ArmsTracker©

The national arms and ammunition register
to reduce gun violence and suffering

Contents

1. Executive Summary

ArmsTracker© fills the most common gaps in national arms and ammunition control systems by enabling simple, accurate record-keeping and enforcement of weapon laws in local languages. This powerful software digitises arms and ammunition record-keeping and can improve import, export, transfer and brokering controls; owner licensing and firearm registration; stockpile management and seizure capacity. It enables tracing, reporting, identification, and interagency cooperation. It helps low-capacity countries to reduce gun-related crime, trafficking, injury and death and to comply with international arms control treaties and agreements.

Each installation is tailor-made for the relevant government agency to enforce national and regional laws and to complement existing systems. Consultation, customisation and installation is followed by user and stakeholder training and on-going engagement. ArmsTracker© continues to be upgraded and optimised, and each update benefits all users.

ArmsTracker© was developed by the Centre for Armed Violence Reduction (CAVR), a registered not-for-profit headquartered in Australia, with personnel in Africa, Asia, North America and Europe. ArmsTracker© databases have been, and currently are being, installed in State Agencies across Africa and Small Island Developing States. Project reports and evaluations are available on request.

The Economic Community of West African States (ECOWAS) Commission, through an UNSCAR grant, has selected ArmsTracker© as their system to manage regional approval of international arms transfers in accordance with the ECOWAS *Convention on Small Arms and Light Weapons, Their Ammunition and Other Related Materials*. The ECOWAS Commission is keen for all West African States to install ArmsTracker and this is currently being done in Sierra Leone and Burkina Faso.

2. Contextual Information

While armed violence directly causes over half a million deaths per year[i] it kills many more people indirectly and has an enormous impact on much of the world, for example:
- **31%** of the world's population do not feel safe out in their community[ii]
- **80%** of the world's poorest will be living in fragile, conflict- and violence-affected countries by 2030 '*without action*' according to the OECD[iii]
- **800 million** people are deprived of sufficient food and a key factor is armed conflict '*fuelled by proliferation of illicit small arms*'[iv]

There are currently 29 States in Sub-Saharan Africa with outstanding international assistance requests for recordkeeping, tracing, stockpile management and transfer processes for conventional arms and ammunition. The 2019 UNIDIR assessment on 'The Role of Weapon and Ammunition Management in Preventing Conflict and Supporting Security Transitions', relevantly found: *'…transfer controls, marking and record-keeping, as well as tracing… are often neglected or under-developed.'* [v] Further, *'poor record-keeping remains one of the primary shortcomings among States in Africa'*.

These 'neglected' elements are critical to better control arms in most African States. To date assistance has been provided to meet some of the disarmament and destruction requests, though there has not been a viable system which can manage record-keeping, tracing and related aspects beyond a few capital cities. ArmsTracker© seeks to provide this solution and overcome the common challenges.

ArmsTracker© can also help address the following from the *Silencing the Guns in Africa by 2020 Roadmap*:

Challenges or Scourges	Practical Steps	Modalities for Mobilizing Action
3a) Illicit inflow of arms/weapons into Africa	- Stop suppliers and recipients from promoting and sustaining illicit business in arms/weapons - Collect, verify and provide information on those involved in illicit arms/weapons trade	- Enable information to emerge concerning a country of origin, transit, or destination and facilitators of movement, payment, storage and use of illicit arms/weapons reaching Africa - Enhance capacity of Member States to identify illicit weapons
3b) Illicit proliferation and circulation of arms/weapons inside Africa	- Stop rebels/insurgents, nonstate actors and their financiers and political backers from accessing weapons	- Provide capacity-building support for national institutions mandated to detect and recover illicit arms - Enhance collaboration to ensure the effective monitoring of arms embargoes, which should be extended to all parties engaged in conflict and distribution of SALW

3. Features of ArmsTracker©

ArmsTracker© assembles a wealth of data on State stockpiles and civilian possession of arms and ammunition for information-based policing. It supports regional cooperation, law enforcement and Customs networking and simplifies national reporting and information sharing. This is an e-gov solution which fills specific security gaps and builds capacity for other ICT and e-gov opportunities.

Each State Agency can choose an ArmsTracker© configuration to suit, for example Police, Military or Customs, then select only the features it needs. We configure every installation to match local laws and procedures, then we help the client to migrate any existing data. Available functions currently include:

Record-keeping
The heart of any arms control system, record-keeping is the single most requested category of international donor assistance.

ArmsTracker© is the world's most affordable record-keeping solution designed for small arm, light weapons and ammunition. The record-keeping functions are shown in the short video at ArmsTracker.org.

Licensing and Registration
ArmsTracker© identifies and stores photos of each officer or private individual authorised to use or possess a specified arm or category of arms. State and Agency licences can be issued to a rank or position, such as station commander or armourer. Every weapon is separately identified, photographed and registered, along with any ballistic images of expended ammunition or casings.

ArmsTracker© follows each registered arm as it transfers from one licence holder to another. A tamper-protected database maintains a chain of evidence and a history of personal responsibility for each arm all the way from import or seizure to export or destruction. E-mail reminders can be sent to expired licence holders, reducing the number of unlawfully held civilian weapons while recovering compliance costs.

Data Security
A secure asset management system for small arms, light weapons and ammunition, ArmsTracker© controls inventory for military units, police stations, Customs import/export comptrollers and registries of civilian firearms. No outsider has any access to the client's register, and no data can be shared unless the owner adds a feature to do so. The ArmsTracker© database exists only on the owner's premises, and only the owner can configure security settings and encryption. As with other downloadable software, periodic ArmsTracker© updates cannot access a client's data.

Trafficking, Tracing & Crime
ArmsTracker© is a potent tool for low-capacity law enforcement agencies to detect and prosecute arms trafficking. It quickly identifies illicit arms and helps transnational crime operations trace weapons back to their origin. Incident reports include photos and GPS coordinates, with all data designed to contribute to international tracing and mapping mechanisms such as iARMS (Interpol) and iTrace (Conflict Armament Research).

Arms Identification
Thanks to a partnership with the Australian Criminal Intelligence Commission, ArmsTracker© automatically classifies most of the world's commercially available small arms by maker, type, action and calibre. When an unknown firearm is located or seized, ArmsTracker© can also link to an international law enforcement firearm identification library. This describes the world's small arms by manufacturer, brand, model, action and markings, often with photographs. Accurate identification can validate both international tracing requests and local records of seized firearms awaiting judicial process, destruction or other disposal.

Ease of Use
Designed for instant use in low-capacity settings, ArmsTracker© displays a context-sensitive pop-up Help tooltip for every label, button and function, all in one or more languages of the client's choice.

Comprehensive Reporting
ArmsTracker© generates instant reports for management, or to inform other government departments. Without sharing their own confidential data, separate State Agencies can deliver anonymised, but compatible statistics for use in reports to international instruments such as the Arms Trade Treaty, the UN Register of Conventional Arms and UN Security Council arms sanctions. While popular report templates are included, users can also create their own. ArmsTracker© both exports and imports data in the most common file formats.

Data Migration
ArmsTracker© imports and re-codes legacy data from most popular databases, spreadsheets and file formats. To help State Agencies migrate records from existing systems without the data leaving their premises, initial import scripts can be written for each client to run on their own files. If an Agency requires complex or large-scale migration and cleaning of existing data, additional funding may be sought to engage local part-time staff or contractors.

Scalability
All ArmsTracker© data is stored in SQL, the world's most commonly used database format. This allows almost infinite scalability to proprietary or open-source platforms on local or wide area networks, intranets and cloud-based web apps. All networking, security protocols, encryption and remote storage are entirely at the discretion of, and under the control of the State Agency which owns the data. As technology evolves, ArmsTracker© data will not be left behind.

Additional Features
Frequent ArmsTracker© software updates make each new feature or improvement freely available to all. Under development are web apps for all popular devices to input data and interact from remote locations. Future developments will include connections to biometric identification systems, photographic ID card printers, barcode readers, e-manifests for exports and imports, community reporting of illicit arms and GPS mapping of illicit weapon hotspots. We welcome new ideas.

4. Agencies Benefitting from ArmsTracker©

As arms control systems vary from country to country, ArmsTracker© offers a version for each State Agency. These are then customised to suit each government department, its governing legislation and practices.

Law Enforcement
ArmsTracker© is purpose-built for information-based policing, enforcement of weapon laws and prevention of firearm-related crime. Its database replaces manual-entry, station-by-station logbooks and spreadsheets with a computerised regional or national register of service weapons, seized arms and privately held firearms. Police identify all officers and civilians authorised to possess an arm and can quickly register every weapon to a licensed officer or civilian. As each arms transfer is then tracked in real time for the life of every registered weapon, it becomes much easier for Police to prevent, detect and prosecute illegal possession, arms diversion and illicit trafficking.

ArmsTracker© also aids Police to licence arms dealers and brokers, authorise weapon imports and exports, trigger international tracing requests, follow up expired licences and recover associated costs.

Customs
ArmsTracker© was designed with experts who worked for years to develop the Arms Trade Treaty ([ATT](#)). It simplifies and standardises Customs import/export procedures to comply with the ATT and other relevant international arms control instruments, maintains a register of arms and ammunition as they move through a Customs port and tracks trans-shipments and transfers to and from authorised importers and exporters. As many small island and developing States work to upgrade their border controls to comply with the ATT, ArmsTracker© ensures that even inexperienced users record accurate transfers and generate reports which meet international obligations.

Military
ArmsTracker© is not designed to equal or to replace existing military asset tracking systems which typically include a wide range of equipment and matériel. Instead, it provides a purpose-built weapon and ammunition tracking solution for smaller militaries to maintain accurate, real-time accountability across their armouries and ammunition magazines. The tamper-protected database allocates responsibility for each weapon and batch of ammunition to a unit, rank or individual, greatly reducing the risk of diversion and trafficking. Commanders can set up one-touch reports to deliver selected data to headquarters or for central government oversight. ArmsTracker© is also an ideal, and highly credible tool to demonstrate compliance with regional arms control regimes and UN Security Council sanctions.

Other Agencies with Armed Personnel
ArmsTracker© assists any entity which needs to manage armed personnel, armouries and ammunition magazines regardless of size. In addition to the above, such entities are typically Corrections / Penitentiary Guard, Coastguard, Park Ranger or Water and Forestry Services. The system is very simple to operate and suits personnel with limited experience and even less time for record-keeping.

Executive
ArmsTracker© can be configured to automatically send reports or alerts when risk thresholds are reached, or when events occur. Each client can set up software permissions on its own network which allow

oversight officials to access real-time reports of selected data, perhaps in read-only format, without waiting for approval. This guarantees timely intelligence and eliminates delays inherent in multi-agency information exchange.

Foreign Affairs

ArmsTracker© enables ministries of Foreign Affairs, commonly responsible for reporting under a range of international instruments such as the Arms Trade Treaty, the UN Register of Conventional Arms, the UN small arms Programme of Action and regional arms control conventions, to reduce or eliminate delays in gathering the necessary information. Without sharing other confidential data, each Agency can automatically anonymise and make available the short summaries required for international compliance. Across all government departments, ArmsTracker© reports use globally standardised descriptors to ensure compatibility of data.

Recent years have seen a decrease in the rate of international reporting on conventional arms. States using ArmsTracker© can more easily meet the obligations of the treaties and agreements to which they contribute, while at the same time reduce their own reporting loads.

Community

ArmsTracker© is available only to national governments and their agencies. However, as some countries require a community reporting system to collect tips about illicit arms, these contributions can be stored separately. Public participation can play an important role in alerting authorities to suspected diversion of illicit arms and the location of weapons, often directly to Police or via anonymous tip lines such as Crime Stoppers. These community reports are processed, and if possible actioned by the appropriate agencies.

5. Contact Details

For further information, please contact:
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Endnotes

[i] http://www.genevadeclaration.org/measurability/global-burden-of-armed-violence/

[ii] World Gallup Poll of 'people who feel safe walking alone at night': https://www.gallup.com/analytics/267869/gallup-global-law-order-report-2019.aspx. This is the most comprehensive data regarding SDG16.1.4.

[iii] http://www.oecd.org/dac/states-of-fragility-2018-9789264302075-en.htm. Despite that forecast, only 2% of aid is spent on armed conflict and violence prevention.

[iv] European Union, *'Securing Arms, Protecting Citizens - EU Strategy against illicit firearms, small arms & light weapons and their ammunition'.* *http://data.consilium.europa.eu/doc/document/ST-13581-2018-INIT/en/pdf*, p5.

[v] UNIDIR, 'The role of weapon and ammunition management in preventing conflict and supporting security transitions: Preliminary findings and key policy considerations', 2019, Executive Summary, http://unidir.org/files/publications/pdfs/the-role-of-weapon-and-ammunition-management-in-preventing-conflict-and-supporting-security-transitions-en-773.pdf