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**IATG**  
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**Ammunition on multi-national  
operations**

### **Warning**

The International Ammunition Technical Guidelines (IATG) are subject to regular review and revision. This document is current with effect from the date shown on the cover page. To verify its status, users should consult [www.un.org/disarmament/ammunition](http://www.un.org/disarmament/ammunition)

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## Foreword

Ageing, unstable and excess conventional ammunition stockpiles pose the dual risks of **accidental explosions at munition sites** and **diversion to illicit markets**.

The humanitarian impact of ammunition-storage-area explosions, particularly in populated areas, has resulted in death, injury, environmental damage, displacement and disruption of livelihoods in over 100 countries. Accidental ammunition warehouse detonations count among the heaviest explosions ever recorded.

Diversion from ammunition stockpiles has fuelled armed conflict, terrorism, organized crime and violence, and contributes to the manufacture of improvised explosive devices. Much of the ammunition circulating among armed non-State actors has been illicitly diverted from government forces.<sup>1</sup> In recognition of these dual threats of explosion and diversion, the General Assembly requested the United Nations to develop **guidelines for adequate ammunition management**.<sup>2</sup> Finalized in 2011, the International Ammunition Technical Guidelines (IATG) provide voluntary, practical, modular guidance to support national authorities (and other stakeholders) in safely and securely managing conventional ammunition stockpiles. The UN SaferGuard Programme was simultaneously established as the corresponding knowledge-management platform to oversee and disseminate the IATG.

The IATG also ensure that the United Nations entities consistently deliver high-quality advice and support – from mine action to counter-terrorism, from child protection to disarmament, from crime reduction to development.

The IATG consist of 12 volumes that provide practical guidance for ‘through-life management’ approach to ammunition management. The IATG can be applied at the guidelines’ **basic, intermediate, or advanced levels**, making the IATG relevant for all situations by taking into account the diversity in capacities and resources available. Interested States and other stakeholders can **utilize the IATG for the development of national standards and standing operating procedures**.

The IATG are reviewed and updated at a minimum every five years, to reflect evolving ammunition stockpile-management norms and practices, and to incorporate changes due to changing international regulations and requirements. The review is undertaken by the UN SaferGuard Technical Review Board composed of national technical experts with the support of a corresponding Strategic Coordination Group comprised of expert organizations applying the IATG in practice.

The latest version of each IATG module can be found at [www.un.org/disarmament/ammunition](http://www.un.org/disarmament/ammunition).

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<sup>1</sup> S/2008/258.

<sup>2</sup> See also the urgent need to address poorly-maintained stockpiles as formulated by the United Nations Secretary-General in his Agenda for Disarmament, *Securing Our Common Future* (2018).

## Introduction

This IATG module is designed for the guidance of personnel involved in the planning, deployment and operational aspects for the storage, handling and use of ammunition and explosives on multi-national (MN) operations. The deployed ammunition may not necessarily be directly managed by ammunition-qualified personnel.<sup>3</sup>

The principles and procedures for the safe, effective and efficient storage, handling, transport and use of ammunition are the same whether the ammunition and explosives are in an explosive storage area or whether they are held in temporary storage locations. However, it is recognised that the range of procedures during deployed operations will be substantially less than at the base or logistic level.

These guidelines should apply in a deployed environment and establish the minimum safety requirements for deployed multi-national (MN) forces. Compliance with these guidelines is strongly recommended except where compelling operational necessity requires otherwise; at which point an explosion consequence analysis must be completed and approved at the appropriate level to accept the residual risk. Many clauses in the IATG are directly applicable for safe storage during deployed operations. Where appropriate these Clauses have been included in this IATG module for ease of reference.

### Planning for Support to Multi-national (MN) Operations

The General Assembly welcomed the continued application of the IATG in the field, including the implementation software and training materials and encourages, in this regard, the safe and secure management of ammunition stockpiles in the planning and conduct of peacekeeping operations, including through the training of personnel of national authorities and peacekeepers, utilizing the IATG.

This module provides basic planning guidance for Troop Contributing Countries (TCC) by detailing key Force-level explosives safety and risk management roles and responsibilities and required competencies. It establishes the minimum IATG requirements that should be applied to ensure the safety of unit personnel and the public by providing a table that points to appropriate IATG modules and clauses to at least meet Risk Reduction Process Level (RRPL) 1 stockpile management requirements, and even higher RRPL if possible. The module additionally requires that all TCC providing ammunition certify that their ammunition deployed in support of a MN operation is 'safe to deploy' and serviceable and with sufficient shelf-life for the deployment.

TCCs supporting MN operations need to be prepared to implement IATG 12.10 requirements when on a UN or MN base. This requires awareness and understanding of such requirements, as well as training of personnel to meet those requirements while in their home countries and prior to arrival at the deployment location.

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<sup>3</sup> Usually Ammunition Technical Officers (ATO) or equivalently trained and qualified Explosive Safety Officers (ESO)

## Ammunition on multi-national operations

### 1 Scope

This IATG module introduces guidance for the safe storage and handling of ammunition and explosives on MN operations. These may include; 1) those mandated by the UN Security Council (UNSC)<sup>4</sup>; 2) those undertaken by regional organizations (e.g. African Union); or 3) those undertaken by coalitions.

### 2 Normative references

A list of normative references is given in Annex A. These documents are referred to in the text in such a way that some, or all, of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

A further list of informative references is given in Annex B in the form of a bibliography, which lists documents that contain additional information related to the contents of this IATG module.

### 3 Terms and definitions

For the purposes of this module the following terms and definitions, as well as the more comprehensive list given in IATG 01.40 *Glossary of terms, definitions and abbreviations*, shall apply.

The term 'shelf life (service life) expiry date (SLED)' refers to the date on which the shelf life (or service life) of an ammunition item expires. In all modules of the International Ammunition Technical Guidelines, the words 'shall', 'should', 'may' and 'can' are used to express provisions in accordance with their usage in ISO standards.

- a) **'shall' indicates a requirement:** It is used to indicate requirements strictly to be followed in order to conform to the document and from which no deviation is permitted.
- b) **'should' indicates a recommendation:** It is used to indicate that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required, or that (in the negative form, 'should not') a certain possibility or course of action is deprecated but not prohibited.
- c) **'may' indicates permission:** It is used to indicate a course of action permissible within the limits of the document.
- d) **'can' indicates possibility and capability:** It is used for statements of possibility and capability, whether material, physical or casual.

### 4 Background

It would be inappropriate to expect personnel not qualified in ammunition management to be aware of all the detailed technical requirements for the safe storage of ammunition and explosives. However, this should not affect their responsibility to protect the health and safety of unit members, the general public and the natural environment.

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<sup>4</sup> For UN peace operations, further guidance can be found in the United Nations Manual on Ammunition Management, First Edition 2020, available at: <http://dag.un.org/handle/11176/401037>. The Manual is firmly based on the IATG.

This module is designed to be used as a reference guideline to the other fundamental clauses within the IATG that should be applied to the handling, storage and transport of ammunition by troop contributing countries (TCC) during MN operations. This should then ensure that the storage complies to a minimum of Risk Reduction Process Level 1.<sup>5</sup>

## 5 Responsibilities

The Force Commander shall have overall responsibility for all ammunition and explosives safety.<sup>6</sup>

The Force Commander shall also be accountable for striking a balance between safety and operational requirements using the information available. The Force Commander shall be informed when the minimum standards cannot be met and should understand the possible consequences of any reduction in safety criteria.

A checklist for the guidance of the Force Commander is at Annex C.

Before the Force Commander makes any decision to deviate from IATG requirements the Force Commander should consult an appropriately qualified and experienced Explosives Safety Officer. It therefore follows that a competent person of an appropriate rank/grade should be designated in writing as the Force Explosives Safety Officer (FESO), to be responsible to the Force Commander for all explosive safety and security matters. The FESO should ideally be a member of the Force Headquarters staff, but for smaller deployments the FESO may be a member of a TCC unit.

### 5.1 Risk management

Explosives safety and munitions risk management (ESMRM) is a systematic approach that integrates risk assessment into operations planning, military training exercises, and contingency operations with the goal of identifying potential consequences associated with munitions operations, risk reduction alternatives, and risk decision criteria for key decision makers.<sup>7</sup> The first level of risk management is the application of appropriate Quantity Distances (QD) or Temporary distances (TD), as detailed in IATG 02.20 and 04.20 respectively.

Any relaxation in the safety standards contained within this IATG module shall require a risk analysis. The risk analysis is a systematic procedure that will determine if acceptable levels of force protection and public protection are provided. It should be conducted in accordance with IATG 02.10 *Introduction to risk management principles*. Acceptance of risk shall be made by the Force Commander, after considered judgment of the balance of risk after development, implementation and enforcement of control measures to mitigate the risk, whilst maintaining operational efficiency. The Force Commander may delegate this responsibility to an appropriate level, but any risk assessment that indicates the possibility of fatalities shall be personally signed off by the Force Commander.

The acceptance of any residual risk resulting from a reduction of the guidelines within this IATG module shall be a documented waiver that formally accepts the residual risk. The Force Commander shall personally sign this waiver and risk acceptance document. The Force Commander should also ensure that this residual risk is immediately communicated to the appropriate authorities, (e.g. HQ UN DPO, national governments, etc.).

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<sup>5</sup> See IATG 01.20 *Index of risk reduction process levels within IATG*.

<sup>6</sup> In United Nations peace operations with an integrated mission structure, where the authority for logistic support and engineering falls under the director/chief mission support (D/CMS) and not under the force commander, the responsibility for all ammunition and explosives safety is raised to a higher level in the mission leadership. For United Nations peace operations the weapons and ammunition advisory board (WAAB), which is chaired by the civilian mission chief of staff one level above the Force Commander, is responsible for all aspects of weapons and ammunition management (WAM).

<sup>7</sup> Allied Logistics Publication (ALP)-16, *Explosives Safety and Munitions Risk Management in NATO Planning, Operations, and Operations*

## 6 Operational planning

### 6.1 Force Explosives Safety Officer (FESO)

A Force Explosives Safety Officer, of an appropriate rank/grade, shall be designated in writing by the Force Commander, or the Operational Headquarters. The FESO shall be responsible for advising the Force Commander on all ammunition and explosives safety matters, including safe handling and disposal of ammunition and explosives during Disarmament, Demobilization and Reintegration (DDR) processes. The mandate of the FESO to implement explosive safety activities within the deployed force should be considered and designated by the Force Commander.

### 6.2 Force generation

An appropriately qualified and experienced officer<sup>8</sup> shall be appointed as the Force Explosive Safety officer. This officer shall have the following competencies:

- a) have a detailed technical knowledge and understanding of the full scope of IATG;
- b) be able to calculate the appropriate Quantity Distances/Temporary Distances (QD/TD) (IATG 02.20/IATG 04.20) to be applied from Potential Explosion Sites (PES) to other PES and to Exposed Sites (ES);
- c) be able to plan an Ammunition Storage Area (ASA) in accordance with IATG 02.20/IATG 04.20 (For example, the number of PES required, barricade requirements, appropriate QD/TD);
- d) have a detailed knowledge and understanding of lightning protection system and fire prevention requirements;
- e) be able to immediately visually identify explosive safety standard shortcomings during a survey or inspection of ammunition storage and maintenance operations;
- f) be knowledgeable of accident reporting procedures and capable of investigating ammunition accidents from first principles of ammunition technology and explosive engineering;
- g) be able to determine the risk and consequences of deviations from the regulations and communicate with the Operational Commander the mitigating efforts necessary to reduce or eliminate hazards. This will inevitably include the requirement to develop Explosion Consequence Analysis (ECA) reports based on first principles of ammunition technology and explosive engineering, as well as advising the Force Commander on ESMRM;
- h) have a detailed knowledge of appropriate mitigation and protective construction design techniques and methodologies;
- i) be able to prepare explosives limits licences based on QD, TD and ECA.
- j) Explosive Ordnance Disposal (Conventional Munition Disposal) matters;
- k) the implementation of MOSAIC 02.30 *Small arms and light weapons control in the context of DDR*
- l) the safe collection of ammunition and explosives from the civilian population in accordance with MOSAIC 05.40 *Collection of illicit and unwanted small arms and light weapons*;
- m) the safe destruction of weapons recovered from the civilian population in accordance with MOSAIC 05.50 *Destruction: Weapons*; and

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<sup>8</sup> The range of competencies required of this appointment means that it is unlikely to be effectively filled by an officer who is not Ammunition Technical Officer (ATO) qualified (or national equivalent).

n) the safe destruction of ammunition and explosives recovered from the civilian population in accordance with IATG 10.10 *Demilitarization, destruction and logistic disposal of conventional ammunition*.

Should a FESO not be identified with the qualifications and experience necessary to advise on j) to n) above, then an appropriately qualified individual should also be appointed to the Force Headquarters.

It is recommended that during the planning process, provision should be made to involve appropriately qualified personnel in the storage, management and safe logistic disposal of ammunition and explosives. This should, ideally, be the FESO designated for the Force.

### **6.3 Field locations**

The aim of the planning phase should be to identify appropriate locations, with adequate outside QD, for the safe storage of TCC ammunition. The following information should be obtained before starting the reconnaissance:

- a) maps of the area;
- b) environmental and weather information of the area. It must be remembered that high temperatures and high humidity can affect the lifetime, quality and safety of some kinds of ammunition, such as rocket systems, flares, White Phosphorus (WP) etc;
- c) type of mission and operation (e.g. peace keeping, peace enforcing);
- d) ammunition type, NEQ hazard division (HD), (for flexibility in the use of the storage, all planning should be based upon HD 1.1 material only and compatibility group (CG));
- e) type of activities in the Ammunition Storage Area such as maintenance, handling of captured ammunition, packaging etc;
- f) any Memorandum of Understanding (MOU) between partners and the host nation;
- g) potential threats;
- h) suitability of terrain (e.g. flood-prone, swampy, vegetation, ground quality, gradient etc);
- i) requirement for specialized buildings (i.e. workshops, receipt and issues area, salvage and office buildings); and
- j) availability of utilities (e.g. power, water).

### **6.4 Certification of the condition of deployed ammunition**

TCC of UN peace operations shall certify that all ammunition deployed in support of national contingents is 'safe to deploy', serviceable and with sufficient shelf-life for the deployment, or until replacement stocks arrive. The form at Annex E (or national equivalent) shall be completed as appropriate by e.g. the national consignor and distributed as indicated on the certificate. Further details shall be described in a Memorandum of Understanding (MoU).

## **7 Ammunition management in operations**

Table 1 summarises the Clauses in the IATG that should be applied to the management of ammunition storage and transport during MN operations to ensure the safety of unit personnel and the general public. The requirements are listed alphabetically for ease of reference:

Requirement	Summary	IATG Reference	
		IATG #	Clause
Accounting	<ul style="list-style-type: none"> <li>▪ Accounting systems.</li> <li>▪ Stack tally cards.</li> <li>▪ Stocktaking and audits.</li> </ul>	03.10	14.2 14.5 14.6
Ammunition Accidents	<ul style="list-style-type: none"> <li>▪ Actions by user unit.</li> <li>▪ Reporting format.</li> </ul>	11.10	8 Annex C
Classification of Ammunition and Explosives	<ul style="list-style-type: none"> <li>▪ Ammunition and explosives are classified in accordance with the UN Globally Harmonised System.</li> </ul>	01.50	6.1 6.2
Controlled Articles and Contraband	<ul style="list-style-type: none"> <li>▪ The prohibition of contraband within temporary or field storage.</li> </ul>	06.10	5.3
Documentation and Records (Held in Magazine)	<ul style="list-style-type: none"> <li>▪ Explosive Limits Licence</li> <li>▪ Humidity Record</li> <li>▪ PES Log Book</li> <li>▪ Temperature Record</li> </ul>	02.30 06.70 06.70 06.70	7 Annex D Annex C Annex D
Explosives Licence	<ul style="list-style-type: none"> <li>▪ Required to ensure that safe levels of storage are authorised and maintained.</li> </ul>	02.30	7
Faults and Performance Failures during use	<ul style="list-style-type: none"> <li>▪ System for the reporting of ammunition faults and performance failures when used for training or on operations.</li> </ul>	01.60	7 8 Annex C
Fire Safety	<ul style="list-style-type: none"> <li>▪ Fire alarm systems.</li> <li>▪ Fire practices.</li> <li>▪ Fire signs and symbols.</li> <li>▪ Immediate fire fighting appliances.</li> <li>▪ Unit immediate actions.</li> <li>▪ Supplementary</li> </ul>	02.50     04.10	7 8.2 10.2 10.3 11.1 11
Mixing Rules	<ul style="list-style-type: none"> <li>▪ Ensures that ammunition of conflicting compatibility groups are not stored together.</li> </ul>	04.10	7.1
Quantity and Separation Distances	<ul style="list-style-type: none"> <li>▪ These should be developed by qualified ammunition personnel and will be clearly stated on the Explosive Limits Licence.</li> </ul>	04.10	6.0 7.4
Transport of Ammunition	<ul style="list-style-type: none"> <li>▪ In accordance with UN Model Regulations.</li> </ul>	08.10	All
Warning Signs	<ul style="list-style-type: none"> <li>▪ In accordance with the UN Globally Harmonised System.</li> </ul>	01.50	6.1 6.1.1

Table 1: Ammunition storage on operations - IATG requirements

## 8 Storage infrastructure

The storage infrastructure should be in line with the guidance contained within IATG 02.20 *Quantity and separation distances*. Dependent on the type of storage infrastructure available, and particularly for longer-term force deployments, it may also be necessary to consult IATG 05.20 *Types of buildings for explosives facilities* and IATG 05.30 *Barricades*.

## 9 Deployed unit ammunition inspections

Deployed units holding ammunition and explosives should be formally inspected by ammunition-qualified personnel, usually the FESO, at the frequencies shown in Table 2:

Type of Explosives Licence <sup>9</sup>	Inspection Frequency	Remarks
Standard	Annually	<ul style="list-style-type: none"> <li>▪ Deployed units are unlikely to hold one of these licences.</li> </ul>
Non-Standard	Twice yearly	<ul style="list-style-type: none"> <li>▪</li> </ul>
Authorised Quantity	Twice yearly	<ul style="list-style-type: none"> <li>▪</li> </ul>
	Annually	<ul style="list-style-type: none"> <li>▪ For those units holding only small arms ammunition.</li> </ul>

Table 2: Deployed unit ammunition inspection frequency

The efficiency of the unit in relation to its ammunition responsibilities should, on completion of each periodic inspection, be graded in terms of **Satisfactory** or **Unsatisfactory**. The grading shall be based on the standard found at the time of the inspection and give an accurate picture of the efficiency of the unit.

Small infringements may be corrected as the inspection proceeds but a general comment observing this is to be recorded in the report. Subsequent corrective action may be taken as necessary to correct faults and bring the unit up to an acceptable standard. Accurate reporting is essential to give the chain of command a clear and unambiguous view of ammunition and explosives safety across their area. This grading shall be recorded on IATG Form 12.10A (see Annex D) (or national equivalent) by the Inspector.

When assessing the grading of a unit's efficiency, the Inspector should base his or her judgement on the points listed in IATG 06.70 *Inspection of explosives facilities*, Annex E. An unsatisfactory grading should only be given if:

- A) there is more than one violation of a major point which is considered to compromise explosive safety;
- B) there are four or more minor points violated and no corrective action has been taken during the inspection; or
- C) recommendations to resolve a major point or two minor points specified in a previous inspection report have not been carried out.

The Inspector shall also recommend if more specialist inspections are warranted, (e.g. electrical, lightning protection, infrastructure stability etc).

A recommended report format for deployed unit ammunition inspections is at Annex D for information.

## 10 Recovered ammunition and explosives

A deployed MN force may be required to store ammunition and explosives recovered as part of a DDR process. This requires that a system should be developed to ensure the safe and secure storage of such ammunition and explosives pending their final disposal. Ammunition and explosives should be recovered in accordance with MOSAIC 02.30 *Small arms and light weapons control in the context of DDR* and MOSAIC 05.40 *Collection of illicit and unwanted small arms and light weapons*, which includes the requirement for EOD support.

Recovered ammunition and explosives should be stored in accordance with the principles and requirements contained within IATG 04.10 *Temporary storage*. Recovered ammunition shall not be stored in the same site or building (i.e. PES) as serviceable ammunition.

<sup>9</sup> See IATG 02.30 *Licensing of explosives facilities*, Clause 7.

The recovered ammunition and explosives shall not be stored with the unit's own ammunition. A separate storage location, which may be within the wider explosive storage area, shall be used.

#### **10.1 Disposal of recovered ammunition and explosives**

Recovered ammunition and explosives shall be disposed of in accordance with IATG 10.10 *Demilitarization, destruction and logistic disposal of conventional ammunition*.

## **Annex A** **(normative)** **References**

The following normative documents contain provisions, which, through reference in this text, constitute provisions of this module. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this module are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO maintain registers of currently valid ISO or EN:

- A) IATG 01.20 *Index of risk reduction process levels within IATG*. UNODA;
- B) IATG 01.40 *Glossary of terms, definitions and abbreviations*. UNODA;
- B) IATG 01.50 *UN Explosive hazard classification system and codes*. UNODA;
- C) IATG 01.90 *Ammunition management personnel competencies*. UNODA;
- D) IATG 02.10 *Introduction to risk management principles and processes*. UNODA;
- E) IATG 02.20 *Quantity and separation distances*. UNODA. 2015;
- F) IATG 02.30 *Licensing of explosives facilities*. UNODA. 2015;
- A) IATG 04.10 *Temporary storage*. UNODA;
- B) IATG 07.10 *Surveillance and in-service proof*. UNODA;
- C) IATG 08.10 *Transport of ammunition*. UNODA;
- D) MOSAIC 05.40 *Collection of illicit and unwanted small arms and light weapons*;
- E) MOSAIC 05.50 *Destruction: Weapons*. ;
- F) MOSAIC 02.30 *Small arms and light weapons control in the context of DDR*;
- G) United Nations Manual on Ammunition Management, First Edition 2020. DPO-DSO.

The latest version/edition of these references should be used. The UN Office for Disarmament Affairs (UNODA) holds copies of all references<sup>10</sup> used in this guideline and these can be found at: [www.un.org/disarmament/un-safeguard/references](http://www.un.org/disarmament/un-safeguard/references). A register of the latest version/edition of the International Ammunition Technical Guidelines is maintained by UNODA, and can be read on the IATG website: [www.un.org/disarmament/ammunition](http://www.un.org/disarmament/ammunition). National authorities, employers and other interested bodies and organisations should obtain copies before commencing conventional ammunition stockpile management programmes.

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<sup>10</sup> Where copyright permits.

## **Annex B** **(informative)** **References**

The following informative documents contain provisions, which should also be consulted to provide further background information to the contents of this guideline:

- A) AASTP-1, Edition B, Version 1, *NATO Guidelines for the Storage of Military Ammunition and Explosives*. NATO Standardization Office (NSO). December 2015.  
<http://nso.nato.int/nso/nsdd/listpromulg.html>;
- B) AASTP-5, Edition 1, Version 3, *NATO Guidelines for the Storage, Maintenance and Transport of Ammunition on Deployed Missions or Operations*. NATO Standardization Organization. June 2016; and
- C) ALP-16 (Edition A Version 1) *Explosives Safety and Munitions Risk Management in NATO Planning, Operations, and Operations*. NATO Standardization Organization. April 2015;

The latest version/edition of these references should be used. The UN Office for Disarmament Affairs (UNODA) holds copies of all references<sup>11</sup> used in this guideline and these can be found at: [www.un.org/disarmament/un-safeguard/references](http://www.un.org/disarmament/un-safeguard/references). A register of the latest version/edition of the International Ammunition Technical Guidelines is maintained by UNODA, and can be read on the IATG website: [www.un.org/disarmament/ammunition](http://www.un.org/disarmament/ammunition). National authorities, employers and other interested bodies and organisations should obtain copies before commencing conventional ammunition stockpile management programmes.

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<sup>11</sup> Where copyright permits.

## Annex C (informative) Checklist for the Force Commander

SER	ITEM	REMARKS
1	What are the threats to the mission?	
2	Is there an up-to-date reconnaissance report for ammunition storage areas available?	
3	Is there sufficient ammunition technical knowledge available in the reconnaissance party concerning ammunition safety and ammunition risk management (storage, handling & maintenance)?	
4	Is there an appropriately qualified officer responsible for ammunition safety and risk management during this operation. (E.g. ATO)?	
5	Are there enough qualified soldiers for the safe handling of ammunition?	
6	Is there enough mechanical handling equipment for the different types of ammunition?	
7	Is there enough space for the safe storage, handling and maintenance of the ammunition in accordance with the recommendations of IATG 04.10? If not what are the effects and the risks for own troops and material?	
8	Are the risks known for operational use or ammunition storage that do not meet the minimum IATG requirements?	
9	Are the effects known if a storage module explodes?	
10	Is it necessary to issue a formal waiver and acceptance of residual risk for the use of smaller quantity distances (QD) than the QD recommended in IATG 04.10 or lesser safety distances if an alternative method is used?	
11	Is it necessary to store ammunition in conditioned containers / storage locations?	
12	Is there a location available for the safe storage of damaged or captured ammunition?	

SER	ITEM	REMARKS
13	Are there enough resources to provide the appropriate protection for the safe storage of the ammunition from undesired explosive events within the ammunition storage location?	
14	Are there enough resources to provide the appropriate protection for own troops and the local population from undesired explosive events within the ammunition storage location?	
15	Are there enough resources to provide the appropriate protection to mission critical equipment from undesired explosive events within the ammunition storage location?	
16	Are the storage locations marked in accordance with the UN Hazard Classification system?	
17	Are adequate firefighting arrangements in place?	

## Annex D (informative)

### Example deployed unit ammunition inspection report

Deployed Unit Ammunition Inspection Report (SPECIAL / ROUTINE) <sup>12</sup>			
			IATG Form 12.10A
<b>Date of Inspection:</b>		<b>Other Units using Store:</b>	
<b>Serial Number:</b>		<b>Store Inspected (Location)</b>	
<b>Unit:</b>		<b>Explosive Licence(s) Serial Number:</b>	
<b>Address:</b>		<b>Grading of Unit Efficiency</b>	SATISFACTORY / UNSATISFACTORY <sup>13</sup>
<b>Inspected by:</b>			
<b>Inspection Unit:</b>			

#### 1. Inspector's Comments

The following inspection report has been compiled by *(Insert Inspector's Full Name and Appointment)* under the authority of *(Insert Technical Authority)*.

The inspection has been conducted in accordance with the criteria laid down in IATG 06.70 *Inspection of explosives facilities*. The inspection covers the management and control of explosives and explosives facilities in accordance with those guidelines. The inspection has been a sample of the documentation, facilities and activities. It is to be noted that there may be documentation, facilities or activities unobserved by the inspector that remain non-compliant with the IATG provisions.

#### 2. Previous Reports (Fire, Security etc)

#### 3. Explosives Licensing and Safeguarding Maps

#### 4. Ammunition Accounts

n.b. This should include any bans or constraints on any ammunition held, plus SLED.

#### 5. Standing Operating Procedures (SOP)

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<sup>12</sup> Delete as applicable.

<sup>13</sup> Delete as applicable.

**6. Condition of store**

n.b. Security, safety, fire measures, information displayed (emergency procedures, phone numbers, licence, A in U list etc), work services, locks, windows and so on, cleanliness, ammunition on battens/pallet bases, stack tally cards and all other important management measures.

**7. Condition of Ammunition**

**8. Closing Remarks**



Item No	Designation	Batch/lot or Date	Quantity		Sentence and Quantity			Remarks and reason for sentence other than "S"	Action to be taken by Unit	
			On Charge	Inspected	S <sup>14</sup>	R <sup>15</sup>	U/S <sup>16</sup>			
INSPECTED: Signature of Inspector:			INSPECTOR'S REMARKS:						CONFIRMED: Signature of Chief Inspector:	
Date:			Signature of Inspector:			Date:			Date:	

## Annex E (normative)

### Certificate of safety, serviceability and adequate shelf life

Certificate of safety, serviceability and adequate shelf life		
Serial	IATG Form 12.10C	
<b>1</b>	<b>Troop Contributing Country Details</b>	
1.1	Country	
1.2	Major Units Deployed	
1.3	Minor Units Deployed	
1.4	Sub-Units Deployed	
1.5	Associated Products	
<b>2</b>	<b>Ammunition Details</b>	
2.1	Types and Calibre (List)	
2.2	Any Proof and Surveillance Concerns or Limitations in Use	
2.3	Shelf life expiry date (SLED)	
<b>3</b>	<b>Certification</b>	
3.1	This form certifies that the ammunition is 'safe to deploy and store, serviceable and has sufficient shelf life remaining to last the deployment or until replenishment stocks arrive' and that any concerns about its safety in storage or use have been identified in Box 2.2 above.	
3.2	Certifying Individual	
3.3	Certifying Authority	
3.4	Signature	
<b>4</b>	<b>Distribution</b>	
4.1	Appropriate National Technical Authority	
4.2	UN Department of Peace Operations	
4.3	Force Commander UNXXX operation	

