Draft

GOVERNMENT REGULATION

of ……. 2025

on the implementation of certain provisions of the Munitions Act

Pursuant to § 37(4), § 38(6), § 44(2), § 46(2), § 47(3) and § 48(2) of Act No 91/2024 on munitions (hereinafter the ‘Munitions Act’), the government orders:

PART ONE

INTRODUCTORY PROVISIONS

§ 1

This Regulation lays down:

a) the minimum requirements for the content, scope and structure of the framework work process prior to delaboration, deactivation, creation of cross-sections or destruction of munitions;

b) the minimum requirements for the content, scope and structure of the framework work process for searching for and handling munitions, ammunition and explosives in connection with ensuring of pyrotechnic survey;

c) the minimum requirements for the content, scope and structure of the discovery log, the interim pyrotechnic survey report, and the final pyrotechnic survey report;

d) requirements for the safe storage of munitions;

e) the method of technical securing of a munitions depot with regards to classification of munitions according to their dangerousness and tolerance;

f) special requirements for the safe storage of munitions containing inert projectiles or grenades, and requirements for the storage of other inert components of munitions;

g) the minimum technical and staff requirements for securing munitions against misuse, loss, or theft during transport;

h) the model deactivation control mark of a general munitions licence holder allowing the identification of munitions and the general munitions licence holder;

i) the minimum technical requirements necessary to ensure the safety of munitions firing ranges, detonation pits for the destruction of munitions or a special munitions facility, unless they are subject to assessment under the Building Act; and

j) the details of the compulsory content of operating rules for a munitions firing range, detonation pit for the destruction of munitions or special munitions facility.

§ 2

For the purposes of this regulation,

a) an on-hand depot is a munitions depot used for the supply of operations in which munitions are developed, manufactured, otherwise processed, delaborated, detonated, fired, or destroyed;

b) a stock is the maximum permissible quantity of stored munitions with regard to the quantity of explosives contained in the munitions;

c) a Net Explosive Quantity (NEQ) is the mass of all explosives[1)] contained in a given type of munition, stated in kilograms;

d) a potentially explosive location is a location with munitions and explosives that, in the event of their explosion, may endanger its surroundings, in particular munitions depots, other buildings with stored munitions, and vehicles carrying munitions;

e) an at-risk location means a location that is exposed to the effects of an explosion or fire from a potentially explosive location, in particular a munitions depot, a workplace with munitions and explosives, an open storage area, a shelter, a tractor vehicle or semi-trailer, an inhabited building, an assembly point or a public road;

f) a safety distance is the minimum permissible distance between a munitions depot, as a potentially explosive location, and an at-risk location; the safety distance is determined both between individual at-risk locations within the compound where the munitions depot is situated and between the munitions depot and other at-risk locations outside this compound;

g) a risk event is an event posing a risk to munitions being transported in terms of possible access by an unauthorised person or the effect of another undesirable phenomenon that may pose a risk in terms of the hazardous properties of the munitions being transported;

h) electronic security equipment is a system of electrical, electronic, mechanical or other components installed in the cargo compartment of the munitions being transported or directly on the munitions being transported and used for the detection of a risk event;

i) a tunnel firing range for munitions is a munitions firing range situated in a tunnel with safe capture of projectiles and shrapnel or parts of projectiles along their entire trajectory;

j) a long-range firing range for munitions is a munitions firing range for firing into open terrain;

k) a firing sector of a munitions firing range is a corridor defined by the remote firing position and the impact area, depending on the type of firing;

l) the length of the firing sector of a munitions firing range is the sum of the maximum range of the most powerful weapon for which the firing range is intended, increased by 10%, and the shrapnel effect of the most powerful munition for which the firing range is intended, or such a firing distance for which the munitions firing range is designed and for which the design of the landing area and the safety measures of the danger zone pursuant to § 21 ensure that there can be no projectiles can escape outside the firing sector;

[1)] § 21(1)(a) of Act No 61/1988 on mining activities, explosives and on the State Mining Administration, as amended.

m) a danger zone is an area in the vicinity of a firing sector or a location if munitions are fired or destroyed in which persons or property may be at risk at the time of firing, detonation or destruction of munitions, in particular by the direct effect of firing, pressure, sound or seismic wave or by flying shrapnel and rocks.

§ 3

Symbols for the marking of potentially explosive locations and for the marking of at-risk locations are set out in Annex 1 to this Regulation.

PART TWO

THE MINIMUM CONTENT OF FRAMEWORK PROCESS DOCUMENTATION, THE DISCOVERY LOG, THE INTERIM PYROTECHNIC SURVEY REPORT, AND THE FINAL PYROTECHNIC SURVEY REPORT

[To implement § 37(4) of the Munitions Act]

§ 4

(1) Documents entered in electronic form in the central register of weapons pursuant to the Munitions Act are technically eligible for entry if

a) they are in Portable Document Format (PDF) or Portable Document Format for Long-term Archiving (PDF/A);

b) a qualified electronic signature is inserted in the entered document; and

c) the electronic signature is accompanied by the certificate on which it is based.

(2) Instead of a qualified electronic signature pursuant to paragraph (1)(b), a handwritten signature on a document in paper form may be used, which is subsequently to be entered in electronic form in the central arms register pursuant to the Munitions Act. The document thus uploaded must be in the format pursuant to paragraph (1)(a).

§ 5

(1) Framework process documentation lays down the procedure for the delaboration, deactivation or destruction of munitions or creating cross-sections of munitions, which must be safe, technically justified and feasible.

(2) Operational documentation drawn up in accordance with other legislation governing requirements for occupational health and safety and safe operation in the manufacture and processing of explosives[2)] is considered to be framework process documentation prepared by the holder of a general munitions licence prior to the delaboration, deactivation or destruction of munitions or creating cross-sections of munitions pursuant to the Munitions Act, if it complies with the requirements set out in this Regulation.

[2])Decree No 327/1992 establishing the requirements to ensure occupational health and safety and safe operation during the manufacture and processing of explosives, and on the professional qualifications of workers performing such activities, as amended by Decree No 340/2001 and Decree No 216/2017

(3) Framework process documentation for the delaboration, deactivation or destruction of munitions or creating cross-sections of munitions contains

a) a title page, which shall state

1. the kind and type of munitions;

2. the personal data of the person who prepared the process documentation;

3. the personal data and signature or qualified electronic signature of the person who approved the process documentation and the date of its approval; and

4. a list of changes to the process documentation;

b) safety regulations for the nature of the given work; in the case of munitions for which all the information pursuant to (1)(a) is not known, appropriate additional security requirements shall be stipulated;

c) an overview of the necessary tools, equipment, gauges, personal protective equipment and aids for the delaboration, deactivation or destruction of munitions or creating cross-sections of munitions and a list of consumables and auxiliary materials;

d) basic directives for in-house transport, specifying the means of transport and storage in on-hand depots, unless this information is contained in the internal rules of the general munitions licence holder; and

e) the hazardous waste management method.

(4) Framework process documentation for the delaboration of munitions, aside from the essentials in paragraph (3), also contains

a) a list of delaborated components indicating the name of the component, the drawing number, and the quantity per product;

b) adequate additional safety requirements for delaboration in the case of munitions for which not all the information pursuant to point (a) is known;

c) f) a flowchart of the delaboration process, including a description of the sequence of operations, drawings of the distribution of individual operations, and a description of the movement of munitions and materials;

d) a description of each delaboration operation, an indication of the sequence and duration of each operation; and

e) the method of controlling the delaboration process.

(5) The framework process documentation for creating cross-sections of munitions contains similar requirements as the framework process documentation for munitions delaboration.

(6) Framework process documentation for the destruction of munitions, aside from the essentials in paragraph (3), also contains

a) the chosen method of munitions destruction and a description of the munitions destruction process; the method of munitions destruction means, in particular, the burning of munitions or the explosion of munitions;

b) stating of the place of destruction of munitions, including the definition of protective measures against the effects of explosion transfer and other harmful effects of the munitions destruction process;

c) stating of the fire-fighting measures to safeguard the munitions destruction process; and

d) if the munitions are destroyed using explosives[1)], also

1. stating of the type of explosive used, the detonators, and the method of their initiation;
2. an overview of the necessary tools, equipment, gauges, personal protective equipment and aids for destruction of munitions using explosives and a list of consumables and auxiliary materials; and
3. the personal data and signature or qualified electronic signature of the person who will destroy the munitions using explosives, including identification of the relevant authorisation.

§ 6

(1) Framework process documentation for pyrotechnic survey stipulates the work procedure for searching for and handling munitions, ammunition and explosives, which must be safe, technically justified and feasible.

(2) Framework process documentation for searching for and handling munitions, ammunition and explosives in connection with carrying out pyrotechnic survey contains:

a) the name and registered office of the holder of the munitions licence for pyrotechnic survey;

b) a list of persons performing specific pyrotechnic survey activities;

c) the personal data of the person who ordered the pyrotechnic survey;

d) more detailed information on the pyrotechnic survey, in particular

1. the cadastral territory of the municipality in which the pyrotechnic survey is carried out;
2. demarcation of the land parcel[3)] or the address of the location of the area where the pyrotechnic survey is conducted;
3. a detailed description of the structure the pyrotechnic survey concerns, such as information on the size or location of the structure;
4. the reason for the pyrotechnic survey;
5. the expected date of the pyrotechnic survey; and
6. a map or plan of the pyrotechnic survey area;

e) the technology used for the given pyrotechnic survey, which means area pyrotechnic survey, surveillance during earthworks, search for munitions underwater, search for aerial bombs, or other technology that must be specified;

f) a list of equipment planned for use in the pyrotechnic survey, including means of detection and means of securing the pyrotechnic survey area;

[3)] § 2(b) of Act No 256/2013 on the Land Register (the Land Registry Act), as amended.

g) a detailed description of the workflow for the chosen pyrotechnic survey technology, including the procedure when munitions, ammunition or explosives are found;

h) the proposed measures to ensure the safety of the pyrotechnic survey;

i) the contact details of persons carrying out specific pyrotechnic survey activities and of the munitions licence holder ensuring the pyrotechnic survey, in particular phone numbers; and

j) approval and signature clauses.

§ 7

(1) In the discovery log pursuant to the Munitions Act, the holder of a munitions licence for conducting pyrotechnic survey records all discoveries of munitions, ammunition and explosives discovered during pyrotechnic survey.

(2) The discovery log pursuant to the Munitions Act contains

a) a title page, which shall state

1. the name and registered office of the holder of the munitions licence for pyrotechnic survey;
2. the number of pages in the discovery log;
3. the date of commencement and end of use of the discovery log; and
4. signature of an authorised person who is the holder of a munitions licence to conduct pyrotechnic survey;

b) a page for recording changes, in particular the personal data of the munitions license holder; and

c) records of the handover of found munitions, ammunition or explosives, kept in tabular form, containing:

1. a sequence number;
2. the place of discovery;
3. the date and time of the discovery;
4. information identifying the munitions, ammunition or explosives;
5. the date and time of receipt by a police officer;
6. the personal registration number and signature of the receiving police officer; and
7. the name, surname and signature of the person who made the record in the record book and who holds a munitions licence to conduct pyrotechnic survey.

§ 8

(1) The interim report on pyrotechnic survey is prepared by the holder of a munitions license to conduct the pyrotechnic survey at the request of the builder[4)].

[4)] § 14(a) of Act No 283/2021, the Building Act, as amended.

(2) An interim report on pyrotechnic survey contains:

a) the name and address of the holder of the munitions licence for pyrotechnic survey, including contact details;

b) identification of the client of the pyrotechnic survey, especially the builder;

c) a description of the area in which the pyrotechnic survey is conducted;

d) a description of the works and the technology used, which means, in particular, area pyrotechnic survey, surveillance during earthworks, search for munitions underwater, search for aerial bombs, or other technology that must be specified;

e) the number of pieces of munitions, ammunition or explosives found, including specification of the types of munitions, ammunition or explosives found; and

f) the next planned steps, including possible proposals for changes in the technological process based on the work carried out so far.

§ 9

(1) The final report on the pyrotechnic survey is drawn up by the holder of a munitions licence to carry out the pyrotechnic survey without delay after the completion of the pyrotechnic survey.

(2) A final report on pyrotechnic survey contains:

a) the name and address of the holder of the munitions licence for pyrotechnic survey, including contact details;

b) identification data of the contracting authority for the pyrotechnic survey;

c) a description of the area in which the pyrotechnic survey is conducted;

d) a description of the works and the technology used, which means, in particular, area pyrotechnic survey, surveillance during earthworks, search for munitions underwater, search for aerial bombs, or other technology that must be specified;

e) the number of pieces of munitions, ammunition or explosives found, including a specification of the types of munitions, ammunition or explosives found;

f) a drawing of the surveyed area and marked findings of munitions, ammunition, or explosives on a map background; and

g) conclusions and recommendations of the holder of a munitions licence conducting pyrotechnic survey.

PART THREE

STORAGE OF MUNITIONS

(To implement § 38(6) of the Munitions Act)

Requirements for safe storage of munitions

§ 10

(1) Munitions are stored in undamaged packaging approved for transport of the given kind and type of munitions pursuant to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)[5)]. If there's no transport packaging pursuant to the first sentence approved for the given type and kind of munitions, the munitions shall be stored in packaging ensuring the safe storage and handling of munitions. When stored on pallets, only undamaged pallets shall be used.

(2) Munitions of the same kind and type are always kept separate from munitions of other kinds and types. Munitions may be stored together in one room only if they are classified in tolerance classes that allow this according to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)[5)].

(3) If a munitions depot is split into several structurally separate parts, for example, rooms, cells, sections or compartments, each structurally separate part is marked. The marking of these structurally separate parts and their maximum stock is part of munitions depot documentation pursuant to § 39 of the Munitions Act. The overall maximum stock of a munitions depot is given by the sum of stock of all its structurally separate parts pursuant to the first sentence.

(4) The stock of an munitions depot or its structurally separated parts as a potentially explosive location is determined according to its safety distance and the hazard class of the munitions being stored. The procedure for determining stocking is set out in Annex 2 to this Regulation.

(5) At most three pallets of munitions may be stacked on top of each other if so permitted by the kind and nature of the munitions, their packaging, and palletisation, up to a maximum height of 3 m. Pallets can be placed at a minimum distance of 0.6 m from the walls of the depot, while escape routes and work passages at least 1.2 m wide shall remain free opposite every door and around the front wall of the depot. Munitions are stored organised by calibre, kind, series, and year of manufacture, and manufacturer's brand if applicable. Information of stored munitions is marked on storage tags located visibly by the stored munitions.

(6) Munitions depot documentation shall stipulate the number and scope of checks performed on stored munitions, their packaging, depot equipment, and technical security equipment pursuant to § 39) of the Munitions Act. The shortest permissible interval between checks pursuant to the first sentence is 30 calendar days.

(7) Storage of munitions in open stockpiles and in shelters is not permitted except for when handling munitions designated for immediate transport of processing. The storage time in an open stockpile or in a shelter must not exceed 24 hours; the depot or shelter is guarded by the munitions licence holder for the entire period of munitions storage.

(8) Unless otherwise provided for in this Regulation, the requirements for the manner in which munitions are stored may also be met by the adoption of measures corresponding to an international standard in the field of munitions storage or to a similar standard used by the armed forces of the Czech Republic that is based on such international standards (hereinafter

[5)] European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), promulgated under No 64/1987, as amended.

the ‘international standard’). If the international standard stipulates specific measures for the storage of munitions from a certain quantity of loaded explosives, such measures shall also be used for munitions loaded with any smaller quantity of explosives. Measures pursuant to the first and second sentence shall be stipulated in the munitions depot's documentation pursuant to § 39 of the Munitions Act.

§ 11

(1) In a munitions depot, munitions, including those in packaging, may only be sorted, stored, transshipped, and removed. Packaging containing munitions may only be opened in a munitions depot during inspections, inventory, or spot checks in order to determine munitions quantities and loading information, and during the removal of munitions. No other handling of munitions, for example, completion, delaboration, maintenance, repairs is permitted in munitions depots.

(2) In the case of special munitions, such as incendiary, smoke or light-emitting, at most two stacks of pallets may be placed next to each other. An inspection passageway is left between the next two stacks, and every munitions package must be reachable from the floor of the munitions depot. Munitions filled with incendiary phosphorous, such as aerial bombs, are stored in a munitions depot in a manner that permits their packaging to be easily checked for leaks, and defective units to be removed quickly.

(3) Flammable substances, preservatives and cleaning products, paints, and similar substances may not be stored in a munitions depot. Substances pursuant to the first sentence are kept outside of the munitions depot in crates, under shelters, and in other premises reserved for this purpose.

§ 12

Technical safety provisions for a munitions depot with regards to classification of munitions according to their dangerousness and tolerance

(1) Munitions depots or their structurally separated parts, as potentially explosive locations that pose a risk to persons and property, including munitions and explosives (at-risk locations), must be located at safety distances from at-risk locations.

(2) The net explosive quantity (NEQ) present at a potentially explosive location shall be used for the calculation of safety distances.

(3) The safety distance shall be measured from the nearest point of the munitions depot as a potentially explosive location to the nearest point of the at-risk location, along a straight line connecting them, regardless of barriers. The total quantity of munitions and explosives stored in a munitions depot is distributed among individual munitions depots to reduce the risk of a mass explosion to only one depot. Safety distances are measured from the outer wall of the munitions depot to the nearest outer wall of the at-risk location. By dividing the munitions depot with one or more partitions, it is possible to prevent a mass explosion of the entire amount of munitions and explosives stored in the munitions depot. Safety distances are measured to these partitions. Determination of safety distances is then based on the quantity of explosives stored in individual depot sections. If the munitions depot is not divided by partitions, the total quantity of explosives stored in it is used to determine safety distances.

(4) The safety distances for munitions of hazard classes 1.1, 1.2 and 1.3 are set out in Annexes 3 to 6 to this Regulation.

(5) Safety distances for munitions and explosives of hazard class 1.4 are determined by the fire regulations of the given munitions depot or its structurally separated parts. The permissible net explosive mass shall not be specified for this hazard class.

(6) Save as otherwise provided in this Regulation, the provisions governing the general technical requirements for ensuring the security of an munitions depot laid down in other legislation shall apply mutatis mutandis.[6)].

§ 13

Storage of munitions with inert projectiles or inert munitions

Munitions containing inert projectiles or grenades and in the case of active cartridges only propellant charges, primers or primer screws may be stored and secured in such a way that:

a) appropriately eliminates the misuse, loss, or theft of such munitions; and

b) prevention of the risk of fire or explosion of stored munitions is ensured and its consequences are minimised.

PART FOUR

SECURING MUNITIONS DURING TRANSPORT

(To implement § 44(2) of the Munitions Act)

§ 14

(1) The provisions of this part shall not apply to securing munitions for air transport.

(2) The provisions of this Part shall not apply if during transport the munitions is secured in accordance with the requirements of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)[5)]. Munitions are always transported in packaging approved for transport of the given kind and type of munitions pursuant to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)[5)].

§ 15

During transport, any quantity of munitions is secured

a) by locking it in the cargo area and ensuring

   1. constant checks on the transported munitions by at least two persons present in the means of transport, in particular the driver, crew member, or security guard, or in an escort vehicle;

   2. the protection of the cargo area or of the munitions being transported by an electronic security device which, in the event of the detection of a risk event, activates an audible warning device or allows the alarm transmission system to transmit the

[6)] Decree No 146/2024 on requirements for construction.

report of such an event to a person who is authorised to take measures to ensure the safety of the munitions being transported; or

3. securing the munitions being transported in a manner that prevents normal handling of the cargo and prevents the separation of any part of it, such as fixing the munitions being transported on a pallet or similar transport aid; or

b) locking it in a container approved for intermodal transport[7)].

§ 16

Following agreement with the Police Praesidium, a method of securing munitions during transport other than that provided for in this section may also be used, provided that it is ensured that the munitions are secured against misuse, loss, or theft, and safety with respect to the risk of fire or explosion.

PART FIVE

MARKING

(To implement § 46(2) of the Munitions Act)

§ 17

Control deactivation mark

(1) The control deactivation mark shall be in a form of a capital letter ‘D’ above the capital letters ‘CZ’, indicating the calendar year of the delaboration or deactivation of munitions and the identification of the person who carried out the irreversible modification of the weapon.

(2) The identification of the person who carried out the delaboration or deactivation of the munitions shall be carried out by indicating the identification number of that person in the form of ‘ID No: …’. A person who has carried out the delaboration or deactivation of munitions and who does not have an assigned identification number shall identify themselves by indicating their name(s), surname and date of birth, or trade name and registered office.

(3) A specimen deactivation mark is stipulated in Annex 7 to this Regulation.

PART SIX

MINIMUM TECHNICAL REQUIREMENTS FOR MUNITIONS FIRING RANGES, DETONATION PITS FOR THE DESTRUCTION OF MUNITIONS AND SPECIAL MUNITIONS FACILITIES, IF THEY ARE NOT SUBJECT TO ASSESSMENT PURSUANT TO THE BUILDING ACT

(To implement § 47(3) of the Munitions Act)

§ 18

The obligation to ensure compliance with technical requirements

[7)] For example, the Convention concerning International Carriage by Rail (COTIF), adopted at Berne on 9 May 1980, promulgated under No 8/1985, as amended.

The operator of a munitions firing range, detonation pit for the destruction of munitions or special munitions facility must ensure compliance with requirements stipulated by this Regulation.

§ 19

Sound and light signals and permanent warning signs

(1) If securing an danger zone of a munitions firing range, detonation pit for the destruction of munitions, or special munitions facility using the security features set out in § 21(3)(b) does not completely prevent unauthorised persons from entering that danger zone,

a) warning signs shall be placed at the edge of an danger zone not secured by security features pursuant to § 21(3)(b), which shall state and display

   1. the text ‘Danger to life! Entering the restricted area and touching found material is prohibited!’;

   2. the safety signs ‘No unauthorised entry’ and ‘Do not touch’ in accordance with other legislation on the appearance and placement of safety signs and on the introduction of signals[8)] and

   3. where appropriate, other warning messages suitable for local conditions; and

b) equipment is installed allowing sound signals and also, and, if needed, suitable light signals to indicate the beginning and end of the firing, detonation, or destruction of munitions, in a way in which the sound signals to be clearly audible at least on the perimeter of the danger zone and in which the light signals are clearly visible at least on access roads to the danger zone.

(2) Warning signs shall have dimensions of at least 40 x 25 cm and shall be positioned at a height of 2 m above ground level in such a way that they are clearly visible from all directions of possible access to the danger zone. The maximum distance between warning signs is 20 m. Warning signs have a yellow background with text and pictograms in red or black.

(3) The meaning and method of implementation of the signals referred to in paragraph (1)(b) shall be specified in the operating rules of the munitions firing range, detonation pit for the destruction of munitions, or special munitions facility in such a way that the audible signals are not interchangeable. The meaning of signals shall also be described on the warning sign.

§ 20

Provision of communications technology

Munitions firing ranges, detonation pits for the destruction of munitions and special munitions facilities must be equipped with a telephone, radio, or other means of communication enabling communication with the person performing work in the danger zone.

§ 21

Securing the danger zone

(1) The specific way of securing the danger zone is determined taking into account the local conditions and the type and kind of munitions fired, ignited or destroyed. When determining a specific security method, it shall especially be taken into account whether the

[8)] Government Regulation No 375/2017 on the appearance, positioning and execution of safety signs and markings and the introduction of signals.

entire danger zone is secured against unauthorised entry pursuant to paragraph (3)(b), or if it is situated in a closed compound.

(2) The danger zone of a munitions firing range, detonation pit for the destruction of munitions or special munitions facility must be secured by safety features to ensure that human life or health is not endangered by the firing, detonation, or destruction of munitions, including the potential presence of unexploded munitions in the danger zone.

(3) The danger zone shall be secured by a combination of

a) safety elements to prevent unwanted effects of the firing, detonation, or destruction of munitions, which may especially include
   1. tunnels,
   2. ditches,
   3. walls,
   4. embankments,
   5. palisades, or
   6. interception devices and bullet traps;

b) security features to prevent unauthorised persons from entering the danger zone, unless the danger zone is fully secured pursuant to point (a), which may include in particular
   1. fencing, or
   2. barriers,

c) security features to detect the entry of unauthorised persons into the danger zone, if the danger zone is not fully secured in accordance with point (a) or (b), which may include, in particular,
   1. physical patrols, or
   2. technical means for indicating and monitoring the entry and movement of persons and

d) where appropriate, other technical and organisational security measures, which may include, in particular,
   1. direction-of-fire limiters;
   2. elevation limiters;
   3. conducting only targeted firing on command while checking correct aim; or
   4. firing only from weapons firmly clamped in a firing stand with a fixed firing direction and elevation.

(4) The area around fences, protective walls and embankments or other similar safety elements is kept easily accessible for the purposes of their inspection and maintenance.

(5) Security features that are not permanently installed shall be put into operation prior to the commencement of firing, launching, or destruction of munitions and shall be kept in operation until the end of firing, launching, or destruction of munitions.

§ 22

Access roads

Access roads to munitions firing ranges, detonation pits for the destruction of munitions or special munitions facilities, and roads used for their operation shall be maintained in a condition allowing their proper and safe operation.

Other minimum technical requirements for a munitions firing range

§ 23

(1) Munitions firing ranges are situated outside the premises of other establishments of the same munitions firing range operator or at their edge. For semi-enclosed firing ranges for munitions of a calibre above 30 mm, the firing sector of the munitions firing range must be at least 200 m to the sides and rear of all structures and areas that could be endangered by the handling of munitions or explosives used, except for shelters for operators and structures necessary for the operation of the firing range; this shall not apply if this danger is completely eliminated by the safety features installed or the characteristics of the munitions used, in particular in the case of firing munitions with an inert projectile where shrapnel is not created.

(2) The firing positions and the danger zone behind them shall be separated from the other structures and facilities of the munitions firing range. For a semi-enclosed firing range for munitions of calibre greater than 30 mm, this separation shall be implemented through a protective wall or embankment.

(3) The direction of fire must usually be oriented towards an area with terrain obstacles, such as hills, undulated terrain, or depressions.

(4) Munitions firing range loading workshops shall be separated from firing positions.

(5) In the case of a tunnel firing range for munitions, individual firing sectors shall be separated from each other with protective walls or embankments, the height of which is determined by the purpose for which they were built.

(6) For long-range firing ranges for munitions with a calibre above 30 mm, the distance between unprotected adjacent firing sectors must be at least 500 m. This distance may be reduced if the firing positions are protected against the pressure effect of the shot, provided that the characteristics of the munitions used allow it.

(7) When firing munitions with tracer, incendiary, or incendiary/armour-piercing rounds, fire-prevention measures must be implemented through the choice of material in the landing area, and effective fire-fighting measures must be implemented.

§ 24

(1) The width of a long-range munitions firing range is stipulated according to the type of firing. In the case of a munitions firing range intended for shooting at an elevation other than zero, the width shall be determined from the sum of the possible lateral deviations and the shrapnel effect of the projectile. The resultant distance is increased by 500 m on each side along its entire length of the firing range as a lateral safety zone. The width of the lateral safety zone can be reduced commensurately if suitable safety elements are installed to limit the

undesired consequences of firing, detonating, or destroying munitions, depending on safety elements installed as far as the perimeter of the danger zone.

(2) In the case of a munitions firing range for munitions intended for firing with an impact angle of up to 25°, it is necessary to eliminate the potential ricochet of projectiles by selecting the terrain of the impact area or by using appropriate safety features to limit the effects of undesired consequences of firing, detonation or destruction of munitions. If the ricochet of the projectiles cannot be completely ruled out, the width of the long-range munitions firing range shall be determined as the sum of one quarter of the maximum range of the most powerful weapon for which the range is intended and the shrapnel effect of the munitions. The resultant distance is increased by 500 m on each side along its entire length as a lateral safety zone. The danger zone in the axis of the firing sector behind the impact area is determined in a similar manner. The width of the lateral safety zone and the danger zone past the impact area can be reduced commensurately if suitable safety elements are installed to limit the undesired consequences of firing, detonating, or destroying munitions, depending on safety elements installed up to the perimeter of the danger zone.

(3) When stipulating the length and width of a long-distance munitions firing range intended for anti-aircraft firing, the distance shrapnel may travel is taken into account, which may be up to half of the projectile's burst height, depending on wind speed.

(4) An impact area that is not equipped with effective safety features to limit the adverse effects of firing or destruction of munitions shall be located in a separate area, away from any structures and areas likely to be affected by the firing or destruction of munitions, with the exception of shelters for personnel and structures necessary for the operation of the firing range, at least 700 m to the sides and rear. For firing ranges with protected impact areas or where the characteristics of the munitions used so permit, this distance may be reduced proportionately.

(5) Capture equipment in a tunnel firing range for munitions shall be adapted in such way that it is not pierced during firing and projectiles do not ricochet back. When shooting at armour, the firing sector must be covered, or precautions must be taken to prevent shrapnel injury during firing in the danger zone.

Other minimum technical requirements for a detonation pit for the destruction of munitions

§ 25

(1) A detonation pit for the destruction of munitions cannot be established in the vicinity of buildings and areas that could be endangered by the handling of munitions or the possible use of explosives, in particular in the vicinity of residential buildings, production facilities, transport infrastructure or utilities. The requirements pursuant to the first sentence shall be deemed to be met if the safety distances referred to in other legislation defining safety distances for buildings and areas intended for the manufacture, processing or storage of explosives are complied with.[9)].

[9])Decree No 102/1994 laying down requirements to ensure occupational health and safety and safe operation in buildings intended for the manufacture and processing of explosives, as amended by Decree No 76/1996 and Decree No 216/2017, Decree No 99/1995 on the storage of explosives, as amended.

(2) As a rule, a demolition pit for destruction of munitions is located in enclosed terrain, for example, in a depression, in a valley, in a terrain undulation, or in a forest.

(3) The site for establishing a blasting pit for the destruction of munitions must not have a rocky substrate that could lead to the ejection of stones outside the designated danger zone, and the area within a radius of at least 25 m of the destruction site must be cleared of trees, grass and other combustible materials. A detonation pit for the destruction of munitions must be equipped with a shelter for the operator, a designated area for storing munitions intended for destruction, and signalling equipment, and may also be equipped with an on-hand munitions stockroom or an on-hand explosives stockroom.[9)]. The personnel shelter must be resistant to the effects of the munitions being destroyed.

(4) The distance of the shelter and other structures from the destruction location is stipulated according to the destruction method and the maximum permissible amount of destroyed munitions, and taking into account their form and type. If the area for munitions destruction has a protective embankment, the shelter can be placed on the outside of the embankment.

§ 26

(1) In a detonation pit for the destruction of munitions, only munitions of the same kind can be destroyed together. Provided that this does not endanger the safety of the operation of the detonation pit for the destruction of munitions, munitions of different types may also be jointly destroyed in it under the conditions laid down in its operating rules. The destruction of munitions must not exceed the total maximum weight of explosives contained in the munitions being destroyed and the explosives used for the destruction of munitions permitted for a particular detonation pit.

(2) When destroying munitions in a detonation pit, it is necessary to choose a method of destruction that will lead to the reliable destruction of the munitions; If the nature of the munitions does not allow it, they cannot be destroyed by burning in a detonation pit for the destruction of munitions.

§ 27

Additional minimum technical requirements for special munitions facilities

(1) Special munitions facilities shall not be established in the vicinity of other structures and areas likely to be endangered by the handling of munitions or the possible use of explosives, in particular in the vicinity of residential buildings, public roads and utilities. The requirements referred to in the first sentence shall be deemed to be met if the safety distances referred to in other legislation defining safety distances for buildings and areas intended for the manufacture, processing or storage of explosives are complied with.[9)].

(2) If a special munitions facility is intended for firing, detonating or destroying munitions outdoors, the provisions of this Regulation and its rules of operation shall apply mutatis mutandis to munitions firing range or detonation pit for destroying munitions.

PART SEVEN

OPERATING RULES FOR A MUNITIONS FIRING RANGE, A DETONATION PIT FOR THE DESTRUCTION OF MUNITIONS OR A SPECIAL MUNITIONS FACILITY

(To implement § 48(2) of the Munitions Act)

§ 28

(1) The compulsory content of operating rules for a munitions firing range, detonation pit for the destruction of munitions or special munitions facility is as follows:

a) the name and registered office of the holder of a general munitions licence who is the operator of a munitions firing range, detonation pit for the destruction of munitions or special munitions facility;

b) an indication of the location where the munitions firing range, munition destruction pit or special ammunition facility is operated, including an indication of the owner of the land on which it is operated, if different from the person referred to in paragraph (a),

c) the time of day and year during which firing, detonation or destruction of munitions is permitted at the munitions firing range, detonation pit for the destruction of munitions or special munitions facility;

d) the name(s), surname, and phone number for each holder of a higher munitions licence who is responsible for firing, detonating or destroying munitions at a munitions firing range, detonation pit for the destruction of munitions or special munitions facility, and for supervising their operation;

e) a clear situational diagram of the munitions firing range, detonation pit for the destruction of munitions or special munitions facility, indicating the permissible direction of fire, the location for detonation or destruction of munitions, including the delineation of firing sectors, shelters, and other structures located within their area, and demarcation of the danger zone;

f) the type and kind of munitions authorised for firing and the type and kind of munitions authorised for detonation or destruction, including the maximum permissible quantity of munitions detonated or destroyed per detonation, expressed in the number of pieces for each type and calibre of munitions or the weight of the explosive charge for that type of munitions and explosives used for the destruction of munitions;

g) the minimum and maximum firing distance on a munitions firing range;

h) the means and procedure for destroying munitions in a detonation pit for the destruction of munitions;

i) the procedure for firing, detonating, or destroying munitions in a special munitions facility;

j) rules for the safe operation of the munitions firing range, detonation pit for the destruction of munitions or special munitions facility, in particular the principles of handling munitions and weapons in their area and the principles for the access of persons to this area and their registration;

k) the principles governing the supervision of the operation of the munitions firing range, detonation pit for the destruction of munitions or special munitions facility;

l) the scope and content of the instructions necessary to maintain safety in the danger zone of the munitions firing range, detonation pit for the destruction of munitions or special munitions facility, which must always be provided to persons located in that area, including those conducting physical patrols, before firing, detonating or destroying munitions, and the method of recording the delivery of such instructions;

m) the determination of personal protective equipment that persons in the munitions firing range, detonation pit for the destruction of munitions or special munitions facility must use in the period between warning audible signals announcing the start and end of firing, detonation or destruction of munitions;

n) the audible and light signalling used before and after firing, detonation or destruction of munitions, and the form and location of warning signs;

o) principles for ensuring communication with a person performing work in the danger zone;

p) the method of securing the danger zone of the munitions firing range, detonation pit for the destruction of munitions or special munitions facility;

q) the procedure for munitions duds and the procedure for the search for, destruction or disposal of unexploded munitions in the munitions firing range, detonation pit for the destruction of munitions or special munitions facility, distinguishing the case of a supervisory on-site inspection after the end of firing, detonation or destruction of munitions from the situation where it is necessary to conduct a pyrotechnic survey of the site, in particular in the event of the cessation of the operation of a munitions firing range, detonation pit for the destruction of munitions or special munitions facility;

r) the manner in which records are kept in the operating log of activities carried out at the munitions firing range, detonation pit for the destruction of munitions or special munitions facility;

s) the procedure in the event of emergencies; and

t) other communication significant with regard to the technical design of the munitions firing range, detonation pit for the destruction of munitions or special munitions facility, and the safety of their operation.

(2) The operating rules of a munitions firing range, detonation pit for the destruction of munitions or special munitions facility include an explicit warning that if explosives are handled during the destruction of munitions, the requirements of other legislation governing the handling of explosives must be met.[10)].

(3) The particulars of the operating rules of a munitions firing range, detonation pit for the destruction of munitions or special munitions facility pursuant to paragraph (1)(e) to (g) and (p) and their modification shall be verified by an expert in the Civil Explosives and Ammunition, Military Explosives and Munitions, Special Ammunition and Projectiles, or the Blasting Work sector.

[10)] Act No 61/1988 on mining activities, explosives, and the State Mining Administration, as amended.

PART EIGHT

TRANSITIONAL AND FINAL PROVISIONS

§ 29

Transitional provisions

(1) Munitions depots for which documentation was created and sent to the competent police department before 1 January 2026 in accordance with § 70r(5) of Act No 119/2002 on firearms and ammunition (the Arms Act), as amended before the effective date of this Regulation, shall be deemed to meet the technical requirements within the meaning of this Regulation until 31 December 2035, and the methods of securing munitions and ensuring the safety of the munitions depot contained in the documentation remain binding.

(2) From 1 January 2026, the holder of a munitions licence is entitled to continue to use the control deactivation mark assigned to him pursuant to § 17(1) of Government Regulation No 219/2017 on the deactivation of certain weapons and ammunition, the making of cross-sections of weapons and ammunition, the destruction of ammunition and the minimum content of documentation in relation to delaboration, deactivation, production of cross-sections and destruction of munitions; at the same time, however, they must use the deactivation control mark in accordance with Part Five of this Regulation in addition to that mark.

§ 30

Final provisions

This Regulation has been notified in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services.

§ 31

Effective date

This Regulation shall come into effect on 1 January 2026.

Prime Minister:

Minister for the Interior:

Symbols for marking potentially explosive locations and danger zones

1. Symbols of potentially explosive locations[11)]

1.1. Structure covered with soil

1.1.1. Structure with a gate

The destructive effect impacts the danger zone located in front of the gate and the front wall of the potentially explosive location.

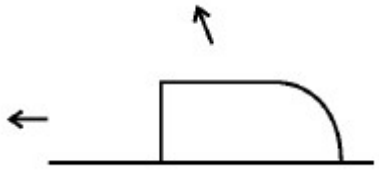


Fig 1

1.1.2. Structure with a gate

The destructive effect impacts the danger zone located behind the rear wall of the potentially explosive location.

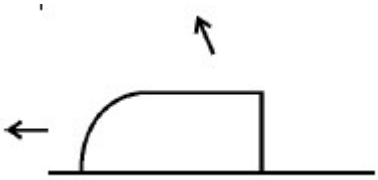


Fig. 2

1.1.3. Structure with a gate

The destructive effect impacts the danger zone located to the left or right of the potentially explosive location.

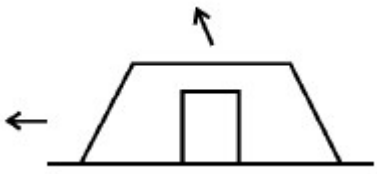


Fig. 3

[11)] The danger zone is located to the left of the displayed symbol.

1.2. Thick-walled structure

A structure with or without a protective ceiling of 15 cm thick reinforced concrete, with walls of reinforced concrete at least 45 cm thick or of bricks at least 70 cm thick or of other material with the same resistance to penetration. If the gate is facing the danger zone, it must be protected by a barrier.

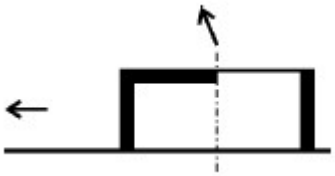


Fig. 4

1.3. Protected location

1.3.1. Munitions depot or shelter protected by a barrier.

1.3.2. Cars, trailers, or wagons loaded with munitions and explosives protected by a barrier.

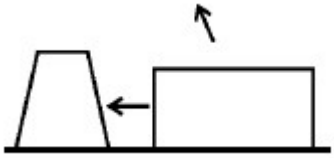


Fig. 5

1.4 Unprotected location

1.4.1. Munitions depot or shelter unprotected by a barrier.

1.4.2. Cars, trailers, or wagons loaded with munitions and explosives unprotected by a barrier.

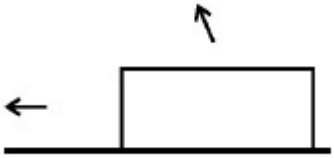


Fig. 6

2. Danger zone symbols[12)]

2.1. Cell designed for a pressure of 700 kPa

2.1.1. Cell with gate

The destructive effect from the potentially explosive location acts towards the gate and the front wall of the cell.

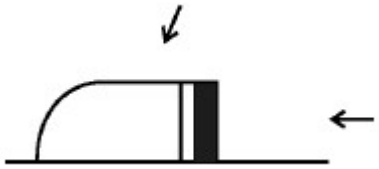


Fig. 7

2.1.2. Cell with gate

The destructive effect from the potentially explosive location acts towards the rear wall of the cell.

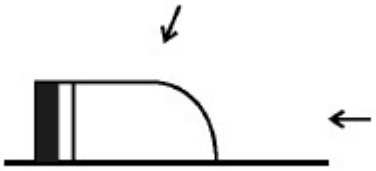


Fig. 8

2.1.3. Cell with gate

The destructive effect from the potentially explosive location acts towards the side wall of the cell.

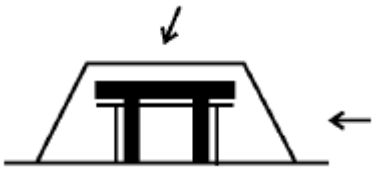


Fig. 9

2.2 Cell designed for a pressure of 300 kPa

2.2.1. Cell with gate

The destructive effect from the potentially explosive location acts towards the gate and the front wall of the cell.

[12)] The potentially explosive area is located to the right of the displayed symbol.

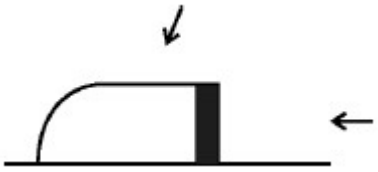


Fig. 10

2.2.2. Cell with gate

The destructive effect from the potentially explosive location acts towards the rear wall of the cell.

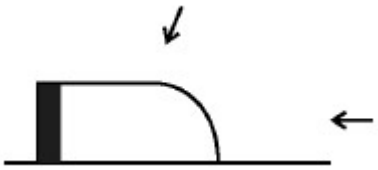


Fig. 11

2.2.3. Cell with gate

The destructive effect from the potentially explosive location acts towards the side wall of the cell.

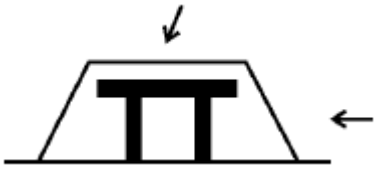


Fig. 12

2.3. Structure covered with soil

2.3.1. Structure with shrapnel-resistant gate

The destructive effect from the potentially explosive location acts towards the gate and the front wall of the structure.

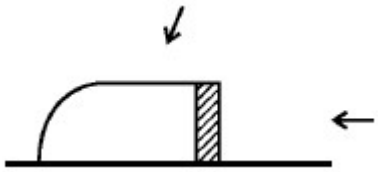


Fig. 13

2.3.2. Structure with gate and gate barrier

The destructive effect from the potentially explosive location acts through the gate barrier towards the gate and the front wall of the structure.

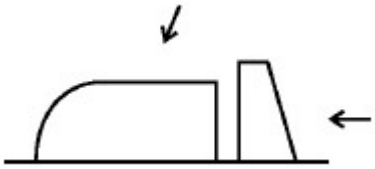


Fig. 14

2.3.3. Structure with a gate

The destructive effect from the potentially explosive location acts towards the gate and the front wall of the structure.

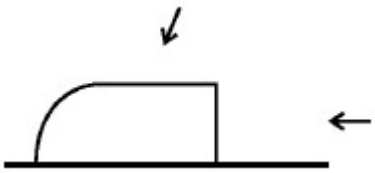


Fig. 15

2.3.4. Structure with a gate

The destructive effect from the potentially explosive location acts towards the rear wall of the structure.

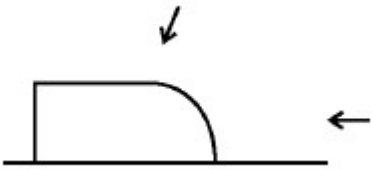


Fig. 16

2.3.5. Structure with a gate

The destructive effect from the potentially explosive location acts towards the side wall of the structure.

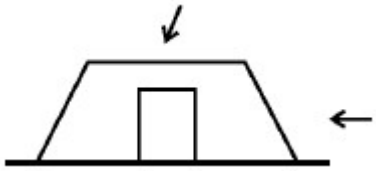


Fig. 17

2.4. Thick-walled structure

2.4.1. A structure with walls of reinforced concrete at least 45 cm thick or of bricks at least 70 cm thick or of other material with the same resistance to penetration, with a protective ceiling of 15 cm thick reinforced concrete. The gate must be protected by a barrier when it faces a potentially explosive location.

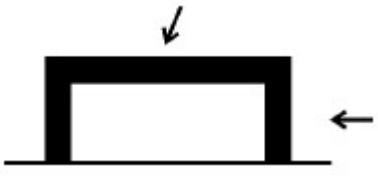


Fig. 18

2.4.2. A structure with walls of reinforced concrete at least 45 cm thick or of bricks at least 70 cm thick or of other material with the same resistance to penetration, without a protective ceiling of reinforced concrete 15 cm thick. The gate must be protected by a barrier when it faces a potentially explosive location.

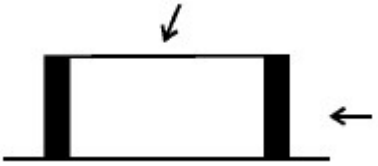


Fig. 19

2.5. Protected location

2.5.1. Munitions depot or shelter protected by a barrier.

2.5.2. Cars, trailers, or wagons loaded with munitions and explosives protected by a barrier.

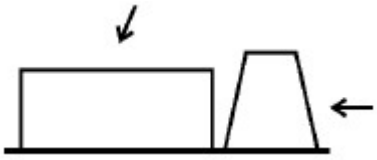


Fig. 20

2.6. Unprotected location

2.6.1. Munitions depot or shelter unprotected by a barrier

2.6.2. Cars, trailers, or wagons loaded with munitions and explosives unprotected by a barrier

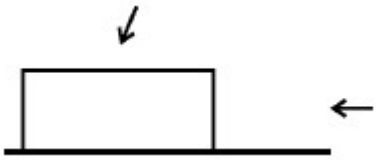


Fig. 21

2.7. Workplace with munitions and explosives

2.7.1. Workplace with munitions and explosives without an exhaust ceiling, with a barrier. The barrier can consist of thick walls.

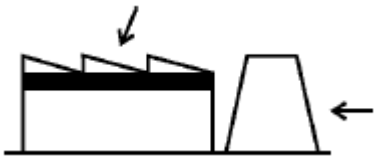


Fig. 22

2.7.2. Workplace with munitions and explosives with an exhaust ceiling, with a barrier. The barrier can consist of thick walls.

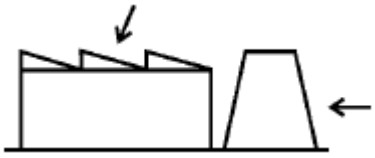


Fig. 23

2.7.3. Workplaces with munitions and explosives, with or without an exhaust ceiling and without barriers.

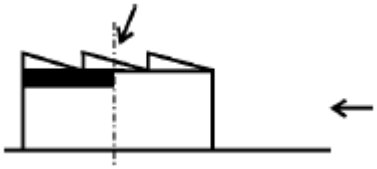


Fig. 24

2.8 External location

2.8.1. Public road

Fig. 25

2.8.2. Inhabited building

Fig. 26

Specification of stock and use of safety distance tables

1. Specification of stock

1.1. Where munitions of the same hazard classes are stored together, their safety distances and permissible quantities are determined pursuant to Annexes 3 to 5 to this Regulation, Tables 1 to 8.

1.2. Where munitions of different hazard classes are stored together, their safety distances and permissible quantities are determined pursuant to Annexes 3 to 5 to this Regulation, Tables 1 to 8.

1.3. When determining the safety distances for jointly stored munitions of different hazard classes, the following procedure is followed:

1.3.1. if munitions of hazard classes 1.1 and 1.2 are stored in a common location, the safety distance is determined as if their total quantity were hazard class 1.1, and then the safety distance is determined as if their total quantity were hazard class 1.2; the default safety distance shall be the greater of the specified distances;

1.3.2. if munitions of hazard classes 1.1 and 1.3 are stored in a common location, the safety distance is determined as if their total quantity were hazard class 1.1, and then the safety distance is determined as if their total quantity were hazard class 1.3; the default safety distance shall be the greater of the specified distances;

1.3.3. if munitions of hazard classes 1.1, 1.2 and 1.3 are stored in a common location, the safety distance is determined as if their total quantity were hazard class 1.1, then the safety distance is determined as if their total quantity were hazard class 1.2, and finally the safety distance is determined as if their total quantity were hazard class 1.3; the default safety distance shall be the largest of the specified distances;

1.3.4. if munitions of hazard classes 1.2 and 1.3 are stored in a common location, the safety distance is determined for hazard class 1.2, and then the safety distance is determined for hazard class 1.3; the default safety distance shall be the greater of the specified distances;

1.3.5. if munitions of hazard class 1.4 are stored in a common location with munitions and explosives of one or more different hazard classes, the quantity of munitions of hazard class 1.4 is disregarded; the safety distance determined in accordance with the procedure set out in points 1.3.1 to 1.3.4, with a minimum distance of 25 m.

1.4. When determining the permissible quantity of jointly stored munitions of different hazard classes, the following procedure is followed:

1.4.1. if munitions of hazard classes 1.1 and 1.2 are stored in a common location, the permissible quantity is determined as if their total quantity were hazard class 1.1, and

then the permissible quantity is determined as if their total quantity were hazard class 1.2; the smaller quantity is used as the default permissible quantity;

1.4.2. if munitions of hazard classes 1.1 and 1.3 are stored in a common location, the permissible quantity is determined as if their total quantity were hazard class 1.1, and then the permissible quantity is determined as if their total quantity were hazard class 1.3; the smaller quantity is used as the default permissible quantity;

1.4.3. if munitions of hazard classes 1.1, 1.2 and 1.3 are stored in a common location, the permissible quantity is determined as if their total quantity were hazard class 1.1, then the permissible quantity is determined as if their total quantity were hazard class 1.2, and finally the permissible quantity is determined as if their total quantity were hazard class 1.3; the smallest quantity is used as the default permissible quantity;

1.4.4. if munitions of hazard classes 1.2 and 1.3 are stored in a common location, the permissible quantity is determined for hazard class 1.2, and then the permissible quantity is determined for hazard class 1.3; the smaller quantity is used as the default permissible quantity;

1.4.5. if munitions of hazard class 1.4 are stored in a common location with munitions of one or more different hazard classes, the quantity of munitions of hazard class 1.4 is disregarded; the permissible quantity is determined in accordance with the procedure set out in points 1.4.1 to 1.4.4, with the smallest quantity being used.

2. Use of safety distance tables

2.1. Tables 1 to 8 in Annexes 3 to 6 to this Regulation contain tables setting out the safety distances between potentially explosive locations and danger zones. Each annex with safety distance tables has two parts.

2.2. The first part contains a table indicating the relative positions of potentially explosive locations and danger zones.

2.3. The second part contains a table indicating the dependence of safety distances on the net weight of explosive.

2.4. Where the quantity of munitions and explosives stored is less than 500 kg net weight of explosive, the safety distance is the same as that corresponding to 500 kg net weight of explosive.

2.5. The storage of munitions and explosives in quantities exceeding 500,000 kg net weight of explosive is unacceptable from the point of view of safety in the event of a potential explosion.

2.6. Tables 1 to 8 in Annexes 3 to 6 to this Regulation set out the safety distances of stored munitions and explosives for each hazard class, whereby:

2.6.1. Tables 1 and 2 are intended for munitions and explosives of hazard class 1.1;

2.6.2. Tables 3 and 4 are intended for munitions and explosives of hazard class 1.2;

2.6.3. Tables 5 and 6 are intended for explosive propellants or deflagration substances of hazard class 1.3, compatibility group C;

2.6.4. Tables 7 and 8 are intended for munitions and explosives of hazard class 1.3, compatibility groups other than C.

2.7. The safety distances for munitions of hazard class 1.4 does not depend on the net weight of the explosive. However, in such a case, danger zones must be at least 25 meters away from potentially explosive locations.

Safety distances for hazard class 1.1

Table 1

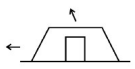
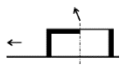
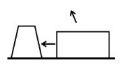
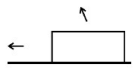
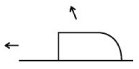
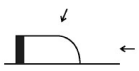
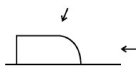
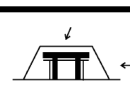
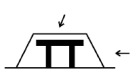
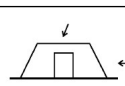
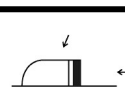
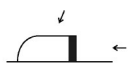
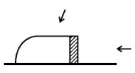
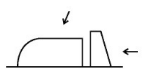
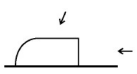
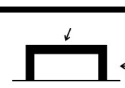
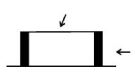
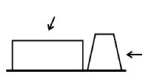
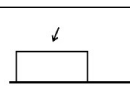
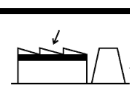
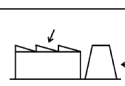
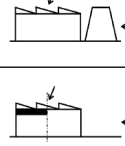
Danger zones	Potentially explosive locations					
						
	D3ag	D3ag	D5a	D5a	D5a	D4ag
	D3ag	D3ag	D5b	D5b	D5b	D4ag
	D4agh *or* D5ag	D4agh *or* D5ag	D6be	D6be	D6be	D4bghe *or* D6ae
	D3ag	D3ag	D5b	D5b	D5b	D5ag
	D3ag	D3ag	D6b	D6b	D6b	D5bg
	D4bgh *or* D6a	D4bgh *or* D6a	D6ce	D6ce	D6ce	D6ce
	D4ag	D4b *or* D5a	D8bde, D9bje *or* D12ae	D8be	D8bde	D8bde
	D6a	D6a	D9bde, D9bje *or* D12ae	D8be	D8bde	D8bde
	D4bgh *or* D7b	D4bgh *or* D7b	D9ce	D4cghe *or* D9ce	D9ce	D9ce
	D4bgh *or* D7b	D4bgh *or* D7b	D9b	D9b	D9b	D9b
	D4bgh *or* D7b	D4bgh *or* D7b	D9cje	D4cghe *or* D9ce	D9cje	D9cje
	D4cgh *or* D7b	D4cgh *or* D7b	D4cghe *or* D7be	D4cghe *or* D7be	D4cghe *or* D7be	D5cghe *or* D7be
	D4cgh *or* D7b	D4cgh *or* D7b	D4cghe *or* D7be	D4cghe *or* D7be	D4cghe *or* D7be	D5cghe *or* D7be
	D4bgh *or* D7b	D4bgh *or* D7b	D4bghe *or* D7be	D1bie,D2bie D4bghe *or* D7be	D1bie,D2bi D4bghe *or* D7be	D4bghe *or* D7be
	D4bgh *or* D7b	D4bgh *or* D7b	D9cje *or* D12fe	D1bie,D2bie D4bghe *or* D7be	D9cje *or* D12fe	D9cje *or* D12fe
	D10	D10	D10	D10	D10	D10
	D10 ≥ 270 m	D10 ≥ 270 m	D10 ≥ 270 m	D10o	D10o	D10 ≥ 270 m
	D10 ≥ 270 m	D10 ≥ 270 m	D13	D10o	D13	D13
	D11 ≥ 270 m k D16≥270 m kn D13 ≥ 400 m D14 ≥ 400 m n	D11 ≥ 270 m k D17≥270 m kn D13 ≥ 400 m D15 ≥ 400 m n	D11 ≥ 270 m k D13 ≥ 400 m	D11k D13	D11k D13	D11 ≥ 270 m k D13 ≥ 400 m
	D13 ≥ 400 m l D14≥400 m ln	D13 ≥ 400 m l D15≥400 m ln	D13 ≥ 400 m l	D13 l D13 ≥ 400 m	D13 l D13 ≥ 400 m	D13 ≥ 400 m l

Table 2
Dependence of safety distances on net weight of explosive

NEQ [kg]	Safety distance [m]																
	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17
500	3		4	7	9	15	20	29	39	64	180	180	270	400	400	270	270
600	3		5	7	10	16	21	31	41	68	180	190	270	400	400	270	270
700	4		5	8	10	16	22	32	43	72	180	200	270	400	400	270	270
800	4		5	8	11	17	23	34	45	75	180	210	270	400	400	270	270
900	4		5	8	11	18	24	35	47	78	180	215	270	400	400	270	270
1000	4		5	8	11	18	24	36	48	80	180	225	270	400	400	270	270
1200	4		6	9	12	20	26	39	52	86	180	240	270	400	400	270	270
1400	4		6	9	13	21	27	41	54	90	180	250	270	400	400	270	270
1600	5		6	10	13	22	29	43	57	94	180	250	270	400	400	270	270
1800	5		7	10	14	22	30	44	59	98	180	270	270	400	400	270	270
2000	5		7	11	14	23	31	46	61	105	180	280	270	400	400	270	270
2500	5		7	11	15	25	33	49	66	110	185	305	280	400	400	270	270
3000	6		8	12	16	26	35	52	70	120	205	325	305	400	400	270	270
3500	6		8	13	17	28	37	55	73	125	220	340	330	400	400	270	270
4000	6		8	13	18	29	39	58	77	130	235	355	350	400	400	270	270
5000	6		9	14	19	31	42	62	83	140	255	380	380	400	400	270	270
6000	7		10	15	20	33	44	66	88	150	270	405	405	400	400	270	270
7000	7		10	16	22	35	46	69	92	155	285	425	425	400	400	270	270
8000	7		10	16	22	36	48	72	96	160	300	445	445	400	400	270	270
9000	8		11	17	23	38	50	75	100	170	310	465	465	400	400	270	270
10000	8		11	18	24	39	52	78	105	175	320	480	480	400	400	270	270
12000	9		12	19	26	42	55	83	110	185	340	510	510	400	415	270	275
14000	9		13	20	27	44	58	87	120	195	360	540	540	400	435	270	290
16000	9		13	21	28	46	61	91	125	205	375	560	560	400	455	270	305
18000	10		14	21	29	48	63	95	130	210	390	590	590	400	475	270	315
20000	10		14	22	30	49	66	98	135	220	405	610	610	400	490	270	330
25000	11		15	24	33	53	71	110	145	235	435	650	650	410	530	275	355
30000	11		16	25	35	56	75	115	150	250	460	690	690	435	560	290	375
35000		15	17	27	36	59	79	120	160	265	485	730	730	460	590	305	395
40000		16	18	28	38	62	83	125	165	275	510	750	760	480	620	320	415
45000														500	640	335	430
50000		17	19	30	41	67	89	135	180	295	550	820	820				
60000		18	20	32	44	71	94	145	190	315	580	870	870				
70000		19	21	33	46	75	99	150	200	330	610	920	920				
80000		19	22	35	48	78	105	160	210	345	640	960	960				
90000		20	23	36	50	81	110	165	220	360	670	1000	1000				
100000		21	24	38	52	84	115	170	225	375	690	1040	1040				
120000		22	25	40	55	89	120	180	240	395	730	1100	1100				
140000			26	42	58	94	125	190	250	420	770	1160	1160				
160000			28	44	60	98	135	200	265	435	810	1220	1220				
180000			29	46	63	105	140	205	275	455	840	1260	1260				
200000			30	47	65	110	145	215	285	470	870	1300	1300				
250000			32	51	70	115	155	230	305	510	940	1400	1400				
300000			34	55	75	120	160	240	325	535	990	1490	1490				
350000			36	57	78	130	170	255	340	565	1050	1570	1570				
400000			37	59	81	135	180	265	355	590	1090	1640	1640				
450000			39	62	85	140	185	280	370	620	1140	1700	1700				
500000			40	64	87	145	190	290	380	635	1180	1770	1770				

Interpretation of the letter indices for safety distances D1 to D17 given in Table 1

Safety distance with letter index

a. ensures complete protection for munitions stored in a danger zone from the effects of a mass explosion originating from a potentially explosive location;

b. ensures a high degree of protection for munitions stored in a danger zone from the effects of a mass explosion originating from a potentially explosive location;

c. ensures a limited degree of protection for munitions stored in a danger zone from the effects of a mass explosion originating from a potentially explosive location;

d. ensures the protection of munitions stored in a danger zone, but the danger zone may be damaged by high-speed shrapnel at the moment of explosion of the potentially explosive location;

e. ensures the protection of munitions stored in a danger zone, but the danger zone may be damaged by low-speed shrapnel at the moment of explosion of the potentially explosive location;

f. ensures protection for munitions stored in a danger zone from the effects of a mass explosion originating from a potentially explosive location;

g. does not ensure the protection of primary explosives and very sensitive explosive substances stored in a danger zone from the effects of a mass explosion from a potentially explosive location;

h. does not ensure the protection of munitions with a sensitive brisant explosive stored in a danger zone from the impact of heavy parts of munitions (especially warheads or projectiles) expelled at the moment of explosion from a potentially explosive location;

i. ensures the protection of bombs and munitions with a thick-walled steel shell with a relatively insensitive brisant explosive stored in a danger zone without munitions casing against the effects of a mass explosion from a potentially explosive location under the following conditions:

   - the danger zone must be separated by a protective embankment;

   - when using safety distance D1, the height of munitions stored in the danger zone must not exceed 1 m;

   safety distance D1 is used for a net explosive weight of the potentially explosive location up to 30,000 kg;

   safety distance D2 is used for a net explosive weight of the potentially explosive location from 30,000 to 120,000 kg;

j. ensures the protection of munitions with a thick-walled steel casing containing an explosive weight of up to 20% of the total weight of the projectile (excluding propellant explosives and cartridges), stored in a danger zone without a munitions casing, from the effects of a mass explosion originating from a potentially explosive location;

k. it protects low traffic density public roads from the effects of a mass explosion from a potentially explosive location;

   safety distances D13, D14, and D15 ensure the protection of public roads with high traffic density;

l. ensures the protection of inhabited buildings and assembly points from the effects of a mass explosion from a potentially explosive location, but glass and other fragile opening fillings may break, which could endanger people and the vicinity; for net explosive weight at a potentially explosive location of less than 5600 kg, where the potentially explosive location is constructed of light partition structures (brick or similar wall 230 mm thick), safety distance D12 (minimum 270 m) specified in Annex 3 to this Regulation, Table 2, may be used; if the potentially explosive location is of solid construction (concrete wall 200 mm thick or more), a safety distance of at least 400 m must be maintained; for densely populated areas (inhabited by more than 10 persons per km^2), a safety distance of at least 400 m must be maintained at all times;

n. ensures the protection of public roads, inhabited buildings, and assembly points from the effects of a mass explosion from a potentially explosive location consisting of two or more structures collectively covered with soil, where, due to the transmission of seismic waves, munitions and explosives with a maximum net weight of 45,000 kg of explosive may be stored in each structure; the internal volume of each structure must not exceed 500 m^3;

   safety distances D14 and D16 are used when public roads, occupied buildings, and assembly points are located behind a potentially explosive location;

   safety distances D15 and D17 are used when public roads, occupied buildings, and assembly points are located to the right or left of a potentially explosive location;

o. it does not ensure the protection of persons and test equipment at workplaces with munitions and explosives with an exhaust ceiling from the effects of falling debris in a mass explosion from a potentially explosive location; a safety distance of at least 270 m must therefore be maintained to ensure the protection of persons and test facilities.

Note: The letter ‘m‘ represents the unit of length ‘metre‘.

Safety distances for hazard class 1.2

Table 3

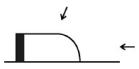
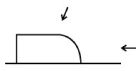
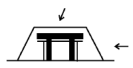
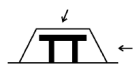
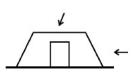
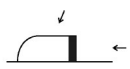
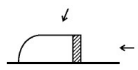
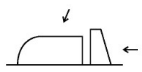
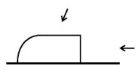
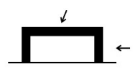
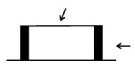
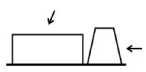
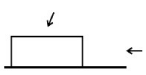
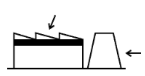
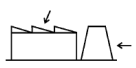
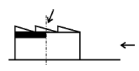
Danger zones	Potentially explosive locations					
	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai
	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai
	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai
	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai
	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai
	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai	2 m ai
	2 m ai	2 m ai	10 m bd, 25 m ad *or* 90 m a	10 m ad *or* 25 m a	25 m bd *or* 90 m a	25 m bd *or* 90 m a
	2 m ai	2 m ai	10 m bd, 25 m ad *or* 90 m a	10 m ad *or* 25 m a	25 m bd *or* 90 m a	25 m bd *or* 90 m a
	2 m ai	2 m ai	10 m b *or* 25 m a	10 m a	25 m b *or* 90 m a	25 m b *or* 90 m a
	2 m ai	2 m ai	10 m b *or* 25 m a	10 m b *or* 25 m a	25 m b *or* 90 m a	25 m b *or* 90 m a
	90 m a	90 m a	90 m a	90 m a	90 m b	90 m b
	2 m ai	2 m ai	10 m a	10 m a	10 m a	10 m a
	90 m b	90 m b	90 m b	90 m b	90 m b	90 m c
	90 m b	90 m b	90 m b	90 m b	90 m b	90 m c
	90 m b	90 m b	90 m b	90 m b	90 m c	90 m c
	25 m	25 m	25 m	25 m	25 m	25 m
	90 m h *or* 135 m g	90 m h *or* 135 m g	90 m h *or* 135 m g	90 m h *or* 135 m g	90 m h *or* 135 m g	90 m h *or* 135 m g
	90 m h *or* 135 m g	90 m h *or* 135 m g	90 m h *or* 135 m g	90 m h *or* 135 m g	90 m h *or* 135 m g	90 m h *or* 135 m g
	90 m hk, 135 m gk, D1h *or* D2g	90 m hk, 135 m gk, D1h *or* D2g	90 m hk, 135 m gk, D1h *or* D2g	90 m hk, 135 m gk, D1h *or* D2g	90 m hk, 135 m gk, D1h *or* D2g	90 m hk, 135 m gk, D1h *or* D2g
	180 m hj, 270 m gj, D1h *or* D2g	180 m hj, 270 m gj, D1h *or* D2g	180 m hj, 270 m gj, D1h *or* D2g	180 m hj, 270 m gj, D1h *or* D2g	180 m hj, 270 m gj, D1h *or* D2g	180 m hj, 270 m gj, D1h *or* D2g

Table 4

Dependence of safety distances on net munitions weight

NEQ [kg]	Safety distances (m)		NEQ [kg]	Safety distances (m)		NEQ [kg]	Safety distances (m)	
	D1	D2		D1	D2		D1	D2
500	180	270	7000	260	340	90000	410	540
600	180	270	8000	270	345	100000	410	560
700	180	270	9000	275	355	120000	410	560
800	180	270	10000	280	360	140000	410	560
900	185	270	12000	290	370	160000	410	560
1000	185	270	14000	300	385	180000	410	560
1200	190	270	16000	305	390	200000	410	560
1400	195	270	18000	310	400	250000	410	560
1600	200	270	20000	320	410	300000	410	560
1800	205	270	25000	330	425	350000	410	560
2000	210	270	30000	345	440	400000	410	560
2500	220	280	35000	350	450	450000	410	560
3000	225	290	40000	360	460	500000	410	560
3500	230	300	50000	375	480			
4000	235	310	60000	390	500			
5000	245	320	70000	400	520			
6000	255	330	80000	410	530			

Interpretation of the letter indices of safety distances D1 and D2, or safety distances specified in metres in Table 3

Safety distance with letter index

a. ensures the complete protection of munitions stored in a danger zone from the effects of local explosions and shrapnel from a potentially explosive location;

b. ensures a high degree of protection of munitions stored in a danger zone against the effects of local explosions and shrapnel from a potentially explosive location;

c. ensures a limited degree of protection of munitions stored in a danger zone against the effects of local explosions and shrapnel from a potentially explosive location;

d. ensures the protection of munitions stored in a danger zone from the effects of local explosions and shrapnel from a potentially explosive location, if

   - objects in the danger zone are covered with soil and their front walls and gates are made of 15 cm thick reinforced concrete or other material with the same penetration resistance;

   - structures in a danger zone meet the requirements of a thick-walled structure;

e. reserved;

f. reserved;

g. ensures the protection of workplaces with munitions, public roads, inhabited buildings and assembly points from the effects of local explosions, shrapnel and fired munitions of calibre above 60 mm at the moment of explosion from a potentially explosive location;

h. ensures the protection of workplaces with munitions, public roads, inhabited buildings and assembly points from the effects of local explosions, shrapnel and fired munitions of calibre up to and including 60 mm at the moment of explosion from a potentially explosive location;

i. ensures the protection of munitions stored in a danger zone from the effects of local explosions and shrapnel from a potentially explosive location; this safety distance may be increased in order to secure handling areas (for example, for firefighters);

j. ensures (at a fixed safety distance of 180 or 270 m depending on the calibre of the ammunition stored) the protection of persons in inhabited buildings and assembly points from the effects of local explosions and shrapnel from a potentially explosive location; does not depend on the quantity of the net mass of the explosive stored at the potentially explosive location, provided that those persons are immediately evacuated and concealed;

   safety distances D1 and D2 (depending on the calibre of the munitions stored) ensure the protection of persons in inhabited buildings from the effects of local explosions and shrapnel from a potentially explosive location, if it is not possible to immediately evacuate and hide;

   safety distances D1 or D2 must always be observed for assembly points;

k. ensures (at a fixed safety distance of 90 or 135 m depending on the calibre of the munitions stored) the protection of public roads against the effects of local explosions and shrapnel from a potentially explosive location, if it is possible to immediately stop operations on them;

   safety distances D1 or D2 (depending on the calibre of the munitions stored) ensure the protection of public roads against the effects of local explosions and shrapnel blasting from a potentially explosive location, if it is not possible to immediately stop operations on them.

Note: The letter ‘m‘ represents the unit of length ‘metre‘.

Safety distances for hazard class 1.3

Table 5
Safety distances for propellants for explosive or deflagration substances of hazard class 1.3, tolerance group C

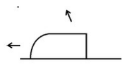
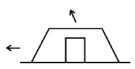
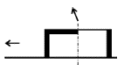
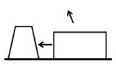
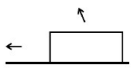
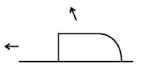
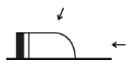
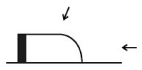
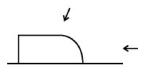
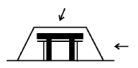
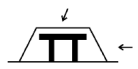
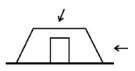
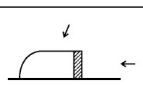
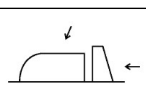
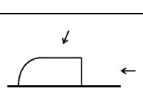
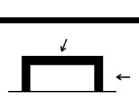
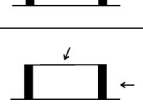
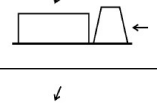
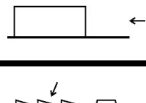
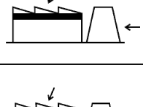
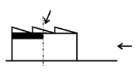
Danger zones	Potentially explosive locations					
						
	2 m ag	2 m ag	2 m ag	10 m ad *or* 25 m a	10 m ad *or* 25 m a	10 m ad *or* 25 m a
	2 m ag	2 m ag	2 m ag	10 m ad *or* 25 m a	10 m ad *or* 25 m a	10 m ad *or* 25 m a
	2 m ag	2 m ag	2 m ag	10 m ad *or* 25 m a	10 m ad *or* 25 m a	D1a
	2 m ag	2 m ag	2 m ag	10 m ad *or* 25 m a	10 m ad *or* 25 m a	10 m ad *or* 25 m a
	2 m ag	2 m ag	2 m ag	10 m ad *or* 25 m a	10 m ad *or* 25 m a	10 m ad *or* 25 m a
	10 m b *or* 25 m a	10 m b *or* 25 m a	10 m b *or* 25 m a	D1b	D1b	D1b
	2 m adg *or* 25 m a	2 m adg *or* 25 m a	2 m adg *or* 25 m a	25 m ad *or* D1a	25 m ad *or* D1a	D1ad, D1bf *or* 240 m b
	2 m adg *or* 25 m a	2 m adg *or* 25 m a	2 m adg *or* 25 m a	25 m ad *or* D1a	25 m ad *or* D1a	D1ad, D1bf *or* 240 m b
	2 m ag	2 m ag	2 m ag	25 m a	25 m a	D1a
	10 m b *or* 25 m a	10 m b *or* 25 m a	10 m b *or* 25 m a	D1a	D1a	D1bf *or* 240 m a
	25 m a	D1a	D1a	D1b	D1b	240 m b
	2 m ag	2 m ag	2 m ag	10 m b *or* 25 m a	10 m b *or* 25 m a	D1a
	25 m a	D1a	D1a	D1b	D1b	240 m a
	25 m a	D1a	D1a	D1b	D1b	240 m a
	25 m a	D1a	D1a	D1b	D1b	240 m a
	D2	D2	D2	D2	D2	D2
	D2	D2	D2	D2	D2	D2f *or* 240 m for balance
	D2	D2	D2	D2	D2	240 m f *or* D4 ≥ 240 m
	D3h *or* D4	D3h *or* D4	D3h *or* D4	D3h *or* D4	D3h *or* D4	D3 ≥ 160 m h *or* D4 ≥ 240 m
	D4	D4	D4	D4	D4	D4 ≥ 240 m

Table 6
Dependence of safety distances on net weight of explosive

NEQ [kg]	Safety distances [m]				NEQ [kg]	Safety distances [m]			
	D1	D2	D3	D4		D1	D2	D3	D4
500	25	60	60	60	18000	30	84	115	170
600	25	60	60	60	20000	32	87	120	175
700	25	60	60	60	25000	35	94	125	190
800	25	60	60	60	30000	39	100	135	200
900	25	60	60	62	35000	42	105	140	210
1000	25	60	60	64	40000	44	110	150	220
1200	25	60	60	69	50000	50	120	160	240
1400	25	60	60	72	60000	54	130	170	255
1600	25	60	60	75	70000	59	135	180	265
1800	25	60	60	78	80000	63	140	185	280
2000	25	60	60	81	90000	66	145	195	290
2500	25	60	60	87	100000	70	150	200	300
3000	25	60	62	93	120000	77	160	215	320
3500	25	60	65	98	140000	83	170	225	335
4000	25	60	68	105	160000	88	175	235	350
5000	25	60	73	110	180000	94	185	245	365
6000	25	60	78	120	200000	99	190	250	375
7000	25	62	82	125	250000	110	205	270	405
8000	25	64	86	130	300000	125	215	290	430
9000	25	67	89	135	350000	135	225	305	455
10000	25	68	92	140	400000	140	235	320	475
12000	25	74	98	150	450000	148	245	330	490
14000	27	78	105	155	500000	156	255	345	510
16000	28	81	110	165					

Interpretation of letter indices of safety distances D1 to D3 or safety distances indicated in metres in Table 5

Safety distance with letter index:

a. ensures complete protection of propellant explosive or deflagration substances stored in the danger zone from the effects of fire, small local explosions or from low-speed shrapnel from the potentially explosive location;

b. ensures a high degree of protection of propellant explosives or deflagration substances stored in a vulnerable location from the effects of fire, small local explosions or from low-speed shrapnel from a potentially explosive location;

c. reserved;

d. ensure the protection of propellant explosive or deflagration substances stored in a vulnerable location from the effects of fire, small local explosions or from low-speed shrapnel from a potentially explosive location, provided that:

   - objects in the danger zone are covered with soil and their front walls and gates or other endangered walls are made of 15 cm thick reinforced concrete or other material with the same resistance to puncture,

   - structures in a danger zone meet the requirements of a thick-walled structure;

e. reserved;

f. ensure the protection of propellant explosive or deflagration substances stored in the danger zone from the effects of fire, small local explosions or from low-speed shrapnel from the potentially explosive location, if the gates in the potentially explosive site or danger zones are protected by a gate barrier or barrier,

g. ensure the protection of propellant explosive or deflagration substances stored in a vulnerable location from the effects of fire, small local explosions or from low-speed shrapnel from a potentially explosive location; this safety distance may increase in order to secure handling areas (for example, for firefighters),

h. ensure the protection of low-density public roads against the effects of fire, small local explosions or low-speed shrapnel from a potentially explosive location;

   safety distance D4 ensures the protection of public roads with high traffic density.

Note: The letter ‘m‘ represents the unit of length ‘metre‘.

Safety distances for munitions and explosives of hazard class 1.3, tolerance groups other than C

Table 7:

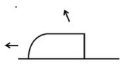
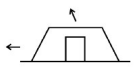
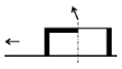
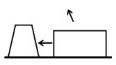
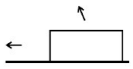
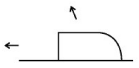
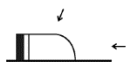
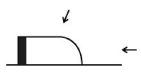
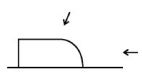
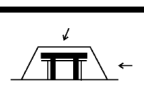
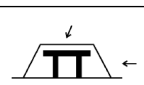
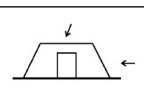
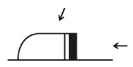
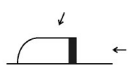
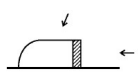
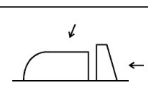
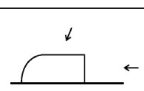
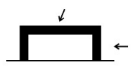
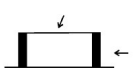
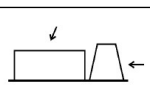
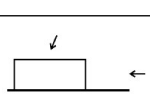
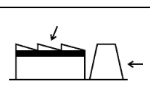
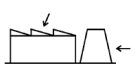
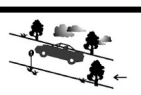
Danger zones	Potentially explosive locations					
						
	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag
	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag
	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag
	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag
	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag
	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag	2 m ag
	2 m ag	2 m ag	10 m ad *or* 25 m a	10 m ad *or* 25 m b	25 m ad *or* 60 m a	25 m ad *or* 60 m a
	2 m ag	2 m ag	10 m ad *or* 25 m a	10 m ad *or* 25 m b	25 m ad *or* 60 m a	25 m ad *or* 60 m a
	2 m ag	2 m ag	10 m a	10 m a	25 m a	25 m a
	2 m ag	2 m ag	10 m b *or* 25 m a	25 m b *or* 60 m a	25 m be *or* 60 m ae	25 m be *or* 60 m ae
	25 m b *or* 60 m a	25 m b *or* 60 m a	25 m bh, 60 m ahi *or* 60 m bi	60 m b	60 m b	60 m b
	2 m ag	2 m ag	10 m a	10 m a	10 m a	10 m a
	25 m b *or* 60 m a	25 m b *or* 60 m a	25 m bh, 60 m ahi *or* 60 m bi	60 m b	60 m b	60 m b
	25 m b *or* 60 m a	25 m b *or* 60 m a	25 m bh, 60 m ahi *or* 60 m bi	60 m b	60 m b	60 m b
	25 m b *or* 60 m a	25 m b *or* 60 m a	25 m bh, 60 m ahi *or* 60 m bi	60 m b	60 m b	60 m b
	25 m	25 m	25 m	25 m	25 m	25 m
	60 m	60 m	60 m	60 m	60 m	60 m
	60 m	60 m	60 m	60 m	60 m	60 m
	60 m f *or* D4	60 m f *or* D4	60 m f *or* D4	60 m f *or* D4	60 m f *or* D4	60 m f *or* D4
	D4	D4	D4	D4	D4	D4

Table 8

Dependence of safety distances on net weight of explosive

NEQ [kg]	Safety distance [m]	NEQ [kg]	Safety distance [m]	NEQ [kg]	Safety distance [m]
	D4		D4		D4
500	60	6000	120	70000	265
600	60	7000	125	80000	280
700	60	8000	130	90000	290
800	60	9000	135	100000	300
900	62	10000	140	120000	320
1000	64	12000	150	140000	335
1200	69	14000	155	160000	350
1400	72	16000	165	180000	365
1600	75	18000	170	200000	375
1800	78	20000	175	250000	405
2000	81	25000	190	300000	430
2500	87	30000	200	350000	455
3000	93	35000	210	400000	475
3500	98	40000	220	450000	490
4000	105	50000	240	500000	510
5000	110	60000	255		

Interpretation of letter indices of safety distances given in metres in Table 7

Safety distance with letter index

a. ensures complete protection of munitions stored in a danger zone from the effects of fire, small local explosions or from low-speed shrapnel from a potentially explosive location;

b. ensures a high degree of protection of munitions stored in a danger zone from the effects of fire, small local explosions or from low-speed shrapnel from a potentially explosive location;

c. reserved;

d. ensures the protection of munitions stored in a danger zone from the effects of fire, small local explosions or low-speed shrapnel from a potentially explosive location, provided that:

   - structures in the danger zone are covered with soil and their front walls and gates are made of 15 cm thick reinforced concrete or other material with the same penetration resistance;

   - structures in a danger zone meet the requirements of a thick-walled structure;

e. ensures the protection of munitions stored in a danger zone from the effects of fire, small local explosions or from low-speed shrapnel from a potentially explosive location, if the gate in the danger zone and in a potentially explosive location is protected by a gate barrier or barrier;

f. ensures the protection of public roads against the effects of fire, small local explosions or low-speed shrapnel from a potentially explosive location, if-traffic on them can be stopped immediately;

   safety distance D4 ensures the protection of public roads against the effects of fire, small local explosions or low-speed shrapnel from a potentially explosive location if it is not possible to immediately stop traffic on them;

g. ensures the protection of munitions stored in a danger zone from the effects of fire, small local explosions or low-speed shrapnel from a potentially explosive location; this safety distance may increase in order to secure handling areas (for example, for firefighters);

h. ensures the protection of munitions stored in danger zone from the effects of fire, small local explosions or from low-speed shrapnel from a potentially explosive location if structures in a potentially explosive location have thick walls with a protective ceiling;

i. ensures the protection of munitions and explosives stored in danger zone from the effects of fire, small local explosions or from low-speed shrapnel from a potentially explosive location if structures in a potentially explosive location have thick walls without a protective ceiling;

Note: The letter ‘m‘ represents the unit of length ‘metre‘.

Specimen deactivation mark