0	X(16)	0	n/a
Singapore	7.50	8.00	0	Χ	Χ	n/a
UAE	7.25	8.00	0	X(16)	0	n/a
Israel	1.25	1.25	0	0	Χ	n/a
Saudi Arabia	0.50	0.50	0	0	0	n/a
Iran	0.00	0.00	0	0	0	n/a
North Korea	0.00	0.00	0	0	0	n/a

ATT annual report**	ATT initial report**	PoA**	Total timeliness (1.50 max.)	Total access and consistency (2.00 max.)	Total clarity (5.00 max.)	Total comprehensiveness (6.50 max.)	Total deliveries (4.00 max.)	Total licences granted (4.00 max.)	Total licences refused (2.00 max.)
Χ	Х	0	1.50	1.00	2.75	3.00	2.00	3.00	0.00
Χ	Χ	Χ	1.50	1.50	2.75	3.50	2.00	1.50	0.00
Χ	Χ	Χ	1.50	1.50	2.75	2.25	3.00	1.50	0.00
Χ	Χ	Χ	1.50	1.50	2.50	3.75	3.00	0.00	0.00
X <sup>e</sup>	X <sup>e</sup>	0	1.50	1.00	1.75	3.25	2.50	1.50	0.25
n/a <sup>f</sup>	$X^f$	Χ	1.50	1.00	2.50	3.75	3.00	0.00	0.00
Χ	Χ	Χ	1.50	1.50	2.50	3.00	3.00	0.00	0.00
n/a	n/a	Χ	1.50	1.00	2.50	3.25	3.00	0.00	0.00
n/a	n/a	Χ	1.50	0.50	2.25	3.75	3.00	0.00	0.00
X	$X^h$	Χ	1.50	1.00	2.50	3.00	2.50	0.00	0.00
Χ	Χ	Χ	1.50	0.50	2.50	2.00	2.50	1.50	0.00
X <sup>i</sup>	Х	Χ	1.50	1.00	2.00	3.00	2.50	0.00	0.00
n/a	n/a	Χ	1.50	1.00	2.50	2.00	2.50	0.00	0.00
n/a	n/a	Χ	1.50	0.50	2.50	2.25	2.50	0.00	0.00
n/a	n/a <sup>j</sup>	Χ	1.50	1.00	2.00	2.00	2.50	0.00	0.00
n/a	n/a	n/a	1.50	1.50	1.50	1.50	3.00	0.00	0.00
n/a	n/a	Χ	1.50	1.00	2.00	1.75	2.50	0.00	0.00
n/a	n/a	X(16)	1.50	0.50	1.75	2.50	2.50	0.00	0.00
n/a	n/a	Х	1.50	1.00	1.75	2.00	2.00	0.00	0.00
n/a	n/a	Χ	0.00	0.00	2.25	2.75	3.00	0.00	0.00
n/a	n/a	Χ	1.50	1.00	1.50	1.50	2.00	0.00	0.00
n/a	n/a	Χ	0.00	0.00	2.25	2.50	2.50	0.00	0.00
n/a	n/a	0	0.00	0.50	0.25	0.50	0.00	0.00	0.00
n/a	n/a	Х	0.00	0.00	0.50	0.00	0.00	0.00	0.00
n/a	n/a	X(16)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n/a	n/a	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### **Notes**

The online version of the Transparency Barometer incorporates corrections that may affect country scores and rankings. For this reason the online version rather than the printed one should be considered definitive. See Small Arms Survey (n.d.a).

Grey shaded cells indicate where countries do not need to report to a particular instrument, given that they were not party to the mechanism in question as of 31 December 2017.

- \* Top and major exporters are countries that export—or are believed to export—at least USD 10 million worth of small arms, light weapons, their parts, accessories, and ammunition in a given year. The 2020 Barometer includes any country that qualified as a top or major exporter at least once during the 2001–17 calendar years; it assesses arms trade activities for 2017.
- "X indicates that a report was issued or submitted by the 2020 Barometer's cut-off date of 31 January 2019—
  that is, 13 months after the year in which the trade activities took place. X(year) indicates that, because a
  report was not issued or submitted by the Barometer's cut-off date, the country was evaluated on the basis
  of its most recent submission, which covered activities for the year reported in brackets. o indicates that no
  report was submitted. n/a indicates that no report was submitted either because the country was not party to
  that instrument or because the country was not due to report to this instrument in that specific time period.
  See also the explanatory notes on the next page.
- \*\*\* The Barometer assesses information provided in the following regional reporting instruments: (1) the EU's Twentieth Annual Report (CoEU, 2018b), which reflects exports of military equipment carried out by EU member states in 2017 and appears as 'EU' in the Barometer; and (2) the regional report compiled by SEESAC (SEESAC, 2019), which covers data on transfers completed in 2017 by exporters from South-eastern and Eastern Europe and appears as 'SEE' in the Barometer.
- For the purposes of the Barometer, the US national report refers to the State Department report issued pursuant to Section 655 of the Foreign Assistance Act on direct commercial sales, as well as the report on foreign military sales prepared by the US Department of Defense. For the third time the 2020 Barometer assesses information on foreign trade provided via USA Trade Online (US CB, n.d.).
- b Canada became an ATT state party on 17 September 2019. It is due to submit its ATT initial report in September 2020 and its first annual report on 31 May 2021.
- Lithuania appears in the Barometer for the first time because it exported at least USD 10 million worth of small arms, light weapons, their parts, accessories, and ammunition in 2017.
- d In the evaluation of South Africa's national report the term 'conveyance' is interpreted to mean transit in accordance with the definition provided in the National Conventional Arms Control Act (South Africa, 2002, art. 1(vii)).
- Cyprus has requested that its ATT initial and annual reports be posted on the area of the website accessible only to ATT states parties.
- South Korea submitted its ATT initial report on 25 February 2018, after the cut-off date for the 2019 Barometer, so it was scored in the present edition. South Korea submitted its first annual report in 2019 for its 2018 activities. This report will be scored in the 2021 Barometer.
- The SIPRI Database on National Reports on Arms Exports indicates that the Turkish Defence Industry Manufacturers Association publishes an annual report on Turkey's arms exports (SIPRI, n.d.). The Barometer does not consider this report when assessing the country's transparency because it is not produced by a government agency and thus is not representative of national reporting practices.
- Argentina has requested that its ATT initial report be posted on the area of the website accessible only to ATT states parties.

- Peru submitted its first ATT annual report in 2017.
- <sup>1</sup> Brazil became an ATT state party on 12 November 2018. Brazil did not submit its ATT initial report, which was due in November 2019.
- <sup>k</sup> Customs data provided by Taiwan, China has been categorized as a national report rather than as a submission to UN Comtrade. The data was retrieved from the Directorate General of its Customs Administration (Taiwan, China, MoF, n.d.).

#### Scoring system

The scoring system for the 2020 Barometer allows exporters to earn a maximum of 25 points on the basis of 42 criteria in 7 parameters: timeliness; access and consistency; clarity; comprehensiveness; the level of detail provided on actual deliveries; licences granted; and licences refused. For detailed scoring guidelines, see Table A4 in the Annexe.

#### **Explanatory notes**

The 2020 Barometer assesses national arms export reports that were made publicly available between 1 January 2017 and 31 January 2019. It also reflects information submitted by states to regional reporting mechanisms that were published after 31 January 2019 and before the Barometer was finalized (1 March 2020), although the submission of this data does not receive points for timeliness.

The 2020 Barometer takes account of national submissions to the UN Register from 1 January 2017 to 31 January 2019, as well as information submitted to UN Comtrade on 2017 exports. The 2020 Barometer takes into account states parties' initial and annual reports to the ATT submitted from 1 January 2017 to 31 January 2019; countries' biennial reports to the PoA submitted from 1 January 2017 to 31 January 2019; and national submissions to the OSCE dated from 1 January 2017 to 31 January 2019.

The fact that the Barometer is based on multiple reporting mechanisms—international, regional, and national—works to the advantage of exporters that submit data to all of these mechanisms. While Barometer scores acknowledge the provision of information to any of the reporting mechanisms, the same information is not credited twice.

### **Section endnotes**

- 1 Lithuania did not publish a national report on its small arms trade activities in 2017, but did provide information to the EU regional report, the UN Register, the OSCE, the PoA, the ATT, and UN Comtrade. With 14 points awarded, Lithuania is in 21st place in the 2020 Barometer.
- 2 The Barometer assesses UN Comtrade data as elaborated by NISAT; see Marsh (2005) and Box 1
- 3 See Pavesi (2016, p. 33); Holtom and Pavesi (2017, pp. 56–57; 2018, p. 30); Holtom, Pavesi, and Rigual (2014, pp. 131–39).
- 4 Another five ATT annual reports were submitted after the Barometer's 31 January 2019 cut-off date, leading to a total of 59 reports being received for 2017 activities as of 13 November 2020.
- 5 See Holtom and Ben Hamo Yeger (2018).

Reports of ammunition transfers to Africa by the ten least transparent exporters in this year's Barometer amounted to only 13 per cent of the value of ammunition transfers reported by their African importers over the period 2008–17."

# III. An eye on ammunition transfers from opaque exporters to Africa

here has been renewed international focus on ammunition control in 2020, notably through the work of the UN GGE on Problems Arising from the Accumulation of Conventional Ammunition Stockpiles in Surplus. Ammunition is the largest authorized traded small arms category at the global level, accounting for 41 per cent of reported small arms exports for the period 2015–17. In Africa imports of ammunition also represent a significant part of the reported trade, totalling USD 97.7 million in 2017, or 42 per cent of the continent's total small arms imports. The Small Arms Survey has highlighted the risks of the diversion of ammunition, especially when it is transferred to countries in conflict or with low capacity for creating and maintaining effective physical security and stockpile management systems to prevent and detect diversion (Bevan, 2008a, pp. 145-53; 2008b). These risks notably pertain to Africa, with a combination of countries in the region experiencing conflict, arms embargoes, human rights violations, or other contexts making transfers and stockpiles vulnerable to diversion and misuse (Florquin, Lipott, and Wairagu, 2019, pp. 46–55; UNSC, 2020, paras. 114-47, 154-65). In light of these risks it is essential to understand the issue further. African governments' reporting on their ammunition trade and holdings is limited, possibly due to cultures of secrecy in the defence sector and general concerns about information potentially revealing national security capacities. There is nevertheless a fair amount of open-source research and analysis on diverted ammunition in Africa, which can be useful to supplement reporting by states, as well as to identify some cases of unreported transfers and instances of post-delivery diversion.

This section therefore examines the unreported aspects of the trade in ammunition with Africa. Looking first at reported ammunition transfers, it then explores supplementary data through case studies on China and Ukraine. By illustrating the extent of ammunition diversion and its use in conflicts in Africa, the section highlights shortcomings in assessing the risks associated with ammunition transfers to countries affected by conflict or subject to arms embargoes, and the need for greater transparency by countries that export ammunition to the continent.

# Authorized ammunition transfers to Africa: UN Comtrade's partial picture

Africa is a region with an uneven transparency record when reporting its small arms imports (Holtom and Pavesi, 2018, pp. 57–63). Not many African states report regularly to UN Comtrade on their ammunition imports. Of those that do, only a few identify the least transparent exporters as their sources of supply, and these exporters have reported only negligible ammunition exports to Africa since 2008. Reports of ammunition transfers to Africa by the ten least transparent exporters in this year's Barometer amounted to only 13 per cent of the value of ammunition transfers reported by their African importers

over the period 2008–17. Moreover, five of the ten least transparent states—Iran, North Korea, Pakistan, Saudi Arabia, and Ukraine—did not report any ammunition exports to Africa since 2008, in spite of some of them—such as Ukraine; see below—being known to have exported ammunition to several countries in the region during this period.

**Table 5** Top five reported importers of ammunition in Africa and the main small arms exporters (in descending order), 2015–17

	2015	2016	2017
1	Côte d'Ivoire, USD 19.8 million Top three exporters: France, United Kingdom, Germany	Morocco, USD 36.2 million Top three exporters: Spain, Brazil, China	Morocco, USD 24.6 million Top three exporters: Brazil, Bosnia and Herzegovina, Italy
2	South Africa, USD 17.5 million Top three exporters: United States, Switzerland, Italy	Ghana, USD 17.9 million Top three exporters: China, Spain, Germany	South Africa, USD 12.6 million Top three exporters: United States, Czech Republic, Spain
3	Namibia, USD 6.8 million Top three exporters: Russian Federation, Serbia, Spain	South Africa, USD 11.1 million Top three exporters: United States, Finland, Czech Republic	Ghana, USD 8.7 million Top three exporters: Spain, China, Italy
4	Uganda, USD 6.1 million Top three exporters: Zambia, Slovakia, South Africa	Tunisia, USD 6.2 million Top three exporters: Brazil, Spain, United States	Egypt, USD 8.1 million Top three exporters: Bosnia and Herzegovina, Cyprus, Italy
5	Burkina Faso, USD 5.4 million Top three exporters: Côte d'Ivoire, France, Mali	Ethiopia, USD 4.2 million Top three exporters: Slovakia, UAE, United States	Namibia, USD 7 million Top three exporters: China, Spain, United States

Note: All US dollar values are those pertaining at the time of the transactions. The UN Comtrade categories covered in this table are 930621 (shotgun cartridges) and 930630 (small arms ammunition).

Source: NISAT (n.d.)

Overall, UN Comtrade data therefore accounts primarily for ammunition transfers reported by Africa's most transparent importers, and is thus unlikely to represent the full picture of authorized ammunition transfers to and within the continent.<sup>2</sup>

With these caveats in mind, the main reported exporters of ammunition to Africa include a range of transparent and less transparent states. Table 5 identifies 21 main exporters to the five largest African ammunition importers between 2015 and 2017. Among them, 11 exporters feature among the group of 25 more transparent states according to this year's Barometer, while 7 feature in the bottom 25.3 Two important exporters to the continent rank among the ten least transparent states in this year's Barometer: China, which is among the main three exporters of ammunition to Ghana, Morocco, and Namibia (who in turn are among the top three importers of ammunition on the continent for at least one of the years analysed in Table 5); and the UAE, which exported ammunition to Ethiopia (which is in turn among the top five African importers of ammunition for the same period).

The continent's main importers of ammunition vary from year to year. South Africa features in the list of five main importers in all three years in the period 2015–17, while Ghana, Morocco, and Namibia appear twice (Table 5). Among the ten main importers listed in Table 5, Egypt, Ethiopia, and Uganda were experiencing armed conflict at the time of these transfers. As previous Trade Updates have noted, authorized transfers to stable countries may also be subject to diversion. For instance, exports of hunting ammunition to Cameroon during the period 2013–17 were subsequently diverted to armed groups in the Central African Republic (Holtom and Pavesi, 2018, Box 6). Export risk assessments for ammunition should therefore take into account the risk of diversion, not only for countries in conflict, but also for those with a known record of theft or leakage from stockpiles, or re-exports that the original exporting state had not authorized. We therefore need additional data sources to calculate these risks.

### Case studies

This section explores data from security actors from the international sphere (peace-keeping organizations, or PKOs, and UN Groups or Panels of Experts), the national sphere (customs), and the civil society sphere through case studies on China and Ukraine—two non-transparent exporters with a known record of small arms and ammunition transfers to the African continent.<sup>5</sup> These two exporters were also selected for study because enough significant data was available on their exports from the sources referred to above to provide a complementary picture. The availability of supplementary data is critical, because the value of China's ammunition exports to Africa reported to UN Comtrade represents 3 per cent of the amounts its African trading partners declared as imports between 2008 and 2017 (Figure 9). This percentage for Ukraine is zero. Finally, both countries have recently sought to reform their national arms export control

legislation,<sup>6</sup> while China has also provided some political and financial support to African countries in their efforts to tackle small arms trafficking.<sup>7</sup> Reviewing ammunition transfers from these two countries to Africa and the associated risks of diversion therefore has the potential to help inform related policymaking efforts.

The two case studies follow a similar structure. They first review the available UN Comtrade data relating to ammunition transfers between China and Ukraine, on the one hand, and the importing African countries, on the other hand. They then consider other—and to date under-utilized—sources of information that can help to fill gaps in the coverage of such transfers. Specifically, the China case study considers datasets of ammunition recovered by PKOs and international arms monitors, while the Ukraine section examines other arms export datasets based on national customs data. Reports of UN Groups and Panels of Experts monitoring UN arms embargoes and reports by specialized organizations also feed into the analysis and help shed light on more secretive transfers to regions affected by armed conflict. Each case study concludes with a discussion on the value of these complementary data sources for highlighting the nature and scope of ammunition transfers and their vulnerability to diversion.

# UN Comtrade, PKO, UN Groups of Experts, and civil society as complementary sources of data on Chinese ammunition transfers to Africa

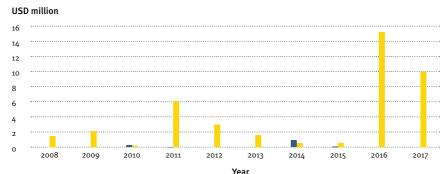
#### UN Comtrade data

China is a top exporter of small arms (Table 2), but is ranked the ninth least transparent exporter of small arms and ammunition in this year's Barometer (Table 4). China declared USD 1.3 million of small arms ammunition<sup>8</sup> exports to African countries between 2008 and 2017, while African importers declared a total of USD 41 million of transfers of ammunition from China over the same period (Figure 9). Most of the available data on China's authorized ammunition trade thus does not originate from the country's own reports, but rather from information provided by reports that its African trading partners submitted to UN Comtrade. Therefore, the true extent of Chinese ammunition exports to Africa is undoubtedly higher than what UN Comtrade data suggests.

African countries only provide UN Comtrade with limited data on their ammunition imports from China (Table 6). In fact, the sharp increase in reported Chinese ammunition exports to the continent in 2016 and 2017 is largely due to significant transfers to just two countries: Namibia and Ghana. Morocco, Niger, and Sudan are the other countries that have reported imports of ammunition from China totalling more than USD 1 million for 2008–17 (see Table 6). Together these five countries accounted for 94 per cent (USD 38 million) of declared Chinese ammunition imports to Africa over

**Figure 9** Value of ammunition trade from China to African countries reported to UN Comtrade by China and its trading partners (USD million), 2008–17

- Exports to African countries as reported by China
- Imports from China as reported by African countries



Note: All US dollar values are those pertaining at the time of the transactions. The UN Comtrade categories covered in this table are categories 930621 (shotgun cartridges) and 930630 (small arms ammunition).

Source: NISAT (n.d.)

this ten-year period. Moreover, Chinese transfers represented 10 per cent of all small arms ammunition imports reported by African countries in 2017 (NISAT, n.d.). Taken at face value, UN Comtrade figures would therefore suggest that China is a limited source of small arms ammunition for the continent.

**Table 6** Transfers of small arms ammunition from China reported to UN Comtrade by African importing states, 2008–17

Importer	Years	Value (USD)
Namibia	2009, 2010, 2011, 2012, 2013, 2015, 2016, 2017	15,646,540
Ghana	2010, 2011, 2012, 2013, 2016, 2017	15,387,330
Morocco	2016	3,880,190
Niger	2009, 2012, 2016	1,904,704
Sudan	2008, 2011, 2017	1,434,669
Other African countries (24)	2008-17	2,398,985

Note: All US dollar values are those pertaining at the time of the transactions. UN Comtrade ammunition categories covered in this table are 930630 (small arms ammunition) and 930621 (shotgun cartridges).

Source: NISAT (n.d.)

### PKO, UN Groups of Experts, and civil society data

Other data sources point to China's having a broader range of ammunition importers in Africa, however. Chinese-made ammunition has been documented among the stockpiles of illicit small arms recovered in several conflict-affected countries. Because there is a lack of reporting on Chinese ammunition exports to such countries, it is often unclear whether this seized ammunition was diverted from the stockpiles of armed forces that are engaged in conflict (for example, through battlefield capture) or from unauthorized re-exports from countries that are not involved in the particular conflict in question.

While there is no single publicly available and comprehensive dataset of illicit ammunition, a number of international and specialized actors document ammunition recovered in the context of conflicts and arms embargoes in Africa. Table 7 draws on two datasets of small arms cartridges documented in the context of peace support operations in the DRC and Mali. The UN Organization Stabilization Mission in the DRC Arms Embargo Cell (AEC) provided access to statistics on ammunition documented in the country. The AEC systematically registers, documents, and identifies illicit arms and ammunition surrendered during the disarmament, demobilization, repatriation, reintegration, and resettlement process since 2013. The data presented in Table 7 is a subset of 14,583 rounds of ammunition observed during the period January 2018—March 2020 in the conflict-affected provinces of eastern DRC, notably Ituri and North and South Kivu, as well as Tanzania.

Information on Mali is based on an international researcher's database of 15,500 cartridge cases documented at the sites of approximately 230 events in northern and central Mali from 2014 to 2019. This ammunition was principally observed at sites where small arms fire, attacks by armed groups, and incidents of armed criminality occurred. The Mali data also includes ammunition seized from uncovered arms caches as well as from apprehended and arrested terrorist and criminal suspects. Table 7 lists the 20 most common varieties<sup>13</sup> of ammunition recorded in these two datasets on the DRC and Mali, based on the number of separate incidents in which they were observed.

Ammunition varieties with markings that are consistent with Chinese production feature prominently among those that international actors and researchers in the DRC and Mali have most frequently documented (Table 7). Among the 20 varieties of ammunition most frequently documented in eastern DRC, 18 bore headstamp markings consistent with Chinese production. One variety alone—bearing the headstamp 911\_77—was recovered at the sites of 181 incidents, involving 54 different armed groups (Table 7). In Mali 14 out of the top 20 most frequently documented varieties are consistent with Chinese manufacture. For instance, close to 1,200 pieces of 7.62 × 39 mm calibre ammunition

Table 7 The 20 ammunition varieties most frequently documented in selected datasets covering Mali and the DRC

Mali (2013–19)	Mali (2013–19)					
Calibre	Producer	Year	Headstamp marking	Number of incidents		
7.62 × 39	Former Soviet Union	1988	711_88	80		
7.62 × 39	China	1994	31_94	74		
7.62 × 39	China	1971	71_71	70		
7.62 × 39	Former Soviet Union	1989	711_89	60		
7.62 × 39	China	2008	811_08	52		
7.62 × 39	China	2008	61_08	49		
7.62 × 39	Poland	1981	21_81*	41		
7.62 × 54R	China	2005	945_05	40		
7.62 × 54R	China	2006	945_06	37		
7.62 × 39	China	1971	661_71	35		
7.62 × 39	China	1997	61_97	34		
7.62 × 39	China	1968	61_68	33		
7.62 × 39	China	2009	811_09	32		
7.62 × 39	China	1975	9121_75	31		
7.62 × 39	China	1966	31_66	30		
7.62 × 39	Former Soviet Union	1975	539_75	26		
7.62 × 39	China	2011	821_11	23		
7.62 × 54R	China	1990	71_90	22		
7.62 × 39	Bulgaria	1979	10_79	19		
7.62 × 39	Algeria	2007	S_07	14		

Sources: Anders (2020); MONUSCO AEC (2020)

DRC (2018–March 2020)					
Calibre	Producer	Year	Headstamp marking	Number of incidents	
7.62 × 39	China	1977	911_77	181	
7.62 × 39	China	1976	81_76	173	
7.62 × 39	China	2007	61_07	138	
7.62 × 39	China	1971	964_71	129	
7.62 × 39	China	2010	61_10	122	
7.62 × 39	China	2007	821_07	110	
7.62 × 39	China	1978	911_78	109	
7.62 × 39	China	2007	811_07	91	
7.62 × 39	China	1976	911_76	80	
7.62 × 39	China	2010	811_10	72	
7.62 × 39	China	1975	911_75	71	
7.62 × 39	China	1971	71_71	68	
7.62 × 39	China	1998	71_98	67	
7.62 × 39	China	2011	61_11	63	
7.62 × 39	China	1972	31_72	59	
7.62 × 39	Former Soviet Union	1955	539_*_И_*	53	
7.62 × 39	China	1996	61_96	51	
7.62 × 39	China	2006	811_06	45	
7.62 × 39	China	1970	61_70	44	
7.62 × 39	Former Soviet Union	1955	3_И	40	

bearing the headstamp 811\_08 were documented at the sites of more than 50 separate incidents in Mali.

Although the most frequently encountered ammunition varieties listed in Table 7 were primarily manufactured ten or more years ago, both datasets also include more recently produced materiel. Ammunition dated 2011 features in both countries' lists of most frequently documented varieties. In addition, the DRC dataset also includes Chinese ammunition varieties dated 2012, 2013, and 2014 that were observed in fewer incidents (MONUSCO AEC, 2020). In Mali most of the Chinese-produced ammunition under review was made in the 1970s (35 per cent), but also includes ammunition produced from 2000 to 2010 (20 per cent), as well as from 2011 (9 per cent). The most recently produced Chinese ammunition found in Mali bears marks indicating production in 2016 (Anders, 2020). Recent dates of manufacture reduce the possible time that elapsed between production, transfer, and the diversion of the cartridges into the illicit market.

Additional data sources confirm that regions experiencing situations of armed conflict have been significant importers of ammunition of Chinese origin over the past decade. For instance, the UN GoE on the DRC documented several Chinese transfers of ammunition to the Armed Forces of the DRC (FARDC) since 2012 (UNSC, 2015a, Annexe 41; 2018, para. 110 and Annexe 23). In 2020 the GoE reported that Chinese entities (including its military, the People's Liberation Army; state-owned defence corporations; and private companies) transferred eight large arms shipments to the FARDC between 2015 and 2019, without submitting the required notification to the UN Sanctions Committee (UNSC, 2020, paras. 154-65). China's failure to notify UN Comtrade of these transfers means that these exports can be considered violations of the exemption procedures established under the arms embargo on the DRC (UNSC, n.d.). The transfers involved various types of rockets and small arms ammunition, including 300,000 rounds of light and heavy machine gun ammunition in 2019, more than 26,000 cases and boxes of 7.62 × 39 mm ammunition in 2018, and 1,760 tonnes of small arms and light weapons and artillery ammunition in 2017 (UNSC, 2018, para. 110; 2020, paras. 161, 163, Annexe 82). The DRC is therefore a recipient of Chinese ammunition that is not presently recorded in UN Comtrade data.

UN GoE investigations also suggest that Chinese exports to the DRC have been prone to diversion. Chinese transfers to the FARDC have subsequently been diverted to non-state armed groups. In 2014, for instance, the GoE documented 12.7 × 108 mm ammunition bearing markings that are consistent with Chinese production in armed group arms caches in Ngungu and Chanzu (both in North Kivu province), as well as at an army position in a camp in Madina (Beni, North Kivu province). The GoE established that this ammunition was originally part of a 2012 delivery of 12.7 × 108 mm ammunition from China to the FARDC, which had not been notified to the UN Sanctions Committee (UNSC, 2015a, Annexe 41). Moreover, there is significant open-source evidence

of ammunition diversion from the FARDC—including intentional diversion by local commanders and soldiers selling small quantities or supplying proxy armed groups. <sup>14</sup> The numerous cases of ammunition diversion from FARDC stockpiles indicate that ammunition transfers to the DRC run significant risks of diversion, and therefore raise questions about China's procedures for assessing the risks associated with transfers to countries under arms embargo regimes.

Chinese ammunition has also been used and recovered repeatedly in South Sudan—another country not identified as an importer of Chinese ammunition in UN Comtrade data. Previous research suggested that elements in the Sudan Armed Forces (SAF) deliberately supplied Chinese ammunition to proxy South Sudanese armed groups. <sup>15</sup> More recently, in 2019, the Panel of Experts on South Sudan noted that ammunition consistent with Chinese production (headstamp 811\_13), which was shipped to South Sudan in 2014 as a consignment of 27 million rounds, continues to represent the majority of ammunition used by all parties to the conflict (UNSC, 2019, para. 107). This case illustrates the continued illicit circulation of ammunition originally transferred to South Sudan several years before. While China claimed that it halted shipments to South Sudan in 2014, <sup>16</sup> a recent Amnesty International report (2020) provided images of Chinese ammunition used by South Sudan's National Security Service at its Luri base, outside Juba, with markings suggesting that it was manufactured in 2016. Although the proximate sources of this ammunition remain unknown, this example indicates the recent diversion of Chinese ammunition to or within South Sudan.

Overall, reports by UN monitoring bodies and datasets of ammunition recovered in conflict areas show that Chinese ammunition is present in several conflict-affected African countries that were not recorded in UN Comtrade as importers of ammunition from China. While there is no evidence that China directly supplies armed groups, some transfers have been diverted after delivery or retransferred to unauthorized end users. This case study therefore raises questions about the effectiveness of China's risk assessment procedures with respect to transfers to subregions affected by armed conflict and countries that are subject to arms embargoes. China's newly adopted export control legislation includes provisions for assessing the risks related to arms exports, including the possibility that importers utilize controlled items for 'terrorist' purposes, 17 and therefore provides opportunities to improve on the country's past practices. Its accession to the ATT in July 2020 also commits China to reporting on its small arms exports and may therefore result in more transparency (Kirkham and Mwachofi, 2020, p. 6)—although the ATT does not require member states to report on ammunition exports (ATT-BAP, 2017). Finally, the case study illustrates how UN sources other than UN Comtrade, as well as civil society researchers, have access to detailed data on ammunition held by armed actors, and that this data can support efforts to detect and prevent the further diversion of ammunition transfers to conflict settings.

# UN Comtrade, Panel of Experts, customs, and civil society data as complementary sources of data on Ukrainian ammunition transfers to Africa<sup>18</sup>

#### **UN Comtrade data**

Ukraine features in this year's Barometer as the eighth least transparent exporter of small arms (Table 4). The Ukrainian government rarely provides data to UN Comtrade on exports of ammunition, with no such exports declared between 2008 and 2017. African countries reported importing USD 1.1 million worth of ammunition from Ukraine over the same period. Mirror data from importing states provides some insight into Ukrainian ammunition transfers, but several African states that import ammunition from Ukraine (that is, states that have imported small arms and light weapons from Ukraine in the last ten years) do not report on their imports. Table 8 highlights the only two countries that declared sizeable ammunition imports to UN Comtrade between 2008 and 2017. Based on this data, it would seem that African imports of Ukrainian ammunition are small and infrequent. Unlike China, however, Ukraine has reported to the UN Register several transfers of small arms and light weapons to Chad, the DRC, Kenya, South Sudan, Sudan, and Uganda in the period 2008–17, but the information provided generally does not specify whether ammunition was also supplied (UNROCA, n.d.).

**Table 8** Transfers of small arms ammunition from Ukraine reported to UN Comtrade by African importing states, 2008–17

Importing state	Year	Value (USD)
Sudan	2009, 2011	803,138
Uganda	2011	303,500

Note: All US dollar values are those pertaining at the time of the transactions. UN Comtrade ammunition categories covered in this table are 930630 (small arms ammunition) and 930621 (shotgun cartridges).

Source: NISAT (n.d.)

## Customs, Panel of Experts, and civil society data

Annual reports by the State Service of Export Control of Ukraine include data on the quantities of small arms and light weapons exported from the country. The countries identified in these reports as recipients of Ukrainian small arms exports include Botswana (2012), Chad (2012, 2013), the DRC (2014), Ethiopia (2013), Kenya (2012), South Sudan (2014, 2016), Sudan (2012), Uganda (2014), and Zambia (2015) (SIPRI,

n.d.). While these reports of small arms transfers can be useful for determining possible recipients of ammunition from Ukraine, they do not specify whether ammunition was included in these exports.<sup>19</sup>

Ukrainian customs data compiled by the Center for Advanced Defense Studies (C4ADS)<sup>20</sup> sheds additional light on Ukraine's ammunition exports to Africa (Table 9). C4ADS sources its data from several different commercial services that acquire it directly from Ukrainian customs. The information it retrieves contains key details about the types and calibres of exported ammunition; the consignees of the shipments; and, in some cases, the purpose of the exports. It also identifies several destination countries that are not referenced in other data sources, including Equatorial Guinea, Libya, South Africa, and Zambia (Table 9). The dataset demonstrates that Ukraine collects detailed data on the ammunition it exports and yet—for unclear reasons—does not report it in its national report or to UN Comtrade.

The C4ADS dataset includes records of 12 shipments of small-calibre cartridges, cartridge components, and missile components to six African countries in the period 2012–17 (Table 9). Six of the shipments went to the ministries of defence or internal affairs in the DRC,<sup>21</sup> Equatorial Guinea, Sudan, and Zambia. These shipments ranged from 20,000 9 mm cartridges exported to the Zambian police in 2017<sup>22</sup> to 2 million cartridge cases and primers transferred to Equatorial Guinea in 2012.

The largest (ostensible) recipient of the exported ammunition captured in the C4ADS dataset was the Libyan Ministry of Defence, which is identified as the consignee of three shipments comprising more than 30 million rounds of 7.62 mm, 12.7 mm, and 14.5 mm cartridges. The calibre and quantity of the ammunition in these shipments match the cargo of the *Nour M*, a Sierra Leone-flagged ship seized by Greek authorities on 11 November 2013 transporting 32 million rounds, including 1,000,000 rounds of 14.5 × 114 mm ammunition, 1,025,000 rounds of 12.7 × 108 mm ammunition, and 30,000,600 rounds of 7.62 x 39 mm ammunition (UNSC, 2014, para. 91). At the time the State Service of Export Control of Ukraine confirmed that it had given permission for a Ukrainian state firm to export 7.62 mm, 12.7 mm, and 14.5 mm cartridges to Libya, and underscored that it had notified the UN Sanctions Committee of the transfer in compliance with UN Security Council Resolution 1970 (UNSC, 2011)—although Ukrainian authorities did not publicly release their notification to the Sanctions Committee (Interfax-Ukraine, 2013). UN investigators suspect, however, that the ammunition was actually destined for Syria via Turkey (UNSC, 2014, paras. 89–93; 2015b).

The UN Panel of Experts on Libya also documented a transfer that was officially destined for the UAE, but was diverted to Libya. Although the transfer did not physically depart from Ukraine, the Armenian broker arranging the deal involved a Ukrainian state firm in the purchase of the ammunition, because the Albanian Military Export Import Company asked to deal with a state entity rather than just a broker. According to

Table 9 Transfers of small arms ammunition and components from Ukraine to African states reported in customs data, 2012–17

Destination country	Commodities (UN Comtrade category)	Export date	Price
Equatorial	100,500 PU9L cartridge cases for 9 × 19 mm cartridges and Berdan primers (930630)	24 February	UAH 143,056.04
Guinea		2012	(USD 18,101)
Equatorial	2,010,000 PU9L cartridge cases for 9 × 19 mm cartridges and Berdan primers (930630)	12 September	UAH 1,438,045.31
Guinea		2012	(USD 179,640)
Equatorial	53,000 12.7 × 108 mm bullets	24 April	UAH 76,253.22
Guinea	(930630)	2013	(USD 9,509.19)
Sudan	50,000 14.5 mm cartridges	4 July	UAH 429,862.35
	(930630)	2013	(USD 53,309.8)
Sudan	500,000 14.5 mm cartridges	28 November	UAH 4,509,922.45
	(930630)	2013	(USD 548,119)
South	Parts for Igla MANPADS	28 October	UAH 1,194,154.20
Africa	(930690)	2013	(USD 145,133)
Libya	1,000,000 14.5 × 114 mm cartridges (930630)	14 October 2013	UAH 11,989,500 (USD 1,480,420)
Libya	1,025,000 12.7 × 108 mm cartridges (930630)	17 October 2013	UAH 2,289,237.50 (USD 1,522,520)
Libya	30,000,000 7.62 × 39 mm cartridges (930630)	21 October 2013	UAH 18,703,620 (USD 2,311,910)
Libya	10,000 Sellier & Bellot FMJ 9 mm (9 × 19) centrefire cartridges for rifled hunting weapons (930630)	19 August 2015	UAH 88,349.47 (USD 4,075.24)
DRC	54,560 cartridges for Yakushev-Borzov	25 February	UAH 9,700,969.06
	YakB-12.7 mm (930630)	2016	(USD 1,101,300)
DRC	60,000 cartridge links for Yakushev- Borzov YakB-12.7 mm and 20,000 cartridge links for Gryazev-Shipunov GSh-30-1 (930690)	25 February 2016	UAH 9,597,413.60 (USD 726,664)
Zambia	70,000 7.62 × 39 mm cartridges	27 June	UAH 145,804.99
	(930190)	2017	(USD 5,631.69)
Zambia	20,000 9 mm Luger cartridges	27 June	UAH 244,744.10
	(930630)	2017	(USD 9,453.19)

Note: All US dollar values are those pertaining at the time of the transactions.

Source: C4ADS (n.d.)

the export licence that the Albanian authorities delivered, the UAE's armed forces were the end user of the ammunition (UNSC, 2013, Annexes 6, 8). The end-user certificate stated that the goods would not be re-exported or handed over to third countries without the prior consent of the authorized authorities of Ukraine and the UAE. Ukraine provided no explanation to the Panel of Experts for the fact that the ammunition was never delivered to the UAE. On 10–12 September 2011, 800,000 12.7  $\times$  108 mm rounds of ammunition originating from Albanian surplus stocks were transferred by an Armenian carrier from Albania to Benghazi, Libya, in violation of the UN arms embargo (UNSC, 2013, paras. 77–78).

The transferred ammunition was mainly of Chinese origin and produced between the early 1960s and the late 1970s, which also illustrates how recent cases of transfer diversions can involve decades-old equipment (UNSC, 2013, pp. 19–21, 75–76). The Ukrainian state firm emphasized in a press release that it did not deliver military goods to Libya in 2011, and that it was involved in military and technical cooperation with other countries in accordance with international norms (*Ukrayinska Pravda*, 2013).

The C4ADS data includes details about an additional shipment of ammunition to Libya (Misrata) in August 2015. The shipment consisted of 10,000 rounds of ammunition reportedly intended for use in 'rifled hunting weapons'. Although shipped from Ukraine, the 9 mm ammunition was made in the Czech Republic. Lastly, the C4ADS dataset includes a 2013 shipment of Igla MANPADS components to a South African company that is part of the South African government's arms acquisition agency.<sup>23</sup>

Reports by specialized organizations highlight additional contracts with African countries affected by armed conflict. In September 2017 Amnesty International reported a 2014 arms deal for the supply of Ukrainian weapons to South Sudan with the help of a shell company registered in the United Kingdom and an intermediary based in the UAE—a country that ranks as a top small arms importer and the fifth least transparent state in this year's Barometer. According to the report, the Government of South Sudan contracted a private firm based in the UAE to procure the weapons. In August 2014 this firm signed a contract with a Ukrainian company to supply weapons and ammunition worth USD 169,280,000 to South Sudan, including 5 million 12.7 mm and 1.4 million 14.5 mm cartridges; 20,000 60 mm mortar shells; 50 million 7.62 mm cartridges; and 30,000 rounds for RPG-7-pattern rocket launchers. Amnesty International also noted, however, that it was unable to determine whether such ammunition was actually delivered to South Sudan (Amnesty International, 2017).<sup>24</sup> The State Service of Export Control of Ukraine pointed out that the contract did not violate international agreements, because South Sudan was not subject to an arms embargo at the time (Ukrinform, 2017).

Although less prevalent than Chinese cartridges, ammunition produced in Ukraine—mostly made during the Soviet era—has been recovered in the last ten years in several

countries affected by conflict or subject to arms embargoes in Africa, including in Côte d'Ivoire (2012–13), the DRC (2016), Libya (2012), Mali (2014), Niger (2014–16), Somalia (2013), South Sudan (2011, 2013, 2014, 2016, and 2017), and Sudan (2012). Datasets of recovered ammunition may not be a particularly useful indicator of Ukrainian transfers to Africa, however, because the country appears also to be involved in transfers of ammunition produced in other countries—as noted above in the cases of transfers of ammunition originating from Albania or manufactured in the Czech Republic.

In spite of Ukraine's negligible footprint in UN Comtrade, the data reviewed in this case study shows that the country exports ammunition to a number of African countries, including some that are affected by armed conflict or subject to arms embargoes. Such cases illustrate a risk of diversion that should be considered when state authorities are authorizing ammunition exports to countries that are known to have previously violated non re-export clauses in end-use or end-user documentation<sup>26</sup> and have a poor record of transparency, or to countries subject to arms embargoes. The cases also suggest that at the time Ukrainian authorities were not conducting stringent enough diversion risk assessments with respect to end users that are not subject to international sanctions.

Since 2018 Ukraine has taken steps to liberalize its arms export control system, granting private companies the right to export weapons, a privilege that only six state-owned Ukroboronprom companies<sup>27</sup> previously enjoyed (Interfax-Ukraine, 2018). It remains to be seen whether these regulatory changes will succeed in reaching the Ukrainian government's goal of expanding the size of the national arms industry while providing adequate oversight to prevent risky arms and ammunition sales. The fact that detailed records of Ukrainian ammunition exports can be acquired through commercial entities indicates that even if information is recorded at the national level, national institutions do not always have the resources to analyse this data. There is therefore scope to support Ukraine in improving on its reporting and transparency practices, because the comprehensiveness of these additional sources remains to be fully understood.

### Closing

International databases such as UN Comtrade are useful but far from perfect sources of data for monitoring the ammunition trade. The lack of transparency by a number of top and major exporters continues to restrain our understanding of the scope of and trends in ammunition transfers to Africa. As a result, the ammunition trade patterns identified through the analysis of states' reports to UN Comtrade reflect primarily those transfers involving the most transparent exporters and importers. Significant gaps remain with respect to public knowledge of the trade occurring between less transparent states—such as those with the ten bottom-most scores of this year's Barometer. In

order to better understand the scope of the ammunition trade and its vulnerability to diversion, there is therefore a need to rely on complementary data sources. This case study section has shown how a range of additional sources—including untapped national customs datasets, PKO datasets of recovered ammunition, and investigations by UN Groups or Panels of Experts and civil society researchers—help to reveal a variety of authorized transfers to African countries affected by conflict that are not reported to UN Comtrade and have been vulnerable to diversion. Overall, the extent of ammunition diversion and use in conflicts in Africa calls for more stringent risk assessments and greater transparency by arms-exporting countries that export materiel to countries in regions affected by armed conflict or subject to arms embargoes.

#### **Section endnotes**

- 1 NISAT (n.d.), using UN Comtrade commodity categories 930621 (shotgun cartridges) and 930630 (cartridges and parts thereof; that is, small arms ammunition, which will be referred to as such below).
- 2 Moreover, donations and gifts of weaponry are not consistently reported to UN Comtrade, and do not appear to be part of China's Comtrade submissions, for instance. There are also suggestions that reported values might not be a good reflection of the volume of equipment actually transferred. Lastly, some shipments recorded as conventional arms may also include small arms ammunition; see Bromley, Duchâtel, and Holtom (2013, pp. 39, 41–47).
- 3 Exporters listed in Table 5 whose scores were among the 25 lowest in this year's Barometer are Bosnia and Herzegovina, Brazil, China, Cyprus, the Russian Federation, South Africa, and the UAE. Côte d'Ivoire, Mali, and Zambia were not scored in this year's Barometer because they are not considered to be major small arms exporters.
- 4 The Survey's Global Violent Deaths Database considers countries with 25 annual battle-related deaths or more as being affected by armed conflict; see Small Arms Survey (n.d.b).
- 5 See, for instance, EP (2019), Gobinet and Gramizzi (2011), and UNSC (2014; 2015a; 2015b; 2020, paras. 154–65).
- 6 In China this included joining the ATT in July 2020 and passing new export control legislation in November 2020 (NPC, 2020). In recent years Ukraine has sought to demonopolize the arms market and modernize its defence sector, notably by allowing some private companies to export weapons (Cabinet of Ministers of Ukraine, 2020a; Ukroboronprom, 2020).
- 7 For instance, through its participation in the triennial Forum on China–Africa Cooperation and support to the African Union's Silencing the Guns by 2020 agenda; see Kirkham and Mwachofi (2020, pp. 5–6).
- 8 China only reported on UN Comtrade category 930621 (shotgun cartridges).
- According to media reports and interviews with Namibian Police officials, the majority of Namibian imports of Chinese small arms and ammunition appear to have been transferred to the Namibian Defence Forces (NDF). Arms and ammunition that Namibian dealers import for the civilian market originate mainly from North America and Europe, with imports from China being fairly negligible (Lamb and Moore, 2019). Military support is a key feature of the Chinese involvement in Ghana and provides an explanation for the recent significant transfers of ammunition to the country. In 2016 China donated security equipment that included machine guns, rifles, ammunition, and four naval patrol boats to Ghana worth USD 3 million (Aning, 2019; Nkala, 2017). Other sources also reveal that China exported other larger ammunition systems to Ghana and Namibia. For instance, in 2016 China exported 100 man-portable air defence systems (MANPADS) to Ghana (UNROCA, n.d.). Another source indicates that in the same year the NDF imported 50 Chinese-manufactured MANPADS via South Africa (DefenceWeb, 2018).
- 10 UN Comtrade categories 930630 and 930621.
- 11 UN Comtrade categories 930630 and 930621.
- 12 For a discussion, see Florquin and Leff (2014) and Desmarais (2018).
- 13 Varieties refer to specific types of ammunition—which are generally characterized by a unique combination of calibre, year of manufacture, and production facility—and not to actual quantities.
- 14 For a discussion, see Debelle and Florquin (2015, pp. 199–200).

- 15 In 2012, for instance, the South Sudan Democratic Movement/Army handed over ammunition to the Sudan People's Liberation Army (South Sudan's military at the time; now the South Sudan People's Defence Forces) that could be traced back to SAF stocks by using packaging and contract numbers found in the possession of both actors. The number on the box, 10XSD14E0128STC/SD, refers to a Chinese contract for the supply of nearly 7 million rounds of 7.62 x 54R ammunition to Sudan in 2010 (Florquin and Leff, 2014, Box 6.2).
- 16 In 2018 Conflict Armament Research reported that the ammunition it documented in South Sudan since 2014 was almost exclusively (99 per cent) Chinese, although none of it was produced after 2014 (CAR, 2018, pp. 14–20).
- 17 Since 2017 China has been attempting to reform its export control legislation in order to strengthen its authority over companies involved in the export of dual-use goods and military technologies. In December 2019 the National People's Congress (NPC) released for public comment the new version of a draft Export Control Law, which the Standing Committee of the NPC approved on 17 October 2020 and becomes effective on 1 December 2020 (NPC, 2020). Under Article 17 the State Export Control Administrative Departments (SECADs) will 'establish a risk management system for end-users and end uses of Controlled Items, evaluate and review end-users and end uses of Controlled Items, and implement a strict management of end-users and end uses'. Article 18 states that the SECADs may 'take necessary measures such as prohibiting or restricting the related deals relating to Controlled Items, ordering suspension of export of the related Controlled Items, and withholding export licensing facilitation measures' when they involve importers that either 'violate the requirements regarding the management of end users and end uses, may endanger national security or national interests, or use Controlled Items for terrorist purposes' (NPC, 2020).
- 18 Case study based on research by Olena Shumska and Matt Schroeder.
- 19 With the exception of missiles for MANPADS, although no such transfers were reported to African countries.
- 20 C4ADS is a Washington, DC-based non-profit organization that conducts data-driven analysis on issues pertaining to global conflict and transnational security.
- 21 The 2016 ammunition transfers to the DRC in the C4ADS dataset coincide with a larger consignment that included 25 T-64 tanks, as Ukraine reported in its 2016 national report and UN Register submission, as well as small transfers of two revolvers or pistols, two assault rifles, one rifle or carbine, and one light machine gun to the DRC reported in Ukraine's 2014 national report (UNROCA, n.d.; SIPRI, n.d.).
- 22 This transfer occurred two years after Ukraine reported in its national report the transfer of 2,544 rifles and carbines, 104 assault rifles, and 17 light machine guns to Zambia in 2015 (SIPRI, n.d.).
- 23 Five other transfers not included in Table 9 were not 'exports', but rather shipments of ammunition to Ukrainian peacekeepers serving in Côte d'Ivoire and Liberia.
- 24 In its national report Ukraine reported the export of 830 light machine guns and 62 heavy machine guns to South Sudan in 2014, and 170 light machine guns and 88 heavy machine guns in 2016, without specifying whether ammunition was included (SIPRI, n.d.). C4ADS data corroborates the 2016 transfer of 170 7.62 mm KM machine guns and 88 12.7 mm DShKM to South Sudan (C4ADS, n.d.).
- 25 See CAR (n.d.; 2018); Florquin and Leff (2014, pp. 190–91); de Tessières (2018, p. 86); and UNSC (2016, p. 82).

- 26 For more information and cases related to unauthorized retransfers, see Holtom, Pavesi, and Rigual (2014) and SEESAC (2014).
- 27 In April 2020 the Cabinet of Ministers supported the further deregulation of exports of weapons and military equipment (Cabinet of Ministers of Ukraine, 2020b). Prior to these reforms the state-run military conglomerate Ukroboronprom, which was created in 2010, had the monopoly over the international sales of weapons, because the six companies that were part of the conglomerate were granted the exclusive right to sell weapons (Cabinet of Ministers of Ukraine, 2010; President of Ukraine, 2010).

Improved transparency by major exporters and the leveraging of multiple data sources in conflict areas have the potential to improve the monitoring of the ammunition trade and prevent future cases of diversion."

## **Conclusion**

ccording to UN Comtrade data, the financial value of the reported authorized small arms trade in 2017 was at least USD 6.5 billion, only a slight decrease (USD 88 million) compared to 2016. While the United States and Germany slightly increased the value of their exports between 2016 and 2017, Italy and Brazil experienced a decrease over the same period. And while the United Kingdom and Switzerland dropped from top to major exporters, Norway entered the top exporter category in 2017. Overall, the number of top and major exporters has remained stable since 2016 and the value of the reported trade seems to have plateaued in 2017.

The five largest small arms importers in 2017 were the United States, Saudi Arabia, Canada, the UAE, and Germany. An analysis of importing trends reveals a significant decrease in US imports and the increasing weight of Middle Eastern countries as small arms importers. Four additional countries from the region became top importers in 2017, while two are now among the world's top five importers of small arms. The top six Middle Eastern importers accounted for 20 per cent—or USD 1.3 billion—of global imports of small arms, light weapons, and ammunition. Between 2016 and 2017 the value of these six countries' imports doubled—in spite of the poor transparency records of several of these states and concerns that the imported material could be diverted or used in the region's conflicts.

The 2020 Small Arms Trade Transparency Barometer identifies Switzerland, Germany, the Netherlands, Serbia, and the United Kingdom as the most transparent small arms exporters, based on reports on activities carried out in the 2017 calendar year. Conversely, North Korea, Iran, Saudi Arabia, Israel, and the UAE are the five least transparent countries. The Barometer shows that, overall, the most transparent countries continue to improve their scores. In several cases one can identify improvements in reporting practices related to brokering authorizations and, in some instances, to the comprehensiveness of the reports, particularly in terms of intangible transfers and licences denied. States whose scores decreased were often penalized for lack of timeliness. No progress is visible among the bottom five least transparent states. Future editions of the Barometer will examine whether the online reporting tools introduced by the ATT and GGE for countries' 2019 reports to the UN Register could have an impact on reporting by major exporters.

This edition of the Trade Update provides case study analyses of ammunition transfers to Africa. In order to address the limitations of UN Comtrade data, the section draws on supplementary data sources to examine transfers from two of the least transparent small arms exporters, namely China and Ukraine. It finds that sources such as PKO datasets of ammunition recovered from armed actors, civil society research, and untapped national customs datasets can help to document transfers to a broader range of African clients, including countries affected by armed conflict or subject to UN arms embargoes. According to available data, China and Ukraine do not knowingly transfer ammunition directly to armed groups in Africa. Instead, armed groups seem to acquire their

ammunition through diversion, including from state supplies. Therefore, since China and Ukraine export arms and ammunition to government forces in conflict-affected regions and such regions are prone to diversion, the risks pertaining to such transfers need to be further emphasized. The additional sources also suggest that the least transparent exporters do not carry out stringent risk assessments when considering exports to entities that are not subject to international sanctions. Improved transparency by major exporters and the leveraging of multiple data sources in conflict areas have the potential to improve the monitoring of the ammunition trade and prevent future cases of diversion.



## **Table A1** Major exporters' annual authorized small arms exports worth at least USD 10 million, 2017

[available at <a href="http://www.smallarmssurvey.org/fileadmin/docs/S-Trade-Update/SAS-Trade-Update-2020-Tables-A1-A2.pdf">http://www.smallarmssurvey.org/fileadmin/docs/S-Trade-Update/SAS-Trade-Update-2020-Tables-A1-A2.pdf</a>)

## **Table A2** Major importers' annual authorized small arms imports worth at least USD 10 million, 2017

[available at  $\frac{\mbox{http://www.smallarmssurvey.org/fileadmin/docs/S-Trade-Update/SAS-Trade-Update-2020-Tables-A1-A2.pdf}]$ 

**Table A3** Regional breakdown of countries and territories

Region	Subregion	Country or territory
Africa	Eastern Africa	Burundi; Comoros; Djibouti; Eritrea; Ethiopia; Kenya; Madagascar; Malawi; Mauritius; Mayotte; Mozambique; Réunion; Rwanda; Seychelles; Somalia; Tanzania; Uganda; Zambia; Zimbabwe
	Middle Africa	Angola; Cameroon; Central African Republic; Chad; Democratic Republic of the Congo; Equatorial Guinea; Gabon; Republic of the Congo; São Tomé and Príncipe
	Northern Africa	Algeria; Egypt; Libya; Morocco; Sudan; Tunisia
	Southern Africa	Botswana; Lesotho; Namibia; South Africa; Swaziland
	Western Africa	Benin; Burkina Faso; Cape Verde; Côte d'Ivoire; Gambia; Ghana; Guinea; Guinea-Bissau; Liberia; Mali; Mauritania; Niger; Nigeria; Saint Helena; Senegal; Sierra Leone; Togo
Americas	Caribbean	Antigua and Barbuda; Aruba; Bahamas; Barbados; British Virgin Islands; Cayman Islands; Cuba; Curaçao; Dominica; Dominican Republic; Grenada; Guadeloupe; Haiti; Jamaica; Martinique; Montserrat; Saint Kitts and Nevis; Saint Lucia; Saint Pierre and Miquelon; Saint Vincent and the Grenadines; Sint Maarten; Trinidad and Tobago; Turks and Caicos
	Central America	Belize; Costa Rica; El Salvador; Guatemala; Honduras; Mexico; Nicaragua; Panama

Region	Subregion	Country or territory
	Northern America	Bermuda; Canada; Greenland; United States
	South America	Argentina; Bolivia; Brazil; Chile; Colombia; Ecuador; Falkland Islands; French Guyana; Guyana; Paraguay; Peru; Suriname; Uru- guay; Venezuela
Asia and the Pacific	Central Asia	Kazakhstan; Kyrgyzstan; Tajikistan; Turkmenistan; Uzbekistan
	Eastern Asia Hong Kong, China; Japan; Macao, Chin Mongolia; North Korea; South Korea; Taiwan, China	
	Oceania	Australia; Cook Islands; Fiji; French Polynesia; Guam; Kiribati; Micronesia; Nauru; New Caledonia; New Zealand; Niue; Norfolk Island; Palau; Papua New Guinea; Samoa; Solomon Islands; Tokelau; Tonga Islands; Tuvalu; Vanuatu; Wallis and Futuna
	South-eastern Asia	Brunei; Cambodia; Indonesia; Laos; Malaysia; Myanmar; Philippines; Singapore; Thailand; Timor-Leste; Vietnam
	Southern Asia	Afghanistan; Bangladesh; Bhutan; India; Iran; Maldives; Nepal; Pakistan; Sri Lanka
	Western Asia	Armenia; Azerbaijan; Bahrain; Cyprus; Georgia; Iraq; Israel; Jordan; Kuwait; Lebanon; Oman; Palestinian Territories; Qatar; Saudi Arabia; Syria; Turkey; United Arab Emirates; Yemen
Europe	Eastern Europe	Belarus; Bulgaria; Czech Republic; Hungary; Moldova; Poland; Romania; Russian Federation; Slovakia; Ukraine
	Northern Europe	Denmark; Estonia; Faroe Islands; Finland; Iceland; Ireland; Latvia; Lithuania; Norway; Sweden; United Kingdom
	Southern Europe	Albania; Andorra; Bosnia and Herzegovina; Croatia; Gibraltar; Greece; Holy See; Italy; Malta; Montenegro; Portugal; San Marino; Serbia; Slovenia; Spain; North Macedonia
	Western Europe	Austria; Belgium; France; Germany; Luxembourg; Netherlands; Switzerland

 Table A4
 The Transparency Barometer scoring guidelines

Parameter max. points)	Criteria (points)*	National report (NR)/ regional report (RR)	port (NR)/ eport (RR)	`	АП/РоА		UN Register	UN Comtrade
		NR	RR	ATT annual ATT initial report	ATT initial report	PoA		
Fimeliness (1.50)	1.1 Did the exporter submit data in 2017 or 2018? (0.5)	`	<b>&gt;</b>	>			>	>
	1.2 Did the exporter submit data in 2018? (0.5)	>	>	>			>	>
	1.3 Did the exporter submit data in 2018 that concerned activities in 2017 or 2018? (0.5)	`	`	<b>&gt;</b>			>	<b>`</b>
Access and consistency	2.1 Did the exporter make its national report available online free of charge? (0.5)	`		<b>&gt;</b>			`	<b>\</b>
(2.00)	2.2 Did the exporter provide interim information—such as biannual or quarterly reports—in addition to a consolidated annual report? (0.5)	<b>,</b>						
	2.3 Did the exporter use the same tool to report on activities in 2015, 2016, and 2017? (0.5)	<b>,</b>		>			<b>&gt;</b>	<b>`</b>
	2.4 Did the exporter use a single additional tool to report on activities in 2015, 2016, and 2017? (0.5)	<b>,</b>		>			>	>
Clarity (5.00)	3.1 Did the exporter distinguish between government- and private industry-supplied transactions? (1/0.5)	<b>&gt;</b>		>			>	

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3.2 Did the exporter distinguish small arms and light weapons from other types of conventional weapons? (0.5/0.25)	3.3 Did the exporter distinguish small arms and light weapons ammunition from ammunition for other types of conventional weapons? (0.5/0.25)	3.4 Did the exporter provide information on temporary exports? Examples would include transfers to trade shows that must be returned, transfers to troops participating in peace operations, and materiel sent to be repaired and returned. (0.5/0.25)	3.5 Did the exporter provide information on its small arms-related laws, regulations, and administrative procedures, as well as its multilateral commitments?	3.5.1 Did the country provide information on its transfer control system, including brokering control, to any reporting mechanism? (0.5/0.25)	3.5.2 Did the exporter provide information on the measures it uses to prevent and detect the diversion of international small arms and light weapons transfers? (0.25)	3.5.3 Did the exporter provide information on its subregional, regional, and international commitments relating to the control of international small arms and light weapons transfers, including brokering? (0.25)
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Parameter (max. points)	Criteria (points)*	National report (NR)/ regional report (RR)	port (NR)/ port (RR)	`	АТТ/РоА		UN Register	UN UN Register Comtrade
		NR	RR	ATT annual report	ATT initial report	PoA		
	3.6 Did the exporter provide information on deliveries? (0.5/0.25)	<b>&gt;</b>	`	<b>&gt;</b>			>	>
	3.7 Did the exporter provide information on licences granted? (0.5/0.25)	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>			>	
	3.8 Did the exporter provide information on small arms brokering authorizations? (o.5)	<b>&gt;</b>		>			>	
Comprehensiveness (6.50)	4.1 Did the exporter provide information on its exports of guided light weapons, such as MANPADS and anti-tank guided weapons? (0.5/0.25)	<b>,</b>	>	<b>&gt;</b>			>	<b>&gt;</b>
	4.2 Did the exporter provide information on its exports of unguided light weapons apart from heavy machine guns and anti-materiel rifles—that is, rocket launchers such as RPGs and anti-tank weapons, grenade launchers, mortars, and recoilless rifles and guns? (0.5/0.25)	,	,	<b>,</b>			`	`
	<ul><li>4.3 Did the exporter provide information on exports of sporting and hunting guns or rifles? (0.5/0.25)</li></ul>	<b>&gt;</b>		>			>	>
	4.4 Did the exporter provide information on exports of pistols and revolvers? (0.5/0.25)	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>			<b>&gt;</b>	>

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4.5 Did the exporter provide information on exports of military firearms—automatic rifles; light, medium, and heavy machine guns; submachine guns; anti-materiel rifles; and military shotguns—apart from pistols and revolvers? (0.5/0.25)	4.6 Did the exporter provide information on exports of ammunition of 12.7 mm calibre and below, as well as shotgun shells? (0.5/0.25)	4.7 Did the exporter provide information on exports of ammunition larger than 12.7 mm calibre that is used in light weapons? Singleuse light weapons systems that contain both the launcher and the projectile are treated as light weapon in either 4.1 or 4.2 above, and are not considered as 'ammunition' here. (0.5/0.25)	4.8 Did the exporter provide information on exports of parts and accessories for small arms and light weapons? (0.5/0.25)	4.9 Did the exporter provide information on intangible transfers' concerning small arms and light weapons, their ammunition, or their parts and accessories? Intangible transfers include the provision of technical plants, blueprints, know-how, schematics, and software for the production of small arms, light weapons, their ammunition, or their parts and accessories. (0.5/0.25)
4.5 Did the exporter provide information on exports of military firearms—automatic rifler light, medium, and heavy machine guns; su machine guns; anti-materiel rifles; and milit shotguns—apart from pistols and revolvers? (0.5/0.25)	4.6 Did the exporter provide information on exports of ammunition of 12.7 mm calibre ar below, as well as shotgun shells? (0.5/0.25)	4.7 Did the exporter provide information on exports of ammunition larger than 12.7 mm calibre that is used in light weapons? Single use light weapons systems that contain bot the launcher and the projectile are treated a light weapon in either 4.1 or 4.2, above, and not considered as 'ammunition' here. (0.5/c)	4.8 Did the exporter provide information on exports of parts and accessories for small and light weapons? (0.5/0.25)	4.9 Did the exporter provide information on intangible transfers' concerning small arms a light weapons, their ammunition, or their pa and accessories? Intangible transfers includ the provision of technical plants, blueprints, know-how, schematics, and software for the production of small arms, light weapons, the ammunition, or their parts and accessories. (0.5/0.25)
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4.5 Did the exports of light, med machine gshotguns-(0.5/0.25)	4.6 D expor	4.7 Di expor calibr use li the la light v	4.8 Did the exporter provide ir exports of parts and accessoriand light weapons? (0.5/0.25)	4.9 Did th 'intangible light wear and acces the provis know-how productio ammuniti: (0.5/0.25)

Parameter (max. points)	Criteria (points)*	National report (NR)/ regional report (RR)	port (NR)/ port (RR)	`	АП/РоА		UN Register	UN UN Register Comtrade
		NR	RR	ATT annual ATT initial report		PoA		
	4.10 Did the exporter provide information on permanent re-exports of small arms and light weapons, and/or their ammunition, not including temporary exports covered in 3.4? (0.5/0.25)	<b>,</b>		<b>&gt;</b>			>	
	4.11 Did the exporter identify the origin and destination of permanent re-exports of small arms and light weapons and/or their ammunition? (0.5/0.25)	<b>,</b>		>			<b>`</b>	
	4.12 Did the exporter provide information on transit or transhipment of small arms and light weapons, and/or their ammunition? (0.5/0.25)	<b>&gt;</b>		>			<b>`</b>	
	4.13 Did the exporter identify the origin and destination of the transit or transhipment of small arms and light weapons and/or their ammunition? (0.5/0.25)	>		`			>	
Deliveries (4.00)	5.1 Did the exporter provide information on delivery recipients? (1/0.5)	`	<b>`</b>	>			<b>&gt;</b>	>
	5.2 Did the exporter provide information on the state of import AND specific end user—such as riot control police, air force, museum, or private dealer? (4/o.5)	<b>&gt;</b>	<b>,</b>	<b>&gt;</b>			>	
	5.3 Did the exporter provide information on the state of import AND the types AND quantities of weapons and/or ammunition delivered? (1/0.5)	<b>&gt;</b>	<b>`</b>	<b>&gt;</b>			<b>`</b>	>

S.4 Did the exporter provide information on the state of import AND the types AND values of weapons and/or ammunition delivered? (4/o.5)  Licences  6.1 Did the exporter provide information on the state of import AND specific end-user? (4/o.5)  6.2 Did the exporter provide information on the state of import AND specific end-user? (4/o.5)  6.3 Did the exporter provide information on the state of import AND the types AND quantities of weapons and/or ammunition delivered? (4/o.5)  6.4 Did the exporter provide information on the weapons and/or ammunition delivered? (4/o.5)  6.5 Did the exporter provide information on the weapons and/or ammunition delivered? (4/o.5)  7.2 Did the exporter provide a reason or explanation on the weapons and/or ammunition delivered? (5/o.25)  7.2 Did the exporter provide information on the weapons and/or ammunition delivered information on the weapons and/or ammunition delivered information on the weapons and/or ammunition that were the subject of a licence refusal?  7.4 Did the exporter provide information on the weapons and/or ammunition that were the subject of a licence refusal?  7.5 Did the exporter provide information on the weapons and/or ammunition that were the subject of a licence refusal?  8.4 Did the exporter provide information on the weapons and/or ammunition that were the subject of a licence refusal?  8.5 Did the exporter provide information on the weapons and/or ammunition that were the subject of a licence refusal?  9.5 Did the exporter provide information on the weapons and/or ammunition that were the subject of a licence refusal?							
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		7.3 Did the exporter provide information on the types AND quantities of weapons and/or ammunition that were the subject of a licence refusal? (0.5/0.25)	<b>`</b>				
		7.4 Did the exporter provide information on the types AND values of weapons and/or ammunition that were the subject of a licence refusal? (0.5/0.25)	`				

#### Notes:

- \* For some criteria only full points are awarded, while for others both partial and full points can be awarded, depending on the comprehensiveness of the information provided by the exporters. In the latter case, two possible scores are given, for example (1/0.5).
- Grey background: not applicable.
- ✓ Voluntary information.

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# About the Small Arms Survey

The Small Arms Survey is a global centre of excellence whose mandate is to generate impartial, evidence-based, and policy-relevant knowledge on all aspects of small arms and armed violence. It is the principal international source of expertise, information, and analysis on small arms and armed violence issues, and acts as a resource for governments, policy-makers, researchers, and civil society. It is located in Geneva, Switzerland, and is an associated programme of the Graduate Institute of International and Development Studies.

The Survey has an international staff with expertise in security studies, political science, law, economics, development studies, sociology, and criminology, and collaborates with a network of researchers, partner institutions, non-governmental organizations, and governments in more than 50 countries.

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