UNODA United Nations Office for Disarmament Affairs

FACT SHEET

SAFE AND SECURE AMMUNITION MANAGEMENT THROUGH 'UN Saf*er*Guard'

In 103 countries over the past five decades, poorly-stored ammunition stockpiles have led to grave incidents resulting in accidental explosions and humanitarian disaster. Thousands of people have died, and the livelihoods of entire communities have been disrupted. Unsecured and/or poorly managed national ammunition stockpiles also lead to considerable diversion to illicit markets. Diverted ammunition is increasingly used to assemble improvised explosive devices.

The Security Council recommended that stockpile security and the management of arms and ammunition be promoted "as an urgent priority (S/RES/1952 (2010)." The General Assembly requested the United Nations to develop guidelines for adequate ammunition management (A/RES/63/61). In response, the **International Ammunition Technical Guidelines (IATG)** were developed in 2011 and the **UN Saf*er*Guard Programme** was established as the corresponding knowledge management platform.

The UN Saf*er*Guard Programme oversees the dissemination of the IATG: practical, authoritative, step-by-step advice for those who wish to improve the safety and security of their ammunition storage sites.

Devastation from a 2012 ammunition depot explosion in Brazzaville, Congo. 200 people were killed, 2000 injured. Photo: Erwan Morand.

International Ammunition Technical Guidelines

The UN Saf*er*Guard Programme serves as the custodian for the IATG – ensuring their highest technical quality through regular updates. The **IATG are publicly available** to assist national authorities – including armed forces, police officers and border control officials – as well as industry, private security companies and others to enhance the safety and security of ammunition stockpiles. The direct result: a reduction of the dual risks of unplanned explosions and illicit diversion.

Users of the IATG can opt for implementing the guidelines' **basic**, **intermediate**, or **advanced** levels, making the IATG relevant for all situations by taking into account the diversity in capacities. These increasingly thorough steps are called *risk reduction process levels* (RRPLs).

The IATG are updated, at a minimum, every five years. Version 2 was released in 2015. See: **www.un.org/disarmament/un-saferguard**.

Tools

Key tools – putting the IATG in practice – are available for immediate use in improving ammunition safety at **www.un.org/disarmament/un-saferguard**.

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A sample of available tools is provided below:

- **Risk reduction checklist**
  How safe is an explosive storehouse? Which IATG module activities are the most urgent? For the stockpile concerned, what is the risk-reduction process level?
- **Quantity-distance map**
  What should be the minimum perimeter around an explosive storehouse in order for an unwanted explosion to have limited effects?
- **Vertical danger area calculator**
  How low can aircraft and helicopters safely fly over an explosive warehouse?
- **Explosive limit license generator**
  How far from the explosive storehouse can other structures be placed?
- **Explosion Consequence Analysis**
  What is the potential hazard to individuals and property from blast effects and fragmentation in the event of an explosive event?
- **Noise prediction**
  What is the distance from detonation at which 140 decibels (dB) could be expected?
- **Gurney equation for fragment velocity**
  How fast will an explosive accelerate a surrounding layer of metal or other material when the explosive detonates?
- **Hopkinson-Cranz scaling law**
  Using the Hopkinson-Cranz rule, what is the scale distance of an explosive? What are the Quantity-Distance (Q-D) criteria?
- **Detonation pressure**
  What is the detonation pressure of an explosive, in Giga Pascals, given its density and velocity of detonation? Is it a high brisance or low brisance explosive?
- **Explosion danger area (based on the International Mine Action Standards)**
  What is the estimate-range danger area when planning the destruction of ammunition by open detonation?
- **Explosive Ordnance Disposal (EOD) task estimation matrix**
  A spreadsheet for calculating a time estimate for EOD tasks.

Quick-response mechanism

The UN Saf*er*Guard Programme identifies technical expertise to provide immediate assistance to requesting national authorities for high-risk situations involving ammunition. Under the **UN SaferGuard Quick-Response Mechanism**, UNODA arranges for urgent ammunition stockpile management improvement, technical assessments and/or clearance activities. Donors can contact UNODA to contribute. Affected countries and clearance specialists can also connect with UNODA for further information.

Training and preventive capacity-building

Course materials are available on the UN Saf*er*Guard website, covering topics such as:

- Military ammunition stockpile management
- Small-unit ammunition stockpile management for law enforcement officials
- Ammunition management in field operations
- Accounting for and tracing ammunition

www.un.org/disarmament/un-saferguard
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