Credits and contributors

Editor: Emilia Dungel

Production coordinator: Olivia Denonville

Copy-editor: Alex Potter

Proofreader: Stephanie Huitson

Design and layout: Rick Jones

Infographics: Daly Design

This Annual Report was compiled by Emilia Dungel with Luigi De Martino, Daniel de Torres, Nicolas Florquin, and Lionel Kosimnik.

Front cover photo: Emilia Dungel/Small Arms Survey.
Contents

Abbreviations and acronyms .......................................................................................................................... 4

I. Director’s introduction ................................................................................................................................. 5

II. Generating data ........................................................................................................................................ 8

III. Strengthening capacities ......................................................................................................................... 11

IV. Applying knowledge ............................................................................................................................... 13

V. Enhancing outreach ................................................................................................................................. 14

VI. Reinforcing operations .......................................................................................................................... 17

List of boxes

1. Global databases ...................................................................................................................................... 10

2. National action plans ............................................................................................................................. 12

3. Reach ...................................................................................................................................................... 13
# Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATT</td>
<td>Arms Trade Treaty</td>
</tr>
<tr>
<td>BMS7</td>
<td>Seventh Biennial Meeting of States (PoA)</td>
</tr>
<tr>
<td>CARICOM IMPACS</td>
<td>Caribbean Community Implementation Agency for Crime and Security</td>
</tr>
<tr>
<td>CHF</td>
<td>Swiss franc(s)</td>
</tr>
<tr>
<td>CNCA</td>
<td>National Commission on Arms Control (Commission Nationale de Contrôle des Armes)</td>
</tr>
<tr>
<td>DCAF</td>
<td>Geneva Centre for Security Sector Governance</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUFOR</td>
<td>European Union Force in Bosnia and Herzegovina</td>
</tr>
<tr>
<td>FLIP</td>
<td>Fundación para la Libertad de Prensa (Foundation for Press Freedom)</td>
</tr>
<tr>
<td>GBV</td>
<td>Gender-based violence</td>
</tr>
<tr>
<td>GFH</td>
<td>Global Firearms Holdings (database)</td>
</tr>
<tr>
<td>GLASS</td>
<td>Gender Lens for Arms Control Support and Sustainability</td>
</tr>
<tr>
<td>GVD</td>
<td>Global Violent Deaths (database)</td>
</tr>
<tr>
<td>HSBA</td>
<td>Human Security Baseline Assessment for Sudan and South Sudan</td>
</tr>
<tr>
<td>IATG</td>
<td>International Ammunition Technical Guidelines</td>
</tr>
<tr>
<td>ICoCA</td>
<td>International Code of Conduct Association</td>
</tr>
<tr>
<td>IDP</td>
<td>Internally displaced person</td>
</tr>
<tr>
<td>IED</td>
<td>Improvised explosive device</td>
</tr>
<tr>
<td>INTERPOL</td>
<td>International Criminal Police Organization</td>
</tr>
<tr>
<td>LAS</td>
<td>League of Arab States</td>
</tr>
<tr>
<td>MAAPSS</td>
<td>Mapping Actors and Alliances Project in South Sudan</td>
</tr>
<tr>
<td>MAG</td>
<td>Mines Advisory Group</td>
</tr>
<tr>
<td>MANPADS</td>
<td>Man-portable air defence systems</td>
</tr>
<tr>
<td>NAP</td>
<td>National action plan</td>
</tr>
<tr>
<td>PoA</td>
<td>Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects</td>
</tr>
<tr>
<td>PSSM</td>
<td>Physical security and stockpile management</td>
</tr>
<tr>
<td>REGISYNC</td>
<td>Developing Common Minimum Standards for Legal Arms Registers and Improving Information Exchange Among EU Member States, South-east Europe, Moldova, and Ukraine</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SAENK</td>
<td>Strengthening Implementation and Enforcement of the Arms Embargo on North Korea</td>
</tr>
<tr>
<td>SANA</td>
<td>Security Assessment in North Africa</td>
</tr>
<tr>
<td>UEMS</td>
<td>Unplanned Explosions at Munitions Sites (database)</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNIDIR</td>
<td>UN Institute for Disarmament Research</td>
</tr>
<tr>
<td>UNMAS</td>
<td>UN Mine Action Service</td>
</tr>
<tr>
<td>UNSCAR</td>
<td>UN Trust Facility Supporting Cooperation on Arms Regulation</td>
</tr>
<tr>
<td>VTF</td>
<td>Voluntary Trust Fund</td>
</tr>
<tr>
<td>WAM</td>
<td>Weapons and ammunition management</td>
</tr>
<tr>
<td>WCO</td>
<td>World Customs Organization</td>
</tr>
<tr>
<td>WPS</td>
<td>Women, Peace, and Security</td>
</tr>
</tbody>
</table>
I. Director’s introduction

The year 2021 saw the continued impact of the COVID-19 pandemic, assuaged by the hope of safe and effective vaccines. The uncertainties brought forth by the Delta and Omicron waves tempered those hopes and posed renewed challenges to the Small Arms Survey’s ability to plan and execute its projects. In spite of it all, opportunities to travel and to organize in-person events gradually opened up throughout the year. Political turmoil around the world, especially the worrying wave of coups across Africa, also required us to adjust some of our plans. The fall of the Western-supported government of Afghanistan and the takeover by the Taliban brought renewed concerns about the mass proliferation of small arms. Finally, Russia’s aggressive posture towards Ukraine triggered widespread alarm, which tragically proved founded in early 2022. The world seemed, at times, committed to reinforcing a saying often attributed to Lenin: ‘There are decades where nothing happens; and there are weeks where decades happen.’

Despite the continued challenges, 2021 was a successful year for the Survey, which found itself in a healthy financial position at year-end. The positive balance was the product of efforts to fine-tune our financial management, combined with a reduction of expenditures due to continued restrictions related to travel and in-person activities. The Survey team and our partners continued to leverage their energy, ingenuity, and enthusiasm to deliver high-quality results. Two major projects received very positive external evaluations and saw renewed commitments from their respective donors: the Security Assessment in North Africa (SANA) concluded its third phase and began its fourth, and the joint initiative with the International Criminal Police Organization (INTERPOL) and the World Customs Organization (WCO), in collaboration with the League of Arab States (LAS), successfully ended its first phase and launched its second.

Geographically, the Survey expanded its already sizeable footprint in East and West Africa, in Europe, and in the Middle East and North Africa region. In 2021, the Survey started a project with the Caribbean Community Implementation Agency for Crime and Security (CARICOM IMPACS) to bolster Caribbean states’ capacities to combat the illicit possession, misuse, and trafficking of firearms and ammunition. Our engagement in Latin America included the inception of a project with Chile and Colombia on the implementation of the Arms Trade Treaty (ATT). Finally, in the last quarter we began research to assess the potential for a significant event on small arms proliferation in Afghanistan.

Thematically, we expanded our work on improvised explosive devices (IEDs) in West Africa and developed contacts to explore similar work in East Africa. With encouragement from our Strategic Council, we increased our focus on gender and small arms and implemented a host of research and capacity-building initiatives, touching upon the gendered impact of ammunition diversion; the role of women in arms trafficking; gender-responsive small arms control; and the convergence of the small arms control and the women, peace, and security agendas—work that continues in 2022. New research on craft weapons in Africa picks up an important topic that we had already explored a few years back. In partnership with the UN Development Programme (UNDP), we conducted a series of in-depth surveys in North Africa and the Sahel exploring drivers for violent extremism.

The Survey continued to provide significant support for the implementation of the international normative framework on small arms—a staple in our portfolio—including collaboration with LAS in the framework of the UN Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects (PoA); support to Chile, Colombia, Serbia, and Zambia on compliance with ATT requirements; and a study on the challenges of compliance with the ATT provisions on gender-based violence (GBV). Our work to support the implementation of sanctions against North Korea, including analysis and capacity-building assistance, reached new partner countries, such as the Philippines. The implementation of effective arms control systems at the national level—a critical component of the UN PoA—is at the root of a series of initiatives supporting the development or implementation of national action plans (NAPs): in 2021, we provided support for NAPs in Burkina Faso, Sierra Leone, and Somaliland.

In summary, 2021 represented a positive step for the Small Arms Survey, built upon its two decades of generating knowledge and analysis. We are always grateful for the trust and support of our partners, our donors, and our peers. The new year starts in the shadow of unprecedented conflict and grave threats to the multilateral order not seen since the cold war. Even in this alarming context, the Survey will strive, as it has done since its founding, to contribute all its resources, expertise, and energy to the elimination of illicit arms flows and of armed violence.

—Daniel de Torres
Director
Human Security Baseline Assessment for Sudan and South Sudan (HSBA): Mapping Actors and Alliance Project in South Sudan (MAAPSS)
Funder: US Department of State Africa Bureau
To generate data and analysis on actors and entities in South Sudan in order to better understand power dynamics, areas of influence, and alliances/networks among government and opposition military and political actors.

Security Assessment in North Africa (SARA)
Funder: Germany
To produce timely, evidence-based research and analysis on issues related to small arms, armed groups, conflict dynamics, and related insecurity in North Africa and the Sahel-Sahara region in order to support and inform those engaged in building a more secure regional environment.

Gender-responsive Small Arms Control
Funder: Germany
To support the meaningful inclusion of diverse perspectives in small arms control; to enhance the convergence between small arms control and women, peace and security processes at the national level; and to strengthen the role of women for gender-responsive arms control to contribute to the reduction of arms-related violence.

Craft Weapons in Africa: State of Play and Regulatory Approaches
Funder: France
To examine the latest developments in the African traditional arms and ammunition manufacturing sector, as well as review the main regulatory approaches used by states and regional organizations, to stimulate international and regional exchanges of information and good practices.

Craft Weapons in Africa: State of Play and Regulatory Approaches
Funder: France
To examine the organization and political dynamics of armed youth groups in South Sudan’s Unity and Jonglei states to understand the root causes of conflict, the relationship between local violence and political struggles in Juba, and how to break current cycles of violence.

Building National Capacity to Prevent and Address Address Threats in Kenya (ATF VTF)
Funder: United States
To build capacity and provide technical assistance to the Kenyan government to improve its ability to prevent and address the diversion of conventional arms in order for the country to comply with Article 11 of the ATC.

Building Capacity to Prevent, Detect, and Respond to the Diversion of Conventional Arms in Somalia and Cedar Coalition
Funder: ATF VTF
To build the capacity of policymakers and officials from regulatory and frontline agencies in Chad and Ethiopia to prevent, detect, and respond to the diversion of conventional weapons using the ATT Article 11 and other recent data and policy-relevant lessons learned from countries with strong arms control management.

Gender and Ammunition Management
Funder: United Nations Office for Disarmament Affairs
To provide practical considerations for national authorities and practitioners to help them explore and elaborate the gender dimensions of ammunition management policy and practice.

Physical Security and Stockpile Management (PSM) Priorities Matrix and Strategic Planning in the Sahel
Funder: United States
To develop national capacities and ownership of PSM in the Sahel region, and to reduce the negative impacts of poorly stored or mismanaged weapons and ammunition.

Supporting the Development of Small Arms NAPs in Burundi, Faso, and Sierra Leone
Funder: Mines Advisory Group (MAG)
To produce roadmaps to support the development of small arms NAPs in Burundi, Faso, and Sierra Leone.

Updating the Survey Publication on the Role of the EU Force (EUFOR) Mobile Training Team in Bosnian and Herzegovina
Funder: Switzerland
To update the 2016 publication Sustainable Stockpile Management in Bosnia and Herzegovina: The Role of EUFOR Mobile Training Team (FPEAT) Weapons and Ammunition Management Program (WAMP) to reflect current data and knowledge and to inform policy and humanitarian responses to ongoing crises in the region.

Building Capacity to Draft Zambia’s Revised Act for Effective ATT Implementation
Funder: ATT VTF
To build capacity and provide technical knowledge to Zambia to enable the country to draft its Conventional Arms Inventory (CAI) Act in line with the ATT implementation.

Physical Security and Stockpile Management (PSM) Priorities Matrix and Strategic Planning in the Sahel
Funder: United States
To develop national capacities and ownership of PSM in the Sahel region, and to reduce the negative impacts of poorly stored or mismanaged weapons and ammunition.

Gender and Ammunition Management
Funder: United Nations Office for Disarmament Affairs
To provide practical considerations for national authorities and practitioners to help them explore and elaborate the gender dimensions of ammunition management policy and practice.

Supporting the Development of an Explosive Hazards Management MAP in Somalia
Funder: HALO Trust
To support the development of a MAP on explosive management in Somalia in order to increase the capacity of the national authorities to address the risks posed by explosive hazards.

Europe Union (EU)–League of Arab States (LAS) Project Combating the Illicit Trade in and Proliferation of Small Arms and Light Weapons in the Member States of the LAS
Funder: EU
To support LAS member states in building sustainable capacities to combat the illicit trade in, and proliferation of, small arms and light weapons in their countries and the Arab region.
II. Generating data

To be effective and sustainable, policies need to be underpinned by a robust evidence base. The data and analytics work of the Small Arms Survey focuses on research and analysis to ensure that the small arms community have access to reliable and consistent knowledge to make informed decisions. In 2021, this research unpacked new trends in illicit arms flows; explored the impact of these flows in particular contexts; and supported the policy frameworks that aim to curb them.

The Survey published findings from research projects centred on investigating illicit arms flows at the global, regional, and national levels in 2021. At the global level, the Tracking the Illicit Proliferation of Advanced Man-portable Air Defence Systems (MANPADS) project compiled a database of illicit MANPADS, comprising 406 unique reports of transfers to, or possession of, MANPADS by armed groups from 2011 to mid-2021. These reports cover illicit MANPADS activity in 32 countries on five continents, with the vast majority occurring in the Middle East and North Africa. A government official who was briefed on the project’s findings noted the usefulness of such open-source intelligence gathering, especially for sharing data with audiences who lack the security clearances required to receive classified information.

In 2021, the Survey also published the findings of its 2020 regionally focused research project, Ammunition Profiling with Ballistics Systems. Examining how automatic ballistics information systems can be used for profiling ammunition used in crime, the research team partnered with ballistic laboratories in Germany, Sweden, and Switzerland, who shared non-confidential subsets of their national databases. As a result, the project consolidated a dataset of 3,130 cartridge cases collected and documented by the partners from 2015 to 2020—of which 61 per cent had been recovered in homicide or assault cases. The findings were presented in October 2021 at a meeting of the firearms working group of the European Network of Forensic Science Institutes, shared in the December 2021 EMPACT Firearms Bulletin, distributed to European Union (EU) law enforcement agencies, and submitted to the peer-reviewed scientific journal Forensic Science International—which published them in early 2022.

A European law enforcement official complimented the authors on the creative and forward-thinking approach of the study, noting that it made them reflect that they could indeed do more to profile the ammunition they seize to help create a broader, strategic intelligence picture.

Tuning to national-level research, our 2020 project Ukraine Ammunition Trafficking published its findings in early 2021 on illicit ammunition trafficked from and within the country. Making the Rounds: Illicit Ammunition in Ukraine analysed markings on more than 1,600 seized hand grenades, shoulder-fired rockets, ammunition tins, and anti-personnel landmines, finding that most of these items were Soviet-designed models produced in factories prior to the dissolution of the USSR and that the items had proliferated throughout Ukraine—including to areas far from the conflict zone in the east. The report is the latest in a series of Survey publications that examine the proliferation of illicit small arms and ammunition in the aftermath of the 2014–15 conflict in eastern Ukraine and its broader regional implications. A senior European law enforcement official said they appreciated that the report highlighted the risks posed by this proliferation to Ukraine and Europe, such as the acquisition of hand grenades and other weapons by criminals and extremist groups located elsewhere in Europe.

The Small Arms Survey also carries out research on the impacts of illicit small arms and the contexts within which these happen. Two examples of such work are the Human Security Baseline Assessment (HSBA) for Sudan and South Sudan project, and the Security Assessment in North Africa (SAN) project, both of which have generated knowledge through empirical research on their regions since 2006 and 2012, respectively.

In 2021, HSBA spearheaded three initiatives focusing on various aspects of the continuing military and political struggles in South Sudan. First, the research team continued populating the Mapping Actors and Alliances Project in South Sudan (MAAPSS) database, currently holding qualitative data on more than 700 local-, state-, and national-level political and military actors in South Sudan. From mid-June 2020 to October 2021, the Survey published eight written analytical briefs in the form of MAAPSS Updates, offering further contextualization to complement database information—including on actor alliances and enmities, Juba politics, and the influence of both on governance and conflict. Similarly, the MAAPSS initiative also hosted a six-part webinar series in 2021, featuring South Sudanese and other international experts to discuss unfolding issues affecting the country. At the end of the year, the database had over 830 registered users from 60 NGOs and think tanks, 15 governments, and 7 UN agencies. As noted by an NGO official working in South Sudan, the research team was informed that published actor profiles and analyses of conflict dynamics and internally displaced person (IDP) returns in Upper Nile state contributed to a reassessment by UN agencies and NGOs of the manner in which humanitarian assistance is delivered in the state, and how IDP returns can be better coordinated through the use of conflict-sensitivity frameworks.

HSBA also managed two grants related to ongoing developments on the ground in 2021. Thankfully—despite ongoing clashes between armed groups and significant levels of local violence related to cattle raiding—the Research on Conflict Dynamics in South Sudan initiative saw field research conducted and completed safely in 2021. The Survey will publish studies on armed conflict in the Equatoria and the Lakes, Upper Nile, and Warrap states in 2022. HSBA’s Organization and Political Dynamics of Armed Youth Groups in South Sudan initiative examines different characteristics of armed youth groups in Jonglei and Unity states to better understand what causes and exacerbates the violence at hand. The project’s final report—Raiding in Jonglei and Unity States, South Sudan—represents a comprehensive analysis of contemporary cattle raiding, local defence force organization, and armed conflict among non-state groups in South Sudan. It emphasizes...
the linkages between local-level conflict and national-level politics, as well as the need for both the international community and the South Sudanese government to recognize these—findings that were reflected in comments made by the Chair of the Commission on Human Rights in South Sudan. An official statement by the Commission dated 22 March 2022 says that ‘the notion that the localized violence is not linked to the State or to national-level conflicts [. . .] is a fallacy’.

SANA saw the successful completion of its third phase in 2021 and seamlessly transitioned to the fourth. To mark this occasion, SANA organized an Expert Briefing series in the form of six webinars held in the second quarter of 2021. These unpacked contemporary security issues in North Africa and the Sahel–Sahara region, focusing on specific topics such as weapons and explosives in North and West Africa; the situation in Chad after the death of Idriss Déby; current dynamics in Libya; Morocco’s foreign policy; and jihadist groups in Burkina Faso. The Expert Briefing series concluded with a panel discussion between long-standing SANA experts. The project also published two blog posts in 2021: one on ballistics analysis (in French), and one on post-Déby Chad, as a follow-up to the webinar held on the topic. The external evaluation of SANA was characterized by high praise; it acknowledged in particular the project's broad geographical scope—allowing for work on transnational flows and similar issues often considered as separate in other research—as well as its analysis of the dual themes of the weapons themselves and the conflicts that demand their use—noted as almost unique to SANA. It also stated that SANA outputs are ‘praised for the high technical quality, depth, and level of details. [They] are deeply rooted in fieldwork- and data-based research and analysis, and are considered very informative by policy-makers.’

The Survey's Data and Analytics unit executed three projects in 2021 through partnerships with stakeholders, with a view to contributing specifically to ongoing measures and programmes to strengthen security. At the regional level, the Survey and CARICOM IMPACS formalized their collaboration by signing a memorandum of understanding in early 2021. The Survey subsequently launched the project Supporting National and Regional Capacities in Reducing the Risks Posed by Illicit Weapons Flows in the Caribbean, which involves in-depth research to generate a regional firearms assessment to be published in the form of a Small Arms Survey Report in 2022. In 2021, the project initiated said research, using innovative data collection tools and methods, including carrying out inmate surveys, accessing detailed forensics and ballistics data, reviewing documents gathered through US Freedom of Information Act requests, examining hospital data on firearms injuries, and studying court documents. To implement these ambitious approaches, the project also signed partnership agreements with prestigious regional research institutions, such as the University of the West Indies, that have the capacity to apply the research methods developed for the project to future activities. Furthermore, the project established a regional advisory committee of civil society experts to guide and validate the study.

Also at the regional level, the Survey continued to undertake collaborative research on the African continent regarding the cross-national dimensions of IED trafficking as well as violent extremism. Assessing IED trafficking involves scrutinizing the diversion of controlled and dual-use materials that are subsequently trafficked to construct IEDs; this calls for a comprehensive approach to information gathering, along with a significant networking effort to get all actors to exchange relevant information. In 2021, the project held a multi-stakeholder workshop in Ghana with the National Commission on Small Arms. Although Ghana has not experienced IED incidents, the country has been identified as a source of diverted commercial explosives in the region. As such, the workshop focused on the complexities of commercial explosives and gathered 45 participants from sectors involved in the manufacturing, transport, dealing, and import of commercial explosives and the Bureau of National Investigation, and the Bureau of National Investigation. The project also undertook field visits to Burkina Faso and Niger, carrying out research and co-organizing a workshop with the National Commission on Arms Control (Commission Nationale de Contrôle des Armes, CNCA) in the former, and deepening established ties with several partners—local, national, and international—in the latter. The strengthened collaboration with national commissions in both Burkina Faso (see also various NAP initiatives in Section III) and Ghana creates opportunities for the project to continue providing further policy support. Highlights from the project in 2021 also included efforts by the Economic Community of West African States' (ECOWAS) unit on small arms and
The Small Arms Survey monitors trends and developments of holdings, transfers, and impacts of small arms through its global databases. These include:

- the Global Firearms Holdings (GFH) database, which provides estimates of the number of firearms in the world, disaggregated by civilian, law enforcement, and military holdings;
- the Global Violent Deaths (GVD) database, which provides estimates on lethal violence, including sex-disaggregated data and data on lethal violence inflicted by firearms;
- the Small Arms Trade Transparency Barometer, which analyses and ranks the transparency of global authorized small arms exporters; and
- the Unplanned Explosions at Munitions Sites (UEMS) database, which consolidates information on accidental explosions of ammunition stockpiles at storage sites.

In 2021, the Survey updated both the Transparency Barometer and the UEMS database. The Transparency Barometer found Switzerland to be the most transparent small arms exporter in the year 2018, and revealed that countries scored an average of 12.61 points out of a maximum of 25, which is a slight increase compared with last year’s score (12.36). The UEMS database update revealed 636 incidents between 1979 and December 2021, resulting in 30,883 casualties (deaths and injuries). Data from this database features prominently in Switzerland’s Arms Control and Disarmament Strategy, 2022–25—the first ever such strategy from Switzerland’s Federal Council.

Figures from the Small Arms Survey’s databases were cited in at least 260 press articles in 2021, of which 244 (or 94 per cent) referred to the GFH database, in particular civilian firearms holdings estimates. The GVD and UEMS databases and the Transparency Barometer were cited in 12, 3, and 1 article(s), respectively. In addition to the media, researchers and practitioners solicit access to and additional information on the Survey’s databases on a regular basis. The Dutch Ministry of Foreign Affairs, for instance, interviewed the team working on the Transparency Barometer and published an article on its findings. The Survey also presented the 2020 Trade Update and Transparency Barometer at a joint Stimson Center–Small Arms Survey–UN Institute for Disarmament Research (UNIDIR)–Conflict Armament Research–Ireland event on practical measures to prevent arms transfers diversion, held on the margins of ATT-related discussions on 31 March, as well as at the course on Building Capacities for Effective Implementation of the Arms Trade Treaty (ATT): Virtual Learning Journey 2021, organized by the Geneva Centre for Security Policy on 14 April.

Light weapons to address IED trafficking at the regional level, and the publication of a blog post providing an overview of the project, its aims, and a snapshot of some of the findings so far. Additionally, the Survey received funding from the UN Mine Action Service (UNMAS) for a supplementary initiative on IEDs focusing on the trafficking of IED components in the Liptako Gourma region—the border area of Burkina Faso, Mali, and Niger—specifically.

Finally, as part of its data and analytics portfolio, which aims to contribute to ongoing policy programmes, the Survey continued work on the Addressing and Preventing Violent Extremism in Africa: A Development Approach project, in collaboration with UNDP. Focusing on the Sahelian borderlands—specifically the peripheries of Chad, Libya, Niger, Nigeria, and Sudan—the project sets out to assess the threat of violent extremism through a perception survey. In 2021, despite challenges brought on by COVID-19 and ongoing political developments on the ground, the project surveyed 6,852 people in the remote border areas of the 5 countries, asking questions related to 7 drivers of violent extremism. Based on the findings, the project team engaged with development and preventing violent extremism practitioners to design a detailed set of policy and programmatic observations. The findings and policy observations will be published as a joint Small Arms Survey–UNDP Report in 2022, and will be made available in Arabic, English, and French.

In 2021, the Survey updated both the Transparency Barometer and the UEMS database. The Transparency Barometer found Switzerland to be the most transparent small arms exporter in the year 2018, and revealed that countries scored an average of 12.61 points out of a maximum of 25, which is a slight increase compared with last year’s score (12.36). The UEMS database update revealed 636 incidents between 1979 and December 2021, resulting in 30,883 casualties (deaths and injuries). Data from this database features prominently in Switzerland’s Arms Control and Disarmament Strategy, 2022–25—the first ever such strategy from Switzerland’s Federal Council.

Figures from the Small Arms Survey’s databases were cited in at least 260 press articles in 2021, of which 244 (or 94 per cent) referred to the GFH database, in particular civilian firearms holdings estimates. The GVD and UEMS databases and the Transparency Barometer were cited in 12, 3, and 1 article(s), respectively. In addition to the media, researchers and practitioners solicit access to and additional information on the Survey’s databases on a regular basis. The Dutch Ministry of Foreign Affairs, for instance, interviewed the team working on the Transparency Barometer and published an article on its findings. The Survey also presented the 2020 Trade Update and Transparency Barometer at a joint Stimson Center–Small Arms Survey–UN Institute for Disarmament Research (UNIDIR)–Conflict Armament Research–Ireland event on practical measures to prevent arms transfers diversion, held on the margins of ATT-related discussions on 31 March, as well as at the course on Building Capacities for Effective Implementation of the Arms Trade Treaty (ATT): Virtual Learning Journey 2021, organized by the Geneva Centre for Security Policy on 14 April.

Image 2 Snapshot of the UEMS database

Source: UEMS database
III. Strengthening capacities

To be comprehensive and effective, policy implementation needs to be based on tailored and locally owned solutions. The Small Arms Survey’s Policy and Capacity Support unit applies knowledge to support small arms control partners in developing, disseminating, and implementing effective practices and standards to this end. In 2021, this policy support included assistance to efforts related to weapons stocks and flows; the consequences of their illicit proliferation; and programmes specifically oriented around control measures.

The Survey collaborated with partners on policy initiatives focused on curbing the diversion of small arms at the global and regional levels. First, at the global level, the Survey partnered with the International Code of Conduct Association (ICoCA) to strengthen the weapons and ammunition management (WAM) provisions of the Association’s Code of Conduct for Private Security Service Providers. The Code of Conduct obliges member and affiliate companies to follow a set regulatory framework related to WAM, but it lacks specific guidance and best practices on how to implement the standards at hand. ICoCA and the Survey therefore joined forces to establish three sets of indicators related to weapons training and WAM—made available on ICoCA’s website in 2022. Furthermore, the project produced a paper for the Swiss Federal Department of Foreign Affairs and ICoCA that highlights the challenges faced by private security service providers when it comes to WAM implementation.

Also at the global level, the Survey continued work on its Gender and Ammunition Management project, which aims to identify entry points for gender mainstreaming in the life-cycle management of ammunition and to propose revisions to enhance the gender sensitivity of the International Ammunition Technical Guide lines (IATG). In 2021, the project delivered support to the Group of Governmental Experts on gender-related language and carried out a gender review of version 3 of the IATG. Building on the 2020 co-publication Making Room for Improvement: Gender Dimensions of the Life-cycle Management of Ammunition, the Survey and the UN Office for Disarmament Affairs jointly released the study Gender-sensitive Ammunition Management Processes: Considerations for National Authorities, launching it at a side event at the First Committee of the UN General Assembly. The project research team also explored the gender dimensions of ammunition diversion, through a case study on Kosovo.

At the regional level, the Developing Common Minimum Standards for Legal Arms Registers and Improving Information Exchange Among EU Member States, South-east Europe, Moldova, and Ukraine (REGISYNC) project was launched in 2021. Carried out jointly with Arquesbus Solutions, the Center for the Study of Democracy, Ecorys, and the Small Arms Survey, REGISYNC is a consortium project that seeks to approach diversion reduction through registers of legal firearms in the EU and neighbouring states. Specifically, the project will map existing legal registers, develop a manual for effective practices and common minimum standards, and evaluate common information exchange practices, as well as draft recommendations for improving them. In 2021, the project established solid collaboration between the partners, with the work itself beginning in 2022.

The media can play a crucial role in monitoring the impacts of small arms abuse; it is therefore important for journalists to be able to recognize and identify small arms and ammunition. To encourage quality and objective reporting on the use of force, and to avoid misinformation, the Survey joined a DCAF – Geneva Centre for Security Sector Governance initiative with Fundación para la Libertad de Prensa (FLIP, or Foundation for Press Freedom) on Strengthening Journalists’ and Social Leaders’ Role in Security Sector Governance Oversight. The project aims to enable journalists in Colombia to better understand the identification of authorized weapons and their usage when reporting on police operations. In 2021, as part of this project, the Small Arms Survey developed and implemented virtual training modules in Spanish, which were then uploaded to an online learning platform administered by FLIP. The content included modules on the legal framework; small arms identification; small arms ammunition identification; riot police; and safety rules. DCAF published a summary video of the project on its YouTube channel.

Though all of the Small Arms Survey’s projects are policy relevant, some specifically emphasize international, regional, or national small arms control instruments. Targeting the ATT from a global perspective, the Survey continued its work on implementing the GBV provisions of the treaty. The Survey presented the research, which was carried out in 2020 and included interviews with export licensing officials, in the form of a background paper in 2021—receiving high praise. As a result, the project obtained additional funding to turn the paper into a published output: a Small Arms Survey Briefing Paper to be released in 2022. Also at the global level in 2021, the Survey launched a new initiative on Women, Peace, and Security (WPS) and Arms Control: Integration of Women’s Civil Society Perspectives in National and Local Small Arms Control. As the title suggests, the project explores possible further linkages between WPS actors and small arms control actors, so as to strengthen national small arms strategies (see Box 2 for an overview of the Survey’s work on NAPs). Though the project focuses on the national level, the agendas that it seeks to converge are very much on an international scale. Project activities involve mapping existing efforts to link WPS with small arms control, as well as related challenges. The project conducted interviews with stakeholders and practitioners in 2021, with a view to presenting its findings at expert workshops in 2022.

In 2021, the Survey’s policy and capacity support work stream carried out three projects specifically focused on regional small arms control frameworks. The year saw the successful completion of the first phase of its EU–LAS project, Combating the Illicit Trade in and Proliferation of Small Arms and Light Weapons in the Member States of the League of Arab States, implemented by the Survey (the project’s coordinator), INTERPOL, and the WCO, in collaboration with LAS. The
project focuses on five priority areas: border controls (WCO); firearms investigation, including tracing (INTERPOL); stockpile management and security, including in conflict and post-conflict settings (the Survey); and the translation of key small arms publications and documents into Arabic (the Survey). Activities undertaken during the first phase included an inception meeting, three needs assessment missions, a subregional workshop, training programmes for the security services of nine LAS member states, and the translation of 16 publications and other documents into Arabic. The government officials who received project training consistently reported having acquired significant new knowledge that would likely or potentially be of use to their work. The EU approved the continuation of the project in Council Decision (CFSP) 2021/1726 of 28 September 2021. Phase II began in October 2021 and will run through September 2024, consolidating and strengthening the foundations laid during the first phase.

As part of efforts to support regionally oriented small arms control measures, the Survey continued work on a project to strengthen the Southern African Development Community (SADC) Firearms Protocol—which had been amended by the regional body in 2020—in collaboration with SADC and the Southern African Regional Police Chiefs Cooperation Organisation. The project aimed to assist member states in assessing their national small arms control systems, support the development of a regional strategy and action plan, and update the standard operating procedures for implementing the SADC Firearms Protocol. To wrap up the project in 2021, the Survey published a blog post reflecting on the implementation of the protocol, as well as noting challenges and possible ways forward.

The Survey’s Physical Security and Stockpile Management (PSSM) Priorities Matrix and Strategic Planning in the Sahel project continued to support PSSM-related capacity development and national ownership in the Sahel region. Though the project has a regional scope, it is focused on assisting national authorities in prioritizing their PSSM needs and subsequently developing related strategic plans. The countries in focus are Burkina Faso, Mali, and Niger, with the Survey having worked with Burkina Faso and Niger in particular to develop PSSM NAPs. In 2021 in the case of Burkina Faso, the authorities decided to update and expand the scope of the current NAP on PSSM (see Box 2 for more on the continuation of this activity).

At the subregional level in 2021, the Survey also launched a new project centred around the reduction of diversion risks in Chile and Colombia, sponsored through the ATT’s Voluntary Trust Fund (VTF). Applying an ATT lens, the project recognizes that regulatory and enforcement officials need to have a solid understanding of illegal arms trade networks in order to identify as many red flags as possible in arms transfers. Due to the established threat of arms smuggling in the two countries, this would allow them to better scrutinize suspicious activities linked to elaborate arms diversion operations. The project therefore sets out to enhance capacities to prevent, detect, and respond to diversion by providing policymakers and officials in the two countries with an overview of the issues at hand, thus strengthening their implementation of ATT Article 11. As most of the activities will take place in 2022, the project focused in 2021 on working with the authorities in Chile and Colombia to set out the modalities of cooperation.

At the national level, the Survey continued its VTF-supported, multi-year collaboration with Zambia and in 2021 completed a project to assist the country in drafting its Conventional Arms Control Act for effective ATT implementation.

Box 2 National action plans

Over the years, the Survey has implemented numerous projects focused on supporting the drafting, evaluation, revision, or implementation of NAPs. These efforts deepened in 2021, with three separate initiatives assisting such activities:

- **Evaluating the Implementation of the PSSM NAP in Burkina Faso:** Building on the activities carried out through the PSSM Priorities Matrix and Strategic Planning in the Sahel project, the Mines Advisory Group (MAG) partnered with the Survey to evaluate Burkina Faso’s 2017 PSSM NAP—in order to support the development of a new plan. The evaluation (in English and French) was instrumental in engaging the newly formed CNCA (see also the IED project in Section II) to discuss the need for a new small arms control strategy—tackled in the project below.

- **Supporting the development of NAPs in Burkina Faso and Sierra Leone:** Following up on the previous PSSM- and NAP-oriented projects in Burkina Faso—and meaningful engagement with stakeholders in Sierra Leone—the Survey worked with MAG on the production of roadmaps meant to serve as guidance documents to support the development of NAPs in the two countries. The roadmaps are planned to be finalized in 2022 after revision and approval by the respective national commissions.

- **Supporting the development of an Explosive Hazards Management Action Plan in Somaliland:** Working with the HALO Trust and the Somaliland Ministry of Defence, the Survey is supporting the latter in developing a Somaliland Action Plan on Explosive Hazards Management. In 2021, two trips were undertaken to Hargeisa to build relationships with stakeholders and initiate the process. As part of the project, the team also supported the establishment of specific structures to facilitate the NAP development process, including an inter-ministerial technical working group to provide strategic guidance; a technical committee to coordinate the process; and thematic working groups to provide specific inputs on mine action, explosive ordnance disposal, and ammunition management.

In addition, as mentioned above, the Small Arms Survey is exploring linkages between small arms control practitioners and WPS practitioners with a view to strengthening national arms strategies, including NAPs.
Before, during, and after the workshop, the project team provided guidance on ATT provisions that would need to be reflected in the act as well as supplementary regulations; examples from other countries on how this can be achieved; and step-by-step support to prepare a draft act that can successfully navigate Zambia’s legislative process. The draft act has been well received by key stakeholders in Zambia, who could play an important role in ensuring that the legislation is approved and implemented.

Also at the national level, the Survey furthered its third VTF project, Building National Capacity to Prevent and Address Diversion in Serbia, in 2021. In addition to the initial workshop held in 2020, a second ‘hybrid’ workshop took place in March 2021, exploring risk assessment procedures; post-shipment verification approaches; and corruption as it relates to diversion. Both workshops aimed to contribute to the drafting of a Serbian national manual on measures to prevent and detect diversion. The draft manual has been prepared in Serbian and next steps (including an English translation) will be decided in 2022.

IV. Applying knowledge

Certain Small Arms Survey projects work on both data generation and capacity strengthening in parallel. In 2021, these included initiatives exploring production and flows, approaches to understanding their impacts, and control programmes.

The Survey undertook a new project in 2021 on craft weapons in Africa. The project sets out to examine the state of play and latest developments in the artisanal arms and ammunition manufacturing sector in Africa, as well as review the regulatory approaches—both national and regional. The project team undertook the desk research in 2021 and began conducting interviews with key informants, including national commissions, experts, civil society representatives, and international and regional organizations. The findings will be shared with stakeholders to feed into First Committee discussions in 2022.

The Survey also completed the second year of its cross-cutting Gender-Responsive Arms Control project. The first set of activities relates to operationalizing gender-responsive small arms control, notably the publication of a Handbook under the previous Small Arms Survey project Gender Lens for Arms Control Support and Sustainability (GLASS). In 2021, the project team delivered three pilot regional workshops for national authorities on gender-responsive small arms control, of which two were carried out in person—Naivasha, Kenya, and San José, Costa Rica—and one, for the Caribbean, held remotely. These workshops highlighted the usefulness of participatory, interactive regional exchanges in order to identify relevant lessons and applicable good practices; to explore the pertinence of the topic to the stakeholders and the potential for follow-up with additional counterparts at the national level; to consider the potential of the Handbook in the development of national or regional action plans and policies on arms control; and to provide participants with concrete tools for reducing gender bias and creating fully inclusive consultative processes to develop and implement small arms control strategies, policies, and measures. The second set of activities under this project relates to increased understanding of the roles of women in illicit arms trafficking. Case study research for this was finalized in 2020, and analysis and drafting took place in 2021; the findings were presented in the June 2022 report Missing or Unseen? Exploring Women’s Roles in Arms Trafficking.

Finally, the Strengthening Implementation and Enforcement of the Arms Embargo on North Korea (SAENK) project continued in 2021, merging knowledge generation with capacity development in real time. Specifically in 2021—with the Royal United Services Institute, the Netherlands, and the United States—the project organized and participated in the Fourth Expert Meeting on the Comprehensive Implementation of Maritime Security Provisions in the UN Security Council Resolutions on North Korea. The project also held several training and awareness-raising sessions with a wide range of government agencies in Botswana, and organized a national dialogue workshop in the Philippines, together with Nonviolence International Southeast Asia and the Philippine Strategic Trade Management Office. The workshop in the Philippines provided an important opportunity for national agencies working on the implementation and enforcement of UN sanctions to work towards the establishment of an inter-agency sanctions implementation and coordination mechanism.

Box 3 Reach

In addition to its projects, the Survey also provides direct guidance to decision-makers.

Support to the BMS7 Chair:

In 2021, the Survey provided support to the Chair of the Seventh 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 (BMS7).

Security Council briefing:

In addition, the Survey spoke at the UN Security Council at the briefing held to consider the Secretary-General’s seventh biennial report on small arms and light weapons. A senior researcher from the Survey spoke of the threat posed by illicit flows of small arms and light weapons in the context of peacekeeping operations.
V. Enhancing outreach
Publications and other outputs released in 2021

1 Report

- January 2021
  - Making the Rounds: Illicit Ammunition in Ukraine
    - English / Ukrainian

2 Briefing Papers

- February 2021
  - Still Not There: Global Violent Deaths Scenarios, 2019–30
    - Arabic / English / French

- December 2021
  - The 2021 Small Arms Trade Transparency Barometer
    - English

1 Infographic

- December 2021
  - Quick facts on unplanned explosions at munitions sites (UEMS) - December 2021 update
    - English
6 Blog Posts

**April 2021**
Stockpiling Munitions Carries Risks: The Basic Steps That Can Stop Catastrophic Explosions

**July 2021**
Profil haut: l’analyse balistique en action

**August 2021**
Forensic Forays: Using X-ray Technology to Analyse Modified and Converted Firearms

**August 2021**
Déby’s Spring Fall: How an Unlikely Rebellion Toppled Chad’s Dictator

**October 2021**
Keeping Current: The SADC Firearms Protocol Update

**December 2021**
A Primer: IEDs in the Sahel and West Africa

2 Webinar Series

**May–June 2021**
SANA Expert Briefings

**April–November 2021**
HSBA MAAPSS Webinar Series

<table>
<thead>
<tr>
<th>SANA Expert Briefings</th>
<th>HSBA MAAPSS Webinar Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weapons and Explosives in North and West Africa</td>
<td>Unity State 1</td>
</tr>
<tr>
<td>Post-Déby Chad: Local Dynamics, Regional Changes, and International Responses</td>
<td>Upper Nile State 2</td>
</tr>
<tr>
<td>Libya: Where Do We Stand and What Is Next?</td>
<td>Jonglei State 3</td>
</tr>
<tr>
<td>Assessing Morocco’s Evolving Foreign Policy</td>
<td>South Sudan’s 10th Anniversary 4</td>
</tr>
<tr>
<td>Burkina Faso: Jihadist Groups and Regional Insecurity</td>
<td>The Split of the Sudanese People’s Liberation Army in Opposition (SPLA-IO) 5</td>
</tr>
<tr>
<td>SANA Project Phase III Concluding Panel Discussion</td>
<td>Ruweng and Pibor Administrative Areas 6</td>
</tr>
</tbody>
</table>
Due to a change in tracking and monitoring tools linked to our new website in 2021, as well as tracking issues following the launch of the site, we are not including download statistics in this year’s infographic.

**Website views and visitors**

Due to a change in tracking and monitoring tools linked to our new website in 2021, as well as tracking issues following the launch of the site, we are not including download statistics in this year’s infographic.

**Blog posts**

15,000 views in total

- **Global Firearms Holdings database**: 8,700 pages viewed
- **Weapons Identification Handbook**: 2,600 pages viewed
- **Global Violent Deaths database**: 2,200 pages viewed

**Press coverage**

25 different languages

- **September 2021 New website**
- **Up from 2020**
  - 138,797 visitors
  - 330,111 pages viewed

**Social media and eAlerts**

- **6,415 eAlert recipients**
  - 1 January 2021
- **6,844 eAlert recipients**
  - 31 December 2021
- **9,581 followers**
  - 1 January 2021
- **10,145 followers**
  - 31 December 2021
- **9,220 likes**
  - 1 January 2021
- **8,941 likes**
  - 31 December 2021
- **3,446 likes**
  - 31 December 2021

**Press coverage**

- **25 different languages**

**Main themes**

- Arms holdings
- Violent deaths / femicides
- Illicit trafficking

**Notable outlets**

- AFP
- Al Jazeera
- East African (Kenya)
- CGTN
- China Times
- CNN
- Deutsche Welle
- El País
- Euronews
- Guardian
- Le Monde
- Diplomatique
- Nation (Nigeria)
- New York Times
- O Globo
- Radio France International
- Washington Post
- Wall Street Journal
- Xinhua

**Press coverage**

- **335 unique media citations**
VI. Reinforcing operations

Institutional development
The year 2021 saw the continuation and consolidation of the reforms initiated in 2020, which had a noticeable impact on the Survey’s internal processes and systems. Increased efficiencies and tighter internal procedures allowed the Survey to eliminate a structural deficit and end the year with a positive balance. In October 2021, the grant management functions were integrated into the Administration and Finance unit to allow for more streamlined financial management and oversight of project grants. In 2022, the Survey will continue fine-tuning its financial and project management processes to ensure that it can continue to efficiently deliver high-quality results to partners and donors.

Following two years of net staff reduction, the Survey increased its staff capacity in 2021 with a series of recruitments, including a senior data expert and a gender coordinator. The Survey team also benefited from professional training, such as Hostile Environment Awareness Training, courses on ammunition and staff assessment training, and an open-source intelligence workshop.

Financial developments
After two years of deficits, the Survey ended 2021 in a stable position and with a positive balance (after operating expenses of CHF 4,994,378). As indicated, this financial position is a result of internal reforms and more efficient allocation of financial resources, combined with a reduction of expenses due to COVID-19-related restrictions. With those restrictions largely lifted, grant expenditure rates—and with them, the volume of operating expenses—are expected to increase perceptibly in 2022.

The Survey depends entirely on external funding and it is thanks to its donors’ support that it can carry out its operations. In 2021, the Survey was grateful for the unrestricted support provided by Australia, Finland, Sweden, and Switzerland. Unrestricted funding allows the Survey to maintain its institutional knowledge, react promptly to new developments, and explore innovative ideas in underserved areas. Additionally, in 2021 the Survey received project-specific support from the EU, France, Germany, the Netherlands, Sweden, Switzerland, the United Kingdom, the United States, the ATT VTF, UNDP, and the UN Trust Facility Supporting Cooperation on Arms Regulation, as well as service contracts from several UN agencies and other partners.

Notes
1 This research took place prior to the Russian invasion of Ukraine in February 2022; the conflict zones have clearly shifted since then.
2 The designation of Kosovo is without prejudice to positions on status and is in line with UN Security Council Resolution 1244 and the International Court of Justice Opinion on the Kosovo declaration of independence.
The Small Arms Survey is a global centre of excellence whose mandate is to generate impartial, evidence-based, and policy-relevant knowledge on all aspects of small arms and armed violence. It is the principal international source of expertise, information, and analysis on small arms and armed violence issues, and acts as a resource for governments, policymakers, researchers, and civil society. It is located in Geneva, Switzerland, and is an associated programme of the Graduate Institute of International and Development Studies.

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

For more information, please visit: www.smallarmssurvey.org.

Contact details
Small Arms Survey
Maison de la Paix
Chemin Eugène-Rigot 2E
1202 Geneva
Switzerland

+41 22 908 5777
info@smallarmssurvey.org

Follow the Small Arms Survey
www.facebook.com/SmallArmsSurvey
www.twitter.com/SmallArmsSurvey
www.smallarmssurvey.org/multimedia