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MEASURING ILLICIT ARMS AND FINANCIAL FLOWS: IMPROVING THE ASSESSMENT OF SUSTAINABLE DEVELOPMENT GOAL 16

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SUMMARY

● Target 16.4 of the United Nations' Sustainable Development Goals aims to, among other things, 'significantly reduce illicit financial and arms flows' by 2030. Indicators have been agreed for measuring the achievement of this target. Data-collection efforts have been launched for arms flows while work continues on finding an agreed definition and measure of illicit financial flows. However, discussions about the progress made on defining indicators for illicit arms and financial flows and the relevant data-collection efforts have taken place within their respective communities of expertise. This paper seeks to make links between these processes by providing an overview of the different stages of progress and the difficulties encountered in developing definitions and collecting data. In doing so, the paper pays particular attention to the work carried out in Latin America and the Caribbean by regional organizations, states and non-governmental organizations to collect data on illicit arms flows and the lessons these efforts provide for target 16.4. The paper concludes by offering recommendations on how data collection for indicators on illicit arms and financial flows could be improved and how additional regional and national indicators could be developed.

I. Introduction

The United Nations' 17 Sustainable Development Goals (SDGs), adopted along with the 2030 Agenda for Sustainable Development in 2015, are grounded in the idea that 'there can be no sustainable development without peace, and no peace without sustainable development'.[1] The goal most closely associated with peace is SDG 16, which aims to 'Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels'. SDG 16 acknowledges the links of development with peace and governance, and thus the role that violence, conflict, state fragility, corruption and poor governance can play in undermining development. It is considered one of the most ambitious and challenging of the SDGs—its focus on peace and inclusive, accountable institutions puts politics at the centre of development.[2] It is also considered by many observers to be the transformational goal of the 2030 Agenda, as an end in itself and as a critical enabler for the achievement of several other goals.[3]

The UN Statistical Commission, which has been tasked with developing global indicators for each SDG, has created the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs). The IAEG-SDGs has identified 232 indicators for the 2030 Agenda, including 23 indicators for the 12 targets of SDG 16. These were adopted by the UN General Assembly on 6 July 2017.[4] Each global indicator has a custodian agency (or agencies) that is responsible

[1] UN General Assembly Resolution 70/1, 'Transforming our world: the 2030 Agenda for Sustainable Development', 25 Sep. 2015, A/RES/70/1, 21 Oct. 2015, p. 2.

[2] Whaites, A., 'Achieving the impossible: can we be SDG 16 believers?', GovNet Background Paper no. 2, Organisation for Economic Co-operation and Development (OECD), 2016, p. 2.

[3] E.g. Wesley, H., Tittle, V. and Seita, A., 'No health without peace: why SDG 16 is essential for health', *The Lancet*, vol. 388, no. 10 058 (12 Nov. 2016), pp. 2352–53; and Institute for Economics and Peace (IEP), *SDG16 Progress Report: A Comprehensive Global Audit of Progress on Available SDG16 Indicators* (IEP: Sydney, 2017), p. 3.

[4] UN General Assembly Resolution 71/313, 'Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development', 6 July 2017, A/RES/71/313, 10 July 2017, annex, pp. 20–22.

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for its methodological development and for collecting data from national statistical systems, coordinating data and metadata, and contributing to statistical capacity-building.[5] The data provided by the global indicators should facilitate cross-country comparison and enable resources to be focused where they are needed. In addition, the 2030 Agenda encourages the development of regional and national indicators by member states.[6] Given that a global indicator may not comprehensively address its respective target, as well as the limitations that many countries face in applying global SDG indicators in national statistical systems, regional and national indicators are a means to 'improve SDG data coverage, notably through proxy indicators or alternative sources that are available'.[7]

Despite the prominence that SDG 16 gives to peaceful societies, only target 16.4 directly references militarization and weaponry, among other things: by 2030 it aims to 'significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime'.[8] However, so far only two global indicators have been identified and agreed: indicator 16.4.1 would measure the 'total value of inward and outward illicit financial flows (in current United States dollars)', while indicator 16.4.2 would measure the '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'.[9]

Data-collection efforts connected to indicator 16.4.1 have not yet begun. Efforts to collect data for indicator 16.4.2 have begun, although the quality and quantity of the information generated to date has been limited. At the same time, there are limits on the ability of indicators 16.4.1 and 16.4.2 to comprehensively measure achievement of target 16.4 and there is a consequent need for additional indicators—particularly at the national and regional levels—to be developed. In developing additional indicators there is significant scope to build on past efforts, particularly when it comes to measuring illicit arms flows. A range of steps are being taken at the regional, subregional and national levels to generate better quality data on illicit arms flows and to develop states' capacities to halt illicit arms flows, trace the origin of illicit arms and share information between governments. A useful case study in this regard is Latin America and the Caribbean, where states, regional organizations and non-governmental organizations (NGOs) have been particularly active in all of these areas. The steps taken in this region and the experience generated could therefore provide important lessons for how additional national and regional indicators could be developed to measure the achievement of the illicit arms and financial flows aspects of SDG target 16.4.

[5] SDG 16 Hub, 'SDG indicators', [n.d.].

[6] UN General Assembly Resolution 70/1 (note 1), para. 75.

[7] SDG 16 Hub (note 5).

[8] UN General Assembly Resolution 71/313 (note 4), annex, p. 21. Several instruments try to distinguish 'small arms' (i.e. weapons used in armed conflict) from 'firearms' (i.e. focusing on law enforcement and public safety). In this paper, the 2 terms are used interchangeably and refer to use in both armed conflict and crime. See Bromley, M. and Grip, L., 'Small arms control measures', *SIPRI Yearbook 2015: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2015), pp. 600–605.

[9] UN General Assembly Resolution 71/313 (note 4), annex, p. 21.

2019 is a significant year for SDG 16. The goal will be reviewed at the High-level Political Forum on Sustainable Development, which will meet on 9–18 July 2019 in New York under the auspices of the UN Economic and Social Council (ECOSOC) and will include a ministerial-level meeting on 16–18 July. The forum will meet again on 24–25 September under the auspices of the UN General Assembly, involving heads of state and government. Such meetings are held every four years to review all 17 SDGs and the Global Sustainable Development Report. Among the many issues that stakeholders will be addressing during the meeting will be the generation of data for measuring the attainment of SDG target 16.4.

To help to inform these discussions, this background paper provides an overview of ongoing and potential work to measure states' achievement of the illicit arms and financial flows aspects of SDG target 16.4. The four distinct phenomena (illicit arms flows, illicit financial flows, organized crime and stolen assets) described in target 16.4 are interrelated in addressing key elements of the dark underside of globalization involving the transnational illicit flows of goods, people and money, often by organized criminal groups, facilitated by the compliance of corrupt officials. The focus on these illicit flows and their agents clearly links peace and security with sustainable development. For example, illicit arms flows, and the laundering of their proceeds, are considered to be the primary illicit flow threatening the safety, security and stability of African Union member states.[10] However, despite these linkages, development of indicators 16.4.1 and 16.4.2 has largely taken place within their respective communities of expertise. Illicit arms flows tend to be dealt with by experts focused on arms control, peace and security, while illicit financial flows tend to be the preserve of a mix of experts in law enforcement, taxation, anti-corruption and anti-money laundering. While development and refinement of the indicators' methodologies depend on specialist knowledge, there is also a risk that silos of expertise emerge around each indicator and that understanding of the interconnections and wider comparative context is lost. This paper seeks to provide a broad overview of the different stages of progress and the difficulties encountered in current efforts to arrive at sound definitions and measures of illicit financial and arms flows.

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The paper continues in section II by assessing the work that has been done so far under indicator 16.4.1 to measure illicit financial flows and, in greater detail, the more advanced efforts made under indicator 16.4.2 to measure illicit arms flows. Section III takes a closer look at the mechanisms for collecting data and sharing information on illicit arms flows in Latin America and the Caribbean. Drawing on these findings, section IV highlights the challenges associated with collecting data on illicit arms and financial flows and identifies where lessons can be learned and progress made in developing meaningful indicators and generating reliable data. This includes

[10] See e.g. African Union Commission and Small Arms Survey, *Weapons Compass: Mapping Illicit Small Arms Flows in Africa* (Small Arms Survey: Geneva, Jan. 2019); Inter-Governmental Action Group against Money Laundering in West Africa (GIABA), *The Nexus between Small Arms and Light Weapons and Money Laundering and Terrorist Financing in West Africa* (GIABA: Dakar, 2013); and Trinkunas, H., 'The network effect: trafficking in illicit drugs, money and people in Latin America', Order from Chaos, Brookings Institution, 3 Dec. 2015.

in appendix 1 a suggested set of additional indicators that could be used to measure the illicit arms flows component of SDG target 16.4.

II. Challenges of measuring illicit arms and financial flows

Collecting meaningful data to measure the implementation of SDG 16 effectively is widely seen as a particularly difficult undertaking. Building adequate statistical capacity will be a lengthy process in many countries. A comprehensive audit of SDG 16 conducted in 2017 found insufficient official data or national statistical capacity to enable comparative cross-country measurement and analysis of the goal.[11] Moreover, the political sensitivity of certain related targets, such as the aim to 'substantially reduce bribery and corruption in all their forms' (target 16.5), raises the question of whether relevant data provided by national authorities can be relied on. In addition, there are methodological challenges related to the complex, multi-dimensional nature of issues such as corruption or the rule of law (target 16.3), which would require many indicators.[12] This section examines the development of indicators 16.4.1 and 16.4.2, outlining the differing methodological approaches and their limitations, the current state of data-collection efforts, and the work done so far on collecting data for indicator 16.4.2.

Illicit financial flows and indicator 16.4.1

Over the past decade, awareness has grown of the harmful effects of illicit financial flows, and they have risen up the international policy agenda. In 2017 the UN General Assembly called for further international cooperation to combat them and to secure the return of illicitly acquired assets in order to foster sustainable development.[13] Through their inclusion in the 2030 Agenda, illicit financial flows are recognized as having a corrosive effect in both developing and wealthier states. They exploit weak state institutions and undermine governance while facilitating criminal activity, empowering and enriching those who flout the law. Further, illicit financial flows reduce domestic resource mobilization and tax revenues, undermining the financial basis for development programming.[14] Achieving the SDGs will require additional financing of trillions of dollars, but illicit financial flows are recognized to be a significant impediment to the national and international mobilization of development finance.[15]

Indicator 16.4.1 would measure the 'Total value of inward and outward illicit financial flows (in current United States dollars)'. It is a Tier III indicator, which means that it has no internationally established methodology

[11] Institute for Economics and Peace (note 3), p. 2.

[12] Institute for Economics and Peace (note 3), p. 3.

[13] UN General Assembly Resolution 72/207, 'Promotion of international cooperation to combat illicit financial flows in order to foster sustainable development', 20 Dec. 2017, A/RES/72/207, 17 Jan. 2018.

[14] World Bank, 'Illicit financial flows (IFFs)', Brief, 7 July 2017.

[15] UN Conference on Trade and Development (UNCTAD), 'Plugging financial leakages and mobilizing domestic and international resources to deliver on the Sustainable Development Goals', Note by the UNCTAD Secretariat, TD/B/65(1)4, 12 Apr. 2018, paras 1, 8.

or standards, but that they are being or will be developed.[16] According to the work plan for the development of indicator 16.4.1, its methodological refinement is to be completed by the end of 2019.[17] The UN Office on Drugs and Crime (UNODC) and the UN Conference on Trade and Development (UNCTAD), the co-custodians of indicator 16.4.1, have developed a draft methodology that is being tested in pilot countries, with the finalized country-level methodology to be ready by the end of 2019.[18]

Collecting data for indicator 16.4.1 is likely to encounter significant obstacles. Currently, there is no internationally agreed definition of 'illicit financial flows' or of the scope of the concept. The High Level Panel on Illicit Financial Flows from Africa (also known as the Mbeki Panel) adopted a definition based on one developed by Global Financial Integrity, an NGO: this defines illicit financial flows as 'Money that is illegally earned, transferred or utilized'.[19] The term is generally understood to refer to cross-border flows of money or other assets that are illegal in source, transfer or use. In practice, this means they are linked to crime, corruption, terrorism, and tax avoidance or evasion. The flows themselves may or may not be illegal.

Differences arise among researchers, law enforcement practitioners, policymakers and activists, who broadly comprise the community of stakeholders interested in curbing such flows. For example, law enforcement actors focus on illegal activities that occur in their jurisdiction and may view illicit financial flows as financial crimes that are closely related to money laundering. They may also, however, see them as 'predicate offences'—that is, one component of an illegal activity that is classified as a serious crime in their jurisdiction. For example, illicit financial flows may be a predicate offence of the primary crimes of drug trafficking, organized crime or terrorism, which tend to be viewed as more serious offences and of greater interest for many law enforcement actors.[20] Stakeholders involved in development may focus more on the illegal transfer of stolen state assets by corrupt or kleptocratic leaders or on tax avoidance, which may be legal but also has harmful effects for sustainable development. Others, such as those critical of large multinational corporations whose structures take advantage of different jurisdictions to avoid taxes (also known as 'profit shifting' or 'arbitrage'), may focus on illicit financial flows as being essentially a question of morality in the moving of legally acquired funds and the impact on the social good, rather than intrinsically unlawful behaviour. The issue of whether international corporate tax avoidance should be included in the definition of

Currently, there is no internationally agreed definition of 'illicit financial flows' or of the scope of the concept

[16] United Nations, Department of Economic and Social Affairs, Statistics Division, 'IAEG-SDGs: tier classification for global SDG indicators', 4 Apr. 2019.

[17] United Nations, Department of Economic and Social Affairs, Statistics Division, 'Workplans for Tier III indicators: 16.4.1', July/Aug. 2018.

[18] Bisogno, E., 'Advances in building a statistical framework to measure IFFs', Presentation at the regional technical meeting, 'Measuring illicit financial flows related to criminal activities for SDG indicator 16.4.1', Mexico City, 20–22 Nov. 2018.

[19] High Level Panel on Illicit Financial Flows from Africa, *Illicit Financial Flows: Report of the High Level Panel on Illicit Financial Flows from Africa* (African Union/UN Economic Commission for Africa: [2015]), p. 9.

[20] Kahler, M., 'Countering illicit financial flows: expanding agenda, fragmented governance', M. Kahler et al., *Global Governance to Combat Illicit Financial Flows: Measurement, Evaluation, Innovation* (Council on Foreign Relations: Washington, DC, Oct. 2018), p. 1.

illicit financial flows remains disputed.[21] This choice of a narrow definition of 'illicit' that focuses on illegal activity or a wider notion that includes the normative interpretation will affect estimates of illicit financial flows.

There is also disagreement over the definition of 'financial'. There are some proponents of the view that illicit financial flows should include not only money and capital, but also non-monetary forms of value such as illegal extraction of natural resources, commodity smuggling, wildlife poaching, migrant smuggling and human trafficking.[22] In addition, there are differences in the definition of the term 'flows'. Illicit financial flows are sometimes wrongly equated solely with capital flight and trade misinvoicing (i.e. the deliberate manipulation of trade prices by under- or over-reporting the value of imports or exports). But these are only two types of illicit financial flow and do not represent the full diversity of practices that constitute this complex, multidimensional phenomenon. Moreover, the focus on cross-border flows may also distract attention from illicit financial flows that occur within a domestic jurisdiction, such as with the use of criminal profits to feed corruption.[23] What links many of these other activities is that they involve funds that are illegally obtained, used or transferred by exploiting secrecy in financial systems that enable the beneficiary to remain anonymous and hidden from regulation.

There are many difficulties in collecting data on illicit financial flows, specifically in measuring the scale and direction of flows. Because they may involve finances that are the proceeds of crime or corruption, these flows are often hidden and require guesswork. In the absence of consensus on a single authoritative method, various methods have been used to collect data and arrive at global estimates of the value of illicit financial flows. Money laundering estimates make calculations on the basis of crime statistics regarding profits from crime, proportions of profits laundered and where profits are laundered. An approach based on the World Bank 'residual model' attempts to estimate capital flight on the basis of balance-of-payments statistics. This identifies mismatches between recorded capital inflows (key sources of funds including external debt and foreign direct investment) and recorded uses of funds (current account deficit and reserves). If more funds arrive in a jurisdiction than are used, this is considered to represent illicit financial flows. Another approach seeks to identify illicit financial flows that are the result of trade misinvoicing. A different method, the 'gravity model' of financial flows, focuses on cross-border flows that are explainable by the economic features of a country; it seeks to identify those flows that are attributable to that jurisdiction's financial secrecy and potential to hide assets. Alternative measures focus on international offshore wealth and aim to identify financial assets held offshore to estimate the proportion that represents evaded taxes.[24]

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Each of the above approaches has distinct limitations. Due to the lack of agreement on the best method for measuring illicit financial flows, the

[21] Forstater, M., 'Defining and measuring illicit financial flows', Kahler et al. (note 20), pp. 12–15.
[22] Hunter, M., *Measures that Miss the Mark: Capturing the Proceeds of Crime in Illicit Financial Flow Models* (Global Initiative Against Transnational Organized Crime: Geneva, June 2018), p. 10.
[23] Hunter (note 22), p. 10.
[24] Forstater (note 21), pp. 16–19.

most commonly used models tend to be those with the most available data, and therefore tend to be those focusing on trade misinvoicing and capital flight. The conflation of these selective, more easily measured phenomena with overall illicit financial flows risks underestimating the contribution of corruption and crime and thus misrepresenting the scale of illicit financial flows. Narrow definitions and measures that favour the dimension focused on finance and commerce risk failure to capture the types of flow that more typically affect less developed states. Moreover, the large number of actors involved across many governmental and non-governmental policy domains in attempts to prevent and detect illicit financial flows poses a significant impediment to developing a coherent understanding.[25]

Summarizing the state of the statistical measurement of illicit financial flows in 2016, UNODC noted the lack of any single agreed definition or global repository of illicit financial flow data.[26] There have been some efforts to estimate global illicit financial flows but these remain controversial.[27] Priority steps for establishing a global indicator for illicit financial flows would involve further refining of methodologies and agreeing on a common definition. In addition, UNODC noted that SDG 16.4.1 could attain 'a higher political relevance' if it were to be disaggregated into key components including organized crime, corruption, tax evasion and other criminal or administrative offences.[28]

Despite the recent emergence of illicit financial flows on the policy agenda and the lack of consensus on how to measure them, UNODC and UNCTAD have been working to develop a common framework to measure them for statistical purposes. Several technical meetings have been convened with statistical and subject matter experts, and expert consultations were organized in Vienna in December 2017 and in Geneva in June 2018 to discuss the development of the statistical methodologies for measuring illicit financial flows.[29]

As a result of those consultations, indicator 16.4.1 is being developed as a multidimensional indicator, requiring three distinct methodologies for the three main types of activity that result in illicit financial flows. The three disaggregated types of activity to be measured are linked to: illicit tax and financial practices; illicit markets (trafficking in drugs, people and counterfeit goods); and corruption and theft-related crimes.[30] Data on illicit financial flows will be collected on each component through existing data-collection channels, then aggregated into national and global figures.[31]

[25] Dohlman, E. and Neylan, T., 'Policy coherence in combating illicit financial flows', Draft, Policy Coherence for Sustainable Development (PCSD) Thematic Module, Organisation for Economic Co-operation and Development (OECD), [n.d.], pp. 23–25.

[26] United Nations, Department of Economic and Social Affairs, Statistics Division, 'Goal 16', SDG Indicators, Metadata Repository, 3 Mar. 2016.

[27] United Nations (note 26), p. 20.

[28] United Nations (note 26), p. 20.

[29] UN Office on Drugs and Crime (UNODC), 'UNODC–UNCTAD Expert Consultation on the SDG Indicator on Illicit Financial Flows (IFF)', Vienna, 12–14 Dec. 2017; and UN Conference on Trade and Development (UNCTAD), 'Expert meeting on statistical methodologies for measuring illicit financial flows', Geneva, 20–22 June 2018.

[30] United Nations, Economic and Social Council, Statistical Commission, Report of the United Nations Office on Drugs and Crime on crime and criminal justice statistics, E/CN.3/2019/19, 19 Dec. 2018, para. 13.

[31] United Nations (note 17).

UNCTAD is responsible for developing the methodology for illicit tax and financial practices, while UNODC is developing the methodologies for illicit markets and corruption. Starting in 2019, certain methodologies relating to illicit markets have been tested in Latin America. Methodologies for the crime-related dimensions of illicit financial flows (illicit markets, corruption and theft) are expected to be finalized in around 2021–22 after global and regional consultations with experts and stakeholders.[32]

To that end, a regional technical meeting held in Mexico City in November 2018 brought together regional participants from Colombia, Ecuador, Mexico, Panama and Peru to discuss how countries can measure the illicit financial flows resulting from hidden criminal activities, such as illegal drug production and trafficking and prostitution, and how they can integrate or reconcile criminal supply chains and the resulting off-book economies with their national accounts and balance of payments.[33] At the meeting, the participants discussed in detail a proposed statistical framework for measuring illicit financial flows at the national level. The framework, which estimates illicit financial flows of illicit markets by identifying relevant economic operations throughout the supply chain, delineates two key types of illicit financial flow: (*a*) those that are related to illicit activities that generate income ('income generation operations'), and (*b*) those that are related to the management of illicitly generated income that is invested or consumed in countries other than where the illicit income was generated ('income management operations'). Data for income generation operations derives from methods used to estimate the overall output of illicit markets and the value generated by production, trafficking and consumption of illicit goods or services. Potential data sources for income management operations may include suspicious transaction reports of financial information units, and other intelligence produced by financial and law enforcement institutions.[34]

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It is important that progress is made in further refining indicator 16.4.1 to arrive at a more comprehensive and nuanced definition and more accurate measures of this complex phenomenon. Following the 2019 High-level Political Forum on Sustainable Development meetings, a comprehensive review at the 51st meeting of the UN Statistical Commission in March 2020 will consider the 'replacement, deletion, refinement or adjustment' of the indicators, including consideration of a few additional indicators where necessary. Indicators must have an agreed methodology and available data, and be 'suitable for global monitoring'.[35] Tier III indicators that have stalled or not made sufficient progress methodologically may be replaced at that time. Given the growing recognition of the harmful impact of illicit financial flows

[32] United Nations, E/CN.3/2019/19 (note 30), para 13.

[33] UN Conference on Trade and Development (UNCTAD), 'Statisticians try to measure illicit financial flows', 7 Jan. 2019.

[34] UN Office on Drugs and Crime (UNODC), Center of Excellence in Statistical Information on Government, Crime, Victimization and Justice and UN Conference on Trade and Development (UNCTAD), 'Report on the Joint Regional Technical Meeting on Measuring Illicit Financial Flows Related to Criminal Activities for SDG Indicator 16.4.1', Mexico City, 20–22 Nov. 2018, p. 3.

[35] Eighth Meeting of the Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs), Plenary Session, Agenda Item 10. Workplan and timeline for 2020: Comprehensive Review, Stockholm, 6–8 Nov. 2018.

in both developing and more developed states, it is likely that attention on the development of the indicator will only increase. Arriving at definitions and approaches to accurately measure this complex multidimensional phenomenon that are broadly endorsed by stakeholder groups will require an inclusive and interdisciplinary approach.

Illicit arms flows and indicator 16.4.2

Measuring illicit arms flows is inherently difficult.

First, there is no universally agreed interpretation of the phrase 'illicit arms flows'. Many states and regional treaties and good practice documents describe illicit arms flows as consisting of any cross-border movement of arms that has not been approved by both the exporting and importing state. This is despite the fact that analyses of the sources of illicit arms indicate that diversion within a country is often no less important than cross-border movements in feeding the illicit market (see section III). Some states—in particular the United States—have blocked the inclusion of this definition in relevant international instruments, largely because they wish to retain the option of supplying arms to rebel groups in other countries.[36] As a result, international instruments such as the 2013 Arms Trade Treaty (ATT) and the 2001 UN Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects (POA) define illicit arms transfers as deliveries to an 'unauthorized' end user or recipient without making reference to who is doing the authorizing.[37] The main exception is the 2005 International Tracing Instrument (ITI), which provides a broader definition of 'illicit arms' that encompasses domestic diversion and emphasizes state responsibility at all stages of the supply chain. According to its definition, illicit arms include any arms that are 'considered illicit under the law of the State within whose territorial jurisdiction [they are] found'.[38]

Second, the instruments that seek to address illicit arms flows do not provide a unified and coherent definition of which arms should be included in any data-collection effort. At the UN level, separate processes have provided definitions of 'conventional arms', 'small arms' and 'firearms', all of which could potentially form the basis of national data-collection efforts.[39]

Third, collection and analysis of any data on illicit flows are inherently challenging. Since the illicit arms trade typically involves concealed activities, it is difficult to measure directly. This may be particularly true for states with limited resources that may be especially affected by the negative consequences of the illicit arms trade.

[36] Holtom, P., 'Prohibiting arms transfers to non-state actors and the Arms Trade Treaty', UN Institute for Disarmament Research (UNIDIR) Resources, [n.d.].

[37] Arms Trade Treaty (ATT), opened for signature 3 June 2013, entered into force 24 Dec. 2014; and United Nations, General Assembly, Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects, A/CONF.192/15, 20 July 2001.

[38] International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons (International Tracing Instrument, ITI), UN General Assembly Decision 60/519, 8 Dec. 2005, Article 6(a).

[39] Parker, S. and Wilson, M., *A Guide to the UN Small Arms Process: 2016 Update* (Small Arms Survey: Geneva, June 2016).

To measure the illicit arms component of target 16.4, the UN Statistics Commission adopted indicator 16.4.2, defined by the IAEG-SDGs as the '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'.[40]

The IAEG-SDGs named the UN Office for Disarmament Affairs (UNODA) and UNODC as custodian agencies of indicator 16.4.2. UNODA is responsible for organizing meetings to review the implementation of the POA and the ITI and for collecting states' national reports on the subject. The POA is a politically binding instrument adopted in 2001 that outlines steps that should be taken at the international, regional and national level to counter the illicit trade in small arms and light weapons (SALW) 'in all its aspects'. The ITI is a politically binding instrument adopted in 2005 aimed at establishing agreed standards in a range of areas in order to enable states to trace the origins of illicit SALW. UNODC is responsible for organizing conferences of the parties to the 2000 UN Convention against Transnational Organized Crime.[41] The convention is supplemented by the 2001 Protocol against the Illicit Manufacturing of and Trafficking in Firearms, their Parts and Components and Ammunition (Firearms Protocol).[42] The Firearms Protocol is a legally binding instrument that provides a framework for states to regulate licit firearms and their flows and to prevent their diversion into the illicit market. It has 117 states parties and an additional 52 states signatories. UNODA and UNODC have each launched data-collection efforts for SDG indicator 16.4.2 linked to their responsibilities for the POA, the ITI and the Firearms Protocol (see below).

The UN Statistics Division has also elaborated definitions for some of the terms used in indicator 16.4.2, which may serve to overcome some of the conceptual difficulties noted above. Hence, drawing in part on the ITI, tracing is defined as 'the systematic tracking of weapons and, where possible, their parts and components, and ammunition, at the 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'.[43] Perhaps confusingly, however, two definitions for arms are provided: the definition of SALW used in the POA and the definition of firearms used in the Firearms Protocol.[44]

Indicator 16.4.2 was initially classed as Tier II by the UN Statistics Division, indicating that it has a clear methodology but inadequate data. It was later downgraded to Tier III.[45] After further refinement and agreement on the methodology, in November 2018 indicator 16.4.2 was again classified as

[40] UN General Assembly Resolution 71/313 (note 4), annex, p. 21.

[41] United Nations Convention against Transnational Organized Crime, opened for signature 12 Dec. 2000, entered into force 29 Sep. 2003.

[42] Protocol against the Illicit Manufacturing of and Trafficking in Firearms, their Parts and Components and Ammunition, Supplementing the United Nations Convention against Transnational Organized Crime (UN Firearms Protocol), opened for signature 2 July 2001, entered into force 3 July 2005.

[43] United Nations, Department of Economic and Social Affairs, Statistics Division, 'Indicator 16.4.2', SDG Indicators, Metadata Repository, 26 July 2018, p. 2.

[44] United Nations (note 43), p. 1.

[45] United Nations (note 16).

Tier II.[46] To complement indicator 16.4.2, UNODA has proposed an additional indicator, 16.4.3, to measure the destruction of arms. It is currently phrased as the 'Number and percentage of seized, found or surrendered small arms and light weapons that have been marked and recorded, or destroyed in accordance with relevant international instruments, to prevent diversion into illicit flows'.[47] This indicator is due to be considered by the UN Statistical Commission in 2020.

A key limitation of indicator 16.4.2 is that the number of 'seized, found or surrendered arms' does not necessarily correlate to the total volume of illicit arms flows. In particular, not all 'seized, found or surrendered arms' are necessarily illicit. The contexts in which legal arms can be 'seized, found or surrendered arms' include cases where legally held arms have to be surrendered for administrative violations or are seized for presumed involvement in criminal activity. Moreover, the 'seized, found or surrendered arms' that are illicit will only be a sample of total illicit arms flows and it is difficult to reliably estimate the portion of the total that they represent. In addition, increases and decreases in this number can indicate either increases in the volume of illicit arms flows, improved enforcement efforts, or some combination of these and other factors. In its design, indicator 16.4.2 acknowledges and seeks to overcome this limitation by focusing on the proportion of those arms whose 'illicit origin or context has been traced or established by a competent authority in line with international instruments'. As the UN Statistical Division notes, indicator 16.4.2 is not an effort to directly measure the phenomena of illicit arms flows but to measure the 'efficiency with which the international community combats the phenomenon of illicit arms trafficking'.[48] Hence, what is being measured is the ability of national authorities to identify the origin of illicit arms.

Indicator 16.4.2 aims to measure the ability of national authorities to identify the origin of illicit arms

At the same time, the UN Statistical Division also acknowledges that the figures generated for indicator 16.4.2 cannot necessarily be interpreted in this way. As it notes, the figure generated will be affected by 'whether the country has a significant proportion of apprehended arms that are traceable, which is usually a consequence of the context of illicit arms trafficking in the country and is not related to its Law Enforcement efforts'.[49] Thus, the fact that one state is able to trace the origin of a higher proportion of 'seized, found or surrendered arms' than another may be due to the type of illicit arms flows the two states experience and not the relative effectiveness of their attempts to combat the phenomenon.

UNODA data-collection efforts

The sixth biennial meeting of states (BMS) on the POA, in June 2016, encouraged 'the development of indicators at the national level, based on the Programme of Action and the International Tracing Instrument, which could

[46] Leone, F., 'SDG indicator group sets methodologies for all but 44 indicators', International Institute for Sustainable Development/SDG Knowledge Hub, 18 Dec. 2019.

[47] UN Office for Disarmament Affairs (UNODA), Programme of Action on small arms and light weapons, 'Sustainable Development Goals', [n.d.].

[48] United Nations (note 43), p. 1.

[49] United Nations (note 43), p. 2.

be used to measure progress made in the implementation of target 16.4'.[50] It also called for the use 'of national reports under the Programme of Action so as to support data collection for relevant indicators relating to the Sustainable Development Goals'.[51]

Based on the mandate provided by the 2016 BMS, UNODA began collecting data for indicator 16.4.2 in 2017 by adjusting the set of questions on seizures of SALW in the template for the reports that states are asked to submit on their implementation of the POA and the ITI. States that complete the questions fully will be providing data on how many SALW have been seized, found or surrendered and in how many cases an attempt was made to trace their origin. As such, the data generated by states' responses to this questionnaire would not reveal the proportion of arms whose illicit origin has been traced, as required for indicator 16.4.2. Instead it would provide information on what steps have been taken to achieve that aim.

In 2018, 119 states reported on their implementation of the POA and the ITI. This is higher than the previous record year, 2008, when 111 states submitted reports. Of these 119 states, 73 reported that they had collected SALW in 2016 or 2017 and 47 provided data on the numbers involved. This was an increase on 2016, when 41 states reported that they had collected SALW and 21 provided data on the numbers involved. However, while the number of reports and the amount of data on seizures increased in 2018, very few states provided the data needed for indicator 16.4.2. Only 11 states provided data on the number of tracing requests initiated: six of these states (Australia, Burundi, Chile, the Democratic Republic of the Congo, Estonia and Kenya) stated that no tracing requests were initiated while Botswana reported 11 requests, Jamaica reported 1509, Peru reported 5, Serbia reported 25 291 and the United Kingdom reported 2277.[52]

The limited number of states that have submitted data on the number of tracing requests initiated and the significant variation in the figures reported could be interpreted in several different ways. In particular, it may simply reflect the fact that few states have initiated any tracing requests while a small group have initiated a significant quantity. However, it may also indicate that tracing requests are being initiated but that national data-collection efforts are not capturing them effectively or that the state in question does not view them as being relevant for POA and ITI reporting. Information available from other official sources would appear to indicate that states are seizing and tracing large volumes of SALW that are not being included in their submissions on the implementation of the POA. For example, Spain reported that it had seized no SALW in 2016 and 2017, despite the fact that the Spanish police separately reported in May 2017 the seizure of over 10 000 illicit assault rifles, anti-aircraft machine guns, shells

While the number of reports and the amount of data on seizures increased in 2018, very few states provided the data needed for indicator 16.4.2

[50] United Nations, General Assembly, Report of the sixth biennial meeting of states to consider the implementation of the Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects, A/CONF.192/BMS/2016/2, 15 June 2016, annex, para. 27.

[51] United Nations, A/CONF.192/BMS/2016/2 (note 50), annex, para. 53.

[52] UN Office for Disarmament Affairs (UNODA), Programme of Action on small arms and light weapons, 'National reports'.

and grenades.[53] Detailed examination of reporting in Latin America and the Caribbean indicates that states are conducting a significant amount of tracing work that is not appearing in reports on the POA and the ITI (see section III).

UNODC data-collection efforts

In 2015 UNODC produced a report on illicit firearms that drew on completed questionnaires from 48 states.[54] The national responses were summarized in a series of country fact sheets with quantitative data on firearms seized during 2012–14 and qualitative information on trafficking routes and methods.[55] In 2016 UNODC was mandated to continue to collect data on illicit arms flows with a view to updating the 2015 report, 'taking into account target 16.4 of the Sustainable Development Goals' while doing so.[56] Following a process of consultations with states and experts, UNODC issued a new questionnaire on illicit arms flows in March 2018.[57] According to UNODC, the questionnaire 'serves the dual purpose of collecting and analysing firearms data and information' and supports 'the global monitoring [of] the achievement of target 16.4 of the Sustainable Development Goals and its indicator 16.4.2 by UNODC'.[58]

The sections of the 2018 questionnaire that are aimed at collecting data for indicator 16.4.2 differ in several ways from the revised UNODA template for reporting on the implementation of the POA. Most significantly, the UNODC questionnaire requests a far greater level of detail. In particular, it contains separate detailed sections on seized, found and surrendered arms and on the number and outcome of tracing requests. The UNODC questionnaire also asks states to specify how they interpret many of the key terms used in the questionnaire. UNODC requested states to respond to the 2018 questionnaire by the end of July 2018. Based on the submissions, 'UNODC will develop and disseminate periodic findings and analysis as requested by the Conference [of parties to the Convention against Transnational Organized Crime]'.[59] At the time of writing, the results of the data-collection exercise had not been published.

UNODC's more detailed questionnaire has the potential to gather more comprehensive data than states' reports on implementation of the POA. Moreover, by asking states for their interpretation of key terms, the new questionnaire should make it easier to discover gaps in their submissions.

[53] UN Office for Disarmament Affairs (note 52); and Timson, L., 'Spanish police seize more than 10,000 weapons "destined for terrorism"', *Sydney Morning Herald*, 15 Mar. 2017.

[54] UN Office on Drugs and Crime (UNODC), *UNODC Study on Firearms 2015* (UNODC: Vienna, 2015).

[55] UN Office on Drugs and Crime (UNODC), *Country Fact Sheets: Summary Data from Country Responses on Firearms Seizures and Trafficking* (UNODC: Vienna, 2015).

[56] Conference of the Parties to the UN Convention against Transnational Organized Crime, 'Strengthening the implementation of the Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, supplementing the United Nations Convention against Transnational Organized Crime', Resolution 8/3, 21 Oct. 2016.

[57] UN Convention against Transnational Organized Crime, Working Group on Firearms, 'Questionnaire on illicit arms flows', Note by the Secretariat, 23 Mar. 2018, CTOC/COP/WG.6/2018/CRP.2.

[58] UN Convention against Transnational Organized Crime, CTOC/COP/WG.6/2018/CRP.2 (note 57), para. 4.

[59] UN Convention against Transnational Organized Crime, CTOC/COP/WG.6/2018/CRP.2 (note 57), para. 5.

Table 1. International instruments to reduce illicit arms flows in Latin America and the Caribbean

Geographical scope	Legal and international instruments
Americas (34 OAS member states)	1997 Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials (CIFTA) and the OAS's model laws[a]
Latin America and the Caribbean (22 member states of the Latin American Parliament)	2006 Model Law Framework on Firearms, Ammunition and Related Material[b]
Southern South America (4 member states of MERCOSUR and others)	1998 Declaration by the Presidents of the members of MERCOSUR, Bolivia and Chile on Combating the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives and Related Materials[c]
	2004 MERCOSUR Memorandum of Understanding for the Exchange of Information on the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives and Other Related Materials[d]
North-western South America (4 member states of the Andean Community)	2003 Andean Plan for the Prevention, Combat and Eradication of the Illicit Trade in Small Arms and Light Weapons in All Its Aspects[e]
Caribbean (15 member states of CARICOM)	2011 CARICOM Declaration on Small Arms and Light Weapons[f]
	2016 Model Legislation on the Arms Trade Treaty
	2016 Model Legislation on the United Nations Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects
Central America (6–8 member states of SICA)	1995 Framework Treaty on Democratic Security in Central America[g]
	2005 Code of Conduct of Central American States on the Transfer of Arms, Ammunition, Explosives and Other Related Materiel[h]

CARICOM = Caribbean Community; MERCOSUR = Mercado Común del Sur (Southern Common Market); OAS = Organization of American States; SICA = Sistema de la Integración Centroamericana (Central American Integration System).

[a] Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials (Convención Interamericana contra la Fabricación y el Tráfico Ilícitos de Armas de Fuego, Municiones, Explosivos y Otros Materiales Relacionados, CIFTA), opened for signature 14 Nov. 1997, entered into force 1 July 1998; and Organization of American States (OAS), 'Fact sheet: Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials (CIFTA)', Press Release no. S-010/18, 4 Apr. 2018.

[b] Parliamentary Forum on Small Arms and Light Weapons and Latin American Coalition for the Prevention of Armed Violence (CLAVE), *Model Law on Firearms, Ammunition and Related Materials*, 2nd edn (Center for Judicial Studies: Asunción, 2008).

[c] Declaración de los Presidentes de los Estados Partes del MERCOSUR, la República de Bolivia y la República de Chile, sobre el Combate a la Fabricación y al Tráfico Ilícito de Armas de Fuego, Municiones, Explosivos y Materiales Relacionados [Declaration by the Presidents of the States Parties of MERCOSUR, the Republic of Bolivia and the Republic of Chile on Combating the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives and Related Materials], 18 Apr. 1998.

[d] Memorándum de Entendimiento para el Intercambio de Información sobre la Fabricación y el Tráfico Ilícitos de Armas de Fuego, Municiones, Explosivos y Otros Materiales Relacionados entre los Estados Partes del MERCOSUR [Memorandum of Understanding for the Exchange of Information on the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives and Other Related Materials between MERCOSUR States Parties], MERCOSUR Common Market Council Decision no. 15/04, 7 July 2004.

[e] Andean Community, Andean Council of Ministers of Foreign Affairs, Plan Andino para la Prevención, Combate y Erradicación del Tráfico Ilícito de Armas Pequeñas y Ligeras en todos sus Aspectos [Andean Plan for the Prevention, Combat and Eradication of the Illicit Trade in Small Arms and Light Weapons in All Its Aspects], Decision no. 552, 25 June 2003.

[f] Conference of Heads of Government of the Caribbean Community, CARICOM Declaration on Small Arms and Light Weapons, 30 June–4 July 2011.

[g] Tratado Marco de Seguridad Democrática en Centroamérica [Framework Treaty on Democratic Security in Central America], signed 15 Mar. 1995, entered into force 26 Dec. 1997.

[h] Código de Conducta de los Estados Centroamericanos en materia de Transferencia de Armas, Municiones, Explosivos y otros Materiales Relacionados [Code of Conduct of Central American States on the Transfer of Arms, Ammunition, Explosives and Other Related Materiel], 2 Dec. 2005.

However, asking for greater detail could lead to fewer states responding in full. As shown by the rate of reporting to UNODA on the POA and the ITI, many states appear to have difficulty in collecting and reporting data on seizures. Because a range of national authorities are likely to collect data, any records that are kept are probably widely dispersed and maintained using different standards. As noted above, both UNODA and UNODC, as co-custodians of indicator 16.4.2, have a mandate—and are committed—to assist states in their efforts to collect data. This assistance will hopefully help to close the gaps in reporting.

III. Regional data-collection efforts for target 16.4: the case of Latin America and the Caribbean

This section takes a close look at the steps taken in Latin America and the Caribbean to collect data for indicator 16.4.2 and broader efforts to measure illicit arms flows. It examines the challenges posed by illicit arms flows in the region and the instruments that have been developed to achieve a common understanding on how to tackle this phenomenon. It then maps good practices at the regional, subregional and national levels in the collection of data on illicit arms flows. The examples given are intended to be illustrative, rather than comprehensive. NGOs have also been active in Latin America and the Caribbean in collecting data on illicit arms flows: the section concludes by giving examples of such work in Honduras and Brazil.

Regional challenges and regional instruments

In 2013 Latin America and the Caribbean accounted for around 8 per cent of the world's population but 32 per cent of all recorded homicides.[60] The regional rate of homicide, at 24 per 100 000 people, is four times the global average.[61] The proportion of homicides that are firearms-related and the number of illicit firearms per capita are well above the international average.[62] The region is estimated to have at least 37 million unregistered firearms, more than double the number of registered civilian firearms.[63]

The region has a range of instruments that establish a common understanding of illicit arms flows, and which can therefore act as a basis for an agreed approach to data-collection efforts in this area (see table 1). The most significant of these is the 1997 Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials (CIFTA).[64] This legally binding instrument has

[60] UN Office on Drugs and Crime (UNODC), *Global Study on Homicide 2013: Trends, Context, Data* (UNODC: Vienna, Mar. 2014), pp. 125–27.

[61] *The Economist*, 'The costs of Latin American crime', 25 Feb. 2017.

[62] Muggah, R. and Aguirre Tobón, K., *Citizen Security in Latin America: Facts and Figures*, Strategic Paper no. 33 (Igarapé Institute: Rio de Janeiro, Apr. 2018), p. 8.

[63] Karp, A., *Estimating Global Civilian-held Firearms Numbers* (Small Arms Survey: Geneva, June 2018), annexe.

[64] Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials (Convención Interamericana contra la Fabricación y el Tráfico Ilícitos de Armas de Fuego, Municiones, Explosivos y Otros Materiales Relacionados, CIFTA), opened for signature 14 Nov. 1997, entered into force 1 July 1998.

Table 2. Reported small arms and light weapons collected and reported tracing requests issued by states in Latin America and the Caribbean, 2016–17

Figures are taken from the national reports on implementation of the UN Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects. While 19 states in Latin America and the Caribbean reported, not all reported on SALW seizures or tracing requests.

	2016			2017		
Country	No. of SALW collected	No. of trace requests issued	Trace requests as share of SALW collected (%)	No. of SALW collected	No. of trace requests issued	Trace requests as share of SALW collected (%)
Antigua and Barbuda	2	..	..	11	..	..
Argentina	..	..	..	..	..	..
Belize	..	..	..	..	..	..
Brazil	..	..	..	..	..	..
Chile	14 000	–	–	8 597	–	–
Colombia	..	..	..	..	..	..
Cuba	..	..	..	..	..	..
Dominican Republic	2 101	..	..	788	..	..
Ecuador	7 450	..	..	12 919	..	..
El Salvador	327	..	..	212	..	..
Guatemala	..	..	..	..	..	..
Jamaica	649	649	*100*	860	860	*100*
Mexico	..	..	..	..	..	..
Panama	..	..	..	..	..	..
Paraguay	..	..	..	..	..	..
Peru	769	2	–	8 470	3	–
Saint Vincent and the Grenadines	..	..	..	..	..	..
Uruguay	..	..	..	200	..	..
Venezuela	..	..	..	..	..	..

. . = no figure reported; – = nil or a negligible value; SALW = small arms and light weapons.

Source: UN Office for Disarmament Affairs (UNODA), Programme of Action on small arms and light weapons, 'National reports', [n.d.].

been ratified by 31 of the 34 member states of the Organization of American States (OAS) and signed by the other three.

The OAS supports the implementation of CIFTA with, among other things, model laws (on topics such as marking and tracing of firearms, confiscation of firearms, and strengthening controls at export points) on which domestic legislation on controls can be based.[65] The direct relevance of CIFTA to the SDGs was reaffirmed by the 2018 Declaration of Mexico, in which the states parties highlighted their commitment 'To implement the CIFTA . . . and to significantly reduce illicit arms flows in line with target 16.4 of the 2030 Agenda for Sustainable Development'.[66]

Latin American and Caribbean states have also worked towards sub-regional agreements to combat illicit arms flows with unified criteria (see table 1). Many of these also contain norms and prescriptions that reiterate the agreed principles of CIFTA. These regional instruments, which focus on SALW, define an 'unauthorized' or 'illicit' transfer to be one that has not been

[65] Organization of American States (OAS), 'Fact sheet: Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials (CIFTA)', Press Release no. S-010/18, 4 Apr. 2018.

[66] Fourth Conference of CIFTA States Parties, Declaration on the occasion of the 20th anniversary of the CIFTA (Declaration of Mexico), Mexico City, 4 Apr. 2018.

approved by both the exporting and the importing state. Such unambiguous state responsibility—with a state having to authorize any and all cross-border movement of firearms involving its territory—contrasts with the POA and the ATT (see section II).

The states of the region have thus adopted a clear conceptual definition and regulatory scope to address cross-border illicit arms flows. However, this definition of illicit arms flows does not necessarily reflect the reality of illicit markets in Latin America and the Caribbean. As noted below, available data on the origin of illicit small arms suggests that while illicit cross-border transfers are part of the illicit market, they do not represent the entire problem. Indeed, in many states the diversion of firearms within national borders is of equal or greater concern.[67] While subregional initiatives have attempted to standardize and strengthen laws along shared borders to combat illicit trafficking, domestic diversion and leakages from licit holdings have generally been left to national legislation to define, prevent and address.[68] Hence, to fully tackle illicit arms flows, the region should apply the same level of unified criteria to domestic diversion and leakages from licit holdings as applied to cross-border illicit arms flows.

Regional efforts to collect data on illicit arms flows

Data submitted to UNODA

During 2018, 19 states from Latin America and the Caribbean submitted a report on their implementation of the POA (see table 2). Eight of these reported that they had collected SALW in 2016 or 2017 and these all provided at least some data on the numbers involved. However, only three states provided data on the number of tracing requests initiated, the figure needed for indicator 16.4.2: Chile stated that it had initiated no tracing requests while Jamaica reported 1509 requests and Peru reported 5. This means that Jamaica issued tracing requests for all of the SALW that it collected in 2016 and 2017 while Peru issued requests for less than 1 per cent of its collected SALW.

Data submitted to UNODC

UNODC received data from 14 states in Latin America and the Caribbean for its 2015 report on firearms trafficking (see table 3).[69] The UNODC data indicates that two main sources of weapons that feed illicit markets in the region: (*a*) leakages from civilian and government holdings, and (*b*) steady cross-border 'ant trafficking' or 'ant trade' through porous controls, referring to individual transfers that are small in scale but recur often, and so have a large cumulative effect. However, the magnitude of each varies from state to state. For example, 86.7 per cent of all firearms seized in Brazil in 2013 had been manufactured in the country. Brazilian authorities reported that, 'Since Brazil is a large manufacturing country there is a large offer of firearms in

[67] Fleitas, D., 'Fire fighters: Latin America battles to stem illegal arms flows', *IHS Jane's Intelligence Review*, Jan. 2016, p. 44.

[68] One such subregional initiative is MERCOSUR's Working Group on Firearms and Ammunition (Grupo de Trabajo sobre Armas de Fuego y Municiones, GTAFM).

[69] UN Office on Drugs and Crime (note 55).

Table 3. Seizures of pistols and revolvers and seized firearms registered in country in Latin America and the Caribbean

Country	Pistol and revolvers as share of total firearms seized, latest year available (%)	Share of firearms seized registered in country, latest year available (%)
Argentina	75.22	80.00
Brazil	84.01	82.00
Chile	54.69	52.30
Colombia	68.54	. .
Costa Rica	78.97	. .
Dominican Republic	89.34	. .
Ecuador	74.78	80.00[a]
El Salvador	78.37	. .
Guatemala	80.25	86.43
Mexico	18.95	. .
Panama	82.32	. .
Peru	80.10	. .
Trinidad and Tobago	70.36	–
Uruguay	66.97	. .
Average	**71.63**	. .

. . = no figure reported; – = nil or a negligible value.

Note: The latest year available varies between 2010 and 2014.

[a] This figure is for firearms manufactured in the country.

Source: UN Office on Drugs and Crime (UNODC), *Country Fact Sheets: Summary Data from Country Responses on Firearms Seizures and Trafficking* (UNODC: Vienna, 2015).

the illicit market'.[70] The Chilean national authorities noted that 'Most seized firearms of criminals were originally stolen from homes of licit owners'.[71] In Ecuador, 80 per cent of all firearms seized in 2013 were manufactured in the country, and authorities reported that 'Illicit firearms and ammunitions are obtained by infringement of military and police stock'.[72] In contrast, the Peruvian authorities noted the prevalence of 'ant' smuggling, describing it as 'people who cross the frontier on foot in areas with little control, carrying dismantled firearms'.[73] Furthermore, Mexico reported that only 30 per cent of firearms seized in 2013 had a domestic origin, while 70 per cent came from its neighbours (60 per cent from the USA and 10 per cent from Guatemala.[74]

The UNODC data indicates that pistols and revolvers accounted for about 7 in every 10 firearms seized in the 14 Latin American and Caribbean states that reported the numbers of seized firearms (see table 3). Moreover, in 13 of these states, pistols and revolvers accounted for more than half of all seized firearms. In Mexico, the exception, rifles represented 65.4 per cent of firearms seized, corresponding to the country's particular security challenges.[75] In addition, in five of the six countries with available data on the origin of seized firearms, a majority of seized firearms originated in the licit trade or in registered holdings within the country. The different dynamic for the sixth state—Trinidad and Tobago—might be related to it being an island state.

The 2015 UNODC data does not include the proportion of firearms whose illicit context has been established through tracing, the focus of

[70] UN Office on Drugs and Crime (note 55), p. 7.
[71] UN Office on Drugs and Crime (note 55), p. 13.
[72] UN Office on Drugs and Crime (note 55), p. 28.
[73] UN Office on Drugs and Crime (note 55), p. 78.
[74] UN Office on Drugs and Crime (note 55), p. 66.
[75] UN Office on Drugs and Crime (note 55), p. 65.

indicator 16.4.2. As noted above, in 2018 UNODC developed a new questionnaire to try to fill this gap by collecting more detailed information on illicit weapons traced back to their source.[76] While developing the updated questionnaire, UNODC held a meeting in Panama with representatives of Latin American countries to enhance regional efforts to monitor illicit arms flows.[77] This meeting sought to strengthen the collection and analyses of statistical data and to discuss an updated data-collection methodology.

ATF data on firearms tracing requests

A third source of data on illicit arms flows that is specific to Latin America and the Caribbean is the data published by the US Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) on the Firearms Tracing System run by the US National Tracing Center (NTC). The NTC is the 'only crime gun tracing facility' in the USA: its role is to assist in solving firearms-related crimes, detect firearms trafficking trends, and identify crime guns trends at the domestic and international levels.[78] Many states in the region regularly submit information about seized firearms to the ATF for tracing, in order to track transfers of specific firearms to the first retailer. In turn, the ATF publishes annual data on both the number of firearms submitted for tracing by each state in Latin America and the Caribbean in the previous year and the proportion that are shown to have originated from US manufacturers or retailers. However, the proportion of all seized arms represented by those submitted for tracing to the ATF is unknown. Despite this limitation, the data published by the ATF highlights noteworthy dynamics regarding illicit arms flows.

For example, the ATF data suggests that the nearer a country is to the USA, the higher the proportion of seized firearms that can be traced back to US manufacturers or retailers. This is apparent in the ATF data for Caribbean states: of the firearms submitted for tracing in 2017 by the Bahamas (which lies about 80 kilometres from the US coast), 83.9 per cent were identified as having been purchased in the USA, while the figure is only 27.7 per cent for Trinidad and Tobago (which is about 2600 km from the USA).[79] The same correlation seems to hold for Central America.[80] For example, 33.3 per cent of the firearms submitted for tracing by Belize, in the north of the subregion, were identified as having been purchased in the USA, whereas this was true for only 18.2 per cent of submissions by Panama, at the south of the subregion.

However, it is also worth noting that a comparison of ATF data with information provided by states in their POA reports reveals some significant reporting inconsistencies. For example, according to its POA report, Mexico

[76] UN Convention against Transnational Organized Crime, CTOC/COP/WG.6/2018/CRP.2 (note 57).

[77] UN Office on Drug and Crime (UNODC), 'Monitoring arms flows and the Sustainable Development Goals: Latin-American meeting on data collection', 29 Nov. 2017.

[78] US Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Office of Strategic Intelligence and Information, 'Caribbean, data source: Firearms Tracing System January 1, 2017–December 31, 2017', 9 Mar. 2018, p. 3.

[79] US Bureau of Alcohol, Tobacco, Firearms and Explosives (note 78). This ATF report has data on tracing requests from 5 states or territories: the Bahamas, Curaçao, Dominican Republic, Jamaica, and Trinidad and Tobago.

[80] US Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Office of Strategic Intelligence and Information, 'Central America, data source: Firearms Tracing System January 1, 2017–December 31, 2017', 9 Mar. 2018.

Table 4. Inconsistencies in data reported on tracing of firearms by selected states in Central America and the Caribbean, 2017

Country	No. of SALW seizures in POA report	No. of SALW tracing requests in POA report	No. of SALW tracing requests made to the ATF
Belize	. .	. .	98
Dominican Republic	788	. .	918
El Salvador	212	. .	1 850
Guatemala	. .	. .	1 915
Mexico	. .	. .	15 316
Panama	. .	. .	653

. . = no figure reported; ATF = US Bureau of Alcohol, Tobacco, Firearms and Explosives; POA = United Nations Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects; SALW = small arms and light weapons.

Sources: US Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Office of Strategic Intelligence and Information, 'Caribbean, data source: Firearms Tracing System January 1, 2017–December 31, 2017', 9 Mar. 2018; US Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Office of Strategic Intelligence and Information, 'Central America, data source: Firearms Tracing System January 1, 2017–December 31, 2017', 9 Mar. 2018; US Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Office of Strategic Intelligence and Information, 'Mexico, data source: Firearms Tracing System January 1, 2012–December 31, 2017', 9 Mar. 2018; and UN Office for Disarmament Affairs (UNODA), Programme of Action on small arms and light weapons, 'National reports', [n.d.].

seized, confiscated or collected (and destroyed) at least 87 328 SALW in 2016 and 2017, but did not report that any tracing requests had been issued for these weapons.[81] However, according to ATF data, Mexico made 13 710 tracing requests in 2016 and 15 316 requests in 2017.[82] It is unlikely that the gap in reporting is due to data not being available, since the same agency—the Attorney General's Office—both compiles the POA submission and issues trace requests.[83] Hence, the decision to leave that field unanswered in the POA report might be an explicit national preference. One possible reason for the inconsistency between the UNODA report and the tracing requests sent by Mexico to the ATF might be that national officials understand POA reporting responsibilities as relating only to arms seized during armed conflict, whereas they see the ATF system as a practical tool to combat all threats to public security.

The inconsistency between data reported to the POA and figures released by the ATF is also prevalent elsewhere in Central America and the Caribbean (see table 4).

The UNODA, UNODC and ATF data sets present some reporting inconsistencies and draw different pictures of the specific scale and scope of illicit arms flows in Latin America and the Caribbean. This situation highlights the particular challenges of generating consistent and reliable data on this subject, even in a region that has invested considerable time and effort in agreeing a definition of what constitutes illicit arms flows and that has a strong track record of commitment to data collection and reporting.

[81] UN Office for Disarmament Affairs (UNODA), 'UN Programme of Action Reporting Tool: Mexico', 2018, p. 16. Mexico did not report the number of SALW seizures in the section of the POA report designed for this purpose. The total of 87 328 is a summation drawn from data in other sections of its POA report.

[82] US Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Office of Strategic Intelligence and Information, 'Mexico, data source: Firearms Tracing System January 1, 2012–December 31, 2017', 9 Mar. 2018, p. 7.

[83] UN Office for Disarmament Affairs (note 81), p. 9.

Aside from this, some regional dynamics stand out that should be taken into consideration when considering if and how to develop better indicators for measuring the achievement of target 16.4. First, the main source feeding illicit markets in Latin America and the Caribbean appears to be leakages from legal domestic holdings, followed by cross-border ant smuggling through porous border controls.[84] Second, pistols and revolvers account for the overwhelming majority of seized firearms, probably because they represent the majority of firearms in illicit circulation. Third, the number of international tracing requests for seized firearms is significantly lower than the number of seized firearms from foreign sources (even considering that the number of such seizures is already low). Fourth, reporting under international commitments is incomplete and inconsistent. Partial and inconsistent reporting could hinder efforts to measure the attainment of target 16.4.

National efforts to collect data on illicit arms flows

Argentina

Argentina has an ambitious national plan to achieve the 2030 Agenda. In a 2018 report, Argentina with the support of the UN Development Programme (UNDP) presented operational programmes designed to reduce illicit arms flows, including quantitative components to measure progress (see table 5). These initiatives cover large parts of the illicit market: when combined, the programmes address the high-risk stages of the firearms lifecycle such as circulation in grey legal areas, domestic manufacture, imports and stockpiling by national security forces. These programmes are designed with quantitative indicators to evaluate progress in reducing the supply of firearms that could reach unauthorized hands. They are also context-specific. With these programmes, Argentina is one of the best examples of good practice in both attaining and measuring (with its own metrics) target 16.4.

Belize and Guatemala

The neighbouring states of Belize and Guatemala offer another important case study on documenting illicit cross-border arms flows. Belize has begun sharing with Guatemala microscopic quality resin replicas of the projectiles and spent cartridge casings—containing the ballistic fingerprints of a firearm—involved in criminal proceedings when the related firearm was marked 'GUA', the standard marking for firearms registered in Guatemala.[85] Guatemalan law enforcement authorities can then compare such a replica against ballistic fingerprints stored in their criminal records database. If the Guatemalan authorities can match the projectile or spent cartridge casing replica with a specific firearm, it may lead to progress in solving an open case.

Beyond the importance of resolving particular criminal proceedings, the sharing of ballistic replicas with neighbouring countries leads to information exchanges on cross-border illicit arms flows. This information-sharing initiative should be considered a good practice because it helps to reduce

[84] UN Office on Drugs and Crime (note 55).

[85] UN Regional Centre for Peace, Disarmament and Development in Latin America and the Caribbean (UNLIREC), *Ammunition Control Practices in Latin America and the Caribbean* (UNLIREC: Lima, 2018), pp. 60–61.

Table 5. Argentinian national programmes to reduce illicit arms flows

Programme	Objective	Quantitative components
National Programme for the Voluntary Surrender of Firearms	Reduction in the firearms and ammunition in circulation through collection, disablement and destruction	Number of firearms and ammunition received by each province in relation to the number of its inhabitants
Plan for the Rapid Destruction of all Weapons Seized, Confiscated and Given to the State	Reduction in the circulation of firearms with a high risk of diversion by re-entry into illicit markets	Ratio between firearms received for destruction and firearms effectively destroyed
Plan to Strengthen Control of National Firearms Manufacturing	Audit of the consistency of the information provided by firearms manufacturers with their actual physical holdings	Inventory of the relation between manufactured firearms reported and actually produced
Plan to Strengthen Control of Firearms Imports	Physical verification of all imported firearms by checking 100% of arrivals at customs checkpoints, rather than only checking samples	Share of imported firearms that match the documentation of origin and actually arrive
Implementation of the Stockpile Management Module of the Integrated Management System for Controlled Materials (SIGIMAC) by national and provincial judiciaries and their public prosecutor's offices	Standardization of the control of firearms and ammunition held in courts and prosecutor's offices via centralized software to prevent diversion and re-entry into illicit markets	Share of the national judicial organization supplied with the Stockpile Management Module

Source: Argentinian Office of the President, National Council for the Coordination of Social Policies, *Objetivos de Desarrollo Sostenible: Informe País 2018* [Sustainable Development Goals: country report 2018] (Consejo Nacional de Coordinación de Políticas Sociales: Buenos Aires, 2018), p. 356 (author translation).

impunity in firearms-related cases and, as a by-product, can generate better data on cross-border arms flows.

The information exchanges between Belize and Guatemala represent a small fraction of the potential in Latin America and the Caribbean to collect data on illicit arms flows using automated ballistics identification systems (ABIS). As of 2012, 22 states in Latin America and the Caribbean had at least one Integrated Ballistics Identification System (IBIS)—a commercial ABIS. If interconnected, these would allow for more firearms-related crimes to be matched with the responsible firearms, even if the relevant files (databases of ballistic fingerprints) are located in a different jurisdiction.[86] As a by-product of solving crimes, the interconnected systems could generate region-wide data on arms flows.

Efforts by non-governmental organizations to collect data on illicit arms flows

Honduras

In 2017 InSight Crime—a Colombian–US NGO—in partnership with Asociación para una Sociedad más Justa (ASJ, Association for a Fairer Society)—a Honduran NGO—issued a report on firearms trafficking in Honduras. This report presents estimates ranging from 650 000 to more than 1 million firearms circulating illicitly inside the country.[87] According to the report,

[86] UN Regional Centre for Peace, Disarmament and Development in Latin America and the Caribbean (note 85), p. 59.

[87] InSight Crime and Asociación para una Sociedad más Justa (ASJ), *El tráfico de armas de fuego en Honduras* [Firearms trafficking in Honduras] (InSight Crime: Washington, DC, 2017), p. 8.

pistols and revolvers represent 81 per cent of all firearms recovered at crime scenes and registered in the police IBIS database.[88] The report also notes that most illicit firearms trafficked from abroad come from the USA or from Honduras's neighbours (El Salvador, Guatemala and Nicaragua).[89] Finally, it highlights the pernicious role that weak security of national stockpiles plays in feeding illicit markets, by leaking both firearms and ammunition.[90]

The methodology employed by InSight Crime and ASJ is particularly relevant since it combines a variety of sources, including data from firearms seized in Honduras, interviews with government officials in charge of arms procurement and licensing, interviews with traffickers, consultations with experts, and a review of previous reports on firearms trafficking.

Brazil

In Brazil, NGOs seem particularly active in collecting data on illicit arms flows. For example, Instituto Sou da Paz has carried out a variety of investigations to build a profile of firearms and ammunition seized during criminal investigations.

In 2013 Sou da Paz analysed data from all firearms seized in the city of São Paulo over a two-year period. It found that 78 per cent of all seized firearms had been manufactured in Brazil.[91] In 2016 Sou da Paz analysed data on all firearms seized in the South East Region (the states of Espírito Santo, Minas Gerais, Rio de Janeiro and São Paulo) in 2014, with similar findings: 61 per cent of all seized firearms were manufactured in Brazil and about 71 per cent were pistols and revolvers.[92] A 2018 report on firearms seized in the North East Region found that Brazilian-made firearms represented at least 76 per cent of the sample.[93] Sou da Paz has also collected information on ammunition used in criminal activity in Rio de Janeiro in 2014–17. It found that 9-millimetre calibre ammunition represented 27 per cent of seizures, the largest share of any calibre in the sample by more than 13 percentage points.[94] Moreover, 42 per cent of ammunition seized in 2014 was manufactured domestically by Companhia Brasileira de Cartuchos (CBC).[95]

The aim of this research, like all NGO publications cited here, is to inform the policies that prevent firearms from reaching unauthorized hands. Such original research, paying attention to subregional flows, represents a

[88] InSight Crime and Asociación para una Sociedad más Justa (note 87), p. 15.

[89] InSight Crime and Asociación para una Sociedad más Justa (note 87), pp. 18–30.

[90] InSight Crime and Asociación para una Sociedad más Justa (note 87), pp. 31–34.

[91] Langeani, B., Fragano Baird, M. and Risso, M., *De onde vêm as armas do crime: Análise do universo de armas apreendidas em 2011 e 2012 em São Paulo* [Where criminal weapons come from: analysis of the universe of weapons seized in 2011 and 2012 in São Paulo] (Instituto Sou da Paz: São Paulo, Dec. 2013), p. 11.

[92] Langeani, B. and Pollachi, N., *De onde vêm as armas do crime apreendidas no Sudeste? Análise do universo de armas apreendidas em 2014* [Where do criminal weapons seized in the South East come from? Analysis of the universe of weapons seized in 2014] (Instituto Sou da Paz: São Paulo, Oct. 2016), pp. 6, 8.

[93] Langeani, B. and Pollachi, N., *De onde vêm as armas do crime apreendidas no Nordeste?* [Where do criminal weapons seized in the North East come from?] (Instituto Sou da Paz: São Paulo, June 2018), p. 58.

[94] Langeani, B. and Pollachi, N., *Arsenal fluminense: Análise das apreensões de munições no Estado do Rio de Janeiro (2014–2017)* [Arsenal fluminense: analysis of ammunition seizures in the State of Rio de Janeiro (2014–2017)] (Instituto Sou da Paz: São Paulo, 2018), p. 15.

[95] Langeani and Pollachi (note 94), p. 24.

valuable contribution to the debate on data collection for target 16.4 and on methodologies for new studies to build on.

IV. Conclusions and recommendations

Current efforts to develop statistical measures for the two agreed indicators of SDG 16.4 are progressing in different ways, but each could inform the other.

Since indicator 16.4.1 is a Tier III indicator, concentrated efforts are being made to agree definitions and methodological approaches for measuring illicit financial flows. The results of tests of methods in Latin America and other selected regions are not yet publicly available. However, the trajectory of development of indicator 16.4.1 indicates that, once achieved, it will be a multidimensional indicator that aims to reflect the complex range of activities that serve as sources of illicit financial flows.

In contrast, SDG indicator 16.4.2 is based on an approach that involves exploiting information provided on the implementation of existing international arms control measures and harnessing the synergies among these measures to generate better data. While agreement on its definitions and methodology is more advanced than for indicator 16.4.1, the data generated so far on illicit arms flows has been disappointing. Only a limited number of states have responded to UNODA's data-collection efforts and the data sets collected so far show clear inconsistencies. These inconsistencies could hinder efforts to measure the attainment of target 16.4.

In addition, the UNODA reporting template is incomplete as a tool to measure indicator 16.4.2 since it does not include a field to report the proportion of traced SALW with an illicit origin. Thus, if the POA reports submitted to UNODA are meant, in part, to track the attainment of target 16.4, the survey here highlights opportunities for improvement in two fields: a methodical evaluation of the template and a renewed commitment by states to report completely and consistently. While UNODC's data-collection efforts may fill many of the data gaps, there are questions about how much information these efforts will generate given the complexity and ambition of the new questionnaire that states have been asked to complete.

The detailed analysis of data-collection and information-sharing efforts at the regional, subregional and national levels in Latin America and the Caribbean highlights a number of issues that are of broader relevance to indicator 16.4.2. Even in a region where there is a focused, more developed and agreed understanding of the concepts surrounding illicit arms flows, states may struggle to generate accurate and comparable data for measuring indicator 16.4.2. Although states in Latin America and the Caribbean have agreed a range of instruments aimed at establishing a common understanding of the concept of illicit arms flows, their reports on implementation of the POA and the ITI and the reports produced by the ATF indicate both national and regional inconsistencies in terms of what it means to trace the illicit origin of arms.

The case of Latin America and the Caribbean highlights the wide range of knowledge and good practice that can be drawn on

At the same time, the case of Latin America and the Caribbean also highlights the wide range of knowledge and good practice that can be drawn on: both to measure indicator 16.4.2 directly and to develop additional

national and regional indicators to complement indicator 16.4.2. A significant amount of information has been generated by regional organizations and, in particular, NGOs to map illicit arms flows in Latin America and the Caribbean. In this regard, the region is far from unique. For many other states and regions, there is a wide range of sources of information that can be used to map illicit arms flows. These include reports produced by NGOs such as Conflict Armaments Research and the reports by the UN panels of experts on arms embargoes.[96] These sources of information will be an essential tool for measuring the achievement of target 16.4; but this will require that the work involved receives funding and that the resulting outputs are used effectively.

In addition, the work done on national indicators and the efforts made to increase the amount of information that states share on illicit arms also highlight some potential ways in which other regional and national indicators for measuring the achievement of target 16.4 could be developed. As the work done on developing indicator 16.4.2 and the data generated show, there is unlikely to be an effective way for states to generate meaningful and consistent data that accurately measures illicit arms flows. The most useful approach is to develop proxy measures that can map progress made on tackling this phenomenon. With this in mind, a range of potential regional-level indicators for measuring the illicit arms flow component of target 16.4 are presented in appendix 1.

The analysis of the work done to date to collect data for indicator 16.4.2 and the wider efforts—particularly in Latin America and the Caribbean—to measure illicit arms flows also contain some useful lessons for how states could make progress with collecting data for indicator 16.4.1 and developing meaningful data on illicit financial flows more generally. In particular, country-by-country reporting on illicit financial flows should be improved. Capacity-building efforts to enhance the abilities of developing countries to monitor and trace small arms flows based on good practice should be similarly applied to the area of illicit financial flows both for countries from which illicit financial flows originate and for countries that serve as conduits and where flows coming from elsewhere are stored or invested. In addition, alternative sources of data, from civil society and NGOs, will continue to be needed to supplement official global measures of illicit financial flows and illicit arms flows. Taking a broader and more comparative approach would enable the researchers and officials seeking to measure the achievement of target 16.4 to identify the connections between the various phenomena they are measuring and to build more effective tools to develop indicators and collect data.

[96] Conflict Armaments Research, 'Publications', [n.d.]; and United Nations, Security Council, 'Sanctions', [n.d.].

Appendix 1. Potential regional-level indicators for measuring the illicit arms flow component of target 16.4

The price of firearms in the illicit market[97]

Illicit firearms are transferred in the black market in response to market forces in the same way as for most commercial goods. As such, prices depend on both supply and demand forces. Hence, assuming that demand forces remain constant, increasing prices for firearms in the black market would, presumably, represent a reduction in the supply of illicit firearms in the black market.

However, there are at least three challenges to measuring prices in the black market. First, for the price in any particular year to be meaningful, it must be in the context of a price time-series analysis since the interest lies in price variations over time. Second, not all firearms are worth the same, so tracking the price of illicit firearms must be done in a disaggregated fashion—that is, the prices of the different types of firearm, calibre, model, make and year of manufacture must be disaggregated so that like can be compared with like. Such detailed tracking could represent a large burden on law enforcement agencies. Third, a careful analysis of demand factors would also be useful to understand price variations.

Despite these challenges, if achieved, this supply-side approach to measuring attainment of target 16.4 would be an informative indicator of the availability of illicit firearms in the illicit market.

The number of firearms that leak from government-owned holdings

Diversion from nationally owned holdings is a significant part of the supply that feeds illicit arms flows. While measuring this diversion is an incomplete measure of target 16.4, it has enormous implications for public security. It also has the advantage that it can be quantified by independent audits of armaments in government-owned holdings. This indicator would promote the adoption of sound record-keeping practices for arms and ammunition and the implementation of practical measures to strengthen physical security and stockpile management, encourage transparent public audits, and maintain accountability.

Perhaps more importantly, there would be the significant benefit of all but eradicating diversion from national holdings. The potential reduction in illicit arms flows is significant since the evidence suggests that leakage from domestic stockpiles is an important source of firearms and ammunition in illicit markets. Since this problem is particularly acute in Latin America and the Caribbean, it could be adopted as a region-specific indicator.

[97] This idea is discussed in Nowak, M., 'Measuring illicit arms flows: Honduras', Small Arms Survey Research Notes no. 62, Nov. 2016.

The interconnection of automated ballistics identification systems with neighbouring states

This alternative indicator does not measure the number of seized firearms traced whose illicit context has been established, but rather the institutional capacity to track and identify seized firearms. It recognizes that, rather than counting ad hoc tracing actions, it might be more important for the achievement of target 16.4 to measure progress in institutional capacity-building efforts, such as establishing the systems that enable automated identification of firearms. The technology exists and IBIS, one available ABIS, is widespread across the law enforcement agencies of Latin America and the Caribbean. As such, this interconnection is both advisable and attainable.

To maximize the efficacy of interconnected ABIS platforms, all states should also establish national databases of the ballistic fingerprints of all government- and civilian-owned firearms. Such databases would create a comprehensive pool of information to help law enforcement agencies to track and identify seized firearms. The institutionalized capacity to identify seized firearms is not only a sound way to measure attainment of target 16.4, but also a conduit to its achievement—that is, if test fires from seized firearms are correlated against domestic and neighbouring states' ballistic fingerprint databases, it would generate intelligence for law enforcement agencies to inform the controls that combat illicit arms flows. Such efforts could also help to shed light on certain dynamics of illicit arms flows.

SIPRI BACKGROUND PAPER

MEASURING ILLICIT ARMS AND FINANCIAL FLOWS: IMPROVING THE ASSESSMENT OF SUSTAINABLE DEVELOPMENT GOAL 16

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