





Global Study on Firearms Trafficking 2020

UNITED NATIONS OFFICE ON DRUGS AND CRIME Vienna

Global Study on Firearms Trafficking 2020



DISCLAIMER

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made.

Suggested citation: UNODC, *Global Study on Firearms Trafficking*, 2020 (United Nations publication, Sales No. E.20.IV.1).

The content of this publication does not necessarily reflect the views or policies of UNODC, Member States or contributory organizations, and nor does it imply any endorsement.

This document has not been formally edited. The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

This document was produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

© United Nations, March 2020. All rights reserved, worldwide.

Title: Global Study on Firearms Trafficking

Language: English
Sales no.: E.20.IV.1

ISBN: 978-92-1-130404-6 eISBN: 978-92-1-004969-6

CONTENTS

ABBREVIATIONS	5
EXECUTIVE SUMMARY	7
INTRODUCTION	16
CHAPTER 1 - THE PRIMARY EVIDENCE BASE: OVERVIEW OF SEIZURES Chapter overview How much is seized Types of firearms seized Parts and components and ammunition	19 20 25
CHAPTER 2 - FROM SEIZURES TO TRAFFICKING Chapter overview	31 32 36 45
CHAPTER 3 - THE NATURE OF FIREARMS TRAFFICKING Chapter overview Prices of firearms in illicit markets Modalities of trafficking	57 58
CHAPTER 4 - LINKS TO ORGANIZED CRIME, TERRORISM AND OTHER FORMS OF CRIME Chapter overview	77
CONCLUSIONS AND POLICY IMPLICATIONS	85
ANNEX Africa Americas Europe Asia and Oceania.	89 92 96
ANNEX - TYPES OF FIREARMS ANNEX - GLOSSARY ANNEX - STATISTICAL ANNEX	104

Acknowledgements

The Global Study on Firearms Trafficking was prepared by the UNODC Crime Research Section, under the supervision of Jean-Luc Lemahieu, Director of the Division for Policy Analysis and Public Affairs, and Angela Me, Chief of the Research and Trend Analysis Branch. The UNODC Global Firearms Programme participated by providing substantive input and advice under the supervision of John Brandolino, Director of the Division for Treaty Affairs, and Loide Ayree, Chief of the Organized Crime and Illicit Trafficking Branch.

Core team

Analysis, drafting and study preparation

Kristiina Kangaspunta, Antoine Vella, Raggie Johansen, Simonetta Grassi, Leonardo Lara and Mareike Buettner

Database development and data management

Enrico Bisogno, Salomé Flores, Hernan Epstein, Francisco Guerreiro, Trung Anh Dang, Francesca Rosa, Umidjon Rakhmonberdiev and Stefanie Mavrakou

Graphic design, layout and mapping

Anja Korenblik, Antero Keskinen, Lorenzo Vita, Suzanne Kunnen, Kristina Kuttnig and Federica Martinelli

Editor (Executive Summary)

Joseph Boyle

Technical inputs, review and comments

The Global Study on Firearms Trafficking benefited also from the expertise and invaluable contributions of other UNODC colleagues in the Global Firearms Programme, namely: Diman Dimov, Paul Ianovici, Lucia Gomez Consoli, Jacques Seckene Ndour and Silvia De Pedro Sanchez-Romero.

External inputs

This study also benefited greatly from data on customs seizures provided by the World Customs Organization. Data from the Crime-Terror Collaboration Database (University of Massachusetts Lowell) was made available by Professor Arie Perliger.

ABBREVIATIONS

ATF Bureau of Alcohol, Tobacco, Firearms and Explosives (United States)

> Annual Report Questionnaire (UN Office on Drugs and Crime)

CTS United Nations Survey of Crime Trends and

Operations of Criminal Justice Systems

(UN Office on Drugs and Crime)

GFP Global Firearms Programme

(UN Office on Drugs and Crime)

IAFQ Illicit Arms Flows Questionnaire

IPFM Intimate partner or family member

MIAFI Monitoring Illicit Arms Flow Initiative

SALWs Small Arms and Light Weapons

Southern Europe

(excl. WB)

ARQ

Southern Europe

(excluding Western Balkans)

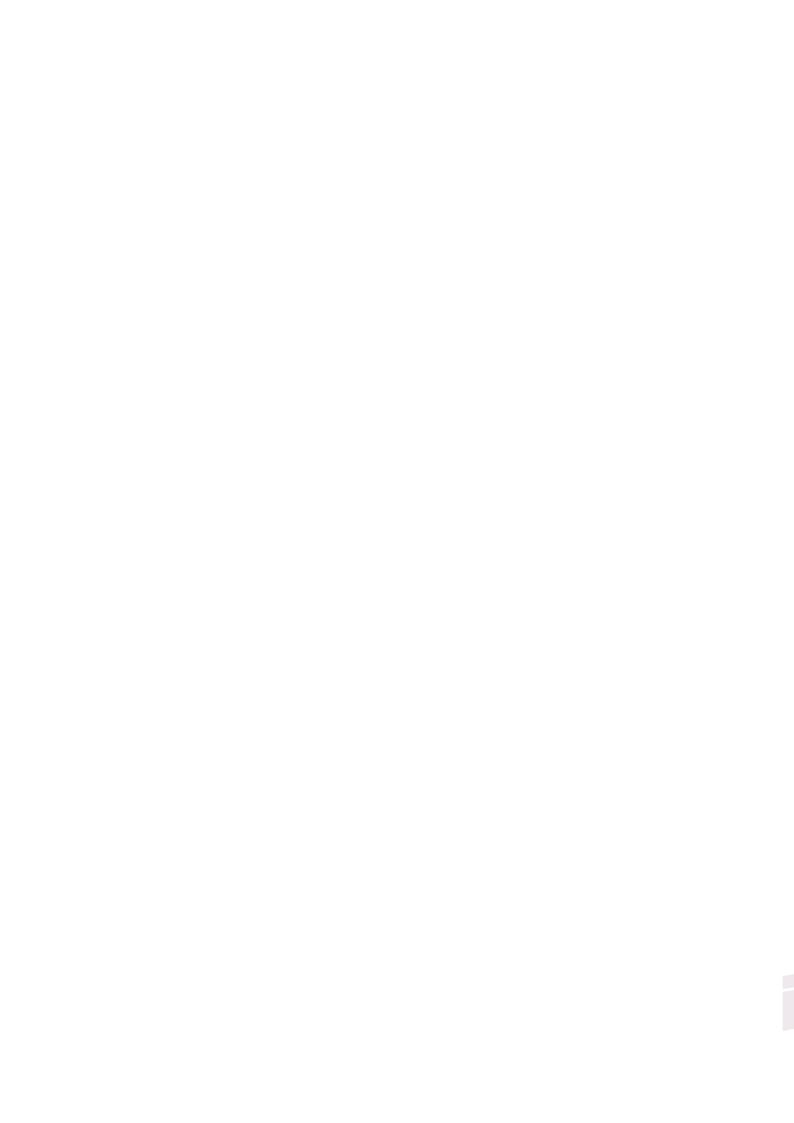
United Nations Office for **UNODA**

Disarmament Affairs

UNODC United Nations Office on Drugs

and Crime

WCO World Customs Organization



Firearms trafficking is a global phenomenon with strong variations between countries

UNODC has carried out its most comprehensive collection of data on firearms trafficking to date, gathering details from survey responses and other sources in 81 countries for 2016-17. These data give a unique insight into the patterns of trafficking globally, regionally and nationally, providing a vital resource for law enforcement, policymakers and public bodies seeking to reduce the damage caused by the illicit circulation of firearms.

Based on these sources, a total of 550,000 firearms were seized during each of 2016 and 2017. The data showed wide variations among countries in terms of quantities seized, which ranged from less than 10 to more than 300,000. The nature of seizures reported also varied dramatically.

The real global figure for seizures is much higher than 550,000, as some of the countries covered by this study underreported their seizures for administrative reasons, and the quality of data varied significantly between countries. Also, many countries have not provided any information, including some of the world's most populous nations. Nonetheless, the coverage for this attempt at global data collection is good and likely to improve in the coming years, as data collection is streamlined and embedded in national institutions.

Pistols emerge as most seized firearms globally

Pistols are the world's most seized type of firearm. However, this pattern is driven to a large extent by the Americas, the region that reported the most seized firearms overall. Pistols constituted more than 50 per cent of the total firearms seized in the region during the reporting period.

In Africa and Asia, shotguns were the most prominent type. Rifles were the main type of firearm seized in Oceania, and in Europe the distribution was more equal between pistols, rifles and shotguns.





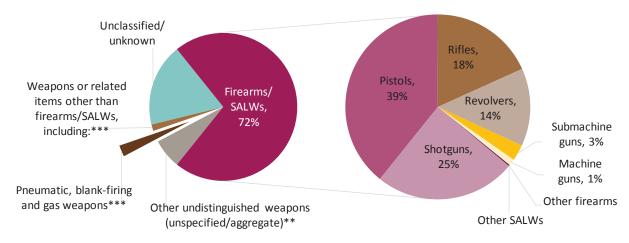
120

FIG. 2 Total number of arms seized, by country and type of coverage, 2016-17 (average)

Sources: UNODC IAFQ and other official sources.

FULL COVERAGE

FIG. 1 Typical distribution* of reported seized arms, by type, 2016-17



INCOMPLETE COVERAGE

Source: UNODC IAFQ and other official sources.

However, many countries in Africa and Asia appear to have a lower capacity to intercept and report trafficked firearms, which may lead to underreporting of some types of firearms. Moreover, the total figures reported by countries include seizures which are not directly connected to trafficking. Based on customs seizures at borders, rifles emerge at par with pistols. This suggests that firearms such as rifles may play a bigger role in global trafficking patterns than what is reflected in the currently available data.

Looking more closely, links emerge between trafficking patterns and broader regional contexts. For example, countries with higher levels of violent deaths and homicide, particularly in Africa and Latin America and the Caribbean, tend to seize a higher percentage of firearms connected to violent crime. Similarly, in countries with higher levels of drug trafficking, more arms are seized linked to that activity.

NO INFORMATION ON COVERAGE/UNCLEAR

¹ For Canada, Ghana and Paraguay data were available for 2016 only.

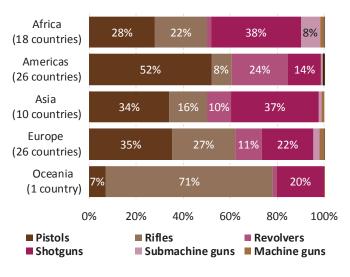
² For Cameroon, Guinea and Kyrgyzstan data were available for 2017 only.

^{*} Simple average based on data for 81 countries.

^{**} Includes weapons reported under "Other" without sufficient information to allow further classification; some of these weapons may be firearms or small arms and light weapons (SALWs).

^{***} For some countries, the reported seizure data included weapons other than firearms/SALWs; however data on such weapons were not explicitly requested by the questionnaire. Hence the share of such weapons is subject to variations in the reporting practice across countries.

FIG. 3 Typical distributions* of seized firearms/SALWs by type, according to region, 2016-17



^{*} Simple averages, adjusted for any firearms/SALWs which could not be classified and quantified into the respective category and weapons other than firearms/SALWS.

Source: UNODC IAFQ and other official sources.

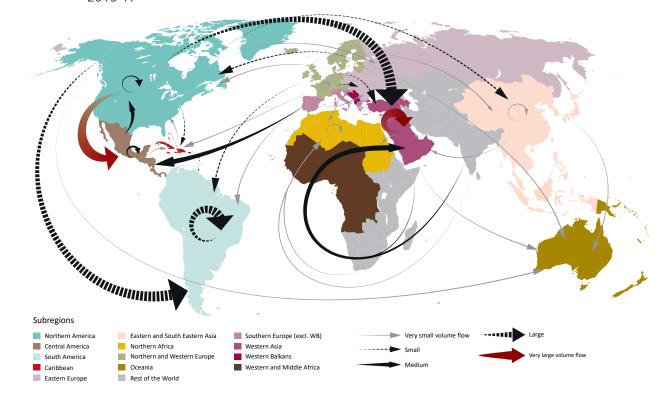
Transnational trafficking exists alongside domestic diversion and illicit manufacture

Most firearms seizures are made within national territories; seizures at borders on average account for less than 10 per cent of all interceptions. Seized weapons are overwhelmingly manufactured outside the country of seizure, but it is likely that the sourcing of firearms found in illicit markets has an important domestic component, such as firearms diverted from licit channels in the country of seizure.

There is often little connection to the country of manufacture – a significant proportion of arms seized on incoming shipments have not been transported directly from where they were produced. This suggests that vulnerability to firearms trafficking is mostly to be found in countries where firearms are diverted from legal holdings rather than where they are manufactured.

Northern America is the principal subregion of departure for seized firearms, according to the available data. On a smaller scale, Europe and Western Asia are also major

MAP 1 Main transnational firearms trafficking flows (as defined by routes of seized firearms), 2016-17



The breakdown into subregional groupings is based on the standard UN classification (M49), adapted to take into account the availability of data and regions of special interest of the study. Please see Methodological Annex for details.

Arrows represent flows between subregions (not specific countries).

Source: UNODC elaboration of data from Illicit Arms Flows Questionnaire and World Customs Organization.

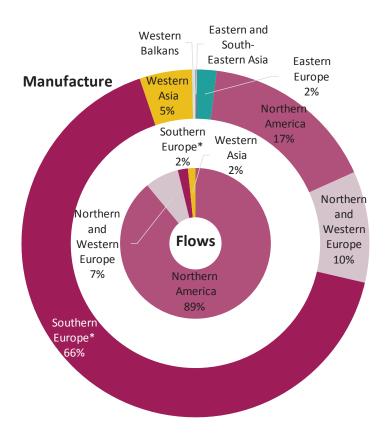
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

departure points for illicit flows. However, illicit flows within subregions often account for significant proportions of firearms entering the market, notably in South America, Northern and Western Europe and Western Asia.

Transnational trafficking is concentrated within continents

Based on the routes of seized firearms, transnational trafficking flows seem to be mostly concentrated within continents. Northern America plays a significant role as departing subregion for other subregions, particularly South and Central America, as well as Western Asia. Northern America, Europe and Western Asia together accounted for almost all departure points of trafficking in 2016-17. In contrast with other parts of the world, outgoing flows from countries in Europe were predominantly intended for trafficking across continents.

FIG. 4 ____ Distribution of subregions identified as origin of incoming illicit flows^a (inner circle) and manufacture^a (external circle) for seizures made in South America, 2016-17



^{*}Excluding Western Balkans.

Note: The shares of flows and of manufacture are based on different kinds of data which require different methodologies. Therefore, the comparison should be made with caution. In both cases, the calculations adjust for the share which is not classified or reported as unknown.

Source: UNODC IAFQ and other official sources

Central and South America together with Western Asia accounted for more than 80 per cent of trafficking destinations. These main destination areas are known for high levels of criminal violence or conflict and show the links between firearms trafficking and violent deaths.

Manufacturing country often unconnected to illicit flow

Illicit firearms flows are complex and do not necessarily follow licit flows. The country of manufacture of firearms and the country where diversions (when firearms leave the licit circuit and enter the illicit one) and seizures take place often do not overlap. This is clearly seen in the contrast between countries that are identified either as manufacturing countries or as the point where the illicit flow starts. While Europe emerges as the main manufacturing region in seizures made across the world, the most prominent subregion of illicit origin is Northern America. Firearms are durable goods and their circulation before and after diversion to the black market often involves several transfers.

Cross-border seizures are most common at land crossings, but sea shipments are bigger

Traffickers tend to use sea transport for large shipments. Cases of seizures from vessels involved more than five times the number of firearms typically intercepted from other types of transportation. This suggests that law enforcement could get a better return on their investment if they focused on transportation by sea.

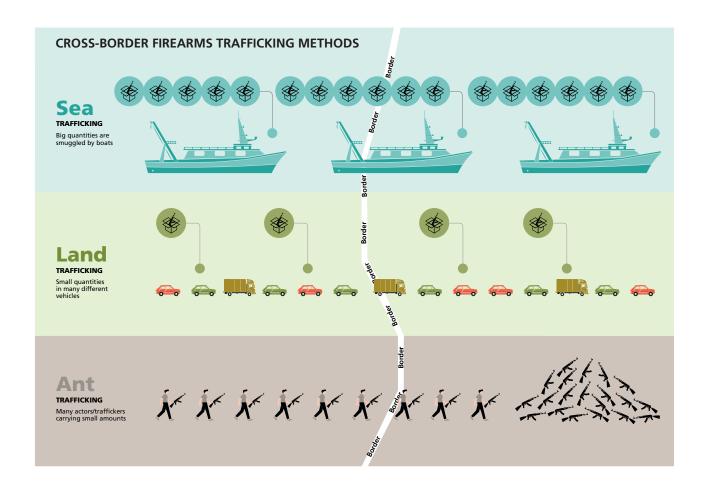
However, trafficking by land remains the most common type of cross-border case, accounting for roughly two-thirds of the total. Interceptions from vessels accounted for only around 6 per cent of all customs cases, but 33 per cent of the total number of firearms seized by customs.

Size of seizure case can reflect the intended use of the firearm

It appears that the vast majority of seizure cases entail law enforcement officers intercepting a single firearm or a very small number, according to available data. However, in terms of quantities of firearms seized, the big cases may account for a significant share. For example, among customs seizures carried out at national borders, roughly three quarters of cases involved one firearm, but around one half of firearms were seized in instances that involved 18 or more firearms.

Seizures of small consignments of one or two firearms may be linked to individual use, where the firearm is taken from the end user. These cases most commonly involved handguns. For example, more than 80 per cent of revolvers were captured in cases involving just a single firearm.

^aThe largest share of transnational illicit flows affecting countries in South America occurs between countries within South America. Similarly, countries in South America itself account for the largest share of manufacture of weapons seized in South America (including weapons seized in the country of manufacture). These shares are not shown in the above figure.



This type of case often entails a violation of possession regulations, but can also involve strategic "ant trafficking", whereby many people transport weapons in small consignments to meet large-scale demand and reduce the risk of disruption by law enforcement. This type of trafficking does not fully explain global arms trafficking, but there is evidence¹ that it is utilized to transport firearms from the United States to Mexico.

At the other end of this continuum, countries reported large seizures that seemed to respond to big instances of demand, for example conflict. Seizures of rifles, shotguns and pistols suggest that firearms of these types can be trafficked in consignments of hundreds and thousands. Highpowered firearms such as machine guns and submachine guns are not often captured, but these rare seizure events generally involve larger quantities. Around one fifth of all customs seizure cases that included machine guns and submachine guns involved such firearms in batches of four or more; on the other hand, such hauls of revolvers, for example, were exceptional.

These big seizure cases were far more likely than smaller consignments to be linked to firearms trafficking offences.

Illicit sellers can compete with licit markets on price

The cost of buying firearms in the illicit market is usually significantly higher than in the licit sphere, reflecting the extra risks and profiteering involved in the black market. However, there are exceptions. In Latin America and the Caribbean, for example, illicit prices were lower than the licit price for handguns. This suggests ample availability of handguns in the illicit market.

Price data from Europe point to the Western Balkans as a potential illicit source of firearms, notably assault rifles. Such weapons were far less expensive in the Western Balkans than in the rest of Europe.

Traffickers supply those seeking to assemble or convert weapons

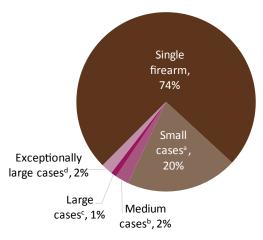
Seizures of parts and components are relatively rare compared with seizures of firearms: on average, only 5 per cent of the number of firearms. However, a different picture emerges in countries where firearms in non-factory condition were seized in relatively high numbers (including artisanal or craft production), particularly in Africa and parts of Asia. Countries in these areas tend to report relatively high levels of seizures of parts and components.

Illicit manufacturing, conversion, reactivation and assembly of firearms is also present in some European countries,

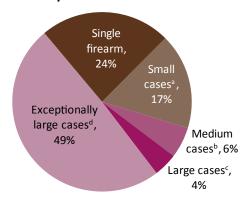
¹ See Section on "Ant trafficking" in Chapter 3.

FIG. 5 Breakdowns of customs seizures, by size* of seizure case, 2016-17

Breakdown of seizure cases, by size*



Breakdown of firearms seized, by size* of seizure case



- * The size of a seizure case refers to the number of firearms seized in that particular instance.
- $^{\circ}$ A case is considered "small" if between 2 and 5 firearms were seized in that particular instance.
- ^b A case is considered "medium" if between 6 and 10 firearms were seized in that particular instance.
- ^c A case is considered "large" if between 11 and 17 firearms were seized in that particular instance.
- ^d A case is considered "exceptionally large" if at least 18 firearms were seized in that particular instance.

Source: World Customs Organization.

possibly reflecting national control mechanisms that make firearms hard to access legally. Modification of weapons may also serve the needs of the criminals to use smaller or more powerful weapons.

Firearms tracing remains insufficient and countries risk missing SDG target

Countries are committed to "significantly reduce illicit financial and arms flows" under SDG Target 16.4. One of the indicators for this target is that the proportion of firearms traced to their illicit origins must be measured. Data from 14 countries in 2016-2017 suggest that, on

average, this illicit origin or illicit context was established for just 28 per cent of the relevant category of firearms.

The countries that registered very high success rates in tracing firearms reported relatively low seizure levels, perhaps because tracing requires a lot of resources. On the other hand, some countries with high levels of seizures registered a low success rate, which may also be linked to firearms seized in connection with less serious offences and perhaps not prioritised in tracing.

Criminal justice responses tend to underplay the significance of firearms trafficking

Countries on average seized around two-thirds of firearms on the grounds of illicit possession, according to the legal justifications given by national authorities. Trafficking was, on average, named as the legal justification in only around 9 per cent of cases.

However, it is likely that the offence of illicit possession provides an easier and quicker way for law enforcement to justify stopping shipments and seizing firearms, and trafficking emerges as the actual offence only after further investigations – this is known as the "criminal context" of the seizure.

When the criminal context is factored in, the proportion of seized weapons that could be connected to trafficking more than doubles to roughly 19 per cent. The real proportion is likely to be even higher, once potential underreporting of firearms trafficking is considered.

The evidence suggests that the criminal justice system focuses on firearms trafficking only in a relatively small percentage of the cases where it would be warranted – meaning firearms trafficking is a largely hidden phenomenon, only part of which comes to the surface.

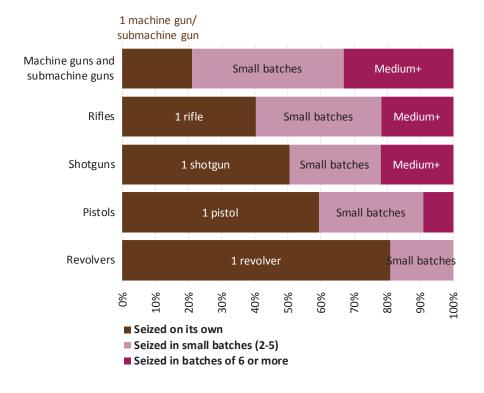
Violent crime and drug trafficking are frequently linked with seizures

Other than arms offences, the criminal conduct most commonly linked with firearms seizures was violent crime, particularly in Latin America and Africa. In Europe, drug trafficking was the biggest category.

On average, a larger share of firearms is seized in the context of violent crime in countries with high homicide rates. The same link is shown with drug seizures. In addition, drugs emerge as the most common commodity intercepted in the same seizures as firearms, followed by counterfeit goods, cultural property and natural resources

Unpicking the link between firearms trafficking and the broader criminal context in which seizures occur is difficult. Some exceptionally large individual seizure cases appear to be connected to areas with recent or ongoing

FIG. 6 Firearms seized in typical customs seizure cases, by size of seizure case (excluding cases with atypical very large number of firearms), 2016-17



a Isolated cases of a very large size were excluded; these were defined as cases with a size above the 98th percentile for the corresponding specific type of firearm.

Source: World Customs Organization.

conflicts, or countries with high levels of violence linked to organized crime. But several large hauls were reported that were apparently unconnected to conflict areas or organized crime.

Some countries may face specific problems related to conflict. Weapons feed conflict while it is going on, then stockpiles can proliferate in the aftermath, causing multiple difficulties for the authorities.

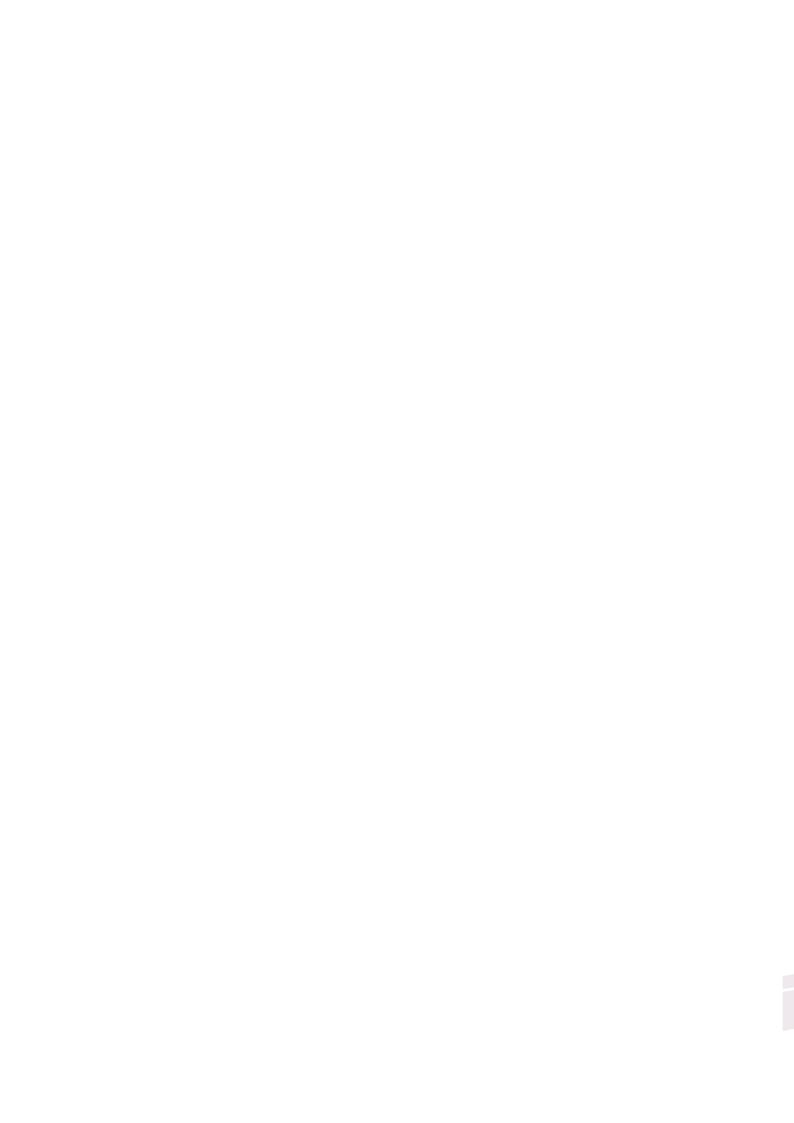
More than 50 per cent of homicides globally are carried out using firearms

Overall, more than 50 per cent of homicides globally each year are carried out with a firearm. The availability of firearms is linked to the homicide rate: a rise in the rate of firearms possession in a country often goes together with an increase in the homicide rate.

However, the significance of firearms varies depending on the context of the homicide. For example, firearms are by far the most significant method in homicides related to gangs or organized crime, but far less prominent when the homicide involves intimate partners and family members. There is also a gender factor involved in the use of firearms in homicide. Most homicide victims and perpetrators globally are men, and this tends to be even more pronounced among firearms homicides. When considering homicides of intimate partners and family members, in which most victims are women, men were more likely than women to use a firearm when killing their female partners, while women were more likely than men to resort to a sharp object.

Overall, seizure data tended to suggest a relationship between the level of interception and the rate of homicide. Countries with higher levels of firearms seizures relative to firearms homicides tend to have lower levels of homicide, which might reflect an established and strong rule of law situation.

^b Size is measured as the number of firearms of the given specific type seized in the corresponding case.



INTRODUCTION

Firearms trafficking affects all parts of the world and impacts on society in multiple ways. It is a major concern in the context of human security, and it is central in law enforcement efforts and activities. Firearms are instrumental in much violence, particularly homicide; they are often used by organized criminals and they support operations related to armed conflicts and terrorism. The most common form of weapons trafficking involves small arms and light weapons; however, the character of this trafficking can vary significantly in different geographical contexts and in relation to different weapons.

Firearms are usually manufactured for legal markets by licenced manufacturers. They can, however, be diverted into illegal markets at any point in their life cycle. The action of law enforcement aims at stopping their illegal movement. In many parts of the world, firearms are easily available for those who can afford them. Firearms can circulate in legal and illegal markets for a long time and because they are durable commodities, they can be easily reused and resold. This durability presents challenges to prevention and control activities. For this report, data from firearms seizures are used to have a closer look at firearms trafficking. Building on the 2015 UNODC Study on Firearms, this report analyses the flows of firearms trafficking, the types of firearms that are trafficked, how this trafficking is conducted and how it is related to other types of crime. The report is not aiming at estimating the value of the illegal market because the available data is too sporadic to support such an estimation.

The complex nature of firearms concerns is also reflected in the international legal framework. There is a wide variety of international and regional instruments addressing firearms and their trafficking. The overall framework of this report is based on the Protocol against the Illicit Manufacturing of and Trafficking in Firearms, their Parts and Components and Ammunition ('the Firearms Protocol') supplementing the United Nations Convention against Transnational Organized Crime which was adopted by the General Assembly in 2001¹. UNODC is the guardian of the Convention and its Protocols. The Firearms Protocol, which had 118 Parties as of October 2019, addresses the illicit manufacturing of and trafficking in firearms from the criminal justice angle, with a view to provide Member States with measures to address the transnational nature of the phenomenon and its links to organized and other serious crime. Many other instruments introduce a complementary approach to firearms trafficking from disarmament, trade or development perspectives.2

¹ GA resolution 55/255 of 31 May 2001.

² See a list of relevant instrument and documents in https://www.unodc. org/unodc/en/firearms-protocol/international-legal-framework.html.

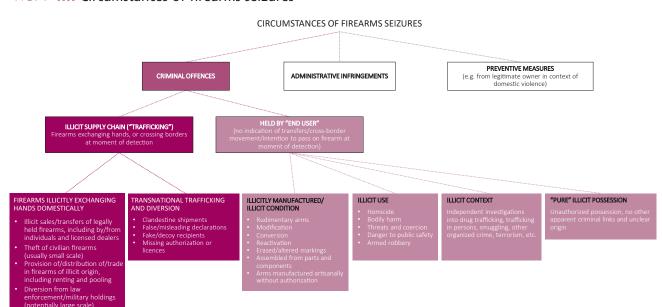


FIG. 7 Circumstances of firearms seizures

In the context of the Conference of the Parties to the UN Convention against Transnational Organized Crime, Member States have requested UNODC to collect and analyse quantitative and qualitative information and suitably disaggregated data on trafficking in firearms, their parts and components and ammunition³. In addition, within the framework of the 2030 Agenda on Sustainable Development, UNODC is monitoring the global developments related to the indicator 16.4.2 ("Proportion of seized, found or surrendered arms whose illicit origin or context has been traced or established by a competent authority in line with international instruments"). UNODC also serves as the international agency co-custodian of this indicator together with the Office of Disarmament Affairs (ODA).

Seizures data to help understand firearms trafficking?

In the United Nations Convention against Transnational Organized Crime, "seizure (or freezing)" is defined as "temporarily prohibiting the transfer, conversion, disposition or movement of property or temporarily assuming custody or control of property on the basis of an order issued by a court or other competent authority" (article 2f). Seizure can precede final confiscation or forfeiture, defined as "permanent deprivation of property by order of a court or other competent authority" (article 2g).

Criteria for seizing firearms can vary considerably among different countries. The Firearms Protocol requires states to seize firearms which are illicitly trafficked or manufactured and to criminalize these offences. National legisla-

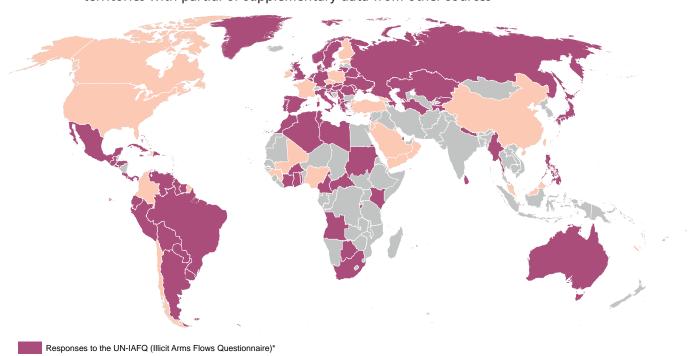
3 Conference of the Parties to the UN Convention against Transnational Organized Crime, Ninth Session, Resolution 9/2, paragraph 32.

tion and regulations often go beyond the provisions of the Protocol and firearms can also be seized for other reasons such as having been used in criminal activities. Seizures can also be based on administrative violations such as a lack of a valid licence for possession or failure to comply with storage conditions.

Seizures are a reflection of a complex reality and of different overlapping facets of the phenomenon of illicit trafficking⁴ of firearms. Seizures may be related to criminal activity but some seizures may also arise out of infringements of an administrative nature. Whether a particular situation or conduct constitutes an administrative or a criminal offence will depend on the national legislation, but administrative offences would typically relate to expired licences, improper storage, inadequate maintenance, carrying or transporting a firearm in violation of applicable restrictions, etc. There are also seizures which happen as a preventive measure, typically in cases of domestic violence or threats of violence - even if no crime has been committed with the firearm.

Bearing in mind that firearms are durable goods which can last for decades, firearms may be detected in criminal settings long after they entered the black market (through diversion or illicit manufacture). Moreover, some criminal links which give rise to the seizure of a firearm may occur independently of whether the firearm had been previously trafficked or not. For example, a firearm can be used in the commission of a crime, and therefore seized, whether it was legally held or not. Sometimes a firearm is seized in the context of crimes or investigations which are unrelated

⁴ The UN Firearms Protocol uses the term "illicit trafficking". For editorial reasons, this term will be shortened to "trafficking" throughout this report.



MAP 2 Responses to the UN-IAFQ (2018 data collection exercise on firearms) and other countries/ territories with partial or supplementary data from other sources

Countries or territories with partial data for IAFQ indicators (2016/17) from other sources

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dashed lines represent undetermined boundaries. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Sudan and South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

to arms offences, such as organized crime or drug trafficking; in such cases, trafficking may or may not have happened prior to the seizure. A firearm can also be seized because of its condition, such as the case of altered or deleted markings or illegal modifications, or because it was illegally manufactured, including conversion from other weapons, illegal assembly or illicitly manufactured in artisanal settings. Once more, such firearms may or may not have been trafficked prior to seizure. There may also be cases of a criminal nature in which a firearm seized from its holder is of unclear origin but there are no evident criminal links other than unauthorized possession.

The cases described above typically occur when a firearm is seized from its "end user", that is, a person or group of persons who held the firearm for their own purposes and use (lawful or not). This leaves the case of firearms which were detected in circumstances which suggest illegal transfers or movement at the moment of interception. Even among such firearms, such transfers or physical movement may be internal to a country, or transnational. Such seizures are those which reflect most directly the nature of illicit flows of firearms. Seizures from cross-border shipments, such as those made by Customs, are of particular interest.

Data sources and limitations

The report is based on data collected from Member States through the Illicit Arms Flow Questionnaire (IAFQ),5 which was developed in cooperation with national and international experts, relevant international and regional organizations, and non-governmental organizations and research entities, in order to collect seizure data in both aggregate form and on a case-by-case basis. The questionnaire collected data on several aspects of firearms trafficking, such as trafficking routes, criminal context, tracing and the criminal justice system response to this crime. A total of 80 responses to the questionnaire were received. In addition, complementary sources of data were used, particularly national reports on the Implementation of the Programme of Action on Small Arms and Light Weapons and the International Tracing Instrument (collected and shared by the UN Office for Disarmament Affairs) and seizure data from the World Customs Organization (WCO). Most of the data cover the years 2016-2017.

^{*} Includes responses from 6 countries limited to metadata and qualitative data only.

Source: UNODC elaboration of data from Illicit Arms Flows Questionnaire and World Customs Organization.

⁵ Questionnaire on Illicit Arms Flows. Note by the Secretariat. Sixth Session of the open-ended intergovernmental working group on firearms established by the Conference of the Parties to the United Nations Convention against Transnational Organized Crime, Vienna, 2-3 May 2018. CTOC/COP/WG.6/2018/CRP.2.

These sources were used in particular to generate quantitative data for some of the indicators covered by the Illicit Arms Flow Questionnaire, yielding data for a total of 107 countries and territories for at least one of the years 2016 or 2017.

There are some limitations concerning the use of seizure data in the context of firearms trafficking. Seizures can be made for reasons other than firearms trafficking per se. Firearms may be seized because they were used in the context of criminal activities such as drug trafficking or homicide. In addition, as for most such data related to crime, seizure data reflect both the level of trafficking and the effort and capacity of law enforcement to implement the regulatory mechanisms which may vary considerably between countries. Triangulating seizures data with other information and analysing them across countries help to use seizures data to inform patterns and dynamics of trafficking but seizures alone do not describe the level of trafficking. Legal definitions and regulatory frameworks can differ greatly from one country to the next, making country-level comparisons difficult and fraught with risks of comparing different phenomena. In addition to these general limitations, some specific limitations concerning the data collection for this report need to be noted. The data collection could not cover all countries in the world and even for those countries that did respond, the richness and quality of the responses varied. While some parts of the questionnaire resulted in good quality data, other parts were left empty or only scarce data were submitted. These limitations should be kept in mind when reading the report.

CHAPTER 1

THE PRIMARY EVIDENCE BASE: OVERVIEW OF SEIZURES



Chapter overview

This first chapter provides an overview of the available data on firearms seizures across the world, focusing particularly on the magnitude and location of seizures, as well as the types of firearms that are most frequently seized. It also analyses the typical sizes of seizure events according to type of firearm.

Data on total arms seized were available for 81 countries (including IAFQ responses as well as other official sources), amounting to roughly 550,000 arms in each of 2016 and 2017. This absolute figure is however dominated by the Americas, due to very large quantities seized by some countries in this region. This region was also relatively well represented in terms of the number of countries with available data. On the other hand, there were significant gaps in data availability in Africa, Asia and Europe, including missing data from relatively large countries. Moreover, in some cases there were clear shortfalls arising from incomplete coverage within a single country. For these reasons the analysis often focuses on averages representative of a typical country rather than global totals.

Based on the available seizure data, pistols are the most frequently seized firearm type. This is driven to a large extent, however, by the pattern in the Americas. The regional patterns vary considerably. While in the Americas, the main types of seized firearms are handguns (pistols and revolvers), in Africa and Asia, shotguns are most frequently seized. In Europe, seizures are relatively evenly distributed between pistols, rifles and shotguns, whereas in Oceania, rifles appear to be the most seized type, although this is based on data from only one country, Australia.

Considering the regional heterogeneity, the seizures patterns may also reflect trafficking patterns, with pistols and revolvers being the most trafficked firearms in the Americas and – to a lesser extent - in Europe. It is not clear, however, how the global pattern of seized firearms reflects global trafficking as there may be less capacity in countries in Africa and Asia to intercept and report illicit shipments of firearms, as indicated by the considerable data gaps in these regions. It could be that the type of firearm dominating seizures in Africa and Asia – shotguns – is more significant in global trafficking flows than what can be gleaned from available seizure data.

Firearms seizure events vary in size, although the vast majority of seizures involve one or a few firearms. The average number of firearms seized per case is 1.4 but in terms of number of seized firearms, about half were seized in large quantities. Most seizure events were small, but a few cases with large quantities of firearms – notably rifles, shotguns or pistols – were seized in a single instance. This suggests that firearms can also be trafficked in large quantities. While small scale trafficking is possible and present

in some regions (see section on ant trafficking in Chapter 3), it is likely that very small seizure cases (such as a single firearm on its own) are frequently connected to other scenarios that might give rise to seizures, such as administrative violations, illicit possession, perpetration or threats of violence, endangering public safety, unauthorized manufacture, or firearms held by criminals which come to light in the context of investigations unrelated to firearms (independently of whether they had been trafficked at an earlier point in time).

Data on seizures reflect both the patterns of the actual firearms trafficking that is taking place and the efforts of national law enforcement and other relevant authorities in tackling it. As such, the data cannot be taken at face value to accurately depict firearms trafficking flows. Moreover, the data should be interpreted cautiously, particularly in terms of cross-country comparability. Some countries have provided partial data that do not include seizures made in certain geographical parts or by some government

entities. Countries have also made different choices regarding the reporting of administrative and criminal seizures; some reported separately, some jointly, and some were not in a position to distinguish. These differences should be taken into account in comparative analyses.

How much is seized

Seizures of firearms occur when agencies such as police, customs or other law enforcement entities detect firearms in circumstances which indicate or suggest a violation of the law or applicable regulations. Seizures made by such agencies may occur in the course of, inter alia, routine inspections (including at border control points), targeted operations, investigations into crimes and responses to reported violations.

Thus, seizures reflect the primary point of contact between the illicit phenomenon and the efforts of the state to counter it. Seizure data are influenced by, and therefore reflect,

Advantages and disadvantages of other data sources related to seizures

The evidence provided in this study relies on seizures data together with other information that help to interpret them in understanding firearms trafficking. There are other data not considered in the study linked to Government responses which could potentially be used with or as an alternative to seizures, but they are either not available systematically across countries or they carry similar challenges to seizures.

Confiscations. While seizures represent a temporary measure that can occur on various legal grounds and usually signify the starting point of an investigation, a confiscation is a permanent deprivation of property that occurs at the end of a judicial proceeding when factual circumstances are established.* While confiscated firearms could provide more reliable information on trafficking of firearms, there are several limitations. The representativeness of confiscations data leans more than seizures towards measuring the effectiveness of the criminal justice system rather than illicit flows. Judicial confiscation orders also may not exclusively relate to illicitly sourced and trafficked firearms. Furthermore, data on confiscations are not as readily available as data on seizures, as judicial proceedings may take a long time and the information may remain in individual files with no aggregation at national or sub-national level.

Circumstances of the seizure. Data on the circumstances of a seizure, such as its suspected criminal context and its geographical occurrence, represent

precious complementary information that help contextualize and interpret seizure data for the analysis of illicit flows, and questions on such aspects have hence been included in the Illicit Arms Flows Questionnaire. Unfortunately, in many countries data at such a level of disaggregation is not collected by frontline officers. The challenge relates to the different sources of information for seizures and their circumstances. Seizure data are typically compiled by law enforcement authorities, while circumstances may be recorded or revised by other criminal justice institutions (prosecution and conviction institutions for example). The disaggregation of seizures data is accurate if they come from the same primary source.

Diverted (stolen or lost) firearms. Data on diverted (stolen or lost) firearms are directly linked to the illicit circulation of firearms and are therefore supported by some scholars** as a possible primary indicator to understand firearm trafficking. The challenge with this indicator is that it does not cover all trafficked firearms and does not measure the share of firearms illicitly crossing borders. Data on diverted firearms may also not have the same level of reporting requirements as seizures.

- * For legal definitions of "seizure" and "confiscation", see Article 2 of the United Nations Convention against Transnational Organized Crime
- ** Bromley M., Caparini M. and Malaret M., Measuring Illicit Arms and Financial Flows: Improving the Assessment of Sustainable Development Goal 16 SIPRI Background Paper, July 2019.

two parallel aspects: the extent of the illicit phenomenon as well as the extent of a certain, targeted form of response on the part of the authorities.

Moreover, seizures can be made on various grounds, not all of which are necessarily linked to illicit trafficking. For example, depending on the national context, firearms may be seized for minor offences deemed in some countries to be of an administrative nature - usually violations of regulations pertaining to aspects such as the renewal of licences, proper storage, restrictions on the carrying of firearms, etc. Firearms may also be seized in the context of the commission of other crimes such as homicide and robbery, which, although serious, may not necessarily be committed with illicitly sourced firearms. Moreover, certain serious offences may also be related to the illicit nature of firearms but still not directly to trafficking, such as the unauthorized manufacture of firearms in a workshop, or the removal or alteration of markings whose purpose is to enable identification, accountable weapons management and tracing.

For these reasons, the use of seizure data to understand the nature of firearms trafficking needs careful consideration. Seizure data alone can be difficult to interpret and can potentially lead to misleading conclusions when taken in isolation, because they reflect priority and capacity of law enforcement as much as supply. This challenge can be overcome by taking into account other, independent sources of information. Another aspect to consider when analysing seizures is the quality of the data which can relate, for example, to the extent of coverage of data reported by a given country. In cases of incomplete coverage, the comparability of total aggregates across countries is limited, but this challenge can be partially overcome by expressing the corresponding figures in relative terms (shares of a total). When historical data are available, a comparison of trends across countries may still be meaningful even if the absolute values present issues of comparability.

Seizure data, including different disaggregations of seized items as well as the criminal context of seizures, are the primary evidence base for this study. This section begins by giving an overview of the seizure data available to UNODC.

Through the Illicit Arms Flow Questionnaire, countries were requested to provide data on the total number of seized arms, their parts and components, and ammunition. Overall UNODC was able to compile data on the number of arms seized in 2016 or 2017 for a total of 81 countries. The total number of such arms amounted to around 550,000 in each of 2016 and 2017. However, this figure varied greatly from country to country and the comparability across countries is subject to a number of factors.

TABLE 1 ... Availability of seizure data,* by region, 2016-17 (number of countries)

	2016	2017	2016/2017
Africa	16	17	18
Americas	26	24	26
Asia	9	10	10
Europe	26	26	26
Oceania	1	1	1
Total	78	78	81

^{*} Total number of arms seized.

One factor affecting comparability relates to coverage. Five countries reported that their data set did not cover the entire national territory (as opposed to 57 countries which confirmed that the entire geographical territory was covered), while 17 countries reported that the data did not cover the operations of all authorities in charge of seizing firearms (as opposed to 43 countries which confirmed that all relevant institutions were covered). Incomplete coverage was also related to the nature of the seizure cases. Some countries, for example, submitted only the seizures made by the national authorities in charge of tracing.

Another important element in analysing seizures across countries is the distinction between administrative and criminal seizures. While the aim of the UNODC data collection was to focus primarily on seizures made in a criminal context, countries could not always make this distinction or clearly characterize the nature of the seizures that they reported to UNODC. Sixteen countries clearly distinguished between criminal and administrative seizures and provided separate statistics.2 In some other cases, countries informed that administrative seizures were not included, as seizures based on purely administrative grounds were reportedly not possible in the national context; however, there were also 8 countries for which the data did include administrative seizures, but they could not be distinguished from criminal seizures.

Thirdly, some countries reported figures that may have included firearms which were recovered in ways other than seizures, for example found and surrendered firearms.

For these reasons, the absolute value of the total number of seized weapons, and especially comparisons among countries on this basis, need to be interpreted with caution.

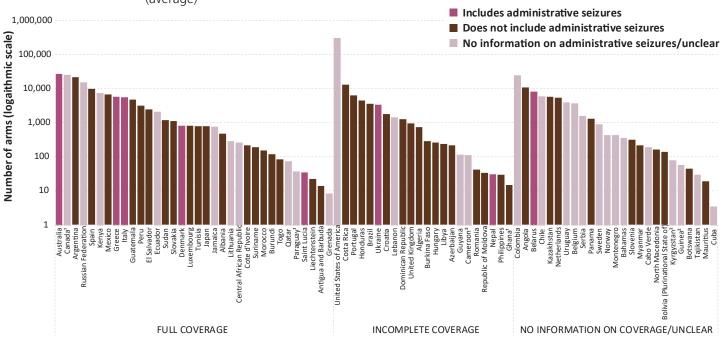
Figures on national seizure aggregates can be contextualized by taking into account the population of the country. This approach does not address the comparability issues

¹ An additional level of uncertainty was due to the fact that not all countries which provided the data also provided information on the extent of geographical or institutional coverage.

The requested data on administrative seizures was limited to the total number of arms seized.

120

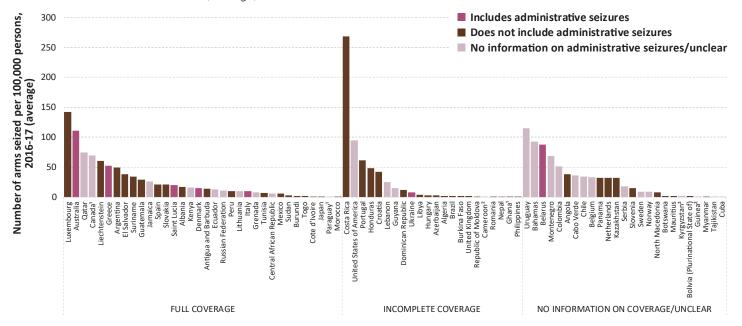
FIG. 1 Total number of arms seized (logarithmic scale), by country and type of overage, 2016-17 (average)



¹ For Canada, Ghana and Paraguay data were available for 2016 only.

Sources: UNODC IAFQ and other official sources.

FIG. 2 Total number of arms seized per 100,000 population, by country and type of coverage, 2016-17 (average)



¹ For Canada, Ghana and Paraguay data were available for 2016 only.

Sources: UNODC IAFQ and other official sources.

related to coverage and the inclusion of administrative seizures, but it provides a better indication of the intensity of seizures and the possible impact they may have in single countries. The variability in the resulting prorated figures is significantly reduced from the variability of simple

totals, but it is still very high, with the values typically ranging between 0.5 and 69 arms per 100,000 persons.³ Some small countries emerge among the ones with the

² For Cameroon, Guinea and Kyrgyzstan data were available for 2017 only.

² For Cameroon, Guinea and Kyrgyzstan data were available for 2017 only.

^{3 10&}lt;sup>th</sup> and 90th percentiles, respectively.

Total number of arms seized 100 100 - 00 01 - 000 001 - 10 000 10 000 No data a aila le

MAP 1 Total number of arms seized, by country, 2017

Sources: UNODC IAFQ and other official sources

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dashed lines represent undetermined boundaries.

The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

highest numbers of arms seized per capita. For some other countries, the adjusted per capita metric confirms that the extreme high or low levels are not attributable to their size only.

In addition to the total number of arms seized, some countries provided also information on the number of cases (instances or incidents) in which the arms were seized. Using this information, it is possible to construct the typical number of arms seized in a given case providing additional insight into the nature of the offence. Nineteen countries provided this kind of information, corresponding to a total of 136,362 arms seized in 97,320 cases, and overall average of 1.4 arms seized per case. Considering all of these together, this implies that at least 60 per cent (probably more) of these cases involved only one arm, and at most 20 per cent (probably less) involved 3 arms or more. Only two countries (Paraguay and Hungary) registered an average of more than 4 arms per case.

Countries were also asked to report information of significant seizures on a case-by-case basis. The suggested criteria for a seizure case to qualify as "significant" were any of the following: more than 5 arms seized; involvement of organized crime groups; or the context of transnational trafficking of arms. Independently of the reason for qualifying a seizure as "significant", the information collected on a caseby-case basis included the types and number of arms seized (along with other specifics such as modus operandi, other items seized together with the firearms and information on provenance).

Information of this kind was provided by 32 countries, which collectively reported 357 cases. Not surprisingly, significant seizure cases were typically much larger than the average seizure cases in general. For example, Brazil reported 10 significant cases averaging 26 arms per case, compared with an average of 1.3 arms seized per case considering the total number of seized arms and total number of cases.

Based on significant cases only, a greater variability (in comparison with cases overall) across countries could be observed in the typical number of arms seized per case, with 7 countries reporting an average of 30 or more arms seized in a handful of significant cases (3 or fewer), and at the other extreme, 6 countries reporting less than 5 arms seized per significant seizure (on average). Once more, this is not surprising in view of the fact that significant seizures constitute a small exceptional subset of a bigger universe.

Overall, among all significant seizure cases, about a third consisted of seizures of 5 arms or less (in addition to ammunition and other items) and another third of seizures of 5-10 arms, with the remaining cases ranging between 11 and more than 6,000 arms. Seizures of a single arm were the most frequent, accounting for more than a fifth

Arms seized per 100,000 population

\$ 5.0

\$ 5.1 - 25.0

\$ 25.1 - 50.0

\$ 50.1 - 75.0

\$ 50.1 - 75.0

\$ No data available

MAP 2 Total number of arms seized per 100,000 population, by country, 2017

Sources: UNODC IAFQ and other official sources.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dashed lines represent undetermined boundaries.

The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

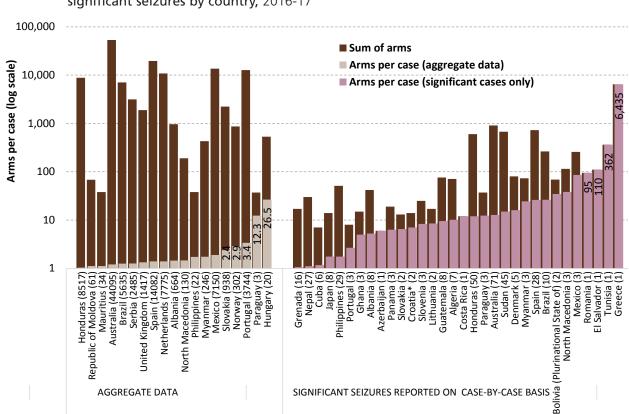
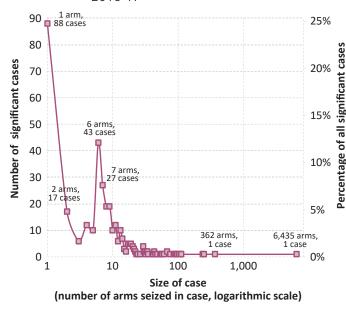


FIG. 3 Average number of arms seized per seizure case, based on total seizures and based on significant seizures by country, 2016-17

Source: UNODC IAFQ

^{*} In addition, Croatia reported a third case involving only explosives. Note: Number in brackets indicates the number of seizure cases.

FIG. 4 Distribution of significant seizure cases by number of arms seized, 2016-17



Source: UNODC IAFQ

of cases (see Figure 4). It should be noted that the spike in the number of cases of seizures of 6 or 7 arms is likely driven by the fact that the presence of more than 5 arms was a suggested criterion (among others in the questionnaire) for the designation of a seizure case as "significant".

Criteria other than the mere number of seized arms were also taken into account by countries. For example, all the significant cases reported by Japan were linked to organized crime groups (Boryokudan). Albania included the

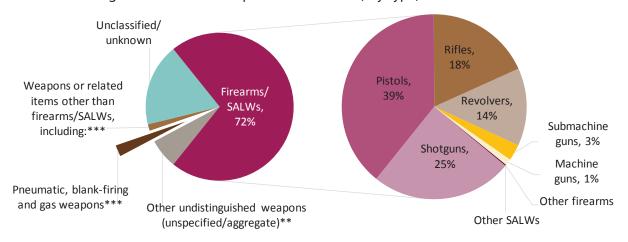
considerable value in the black market of illicit items among the characteristics defining a "significant" case (along with the involvement of organized crime groups and the international trafficking of arms).4 Other criteria which were explicitly mentioned for considering seizures as significant included the international dimension and the nature of the arms involved.

Types of firearms seized

For most countries where any seizure data were available, a breakdown of the seizures by type was also available. The distribution by type yields insights into the nature of the illicit firearms market as well as firearms used for criminal purposes in the corresponding countries. Combined with additional complementary data such as crime statistics or homicide data, the information on firearms seizures by type of firearms can provide meaningful insights on the criminological context of the seizures and represent a valuable investigative lead for law enforcement authorities to better gear and prioritize their actions.

Even if reported seizures capture only a small subset of seized arms, they represent a cross-section of all seized arms. Hence, breakdowns of reported seizures by type of arm (expressed as percentages for each type) may still capture the distribution of arms seized overall in the given country to the extent the subset is representative of the whole. Moreover, such distributions are not subject to the variability in the magnitude of seized quantities across countries, which is influenced by many factors, including comprehensiveness of coverage but also the size of reporting country. Thus such breakdowns provide meaningful insight into the universe of seized arms and also lend them-

FIG. 5 Average distribution* of reported seized arms, by type, 2016-17



^{*}Simple average based on data for 81 countries.

Note: Percentages on the right hand side are renormalized so that firearms/SALWs add up to 100%

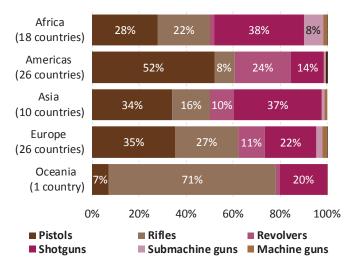
Source: UNODC IAFQ.

Some of the items seized by Albania, alongside firearms, included large quantities of cannabis, vehicles and cash.

^{**} Includes weapons reported under "Other" without sufficient information to allow further classification; some of these weapons may be firearms or SALWs.

^{***} For some countries, the reported seizure data included weapons other than firearms/SALWs; however data on such weapons were not explicitly requested by the questionnaire. Hence the share of such weapons is subject to variations in the reporting practice across countries

FIG. 6 Average distributions* of seized firearms/SALWs by type, according to region, 2016-17



^{*} Simple averages, adjusted for any firearms/SALWs which could not be classified and quantified into the respective category (including weapons whose type was unknown, not reported, or reported under "Other" without sufficient information to allow further classification) and weapons other than firearms/SALWS.

Sources: UNODC IAFQ and other official sources.

selves better to aggregations at regional and global level, in that they are less prone to the comparability issues inherent in the absolute values.

In single countries, pistols tend to be, on average, the most widely seized type of firearm. This pattern is most pronounced in the Americas, where handguns generally (pistols and revolvers) are conspicuous (see Figure 6). Shotguns emerge most prominently in Africa and in Asia, while rifles consistently made up a non-negligible share of seizures in all regions. The types of arms seized in Europe were relatively diversified, including a significant proportion of weapons other than firearms or SALWs, in particular pneumatic, blank-firing and gas weapons. This may be indicative of the relative importance in this region of conversion of such weapons into illicit firearms.

Some of these regional patterns are brought into focus by an examination of the highest proportions of specific types of firearm reported as seized at country level (based on data for 2016-17). This confirms the prominence of handguns in the Americas, with some Caribbean countries registering unusually high proportions of pistols, and other

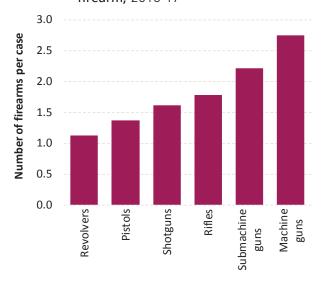
- 5 See Regional Annex.
- 6 While the main focus of the study is on firearms/ SALWs, some countries also reported on other categories of arms, such as pneumatic, blank-firing and gas weapons. It largely depends on national legislation whether these items are considered as firearms or not. However, for the purpose of the study, only weapons falling under the definition of the UN Firearms Protocol and the 1997 UN Panel of Governmental Expert on Small Arms were considered as firearms/SALWs. Given that there are documented cases where some of these other weapons were subject to conversion and turned into firearm, the study nonetheless reflects these types of arms and analyses the received data.

countries in Latin America registering high proportions of revolvers. Some countries in Southern Europe (Albania, Croatia, Serbia, Slovenia) seized high proportions of rifles, while some Eastern European countries (Hungary, Ukraine), Northern European countries (Denmark, Norway, Sweden), Croatia and the Netherlands stood out in terms of the proportions of machine or submachine guns.⁷

Shotguns were most conspicuous in African countries (Algeria, Burkina Faso, Togo, Tunisia); in addition, a high proportion of shotguns was registered in Greece, driven by a single seizure of 6,404 shotguns intended for the Democratic Republic of the Congo. Moreover, high proportions of high-powered arms could also be observed, albeit in a sporadic fashion, in some African countries, such as rifles in Kenya and Libya and machine guns in Tunisia.⁸

When considering instances of a pronounced presence of a specific type of firearm among seizures in a given country, it is also useful to bear in mind the different kinds of

FIG. 7 Average number of firearms of a given type typically seized* by customs in a single case** (excluding cases with atypical very large numbers of firearms), according to specific type of firearm, 2016-17

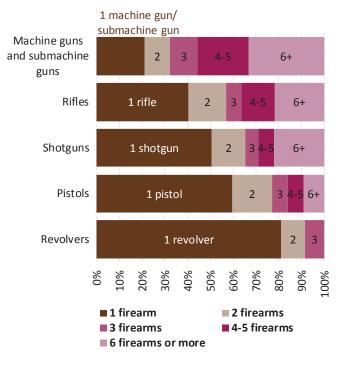


- * Given that some isolated seizures of large numbers of firearms were recorded, extreme values were excluded in the computation of the averages. These values are more representative of seizures usually made on a regular basis. The extreme values were determined on the basis of cases between the 2nd and 98th percentile (trimmed means).
- ** Only cases in which at least one firearm of the respective type were seized are considered.

Source: World Customs Organization.

- 7 These proportions were notable in comparison with other countries; however in each of the mentioned countries the proportion of machine guns or submachine guns (separately) did not exceed 16 per cent of the total arms seized in that country over 2016-17.
- 8 See Regional Annex for illustrations of the national distributions of seized arms by type.

FIG. 8 Firearms seized in typical^a customs seizure cases, by sizeb of seizure case, (excluding cases with atypical very large numbers of firearms), 2016-17



^a Size is measured as the number of firearms of the given specific type seized in the corresponding case.

Source: World Customs Organization.

activity that are usually associated with specific types of firearms. For example, shotguns are ideal for use against small, fast-moving targets, which renders them useful for hunting—although they are also used for law enforcement and military purposes. Hunting rifles also exist, while other kinds of rifles, as well as machine guns, are designed for military use. Handguns (pistols and revolvers) are easy to conceal and to manoeuvre at close quarters; hence they are frequently used in the commission of violent crime. Submachine guns are typically used by military or law enforcement agencies.

There appear to be differences across the types of seized firearms also in relation to the quantities in which they are typically seized. Such patterns can be observed from seizure cases made by customs authorities. Similarly to seizures in general (within or across borders), the great majority of seizure cases at the border involve one single arm, with a few cases involving large quantities of arms. However, based on all customs seizures recorded in the World Customs Organization's Customs Enforcement Network (CEN) database, and setting aside some isolated, very large seizures (notably of rifles), a pattern emerges which suggests that, despite the fact that the more highpowered weapons such as machine guns and submachine guns are seized in smaller numbers overall, in instances when they are seized they typically come in larger quantities (see Figure 7).

More detailed breakdowns confirm these differences across types of firearms and the general progression from handguns on the one hand to machine guns and submachine guns on the other. In terms of the number of instances, for example, only 11 per cent of seizure cases of revolvers—on one extreme—involved more than one such firearm at a time, compared with 21 per cent in the case of shotguns and—at the other extreme—almost one half in the case of machine guns and submachine guns. This pattern is amplified in terms of the number of firearms seized (see Figure 8).

Assuming that seizures reflect the pattern of underlying trafficking, these data suggest that while machine guns and submachine guns may be involved in a small percentage of trafficking cases, they are more likely to be subject to cross-border, well organized and larger trafficking operations. At the same time, handguns may be more likely to be carried for personal use (licit or illicit).9

Some cross-border cases of seizures of rifles were exceptionally large, indicating that the transnational trafficking of rifles may involve few cases but of very large quantities, much larger than other types of arms. Given that rifles may be used in conflict situations, the exceptionally large seizures may indicate rifle trafficking linked to conflict areas.

Parts and components and ammunition

Parts and components of firearms are also subject to international control; not only can they be used to replace elements of firearms, but also to (illegally) modify weapons and even to assemble firearms in their entirety. Parts and components can also be trafficked and hence seized.

The United Nations Firearms Protocol defines parts and components as "any element or replacement element specifically designed for a firearm and essential to its operation, including a barrel, frame or receiver, slide or cylinder, bolt or breech block, and any device designed or adapted to diminish the sound caused by firing a firearm".

Parts and components, being smaller than firearms, may be easier to traffic and conceal. Moreover, there are frequently discrepancies across countries in terms of the legislation regulating parts and components; in particular,

^b Isolated cases of a very large size were excluded; these were defined as cases with a size above the 98th percentile for the corresponding specific type of firearm.

In many countries, machine guns, submachine guns and certain types of rifles are not available in the legal market for civilian use. Hence, seizures of such arms (whether domestic or of a cross-border nature) are in general less likely to be seized from their legitimate owner and more likely to be linked to criminal offences, including illicit possession and illicit firearms trafficking - independently of the number of

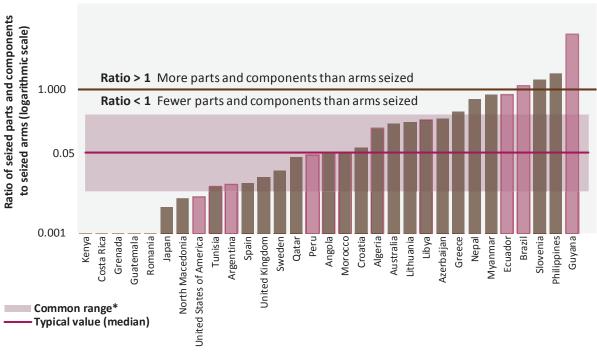


FIG. 9 Seizures of parts and components in relation to seizures of arms, by country, 2017

* 25th -75th percentile (interquartile range) Source: UNODC IAFQ.

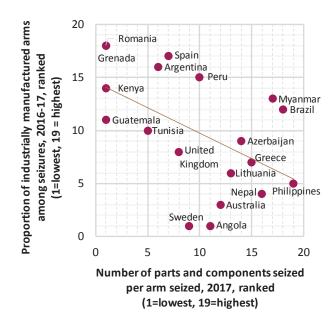
some parts and components may be subject to restrictions in one country but not another. This leads to the potential for "grey trafficking" whereby a legal purchase in one country can be used to illegally supply parts and components in another, with a reduced risk of drawing the attention of law enforcement, including through the use of parcel deliveries and international online purchases.

Data on total seizures of parts and components for 2016 or 2017 (or both years) were available for 33 countries, amounting to approximately 19,000 parts and components in 2016 and 15,000 parts and components in 2017.

In order to place these figures in perspective, it is useful to relate them to the number of arms seized in the corresponding country. For most countries which provided these data, far fewer parts and components were seized than entire arms - typically around 5 per cent of the number of arms seized.

The data on parts and components corroborate, to a certain degree, an overall link between the prevalence of parts and components and their use in assembling, adapting or otherwise manufacturing firearms. Data from countries that reported on both parts and components and on the condition of seized arms, show that some of the highest levels of seizures of parts and components (relative to the numbers of arms seized) can go along with significant levels of illicit manufacture—including illicit "craft" manufacture (e.g. in Nepal¹⁰) and assembly—displayed by

FIG. 10.... Association between seizures of parts and components and condition of seized arms, 2017



Source: UNODC IAFQ.

lower proportions of arms seized in "factory condition". In other words, it appears that in countries with a relatively high incidence of illicit manufacture or adaptation, parts and components are more frequently seized.

The United Nations Firearms Protocol defines "ammunition" as "the complete round or its components, including cartridge cases, primers, propellant powder, bullets or projectiles, that are used in a firearm, provided that those

¹⁰ Small Arms Survey, The Highway Routes - Small Arms Smuggling in Eastern Nepal, Issue Brief No. 4, November 2014.

FIG. 11.... Seizures of ammunition in relation to seizures of arms, by country, 2017

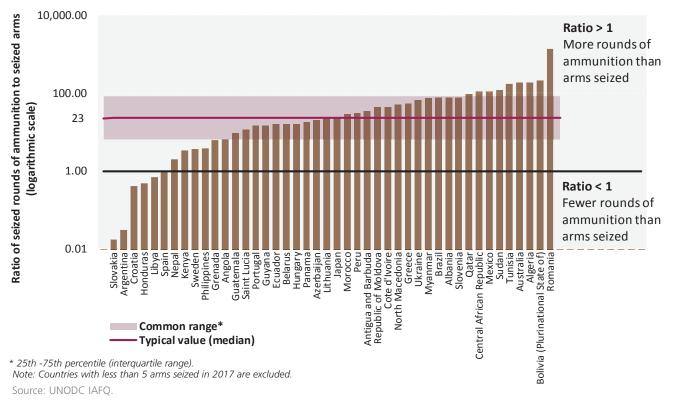
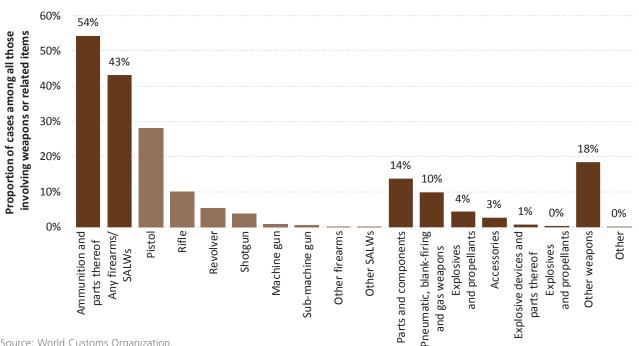


FIG. 12.... Relative frequency of seizures of weapons and related items by customs, by type, 2016-17



Source: World Customs Organization

components are themselves subject to authorization in the respective State Party".

The international control measures on ammunition are generally weaker than the ones applicable to firearms. However, while firearms are durable goods, ammunition is expendable and hence, in a sense, more prone to trafficking, as its ongoing use immediately creates a need for it to be replaced.

Data on seizures of ammunition in 2016 or 2017 (or both years) were available for 45 countries, amounting to a total of 3.0 million rounds in 2016 and 7.9 million rounds in 2017. For a single country, the number of rounds of ammunition recovered in 2017 ranged from less than 10 to more than 5 million, but typically stood at around 23 rounds of ammunition per arm seized (see Figure 11).

Data from the World Customs Organization enable a comparison of the extent of illicit movements of ammunition as opposed to firearms. Among all Customs seizure cases made in 2016-17 involving weapons or related items, and recorded in the Customs Enforcement Network database, 54 per cent involved ammunition or parts thereof, while 43 per cent involved firearms/SALWs and 14 per cent involved parts and components. Some seizures involved more than one element.

Chapter overview This chapter delves deeper into

This chapter delves deeper into seizure-related data, analysing the legal justifications employed for firearms seizures and the broader criminal context in which seizures take place. Data on the legal justification used by law enforcement authorities to seize firearms and the subsequent criminal context that emerges from the investigation suggest that the great majority of firearms are first stopped on the ground of illegal possession but trafficking is frequently recorded at a later stage, as the criminal context in which seizures took place. In fact, only around one half of arms known or suspected to have been seized in a trafficking context were typically seized with this legal justification.

When a firearm is seized, the authority that carries out the seizure – usually a law enforcement agency – is required to provide a legal justification for their action. Looking at national averages, the most frequently used justification is illicit possession of a firearm, accounting for nearly twothirds of seizures, while illicit firearms trafficking is the stated reason in some 9 per cent of cases. It is probable, however, that the legal justifications mainly reflect considerations other than the full context of the seizure. Illicit possession can be used to take the firearm out of circulation quickly and efficiently while the different crimes associated with the seized firearms ("criminal context") may come to light later. The majority of the crimes that emerge in the criminal context still relate to firearms (mainly illicit possession and trafficking) but there are also other crimes that occur in relation to seized firearms such as violent crime and drug trafficking.

Establishing the criminal context of a seizure through statistics is challenging. Data provided to UNODC are based on suspected offences in aggregated form. These data indicate that firearms trafficking is more prevalent as the context of crime than what the legal justification used for the seizures alone would imply, and that the share of arms seized in the context of trafficking was, on average, 19 per cent. Moreover, the data also highlight the regional differences with regard to the other forms of crime committed in the context of arms not associated with offences related to firearm regulations. Among these offences, for example, violent crime was most prominent in Africa and Latin America and the Caribbean, while in Europe, drug trafficking was assessed more frequently than violent crime.

Conflict is also related to firearms trafficking because situations of armed conflict may weaken the rule of law and impede the authorities' ability to manage firearm stockpiles and enforce regulations, therefore enhancing the illicit supply of firearms.

CHAPTER 2

FROM SEIZURES TO TRAFFICKING



Firearms can enter the illicit market in several ways. As most trafficked firearms are produced legally, the illicit chain starts when firearms undergo transfers or movements in violation of national or international laws and regulations. This is called the 'point of diversion' and can happen in numerous ways. Firearms may be lost by or stolen from the legitimate owners, who may have been, for example, individuals, law enforcement or defence forces, private security companies or international peacekeeping forces. Legitimate owners may also have sold their firearm illicitly, there may be unauthorized artisanal firearms manufacturing in some countries, firearms could have been illegally modified, or their unique markings could have been altered, rendering the firearms illicit.

The chapter looks at the unique markings of firearms, as mandated by international regulations. These markings are crucial for enabling identification and tracing of firearms, and in spite of well-known efforts by traffickers to tamper with the markings, the vast majority of seized firearms – some 85 per cent - are indeed appropriately marked. Moreover, out of these seized and marked firearms, nearly 90 per cent were found to have been industrially manufactured, indicating that illicit firearms manufacture – although acutely present in some locations – remains a relatively limited phenomenon.

The chapter also looks at the various ways in which firearms enter the illicit markets, focusing on diversion from domestic sources in addition to trafficking from abroad. While it is difficult to determine whether diversion took place in the country of seizure or another country, some evidence suggests that a significant share of seized illicit firearms are diverted in the same country where they were seized. This seems to hold true also for countries with restrictive laws related to the range of available firearms and the ease of obtaining them. The levels of legally regulated firearms in a given country may also influence how the black market for firearms is supplied.

The chapter closes with an analysis of the role of licit markets in firearms trafficking, homing in on prominent countries for firearms manufacturing. Illicit firearms flows are complex and do not necessarily follow the licit flows. This means that the country of origin of licit firearms – the manufacturing country - and the country where the diversion (where the illicit origin starts) and seizures take place often do not overlap. This is clearly seen by the diversity of regions that are identified as manufacturing and as point of illicit origin. Europe is reported as the main region of manufacturing of seizures made across the world; the Americas is the continent most reported as illicit origin. Firearms are durable goods and their circulation before and after diversion to the black market can and often do involve several transfers.

Why is it seized: legal justification and criminal context

In order to understand the context and the nature of firearms seizures, it is helpful to look at the legal justification used to justify the seizures as well as the criminal offences associated with the seizures. The legal justification may provide partial information on the criminal context of the seizures, but this may not capture the entire picture, because authorities may use justifications which are easier to prove at the time of seizing the firearms. For example, it is relatively easy to establish the offence of illicit possession—that is, that a firearm is held by somebody who is not its legally registered owner at the time of seizure—or, that the firearm was used to commit another criminal offence (for example, a homicide). Illicit firearms may come to light in an incidental fashion in the context of a wide variety of criminal offences; in such cases, the offence of trafficking is often considered a secondary (predicate) offence and is particularly difficult to prove when it occurred prior to the principal offence.

In such a context, offences such as illicit possession are quick to establish and can justify the immediate seizure while obviating the need for a parallel investigation into the specific offence of trafficking. The information on the illicit origin of the firearm may initially only be based on suspicions and the relevant evidence may emerge, if at all, only at a later stage of the process. Hence legal justifications for seizures and suspected offences related to seizures describe two related but different aspects of the context of seizures.

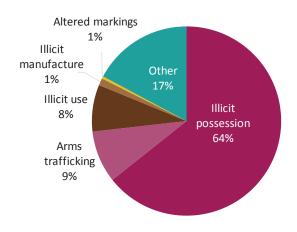
Data provided by 53 countries show these different aspects. Possession is typically the most prevalent justification used by national authorities to seize firearms, but in terms of suspected offences a different scenario emerges. This information suggests that while firearms may be seized on given legal grounds, the suspected offences point to an overlap between these firearms and other, additional forms of criminality. Due to the fact that the data on criminal context are based on suspected offences, the extent of this link is however difficult to assess in quantitative terms.

Legal justification

Forty-eight countries provided information about the legal grounds for seizures of arms. On average, countries tend to seize the majority of arms for offences related to illicit possession (64 per cent), followed by trafficking and illicit use. Other specific firearm-related offences, namely altered

¹ Forty-eight countries provided data on legal justification and thirty-six countries provided data on other suspected offences. Some countries are included among both the 48 and the 36 because they reported on both types of data.

FIG. 1 Average distribution* in a single country of seized arms, by legal justification, 2016-17



Simple average of data 48 countries, adjusted for seizures whose legal justification was unknown or unclassified

Source: UNODC IAFQ.

markings and illicit manufacture, are typically much less frequent in national seizures (on average), as measured in terms of number of arms seized. This can be the results of different dynamics.

As stated earlier, firearms seizures do not point automatically to illicit trafficking, unless the firearms were seized at the border or in any other context that establishes a clear link to a trafficking case. Illegal possession may be easier to prove than trafficking and is the offence most used by law enforcement to justify seizures. Proving the offence of

firearms trafficking requires specific examinations, including the tracing of the firearm (see Section: SDG indicator 16.4.2 and tracing) and additional investigations which take more time and may involve other authorities. The charge of illicit possession may be the easiest and fastest way to take firearms out of circulation, even if it may appear clear from additional circumstances, that the firearm(s) had been trafficked.

The predominance of illicit possession as legal grounds for seizure may be influenced in part by practical considerations, such as the relative ease of proving such an offence for law enforcement agencies at the time of issuance of the seizure order, as well as issues of perceived priority and resource allocation.

Another complementary explanation relates to the size of seizures. Seizures of one or a few firearms may more likely be related to illegal possession than to trafficking. So the fact that the largest portion of firearms are seized for illicit possession may be linked to the prominence of small seizures.

There is, however, some regional variation. The majority of countries in Europe reported illegal possession as the predominant justification for seizures, but this might relate to the large number of cases with single arms seized. But there are noticeable departures from this general pattern showing the possible different nature of seizures in single countries. A large share of firearms seized on the grounds of trafficking was reported by Hungary - 127 arms out of a total of 337 - and Greece, with a very large single seizure

International and national definitions of firearms trafficking

The United Nations Firearms Protocol, in its Article 3 (e), defines "illicit trafficking" as "the import, export, acquisition, sale, delivery, movement or transfer of firearms, their parts and components, and ammunition from or across the territory of one State Party to that of another State Party if any one of the States Parties concerned does not authorize it in accordance with the terms of this Protocol or if the firearms are not marked in accordance with article 8 of this Protocol". This definition contains two crucial elements: (1) a transnational character, and (2) a violation of a regulatory measure (i.e. lacking authorization or having improper markings). The related offences defined by the Protocol are intended to increase transparency associated with the cross-border movement of firearms and related items.^a

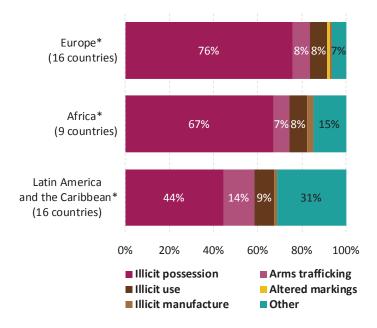
National definitions of firearms trafficking of State parties and non-State parties to the Firearms Protocol may however vary, both in terms of nomenclature and in terms of the punishable behaviour. Some

national legislation may include in one single offence the illicit nature of both domestic and transnational transfers. Countries with such legislation may not be able to distinguish seizures related to transnational arms trafficking from those related to domestic illicit circulation.

Based on the information provided by Member States, it seems that this type of legislation is guite common. Only 6 of the 53 countries that provided information regarding their national definitions of firearms trafficking do not include the transfer or movement of arms within national borders in their firearms trafficking legislation.

It should also be noted that not all countries have established firearms trafficking as a criminal offence, and the relevant violation may have the character of a customs infringement, such as "illegal importation", "smuggling", or "contraband".

FIG. 2 Average national distributions* of seized arms by legal justification, according to region, 2016-17



^{*} Simple averages adjusted for seizures whose legal justification was unknown or unclassified.

Source: UNODC IAFQ.

of trafficking of 6,435 firearms (of which 6,404 were shotguns).² Sweden for example, reported a relatively high proportion of arms (284 out of 1,769 during the period of 2016-17) seized on the grounds of alterations in the firearm markings.³

Illicit manufacture as legal grounds for seizure was most marked – even if still very small in relative terms - in Africa, driven mainly by Algeria, which reported 265 arms seized in 2016-17 on these grounds (18 per cent of the total arms seized in these two years) and Kenya (424 arms out of 5,264 seized in 2016). This is in keeping with the known prevalence of artisanal manufacture of firearms in this region. Burkina Faso also seized significant numbers of artisanally manufactured arms, but data on legal justification were not provided.

On the other hand, trafficking as legal justification was most marked in countries in Latin America and the Caribbean. For example, in the Plurinational State of Bolivia, 69 arms were seized on these grounds in 2017, out of a total of 152. In the same region, Jamaica registered the largest proportion for illicit manufacture as a legal justification of seizures: all of the 111 seized "homemade" arms in 2016-17 (out of a total of 1,511) were seized with "illicit manufacture" as a legal justification (see also Figure 8).

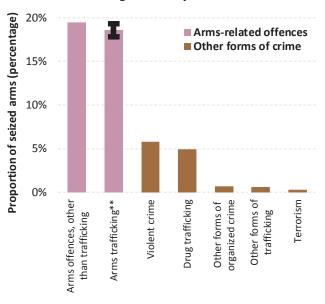
Criminal context

Illicitly sourced or trafficked firearms may be seized in the context of criminal activities which are not related to firearms, such as drug trafficking, homicides or other crimes.

Among the 36 countries that provided information on arms seized in the context of offences not related to firearm regulations, a relatively small proportion of firearms were seized in relation to drugs (from 0 per cent to 36 per cent) and violent crime (from 0 per cent to 21 per cent, with only one country reaching 79 per cent), with a negligible percentage related to other forms of organized crime, and terrorism. Still the highest percentage of firearms are seized in connection to suspected firearms-related offences (possession and trafficking). These data confirm that there is a connection between illegal activities related to firearms and other forms of crime, but they do not define the magnitude of this connection because of possible underreporting of suspicions based on observed circumstances and the fact that the starting point of the analysis is the firearms seizures. More connections could potentially be found if the starting point were drug trafficking or other crimes.

While the average percentage of arms seized related to forms of crime not connected to arms related offences is low, there are regional variations in the different kinds of crime (other than arms offences) and in the national shares of seizures related to other forms of crime. As a context for arms seizures, violent crime was on average most pronounced in Latin America and the Caribbean and in

FIG. 3 Criminal context of seizures, measured by arms seized in context as average proportion* of arms seized in a single country, 2016-17



^{*} Simple averages, based on data for 36 countries.

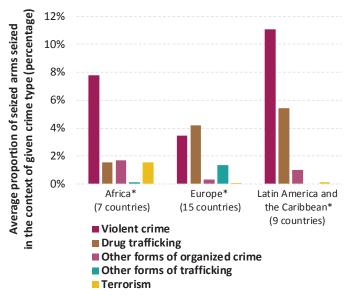
Source: UNODC IAFQ.

² This seizure was made by the Hellenic Coast Guard in Crete, from containers intended for the Democratic Republic of the Congo.

³ The purpose of the markings is to enable identification, accountable weapons management and tracing.

^{**} Error bars reflect uncertainty due to potential overlaps in recording of trafficking as a legal justification and as a criminal context.

FIG. 4 Other forms of crime (not connected to firearms offences) emerging in the context of arms seizures, measured by arms seized as proportion of overall seizures in a given country (averages by region), 2016-17



^{*} Simple averages.

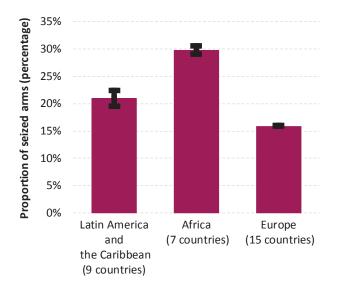
Source: UNODC IAFQ.

Africa. This is in line with the relatively high levels of violent deaths (conflict-related or otherwise), in particular intentional homicide and specifically firearm-related homicides, known to affect these regions. 4 Drug trafficking was also prominent in Latin America and the Caribbean, where the links between this phenomenon and violence are also well-documented.5,6

Guatemala, for example, reported that, out of 9,626 total arms seized in 2016-17, more than three quarters (7,641) were seized in the context of violent crime, 250 in the context of drug trafficking and 500 in the context of other forms of organized crime. In Burundi, although total seizures were low (235 arms during 2016-17), around a fifth were seized in the context of a violent crime, while the analogous share was around 15 per cent in Algeria and Morocco. In Tunisia, out of 1,570 arms seized in 2016-17, 11 per cent were linked to terrorism.

In Europe, notable quantities of arms were seized in the context of drug trafficking by Portugal (668 during 2016-17), Spain (538) and, in relative terms, Albania (146 out of 963). Denmark and Sweden were among the countries in Europe registering the highest proportions of seized arms linked to violent crime (13 per cent in Denmark and 8 per cent in Sweden).

FIG. 5 Arms seized in the context (confirmed or suspected) of trafficking, as proportion* of overall seizures in a given country (averages by region), 2016-17



^{*} Based on data for 36 countries (simple averages).

Note: Error bars reflect uncertainty due to potential overlaps in recording of trafficking as a legal justification and as a criminal context.

Source: UNODC IAFQ.

The data on criminal context suggest that more serious arms offences, such as arms trafficking, are more prevalent than would appear from the legal justification used as grounds for seizure. Indeed, taking into account both kinds of reporting linking arms to trafficking (suspected criminal context as well as legal justification), the data suggest that the proportion of arms seized which could be placed in the context of trafficking was, in most countries, around double that which the legal justification alone would indicate (on average, 19 per cent in each country). In other words, only around one half of arms known or suspected to have been seized in a trafficking context were typically seized on these grounds as a legal justification.

Africa registered the highest average proportions of arms seized and linked to trafficking, with notable proportions reported by Sudan, Tunisia, Algeria and Kenya. In Europe, the highest percentages were registered by Romania, North Macedonia and Greece, each of which reported more than half of the arms seized in 2016-17 being linked to firearms trafficking. However, the quantity of arms seized was small in Romania (85), while the high proportion in Greece was attributable to a single large seizure.

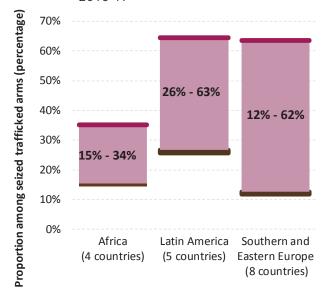
The seizure of a firearm is the first step of a criminal justice process which later includes investigation, prosecution and possible conviction. The legal justification which forms the basis of a seizure does not necessarily correspond to the final charges and convictions resulting from the seizures. Placing the legal justification of firearms trafficking in relation to the actual extent of firearms which had

UNODC, Global Study on Homicide, 2019.

UNODC, Global Study on Homicide, 2019; UNODC, World Drug Report, 2016.

UNODC, World Drug Report, 2016.

FIG. 6 Proportion of arms seized on the basis of trafficking as a legal justification, among trafficked arms, 2016-17



- Upper end of range
- Proportion (range) among seized trafficked arms for which "trafficking" was also the legal basis of seizure
 Lower end of range

Source: UNODC IAFQ.

been trafficked, gives an initial indication of the extent to which trafficking of firearms is detected and recognized at the earliest stage of the criminal justice process. Based on the available data, only about one half of arms which could be linked to trafficking were already recognized as such in terms of legal justification at the point of seizure. However, given the reliance on suspicions of criminal context, and on such suspicions being captured in the recording and reporting, the available data on criminal context likely underestimate the de facto levels of trafficking in the context of seizures; consequently, the share of one half is likely optimistic and should be taken as a lower bound.

An independent way to estimate this share is to assume, as a worst case scenario, that all seized arms had been trafficked, with the exception of those seized from their legitimate owners (as these arms had presumably not been trafficked). This "pessimistic" approach is biased in the opposite direction but, when combined with the data on known and suspected cases of trafficking, allows to derive the proportion as a range. This approach would indicate that, in Africa (based on data from 4 countries), on average 15-32 per cent of arms that were trafficked were seized as such. In other words, less than one third of trafficked arms were indeed seized for trafficking (as a legal justification); similarly, the proportion is estimated to range between 26 and 63 per cent in Latin America (based on 5 countries) and 12 to 63 per cent in the case of Southern and Eastern Europe (based on 8 countries).

Understanding the black market for firearms

Supply and demand of illicitly sourced firearms

The demand for illicitly sourced and trafficked firearms is linked to a multitude of factors which revolve around three main elements: crime, conflict and speculation. Firearms can also have a value by themselves and be used as monetary value in exchange for commodities from other illicit markets such as drugs. Each country may have a different factor or a combination of factors that drive demand. In certain countries, crime may be the primary driver as criminals opt to resort to firearms which are not accessible to them through legal means — for example, because their profile or criminal record precludes them from possessing the weapon of choice, or because such a weapon is not freely available to civilians in the country.

The intended illicit use of firearms by criminals may vary, with perpetration of violent crime perhaps the most obvious. Firearms become an instrument of violent crime in different ways, mainly threatening and perpetrating violence that result in homicide, assaults, robberies, extortion or kidnapping. Firearms are instrumental to organized crime and gangs as they can convey the sense of threat and power which allow the protection of the group, the territory and eventually their illicit markets. In some cases, firearms help organized crime groups and gangs to display extreme brutality as a message intended to catch the attention of the general public as well as state authorities.

Trafficked firearms can also be instrumental to violence perpetrated for political or ideological reasons, in particular insurgency and terrorism. Non-state armed groups which exercise de facto control of a certain territory may rely on diverted or trafficked firearms as tools for "enforcement". Certain groups of a legitimate nature may also resort to firearms obtained indiscriminately, such as community-based "vigilante groups". The various forms of armed conflict, including civil war and armed resistance, create a demand for firearms which may be met through trafficking.

Diversion of legally manufactured firearms to illegal markets appears to be a major contributor driving supply of illicit firearms. The licit holdings of firearms by the civilian population are susceptible to being diverted into the black market, from where they can become instruments of illegal activity. Loopholes in legislation and weak rule of law may facilitate diversion. Armed conflict may drive demand but can also drive supply, in that it may bring about a breakdown in the rule of law and undermine the ability of authorities to manage state stockpiles and enforce

⁷ See subsections on "Condition of seized firearms and grey areas" and "Evidence on diversion".

regulations on civilian firearms which may be more easily diverted into illicit markets. In post-conflict scenarios, the accumulation of weapons over the course of the preceding conflict may also result in a pool of firearms outside of the legal control mechanisms which can increase supply.

Independently of the presence of conflict, holdings of firearms by military and law enforcement agencies can constitute a risk of diversion and can increase supply if the adequate measures are not in place to ensure proper inventory management, storage, transportation and disposal and to safeguard against leakage through theft or corruption.

Modalities for firearms to enter the black market

Firearms trafficking presents distinct features as compared to other commodities. Some forms of trafficking, such as the trafficking of drugs which are under the most restrictive regulation in the international drug conventions (such as cocaine and heroin), have to do with the movement and trade of commodities which are illicitly sourced; for such commodities, the trafficking chain typically starts at the place of cultivation or manufacture. The licit production of these substances is typically insignificant in comparison with the amounts illicitly manufactured.

In contrast, the vast majority of firearms, and indeed of trafficked firearms, are manufactured legally by licensed manufacturers.8 Aside from certain exceptions which account for a minority of firearms of illicit origin, the illicit chain starts at the moment when the legal chain is diverted into the illegal chain - that is, when transfers or movement occur in violation of national laws or international provisions.

In order to understand how the black market for firearms is supplied, it thus becomes crucial to understand the point at which firearms cross over from the licit sphere to the illicit sphere; this is referred to as the "point of diversion." Once a firearm enters the illicit market, it can in principle continue to be trafficked indefinitely, unless taken out of circulation; hence diversion is only the beginning of the trafficking chain.

The transition from the licit sphere into the black market can occur at various points of the firearm's life cycle: domestic or international transfer and transit, storage, possession and use or final disposal. There are various modalities for diversion to happen.

Many firearms seized from illicit circulation are recorded as lost, or stolen from their legitimate holder (who may be a private individual, national law enforcement or defence forces, or personnel of private security companies, et cetera).

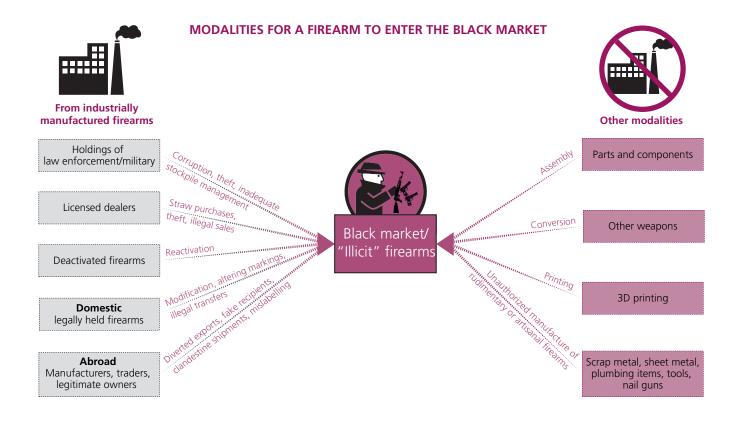
This is confirmed, for example, by the presence of markings found on seized firearms - see next section, "Condition of seized firearms and grey areas".

Firearms may be stolen from an unaware legitimate holder, but it is also possible for the legitimate holder to sell their firearm to a buyer in violation of laws governing transfers, licensing and registration, as the national legislation may require. Indeed, one technique which has been documented for criminals to acquire firearms is that of "straw purchases",9 whereby an individual with a clean criminal record buys a firearm from a licensed outlet, quite possibly without violating any laws in so doing, precisely with the intention of selling it either on the black market (in the same country or not) or to a pre-determined buyer who would otherwise not be eligible to own such a firearm.

In conflict and post-conflict countries, the accumulation of legal stockpiles of weapons may create the potential for firearms to reach the hands of non-state armed groups, other criminal groups or even the general population, especially if that very conflict weakens the ability of the state infrastructure to manage those stockpiles properly. Another scenario, of crucial importance, is that of a firearm which is legally acquired or held in one country and which is then transferred illegally to another country, circumventing the applicable regulations on transfers, either by simply concealing and transporting the firearms across borders or by the use of falsified or misleading declarations, fake and decoy recipients or other methods. In such cases, the point of diversion can arguably be considered to be the international cross-border movement itself rather than a specific country. Moreover, this modality is especially relevant in case of source countries which have less stringent restrictions on the licit market than the destination countries.

In some countries, firearms may be manufactured in artisanal settings, which may be an avenue for firearms to enter the illicit market. There are also indirect ways in which a firearm may illicitly come into existence. Some weapons, such as gas pistols, may in some countries fall outside of the formal definition of a firearm and therefore not necessarily be subject to the same legal restrictions, but may at the same time easily lend themselves to conversion into a functioning firearm by any person with a modicum of skill. In some instances, it may be possible to reactivate a deactivated firearm, another modality resulting in a functional firearm which thereby enters the illicit sphere. It may also be possible to circumvent laws and regulations by buying various parts and components of firearms separately, potentially from different countries with different control regimes, in order to assemble complete firearms. There have also been known incidents of the use of 3-D printing to produce firearms, although the technology appears not to be sufficiently developed to yield reliable firearms yet.

See, for example: United States, Department of the Treasury, Bureau of Alcohol, Tobacco & Firearms, Following the Gun: Enforcing Federal Laws Against Firearms Traffickers, Department of the Treasury, Bureau of Alcohol, Tobacco & Firearms, June 2000.



Firearms can also be modified in ways which significantly change their functionality and features, and thereby potentially circumvent legal restrictions. For example, shortening the barrel of a shotgun makes it easier to conceal and use at close quarters, while the potential of a semi-automatic firearm for inflicting damage can be significantly increased by rendering it capable of automatic fire. Finally, the United Nations Firearms Protocol stipulates that the alteration or obliteration of markings meant to enable the identification, accountable management and tracing of the firearm is itself an offence and renders the firearm illicit even if it continues to be held by the person who originally acquired it through legal means.

Condition of seized firearms and grey areas

The majority of trafficked firearms are likely to have been legally manufactured and diverted after manufacture along national and international trafficking routes. Most of firearms seized by countries are uniquely marked so they are traceable. Among those that are not marked, seizures data suggest that there is regional variation on how traffickers conceal the firearms' provenance or source firearms outside of marked, legal production. In Latin America and the Caribbean, traffickers seem to use legally manufactured firearms and alter markings to hide their origin, while in Africa it is more likely than in other regions to find no markings on seized firearms, likely reflecting the importance of artisanal production in this region.

Firearms can be produced or modified in different ways. The majority of trafficked firearms are industrially manufactured, but seizures data show that there are some other methods used in clandestine production varying from firearms which are modified, converted, assembled, reactivated or artisanally manufactured. In some countries it is possible to note specific characteristics of concealing methods or illegal manufacturing, for example, artisanal manufacture is more common in parts of Asia and Africa.

Firearms can also be converted from other weapons such as those designed to only fire tear gas or even blanks as well as pneumatic ("air") weapons, which rely on air pressure (rather than an explosion) to convey motion to the projectile. Specific patterns in some countries suggest a geographical concentration of the different methods used to convert such weapons into firearms, most notably in Europe.

"Every firearm tells a story"

The identification and analysis of firearms and their ammunition can give an indication of their illicit nature and clues about specific modi operandi of criminals. With the right procedures it is possible for example to determine if firearms were discharged and used in crime; whether they were used to kill or injure a particular victim. Firearms that are not produced in an industrial manner and lack original marking and serial number, or those whose markings have been erased, are likely to have been illicitly manufactured or diverted to the illicit market at a certain point; but without a traceable mark, investigation on the nature of the firearms is more difficult.

The presence of markings helps to understand the history of firearms found in illegal markets. As per article 8 of the United Nations Firearms Protocol, States Parties which authorize manufacture of firearms are to "require unique marking providing the name of the manufacturer, the country or place of manufacture and the serial number, or maintain any alternative unique user-friendly marking with simple geometric symbols in combination with a numeric and/or alphanumeric code, permitting ready identification by all States of the country of manufacture". 10

Such markings are crucial to facilitate the identification and tracing of firearms and define points of vulnerability in the illegal market; however, criminals and traffickers sometimes attempt to obliterate such markings on industrially manufactured firearms or to render them unreadable-actions which States Parties are also required to criminalize. Moreover, in cases of illicitly manufactured firearms, including illicit artisanal manufacture, such markings are typically not present.

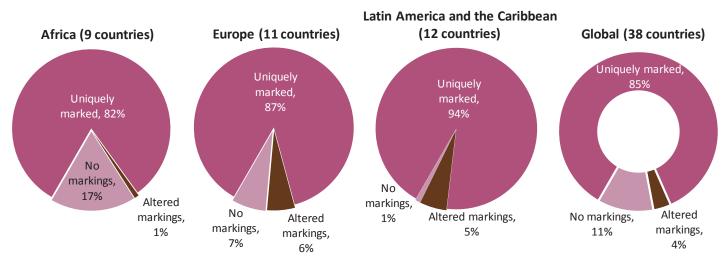
On average, 85 per cent of arms seized in a single country in 2016-17 were uniquely marked - reflecting the fact that the vast majority of firearms originate from industrial legal manufacture. Among those that were not uniquely marked, once more, regional variations could be observed in terms of the balance between firearms with altered markings and no markings at all. In Latin America and the Caribbean, arms with altered markings dominated the firearms that were not uniquely marked, driven mainly by the numbers reported by Argentina (9,980 arms with altered markings out of 43,321) and Brazil (896 out of 7,078). Altered markings were also significant in Europe:

Spain and Portugal were among the most prominent in the region, seizing respectively 2,322 and 1,275 arms with altered markings. However, in the United Kingdom, seized arms with no markings (622) outnumbered arms with altered markings (111). Arms with no markings at all were conspicuous in Africa, likely reflecting the importance of artisanal production in this region, and driven by the shares registered in Algeria, the Central African Republic and Ghana (although the seizures in Ghana were very small in absolute terms). Algeria also reported instances of artisanal firearms seized among significant cases, including artisanal hunting weapons.

There are several types of actors who may produce or adapt firearms outside of the legal industrial process. This includes hobbyists, gunsmiths and tribal groups who produce firearms for cultural reasons or for the purpose of hunting, as well as criminals and traffickers. Some research suggests that non-state armed groups operating in conflict and post-conflict zones rely mainly on professionally-manufactured small arms, while they may resort to their own production of light weapons and their ammunition.11

Some rudimentary arms can be produced by putting together commercially available parts which were not meant to be used to construct a firearm. In other cases, the starting point to illicitly obtain a firearm can be any of the following: a deactivated firearm; an "ordinary" firearm which is subsequently modified to increase its efficiency or capacity for damage; industrially manufactured parts and components of firearms which are illegally assembled; or other weapons which can be easily converted into firearms.

FIG. 7 Average national distributions of seized arms by marking status, global and by region, 2016-17



Notes: Simple averages of distributions. Adjusted for arms whose marking status was unknown or unclassified. Source: UNODC IAFQ

¹⁰ Other requirements are applicable in the case of importation of firearms and transfers from government stocks to civilian use.

¹¹ Small Arms Survey, Beyond State Control, Improvised and Craft-produced Small Arms and Light Weapons, 2018.

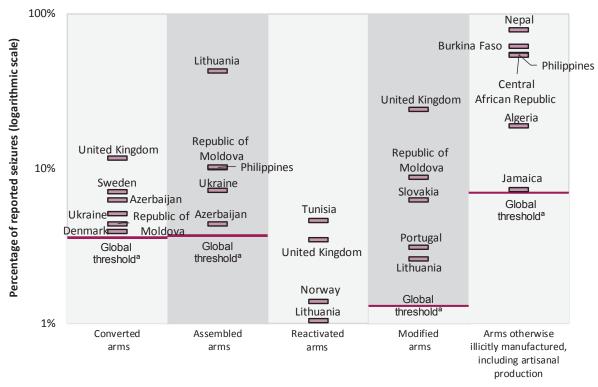


FIG. 8 Countries seizing notable proportions^a of arms other than industrially manufactured arms in factory condition, 2016-17

Source: UNODC IAFQ.

Based on 21 countries which gave a comprehensive breakdown of seizures according to this typology, on average 88 per cent of seized firearms at the national level were industrially manufactured in factory condition (with no signs of alteration or deactivation); the other categories (modified firearms; firearms which had been converted (from other kinds of weapon); firearms which had been assembled (from parts and components); reactivated firearms; or arms otherwise illicitly manufactured (including in artisanal settings) together accounted for an average of less than 15 per cent. However, the exceptions yield some insights into the modalities employed by criminals to obviate restrictions on firearms and the ways to acquire them.

An examination of the countries with unusually high proportions (compared to all countries in general – see Figure 8): of seized arms that were not industrially manufactured (in factory condition) shows that several countries in Europe, notably Northern Europe (Denmark, Lithuania, Norway, Sweden and the United Kingdom) have some specificities. The United Kingdom in particular was conspicuous in terms of the proportions of seized arms that were converted, reactivated and modified; this could reflect the relatively restrictive nature of laws and regulations in this country, which may spur individuals to resort to adaptations of firearms or conversions of other, more easily

accessible weapons. Lithuania identified the main type of trafficked firearms as semi-automatic pistols, mostly converted and/or reactivated. Sweden and Denmark reported significant proportions of arms converted from "starter pistols" and from "gas-/alarm pistols", respectively.

Ukraine registered significant proportions of assembled and converted arms. This corroborates other evidence of these two types of illicit manufacture in this country, including the discovery of conversion workshops catering mainly for criminals, and the detection in recent years of workshops specializing in the assembly of firearms from parts and components.¹²

Some countries in Africa registered high proportions of seized arms which were neither industrially manufactured nor produced from industrially manufactured weapons or components through techniques such as modification, conversion, reactivation and assembly of components. This reflects to a large extent the importance of artisanal production – including under licence in some countries - of firearms in this region.

^a A proportion was deemed notable if it was based on a total of at least 30 arms seized and exceeded a threshold calculated as the 90th percentile of the proportions from countries which reported a comprehensive breakdown.

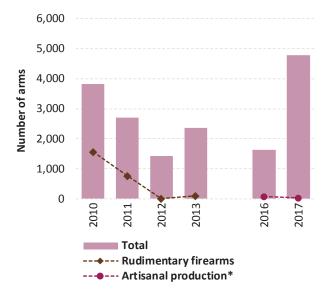
^b Includes ammunition and other items.

^c Mav include licensed artisanal manufacture.

^d Very few countries reported reactivated arms.

¹² Buscemi, F., Duquet, N., Golovko, E. & Woods, E. 'Illicit firearms proliferation in the EU periphery: The case of Ukraine', in Duquet, N. (Ed.), Triggering terror: Illicit gun markets and firearms acquisition of terrorist networks in Europe, Brussels: Flemish Peace Institute, 2018.

FIG. 9 Seizures of artisanal/rudimentary arms in comparison with total arms seizures in Peru, 2010-17



^{*} Includes all types of illicit manufacture other than conversion, assembly and reactivation. Does not include modified arms.

Note: No data were available for 2014 and 2015.

Source: UNODC IAFQ

Nepal also registered a high proportion of such firearms among its seizures, with some described as "homemade" pistols and typically seized individually (only one per instance). This is again in line with the documented prevalence of artisanal manufacture in this country. 13

Although countries in Latin America and the Caribbean were not particularly prominent (with the exception of Jamaica) in terms of the proportions of illicitly manufactured arms among seizures, several countries reported "armas hechizas" (rudimentary firearms) among their seizures, including Costa Rica, Honduras and Peru. Based on historical data collected in the 2015 UNODC firearms data collection exercise, rudimentary firearms were prominent among seizures in Peru in 2010 and 2011. Despite some comparability issues, the data for 2016-17 from the present study suggest that this phenomenon has considerably decreased. Significant numbers of arms "otherwise illicitly manufactured" were also reported by Argentina, El Salvador and Guatemala.

Pneumatic, blank-firing and gas weapons

There are some weapons that do not technically qualify as "firearms" as defined by the Firearms Protocol that could, however, be of particular relevance to firearms trafficking, in that they may be easily converted into firearms (depending on the characteristics of the specific models). They include weapons designed to only fire tear gas or

even blanks (e.g. starting pistols used for track and field races) as well as pneumatic ("air") weapons, which rely on air pressure (rather than an explosion) to convey motion to the projectile. Since the rules and regulations governing the sale, transfer and ownership of such weapons are less stringent than firearms, these weapons can be legally sold and transferred among countries and regions, and subsequently be converted into illicit firearms and used in crime. Moreover, such rules and regulations depend on national legislation, and consequently the interpretation of seizures data needs to be done with caution since their legal justification (if any) varies across countries.

Several countries provided information on seizures of such weapons. Independently of whether these weapons had been illicitly converted, or were meant to be converted, into firearms, the fact that they were seized and reported indicates that they were detected in circumstances which violated the applicable national laws and regulations.

Aside from the total number of seized pneumatic, blankfiring and gas weapons, several countries reported on emerging modalities, related to these weapons, which may affect the illicit manufacture or adaptation of firearms.

Denmark reported a rise, in 2016-17, in the levels of trafficking of converted gas-/alarm pistols. Trafficking of sawn-off shotguns was also occasionally detected alongside the more prevalent pistols, while weapons assembled from separately trafficked parts and components were rarely encountered. These pieces of information together suggest that there is a demand in the criminal underworld in Denmark for smaller weapons that are easier to conceal. Sweden registered three cases of 3D-printed firearms in 2017, and one in 2016.

North Macedonia mentioned some cases of individuals who held gas pistols, signal pistols or an air rifle without adequate permission, and highlighted the trade in the illegal market of flare guns illegally converted into other types of weapons, including semi-automatic weapons. These weapons were reportedly most frequently procured from Turkey, where they were manufactured, but it was also possible to procure them from Bulgaria. The flare guns were usually converted by replacing the barrel, after which the weapons could be used as firearms with 6.35mm and 7.65mm calibre rounds.

Hungary reported an increase of incoming gas and alarm pistols from Turkey as well as an increase in such weapons purchased domestically (the legislation in Hungary does not require permission to purchase gas or alarm pistols nor does it require such weapons to be registered). This trend is likely driven by the demand for such weapons for the purpose of illegal conversion.

Portugal highlighted the conversion of 6.35mm calibre weapons into firearms as well as the modification of shotguns whose barrels are cut, and also reported indications

¹³ Small Arms Survey, The Highway Routes - Small Arms Smuggling in Eastern Nepal, Issue Brief No. 4, November 2014.

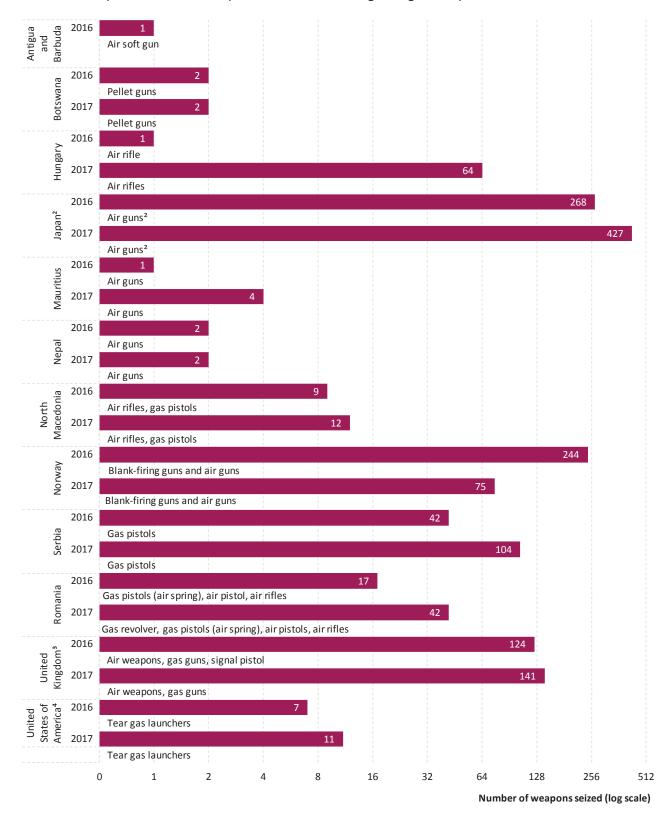


FIG. 10.... Reported seizures¹ of pneumatic, blank-firing and gas weapons, 2016-17

Source: UNODC IAFQ.

¹ Includes only cases where the number of seized weapons of this type could be quantified. Several other countries reported seizures of such weapons aggregated with other types.

² Figures for Japan may also include machine guns and other weapons.

³ Figures for the United Kingdom potentially include found weapons in addition to seized weapons.

⁴ Data for the United States include firearms (as classified by the Bureau of Alcohol, Tobacco, Firearms and Explosives, United States) submitted for tracing to the Bureau of Alcohol, Tobacco, Firearms and Explosives by a law enforcement agency, resulting from seizure as well as abandonment, buy-back program, or other recovery method. Moreover, only seized firearms submitted for tracing are included. Firearms submitted for tracing after recovery do not represent the entire set of all seized firearms.

of Portuguese citizens with sufficient knowledge and equipment to modify or otherwise adapt weapons in their homes. Portugal also reported some seizures of Flobert guns which entered Portugal illegally from Slovakia.

Among the types of trafficked weapons, Spain identified "unused" reactivated pistols, blank-firing pistols ("pistolas detonadoras") originating mainly from Turkey, "acousticexpansion" weapons originating mainly from Czechia and Slovakia, and homemade weapons. The blank-firing pistols and "acoustic-expansion" weapons were converted by making the necessary adaptations in the barrel (eliminating the stopper or seal) and "unused" pistols were reactivated in order to be able to produce real fire. Homemade weapons ranged from simple and rudimentary weapons, such as the so-called "chimbas", to more sophisticated and reliable pen guns.

In one jurisdiction in Australia where blank-firing firearms were sold legally, there was an apparent market for homemade, modified or converted firearms including shotguns and blank-firing firearms. There is no information on what triggered this dynamic, but access to modification instructions on the internet may have played a role. Another jurisdiction in Australia detected proscribed modifications such as sawn-off barrels in the illicit market.

Evidence on diversion

The concept of tracing lies at the heart of efforts to identify the point of diversion, understood as the point in which firearms exit the legal circuit and enter the illicit realm. The United Nations Firearms Protocol, in its Article 3 (f), defines "tracing" as the "systematic tracking of firearms and, where possible, their parts and components and ammunition from manufacturer to purchaser for the purpose of assisting the competent authorities of States Parties in detecting, investigating and analysing illicit manufacturing and illicit trafficking." In practice, this may involve a variety of strategies, depending on national context, to track the lifecycle of a firearm, but a systematic approach usually entails an examination of the legally required markings on the firearm (which are intended precisely for the purpose of tracing), a check against national records and international databases and, where necessary, the submission of tracing requests to counterparts in other countries.

Such efforts may yield a variety of outcomes, and some information on these tracing outcomes was collected through the UNODC questionnaire, in a format designed to cater for the purposes of SDG indicator 16.4.2.14 Although these data are geared towards the measurement of the success rate in tracing, they can also give some information about the nature of diversion and the modality whereby the weapons become illicit.

14 See Section on SDG Indicator 16.4.2 and tracing.

A central question is the extent to which the firearms of illicit origin¹⁵ in a country's black market derive from illicit domestic sources (domestic diversion or domestic illicit manufacture) as opposed to trafficking from abroad. Some information on this may be gleaned from data on tracing outcome, which includes information on whether the firearm was identifiable through marking, whether the firearm was seized from its legitimate owner,16 whether a tracing attempt was made and, if so, whether the firearm could be traced to a local or foreign registry (see Figure 11).

The above question can be addressed by considering three different sets of arms of illicit origin, defined in terms of the tracing outcome. The largest of the three sets consists of all seized firearms which were uniquely marked (except for those seized from their legitimate owner). This set captures the biggest universe of seized firearms which could provide information on the nature of diversion (domestic or not), but it carries most uncertainty, as it includes several tracing outcomes which do not conclusively determine whether the illicit origin was of a domestic or transnational nature. These data show that, on average, illicit origin of a domestic nature accounted for between 32 to 92 per cent of all seized arms of illicit origin (see bar "A-F" in Figure

When focusing on the smaller subsets of seized arms, those for which a tracing attempt was made and those for which there was successful tracing, this range becomes smaller and more revealing, although the numbers may be less representative (since the universe of firearms considered is smaller - see bars "B-F" and "D-F" in Figure 12).

The smallest set consists of successfully traced arms. In principle, it can reveal with most precision the proportion of domestically diverted arms, through data on firearms that have been traced to a foreign registry (and quite likely diverted abroad) and firearms that have been traced to the national registry (and quite likely diverted domestically).¹⁷ These data suggest a share of domestically diverted arms of around 70 per cent among seized arms of illicit origin. However, these data provide a partial picture because they describe only those seizures where it was possible to determine the point of diversion through successful tracing.

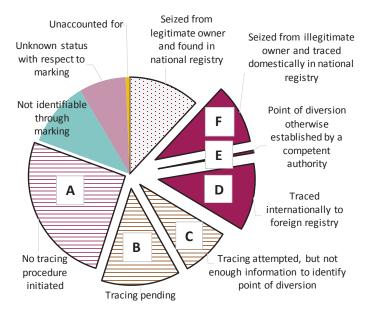
The picture which emerges overall, though not definite, does suggest that, on average, a significant proportion (potentially a majority) of arms of illicit origin derive from domestic sources, at least on the basis of seized arms which

¹⁵ See next Section "SDG Indicator 16.4.2 and tracing" for a discussion of the "illicit origin" of firearms.

¹⁶ Firearms held by their legitimate owner cannot be said to be of "illicit origin" and the question of domestic versus transnational illicit origin

This assumes that the tracing process follows through to the last legal record of the firearm, implying that the firearm was not legally exported at a later stage (thus precluding the rather unusual, albeit also documented, scenario of firearms which are exported, subsequently diverted and then trafficked back into the country of seizure).

FIG. 11.... Average breakdown of seized arms by tracing outcome in a single country,* 2016-17



^{*} Simple averages for 14 countries.

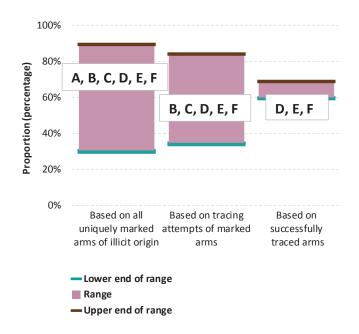
Notes: Black border denotes arms which were uniquely marked. Dotted background denotes arms not considered to have an "illicit origin". Striped shading denotes outcomes which do not provide evidence on the domestic or transnational nature of the illicit origin of an arm (including segment E).

Source: UNODC IAFQ.

are identifiable through marking. ¹⁸ Although this reflects the typical scenario to be expected on average, the reality in a given country will of course depend on its specificities and the nature of its licit and illicit market. It stands to reason that, if a given country's licit market provides an ample, varied and easily accessible pool of weapons, it may be more viable for criminals to divert firearms internally rather than resort to firearms trafficked from other countries. This holds not only for countries with legal domestic manufacture but also for countries whose licit market is mainly supplied by legal imports.

Also, in countries with relatively restrictive laws on the licit market which severely curtail the range of accessible firearms and the ease of obtaining them, domestic diversion remains a predominant source for illicit firearms. An example is the United Kingdom. Based on the information from the National Ballistics Intelligence Service (NABIS) of the United Kingdom, the number of firearms seized there from legitimate owners is negligible. Moreover, using serial numbers and manufacture markings when present, as well as information on legal sales for those firearms of an age where sales records were believed to be in existence, NABIS

FIG. 12.... Domestically diverted arms as proportion* of seized arms of illicit origin – ranges (based on uniquely marked arms only), 2016-17



* Simple averages.

Note: Letters refer to labelled segments in Figure 11.

Source: UNODC IAFQ.

are able to determine the country of diversion of approximately one third of firearms recovered in the United Kingdom. Analysis of those firearms has consistently shown that approximately 70 per cent transitioned from lawful to unlawful possession in the United Kingdom.

It may be the case that, in such countries, some of the novel and unconventional ways of illicitly manufacturing a firearm, including assembly, conversion, extensive modification and reactivation, provide an alternative to trafficking from abroad as a method to supply the illicit market with weapons that are not available on the licit market.

Other factors to consider are the levels of legally registered firearms in a country. The National Firearm Trace Program of the Australian Criminal Intelligence Commission, for example, found that, based on firearms traced in 2015-16, the primary contemporary method of diversion in Australia was theft from licensed individuals or firearm dealers (including suspected staged theft), while illegal import accounted for a relatively small percentage of illicit firearms in the Australian market.¹⁹

¹⁸ In general, illicit domestic sources could in principle consist of diversion as well as illicit manufacture. For seized arms which are identifiable through marking, the contribution of illicit manufacture is less relevant.

¹⁹ Australian Criminal Intelligence Commission, Illicit Firearms in Australia, 2016

SDG indicator 16.4.2 and tracing

SDG indicator

With the adoption of target 16.4 of the 2030 Agenda for Sustainable Development, countries committed to "by 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime". To measure the attainment of this target, Member States adopted Sustainable Development Goal (SDG) indicator 16.4.2, which measures the reduction of illicit arms flows by collecting data on the "proportion of seized, found and surrendered arms whose illicit origin or context has been traced or established by a competent authority in line with international instruments".

The purpose of the indicator is to establish the illicit origin of relevant seized, found and surrendered arms, which entails identifying the specifics of the moment or situation in which the arm began its illicit lifecycle. For legally manufactured arms, this boils down to establishing the point of diversion, that is, the moment when the (originally legal) arms crossed from legal to illegal status. For arms which were manufactured illicitly, establishing the "illicit origin or context" requires identification of the circumstances in which they came into existence.

This chapter describes the process of disentangling information on firearms seizures to compute the SDG indicator and presents the first global baseline data for the indicator although still based on data from a relatively small number of countries. This first data set shows that the practice of tracing, in order to establish the illicit origin or illicit context of seized firearms—along with the systematic recording of the outcome of tracing—is not very well established. On average, it was possible to have successful tracing outcomes for only 28 per cent of the relevant category of firearms - mainly those with identifying markings.

The countries that achieved high success rates in tracing firearms reported relatively low seizure levels, perhaps because tracing requires separate investigative efforts, time and human resources that are often not available. On the other hand, some countries with high levels of seizures registered a low success rate, which may also be linked to firearms seized in connection with less serious offences which are not prioritised in tracing.

A pathway through seizure data to determine success in tracing outcomes

Establishing how many seized firearms could successfully be traced requires a careful analysis of the data on seized firearms in all their components. Firstly, it should be noted that some firearms may be seized from their legitimate owner, in which case their origin cannot be described as illicit, and they are not linked to illicit flows. These seizures are not taken into account when determining if there was successful tracing and can be removed from the universe of the indicator, which thus includes in principle any situation in which the firearm is seized, found or surrendered in circumstances other than from/by its legitimate holder.

In practice, the process for establishing the illicit origin of firearms is heavily impacted by the presence of markings. Industrially manufactured firearms carry identifying markings which render them uniquely identifiable and enable authorities to trace their legal lifecycle, and hence the last legal record and the point of diversion. However, some firearms are also manufactured in artisanal settings or come into existence in other illicit ways, in which case markings may not be present. Some firearms may also have their markings erased or altered in a way which renders them not uniquely identifiable any more; such action in itself can be considered to represent the beginning of the illicit lifecycle of the firearm.

Thus, the process of tracing the illicit origin of a seized firearm starts by checking whether the firearm is uniquely identifiable through markings. This is, however, only the first step. For uniquely marked firearms, the tracing process usually starts by ascertaining whether the firearm in question is recorded in the national registry of the seizing country; aside from firearms seized from their legitimate owner, such a search may yield "successful" outcomes if the firearm was recorded as "lost", "stolen", "confiscated", "marked for destruction", "deactivated", et cetera. If the firearm is not recorded in a national registry, the next step is usually to attempt to identify the last legal record of the firearm through searches in international databases, such as Interpol's iARMS database of stolen, lost and found firearms, or, if necessary, to locate a legal record of the firearm in a foreign registry by sending individual tracing requests through bilateral contacts or other established tracing mechanisms. The markings may assist in identifying the countries to which such requests may be directed. Such countries can be the country of manufacture or, if the relevant markings exist, the country of last legal importation. If successful, such requests may yield outcomes similar to the case of items found in national registries. One helpful outcome for both domestic and international tracing is if the item is recorded as "exported", because this could facilitate tracing back the history of the firearm. In order to truly identify the point of diversion, it is important that the process identifies the last legal record of the firearm.

For items which were not uniquely identifiable through marking, the process would entail pursuing a variety of potential avenues as the opportunity arises, including further investigations and intelligence gathering, ballistics work, communication with international counterparts and other measures.

FIG. 13.... Typical process for the establishment of illicit origin/context of seized, found and surrendered arms, their parts and components and ammunition

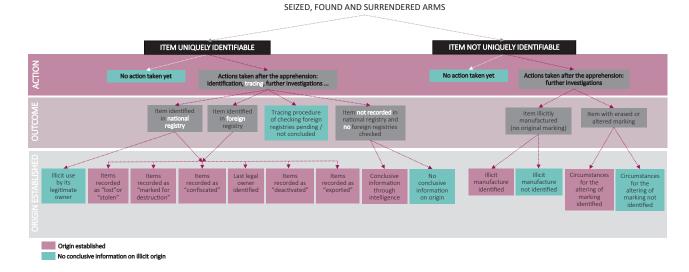
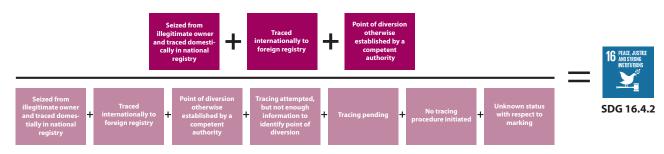


FIG. 14.... Computation of SDG Indicator 16.4.2



See Figure 13 for a general illustration of the process of establishment of illicit origin/context of seized firearms. It should be borne in mind, however, that, due to considerations of data availability as well as the focus of SDG target 16.4 on illicit flows, this schematic representation goes beyond the categories used for the computation of indicator 16.4.2.

The computation of the SDG indicator 16.4.2 requires to distinguish between "successful" and "unsuccessful" efforts to establish the illicit origin or context, among the entire universe of seized arms²⁰ where this concept is relevant and applicable (that is, excluding arms seized from their legitimate owner). UNODC's IAFQ questionnaire asks Member States to classify the outcome of these efforts into a number of categories, which are then used to determine the numbers of firearms for which these efforts were successful or not.

The data collected by UNODC distinguish between those firearms which were uniquely identifiable through markings and those which were not. For those firearms which

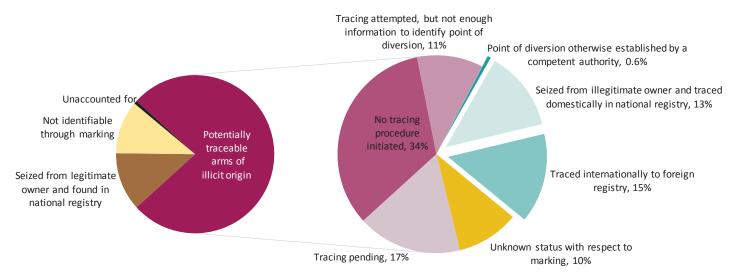
were not identifiable through markings, which include illicitly manufactured firearms and firearms with erased or altered markings, there is a certain degree of subjectivity in determining whether the circumstances of the illicit origin were ascertained with sufficient detail; moreover, the available data do not allow to distinguish between successful and unsuccessful outcomes. For this reason, the computation of the SDG indicator focuses on the subuniverse of "potentially traceable" firearms, which consists mainly of firearms with uniquely identifiable markings (and also excludes firearms seized from their legitimate owners). Firearms whose marking status was not recorded are also included and considered as "unsuccessful" instances of the efforts to identify the illicit origin. See Figure 14 for an illustration of the computation of the SDG and the various categories.

Findings on the SDG indicator

Sufficiently detailed data to compute the SDG indicator were provided by 14 countries. On average, the value of the indicator amounted to 28 per cent.²¹ This number was

²⁰ The SDG Indicator also refers to found and surrendered arms; in view of the availability of data, the computations so far have been restricted to seized arms.

²¹ The average proportion of successfully traced arms is adjusted for arms which do not belong to the universe of potentially traceable arms. See Methodological Annex for details.



* Average of 14 countries. Source: UNODC IAFO.

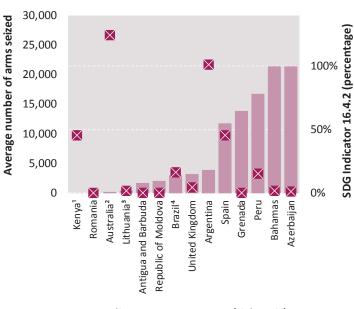
driven by two components in roughly equal measure: firearms traced domestically to a national registry (13 per cent) and firearms traced internationally to a foreign registry (15 per cent).

There was notable variability in the value of SDG indicator 16.4.2 across the 14 countries. In particular, some very high proportions of traced firearms were registered in some countries with relatively low levels of seized arms, such as Bahamas (average of 362 arms seized per year in 2016-17) and Azerbaijan (215 per year). At the other extreme, some very low proportions were registered by countries with relatively high numbers of arms seized, such as Kenya (9,728 firearms seized in 2017) and Australia (average of 26,660 arms seized per year in 2016-17).

This apparent association between high seizure levels and low values for the SDG indicator could potentially reflect two different mechanisms. Smaller quantities of firearms to be traced create less of a burden for tracing which is more likely to be carried out successfully (and conversely higher numbers, a bigger burden, and less successful tracing). Higher seizure levels may also be indicative of firearms seized for less serious offences, which may in turn not be deemed to warrant the investment of resources dedicated to tracing. This last inverse association is mainly observable at the extreme values of the indicator and cannot be said to constitute a general pattern (see Figure 16).

A breakdown of the different types of tracing outcomes gives further insights into the composition of the successful outcomes. In some countries, such as Argentina, Australia, Azerbaijan, Peru, Republic of Moldova and Spain, the dominant contribution was the component of firearms found in a national registry. In general, such a pattern is not surprising, given that tracing to a foreign registry is

FIG. 16.... Value of SDG Indicator 16.4.2, in comparison with average arms seized, 2016-17



■ SDG Indicator 16.4.2, 2016-17 (right axis)

■ Average arms seized per year, 2016-17 (left axis)

⁴ Both the average number of arms seized as well as the value of the SDG Indicator are based only on seizures in the records of the Federal Police Tracing Centre of Brazil.

Source: UNODC IAFQ

inherently more onerous in comparison with tracing to a national registry.

In some cases, such as Argentina, the predominance of domestic tracing may be driven by a significant component of seized firearms which were manufactured in the

¹ Data for 2017 only.

² Include seizures of an administrative nature.

³ Data for 2016 only.

20% 80% 100% 0% 40% 60% Antigua and Barbuda SDG Value: 8' Argentina SDG Value: 18% G Value: 1% Australia Azerbaijan SDG Value: 1009 Bahamas SDG Value: 1009 Brazil Grenada SDG Value: 659 Kenva* SDG Value: 0% SDG Value: 2% Lithuania** Peru SDG Value: 789 Republic of Moldova SDG Value: 9% Romania DG Value: 0% Spain United Kingdom SDG Value: 15% ■ Seized from illegitimate owner and found in national registry (successful tracing) Seized from illegitimate owner and found in foreign registry (successful tracing) ■ Point of diversion otherwise established (successful tracing) ■ Tracing attempted, but not enough information to identify point of diversion Tracing pending ■ No tracing initiated ■ Unknown status with respect to marking

FIG. 17.... Breakdown of potentially traceable arms by tracing outcome, and composition of Sustainable Development Indicator 16.4.2 by type of successful outcome, 2016-17

Note: Successful tracing outcomes are shown on the left hand side in different shades of purple; unsuccessful tracing outcomes are shown on the right hand side in different shades of brown.

Source: UNODC IAFQ.

country and diverted domestically (at least 69 per cent of firearms seized in Argentina in 2016-17 had been manufactured in Argentina itself²²).

In some cases, the lack of successful international tracing to a foreign registry was due to countries' limited capacity to report on this number. However, some countries also reported that no firearms were traced internationally, suggesting that greater capacity and awareness raising are needed in this area.

In other countries, such as Bahamas, Brazil and the United Kingdom, the dominant component of successful tracing outcomes was that of firearms traced to foreign registries. It should however be borne in mind that these computations are based on a subset of all seized firearms.

Tracing requests sent and received

Aside from the outcome of tracing efforts, countries were also asked to provide information about the number of tracing requests sent during 2016-17, and to which countries or agencies these requests were addressed. In total, 15

22 Out of 43,321 arms seized in 2016-17, 29,794 had been manufactured in Argentina; in addition, the country of manufacture was unknown for 4,251 arms.

countries reported having sent 6,173 requests to 45 different countries and one agency (Interpol) (see Figure 18).

The largest numbers of sent requests were reported by countries in Latin America and the Caribbean; in some cases, similar requests pertaining to the same firearms may have been sent to multiple countries in a systematic fashion. In terms of the number of different countries to which requests were sent, the highest numbers were reported by the United Kingdom (26) and Spain (13); however, based on a small subset of tracing requests for which details were available (23 out of 837 made during the period 20 February 2017-31 December 2017), Brazil sent tracing requests to at least 15 different countries.

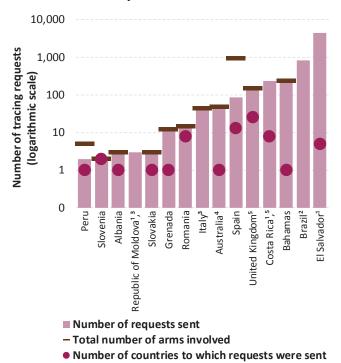
The United States was most frequently mentioned as the country to which tracing requests were sent (mentioned by 6 countries), followed by Germany (4 countries). In addition, 7 countries reported sending requests to, or facilitated by, Interpol.

There appeared to be a certain correspondence between the country of manufacture of seized firearms and the countries to which tracing requests were sent. For example, in the case of the United Kingdom, among the top nine countries which were identified as the country of manu-

^{*} Based on data for 2017 only.

^{**} Based on data for 2016 only.

FIG. 18.... Tracing requests sent, by reporting country, 2016-17



- ¹ For Costa Rica, El Salvador and Republic of Moldova the total number of arms involved was not available
- ² Data for Brazil refer to the period 20 February 2017-31 December 2017 only. The total number of arms involved and the total number of countries to which requests were sent were not available.
- ³ For Italy and Republic of Moldova, all requests were sent to or through Interpol.
- ⁴ Data from one jurisdiction only.
- ⁵ Data for Costa Rica and the United Kingdom refer to 2017 only.

Source: UNODC IAFQ

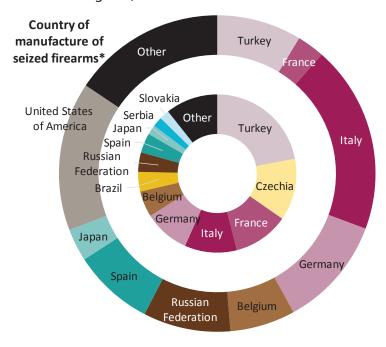
facture of firearms seized by the United Kingdom (excluding the United Kingdom itself), most (seven) were also among the top nine to which the United Kingdom sent tracing requests. This is to be expected, as the country of manufacture is a natural starting point in tracing the lifecycle of a firearm (see Figure 19).

Countries were also asked to provide information about the number of tracing requests received during 2016-17, and from which countries or agencies these requests originated. In total, 16 countries reported receiving 6,915 requests from 65 countries and 2 agencies (Europol and Interpol) (see Figure 20).

Some of the countries which reported sending high numbers of tracing requests were also among those which received relatively high numbers of requests; this included Costa Rica, El Salvador, Spain as well as the United Kingdom (in view of the fact that data available for this country covered 2017 only).

Belgium attributed the large number of tracing requests received (769 from at least 39 countries) to the presence of a large firearms production facility in Belgium. Local

FIG. 19.... Tracing requests sent by the United Kingdom, by requested country, in comparison with country of manufacture of arms seized by the United Kingdom, 2017



- Top 9 countries, excluding the United Kingdom itself and unknown countries of manufacture. Other countries included under "Other"
- ** Top 12 countries to which requests were sent. Other countries included under "Other"

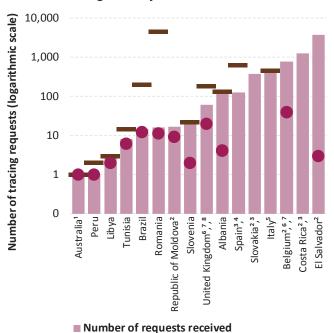
Source: UNODC IAFQ

manufacture may also play a role in the cases of Italy, Spain and the United Kingdom—among countries which provided data on tracing requests received, Italy, Spain, Belgium and the United Kingdom constitute the top four counties in terms of their frequency as the country of manufacture of seized firearms (compare Figure 20 and Figure 24).

In some cases, the high numbers of requests appeared to be driven by requests between neighbouring countries; for example, El Salvador reported sending a total of more than of 4,000 requests to Mexico, Guatemala, Honduras, Nicaragua and Costa Rica, and receiving a total of more than 3,500 requests from Mexico, Honduras and Costa Rica. A similar pattern held also for Costa Rica, which sent requests to eight countries, of which seven were in Central America, and identified only Panama among the countries from which it received tracing requests.

In other cases, the high numbers of requests were received from a very diverse group of countries. Brazil, Spain and the United Kingdom, which sent tracing requests to the highest numbers of countries, were also among those reporting requests received from the highest numbers of countries: at least 20 in the case of the United Kingdom, at least 13 in the case of Spain (aside from Europol and Interpol) and 12 in the case of Brazil. This suggests that a

FIG. 20.... Tracing requests received, by reporting country, 2016-17



- Number of requesting countries
- ¹ Data from one national agency only. ² For Belgium, Costa Rica, El Salvador, Republic of Moldova and Slovakia the total number of firearms involved was not available.
- ³ For Costa Rica and Slovakia, the number of requesting countries was not available

Total number of arms involved

- ⁴ Spain received requests from 13 countries or more
- ⁵ For Italy, all requests were received from or through Interpol.
- ⁶ For Belgium, the number of requesting countries may omit an unknown number of countries reported under "other".
- ⁷ Data for Belgium and the United Kingdom refer to 2017 only.
- ⁸ For the United Kingdom, the number of requesting countries may omit one country reported under a regional aggregation.

Source: UNODC IAFQ.

general engagement of such countries in the area of tracing begets mutually reinforcing roles of receiving and responding to tracing requests.

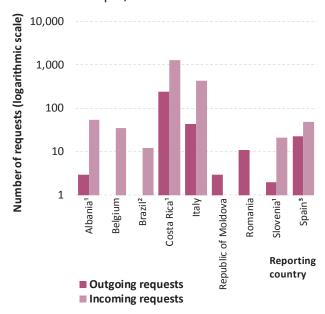
Nine countries reported the involvement of Interpol in tracing requests sent or received (see Figure 21). Among these countries, the number of tracing requests received tended to be higher than requests made; this may be influenced by the ability of countries to effectively direct tracing requests to multiple countries through the use of a dedicated multilateral platform managed by Interpol.

Licit manufacture

It is important to note that, while the illicit supply chain starts at the point of diversion (or illicit manufacture), a diverted weapon may have a long licit history prior to diversion, starting with the country of licit manufacture.

With the exception of some countries with significant domestic licit manufacture of firearms, typically the majority of seized weapons were manufactured outside the coun-

FIG. 21.... Tracing requests sent to, received from, or otherwise facilitated by Interpol, 2016-17



¹ Includes requests placed through the Interpol platform iARMS.

² Brazil reported sending 18 requests involving Interpol; however details were unavailable for the vast majority of requests and therefore this number likely underestimates the actual figure.

³ Spain also reported 12 requests coming from Europol.

Note: Slovakia reported 381 incoming requests, of which an unspecified number were received from Europol and Interpol.

Source: UNODC IAFQ.

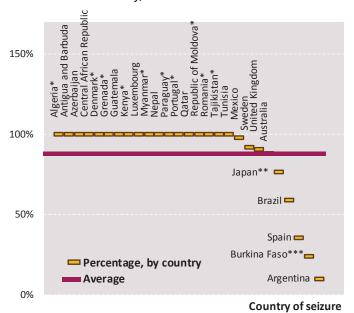
try of seizure. This is hardly surprising, given that, in many countries, the licit market also relies heavily on imports from the major producing countries (see Figure 22).

The country of diversion may be anywhere on the chain between the country of manufacture and the country of seizure. The indications that the illicit source of firearms is often to be found in the country where firearms are seized (see Figure 12), coupled with the fact that seized arms are, for most countries, manufactured outside the country of seizure, suggest that the country of manufacture may have little to do with the country of diversion. There is also the possibility of undetected diversion happening in manufacturing countries, but this could not be ascertained with the available information.

Further corroboration of this can be found when considering a special subset of seized arms which by definition are unlikely²³ to have been diverted in the country of seizure - namely arms seized on incoming cross-border shipments. Among such seizures, there appears to be a significant proportion which enter from a country other than the country of manufacture. This does not, by itself, establish what proportion of arms are diverted within the

²³ Aside from the possibility that a firearm was diverted in a given country, then trafficked into another country, followed by an attempt, detected at the border, to traffic the firearm back into the country of diversion

FIG. 22.... Proportion of seized arms manufactured outside country of seizure, by country, 2016-17



Note: Proportions are adjusted to exclude arms whose country of manufacture was unknown or not reported.

- * These reporting countries did not indicate themselves among the countries of manufacture, but reported some seized arms manufactured in unspecified "Other" countries (a breakdown by country was only collected for the main (top 10) countries of manufacture.)
- ** Based on data for revolvers and pistols only (data on country of manufacture for overall seizures were not available).
- *** Based on data for 2016 only. The response from Burkina Faso suggests that arms manufactured in Burkina Faso itself (using artisanal techniques) accounted for the largest share of arms seized in the country, but the number of such arms was not quantified. As a proxy, the total number of artisanally manufactured arms is used in the calculation. However, some arms manufactured in neighbouring countries may also have been manufactured using artisanal techniques; hence the proportion manufactured outside Burkina Faso may be under-estimated.

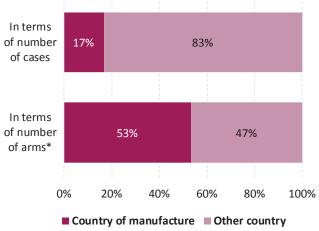
Source: UNODC IAFQ.

country of manufacture or otherwise, but it gives a strong indication that diversion has occurred after exportation from the country of manufacture (see Figure 23); in other words, it is very plausible in such a scenario for an arm to be first legally manufactured, then legally exported, and only then diverted.

The different distribution between number of cases and number of arms is affected by two large seizures demonstrating the attempt to illegally export a large quantity of arms from a manufacturing country. This suggests that there may be cases with a large number of trafficked firearms where the point of diversion is in the country of legal manufacturing (or at its border). However, such cases were relatively infrequent; once more, this is not surprising, given that many civilian firearms are exported at wholesale level and only subsequently sold at retail level outside of the country of manufacture.

Once a firearm has been legally sold and is in civilian ownership, it is rather unlikely for the legitimate owner to undertake, in a legal fashion and for purely legal purposes,

FIG. 23.... Country of provenance of arms seized on an incoming route, breakdown into country of manufacture versus third country, 2016-17



* This distribution is heavily impacted by two large seizures by the same country and from the same country of provenance. Excluding these two large cases, the distribution is: 22 per cent of weapons for which the country of provenance coincided with the country of manufacture, 78 per cent of weapons for which the country of provenance was another country.

Note: Based on reported significant cases of weapons seized on an incoming route for which the country of provenance (country from which the seized arms entered the country of seizure) and as the country of manufacture of the seized weapons were both available (7 countries).

Source: UNODC IAFQ.

an exportation to another country – unless the owner herself moves across the border (temporarily or to take up residence for the longer term²⁴). Thus, for firearms in civilian possession, the country of the last legal status may frequently coincide with the country of the first retail purchase, with individual mobility being the main counterbalance to this. In other words, if an illicit firearm was at some point diverted from civilian ownership, it is quite plausible that this happened either within the country of first retail purchase, or else in an outgoing cross-border movement from the country of first retail purchase.²⁵

The concept of tracing²⁶ requires the identification of the point at which the transition is made from the licit to the illicit spheres (point of diversion). In principle, this requires the identification of the last legal owner; in some countries where there is no legal obligation to keep records of the final end-user, this information is not possible to obtain and tracing practices will by necessity look for the retail purchase in order to determine with some approximation the point of diversion.

- 24 For example, sports shooters and hunters may cross borders with their legally held firearms and sell their arms during their travel.
- 25 One exception to this is the possibility of legal exports which are really pretexts for diverting the weapon in the country of importation.
- 26 See Article 3 of the UN Firearms Protocol and paragraph 5 of the International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons.

TABLE 1 Most frequently reported countries of manufacture of seized arms, ranked by number of reporting countries^a (by geographical proximity of reporting country), 2016-17

Country of manufacture	Reporting countries, in relation to country of manufacture						
	Intra-subregional ^a	Intra-regional	Inter-regional	Total			
Italy	3	5	15	23			
Germany	4	5	13	22			
United States of America		6	15	21			
Belgium	4	3	10	17			
Czechia	1	6	9	16			
Russian Federation	1	4	10*	15*			
Spain	2	5	7	14			
Turkey	2	1	11	14			
China	2	2	8	12			
Austria	2	3	5	10			
France	2	3	4	9			
Brazil	1	2	5	8			
United Kingdom	1	1	2	4			
Israel	†		4	4			
Japan	†	1	2	3			
Yugoslavia (former State)		3	* + + - 	3			

^{*} In addition, one African country reported seized arms manufactured in the Union of Soviet Socialist Republics (former State).

Source: UNODC IAFQ.

TABLE 2 Most frequently reported countries of manufacture of seized arms, ranked by number of reporting countries^a (by region of reporting country), 2016-17

Country of manufacture	Region of reporting country						
	Africa	Americas	Asia	Europe	Oceania	Total	
Italy	3	7	4	8	1	23	
Germany	3	5	4	9	1	22	
United States of America	2	6	4	8	1	21	
Belgium	2	5	3	7		17	
Czechia	1	4	3	7	1	16	
Russian Federation	5*	1	4	5		15*	
Spain	2	2	2	7	1	14	
Turkey	3	2	3	6		14	
China	2	3	4	2	1	12	
Austria		5		5		10	
France	4			5	1	9	
Brazil		3	1	3	1	8	
United Kingdom	1			2	1	4	
Israel	2	2			1	4	
Japan			1	1	1	3	
Yugoslavia (former State)		1		3	1	3	

^{*} In addition, one African country reported seized arms manufactured in the Union of Soviet Socialist Republics (former State).

Source: UNODC IAFQ.

^a Not including countries reporting seized arms manufactured in their own countries.

^a Not including countries reporting seized arms manufactured in their own countries.

In general, the country of last legal record and that of first retail purchase may often coincide, but this relationship deserves further research.

Countries of manufacture

The vast majority of trafficked firearms originate as legally manufactured firearms which are at some point diverted to the black market. The above analysis indicates that firearms may leave the country of manufacture through legal trade, with diversion happening after the first border crossing. Therefore, the country of manufacture of a trafficked firearm may in principle be far removed from the trafficking route, and thus does not necessarily coincide with the starting point of the illicit flow of a trafficked firearm.

Nevertheless, information on the country of manufacture of seized firearms may yield additional insights into their provenance. This determination of the country of manufacture can be based on verifiable criteria, such as the markings present on firearms as well as (to a certain extent) the particular brand or model of the weapon.²⁷ These insights can be useful, for example, to improve or put in place preventive measures at the early stages of the supply chain.

Based on data on the country of manufacture reported through the Illicit Arms Flow Questionnaire, several European countries emerge among the most prominent countries of manufacture. This is most pronounced in the case of Germany and Italy, which stood out in terms of two different metrics: the number of countries which identified them among the countries of manufacture of seized weapons, as well as the proportion of seized arms originating from the country–in terms of manufacture²⁸ (see Table 1, Table 2 and Figure 24). The United States and the Russian Federation also emerge among the most prominent countries, especially in terms of the second metric.

At the level of subregional groupings (see Figure 25), Northern and Western Europe emerged consistently as a prominent subregion of manufacture across most subregions of seizure. Southern Europe (excluding the Western Balkans) also accounted (in terms of manufacture) for significant proportions of arms seized across various subregions, including other parts of Europe but also in the Americas and within Southern Europe itself. The role of Northern America as a subregion of manufacture was most marked in the Americas as well as parts of Asia and Oceania, while arms manufactured in Eastern Europe were prominent in Africa and Western Asia. South America was another subregion which seized, on average, a large share of arms manufactured within the subregion itself, and specifically within the country of seizure.

A comparison of the location of manufacture of seized arms with incoming illicit flows of weapons illustrates the complex relationship that may exist between trafficking routes and countries of manufacture. In the case of South America, for example, illicit incoming inter-regional flows are dominated by the share from Northern America, while

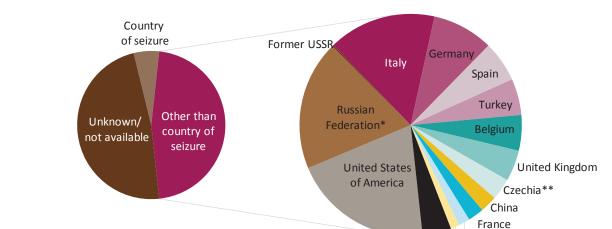


FIG. 24.... Typical distribution^a of country of manufacture of seized arms, 2016-17

Source: IAFQ

Austria

Former Yugoslavia

22 other countries

^a Simple average over 29 reporting countries

^{*} Includes one aggregate mention for Russian Federation and former Union of Soviet Socialist Republics.

^{**} Includes one aggregate mention for Czechia, Slovakia and former Czechoslovakia.

²⁷ T

²⁷ The model of a weapon may not necessarily uniquely determine its manufacturer; however, depending on the particular case, information on the model and the brand, coupled with a knowledge of the market for firearms, may help to identify or narrow down the country of manufacture.

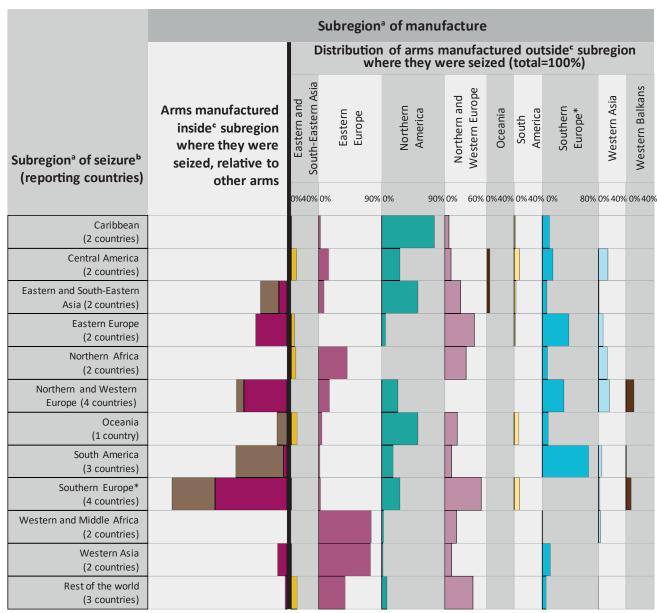
²⁸ These calculations do not include instances of countries reporting seizures of arms manufactured in their own countries.

020

Europe accounts, in contrast, for the vast majority of seized weapons in terms of manufacture. Similarly, in the case of Southern Europe (excluding the Western Balkans), Northern America accounts for a large share in terms of countries of manufacture, but not in terms of incoming illicit flows.

On the other hand, certain similarities between the two types of distribution can also be seen, especially in the case of Northern and Western Europe, as well as the role of the Western Balkans in the case of Southern Europe.

FIG. 25.... Breakdown of seized arms by subregion^a of manufacture, according to subregion^a of seizure, 2016-17



Arms manufactured in other country within same subregion as country of seizure

■ Arms manufactured in country of seizure

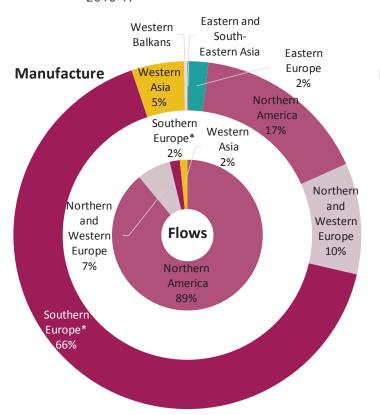
Source: UNODC IAFQ

^a See Methodological Annex for the list and composition of subregional groupings used.

^b Data were not available for all subregions.

^c Percentages are normalized so that the shares of arms manufactured outside the subregion of seizure sum up to one (for each subregion of seizure). Weapons seized outside the subregion of manufacture are represented proportionally on the left hand side. The calculations adjust for the share of seized arms whose country of manufacture was not known or not reported.

^{*} Excluding Western Balkans.

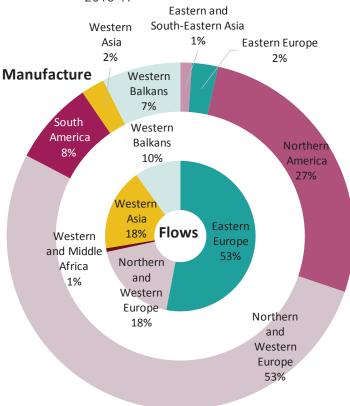


- * Excluding Western Balkans.
- ^a The largest share of transnational illicit flows affecting countries in South America occurs between countries within South America. Similarly, countries in South America itself account for the largest share of manufacture of arms seized in South America (including arms seized in the country of manufacture). These shares are not shown in the above figure.

Note: The shares of flows and of manufacture are based on different kinds of data which require different methodologies. Therefore the comparison should be made with caution. In both cases, the calculations adjust for the share which is not classified or reported as unknown.

Source: UNODC IAFQ.

FIG. 27... Distribution of subregions identified as departure of incoming illicit flows^a (inner circle) and manufacture^a (external circle) for seizures made in Southern Europe,* 2016-17

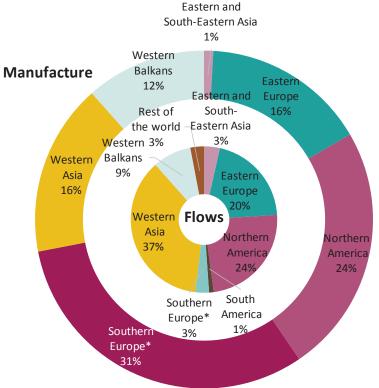


- * Excluding Western Balkans.
- ^a Southern Europe itself accounts for the largest share of manufacture of weapons seized in Southern Europe. Similarly, there is also a small share of transnational illicit flows affecting countries in Southern Europe* which occurs between countries within Southern Europe. These shares are not shown in the above figure.

Note: The shares of flows and of manufacture are based on different kinds of data which require different methodologies. Therefore the comparison should be made with caution. In both cases, the calculations adjust for the share which is not classified or reported as unknown.

Source: UNODC IAFQ.

FIG. 28... Distribution of subregions identified as departure of incoming illicit flows^a (inner circle) and manufacture^a (external circle) for seizures made in Northern and Western Europe, 2016-17



^{*} Excluding Western Balkans.

Note: The shares of flows and of manufacture are based on different kinds of data which require different methodologies. Therefore the comparison should be made with caution. In both cases, the calculations adjust for the share which is not classified or unknown.

Source: UNODC IAFQ

^a The largest share of transnational illicit flows affecting countries in Northern and Western Europe occurs between countries within Northern and Western Europe. Similarly, Northern and Western Europe accounts for the largest share of countries of manufacture of weapons seized in Northern and Western Europe. These shares are not shown in the above figure.

CHAPTER 3

THE NATURE OF FIREARMS TRAFFICKING

Chapter overview

This chapter analyses the nature of firearms trafficking, starting by considering the prices paid for firearms in illicit markets around the world. The illicit nature of firearms markets makes prices generally higher than for firearms bought regularly, although there are some exceptions for some types of firearms in certain geographical locations where the licit markets compete with lower prices in the illegal market. The chapter then looks at the different ways that firearms can be trafficked between different locations, both across international borders and within countries, before finally looking more closely at trafficking within some selected countries with known, sizable domestic firearms trafficking flows.

Due to the considerable risk and costs involved in supplying illicit firearms, in most parts of the world, the illicit prices of firearms are usually significantly higher than the licit price. There are, however, some notable exceptions. In some parts of Latin America and the Caribbean, the illicit prices were found to be lower than the licit price, specifically for handguns, which might be due to their easy availability in the illicit market. Looking at specific firearms types, user preferences also seem to play a role. For example, in some of these countries, revolvers are reportedly less expensive in illicit markets than pistols, and the primary reason appears to be that criminals prefer pistols.

Trafficking of firearms can be carried out by using different strategies, chosen on the basis of the perceived risk of detection, ease of concealment, feasibility of large payloads and geographical conditions. For transnational trafficking, the vigour of border controls along the trafficking route is another important factor. Regardless of strategy, seizures that are associated with trafficking tend to involve larger numbers of firearms per case than those not related to trafficking (and related to illicit possession, for example).

Seizures at borders comprise on average less than 10 per cent of firearms seizures at the national level. In other words, more than 9 in 10 seizures take place within the national territory. Even though seizures at the borders are in the minority, they shed considerable light on transnational illicit flows. For example, they reveal that while the number of cases involving customs-related seizures from vessels is relatively low, each case involved nearly 20 seized weapons. On the other hand, seizures from vehicles accounted for three quarters of all the customs-related seizure cases, but fewer than two firearms were seized per case, on average. There is also a clear distinction between

¹ Throughout this report, the term "within national territory", in reference to seizures, excludes seizures made at borders. See also glossary.

the detection of incoming and outgoing flows. Most weapons are seized on an incoming, rather than outgoing, route, suggesting that the level of scrutiny exercised by customs authorities tends to be higher with regard to incoming firearms. It may also be indicative of existing forms of informal cooperation and information exchange between countries leading to seizures (and capture of suspects) in the country of arrival.

It appears that trafficking by land is the most commonly used mode of firearms trafficking. While information is scarce, several countries highlighted trafficking by land; either in road vehicles which may have been modified for this purpose, in packages or deliveries, or by persons on foot. Cross-border trafficking of firearms sometimes takes the form of so-called "ant-trafficking", by which the illicit flow involves numerous individuals transporting one or a small number of firearms in order to lower the risk of detection. This mode may not be predominant at the global level, but it might be significant along certain routes.

Illicit movements of firearms within given countries can only be gleaned through sub-national-level seizure data. Such data were available for some countries in Central America, where it appears that violent crime is a key driver of demand for firearms. Moreover, seizures are also markedly higher in many border and port areas, as well as in areas with high levels of trade activity. Sub-national data from the United States showed that more than 70 per cent of traced seized weapons had been purchased in the state where they were seized.

Based on seizures, transnational trafficking flows seem to be mostly concentrated within continents with the notable exceptions of inter-regional flows from Northern America and Europe. Northern America, Europe and Western Asia together accounted for almost all departure points of trafficking in 2016-17, while Central and South America together with West Asia accounted for more than 80 per cent of the trafficking destinations.

Prices of firearms in illicit markets

Further insight into firearms trafficking can be obtained from prices of firearms on the black market, as well as the way these relate to licit prices. Some countries provided prices of the same, or comparable, types of firearm in both the licit and illicit markets, and also - where possible – on distinguishing features, such as condition or model.

In most cases, the firearm price follows what happens in other regulatory markets: prices are distinctly higher in the illegal market than in the legal market. There are, however, remarkable exceptions in some geographical locations with firearm prices lower in the illegal market, suggesting that in these locations either the illicit supply is much higher

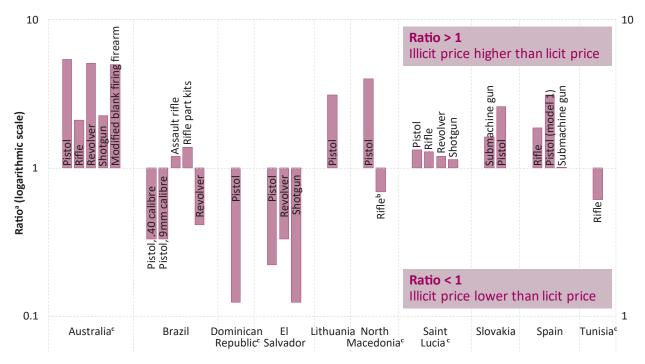


FIG. 1 Ratio of illicit to licit prices of firearms, by country, 2016-17

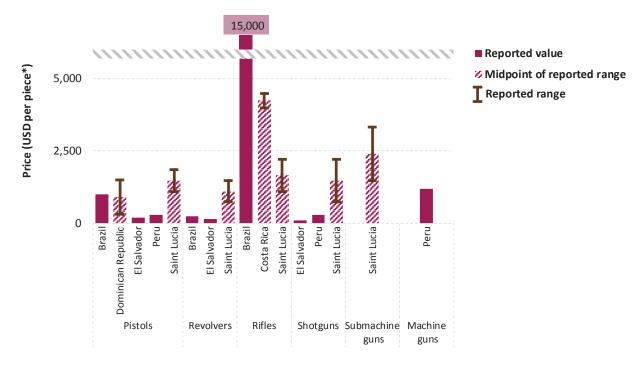
Source: UNODC IAFQ

^a A ratio larger than 1 means that the price on the illicit market was higher than the corresponding price (for the same type of firearm) than the price on the licit market. A ratio smaller than 1 means that the price on the illicit market was lower.

^b For North Macedonia, the same model of rifle was not available in the licit market; the comparison is based on a similar model.

^c For Australia, Dominican Republic, North Macedonia, Saint Lucia and Tunisia the ratio is based on the midpoint of the reported price ranges. Note: Only data where price was available for comparable models of firearms in both the licit and illicit markets are included.

FIG. 2 Price of firearms in the illicit market reported by countries in the Americas, 2016-17



* Converted from original currency using UN exchange rates. Source: UNODC IAFO.

than the licit supply, or that there is not enough interdiction to raise the price in the illegal supply-chain. One example of these exceptions is the low price of certain types of firearm, mainly handguns, in the illegal market in Latin America and the Caribbean. In Brazil, this consisted mainly of .32 and .38 calibre revolvers manufactured between 1960 and 1997 (the year of the first law on firearms in Brazil) as well as 9mm and .40 calibre pistols. Brazil explained the relatively low prices in terms of the ample supply. The revolvers reportedly originated partly in Brazil and partly in the United States, while pistols were mainly trafficked into Brazil through Paraguay, following importation from several countries. In May 2018, imports of arms and ammunition into Paraguay were suspended.2

The higher comparative price of assault rifles in Brazil suggests that there is a certain demand there for this type of firearm. The reported black market price is significantly higher than in other countries, and also significantly higher than the price of other firearms in Brazil: around US\$15,000 for an assault rifle, and around \$12,500 for 5.56mm calibre part kits. However, these prices remained only moderately higher than the corresponding licit prices in Brazil. Such weapons and related part kits were only licitly available in Brazil to a restricted group of authorized individuals - shooters, hunters and collectors.

Comparing prices in illicit markets across countries, it appears that revolvers are less expensive than pistols in the three countries in Latin America and the Caribbean where the prices of both arms were available.

In general, firearms prices were relatively low in the illicit market in El Salvador and Peru.

In Africa, prices in the illicit market were relatively low in Kenya, including prices of high-powered weapons such as battle rifles and assault rifles. In Libya, the black market price of an assault rifle was uncharacteristically low in comparison with other types of firearms.

In general, the price data suggest that pistols are frequently available in the illicit market in a wide range of forms, and that, while criminals are willing to resort to converted firearms, they still have a preference for industrially manufactured firearms, with niche demand for different kinds of industrially manufactured pistols. This pattern was most pronounced in Europe. For example, a converted pistol in Spain was about six times cheaper than a reactivated pistol, suggesting lower demand for converted as compared to reactivated pistols. In Sweden, a converted starting/gas pistol was reported to cost approximately US\$870-1,750,3 as opposed to \$1,170-2,340⁴ for an original pistol. In Denmark, three different prices were reported for pistols, with

Agencia de Informacion Paraguaya, Ministerio de Tecnologias de la Informacion y Comunicación, Dimabel suspende importación de armas y municiones para controlar el mercado interno, 23 May 2018 (available at: https://www.ip.gov.py/ip/dimabel-suspende-importacion-dearmas-y-municiones-para-controlar-el-mercado-interno/).

^{7,500-15,000} SEK converted into US\$ dollars using average UN official exchange rates for 2016-17.

^{10,000-20,000} SEK, converted into US\$ dollars using average UN official exchange rates for 2016-17.

)20

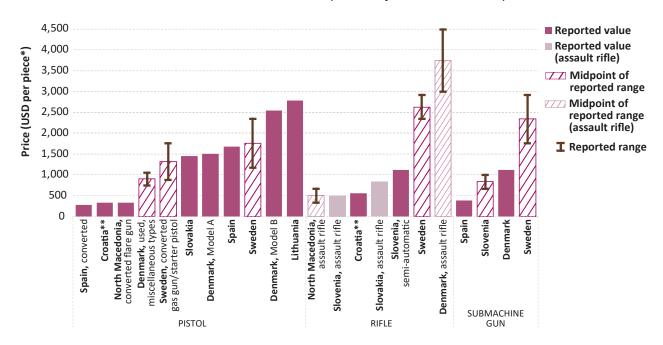
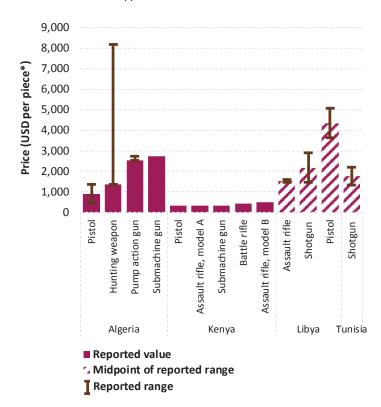


FIG. 3 Price of firearms in the illicit market reported by countries in Europe, 2016-17

Source: UNODC IAFO.

FIG. 4 Price of firearms in the illicit market reported by countries in Africa, 2016-17



^{*} Converted from original currency using UN exchange rates.

Source: UNODC IAFQ.

used pistols being the least expensive and a specific, smaller model of pistol – which is easier to conceal and carry – the most expensive.

With regard to rifles, a notable difference could be seen between the prices of rifles (including assault rifles) in illicit markets in the Western Balkans and in Northern Europe, pointing to the potential of the Western Balkans as a source region for these firearms. Notably, the price of a rifle in the illicit Slovak market was lower than the price for a pistol in the same country.

Beyond Europe, the wide range of prices for pistols is also conspicuous in the case of Australia, which reported a range of approximately US\$230-6,330⁵ for pistols on the illicit market, encompassing the illicit prices for all the other types of firearms (also reported as ranges), with the single exception of high prices of assault rifles reported from one jurisdiction in Australia.

Modalities of trafficking

Traffickers may resort to different strategies and techniques to transport firearms across borders or, domestically, from one location to another. Clearly many factors can influence these choices, such as the potential for detection, the ease of concealment, the degree of control exercised at borders, the feasibility of larger payloads and geographical convenience.

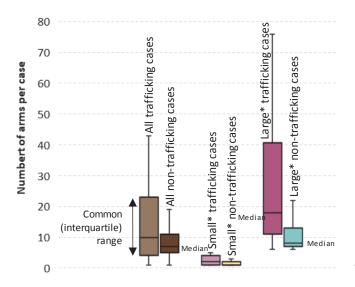
^{*} Converted from original currency using UN exchange rates.

^{**} Prices for Croatia represent a lower bound.

Model A and Model B refer to two distinct models from the same manufacturer.

^{5 300-8,400 \$}A, converted into US\$ using average UN official exchange rates for 2016-17.

FIG. 5 Number of arms seized in significant individual cases (common ranges1), trafficking cases in comparison with other cases, 2016-17



¹ Interquartile range and full range, excluding outliers.

Note: Responses did not always specify whether the cases were trafficking cases or not. Such cases are not included.

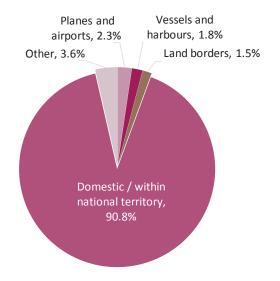
Source: UNODC IAFQ

Seizures data can provide insights on these trafficking strategies, although it is important to bear in mind that not all seizures may be associated with trafficking or even with illicitly sourced firearms. Data on significant seizures reported on a case-by-case basis show that cases of trafficking tend to involve, on average, larger numbers of firearms per case than cases of firearms that may be stopped by the authorities for possession or other alleged offences. In general, the typical (median) number of arms per case was 10 for trafficking cases and 7 for non-trafficking cases. The difference is clearer when considering small (less than five firearms seized) and large (more than five firearms seized). For small seizures, the median of trafficking cases is 2 and for non-trafficking cases is 1. For large seizures the difference is more pronounced: 18 arms is the median for trafficking cases and 8 for non-trafficking cases (see Figure 59). However, the fact that the larger number of arms are seized may impact the likelihood that the seizure is designated as a case of trafficking.

Cross-border transportation (air/land/ sea/mail) and modi operandi

Data reported on the type of location where arms were seized indicate that, on average, the overwhelming majority of arms are seized within the national territory (exclud-

FIG. 6 Average distribution* of arms seizures by type of location where they were seized, 2016-17



* Simple average of distributions for 51 countries, adjusted for seizures whose type of location was unknown or unclassified.

Source: UNODC IAFQ.

ing ports of entry). Cross-border seizures account, on average, for slightly less than 10 per cent, with the standard modes of air, sea and land transportation across borders typically each accounting for around 2 per cent of seizures. While some of these arms may have been trafficked into the country and only detected after having crossed the border, and some diverted domestically (as mentioned above) some seizures may not always be linked to trafficked, diverted or illicitly sourced firearms and, particularly for small seizures, they may relate to other offences, such as possession, which may be of an administrative nature.

Despite the fact that cross-border seizures are a minority of seized firearms, given their nature, they may be particularly revealing about transnational illicit flows. Based on seizures by customs authorities, there are clear differences across the types of conveyance in terms of the total number of arms seized per case, with seizures from vessels being on average more than five times larger than any other type of conveyance. At the same time, seizures from vehicles accounted for more than two thirds of seizure cases, suggesting that large illegal shipments tend to travel by sea while small shipments may be more common and tend to travel by land. Assigning resources to targeting vessels in law enforcement efforts could significantly impact the number of firearms intercepted.

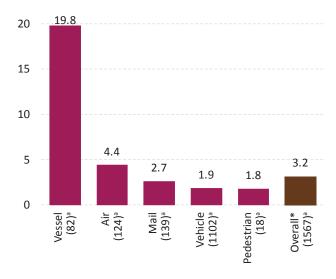
International firearms trafficking methods

More information on trafficking modes is available from the qualitative assessments provided by countries of the prevalent modes of transportation for trafficking across

^{*} A case is considered "small" if 5 arms or less were seized, "large" otherwise. This distinction is made in view of the fact that the threshold of more than 5 arms seized in a case was one of the criteria recommended in the questionnaire for the designation of a seizure case as "significant".

FIG. 7 Type of conveyance in customs seizures in terms of size of seizure and number of seizure cases

Average number of seized firearms/SALWs per customs seizure, by type of conveyance, 2016-17



- * Includes 102 cases of other or unknown type of conveyance.
- ^a Number in brackets denotes number of cases.

Source: World Customs Organization.

borders. Countries distinguished land, maritime and air transportation, as well as mail and other forms of transportation.

In general, there is a clear distinction between the detection of incoming and outgoing flows, and most weapons are seized on an incoming, rather than outgoing, route. This suggests that the level of scrutiny exercised by customs authorities tends to be higher on incoming firearms.

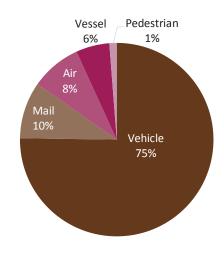
Land borders

Trafficking by land was overall the mode of transportation most highlighted by countries. Libya, for example, reported that the most common routes for firearms trafficking was across its eastern, western and southern borders. Vehicles with false bottoms were used in Mexico and specific types of vehicles for firearms trafficking was reported by Costa Rica. Concealment and package delivery were mentioned as the most frequent modes of transportation in Paraguay. From Paraguay, firearms were trafficked to Brazil across the land border in cars, trucks and buses. Land border crossings were also used in Croatia, Slovenia and Denmark. Land borders were mainly crossed for trafficking purposes also in Albania, either by vehicles or on foot.

Planes and airports

Eight per cent of firearms seizure cases made by customs authorities involved trafficking by air with on average, 4 firearms per seizure. Out of 24 countries which reported

Cases of firearms/SALWs** seized by customs authorities, by type of conveyance, 2016-17



** Cases of unknown type of conveyance are excluded.

any cross-border seizures of arms, 16 had made some of these seizures in planes and airports. Brazil reported the detection of a large seizure case of 60 assault rifles, seized from incoming air freight. In Paraguay, all the arms seized in 2016⁶ were seized in connection with unauthorized importation attempts by air.

Vessels and harbours

A small number of countries mentioned cross-border trafficking by sea, but among these few reports, there were very large seizures. For example, Tunisia reported a seizure of 362 arms in the Port of La Goulette. Trafficking by sea could be done by hiding firearms in the vessels like was done in Tunisia were firearms were transported inside vehicles through seaports on board ships from the ports of Marseille (France) and Genoa (Italy). Another technique to cross the border avoiding the detection of customs was reported by the Philippines, whereby firearms were jettisoned from vessels at prearranged areas some distance from the shore and subsequently picked up by small boats. In addition, leakages in legitimate importations of firearms were used by traffickers, including some involving the use of private ports and wharves. In some cases, small boats were used to cross rivers and lakes like in Brazil where such border crossings reportedly happen across the Parana river and Itaipu lake. Another way to transport firearms across borders by sea was to use undeclared or mis-declared firearms, alongside other goods, addressed to fictitious names and addresses. In addition, parts and components of dismantled firearms could have been included within imported or exported metal items or parts of machinery.

⁶ Seizures in Paraguay amounted to 37 firearms in 2016. No data were available for 2017.

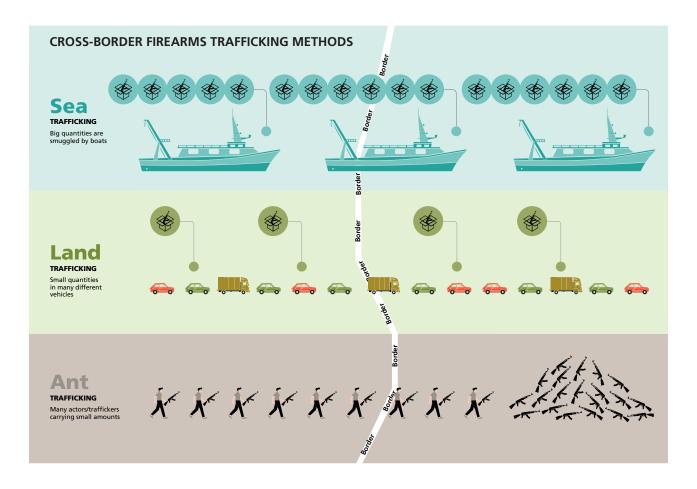
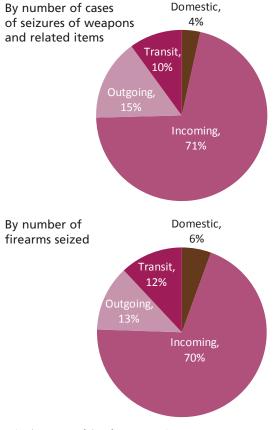


FIG. 8 Average distributions* of customs seizures, by type of routing, 2016-17



^{*} Simple average of data for 59 countries. Source: World Customs Organization.

Mail and other methods

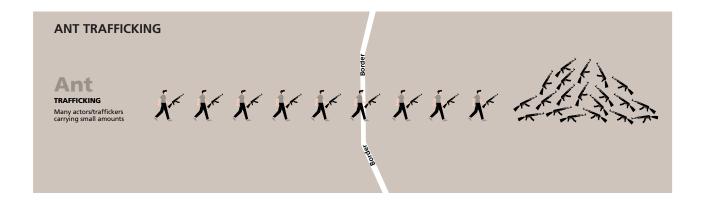
Traffickers also use methods in which their physical involvement is reduced and which may be seen as less risky. Mail was reported to be used for firearms trafficking in Albania, Slovakia and Lithuania. Traffickers in some countries used the open internet or the darknet for firearms trafficking. This included Slovakia, Spain, Libya⁷ and in particular Portugal, where illegal transactions originating in the European Union and conducted over the darknet or open internet were detected. Also, Lithuanian authorities indicated having received communication arising from foreign investigations on Lithuanian nationals suspected of acquiring firearms illegally on the internet.

Ant trafficking

Cross-border trafficking of firearms sometimes takes on the form of so-called "ant trafficking"; in other words, the illicit flow is facilitated by carrying or transporting very small quantities, possibly by numerous individuals. This phenomenon has been hypothesized and documented in various settings and regions, including Africa, Asia, Europe,8 and the border between the United States and

Some research suggests that the use of online sites and services for trade in arms in Libya has its beginnings between 2011 and 2013. See Small Arms Survey, The Online Trade of Light Weapons in Libya. Dispatch No. 6, April 2016.

Savona Ernesto U. and Mancuso Marina (Eds.) 2017. Fighting Illicit Firearms Trafficking Routes and Actors at European Level. Final Report



Mexico.⁹ Such a mechanism may or may not occur in a concerted fashion or be orchestrated by the final recipients of trafficked arms, but can also simply be a consequence of multiple individuals acting independently.

In some cases, cross-border trafficking in small quantities can be opportunistic and targeted to serve local or smallscale demand. For example, in its 2013 Serious and Organized Crime Threat Assessment,10 Europol assessed that trafficking in the European context occurred on a small scale and trafficked weapons were intended for personal use or to meet specific orders. A joint research initiative of Small Arms Survey and the African Union Commission¹¹ has documented smaller-scale trading of arms, facilitated by ethnic ties, by pastoralists, across the borders of Kenya, Uganda and South Sudan for the purposes of protection of their herds. This was also corroborated by Kenya in its reply to the Illicit Arms Flows Questionnaire for 2016-17, which mentioned cattle raids as a context for arms seizures. In Asia, one instance of cross-border trafficking which has been described as "ant trade" is the crossborder trafficking into eastern Nepal.¹²

Although "ant trafficking" occurs in small individual consignments, it can result in sizeable illicit flows and accumulation of illicit firearms, and may also be the result of an organized strategy or the outcome of a supply and demand mechanism functioning at a larger scale. One technique which may be used for this is the use of "mules", including migrants and refugees. ¹³ In its reply to the Illicit Arms Flows Questionnaire for 2016-17, Libya reported that arms trafficking routes were often the same as those used for irregular migration.

Another systematic technique to illicitly procure firearms is the use of straw purchases. This involves an individual, usually with a clean criminal record, legally buying a firearm with the intention of illegally passing it on to a person who would otherwise be precluded from owning a firearm, or whose profile would raise suspicion if they were to attempt such a purchase themselves. Often the serial numbers would be erased and the firearm reported as stolen. It has been claimed that fake "stealing" of firearms was an important channel used by organized crime groups in Italy to secure "clean" weapons for homicides and other crimes. ¹⁴

Considering that firearms are available on the licit market, which is regulated to various degrees, it is often more effective for criminals to acquire and subsequently divert firearms from the licit market as an alternative to large-scale trafficking of illicitly sourced firearms. The need to be discreet — not attracting too much attention from law enforcement - and to operate (at least in appearance) within the rules would be compatible with the small numbers of weapons procured and moved in single instances, and would also confirm that the initial procurement may need to be done by individuals without a criminal record. Such a mechanism may function both within a given country and across borders.

The land border between the United States and Mexico likely represents the earliest instance where the "ant trade" was observed by scholars. ¹⁵ One of the aspects which suggest that this trade is done in an organized fashion is that, despite the fact that the firearms are moved in smaller batches, the sources may be more concentrated. ¹⁶ Moreover, a single straw purchase may involve larger quantities of firearms, and the same individuals may be involved in multiple straw purchases and multiple border crossings. ¹⁷

of Project FIRE, p. 54, 2017.

⁹ See, for example: UNODC, The Globalization of Crime – A Transnational Organized Crime Threat Assessment, 2010.

¹⁰ Europol, EU Serious and Organized Crime Threat Assessment 2013.

¹¹ Small Arms Survey, Weapons Compass, Mapping Illicit Small Arms Flows in Africa, January 2019.

¹² Small Arms Survey, *The Highway Routes. Small Arms Smuggling in Eastern Nepal.* Issue Brief No. 4, November 2014.

¹³ Small Arms Survey, Weapons Compass, Mapping Illicit Small Arms Flows in Africa, January 2019.

¹⁴ Massari, M. (2013) "Guns in the family. Mafia violence in Italy", in LeBrun E., McDonald G., Alvazzi del Frate A., Berman E.G., and K. Krause, Small Arms Survey 2013, Cambridge University Press.

¹⁵ Lumpe, L., 'The US Arms Both Sides of Mexico's Drug War', *Covert Action Quarterly*, 61: 39–46, 1998.

¹⁶ Cook, P.hilip J., Cukier W. and Krause, K., 'The illicit firearms trade in North America', *Criminology and Criminal Justice*, 2009; 9; 265-286.

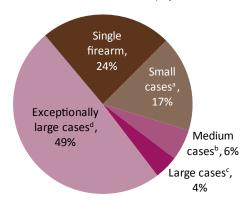
¹⁷ Lumpe, L., 'The US Arms Both Sides of Mexico's Drug War', *Covert Action Quarterly*, 61: 39–46, 1998.

FIG. 9 Breakdowns of customs seizures, by size* of seizure case

Breakdown of seizure cases, by size*

Single firearm, 74% casesª. Exceptionally 20% large casesd, 2% Large Medium casesc, 1% casesb, 2%

Breakdown of firearms seized, by size* of seizure case



- * The size of a seizure case refers to the number of firearms seized in that particular instance.
- ^a A case is considered "small" if between 2 and 5 firearms were seized in that particular instance.
- ^b A case is considered "medium" if between 6 and 10 firearms were seized in that particular instance.
- ^cA case is considered "large" if between 11 and 17 firearms were seized in that particular instance.
- ^d A case is considered "exceptionally large" if at least 18 firearms were seized in that particular instance.

Source: World Customs Organization.

Using cross-border seizures as a proxy for trafficking, one indicator which may give further insight into the phenomenon of ant trafficking is the extent to which weapons are seized in smaller quantities, bearing in mind that this may also be influenced by law enforcement strategies.

The question may arise whether the "ant trade" is the predominant form of international trafficking. The evidence from customs seizures does not clearly support the hypothesis of that international firearms trafficking is generally an "ant" trade. Customs seizures recorded in the World Customs Organization's CEN database in 2016-17 show that firearms trafficking across borders happened at all levels, including trafficking of individual firearms, a few firearms and large shipments.

Approximately three quarters of all cases involved only one firearm, and less than 6 per cent involved more than 5 firearms at a time. However, in terms of numbers of firearms seized, the top 2 per cent of cases (cases of at least 18 firearms or more) accounted for approximately one half of all seized firearms. These included 4 cases in which more than a hundred firearms were seized (see Figure 9). It should be borne in mind that the small seizure cases may include many instances which were unrelated to trafficking. On the other hand, the sporadic nature of the very large instances, in addition to the lack of background information, makes it hard to reliably interpret their overall importance in the big picture of trafficking. While the characterization of trafficking as an "ant" trade depends on a subjective threshold of what constitutes a "small" shipment, this evidence does not warrant describing inter-

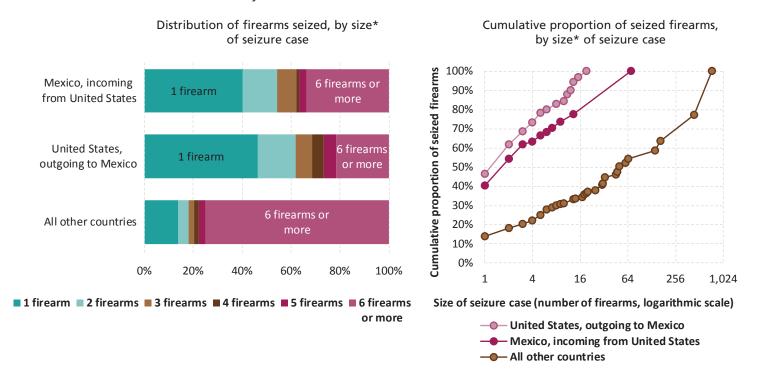
national firearms trafficking in general as predominantly an "ant" trade.

However, a focus on seizures made specifically by customs authorities in the United States and in Mexico brings out a striking distinction between such seizures and customs seizures in general, and confirms that seizures across this border tend to be significantly smaller than usual. In particular, cases of 5 firearms or less accounted for two thirds of firearms seized by Mexico as they crossed the border from the United States, and an even higher proportion (78 per cent) of firearms seized by the United States at the same border (on their way to Mexico). This is in sharp contrast with customs seizures in other countries, among which only a quarter of firearms were seized in cases of 5 firearms or less. Moreover, the similarity of the patterns (see Figure 10) which emerge independently from seizures by authorities in Mexico and the United States further corroborates the assumption that these patterns reflect a real characteristic of flows across this border.

Thus, the comparison between customs seizures in general and those made specifically en route from the United States and Mexico does support the hypothesis of ant trafficking between these two countries, in the sense that this flow appears to occur in smaller individual batches than the general global pattern.

A comparison of the types of arms seized in the United States and Mexico also reveals an interesting pattern, with the share of rifles rising progressively from those recoveries made in the United States in general (14 per cent), to

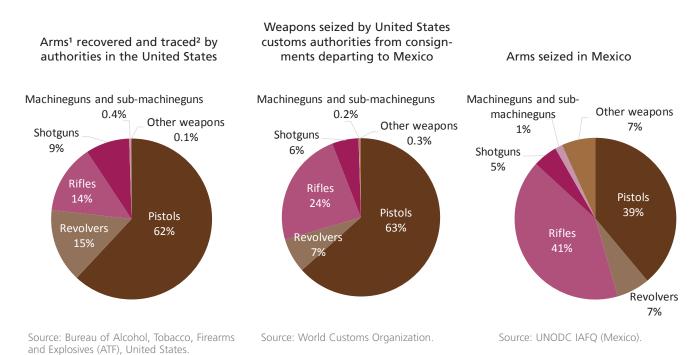
FIG. 10.... Size* of customs seizures from the United States to Mexico in comparison with customs seizures made by all other countries



^{*}The size of a seizure case refers to the number of firearms seized in that particular instance.

Sources: Mexican Customs (data for Mexico); World Customs Organization (data for the United States and all other countries).

FIG. 11.... Comparison of the distributions of arms or other weapons seized along the route from the United States to Mexico, 2016-17



¹ Includes, under the category "Other weapons", the following categories as classified by the Bureau of Alcohol, Tobacco, Firearms and Explosives: tear gas launchers, destructive devices, combination guns, flare guns and "any other weapon". Derringers are included under "pistols". Silencers and receivers/frames are not included.

² Includes firearms submitted for tracing to the Bureau of Alcohol, Tobacco, Firearms and Explosives by a law enforcement agency, resulting from seizure as well as abandonment, buy-back program, or other recovery method. Moreover, only firearms submitted for tracing are included. Firearms submitted for tracing after recovery do not represent the entire set of all seized firearms.

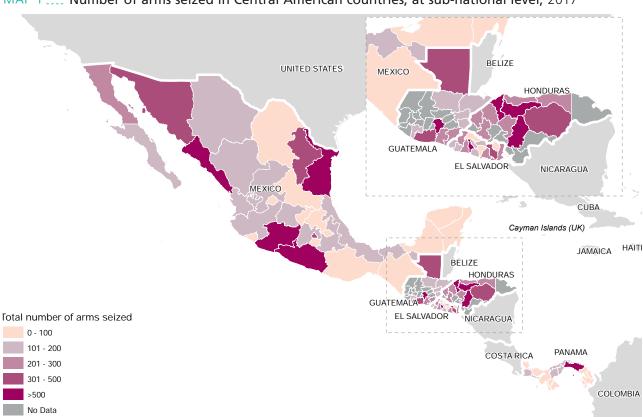
cross-border customs seizures made by authorities in the United States (24 per cent) and again to seizures in Mexico (41 per cent). This increasing share is mainly offset by the smaller share of pistols, but the progression in terms of the share of pistols is less clear. One possible interpretation for this pattern is that the illicit market in Mexico exhibits a strong demand specifically for rifles which may be fed by flows from the United States. Another interpretation is an uneven priority given to rifles between the United States and Mexico at the border.

Domestic trafficking

In general terms, firearms trafficking is understood as the unauthorized trade, purchase and transportation of firearms. As all other forms of trafficking, firearm trafficking can happen within and across borders, so trafficking can be analysed and researched as a domestic and a transnational phenomenon. From a legal perspective, according to the United Nations Firearms Protocol, "illicit trafficking" of firearms entails a physical movement from the territory of one state to that of another state; 18 some countries, as well as international instruments, refer to broader concepts such as "illicit proliferation"19, "diversion" and "illicit transfers" or "illicit arms flows" (the SDG 16.4), with a view to capture also the domestic aspect of trafficking of weapons, regardless of their possible or potential subsequent crossing of international borders. Some national legislations, such as Uruguay, for example, have also explicitly introduced separate offences for internal and international trafficking.

It is difficult to analyse trafficking of firearms by separating its national and international dimensions. National legislation may not differentiate trafficking that remains within national borders and trafficking that comes from abroad or is destined for abroad, so information related to trafficking, such as seizure data, cannot be disaggregated to reflect these two aspects separately. Looking at trafficking that crosses borders in isolation from domestic trafficking would be misleading because domestic trafficking is often the beginning of the illicit transnational supply chain of firearms. Hence starting with addressing domestic trafficking is a way to counter transnational illicit arms flows.

In order to shed light on the illicit movement of firearms within the territory of a given country, it is useful to examine seizures at sub-national level (region, state, department, province, et cetera). A certain level of detail was available for some countries in Central America.



MAP 1 Number of arms seized in Central American countries, at sub-national level, 2017

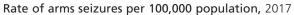
Source: UNODC IAFO

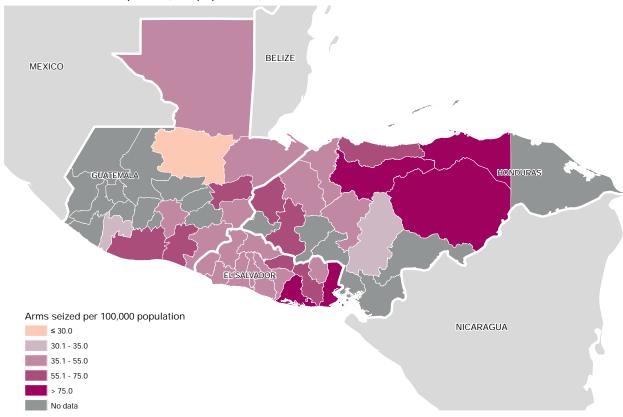
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

¹⁸ See Box 'International and national definitions of firearm trafficking'.

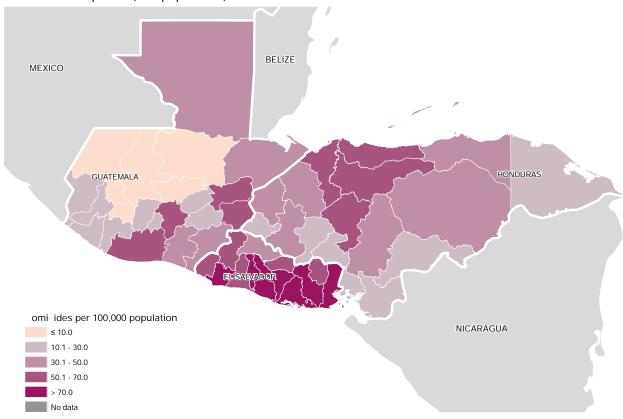
¹⁹ Programme of Action to prevent, combat and eradicate the illicit trade in small arms and light weapons

MAP 2 Rate of arms seizures per population in Guatemala, Honduras and El Salvador, in comparison with homicide rates





Homicide rates per 100,000 population, 2017/16



Source: UNODC IAFQ; UNODC Homicide Statistics.

The boundaries and names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

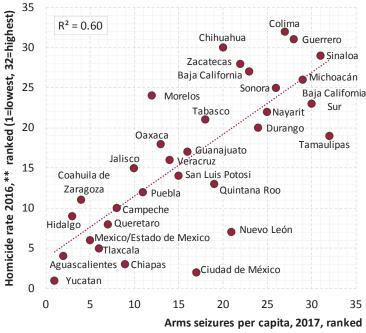
Within the neighbouring countries of El Salvador, Guatemala and Honduras, seized arms, as measured in absolute numbers, tended to concentrate around some of the most violent areas suggesting that seizures may be broadly linked with the demand for firearms generated by violent crime.

Data from Guatemala indicate that, in 2017, 80 per cent of seized arms²⁰ were seized in the suspected context of violent crime. For El Salvador, the criminal context was more frequently assessed to be related to trafficking as opposed to violent crime²¹, but El Salvador also indicated that the data pertaining to illicit trafficking included transfer or movement of items within national borders, as well as cross-border trafficking. Hence these figures do not allow to distinguish between international movements of firearms and the final stages of the domestic illicit supply chain (close to the final "consumers").

Some of the largest significant seizure cases reported by these countries also occurred in urban centres. El Salvador reported a seizure of 110 handguns in Santa Ana. Of the 8 significant cases reported by Guatemala, 5 occurred in Guatemala City or Guatemala Department, 2 in a port and 1 on a highway - the largest being a seizure of 29 firearms in Guatemala Department. Of the 7 largest cases reported by Honduras, 5 were made in San Pedro Sula or Tegucigalpa, Distrito Central (the capital); this included a seizure of 68 arms in San Pedro Sula. The largest case, involving 91 arms, occurred in the municipality of El Progreso – a smaller city but an important logistical hub. The concentration of seizures in urban areas may suggest a combination of factors: higher demand of firearms related to violent crime, concentration of trafficking hubs, and higher presence and capacity of law enforcement.

When expressed in rates per capita, the most pronounced seizure levels shift perceptibly from the more populated areas towards the land and sea borders, with higher rates registered for example in the departments of La Unión (El Salvador) and Colón, Copan and Olancho (Honduras). Border areas are also affected by the highest level of homicide. The presence of trade junctions or logistical hubs may also play a role, as in the case of Yoro department in Honduras (including the municipality of El Progreso) and the two departments, on the Pacific coast of Guatemala, of Escuintla (with its major port of Puerto Quetzal) and Santa Rosa (also close to the land border and including the municipality of Chiquimulilla). Thus, the seizure levels expressed per capita are more likely than the absolute values to reflect the transnational movement of firearms among these countries as well as neighbouring countries. El Salvador reported sending and receiving large numbers of tracing requests from neighbouring countries.

FIG. 12.... Homicide rates and arms seizures per capita in administrative regions* of Mexico, 2016/17 (ranked correlation)



(1= lowest, 32=highest)

Sources: UNODC IAFQ; UNODC Homicide Statistics.

In Mexico, among the 32 administrative regions (31 states and one federal district), the highest numbers of arms seized in 2017 were seized in Tamaulipas, Sinaloa, Michoacán and Guerrero. All four states were also among the top five (along with Baja California Sur) when ranked in per capita terms. In general, there appeared to be an association between homicide rates and seizures of arms per capita (see Figure 12). Overall, this suggests a link to the presence of organized crime groups and inter-cartel violence. There are some exceptions to this general pattern as in the case of Tamaulipas, which was the most prominent in both absolute and per capita seizure terms, but with comparatively moderate levels of homicidal violence; the proximity to the border with the United States may bring about a significant role in firearm trafficking. Tamaulipas and Guerrero were also the location of large significant seizures reported by Mexico: 101 rifles seized in Tamaulipas, and 48 arms seized in Guerrero (the only other significant case reported by Mexico was, however, even larger, involving 109 arms seized in Nuevo León).

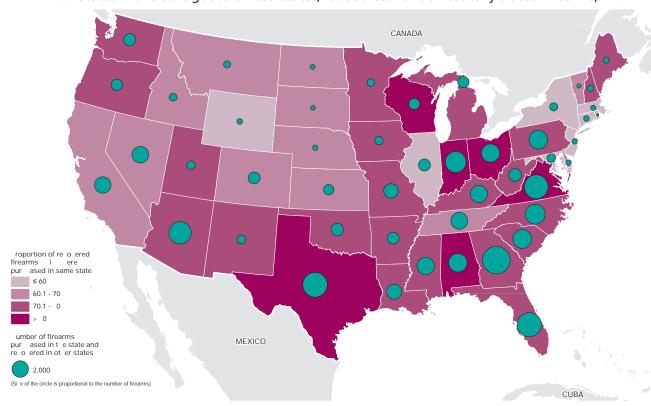
Some detailed data at sub-national level were also available for the United States, in particular information on the states to which recovered weapons could be traced. These data enable a quantification of the extent to which recovered weapons had been sold in a specific state, both among that state's own recoveries as well as recoveries in other states. These two independent measures result in similar outcomes in terms of the importance of states relative to

^{20 3,651} out of a total of 4,686.

Out of 3,103 weapons seized, only 345 were suspected to be linked to a context of violent crime, compared to 1,898 weapons linked to a context of trafficking.

^{* 31} states and 1 federal district

^{**} Data for 2017 were not available.



MAP 3 States in the contiguous United States,1 as sources for domestically traced firearms,2 2017

Note: Purchases refer to the legal market. Based on a subset of traced firearms for which it was possible to identify a purchaser and the state in which the final dealer was located. Firearms submitted for tracing to the Bureau of Alcohol, Tobacco, Firearms and Explosives by a law enforcement agency may result from a seizure as well as abandonment, buy-back program, or other recovery method. Firearms submitted for tracing after recovery do not represent the entire set of all seized firearms.

Source: Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), United States

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

each other. In other words, those states which emerge as the most prominent on the basis of their own recoveries – in the sense that they recovered relatively high proportions of firearms originally sold within the same state – tended to be the same ones which emerged most prominently as the location of purchase of firearms recovered in other states. The fact that these independent metrics by and large tally strengthens their interpretation as a measure of the varying degrees to which firearms involved in crime can be sourced from a given state. States with a higher proportion of firearms recovered within the state and high number of firearms purchased in the same states are more likely to be the source of domestic trafficking (see Map 3).

Overall, among firearms for which it was possible to identify a purchaser and the state in which the final dealer was located, around 71 per cent had been purchased in the same state where they were recovered.

Information on the time elapsed in the United States between the first retail purchase of a recovered and traced firearm and the moment it is recovered indicates that several years may pass from the time when a firearm is legally purchased until it is seized, depending on the geographical distance between the States where the firearm is purchased and intercepted. Data indicate that, among traced firearms for which it was possible to identify the first retail purchase (including the date of purchase), around 60 per cent had been sold more than three years before being recovered. Moreover, the proportion of firearms which were recovered in a state other than that in which they had been sold increased steadily with the time elapsed between sale and recovery. These data suggest that, not only can firearms last a long time in circulation before they are used and detected in a crime, but also that the longer they are in circulation, the more they are likely to move geographically, at least within the same country.

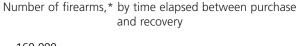
Transnational trafficking flows

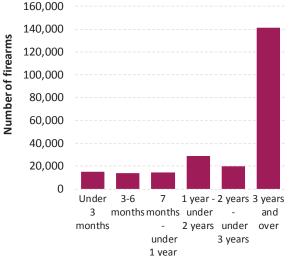
Respondents to the Illicit Arms Flows Questionnaire provided information about the routes that were observed in seizures related to illicit trafficking of firearms. Information about the countries of departure and intended destination of seized consignments was also included in the Customs Enforcement Network database maintained by

¹ District of Columbia is also included. Alaska, Hawaii, Guam, Puerto Rico and the United States Virgin Islands are not included as they do not share a land border with other parts of the territory of the United States.

² May include tear gas launchers, destructive devices, receivers/frames, silencers and any other weapons classified as "firearms" by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), United States.

FIG. 13.... Firearms* recovered in the United States and traced domestically to first retail purchase, 2017

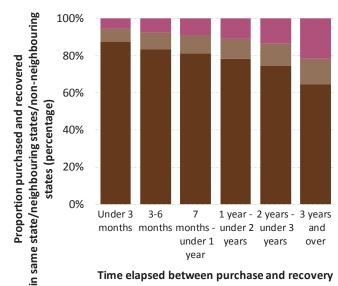




Time elapsed between purchase and recovery

May include tear gas launchers, destructive devices, receivers/frames, silencers and any other weapons classified as "firearms" by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), United States.

Distribution by geographic proximity of purchase to recovery, according to time elapsed



- Purchased and recovered in non-neighbouring states/territories
- Purchased and recovered in neighbouring states/territories
- Purchased and recovered in same state/territory

Note: Purchases refer to the legal market. Based on a subset of traced firearms for which it was possible to identify a purchaser and the state in which the final dealer was located, and to determine the time elapsed between purchase and recovery. Firearms submitted for tracing to the Bureau of Alcohol, Tobacco, Firearms and Explosives by a law enforcement agency may result from a seizure as well as abandonment, buy-back program, or other recovery method. Firearms submitted for tracing after recovery do not represent the entire set of all seized firearms.

Source: Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), United States.

the World Customs Organization. Although these data were of a different nature, their combined coverage could be used to build a picture of illicit trafficking flows. In general, the information about incoming seizures and flows was more comprehensive than information about outgoing seizures.

Northern America, Europe and Western Asia emerged prominently as points of departure for illicit flows - in different ways. Northern America was important both in terms of trafficking to other parts of the Americas, notably Central America, as well as inter-regional flows. The role of Europe as a source was more pronounced in terms of inter-regional flows. Considering inter-regional flows only, illicit flows departing from Northern America and Europe together were estimated to account for the vast majority of the global total, with Western Asia the only other subregion accounting for a non-negligible share (see Map 5 and corresponding figure in the Methodological Annex).

Western Asia (along with South America) was important mainly in terms of trafficking within the subregion, but also stood out in terms of the diversity of the destination regions where it was identified as a source for illicit flows. The same characteristic was even more marked for Northern and Western Europe and was also striking—despite

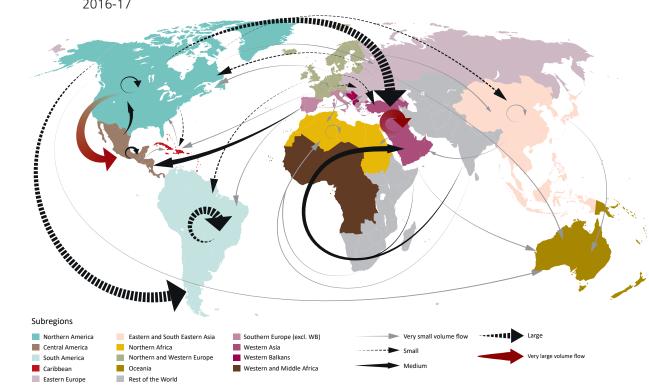
the overwhelming intra-regional component—for Northern America.

The most important areas of destination were Central America and, taking into account trafficking within subregions, Western Asia and South America. These main destination areas are known for high levels of criminal violence or conflict.

Overall, illicit flows appeared to have a certain localized character. For most regions, the inter-regional component of incoming flows (that is, illicit flows originating within the same region) accounted for the large majority of incoming illicit flows, with the exception of Eastern and South-East Asia, Oceania and Western and Middle Africa.^{22, 23} In some subregions-namely Northern and Western Europe, South America and Western Asia-the localized character was even more pronounced, in that a majority of incoming flows were detected on their way from countries within the same subregion.

²² Once more, for these exceptions, the inter-regional flows originated mainly from the three main source regions of Northern America, Europe and Western Asia. It should, however, be borne in mind that coverage from Asia and Africa was relatively limited.

²³ It should however be borne in mind that coverage from Asia and Africa was relatively limited.



MAP 4.... Main transnational firearms trafficking flows (as defined by routes of seized firearms), 2016-17

The breakdown into subregional groupings is based on the standard UN classification (M49), adapted to take into account the availability of data and regions of special interest of the study. Please see Methodological Annex for details.

Arrows represent flows between subregions (not specific countries).

Source: UNODC elaboration of data from Illicit Arms Flows Questionnaire and World Customs Organization.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

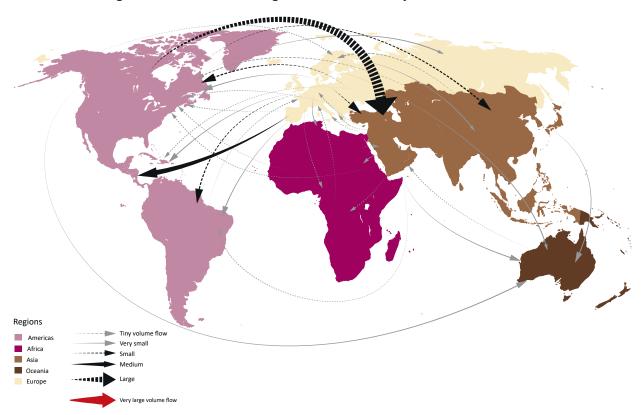
This local character could also be observed in the reports of specific countries. For example, Sudan reported incoming routes from five different countries, all of which share a land border with the country. Sudan reported 32 significant cases for which the country of departure was believed to be Libya (the largest three seizures made in Sudan arriving from Libya involved 234, 86 and 53 firearms). Algeria also detected and seized firearms which had departed from bordering countries, including Libya – although countries outside Africa were assessed to account for larger shares of incoming flows.

Although the available seizure data do not provide solid evidence of large illicit flows of arms affecting Africa, this may also be a reflection of lower capacity to intercept and record transnational shipments. It should also be borne in mind that, for some countries, the proliferation of arms and their ample supply on the black market may potentially render transnational trafficking, especially interregional trafficking, largely unnecessary as a way to illicitly source firearms. ²⁴ Nevertheless, it appears that Libya may be an important source country for arms trafficked to neighbouring countries.

Another example of the local character of trafficking is the case of Brazil, although in this case it is the interplay with the licit sphere which brings in an inter-regional element. Brazil identified a number of countries in South America as the country of departure in seizures related to trafficking, most prominently Paraguay. The routes into Brazil involved neighbouring countries in various ways, including diversion from holdings of state authorities, importation from third countries for the purposes of diversion and trafficking into Brazil, and also trafficking originating in the United States going through Paraguay as a transit country. While trafficking of firearms into Brazil appeared to be mainly done alongside drugs and contraband, in their illicit shipments, there were also groups mainly dedicated to firearms trafficking. Some groups based in São Paulo and Rio de Janeiro – the two most important destinations for trafficked firearms within Brazil - also set up bases in Paraguay to receive drugs from the Andean countries and also manage the firearms trafficking from Paraguay.

Brazil reported several significant seizure cases of firearms believed to have entered the country from Paraguay, including 4 cases of more than 30 firearms each²⁵ - mainly pistols - as well as a case of 61 rifles trafficked from the United States. Moreover, two significant seizures were made in the

²⁴ See Small Arms Survey, Weapons Compass, Mapping Illicit Small Arms Flows in Africa, January 2019, p. 38.



MAP 5 Inter-regional firearms trafficking flows (as defined by routes of seized firearms), 2016-17

The breakdown into subregional groupings is based on the standard UN classification (M49), adapted to take into account the availability of data and regions of special interest of the study. Please see Methodological Annex for details.

Arrows represent flows between subregions (not specific countries).

Source: UNODC elaboration of data from Illicit Arms Flows Questionnaire and World Customs Organization.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

city of São Paulo in which the seized firearms (9 and 19) were believed to have entered Brazil from the Plurinational State of Bolivia and were seized alongside large quantities of cocaine (882 kg and 273 kg respectively).26

Brazil also reported on a pattern in trafficking which has in recent years been successfully countered and largely reduced through efforts undertaken by the state. The pattern involved firearms being legally exported to neighbouring countries and subsequently trafficked back into the country; the introduction in 2001 in Brazil of a tax on exports to some countries in South America appears to have made it less viable for traffickers to use this strategy, although there may remain instances of "triangulations", in which firearms are legally exported to a third country outside South America and subsequently re-enter Brazil through neighbouring countries. The latter modality however appears to occur on a small scale and to fall within a broader pattern of channelling firearms from licit sources into the Brazilian black market through or

from neighbouring countries, predominantly from the legal market of third countries outside the region but also directly from the stockpiles held by authorities of some neighbouring countries.

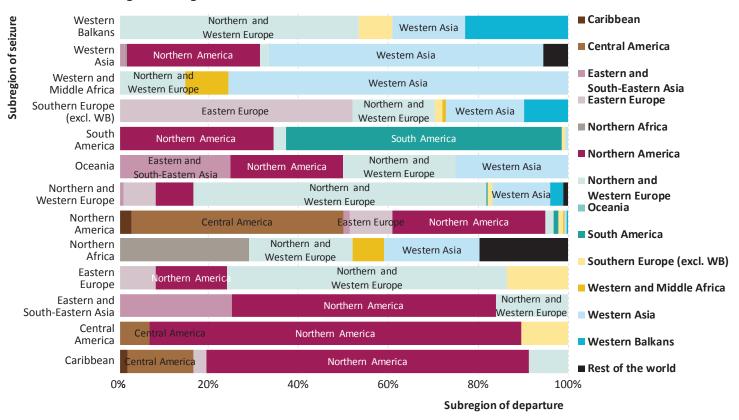
Reports of trafficked firearms departing from the Western Balkans and detected outside this subregion were limited and mainly restricted to neighbouring countries (Slovenia and Croatia), in addition to Sweden. In terms of seizures made by countries in the Western Balkans themselves,²⁷ customs seizure data provided additional, but still limited, evidence of flows departing from the Western Balkans to other regions (4 cases amounting to 34 firearms in 2016-17).

²⁵ One of these cases, involving firearms held in a private home on behalf of a drug trafficking organization, was not designated as a case of traf-

²⁶ These two cases were not designated as trafficking cases.

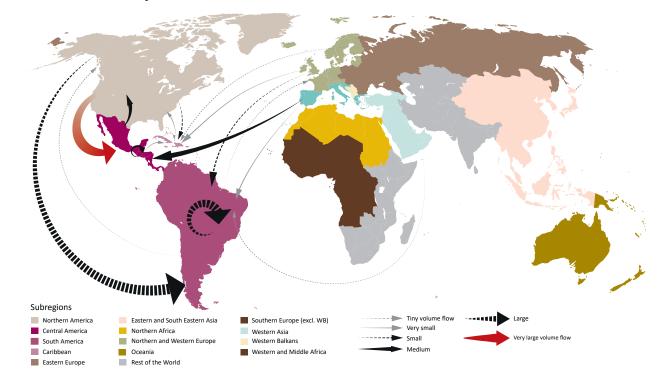
²⁷ In its reply to the Illicit Arms Flow Questionnaire for 2016-17, Albania also reported seizures to unspecified destinations.

FIG. 14... Estimated breakdown of firearms seized from incoming consignments by subregion of departure, according to subregion of seizure, 2016-17



Source: UNODC elaboration of data from Illicit Arms Flows Questionnaire and World Customs Organization.

MAP 6 Transnational firearms trafficking flows affecting Latin America and the Caribbean (as defined by routes of seized firearms), 2016-17



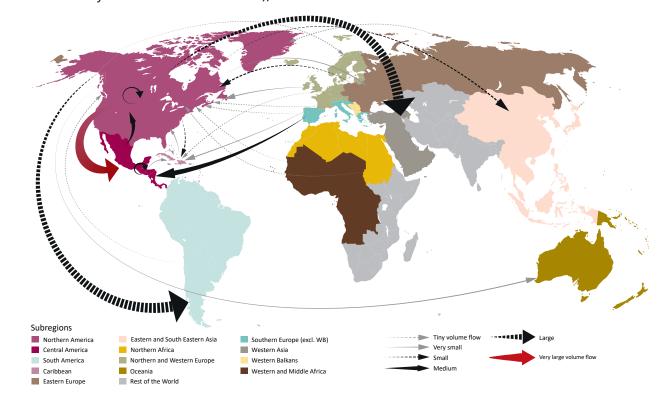
The breakdown into subregional groupings is based on the standard UN classification (M49), adapted to take into account the availability of data and regions of special interest of the study. Please see Methodological Annex for details.

Arrows represent flows between subregions (not specific countries).

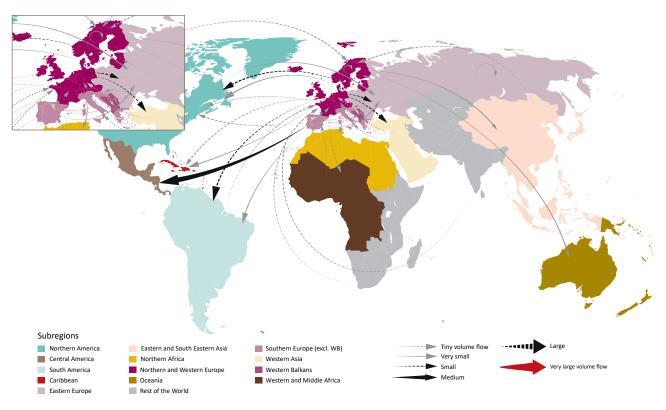
Source: UNODC elaboration of data from Illicit Arms Flows Questionnaire and World Customs Organization.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

MAP 7 Transnational firearms trafficking flows affecting Northern and Central America (as defined by routes of seized firearms), 2016-17



MAP 8 Transnational firearms trafficking flows affecting Europe (as defined by routes of seized firearms), 2016-17



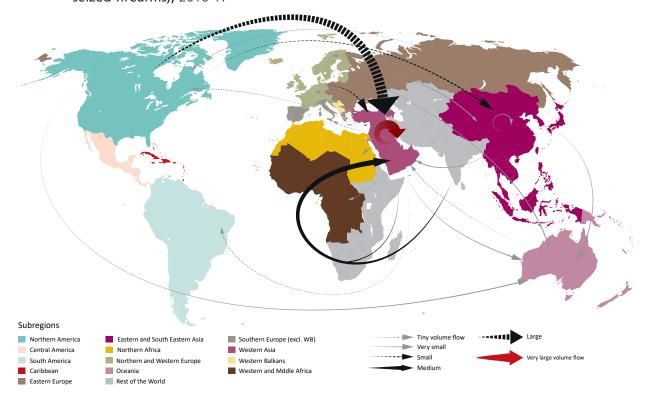
The breakdown into subregional groupings is based on the standard UN classification (M49), adapted to take into account the availability of data and regions of special interest of the study. Please see Methodological Annex for details.

Arrows represent flows between subregions (not specific countries).

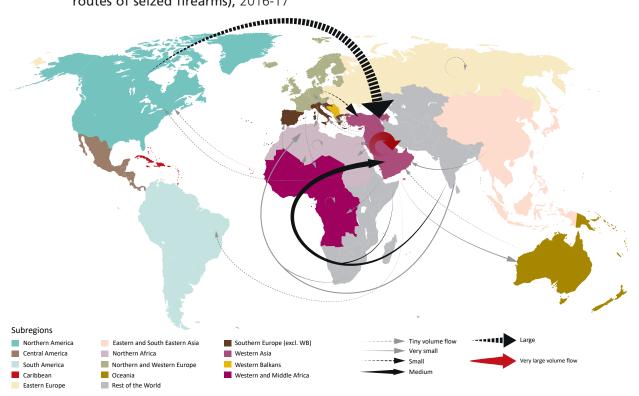
Source: UNODC elaboration of data from Illicit Arms Flows Questionnaire and World Customs Organization.

The boundaries and names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

MAP 9 Transnational firearms trafficking flows affecting Asia and Oceania (as defined by routes of seized firearms), 2016-17



MAP 10... Transnational firearms trafficking flows affecting Africa and Western Asia (as defined by routes of seized firearms), 2016-17



The breakdown into subregional groupings is based on the standard UN classification (M49), adapted to take into account the availability of data and regions of special interest of the study. Please see Methodological Annex for details.

Arrows represent flows between subregions (not specific countries).

Source: UNODC elaboration of data from Illicit Arms Flows Questionnaire and World Customs Organization.

The boundaries and names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

CHAPTER 4

LINKS TO ORGANIZED CRIME, TERRORISM AND OTHER FORMS OF CRIME

Chapter overview

This chapter takes a step back to analyse the bigger picture of linkages between firearms trafficking and a range of other crimes and social issues. Firearms trafficking often takes place to satisfy demand from criminals who need the arms for use in various unlawful activities. Drug trafficking and violent crime — including its starkest manifestation, homicide — are among the key crimes associated with the circumstances of firearms seizures.

There seems to be a relationship between the level of certain crimes registered by countries and the share of firearms that are seized in those criminal contexts. Although there are some variations, in general, the higher the homicide rate or rate of illicit drug seizures, the larger the share of firearms seized in those criminal contexts. In addition, illicit drugs are the most common non-firearms-related commodities seized together with firearms, followed by counterfeit goods, cultural property and natural resources.

In several countries, the use of firearms is particularly pronounced in organized crime or gang-related homicides. While the majority of homicide victims globally are men, this trend is typically even more acute when considering homicides perpetrated by firearms. However, data for a limited number of countries related to homicides of intimate partners and family members — in which most victims are women - show other gender-related patterns. Men were more likely than women to use a firearm when killing their female partners, while women were more likely to resort to a sharp object.

More than half (54 per cent) of all homicides in 2017 were carried out with firearms, and the availability of firearms seems to have an impact on homicide rates. An increase in the rate of possession of firearms broadly corresponds to an increase in the homicide rate. This can best be observed when comparisons are made within relatively homogeneous country groupings, for example in terms of geography or socio-economic characteristics. Comparing firearms seizures and homicide rates can also help to identify countries with better firearms interdiction capacity and stronger rule of law. Countries with higher levels of firearms seizures relative to the number of homicides committed with firearms are those where higher seizure levels may be related to the capacity of law enforcement rather than firearm supply. These countries tend to have lower overall levels of homicides, possibly reflecting an overall strong rule of law situation. Data also show some correlation between firearm ownership and firearm homicide. Statistical models suggest that a 1 per cent increase in the rate of firearm civil possession can bring a 1.13 per cent increase in the homicide rate in the case of developing countries and 0.74 per cent in the case of developed countries.

In order to adequately explore the links with various forms of crime, this chapter draws substantially on data sources which go beyond the Illicit Arms Flow Questionnaire. This includes other data collection exercise administered by UNODC—namely the Annual Report Questionnaire (for data on drug seizures) and the Crime Trends Survey (for data on homicide)—specific data collection initiatives, published studies (including the UNODC *Global Study on Homicide*) and estimates of civilian holdings of firearms published by Small Arms Survey.

Forms of crime linked to firearms

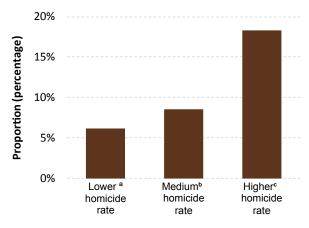
As discussed in Chapter 1, reported data confirm the link between crime and firearms, since the criminal context of seized firearms extends well beyond firearms-related offences.¹ Given that these data are based on recorded suspicions of non-firearms-related offences, they likely underestimate the real extent of the incidence of such offences in the context of firearms seizures. Nevertheless, from these data, drug trafficking and violent crime emerge as the more prominent types of criminal activity associated with the circumstances of seized firearms outside of firearm-related offences.

Regional variations can be observed in the different kinds of criminal context seen in these data. As a context for arms seizures, violent crime is most pronounced in Africa and in Latin America and the Caribbean. This is in line with the relatively high levels of violent deaths (conflict-related or otherwise) in these regions, including intentional homicide and specifically firearm-related homicides.² Drug trafficking is also prominent in Latin America and the Caribbean, where the links between this phenomenon and violence are also well-documented.³ Relative to other kinds of criminal context, drug trafficking is also prominent in Europe, closely followed by violent crime, while terrorism is most pronounced in the case of Africa (see Figure 4 in Chapter 2).

The association between violent crime as a context for firearms seizures and violence in general can be corroborated with UNODC's homicide statistics. Similarly, data on drug seizures corroborate an association between drug trafficking as a context for firearms seizures and drug trafficking in general (see Figures 1 and 2). The countries especially affected by violent crime and drug trafficking are reflected in a correspondingly higher share of arms seized in this context.

Furthermore, data on significant cases of firearms seizures also corroborate the strong link between drug trafficking

FIG. 1 Average proportion of arms seized in the suspected context of violent crime, by rank of homicide rate of reporting countries, 2016*



- $^{\circ}$ 6 countries with homicide rate of less than 1.05 per 100,000 population.
- ^b 6 countries with homicide rate in the range of 1.05-6 per 100,000 population.
- ^c 6 countries with homicide rate of more than 6 per 100,000 population.
- * In the case of one country, the homicide rate for 2016 was not available, and the corresponding rate for 2015 was used as a proxy.

 Note: Reported values of 0 arms seized in the context of violent crime are not included.

Sources: UNODC IAFQ; UNODC Homicide Statistics (UN-CTS and other official sources).

and seized weapons. Aside from weapons-related items such as ammunition, parts and components, and explosives, drugs emerge as the most common commodity seized together with firearms, followed by counterfeit goods, cultural property and natural resources.

Some countries also provided contextual information which provide further insight into the circumstances of weapons seizures and the links to various forms of organized crime.

Albania reported three significant seizure cases (among others), over the period 2016-17, that involved the seizure of large quantities of cannabis in conjunction with several rifles. North Macedonia reported on the procurement of weapons, ammunition and explosive devices by individuals or groups connected with various criminal activities, including property crimes, violent crime, illegal hunting and the illegal drug trade. In particular, North Macedonia reported a significant seizure of 13 weapons, including 3 rifles as well as a hand grenade and two chemical bombs, which was linked to an organized crime group connected to migrant smuggling and drug trafficking. Moreover, weapons were often found in small numbers in apartment and house searches related to the detection of crimes such as drug trafficking, attempted homicide or acts against public safety. Illegally held firearms were found in the possession of individuals who had committed offences including homicide, extortion, grand theft and robbery.

¹ See Figure 3 in Chapter 2.

² UNODC, Global Study on Homicide, 2019.

³ UNODC, Global Study on Homicide, 2019; UNODC, World Drug Report, 2016.

Denmark reported that firearms were often trafficked in conjunction with, or in return for, illicit drugs. A number of firearm-related cases exhibited the involvement of street gangs or motorcycle groups. On several occasions, authorities observed the pooling of firearms and ammunition, stored in neutral locations known only to key gang members and used in multiple shootings.

Peru reported on the involvement of cartels in the illegal importation of firearms by air to be delivered to criminals in areas affected by illicit coca bush cultivation, such as the Valle de los Ríos Apurímac, Ene y Mantaro. The intended recipients included terrorists as well as drug traffickers seeking weapons as a way to enhance their own "safety" and to enable their confrontations with law enforcement. Moreover, corrupt officers in the National Police and Armed Forces diverted weapons from their holdings. Firearms diverted from the armed forces of other countries also entered Peruvian territory to be used in various forms of crime, including organized crime and drug trafficking.

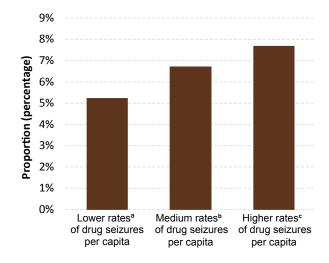
Brazil reported on the parallel trafficking of drugs and firearms along two main routes: across the land border from Paraguay (where marijuana is trafficked along with cocaine); or on small planes from the Plurinational State of Bolivia to the countryside of states in the southeast of Brazil, such as São Paulo or Minas Gerais, from where some of the illegal goods were further trafficked to Rio de Janeiro.

Ultimately most of the trafficked firearms were intended for big cities such as São Paulo and Rio de Janeiro. In the case of Rio de Janeiro, one of the main drivers of demand for firearms was their use in maintaining control of areas for drug dealing. The criminal groups who received the firearms in São Paulo tended to manage the illicit circulation and further distribution of these firearms by renting, lending and selling them, for the purpose of committing crime such as bank robberies.

In general, there were people specialized in the transport of drugs, contraband goods and firearms from the land border to the urban centres, via the Brazilian highways. Some criminal groups based in São Paulo and Rio de Janeiro involved in importing drugs from Andean countries had also set up cells in Paraguay to manage the firearms trafficking from this country. Although in many cases criminal groups sent firearms together with drugs in their illicit shipments, there were also groups dedicated mainly to firearms trafficking.

Libya reported a certain overlap in the routes used for firearms trafficking and migrant smuggling. These included routes through several areas on or close to the borders with Algeria, Niger, Chad, Sudan and Egypt. Kenyan authorities, in reporting on the context of significant cases of firearms seizures, referred to armed robberies, carjacking, cattle raids, terrorism and inter-community clashes.

FIG. 2 Average proportion of arms seized in the suspected context of drug trafficking, by rank* of drug seizures per capita of reporting countries, 2016

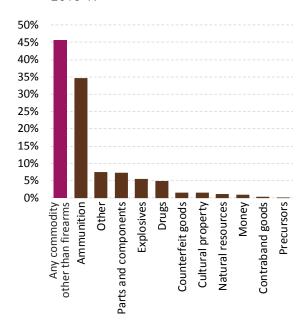


- ^a 7 lowest-ranked countries (among 20)
- ^b 6 medium-ranked countries (among 20).
- ^c 7 highest-ranked countries (among 20).

Note: Reported values of 0 weapons seized in the context of drug trafficking are not included.

Sources: UNODC IAFQ; UNODC Annual Report Questionnaire (ARQ) and other official sources (drug seizures).

FIG. 3 Proportion of significant firearm seizure cases involving other commodities, by type of commodity, 2016-17



Source: UNODC IAFQ.

^{*} Based on the average of 4 separate rankings for each of the four major drug classes: amphetamine-type stimulants; cannabis; cocaine-type; and opiates. Within each drug class, aggregate weights per capita were based on representative drug types of roughly interchangeable weight, chosen as follows: amphetamine and methamphetamine for amphetamine-type stimulants; marijuana and cannabis resin for cannabis; all forms of cocaine (including base, paste and salts, but excluding coca leaf and coca bush) for cocaine-type; heroin and morphine for opiates.

Weapons as a nexus between crime and terrorism (cooperation between criminal and terrorist actors in weapons exchange)

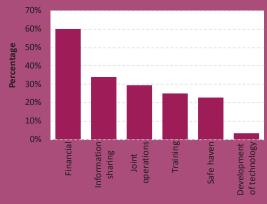
Both criminals and terrorists rely to a large extent on weapons for their activities; thus the procurement of firearms is potentially a natural area of cooperation between the two types of actors.

An initiative of the University of Massachusetts Lowell documented instances of cooperation between crime and terror networks (on a global basis), of which 88 instances included cooperation specifically in the area of weapons exchange. Among these instances, several other areas of cooperation were observed, notably (in more than half the cases) financial support but also information sharing, joint operations, provision of training and provision of a safe haven.

With respect to certain specific areas of cooperation - namely financial support, provision of training, provision of a safe haven, as well as weapons exchange itself - the initiative also documented the "direction" of assistance, that is, whether it was the crime network providing support or assistance to a terror network, or the other way around. From this information it clearly emerges that terrorist organization rely heavily on criminal organizations to support their operations, including in the provision of firearms.

In about three quarters of cooperation initiatives, it was a crime network which provided weapons to a terror network. Moreover, even among these instances, other forms of support also tended to occur in the same direction; for example, there were about three times as many cases of financial support from a crime network to a terror network as there were the other way around, despite the fact that financial support might be expected to compensate for the provision of weapons.

The acquisition of firearms by terrorists was also explored, in the European context, in a study* conducted by the Flemish Peace Institute which drew on interviews with more than a hundred criminal justice practitioners from eight European countries. The study confirms that terrorists' access to the criminal milieu is key for the acquisition of firearms, especially in the case of religiously-inspired terrorist attacks (as opposed to separatist organizations or extremist groups with a political inspiration). The study observes that most perpetrators of recent religiously-inspired terrorist attacks in the European Union appear to appear to have been involved in low-level criminality rather than organized crime, and, in order to procure their firearms, tended to leverage the connections to the criminal underworld—along with the familiarity with firearms—acquired prior to their radicalization. The criminal suppliers often may not have been aware of the intentions of the terrorists; indeed, the study suggests that criminals, especially organized crime Instances of additional areas of cooperation between crime and terror networks, among instances of cooperation in the provision of weapons

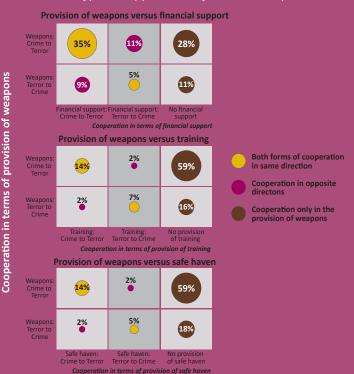


Additional area of cooperation

Note: Based on 88 documented instances of collaboration between a crimenetwork and a terror network, all of which included collaboration in the provision of weapons.

Source: University of Massachusetts Lowell, Crime-Terror Collaboration Database

Breakdowns of instances of cooperation between crime and terror networks in the provision of weapons, according to additional type of support and by direction of provision



Source: University of Massachusetts Lowell, Crime-Terror Collaboration Database.

Note: Based on 88 documented instances of collaboration between a crimenetwork and a terror network, all of which included collaboration in the provision of weapons.

groups, may be averse to supplying terrorist groups with firearms due to the attention it may draw from law enforcement authorities.

^{*} Flemish Peace Institute, Firearms acquisition by terrorists in Europe. Research findings and policy recommendations of Project SAFTE,. Flemish Peace Institute, Brussels, April 2018.

Japan reported a total of 8 significant cases of firearms seizures, all of which were made from members of various Japanese organized crime groups ("Boryokudan").

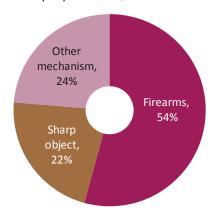
Firearms as a mechanism for homicide

Firearms play a prominent role as an instrument used in the perpetration of homicide. Globally, UNODC estimates that, in 2017, a majority of homicides (54 per cent) involved firearms, and this proportion is even higher in certain countries, reaching around three quarters in the Americas overall. Some countries with high proportions of firearms-related deaths tend to have high rates of homicide, suggesting that firearms are key enablers of high homicide levels.

Triangulating data from different collection streams, a pattern can be discerned by expressing the number of firearms seized in relation to the number of homicides committed by firearms. Higher rates of firearm seizures versus firearms homicides can be observed in countries with low homicide rates, while low rates of firearms seizures versus firearms homicides are observed in countries experiencing high levels of homicide (see Figure 5). This pattern suggests that relative higher levels of vigilance exercised in intercepting firearms go along with low homicide levels. It doesn't suggest a direct causal relationship between seizures and homicide but it highlights a possible underlying explanation with the rule of law maintaining a low homicide rate and ensuring high vigilance on firearms.

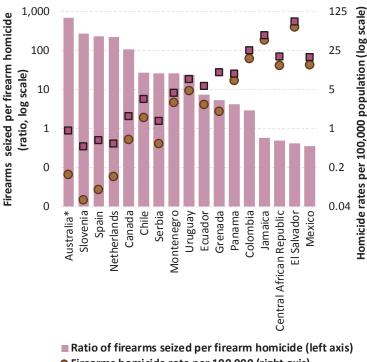
Homicides occur in a variety of contexts, ranging from family settings to property crime and organized crime, and firearms as a mechanism for the perpetration of homicide may in principle be more or less closely associated with a given situational context. For example, whether a homicide is a crime happening in a domestic setting, as opposed to a homicide occurring in the context of organized crime, will probably impact on the likelihood of a firearm having been used (or not).

FIG. 4 Estimated breakdown of intentional homicide worldwide, by mechanism of perpetration, 2017



Source: UNODC Homicide Statistics 2019 (CTS and other official sources).

FIG. 5 Firearm seizures per firearm homicide, in comparison with homicide rates, 2016



- Firearms homicide rate per 100,000 (right axis)
- Overall homicide rate per 100,000 (right axis)

Sources: UNODC Illicit Arms Flows Database (IAFQ and other official sources); UNODC Homicide Statistics 2019 (CTS and other official sources).

The situational context of a homicide is classified in UNODC data into the following four main categories: homicides committed by intimate partners or family members of the victim (IPFM homicides, typically occurring in a domestic or family setting); homicides occurring during the perpetration of robbery; homicides committed by members of an organized group or in the context of organized crime; and homicides related to gang activity.

Although breakdowns of homicide data by situational context are collected by UNODC, the additional layer of detail required in the data to assess the association between firearms and the situational context of homicides was not available on a systematic basis. Nevertheless, data from a limited number of countries do suggest some recurring patterns. For example, data from Canada and El Salvador indicate that the role of firearms was the least marked among IPFM homicides, while homicides related to organized crime or gangs were much more likely to involve firearms.

Some other countries provided parallel breakdowns of homicide, by situational context and by mechanism (including firearm), which were sufficiently comprehensive as to allow to indirectly evince (subject to certain assumptions) estimated breakdowns by mechanism within each

^{*} Seizures for Australia include cases of an administrative nature. Note: Countries with known incomplete coverage of seizure data are excluded.

Canada, 2008-2012 El Salvador, 2013 100% Percentage of homicides involving firearms 100% Percentage of homicides involving firearms 100% 90% 90% 80% 80% 80% 70% 70% 60% 60% 60% 50% 50% 40% 40% 40% 30% 30% 20% 20% 20% 10% 10% 0% 0% 0% 2012 2010 2011 Organized Robbery IPFM* Uncertainty range - Best estimate

FIG. 6 Proportion of homicides involving firearms in Canada and El Salvador, by situational context

* Intimate partner or family member.

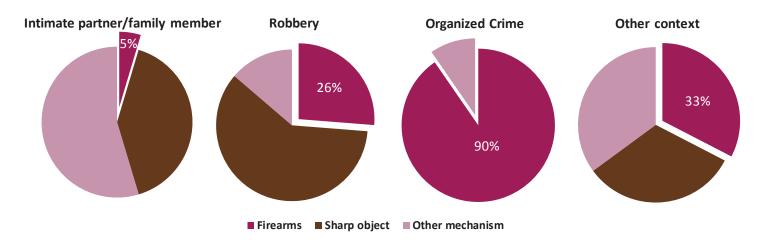
Source: UNODC homicide statistics (2019).

situational context. Two such countries were the Netherlands and Trinidad and Tobago. Once more, in both cases the role of firearms appears to be least pronounced in connection with homicides perpetrated by intimate partners or family members, and much more prominent in connection with organized crime (in the case of the Netherlands) and gangs (in the case of Trinidad and Tobago). Taking into account all four countries, the role of firearms in robbery-related homicide varied significantly but, by and large, stayed within the range defined by IPFM homicides on one hand and organized crime or gang-related homicides on the other.

Some relationships can also be observed between the mechanism used in the perpetration of homicide and the gender of homicide victims, as well as homicide perpetrators. While men are a majority of victims of homicide overall, there are clear differences in the proportion of men among homicide victims depending on the type of mechanism, with the strongest representation of men being found among victims of homicides perpetrated by firearm. Still, this is in a context where men tend to constitute a majority of victims across all three types of mechanism.

When focusing only on IPFM homicides, however, the picture is very different. It should be noted that women

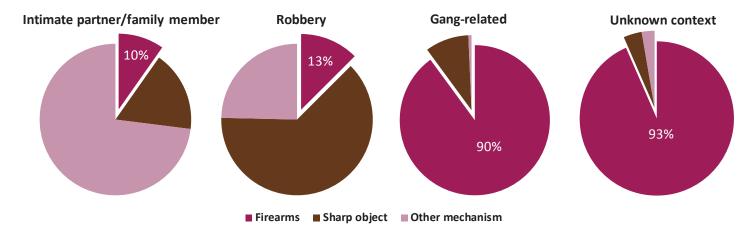
FIG. 7 Estimated distributions* of homicides in the Netherlands by mechanism, according to situational context, 2007-2015



^{*} UNODC estimates based on independent disaggregations of homicides by mechanism and by situational context and derived using a model which assumes that the distributions remain stable over time. Available data from the Netherlands did not include a cross-disaggregation of homicides by mechanism and situational context.

Source: UNODC, elaboration of homicide statistics (2019).

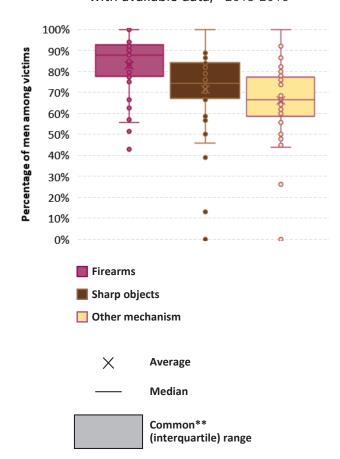
FIG. 8 Estimated distributions* of homicides in Trinidad and Tobago by mechanism, according to situational context, 2006-2015



^{*}UNODC estimates based on independent disaggregations of homicides by mechanism and by situational context and derived using a model which assumes that the distributions remain stable over time. Available data from Trinidad and Tobago did not include a cross-disaggregation of homicides by mechanism and situational context.

Source: UNODC, elaboration of homicide statistics (2019).

FIG. 9 Proportion of men among homicide victims, by type of mechanism, common range among countries with available data,* 2015-2016



^{* 45} countries

Source: UNODC Homicide Statistics (2019).

constitute a majority of victims of IPFM homicides, largely due to the subset of intimate partner (IP) homicides. Although data enabling a cross-disaggregation of IPFM homicides by mechanism and sex are very limited, country-specific data suggest that, in a context where women make up the great majority of victims of IPFM homicide, the proportion of women tends to be consistently higher among victims of firearm-related IPFM homicides, in comparison with those IPFM homicides perpetrated by means of sharp objects.

Indeed, the pattern that emerges from the limited data suggests that an IPFM homicide is more likely to be perpetrated using a firearm, and less likely to be perpetrated by means of a sharp object, when the victim is female. Considering that the majority of IPFM homicide is IP homicide, and that the victim and perpetrator are not of the same sex in the vast majority of IP homicides, this suggests that men are more likely than women to use a firearm when killing their female partners, while women are more likely to resort to a sharp object; this is despite the "equalizing" effect of a firearm, which renders physical strength largely irrelevant. The reasons for this pattern are unclear; one possible explanation could be that men are more likely to kill with premeditation, while an alternative explanation could be that women may tend to have less access to and less familiarity with firearms than men.4

Civilian holdings

Although firearms account for a significant component of homicides in most countries worldwide, the level of firearms-related homicide, as well as the relative share (proportion) of firearm-related homicides among homicides

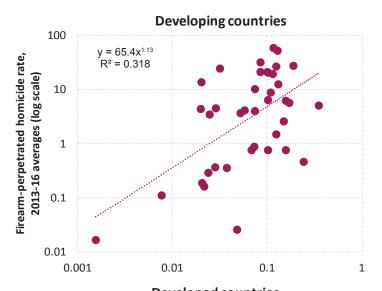
^{**} The common range (interquartile range) represents the "middle half" of the datapoints; in other words, it excludes data from the lowermost and topmost quartiles.

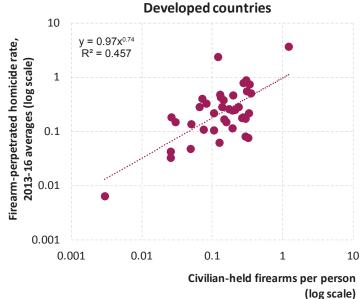
See UNODC, Global Study on Homicide, 2019. Booklet 3, Figure 62.

generally, both vary greatly from country to country. The factors which explain the variation in homicide rates across countries are multiple and complex, and include socioeconomic characteristics such as inequality as well as the age composition of a country's population.⁵

Some of these factors can be expected to impact homicide generally, independently of the mechanism of perpetration; in contrast, one aspect which may impact firearms related homicide specifically is the availability of firearms in the licit market and their ready accessibility to the general population. This aspect is itself complex to measure, but one metric which may be used is the rate of holdings of firearms among the civilian population.⁶

FIG. 10.... Firearms homicide in relation to civilian holdings of firearms





Sources: UNODC Homicide database (2019); Small Arms Survey.

- 5 See UNODC, Global Study on Homicide, 2019. Booklet 4.
- 6 Alternative measures would be, for example, the proportion of individuals among the population who hold a firearm, or the proportion of individuals who have access to a firearm within their household.

When this metric is used, alongside other indicators, to model homicide rates at a global level, its role in explaining homicide-related firearms, although statistically significant, appears to be secondary to other factors of a socioeconomic character, factors which may themselves be linked, for example, to the underlying level of development. However, when considering countries in more homogenous groups, in particular by distinguishing between developed and developing countries, the impact of civilian-held firearms can be observed more clearly.

Indeed, considering developed and developing countries separately, and using estimates of civilian holdings of firearms published by Small Arms Survey, ¹⁰ statistical models suggest that a 1 per cent increase in the rate of possession of firearms (number of civilian-held firearms per person) can be expected to correspond, all other relevant factors being equal, to an increase of 1.13 per cent¹¹ in the homicide rate in the case of developing countries (based on 39 countries determined on the basis of data availability) and 0.74 per cent¹² in the case of developed countries (based on 39 other countries)¹³ (see Figure 10).

- 7 See UNODC, Global Study on Homicide, 2019. Booklet 3, Figure 58.
- 8 Based on the designation of "developed" and "developing" countries in the standard country or area codes for statistical use maintained by the United Nations Statistical Division.
- 9 See UNODC, Global Study on Homicide, 2019. Booklet 3, page 84.
- 10 Small Arms Survey, Estimating Global Civilian-held Firearms Numbers. Briefing Paper, June 2018 (Annex).
- 11 95 per cent confidence interval: 0.58-1.68 per cent.
- 12 95 per cent confidence interval: 0.47-1.00 per cent.
- 13 See UNODC, Global Study on Homicide, 2019. Booklet 3, page 84.

CONCLUSIONS AND POLICY IMPLICATIONS

The information and data presented in the Global Study on Firearms Trafficking provide an insight into the magnitude and extent of firearms trafficking and its links to other forms of crime. The Study constitutes the result of the first global data collection exercise via the Illicit Arms Flows Questionnaire (IAFQ), which builds upon an earlier effort to shed light on firearms trafficking undertaken by UNODC in 2015. The following is a discussion of the main conclusions and policy implications of its findings.

Member States and the international community have increased their efforts to collect evidence based information on firearms trafficking, but more needs to be done to provide the full picture and stop illicit trafficking flows.

Between 2015 and now, the attention as well as efforts of Member States and of the international community to develop, analyse and base policies and strategies for effective results against firearms trafficking on reliable datasets on seized and trafficked firearms increased significantly. This important development, which is also supported by the commitment of Member States to significantly reduce illicit arms flows inscribed in Target 16.4 of the Sustainable Development Goals, is reflected in various ways. There is a notable increase of analytical and research products on firearms trafficking, several initiatives by Member States to enhance their national firearms data collection capacities, tools and mechanisms, and a considerable increase in the response rate to the questionnaire by almost 40 per cent compared to the 2015 exercise conducted by UNODC.

In 80 countries, an amount of over 500,000 firearms have been seized in each of 2016 and 2017. However, existing gaps in data coverage in several of these countries and reported difficulties in detecting illicit trafficking flows lead to conclude that these amounts are likely to represent just the tip of the iceberg, as higher amounts of illicitly circulating firearms remain undiscovered and unreported.

More efforts are needed to enhance the intelligence picture on firearms trafficking by looking closer at the criminal context of each seizure and the whereabouts of the firearms, in order to better understand the nature and extent of the illicit trafficking flows and devise concrete preventive and control measures to stop the flows and reduce criminals' access to these arms.

Seizure data represent one of the most relevant proxies to disclose and monitor illicit trafficking flows, but need to be enriched with complementary analysis on the criminal context and on the illicit origin of the seized items.

The study has confirmed the relevance of using seizure results as an entry point to explore and further analyse the possible extent and nature of firearms trafficking patterns. While it is clear that not all seized firearms are necessarily linked to illicit traffic, seizure information, when usefully combined with complementary information on the seized items, the criminal context in which the seizure occurs, and the whereabout of these items, can help disclose illicit trafficking routes and patterns.

Firearms trafficking remains a largely invisible phenomenon

The vast majority of firearms are seized within national territories, in contexts other than illicit trafficking, either in the context of another crime, or when circulating within the national territory. Additional circumstantial information, such as the criminal context of the seizure and the tracing outcome of the items, must be analysed systematically in order to determine whether these arms were trafficked into the country prior to their seizure.

As a result, illicit firearms trafficking remains most often invisible and undisclosed, as illicit firearms are hardly intercepted at their point of diversion, but only when they re-emerge at the surface in connection with other criminal activities.

Countries must double their efforts to prevent, detect and intercept illicit firearms trafficking flows, especially at borders and during transfers.

Few arms are seized at borders. In order to invert this trend, countries must intensify their efforts to detect and combat the illicit trafficking activity itself and prevent that these firearms make their way in the hands of criminals and appear again in the context of other crimes.

Enhanced border control and risk profiling capacities are required to prevent and intercept illicit movement of firearms, including those arriving through less conventional means such as parcel and postal services deliveries. Detecting and investigating illicit trafficking requires additional efforts, time and resources, that are often not available to criminal justice practitioners.

Criminal justice responses tend to underplay the significance of firearms trafficking by focusing predominantly on illegal ownership rather than illicit origin and the criminals involved in trafficking.

The study confirms that, on average, around two thirds of firearms seizures were based on the legal ground of illicit possession, while complementary contextual information and tracing results clearly point to the fact that a considerable portion of these firearms may have been illicitly trafficked into the country prior to their seizure. The current practice of limiting seizure efforts to illicit possession charges reflect the relative short-sightedness of many crimi-

nal justice systems, that focus more on the firearm as a tool for crime or as evidence, and do not see the value of addressing its illicit origin and trafficking. By doing so, they meet the immediate objective of taking illicit firearms out of circulation, but the overarching goal of countering illicit trafficking remains largely undisclosed and unattended.

Achieving the SDG Target 16.4 requires a fundamental paradigm shift, and a more strategic vision and proactive responsiveness from criminal justice practitioners to look beyond the single firearm and give priority to the objective of investigating and prosecuting the illicit trafficking activity, and thus giving visibility and adequate responses to this underlying crime that is predicate to and fuels all the subsequent ones.

There is a close link between the domestic and transnational characteristics of firearms trafficking, which are not always clearly distinguished by national authorities. To understand the source of the issue and conceive appropriate responses, Member States need to set up systems that enable them to understand, analyse and react to the domestic and transnational extent of the issue.

The information and data presented in the study suggest that, on average, the diversion rate of firearms at domestic level is high. It is therefore plausible that illicit firearms circulate within national borders before they are eventually trafficked abroad. Looking at trafficking that crosses borders in isolation from domestic trafficking would be misleading because domestic trafficking is often the beginning of the illicit transnational supply chain of firearms. While these two phenomena require a joint analysis, distinct knowledge about the domestic and transnational extent and characteristics of firearms trafficking is essential for national authorities and policy makers to understand the source of the problem and conceive appropriate responses.

However, national legislation is not conducive to grasping the domestic or transnational nature of the phenomenon. Only 6 of 53 countries that provided the relevant data adopted a specific legal concept for transnational firearms trafficking, rendering the recording of disaggregated data on firearms seizures difficult.

In order to facilitate distinct data collection efforts on illicit transnational and domestic arms flows, Member States should consider developing two distinct legal concepts for the two phenomena. Keeping close track of seizures by customs authorities at land border crossings, airports and harbours on the one hand, and systematically recording, aggregating and analysing tracing results for seized firearms on the other, constitute further important measure to help increasing the understanding of the domestic and transnational extent and characteristics of the issue.

To prevent and combat firearms trafficking, it is necessary to scale up capacities, procedures and tools to identify the illicit origin of seized, found and surrendered firearms and to record the results in an accessible manner. Particular emphasis should be placed on:

- Recording information on firearms and their criminal context during the different steps of an investigations in an easily aggregable manner;
- Improving mechanisms and enhancing capacities for domestic and international tracing of seized firearms:
- Centralising relevant data in national databases that can help conduct tracing and support investigation of their possible illicit origin.

The relatively low response rate to the different questions of the IAFQ and the varying geographical and institutional coverage of the data in individual countries reflect the lack of systematic and comprehensive data collection procedures in Member States.

In order to develop a comprehensive insight into firearms trafficking, Member States should harmonise their recording requirements in the different steps of a firearms-relevant investigation, including the seizure, the in-depth analysis of the weapon, as well as its tracing outcome. The particularly low response rate to questions related to tracing results reveal the pressing need for Member States to enhance mechanisms and capacities for effective domestic as well as international tracing. Lastly, Member States should set up centralised databases that can help conduct tracing and support investigation of their possible illicit origin. This constitutes a crucial element of any effective firearms control regime.

Enhancing efforts to detecting and seize parts and components of firearms, including when shipped via fast parcel deliveries, may support the fight against various types of illicit manufacture of firearms, including conversion, assembly and craft production.

While the reported overall level of seizures of parts and components is low in comparison with firearms, the number of seizures is higher in countries where firearms in non-factory condition were seized, including artisanally manufactured, assembled and converted weapons. The dark number of illicitly circulating parts and components may likely be higher than the reported numbers, due to the difficulty in detecting and identifying them as items belonging to a firearm. Increased attention and capacities to take illicit parts and components out of circulation, including when shipped via fast parcel delivery services, may prevent various types of illicit firearms manufacture, such as conversion, assembly and craft production.

In order to address transnational firearms trafficking, law enforcement efforts should continue to

target different types of transportation, in particular vehicles and vessels.

The information and data presented in the study reveal that vehicles and vessels constitute the primary types of transportation to traffic firearms across borders. Consequently, continued efforts to detect firearms in vehicles at land border crossings as well as in vessels at harbours are required.

Collecting and analysing data on lost and stolen firearms can further help to develop understanding about firearms trafficking and the point of diversion of trafficked firearms.

Supplementing the globally adopted indicator to measure illicit arms flows as one of the Sustainable Development Goals, Member States and the international community should further look into systematically collecting and analysing data on lost and stolen firearms. Such information can enrich the data on firearms seizures and increase understanding of illicit arms flows. Data recorded in the Interpol-administered iARMS database can constitute a useful starting point in this regard.

While the country of manufacture of seized firearms and the country of diversion often do not overlap, countries seizing illicitly trafficked firearms should inform the country of manufacture about the seizure. Such an information exchange is an important step to improve or put in place preventive measures at the early stages of the supply chain and may provide essential information for the export risk assessment to be undertaken by the exporting country.

An important share of trafficked firearms originate as legally manufactured firearms that are diverted to the black market only after their legal export. However, under international and regional instruments, such as the Arms Trade Treaty or the Central African Convention against the Firearms, their Parts and Components and Ammunition, countries are obliged to assess the risk of future diversion during their export risk assessment. While post-delivery verifications may constitute an effective measure to support the export risk assessment, information on trafficked firearms from the seizing country may constitute another important source of information for the manufacturing country. Member States should therefore maintain open communication channels and information exchange on trafficked and diverted firearms.

Integrated and comprehensive data collection mechanisms and use of standardized templates and tools can help improve the situation. Without this, Member States risk to miss attainment and monitoring of SDG Target 16.4. Increased participation and support for global data collection efforts is also required.

The low priority given by criminal justice systems to the issue of firearms trafficking is often also reflected in the rudimentary and isolated way in which data on firearms are sometimes collected and recorded in some countries. Consequently, data collection mechanisms and tools of many countries are also often not sufficiently equipped to fully capture the phenomenon of illicit trafficking and related offences, including new or emerging threats like trafficking in parts and components, parcel service and internet-enabled trafficking; conversion and modification of arms into live firing weapons, etc.

With increased visibility and awareness on the importance of addressing firearms trafficking, more priority should also be given to ensuring integrated and comprehensive methods of gathering, analysing and using data on firearms. Countries need to recognize the relevance of looking beyond firearms as an instrument or evidence, into their origin and possible trafficking, and to adapt their data collection and analysis mechanism accordingly in order to integrate broader crime data into the overall intelligence picture surrounding illicit firearms.

There is a need to enhance the intelligence picture on firearms trafficking by enhancing their counting mechanism from the bottom up, in order to facilitate the gathering and analysis of circumstantial information such as the criminal context, links to specific security threats like terrorism or organized crime, and to support evidence-based intelligence analysis and strategic decision-making.

Development and use of standardized tools, such as templates and automated applications that can help disaggregate the information from the moment it is produced / generated, and reduce risks of errors, can greatly contribute to enhance the picture and the analysis

Poor tracing practice and insufficient efforts to report on them reduce the likelihood to disclose and counter illicit arms flows, and put Member States at risk of not attaining and monitoring the SDG Target 16.4. Increased participation and support for global data collection efforts is required.

While seizure data provide the closest proxy to monitor firearms trafficking, only tracing the illicit origin can help establish the point of diversion of the seized firearms, and identify trafficking routes and patterns.

Countries must systematically trace and report on their efforts to establish the illicit origin of firearms seized in crime, with a view to investigate and prosecute the illicit trafficking offence, beyond and regardless of the main offence that has given rise to the law enforcement action leading to the seizure of the firearm. Without this, countries will not be able to detect and disrupt illicit trafficking networks and reduce the illicit arms flows by 2030.

Yet, looking at the overall number of countries providing processable data on the SDG-related question (14 coun-

tries) and the number of seized, found and surrendered arms they were able to trace to their illicit origin (28 per cent on average), Member States are at risk to fail attaining and monitoring the attainment of SDG Target 16.4. It is therefore necessary to scale up capacities, procedures and tools to identify the illicit origin of seized, found and surrendered firearms and to record the results in an accessible manner.

Transnational firearms trafficking constitutes a complex crime, with often fatal consequences. To counter the phenomenon effectively, Member States and the international community should invest in further research into existing links to other security threats and develop appropriate, multi-sectorial approaches.

The study confirms the interconnectedness of seized firearms on the one hand and drug trafficking as well as armed violence, in particular homicide, on the other. Further analysis on these links as well as on the interconnectedness between illicit firearms and other substantive topics, such as trafficking in other commodities and terrorism should be conducted. Insights into the interplay between illicit firearms on the one hand and corruption and money laundering on the other may further help in enhancing investigative approaches against these crimes.

While the study confirms that firearms used in homicide have a particular gender dimension, the impact of illicit firearms on men and women, boys and girls should be further researched and addressed.

ANNEX

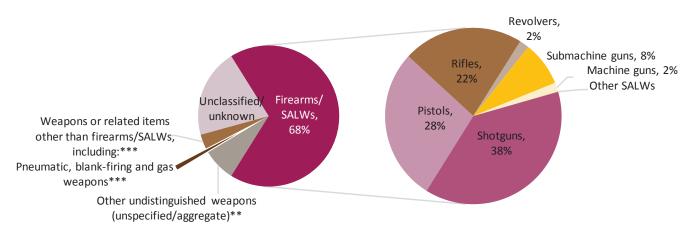
REGIONAL SUMMARY AND TRENDS

Africa

In Africa, the largest quantities of seized weapons seized were registered in Angola and Kenya. Aside from the prevalence of shotguns generally, notable proportions of machine guns were seized in Tunisia and of submachine guns in Burundi. In Central African Republic, aside from miscellaneous weapons such as grenades, artisanal weapons and cannons, the remaining seized weapons were predominantly rifles and submachine guns.

However, many countries in Africa and Asia appear to have a lower capacity to intercept and report trafficked firearms, which may lead to underreporting of some types of firearms. Moreover, the total figures reported by countries include seizures which are not directly connected to trafficking. Based on customs seizures at borders, rifles emerge at par with pistols. This suggests that firearms such as rifles may play a bigger role in global trafficking patterns than what is reflected in the currently available data.

FIG. 1 Average distribution* of reported seized arms in Africa, by type, 2016-17



^{*} Simple average based on data for 18 countries.

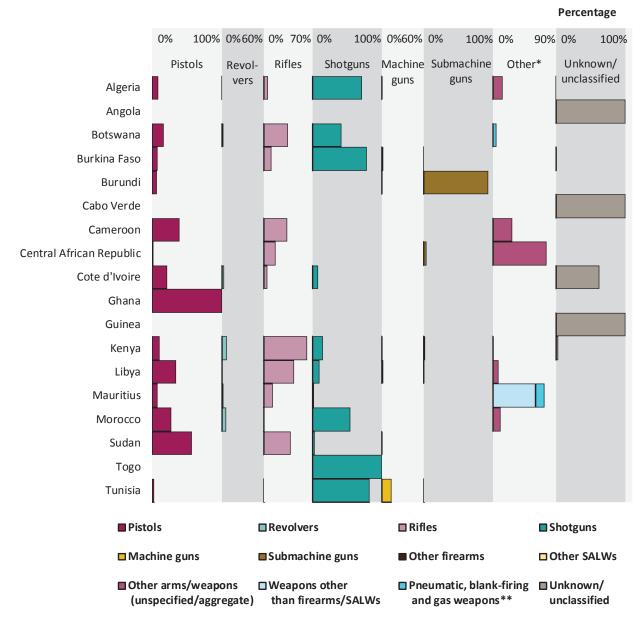
Sources: UNODC IAFQ and other official sources.

Looking more closely, links emerge between trafficking patterns and broader regional contexts. For example, countries with higher levels of violent deaths and homicide, particularly in Africa and Latin America and the Caribbean, tend to seize a higher percentage of firearms connected to violent crime. Similarly, in countries with higher levels of drug trafficking, more arms are seized linked to that activity.

^{**} Includes weapons reported under "Other" without sufficient information to allow further classification; some of these weapons may be firearms or SALWs.

^{***} For some countries, the reported seizure data included weapons other than firearms/SALWs; however data on such weapons were not explicitly requested by the questionnaire. Hence the share of such weapons is subject to variations in the reporting practice across countries.

FIG. 2 Distribution of seized arms by type, countries in Africa, 2016-17



^{*} Includes other firearms, other SALWs and other weapons. Also includes weapons reported under "Other" without sufficient information to allow further classification or disaggregation; some of these weapons may be firearms of the six foregoing standard types.

^{**} Pneumatic, blank-firing and gas weapons fall under the preceding designation "Weapons other than firearms/SALWs", but are distinguished whenever the available data allows.

12,000 2,400 Number of arms (all countries except Angola and Kenya) Number of arms (Angola and Kenya) 10,000 2,000 8,000 1,600 6,000 1,200 4,000 800 400 2,000 0 0 2016 2016 2016 2016 2016 2016 2016 2017 2017 2016 2017 2017 2017 2017 Sudan Burkina Libya Angola Kenya Tunisia Algeria Central Cote

FIG. 3 Arms seized by countries in Africa, by type, 2016-17 (9 countries with largest quantities seized)

(left axis)

(left axis)

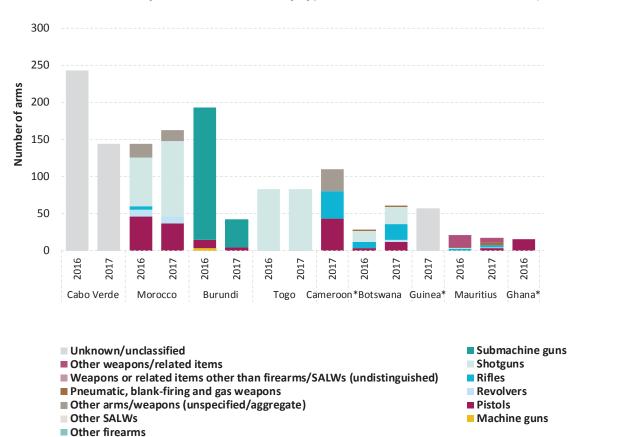


FIG. 4 Arms seized by countries in Africa, by type, 2016-17 (9 countries with lowest quantities seized)

Faso

(right axis)

African

Republic

(right axis)

(right axis)

d'Ivoire

(right axis)

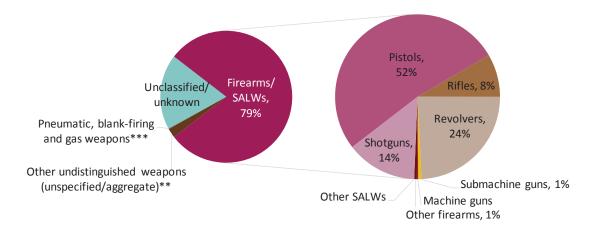
(right axis) (right axis) (right axis)

^{*} Data for Ghana were available for 2016 only; data for Cameroon and Guinea were available for 2017 only. Sources: UNODC IAFQ and other official sources

Americas

In Latin America and the Caribbean, the largest quantities of seized weapons were reported by Colombia and Argentina. However, comprehensive data for Brazil were not available. Excluding weapons other than firearms/SALWs, as well as any firearms/SALWs which could not be classified and quantified into the respective category, the Americas were the region with the highest proportions of pistols (on average, 52 per cent) and revolvers (24 per cent). The proportion of rifles seized in Mexico was significantly higher than in other countries in Latin America and the Caribbean.

FIG. 5 ____ Average distribution* of reported seized arms in the Americas, 2016-17



^{*} Simple average based on data for 26 countries.

Sources: UNODC IAFQ and other official sources.

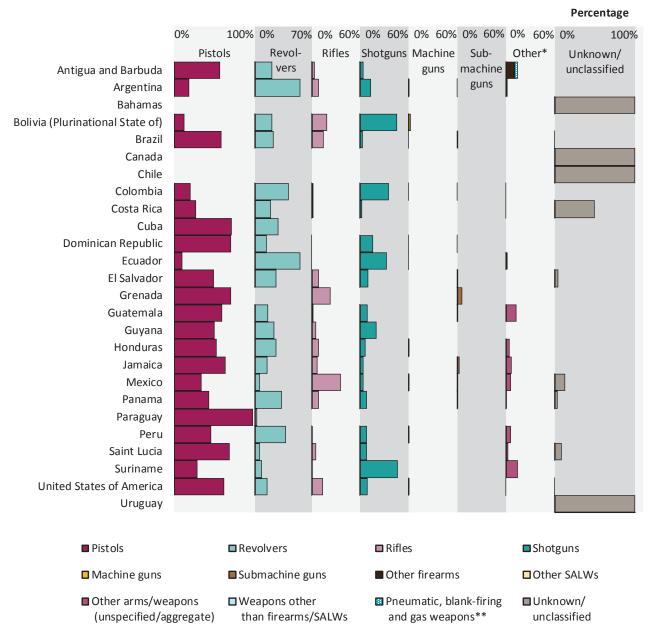
The data collection exercise carried out for the present study, which was focused on data for the years 2016 and 2017, built on an earlier exercise carried out by UNODC. Hence, for some countries, seizure data were also available for earlier years. Despite a gap in the reporting periods and the potential for issues of comparability, in some cases it was also possible to derive meaningful longer-term increasing or decreasing trends. In Latin America, this was possible for three countries, all of which exhibited clear decreasing trends.

^{**} Includes weapons reported under "Other" without sufficient information to allow further classification; some of these weapons may be firearms or SALWs.

^{***} For some countries, the reported seizure data included weapons other than firearms/SALWs; however data on such weapons were not explicitly requested by the questionnaire. Hence the share of such weapons is subject to variations in the reporting practice across countries.

¹ UNODC Study on Firearms, 2015.

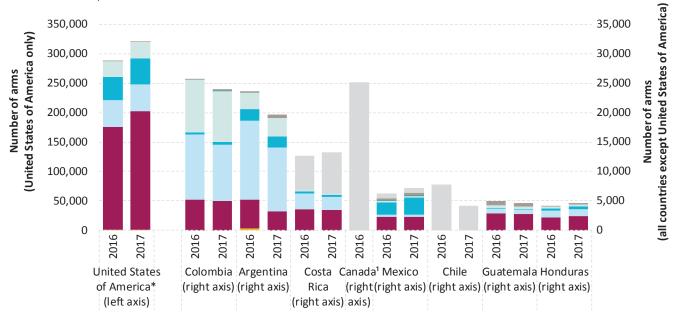
FIG. 6 Distribution of seized arms by type, countries in the Americas, 2016-17



^{*} Includes other firearms, other SALWs and other weapons. Also includes weapons reported under "Other" without sufficient information to allow further classification or disaggregation; some of these weapons may be firearms of the six foregoing standard types.

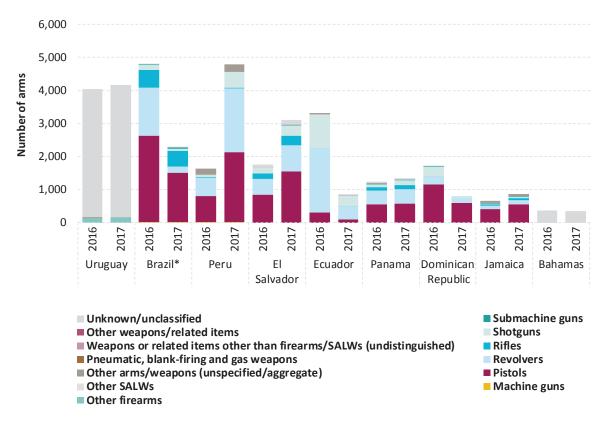
^{**} Pneumatic, blank-firing and gas weapons fall under the preceding designation "Weapons other than firearms/SALWs", but are distinguished whenever the available data allows.

FIG. 7 Arms seized by countries in the Americas, by type, 2016-17 (9 countries with largest quantities seized)



^{*} Includes firearms submitted for tracing to the Bureau of Alcohol, Tobacco, Firearms and Explosives by a law enforcement agency, resulting from seizure as well as abandonment, buy-back program, or other recovery method. Moreover, only seized firearms submitted for tracing are included. Firearms submitted for tracing after recovery do not represent the entire set of all seized firearms.

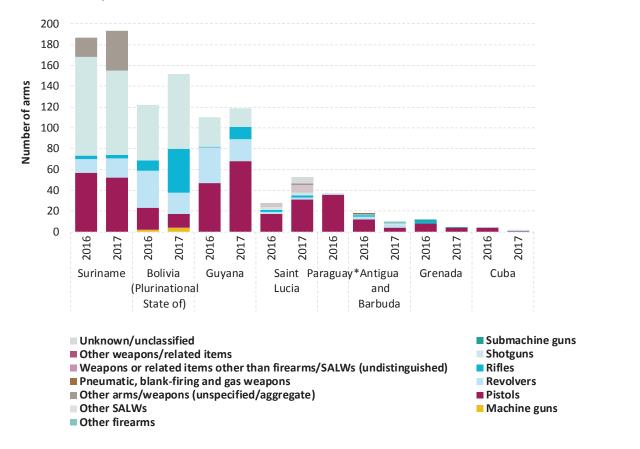
FIG. 8 ____ Arms seized by countries in the Americas, by type, 2016-17 (9 countries with intermediate quantities seized)



^{*} Includes only seizures in the records of the Federal Police Tracing Centre of Brazil.

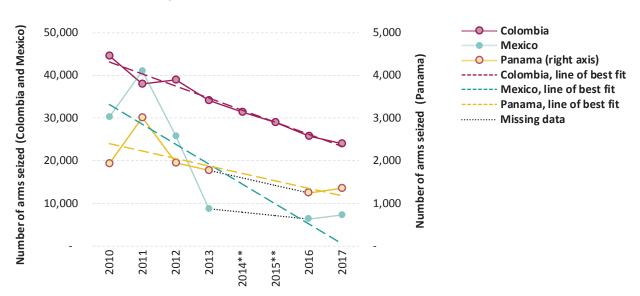
¹ Data for Canada were available for 2016 only.

FIG. 9 Arms seized by countries in the Americas, by type, 2016-17 (9 countries with lowest quantities seized)



^{*}Data for Paraguay were available for 2016 only.

FIG. 10.... Significant* longer-term trends in the number of arms seized by countries in Latin America, 2010-2017



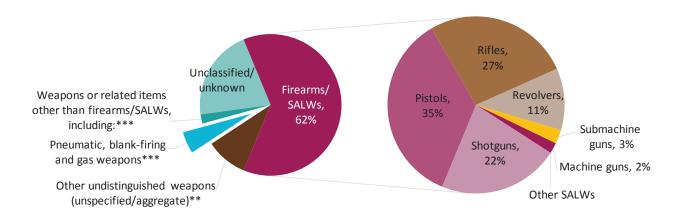
^{*} Due to a revised data collection instrument, data prior to 2016 are not guaranteed to be comparable to data for 2016-17, with the exception of updated historical data. This graph shows only countries for which at least 5 datapoints were available over the period 2011-2017 and the corresponding simple linear regression model yielded p-values that were significant at the 90% level.

^{**} For 2014 and 2015, no data were available for Mexico and for Panama.

Europe

Among all regions, the types of weapons seized in Europe were the most diversified. Among weapons which could be clearly classified as firearms and SALWs, pistols accounted on average for 35 per cent of seizures, followed by rifles (27 per cent), shotguns (22 per cent) and revolvers (11 per cent), with submachine guns and machine guns accounting for most of the remainder (4.5 per cent).² Moreover, on average Europe registered the highest proportions of miscellaneous types of weapons – this may be related to the prominence of conversion and other forms of improvisation as ways to obtain illicit firearms.

FIG. 11.... Average distribution* of reported seized arms in Europe, 2016-17



^{*} Simple average based on data for 26 countries.

Sources: UNODC IAFQ and other official sources.

As for the Americas, in the case of Europe it was also possible to identify some statistically meaningful longer-term decreasing or increasing trends, namely in the cases of Spain, Lithuania and Romania.

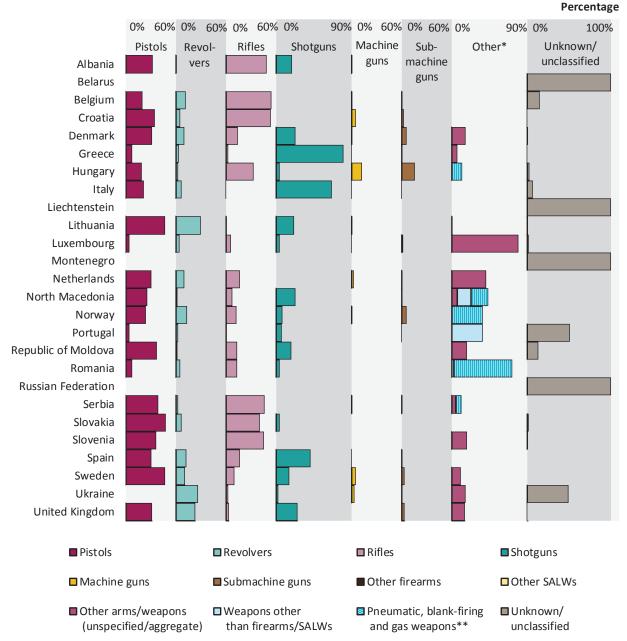
Historical data were also available for countries in the Western Balkans; however, in this case, no statistically significant increasing or decreasing trends were identified.

^{**} Includes weapons reported under "Other" without sufficient information to allow further classification; some of these weapons may be firearms or SALWs.

^{***} For some countries, the reported seizure data included weapons other than firearms/SALWs; however data on such weapons were not explicitly requested by the questionnaire. Hence the share of such weapons is subject to variations in the reporting practice across countries.

² This breakdown excludes weapons other than firearms/SALWs, as well as any firearms/SALWs which could not be quantified and classified into the respective category.

FIG. 12.... Distribution of seized arms by type, countries in Europe, 2016-17



^{*} Includes other firearms, other SALWs and other weapons. Also includes weapons reported under "Other" without sufficient information to allow further classification or disaggregation; some of these weapons may be firearms of the six foregoing standard types.

^{**} Pneumatic, blank-firing and gas weapons fall under the preceding designation "Weapons other than firearms/SALWs", but are distinguished whenever the available data allows.

18,000 16,000 14,000 **Number of arms** 12,000 10,000 8,000 6,000 4,000 2,000 0 2016 2016 2016 2016 2016 2017 2017 2017 2017 2016 2016 2017 2017 2017 2017 Russian Spain Belarus Portugal Greece Italy Netherlands Belgium Ukraine

FIG. 13.... Arms seized by countries in Europe, by type, 2016-17 (9 countries with largest quantities seized)

Federation

FIG. 14.... Arms seized by countries in Europe, by type, 2016-17 (9 countries with intermediate quantities seized)

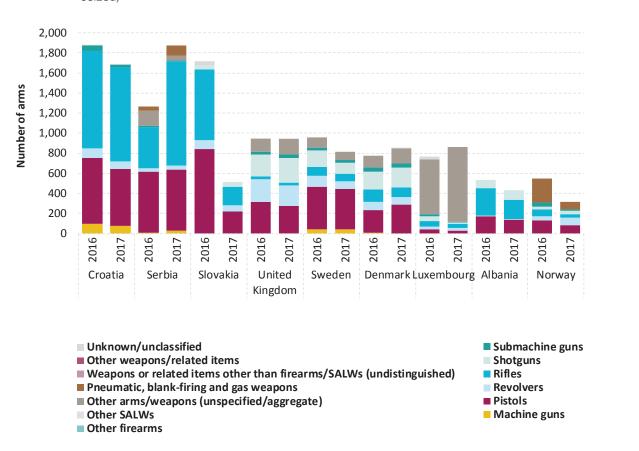
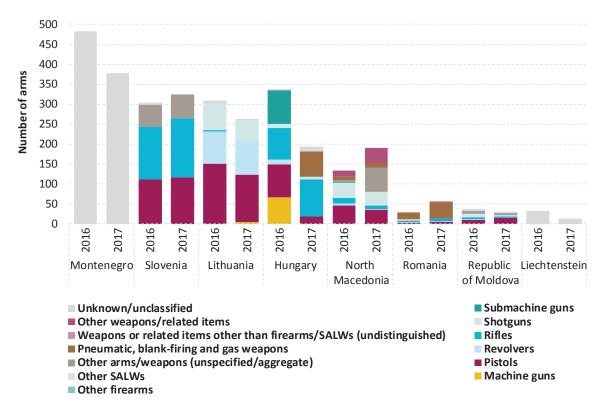
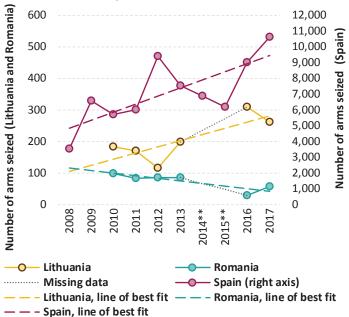


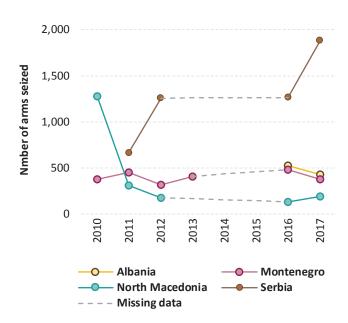
FIG. 15.... Arms seized by countries in Europe, by type, 2016-17 (8 countries with lowest quantities seized)





^{*} Due to a revised data collection instrument, data prior to 2016 are not guaranteed to be comparable to data for 2016-17, with the exception of updated historical data. This graph shows only countries for which at least 5 datapoints were available over the period 2011-2017 and the corresponding simple linear regression model yielded p-values which were significant at the 90% level. The Russian Federation was also excluded due to the fact that data prior 2016 covered customs seizures only.

FIG. 17.... Seizures of arms in the Western Balkans, 2010-2017



Note: Due to a revised data collection instrument, data prior to 2016 are not guaranteed to be comparable to data for 2016-17. Therefore, the comparison needs to be made with caution.

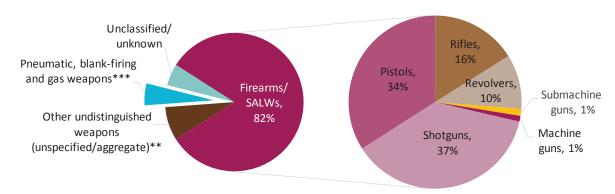
^{**} For 2014 and 2015, no data was available for Lithuania and Romania. Sources: UNODC IAFQ and other official sources.

020

Asia and Oceania

In Asia and Oceania, coverage was rather limited; hence representative patterns cannot be reliably elucidated. The number of seized weapons was very high in Australia, but this included seizures of an administrative nature. The relative importance of shotguns was similar to that in Africa, with relatively high proportions of this type of weapon being registered in the neighbouring countries of Kazakhstan, Kyrgyzstan and Tajikistan, as well as Lebanon.

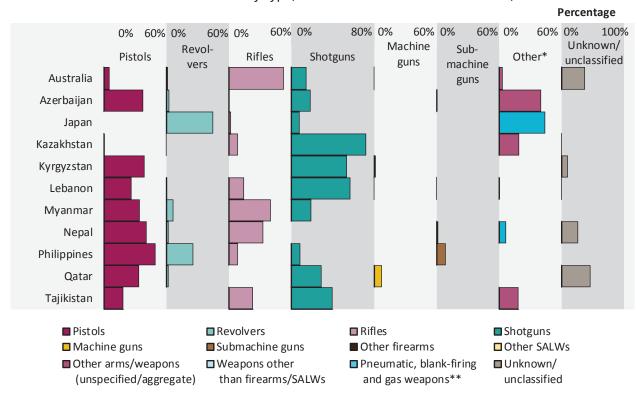
FIG. 18.... Average distribution* of reported seized arms in Asia, 2016-17



^{*} Simple average based on data for 10 countries.

Sources: UNODC Illicit Arms Flows Database (IAFQ and other official sources.)

FIG. 19.... Distribution of seized arms by type, countries in the Asia and Oceania, 2016-17



^{*} Includes other firearms, other SALWs and other weapons. Also includes weapons reported under "Other" without sufficient information to allow further classification or disaggregation; some of these weapons may be firearms of the six foregoing standard types.

Sources: UNODC Illicit Arms Flows Database (IAFQ and other official sources.)

^{**} Includes weapons reported under "Other" without sufficient information to allow further classification; some of these weapons may be firearms or SALWs.

^{***} For some countries, the reported seizure data included weapons other than firearms/SALWs; however, data on such weapons were not explicitly requested by the questionnaire. Hence the share of such weapons is subject to variations in the reporting practice across countries.

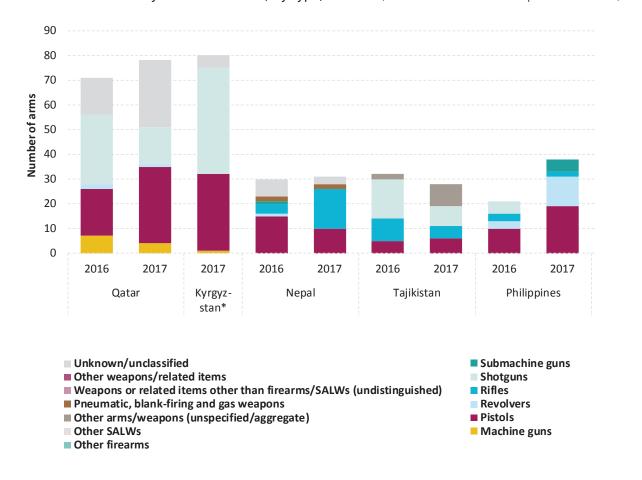
^{**} Pneumatic, blank-firing and gas weapons fall under the preceding designation "Weapons other than firearms/SALWs", but are distinguished whenever the available data allows.

FIG. 20.... Arms seized by countries in Asia and Oceania, by type, 2016-17 (6 countries with largest quantities seized)



Sources: UNODC Illicit Arms Flows Database (IAFQ and other official sources.)

FIG. 21.... Arms seized by countries in Asia, by type, 2016-17 (5 countries with lowest quantities seized)



^{*}Data for Kyrgyzstan were available for 2017 only.

Sources: UNODC Illicit Arms Flows Database (IAFQ and other official sources.)

Types of firearms

Types of Weapons	Example
"Machine gun": Firearm that automatically shoots more than once without manual reloading, by a single function of the trigger. A machine gun continues to load and fire ammunition until the trigger, or other activating device, is released, the ammunition is exhausted, or is jammed. Machine guns can have automatic firing systems, but often can be set to fire in semi-automatic mode.	Tries-
"Pistol": Firearm designed for semi-automatic operation. The chamber is part of the barrel. Cartridges are generally loaded into an ammunition magazine which is inserted into the grip. As long as cartridges are present in the ammunition magazine and the firearm is functioning properly, the action of the pistol is responsible for the feeding and chambering of the cartridge and the extraction and ejection of the cartridge case once the cartridge has been fired. The firing systems of pistols can be trigger, repetitive, semi-automatic or automatic. Types of pistols are the single shot pistol, repeating pistol, semi-automatic pistol and automatic pistol.	
"Revolver": A short or hand-held firearm which has a revolving cylinder with a number of chambers. These chambers are designed to be manually loaded with cartridges of the appropriate calibre; then, as the cylinder rotates into position under the hammer, the trigger can be pulled, releasing the hammer which causes the cartridge to be fired. According to the system of operation of the trigger tail, revolvers can be of double or single action.	
"Rifle (including carbine)": A relatively long-barrelled firearm, fired from the shoulder, with a series of spiral grooves cut inside the barrel (referred to as rifling) imparting spin to the projectile. Some rifles have a detachable magazine similar to the pistols described above, and others have integral magazines. A carbine resembles a rifle but has a shorter barrel. Rifles or carbines have single-shot, repeating, semi-automatic or fully automatic systems.	
"Short shotgun (pistolon)": A handgun with one or more smoothbore barrels. Short shotguns have single-shot systems.	
"Shotgun": A shoulder-fired long gun with one or two unrifled barrels, usually designed to shoot a large number of small projectiles (referred to as shot) rather than a single large projectile (referred to as bullet). The firing systems of shotguns can be single-shot, repeating or semi-automatic.	
Sub-machine gun": A hand-held, lightweight, short-barrelled machine gun consisting of relatively low-energy handgun-type cartridges and fired from the hand, hip or shoulder. Submachine guns have semi-automatic firing systems. (Where the firing system is automatic, firearms are classified as automatic pistols or automatic machine guns.)	

Types of Parts and Components Example "Barrel": A metal tube, through which a projectile (or shot charge) travels under the force of the charge out of its front end. The barrel is fixed to the receiver/frame. "Bolt": A mechanical part of a firearm (mostly semi-automatic pistols) that blocks the rear chamber while firing, but moves aside to allow another cartridge to be inserted. "Breech block": The movable part of the firing system that seals the moment of firing, preventing gases from escaping. Most modern small firearms use a bolt. "Cylinder": A cylindrical, rotating part of a revolver that contains multiple cartridge chambers. "Frame or receiver": The main element of a hand gun to which the barrel and the stock are attached. The receiver holds other parts and components, such as the breech mechanism, trigger and firing mechanism. "Magazine": The ammunition storage and feeding device of a firearm within or attached to a repeating firearm. Magazines can be removable or integral to the firearm. "Silencer": The part designed to reduce the sound and the visible muzzle flash generated by firing, by slowing down the escaping propellant gas or reducing the velocity of the bullet. "Slide": The part that generally houses the firing pin and the extractor, and serves as the bolt for the majority of semi-automatic pistols. It is spring-loaded to chamber a fresh cartridge provided that the magazine is not empty.

Glossary

Term	Definition
Altered markings	Markings on a weapon that were modified, damaged, or removed in order to make the firearm unidentifiable.
Ammunition	The complete round or its components, including cartridge cases, primers, propellant powder, bullets or projectiles used in firearms.
Arms	Weapons reported as seized, found or surrendered through the Illicit Arms Flow Questionnaire. The target universe is that of all categories of firearms and of small arms and light weapons; however in some cases the reported figures may include other weapons.
Assembled arms	Any arms illegally put together from multiple industrially manufactured parts and components, without being part of an industrial process.
Land Border	The customs office between two jurisdictions, but also to border crossings or checkpoints when a border has no customs office.
Case/instance	A single act of seizing arms, their parts and components or ammunition, regardless of how many items are seized collectively. For example, the seizure of a shipment containing 200 arms and 500 rounds of ammunition being trafficked illicitly via sea one case or instance, despite the fact that 700 items are being apprehended.
Converted arms	Any arms such as blank firing, air-soft, paintball or air cartridge that is adapted or modified to enable a shot, bullet or other projectile to be discharged that is capable of lethal injury.
Country of manufacture	The country where the item was manufactured. In the case of assembled arms, the country where the weapon was assembled should be considered.
Departure country	The country from where the traffickers originally departed before entering your national territory, or from where the arms were shipped, in the case of unaccompanied shipments. If such information is not available, please consider the country where the item was last legally recorded or, in cases where such record does not exist, the country of departure established through intelligence.
National/within national territory	Seizures that occur in national territory, but do not take place in airports, seaports or harbours, or in land borders, as defined above.
Firearm	Any portable barrelled weapon that expels, is designed to expel or may be readily converted to expel a shot, bullet or projectile by the action of an explosive, excluding antique firearms or their replicas. Antique firearms and their replicas shall be defined in accordance with domestic law. In no case, however, shall antique firearms include firearms manufactured after 1899.
Found item	Any weapons, parts and components or ammunition apprehended by authorities not linked to an intentional or planned investigation or inspection, neither attributable to any apparent holder or owner, regardless of whether the item was reported lost or stolen.
Illicit manufacture	The manufacturing or assembly of arms, their parts and components, or ammunition: (a) From parts and components illicitly trafficked; (b) Without a licence or authorization from a competent authority of the State party where the manufacture or assembly takes place; or © Without marking the weapon at the time of manufacture with a unique marking providing the name of the manufacturer, the country or place of manufacture and the serial number; or maintaining any alternative unique user-friendly marking with simple geometric symbols in combination with a numeric and/or alphanumeric code, permitting ready identification by all States of the country of manufacture. The manufacture of parts and components must be licensed and authorized in accordance with national law. "Illicit manufacturing" also refers to illicitly reactivated arms. For example, reactivating a deactivated weapon, which is not considered to be a weapon anymore, is considered illicit manufacture, as well as manufacturing a weapon at home with parts and components trafficked through the web without licence or authorization.
Illicit possession	The unlawful possession of regulated or prohibited firearms, their parts and components or ammunition. Carrying a handgun without a license is an example of illicit possession.
Illicit trafficking	The import, export, trans-shipment, acquisition, sale, delivery, movement or transfer of arms, their parts and components, and ammunition from or across the territory of one State to that of another State if any one of the States concerned does not authorize it in accordance with national law of one of the countries involved or if the arms are not uniquely marked upon manufacture and marked upon import. Arms that were not properly deactivated according to the national legislation of the destination country can also be illicitly trafficked or smuggled.

Term	Definition
Illicit use	This is the unlawful use of regulated or prohibited firearms, their parts and components or ammunition. The illegal discharge of arms is an example of illicit use.
Individuals convicted	Persons found guilty by any legal body authorized to pronounce a conviction under national criminal law, whether or not the conviction was later upheld.
Individuals prosecuted	Alleged offenders against whom prosecution commenced in the reporting year(s). Persons may be prosecuted by the public prosecutor or the law enforcement agency responsible for prosecution. All persons for which prosecution starts should be counted, irrespective of the case-ending decision
Intended destination	The country for which the arms, parts and components, and ammunition were destined. Your country may also be considered in this category.
Last legal record	The last officially recorded information available about the item, its status (deactivated, stolen, lost, seized, found, surrendered, sent for destruction, confiscated, in transit, etc.) and its legal end-user. The identification of the last legal record may require the initiation of several individual tracing requests.
Make	The name or brand of the manufacturer of a given weapon. Examples include: Beretta, Colt, Glock, Smith and Wesson, and Taurus.
Modified arms	Any arms modified to increase its efficiency or damage capacities. For example, increased capacity of the magazine, cut barrel, modified from semi-automatic to automatic.
Natural resources	A naturally occurring source of wealth. For example, plants, mineral deposits, water, etc.
Parts and components	Any element or replacement element specifically designed for a firearm and essential to its operation, including a barrel, frame or receiver, slide or cylinder, bolt or breech block, and any device designed or adapted to diminish the sound caused by firing a firearm.
Point of diversion	The point in space and time, and/or circumstances when arms, parts and components, and ammunition left the licit circuit and entered the illicit one. For example, a weapon was manufactured in country A, then exported to country B, where it was stolen, and later trafficked to country C, where it was seized. In this scenario, the point of diversion occurred when the weapon was stolen in country B. Identifying the point of diversion entails tracing the last available legal record of the weapon in country B, either the last legal owner in the country or the record that indicates it was stolen.
Reactivated arms	Any weapon previously deactivated by the competent authority with a view to rendering it permanently inoperable and that has illegally been returned to working condition.
Seized items	Arms, their parts and components and ammunition that have been temporarily physically apprehended by a competent authority in relation to a suspected criminal offence or administrative violation related to these items. Seized items can be permanently confiscated at a later stage by the state, or returned to their legitimate owners.
Seizures related to administrative offences	Items seized in circumstances involving an action prohibited by a national criminal code or any offence listed in this questionnaire, including, among others, trafficking and smuggling of arms. The item can be the main commodity, the instrument, or derived from the offence.
Small Arms and Light Weapons (SALWs)	Any man-portable lethal weapon that expels or launches, is designed to expel or launch, or may be readily converted to expel or launch a shot, bullet or projectile by the action of an explosive, excluding antique small arms and light weapons or their replicas. Antique small arms and light weapons and their replicas will be defined in accordance with domestic law. In no case will antique small arms and light weapons include those manufactured after 1899: (a) "Small arms" are, broadly speaking, weapons designed for individual use. They include, inter alia, revolvers and self-loading pistols, rifles and carbines, sub-machine guns, assault rifles and light machine guns; (b) "Light weapons" are, broadly speaking, weapons designed for use by two or three persons serving as a crew, although some may be carried and used by a single person. They include, inter alia, heavy machine guns, hand-held under-barrel and mounted grenade launchers, portable anti-aircraft guns, portable anti-tank guns, recoilless rifles, portable launchers of anti-tank missile and rocket systems, portable launchers of anti-aircraft.

Term	Definition
Surrendered item	Any arms, their parts and components, and ammunition willingly handed to authorities, that is not linked to a planned investigation or inspection. The surrender may occur as a personal initiative of a citizen, in the context of a voluntary surrender campaign, and disarmament, demobilisation and reintegration processes, inter alia.
Tracing	The systematic tracking of arms and, where possible, their parts and components, and ammunition, at a national and/or international level for the purpose of assisting the competent authorities of States Parties in detecting, investigating and analysing illicit manufacturing and illicit trafficking. Searching the national record for example is considered as tracing.
Transit country	The country through which the arms, their parts and components, and ammunition transited before reaching the destination country. There could be more than one transit country between the departure/source and destination country.
Typical price in the licit market	The typical price paid at a licit firearms specialized business for a specific weapon. This may refer to the median (or alternatively, the average) price derived from several observations obtained through a statistical data collection effort, or it may be obtained from knowledge derived from professional expertise in the field.
Typical price in the street / black market	The typical price paid for a specific weapon in the street or black market. This may refer to the median (or alternatively, the average) price derived from several observations obtained through intelligence operations (e.g., undercover initiatives), or it may be obtained from knowledge derived from professional expertise in the field.
Uniquely marked/uniquely identifiable	A uniquely marked item has a unique marking providing the name of the manufacturer, the country or place of manufacture and the serial number, or maintain any alternative unique user-friendly marking with simple geometric symbols in combination with a numeric and/or alphanumeric code, permitting ready identification by all States of the country of manufacture.
Violent crime	A crime in which the perpetrator uses or threatens to use force upon a victim. Examples include homicide, intended homicide, rape, among others.

Statistical annex

TABLE 2 ... Arms seized by type, 2010-2017

5264 9728 110 224 193 700 21 Total 424 0 0 0 0 0 0 0 0 0 2 2 Unknown 1104 0 0 281 182 30 263 132 16 804 Other 0 0 0 3 7 0 0 ~ | m 94 38 Submachine gun 0 0 - | 0 0 0 0 63 2136 507 538 Shotgun 24 0 0 3699 2 8 48 93 37 32 Rifle 156 840 0 -0 0 0 2 2 7 7 0 0 Revolver 769 0 0 9 2 43 58 79 Pistol 0 0 0 0 0 0 9 9 8 m 0 31 Machine gun Source UNPOL IAFQ 2016 2016 2016 2016 2016 2016 Year 2016 2017 2017 2017 2017 2017 2017 2017 2017 Central African Republic Region Northern Africa Eastern Africa Middle Africa Cameroon Mauritius Africa Burundi Angola Algeria Kenya

¹ Rocket launchers/motors

¹⁷ stun guns and 1 air gun

⁶ stun guns and 4 air guns

⁴ Spearguns

Region	Year	Source	Machine gun	Pistol	Revolver	Rifle	Shotgun	Submachine gun	Other	Unknown	Total
Morocco											
	2016	IAFQ	0	46	0	2	65	0	19	0	144
	2017	IAFQ	0	37	0	0	102	0	14	0	162
Sudan											
	2016	IAFQ	7	623	0	341	27	0	0	0	866
	2017	IAFQ	16	724	0	573	48	0	0	0	1361
Tunisia											
	2016	IAFQ	207	30	0	-	289	0	0	0	935
	2017	IAFQ	41	16	0	2	601	2	0	0	635
Southern Africa											
Botswana											
	2016	IAFQ	0	m	0	6	41	0	25	0	28
	2017	IAFQ	0	12	2	22	23	0	25	0	61
Western Africa											
Burkina Faso											
	2011	SOF									174
	2012	SOF									852
	2013	SOF									1231
	2016	IAFQ	∞	41	0	30	270	2	0	7	358
	2017	IAFQ	0	0	0	35	183	0	0	0	218
Cabo Verde											
	2016	UNODA									243
	2017	UNODA									144
Cote d'Ivoire											
	2016	IAFQ	0	31	4	0	2	0	0	151	191
	2017	IAFQ	0	59	∞	23	32	0	0	115	237
Ghana											
	2010	SOF	0	7	0	0	5	0	12	0	24
	2011	SOF	0	10	0	0	4	0	14	0	28
	2012	SOF	0			10	41	0	20	0	73

Region	Year	Source	Machine	Pistol Revo	Revolver	Rifle	Shotgun	Submachine gun	Other	Unknown	Total
	2013	SOF	0	26	4	5	21	0	372	0	428
	2016	IAFQ	0	15	0	0	0	0	0	0	15
Guinea											
	2017	UNODA									57
Niger											
	2012	SOF									213
Togo											
	2012	SOF									205
	2016	IAFQ	0	0	0	0	83	0	0	0	88
	2017	IAFQ	0	0	0	0	83	0	0	0	83
Americas											
Caribbean											
Antigua and Barbuda											
	2016	IAFQ	0	12	m	_	0	0	26	0	8
	2017	IAFQ	0	4	m	0	_	0	27	0	10
Bahamas											
	2016	IAFQ									375
	2017	IAFQ									350
Cuba											
	2016	IAFQ	0	4		0	0	0	0	0	2
	2017	IAFQ	0		-	0	0	0	0	0	2
Dominican Republic											
	2010	SOF		803	141		80		72		1104
	2011	SOF	0	732	134	0	99	0	16	0	948
	2012	SOF	0	911	250	0	86	0	7	0	1266
	2013	SOF	0	501	136	0	70	0	9	0	713
	2016	IAFQ	2	1150	225	_	319		0		1698
	2017	IAFQ	0	605	131	0	65	0	0	0	801
Grenada											
	2016	IAFQ	0	∞	0	æ	0		0		12
	2017	IAFQ	0	4	0	_	0	0	0	0	5

6 1 converted flare gun and 1 air soft gun 7 2 converted flare guns

Jamaica 2016 Saint Lucia 2017 Trinidad and Tobago 2010 Contral America 2013 Costa Rica 2016	IAFQ IAFQ SOF SOF	0 0 0 0	402							
	IAFQ IAFQ SOF SOF SOF	0 0 0 0	564							
	IAFQ IAFQ SOF SOF SOF	0 0 0	564	113	37	22	20	52	0	649
	IAFQ SOF SOF SOF	0 0 0		120	29	35	20	26	0	862
	IAFQ SOF SOF SOF SOF	0 0 0								
	SOF SOF SOF	0 0	1/	2	2	m	0	0	0	24
	SOF SOF SOF	0	31	2	2	M	0	2	9	46
vmerica	SOF SOF SOF	0								
nmerica	SOF SOF		163	102	4	51	7	57	0	384
ımerica	SOF		151	125	31	53		55		425
nmerica	SOF		186	110	25	21	7	49		429
ımerica			194	86	14	37		61		419
2000										
0107	IAFQ	0	3539	2723	300	311	0	48	5820	12697
2017	IAFQ	0	3489	2254	265	254	0	78	7032	13301
El Salvador										
2010	SOF		2182	1558	291	559	20	186		4837
2011	SOF	32	2026	1448	262	473		187		4456
2012	SOF	2	4004	2011	437	878	36	307		7726
2016	IAFQ	0	844	485	155	166	9	0	96	1752
2017	IAFQ	0	1548	795	290	313	21	0	136	3103
Guatemala										
2010	SOF	23	2737	805	158	433		416		4580
2011	SOF	4	2375	703	137	452		396		4069
2012	SOF	_	2692	992	74	419		423		4378
2013	SOF	2	2914	744	26	395		447		4558
2016	IAFQ	0	2935	808	96	470	33	297	0	4940
2017	IAFQ	0	2764	743	83	429	39	628	0	4686
Honduras										
2016	IAFQ	21	2218	1133	371	274	0	203	0	4220
2017	IAFQ	31	2397	1197	443	315	0	225	0	4608

Region	Year	Source	Machine gun	Pistol	Revolver	Rifle	Shotgun	Submachine gun	Other	Unknown	Total
Mexico											
	2010	SOF	100	9664	2961	13826		377		3363	30291
	2011	SOF	77	9966	3230	17191	5035	367		5130	40996
	2012	SOF	75	6305	1853	11346	2406	255		3563	25803
	2013	SOF	23	2236	206	3749	542	103	0	1600	8759
	2016	IAFQ	23	2281	401	2030	261	09	375	892	6323
	2017	IAFQ	23	2304	379	2834	317	69	423	892	7241
Panama											
	2010	SOF	44	662	753	234	243	0	0	0	1936
	2011	SOF	29	1143	1360	192	240	0	47	0	3011
	2012	SOF	21	795	733	162	186	0	25	33	1955
	2013	SOF		846	611	111	137	0	25	29	1770
	2016	IAFQ	0	544	431	103	85	15		54	1243
	2017	IAFQ	0	280	436	127	137	41	1	46	1351
Northern America											
Canada											
	2012	CND									32000
	2016	CND									25123
United States of America											
	2013	ATF	13829	12808310	45795	40221	28898		39711	268	24504412
	2014	ATF	7179	13375913	43799	38854	26970		36111	245	24470512
	2015	ATF	7659	15249814	44792	41273	27519		58111	1918	26934612
	2016	ATF	8769	17483615	44855	40449	26328		35111	465	28816012
	2017	ATF	12659	20159516	45407	44085	27241		32111	347	32026112

9 May include submachine guns

10 Includes 2195 derringers

Includes destructive devices, combination guns and flare guns, tear gas launchers 11

Includes firearms submitted for tracing to the Bureau of Alcohol, Tobacco, Firearms and Explosives by a law enforcement agency, resulting from seizure as well as abandonment, buy-back program, or other recovery method. Moreover, only seized firearms submitted for tracing are included. Firearms submitted for tracing after recovery do not represent the entire set of all seized firearms. The classification encompasses destructive devices, tear gas launchers. 12

Includes 2197 derringers 13

Includes 2234 derringers 14

15 Includes 2094 derringers

Includes 2087 derringers 16

Region	Year	Source	Machine gun	Pistol	Revolver	Rifle	Shotgun	Submachine gun	Other	Unknown	Total
South America											
Argentina											
	2010	SOF	_	456	787	296	331	_	0	0	1872
	2011	SOF	0	704	1288	249	258	m	0	0	2502
	2012	SOF	-	2671	4845	1018	1021	0	m	0	9568
	2013	SOF	0	1517	1519	969	481	2	m	0	4218
	2014	SOF	0	280	549	206	165	_	0	0	1501
	2016	IAFQ	334	4941	13282	2054	2723	24	306	0	23664
	2017	IAFQ	21	3218	10888	1840	3137	9	547	0	19657
Bolivia (Plurinational State of)											
	2016	IAFQ	2	21	36	10	53	0	0	0	122
	2017	IAFQ	4	13	21	42	72	0	0	0	152
Brazil											
	2013	SOF	45	3073	7888	413	1590	31	∞	0	13048
	2016	IAFQ	0	2616	1452	550	134	27	0		4794
	2017	IAFQ	4	1510	189	472	09	42	0	7	2284
Chile											
	2010	SOF	0	206	1106	40	1327	0	401	80	3460
	2011	SOF	4	699	1113	43	1377	0	493	0	3699
	2012	SOF	4	589	1068	45	1313	0	612	0	3631
	2013	SOF	O	887	1855	172	1502	0	592	1215	6229
	2016	UNODA									7833
	2017	UNODA									4137
Colombia											
	2010	Ь	18	10516	23625	1289	8915		06	0	44564
	2011	Ъ	19	8235	20171	819	8524	66	96	0	37963
	2012	Ъ	34	7956	18812	2070	9476	158	393	0	38899
	2013	읍	21	6934	16462	568	9941	101	113	0	34140
	2014	ď	13	6337	14362	493	10111	94	33	0	31443
Colombia											
	2015	РР	5	6160	12529	444	9795	26	36	0	29025
	2016	ЪР		5226	11058	332	8970	52	28	0	25677

Exemply 2017 PP 91 91 4497 9479 9479 9479 9479 9479 947	Region	Year	Source	Machine gun	Pistol	Revolver	Rifle	Shotgun	Submachine gun	Other	Unknown	Total
1		2017	ЬЬ		4992	9479	467	8698	88	254	0	23997
2010 SOF SOF SO SOF SOF	Ecuador											
2011 SOF A 23 3568 6 336		2010	SOF	D	44	385	m	52				514
2012 SOF 6 422 3053 17 664 865		2011	SOF	7	203	3698	9	306		324		4606
2013 SOF 94 310 2323 526 656		2012	SOF	9	432	3053	17	604		826		5171
2016 JAPQ 394 1945 116 1017 0 386 1 386 1 386 286 1 386 1 386 286 286 21 12 386 28 21 12 18 0 0 0 0 0 48 21 12 18 0 </td <td></td> <td>2013</td> <td>SOF</td> <td>0</td> <td>310</td> <td>2323</td> <td>25</td> <td>989</td> <td></td> <td>218</td> <td></td> <td>3739</td>		2013	SOF	0	310	2323	25	989		218		3739
na 2017 MrQ 1 102 381 1 336 26 26 na/4 MrQ 68 21 12 28 0 0 0 na/4 MrQ 68 21 12 18 0 0 0 0 na/4 MrQ 68 21 12 18 0		2016	IAFQ	0	304	1945	16	1017	0	38		3320
na Ario Merio		2017	IAFQ	_	102	381	—	336		26		847
pulsy 2016 MHO 68 21 13 28 0 0 0 pulsy 2017 MHO 68 21 1 28 0 0 0 0 pulsy 2016 MHO 681 1017 145 358 0 1571 0 2010 SOF 0 681 1017 145 358 0 1571 0 2011 SOF 0 637 618 618 161 773 170 2012 SOF 0 624 618 618 62 67 777 anne 2017 MHO 13 521 29 53 648 0 777 anne 2017 MHO 13 212 134 32 481 0 178 anne 2016 MHO 57 121 32 481 0 178 anne 2017	Guyana											
puny Africanol 68 21 12 18 0		2016	IAFQ	0	47	34	-	28	0	0	0	110
Jusy 2016 IAFQ 6681 11017 145 358 681 148 0 1571 2012 SOF 0 637 880 81 148 0 7773 2012 SOF 0 624 616 49 92 0 7773 2012 SOF 0 624 616 49 92 0 7773 2016 IAFQ 13 2129 529 59 0 101 ame 2016 IAFQ 13 32 551 29 59 0 182 ame 2017 IAFQ 0 57 121 32 481 0 717 ame 2017 IAFQ 0 57 121 32 481 0 182 ame 2018 IAFQ 0 557 121 398 324 4 0 119 ama		2017	IAFQ	0	89	21	12	18	0	0	0	119
1	Paraguay											
2010 SOF O 681 1017 145 358 O 1571 1571 145 145 148		2016	IAFQ	0	36	_	0	0	0	0	0	37
2010 SOF 0 681 1017 145 358 0 1571 1773 1773 1773 1774 1774 148 0 7773 1774 1774 1774 1774 1777 1717	Peru											
2011 SOF 0 637 880 81 148 0 773 11 71 148 0 773 17 17 14 92 0 9 <td></td> <td>2010</td> <td>SOF</td> <td>0</td> <td>681</td> <td>1017</td> <td>145</td> <td>358</td> <td>0</td> <td>1571</td> <td>48</td> <td>3820</td>		2010	SOF	0	681	1017	145	358	0	1571	48	3820
2012 SOF 0 624 616 49 92 0 9 9 2013 SOF 0 777 1107 101 236 0 9 101 2016 JAFQ 14 793 551 29 59 0 101 101 2016 JAFQ 13 2129 1914 32 481 0 217 101		2011	SOF	0	637	880	81	148	0	773	183	2702
2013 SOF 0 777 1107 101 236 0 101 90 101 90 101 90 101 90 101 90 101 90 101 90 182 90 90 182 90 182 90 182 90 182 90 112 90 112 90<		2012	SOF	0	624	616	49	92	0	6	26	1416
2016 IAFQ 14 793 551 29 59 69 0 182 182 182 182 182 182 182 183		2013	SOF	0	777	1107	101	236	0	101	30	2352
2017 IAFQ 13 2129 1914 32 481 0 217 7		2016	IAFQ	41	793	551	29	29	0	182	0	1628
2016 IAFQ 0 57 13 3 95 0 19 2017 IAFQ 0 52 19 3 81 0 18 2013 SOF 0 557 1211 398 324 4 0 38 2016 IAFQ 0 557 1211 398 324 4 0 0 2017 IAFQ 0 23 5 531 4547 0 1526 3ia 2017 IAFQ 0 23 5 531 4547 0 633		2017	IAFQ	13	2129	1914	32	481	0	217	0	4786
2016 JAFQ 0 57 13 3 95 0 19 2017 JAFQ 0 52 19 3 81 0 19 2013 SOF 0 557 1211 398 324 4 0 38 2016 JAFQ 0 557 1211 398 324 4 0 0 2017 JAFQ 0 23 2	Suriname											
2017 IAFQ 0 557 1211 398 324 4 0 38 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9		2016	IAFQ	0	57	13	m	95	0	19	0	187
2013 SOF 0 557 1211 398 324 4 0 0 2016 IAFQ 0 1521 4 0 0 1526 sia 2016 IAFQ 0 23 5 531 4547 0 1526 2017 IAFQ 0 24 5 5427 3612 0 633		2017	IAFQ	0	52	19	m	8	0	38		193
2013 SOF 0 557 1211 398 324 4 0 0 2016 IAFQ RAFQ RAFQ RAFQ RAFQ RAFAT RAFAT 0 1526 sia 2017 IAFQ 0 23 5 531 4547 0 0 633 2017 IAFQ 0 24 5 5 531 0 0 633	Uruguay											
2016 IAFQ 2017 IAFQ sia 2016 IAFQ 2017 IAFQ 2018 IAFQ 2019 IAFQ 2010 IAFQ 2011 IAFQ 2011 <td></td> <td>2013</td> <td>SOF</td> <td>0</td> <td>257</td> <td>1211</td> <td>398</td> <td>324</td> <td>4</td> <td>0</td> <td>146</td> <td>2640</td>		2013	SOF	0	257	1211	398	324	4	0	146	2640
sia 2017 IAFQ 0 23 5 531 4547 0 1526 2017 IAFQ 0 24 5 5 531 627 0 633		2016	IAFQ		_ = 4							3891
sia 2016 IAFQ 0 24 5 531 4547 0 1526 2017 IAFQ 0 24 5 633		2017	IAFQ		_ = -							3997
sia 2016 IAFQ 0 23 5 531 4547 0 1526 2017 IAFQ 0 24 5 427 3612 0 633	Asia											
2016 IAFQ 0 23 5 531 4547 0 1526 2017 IAFQ 0 24 5 427 3612 0 633	Central Asia											
IAFQ 0 23 5 531 4547 0 1526 IAFQ 0 24 5 427 3612 0 633	Kazakhstan											
IAFQ 0 24 5 427 3612 0 633		2016	IAFQ	0	23	2	531	4547	0	1526		6635
		2017	IAFQ	0	24	2	427	3612	0	633		4704

Region	Year	Source	Machine	Pistol	Revolver	Rifle	Shotgun	Submachine	Other	Unknown	Total
Kyrgyzstan											
	2017	IAFQ	_	31	0	0	43	0	0	2	80
Tajikistan											
	2016	IAFQ	0	Ŋ	0	6	16	0	2		32
	2017	IAFQ	0	9	0	5	∞	0	6	0	28
Eastern Asia											
Japan											
	2016	IAFQ	0	0	341	14	99	0	26817	0	689
	2017	IAFQ	0	0	361	22	09	0	42717	0	870
South-Eastern Asia											
Myanmar											
	2016	IAFQ	0	29	15	88	36	0	0	0	206
	2017	IAFQ	0	79	12	98	46	0	0	0	223
Philippines											
	2016	IAFQ	0	10	M	m	Ŋ	0	0	0	21
	2017	IAFQ	0	19	12	2	0	7	0	0	38
Southern Asia											
Nepal											
	2016	IAFQ	0	15		4	0		218	7	30
	2017	IAFQ	0	10	0	16	0	0	218	m	31
Western Asia											
Azerbaijan											
	2016	IAFQ	0	97	7	<u></u>	52	2	09	0	219
	2017	IAFQ	0	65	4	2	28	0	113	0	212
Iraq											
	2010	SOF	467	1444	0	9016	22	0	0	0	10949
	2011	SOF	909	1443	0	15158	75	0	0	0	17281
	2012	SOF	677	1459	0	9624	09	0	0	0	11820
Kuwait											
	2013	SOF	0	61	0	12	-	0	0	0	84

17 Includes air guns and machine guns
18 Air guns

Region	Year	Source	Machine gun	Pistol	Revolver	Rifle	Shotgun	Submachine gun	Other	Unknown	Total
Lebanon											
	2016	IAFQ	5	106	4	245	086	ĸ	13	М	1359
	2017	IAFQ	-	929	2	188	929		20		1548
Qatar											
	2016	IAFQ	7	19	2	0	28	0	0	15	71
	2017	IAFQ	4	31	-	0	15	0	0	27	78
Turkey											
	2013	SOF	m	190	417	7587	1604	0	52	0	9853
Europe											
Eastern Europe											
Belarus											
	2016	IAFQ									7416
	2017	IAFQ									9906
Hungary											
	2016	IAFQ	99	83	12	79		83	119	2	337
	2017	IAFQ	0	2	0	93	_	0	6419		193
Poland											
	2010	SOF	168	262	263	167	168	37	118	1086	2269
	2011	SOF	158	201	201	159	158	47	84	269	1577
	2012	SOF	184	216	215	184	184	17	102	748	1850
	2013	SOF	162	219	220	161	161	23	98	535	1567
Republic of Moldova											
	2016	IAFQ	0	10		9	6	0	9	5	37
	2017	IAFQ	0	15	0	m	m	0	9		31
Romania											
	2010	SOF		-	2	5	_				66
	2011	SOF	1	m		2	2		1		84
	2012	SOF	1	2	1	1	2				86
	2013	SOF		1		9	2				86
	2016	IAFQ	0	2	2	4	m	0	17	0	28
	2017	IAFQ	0	4	2	7	0	0	44		57

19 Air rifle(s

Region	Year	Source	Machine	Pistol	Revolver	Rifle	Shotgun	Submachine gun	Other	Unknown	Total
Russian Federation											
	2010	SOF									47
	2011	SOF									2233
	2012	SOF								+ +	18
	2013	SOF									56
	2016	IAFQ	0	0	0	0	0	0	0	17197	17197
	2017	IAFQ	0	0	0	0	0	0	0	13855	13855
Slovakia											
	2016	IAFQ	0	842	68	707	41	0	0	36	1715
	2017	IAFQ	0	219	09	186	40	0	0	0	510
Ukraine											
	2016	IAFQ	70	0	740	42	42	30	389	1725	3038
	2017	IAFQ	123	0	1016	109	109	23	737	1645	3762
Northern Europe											
Denmark											
	2017	IAFQ	5	230	83	121	175	46	113	2	778
	2017	IAFQ	M	284	75	100	194	42	152	4	854
Finland											
	2010	SOF	98	386	386	677	229		30		2783
	2011	SOF	43	448	449	989	770		22	1	3023
	2012	SOF	55	399	399	989	570		18	1	2127
	2013	SOF	120	413	414	662	612		29		3149
Latvia											
	2010	SOF	M	∞	∞	_	2	0		0	23
	2011	SOF	10	0	81	23	4	0	2	0	120
	2012	SOF	0	0	15	∞	4	0	0	0	27
	2013	SOF	0	2	∞	2	2	0	2	0	16
Lithuania											
	2010	SOF	2	0	0	34	74	0	62		183
	2011	SOF	14	0	0	32	47		70	9	170
	2012	SOF	M	4	0	16	46	0	39	7	115
	2013	SOF	7	7	2	30	72		89		198

Norway			dnb	2	2	ייי		dnb			
Norway	2016	IAFQ	0	150	8	4	89	0	120	7	309
Norway	2017	IAFQ	4	119	87	0	51	0	120	0	262
	2016	IAFQ	4	127	42	70	25	88	24421	0	550
	2017	IAFQ	m	82	70	38	35	13	75 ²¹	0	316
Sweden											
	2016	IAFQ	39	430	106	92	158	30	102	0	957
	2017	IAFQ	42	401	77	9/	106	29	81	0	812
United Kingdom											
	2016	ЬР	0	317	223	2722	223	23	132	—	946
	2017	ЬР	0	274	203	2722	249	34	160	0	947
Southern Europe											
Albania											
	2016	IAFQ	4	169	D	273	80	0	0	0	531
	2017	IAFQ	0	139	Ŋ	189	66	0	0	0	432
Croatia											
	2016	IAFQ	76	655	66	996	0	09	0		1878
	2017	IAFQ	78	268	75	937	0	26	0	2	1686
Greece											
	2016	IAFQ	2	489	175	92	7838	57	492	0	9145
	2017	IAFQ	2	367	156	163	1504	52	247	<u></u>	2492
Italy											
	2016	IAFQ	9	1296	383	0	4631	m	0	298	6617
	2017	IAFQ	0	1045	323	4	2768	6	0	396	4545
Montenegro											
	2010	SOF	21	195	-	22	81	4		15	379
	2011	SOF	01	273	10	24	74	m		24	453
	2012	SOF		145	41	30	79	0		m	319
	2013	SOF	22	162	12	53	110	4		15	411

20 Grenade launcher21 Blank firing guns and air guns22 Includes 8 assault rifles

Region	Year	Source	Machine	Pistol	Revolver	Rifle	Shotgun	Submachine gun	Other	Unknown	Total
C	2016	UNODA									482
	2017	UNODA									377
North Macedonia											
	2010	SOF	0	101	10	87	0	4	9	1062	1279
	2011	SOF		8	10	49	0	136	15	22	314
	2012	SOF		65	Ŋ	99		41	7		179
	2016	IAFQ	0	46	Ŋ	14	38		30	0	134
	2017	IAFQ	0	36	_	6	35	0	109	0	190
Portugal											
	2016	IAFQ	0	298	150	30	453	13	239523	3415	6754
	2017	IAFQ	0	199	95	31	373	7	220823	3012	5925
Serbia											
	2011	SOF	0	223	222	190	0	0	33	0	899
	2012	SOF									1258
	2016	IAFQ		902	37	410	0		193	0	1267
	2017	IAFQ	25	610	41	1041	0	0	155	0	1881
Slovenia											
	2016	IAFQ	0	— I	0	133	0	0	54		304
	2017	IAFQ	0	116	0	149	0	0	59	0	324
Spain											
	2010	В	0	801	261	066	3667	4			5723
	2011	А	4	878	315	1061	3731	24			6013
	2012	A.	2	2249	1022	1302	4595	208		1	9378
	2013	Ъ	0	1590	692	1268	3951	41			7515
	2014	Ъ	∞	1480	561	1305	3525	18			2689
	2015	Ъ	2	1262	507	1177	3177	36			6161
	2016	IAFQ	_	1549	1216	1563 ²⁴	4657	17	0	0	9003

23 Includes alarm weapons, sticks, electric weapons, gas, razors, throwing stars and "beasts".
24 Includes 29 assault rifles

Region	Year	Source	Machine	Pistol	Revolver	Rifle	Shotaun	Submachine	Other	Unknown	Total
			ung			2		unb)	5
	2017	IAFQ	m	4389	1185	159725	3303	125	0	0	10602
Western Europe											
Belgium											
	2016	IAFQ	13	289	429	2086	0	13	0	517	3745
	2017	IAFQ	19	747	381	1903	0	10	0	554	3614
France											
	2013	SOF	14	222	09	0	259	7	109	154	825
Liechtenstein											
	2016	IAFQ									32
	2017	IAFQ									13
Luxembourg											
	2016	IAFQ	_	39	31	52	51	15	547	30	992
	2017	IAFQ	0	27	27	41	16	4	748	0	863
Netherlands											
	2010	IAFQ	DNN								1405
	2016	IAFQ	16326	1619 ²⁶	52226	75326	0	6 ²⁶	233626	0	539926
	2017	IAFQ	132 ²⁶	165126	555^{26}	99156	0	2426	2110^{26}	0	5463 ²⁶
Oceania											
Australia and New Zealand	pu										
Australia											
	2016	IAFQ	17	335	13234	3742	0	742	6103	25502	
	2017	IAFQ	13	357	14806	4177	0	1145	5874	27819	

²⁵ Includes 47 assault rifles26 Includes found and surrendered arms

TABLE 3 \dots Arms seized by legal justification of seizures, 2016-2017

	Year	Altered markings	Illicit manufacture	Illicit possession	Illicit trafficking	Illicit use	Other	Unknown	Total
Africa									
Eastern Africa									
Burundi									
	2016			193					193
	2017			42					42
Kenya									
	2016	64	424	4762				41	5264
	2017						9.728		9728
Middle Africa									
Angola									
	2016			9509		5.419			11475
	2017			4965		5.23			10195
Central African Republic									
	2016			74		2	4	224	304
	2017		_	104	7	4	14	81	211
Northern Africa									
Algeria									
	2016		101	322	87	0	190		700
	2017		164	293	65	0	250		772
Libya									
	2016			224					224
	2017			247					247
Tunisia									
	2016			110	392	160	260		935
	2017		17	110	358	11	139		635
Western Africa									
Cote d'Ivoire									
	2016			180					191
	2017			190		22		25	237

	Year	Altered		Illicit manufacture	Illicit possession	Illicit trafficking	Illicit use	Other	Unknown	u v	Total
Togo											
	2016				83						83
	2017				83						83
Americas											
Caribbean											
Antigua and Barbuda											
	2016		0	0	8	0	0			0	8
	2017		0	0	10	0	0			0	10
Cuba											
	2016					5					5
	2017					2					2
Dominican Republic											
	2016		0	0	1498	0	135			65	1698
	2017		0	0	653	0	125			23	801
Grenada											
	2016	1	+		12			1		+	12
	2017				5						Ŋ
Jamaica											
	2016			55	48		277	269	6		649
	2017			26	20		392	364			862
Saint Lucia											
	2016									24	24
	2017				26					20	46
Central America											
Costa Rica											
	2017					2					
El Salvador											
	2016	1		96		1351		1			1447
	2017			132		1898					2037

	Year	Altered markings	Illicit manufacture	Illicit possession	Illicit trafficking	Illicit use	Other	Unknown	Total
Guatemala									
	2016	_	0	3223	0	404	1312	0	4940
	2017	0	0	3200	0	315	1171	0	4686
Honduras									
	2016	0	210	2612	0	1237		161	4220
	2017	0	136	2844	0	1431	+ · · · · · · · · · · · · · · · ·	197	4608
South America									
Argentina									
	2016						23664		23664
	2017						19657		19657
Bolivia (Plurinational State of)	te of)								
	2016			122					122
	2017			83	69				152
Brazil									
	2016	0	0	4377	17	0	100	300	4794
	2017	0	0	1769	204	0	61	250	2284
Ecuador									
	2016					339	2981	+	3320
	2017					303	544		847
Peru									
	2016	0	0	0	0	20	1.569	0	1628
	2017	0	0	0	15	1118	3.653	0	4786
Asia									
Eastern Asia									
Japan									
	2016			624	4	22	39		689
	2017			794		59	47		870
South-Eastern Asia									
Myanmar									
	2016			506					206

	Year	Altered	Illicit manufacture	Illicit possession	Illicit trafficking	Illicit	Other	Unknown	Total
	2017			223					223
Philippines									
	2016				5	2		m	21
	2017			33	_	4			38
Southern Asia									
Nepal									
	2016			30					30
	2017			28				m	31
Western Asia									
Azerbaijan									
	2016	0	4	150	Ō	56	0	0	219
	2017	0	7	152	4	49	0	0	212
Qatar									
	2016			56					56
	2017			49	2				51
Europe									
Eastern Europe									
Belarus									
	2016							7416	7416
	2017							9906	9906
Hungary									
	2016	1		210	127				337
	2017			193					193
Republic of Moldova									
	2016		2	29	m	2			37
	2017		m	19	<u> </u>		4	m	31
Romania									
	2016	0	0	28	0	0	0	0	28
	2017	0	0	57	0	0	0	0	57

	Year	Altered markings	Illicit manufacture	Illicit possession	Illicit trafficking	Illicit use	Other	Unknown	Total
Northern Europe									
Denmark									
	2016			512		106	160		778
+ · · · · · · · · · · · · · · · ·	2017	- · · · · · · · · · · · · · · · · · · ·	+ · · · · · · · · · · · · · · · ·	009	+	78	176	+ · · · · · · · · · · · · · · · ·	854
Lithuania									
	2016			289		8	12		309
	2017			233	M	6	7		262
Sweden									
	2016	149	C						
	2017	135	2						
United Kingdom									
	2016	0	0	856	23	63	0	4	946
	2017	0	0	808	7	37	0	0	947
Southern Europe									
Albania									
	2016			435		5		08	531
	2017			326	9	_		66	432
Greece									
	2016				6435			2710	9145
	2017			2				2490	2492
Portugal									
	2016		0,1	3012	114	1338			4498
	2017	9	64	2481	152	780			3483
Slovenia									
	2016	0	0	304				0	304
	2017	0	0	324				0	324
Spain									
	2016		4	268	936	301	336	6858	8003
	2017			429	86	332	349	9394	10602

	Year	Altered markings	Illicit manufacture	Illicit possession	Illicit trafficking	Illicit use	Other	Unknown	Total
Western Europe									
Liechtenstein									
	2016			32					32
	2017			<u>E</u>					£ (1)
Luxembourg									
	2016	 0	0	445	0	321	0	0	992
	2017	 0	0	512	0	351	0	0	863
Netherlands									
	2016	 0	0	3956	64	092	477	142	5399
	2017	 0	0	4282	43	517	439	182	5202
Oceania									
Australia and New Zealand	Zealand								
Australia									
	2016	 18		3018	15	33	15621	16791	25502
	2017	 24	12	2869	26	105	16749	8034	27819

TABLE 4 ... Parts and components and ammunition seized, 2016-2017

Region	Year	Parts and components	Rounds of ammunition
Africa			
Eastern Africa			
Kenya		,	
	2016	0	21141
	2017	0	33608
Middle Africa			
Angola			
	2016	1.259	17377
	2017	489	66077
Central African Republic		· · · · · · · · · · · · · · · · · · ·	
	2016	 	8724
NI - utla - u Afri	2017		23289
Northern Africa			
Algeria	2016	44	E6221
	2016 2017	118	56321 145668
Libya	2017	110	143008
Libya	2016	47	4299
	2017	56	173
Morocco			
	2016	7	5472
	2017	8	4724
Tunisia	·i	ii-	
	2016	28	17959
	2017	6	11241
Americas			
Caribbean			
Cuba			
	2016		7426
	2017		7956
Grenada		,	
	2016	1	239
	2017	0	32
Central America			
Costa Rica		:	
	2016	0	
	2017	0	
Guatemala	200		
	2016	0	40169
Niambara Amari	2017	0	44415
Northern America			
United States of America	2016	1063	
	2016	1063	

Region	Year	Parts and components	Rounds of ammunition
South America			
Argentina			
	2016	68	742
	2017	204	610
Brazil		,	
 	2016	629	293211
	2017	2690	174848
Ecuador		·	
 	2016	7809	29472
	2017	660	13480
Guyana	·	·	
	2016	630	1516
 	2017	1.685	1751
Peru			
	2016	64	47917
	2017	202	145061
Asia			
Eastern Asia			
Japan		·	
 	2016	1	14724
	2017	3	21048
South-Eastern Asia			
Myanmar			
	2016	157	29493
	2017	171	16748
Philippines			
	2016	43	96
	2017	82	146
Southern Asia			
Nepal			
	2016	6	28
	2017	19	62
Western Asia			
Azerbaijan		1	
 	2016	78	5851
	2017	52	4385
Qatar	1		
	2016	12	7209
_	2017	3	7501
Europe			
Eastern Europe			
Romania	1		
	2016	0	81861
 	2017	0	79810

Region	Year	Parts and components	Rounds of ammunition
Northern Europe	<u>'</u>		
Lithuania			
	2016	67	6893
	2017	54	5911
Sweden	_,		
	2016	20	3563
	2017	16	3031
United Kingdom	_,		
	2016	5	
	2017	14	
Southern Europe			
Croatia			
	2016	163	636
	2017	104	695
Greece			
	2016	1823	578912
	2017	862	136241
North Macedonia			
	2016	6	4995
	2017	1	9718
Slovenia			
	2016	58	48214
	2017	515	25151
Spain			
	2016	2270	8813
	2017	118	10191
Oceania			
Australia and New Zealand			
Australia			
	2016	2509	309980
	2017	5369	5196801

TABLE 5 ... SDG Indicator 16.4.2 (seized arms only) of selected countries for the period, 2016-2017

Country	Α	В	С	D (A+B+C)	E	F	G	Н	l (D+E+F+G+H)	SDG (D/I, percentage)
Antigua and Barbuda	0	2	0	2	0	14	9		25	8
Argentina	5842	0	0	5842	15040	11022	0	0	31904	18
Australia	357	0	150	507	2975	3	28881	20530	52896	1
Azerbaijan	224	0	0	224	0	0	0	0	224	100
Bahamas	91	493		584		0		2	586	100
Brazil	83	684	75	842	0	5290	0		6132	14
Grenada	0	11		11	1		5		17	65
Kenya	0			0		0	9722	6	9728	0
Lithuania	3			3	176			+	179	2
Peru	2875	0	0	2875	788	0	0	+	3663	78
Republic of Moldova	5			5				48	53	9
Romania	0	0	0	0	0	19	61	0	80	0
Spain	401		737	1138	25	898			2061	55
United Kingdom	94	145	18	257	0	114	1370	0	1741	15

- A Weapon seized from illegitimate owner and weapon found in national registry (e.g., lost or stolen) (national tracing)
- B Point of diversion of the weapon (last legal record) identified through tracing and weapon found in foreign registry (international tracing)
- C Point of diversion otherwise established by a competent authority
- D SDG numerator: successfully traced arms of illicit origin
- E Tracing attempted, but not enough information to identify point of diversion
- F Tracing procedure still pending
- G No tracing procedure initiated
- H Unknown status with respect to marking
- I SDG denominator: Potentially traceable arms of illicit origin
- SDG SDG Indicator

TABLE 6 ... Data sources

	Data source
IAFQ	UNODC Illicit Arms Flows Questionnaire
PP	Official communication
SOF	UNODC Study on Firearms 2015
WCO	World Customs Organization
UNODA	United Nations Office for Disarmament Affairs
CND	Commissioner of Firearms report and Statistics Canada catalogue
NND	Nationaal dreigingsbeeld 2012
ATF	Bureau of Alcohol, Tobacco, Firearms and Explosives
UNPOL	United Nations Police
NA	Not available / Not applicable