

TOWARDS BMS7: MARKING AND TRACING

When law enforcement officials are able to trace small arms back to their last legitimate owner – who might then be held accountable – this forms an effective measure against the diversion of weapons. For that purpose, it is essential that the weapon be marked upon production and import and that appropriate records be kept.¹

The proliferation of illicit small arms and light weapons (SALW) is a global problem that prolongs conflicts, facilitates violations of international humanitarian law and human rights law, and puts civilians at high risk of death or injury from weapons-related violence.

Marking and tracing SALW and ammunition is key to addressing this proliferation. Most illicit small arms and light weapons begin as legally manufactured, imported or legally owned weapons that are subsequently diverted to the illicit realm. Marking and tracing enables the systematic tracking of illicit small arms or light weapons from their point of manufacture or most recent import, through their lines of supply, to their last legal title-holder, in order to determine the point, in space and time, at which they became illicit.² Given that illicit SALW and ammunition are easily smuggled across national borders, international cooperation in marking and tracing is also vital.

Effective marking and tracing forms part of the vital work to achieve the 2030 Agenda for Sustainable Development, specifically to provide data relevant to Sustainable Development Goal (SDG) indicator 16.4.2 (“proportion of seized, found or surrendered arms whose illicit origin or context has been traced or established by a competent authority in line with international instruments”), which will assist in verifying the fulfilment of SDG target 16.4 (which includes “significantly reducing illicit financial and arms flows”).

What is marking and tracing?

Marking is the inclusion of specific information on firearms that uniquely identifies the firearm. The primary purpose for marking firearms is to enable law enforcement to trace crime gun and to combat the trafficking and stockpiling of firearms. Tracing a firearm cannot happen without marking.

Tracing is, as defined by the International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons (ITI), “the systematic tracking of illicit small arms and light weapons found or seized on the territory of a State from the point of manufacture or the point of importation through the lines of supply to the point at which they became illicit”.³

The requirements for successfully tracing an illicit SALW include:

¹ <https://www.un.org/disarmament/convarms/small-arms-marking-recordkeeping/>

² UNODA Small Arms Tracing <https://www.un.org/disarmament/convarms/small-arms-tracing/>

³ The International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons was adopted in 2005 in the framework of the PoA: <https://www.unodc.org/documents/organized-crime/Firearms/ITI.pdf>

- the presence of a unique identification of the weapon based on its markings and physical characteristics;
- a domestic tracing operation to establish whether the weapon:
 - became illicit while under the jurisdiction of the State that recovered it (e.g. following its domestic manufacture or import); or
 - possibly entered the country by illicit means;
- an international tracing operation, if the weapon is suspected of having entered the country by illicit means;
- a tracing operation (domestic or international) that identifies the point in time and space at which the weapon became illicit;
- taking action to prosecute those responsible for diverting the weapon and to prevent similar diversions from re-occurring;
- having data from the tracing operation included in national report on tracing illicit small arms and light weapons.⁴
- Record-keeping is also an essential aspect of weapon management, and is a prerequisite for successful tracing operations. Keeping records of weapons through registration and record-keeping ensures that a state is able to share information on these weapons at the national level across security forces (through domestic tracing) and at the international level (through international tracing).

Why is marking and tracing important?

Marking and tracing is one of the fundamental pillars on which effective SALW management rests. It enables states to identify and control weapons under their jurisdiction. In the absence of marking and tracing, it is very challenging for states to identify ownership of a weapon used in armed crime, breaches of arms embargoes, or to track the sources of weapons and ammunition in conflicts. Identifying a weapon's point of diversion is also necessary to preventing future diversions and developing effective measures against illicit flows of SALW.

For marking and tracing to be effective it is also essential that standards and procedures are kept up to date. In the last decade, new challenges have emerged which are related to developing technologies in the production of SALW. These include the use of new materials such as plastics instead of metal, the production of modular weapons where the calibre can be easily altered as well as the risks involved as 3D printing becomes more accessible and affordable.

Marking of ammunition

Marking of ammunition is crucial for the same reasons as for SALW but it is more complex and has been a contested issue both for political and economic reasons. As MOSAIC states, “[I]t can be difficult to trace illicit ammunition, especially if ammunition manufactured as a single lot (and bearing a unique lot number) is divided up and transferred to multiple different users. Under some circumstances, however, illicit ammunition can be successfully traced; e.g. if a single lot of ammunition (bearing a unique lot number) is transferred in its entirety to a single recipient (e.g. a military force) and the transfer is adequately recorded.”⁵

A Small Arms Survey study explains further noting that as most of the information vital for ammunition tracing purposes is found on the packaging, rather than on the limited space of the cartridge “the problems start once it [ammunition] leaves these boxes, and the consequences of this scenario have rendered the possibility of marking lot numbers on individual cartridges a central and controversial point of the international debate.”⁶

Marking and tracing of ammunition is not specifically addressed in the PoA, as controls on ammunition are not explicitly included in the PoA or the ITI text.⁷ Instead, all progress on ammunition management has

⁴ United Nations Office for Disarmament, Small arms: Tracing <https://www.un.org/disarmament/convarms/small-arms-tracing/>

⁵ MOSAIC module 5.31: <https://www.un.org/disarmament/wp-content/uploads/2018/10/MOSAIC-05.31-2012EV1.0.pdf>

⁶ Small Arms Survey, Issue Brief 3, Ammunition Marking (2011) <http://www.smallarmssurvey.org/fileadmin/docs/G-Issue-briefs/SAS-IB3-Ammunition-Marking.pdf>

⁷ See, IANSA briefing paper “The Programme of Action on Small Arms: Why Ammunition must be included”: <https://iansa.org/the-programme-of-action-on-small-arms-why-ammunition-must-be-included-june-2021/>.

happened outside of the PoA process. For example, MOSAIC module 5.31 (Tracing Illicit SALW) includes guidance on the marking of ammunition.⁸

Also, in 2017, a group of governmental experts (GGE) was convened to examine “problems arising from the accumulation of conventional ammunition stockpiles in surplus”. In a Note by the Secretariat in connection to the GGE, it was noted that “[T]he marking of ammunition for small arms and light weapons has proven technically feasible and cost-effective, as evidenced by the introduction by some States of laser marking in the production chain or by traditional headstamp marking. In some regions, and in Latin America and the Caribbean in particular, there is growing interest in exploring ammunition marking at the national, subregional and regional levels.”⁹

How is marking and tracing included in the PoA?

Commitments on marking and tracing in the PoA text are broadly related to ensuring that measures are in place for tracing, ensuring that manufacturers apply a marking and to consider cooperation and assistance to improve marking and tracing.

The more detailed commitments on marking and tracing are in the ITI. In the ITI states commit to undertaking measures to ensure the adequate marking and record-keeping of SALW and to strengthen cooperation in tracing illicit SALW.

What are the objectives and key provisions of the ITI?

The general objectives of the ITI are to enable tracing of illicit SALW, facilitate international cooperation and assistance and enhance and complement bilateral and regional agreements on controls of SALW.

The key provisions are summarised as:¹⁰

Marking:

- method of marking is a national prerogative but must be visible, readable, durable, recoverable;
- at the point of manufacture: include marking of manufacturer, the country of manufacture and serial number;
- on import: to the extent possible simple marking of country and year of import on each SALW;
- found or seized illicit SALW must be uniquely marked, recorded; or destroyed.

Record-keeping:

- records of marking weapons must be established and kept as long as possible;
- manufacturing records: kept at least 30 years;
- all other records, including imports and exports: kept at least 20 years.

Cooperation in tracing:

- have systems in place to undertake confidential traces;
- tracing can be initiated by states, providing initial sufficient information;

⁸ <https://www.un.org/disarmament/wp-content/uploads/2018/10/MOSAIC-05.31-2012EV1.0.pdf>

⁹ <https://undocs.org/GGE/PACAS/2020/2>

¹⁰ Presentation on ITI by United Nations Office on Disarmament Affairs (UNODA) https://www.un.org/disarmament/wp-content/uploads/2018/03/2018-03-22-ITI_UNODA_PrepCom.pdf

- responding states will respond within a reasonable amount of time.

Implementation:

- adopt appropriate national regulations;
- designate national points of contact;
- render international assistance;
- cooperate with the United Nations and INTERPOL;
- submit biennial national report.

What progress has been made in the PoA framework on marking and tracing?

Meetings and national reports on PoA and ITI are combined. A UNIDIR project from 2018 aimed at examining options to support the operationalization of the ITI concludes that several challenges remain, including issues related to identification, marking, record-keeping and information sharing.¹¹

Nevertheless, the Small Arms Survey's assessment of national reports submitted by states between 2012 and 2017 on the implementation of the PoA and the ITI concludes that reporting states provided evidence of progress in all of these areas during 2012–17. The assessment states, "[T]he overwhelming majority of the 110 states mark small arms in the possession of government armed and security forces (98 states) and have an NPC [national point of contact] for the ITI (94 states), procedures in place for tracing (83 states), and laws, regulations, and/or administrative procedures governing brokering of small arms (82 states)".¹²

These advancements are echoed in the UN Secretary-General 2019 report which also highlights that "[M]ore assistance for the effective implementation of the Programme of Action and the International Tracing Instrument is strongly encouraged."

New designs and production methods of SALW and how these could negatively impact effective SALW control has been on the PoA agenda for years. In 2014 the UN Secretary-General submitted a report providing an overview of technological developments considering weapons tracing requirements under the ITI, including implications for ITI implementation.¹³ The report focused on weapons with polymer frames, 3D-printed weapons, and the increasingly modular nature of weaponry.

The 2018 Review Conference on the Illicit Trade in Small Arms and Light Weapons (RevCon3) also discussed the topic of new technologies and how this presents challenges and opportunities for the marking, record-keeping and tracing of SALW. The RevCon3 outcome document encourages the appropriate use of new technologies for marking, record-keeping and tracing, where available, in strengthening the implementation of the ITI. RevCon3 also requested an updated report on recent developments including recommendations on ways to address them.¹⁴

In relation to marking and tracing, the new materials used in the production of weapons, such as plastics, can have negative consequences for marking, making them easier to erase or simply less durable. Modular weapons also require markings of several parts. At the same time, new technologies such as laser-marking, micro-stamping and electronic data collection present opportunities in terms of being more difficult to detect and erase.

¹¹ UNIDIR final report "International Tracing Instrument (ITI) and the Way Forward: Examining Possible Options to Support the Operationalization of the ITI (2018) <https://www.unidir.org/files/publications/pdfs/the-international-tracing-instrument-examining-options-to-support-operationalization-en-712.pdf>

¹² Paul Holtom and Moshe Ben Hamo Yeger, *Implementing the Programme of Action and International Tracing Instrument – An Assessment of National Reports, 2012–17*, (2018), Small Arms Survey: <http://www.smallarmssurvey.org/fileadmin/docs/U-Reports/SAS-Report-PoA-ITI-2012-17.pdf>

¹³ Secretary General's Report, Recent developments in small arms and light weapons manufacturing, technology and design and implications for the implementation of the International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons (2014) https://www.un.org/ga/search/view_doc.asp?symbol=A/CONF.192/BMS/2014/1&referer=/english/&Lang=E

¹⁴ UNODA Information Bulletin, October 2018: <https://www.un.org/disarmament/2018/>

One challenge here lies in the instrument itself. As noted above, the ITI requires markings to be visible. The Chair of BMS7 has therefore suggested the consideration of a Supplementary Annex to the ITI to be included on the agenda.

What should states do on marking and tracing at BMS7?

During BMS7, states should:

1. **Ensure the continued relevance of the ITI by supporting the development of a Supplementary Annex** to address recent developments in SALW manufacturing, technology, design, materials used as well as implications for the ITI.
2. **Include ammunition in the thematic discussions on marking and tracing**, especially in relation to the complexities related to the marking and tracing of ammunition for SALW. The tracing of ammunition today relies on a patchwork of national regulations. Systematic data collection and sharing would enhance transparency and accountability, contribute to limiting the illicit trade and identifying points of diversion, and ultimately prevent the illicit use of ammunition to commit violent acts.
3. Commit to marking all military, police and other law enforcement SALW.
4. Develop procedures at the national level to **maintain up-to-date records** of the markings on confiscated weapons for 20 years and have adequate procedures to keep records of all marked small arms and light weapons;
5. Commit to having **detailed national procedures** and trained relevant law enforcement officials to trace small arms and light weapons.

Further Resources

- Small Arms Survey: Marking, Record-keeping, and Tracing: <http://www.smallarmssurvey.org/regulations-and-controls/control-measures/markings-record-keeping-tracing.html>
- Small Arms Survey: Implementing the Programme of Action and International Tracing Instrument – An Assessment of National Reports, 2012–17 (2018) by Paul Holtom and Moshe Ben Hamo Yeger: <http://www.smallarmssurvey.org/fileadmin/docs/U-Reports/SAS-Report-PoA-ITI-2012-17.pdf>
- United Nations Office for Disarmament Affairs (UNODA):
 - Small arms: tracing <https://www.un.org/disarmament/convarms/small-arms-tracing/>
 - Small arms: new technologies <https://www.un.org/disarmament/convarms/small-arms-new-technologies/>
- United Nations Institute for Disarmament Research: 'The International Tracing Instrument: Examining options to support Operationalization' (2018) written by Dr Andrea Edoardo Varisco. Head of Analytics for Conflict Armament Research: <https://www.unidir.org/files/publications/pdfs/the-international-tracing-instrument-examining-options-to-support-operationalization-en-712.pdf>

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