



ADOPTED  
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Commission dated October 5, 2021 N 1

TECHNICAL REGULATIONS OF THE EURASIAN ECONOMIC UNION "ON THE SAFETY OF PRODUCTS INTENDED FOR CIVIL DEFENSE AND PROTECTION AGAINST NATURAL AND TECHNOGENIC EMERGENCIES" (EAEU TR 050/2021)

Lists of standardization documents ensuring compliance with the requirements of these Technical Regulations

## I. SCOPE OF APPLICATION

1. These technical regulations have been developed in accordance with the Treaty on the Eurasian Economic Union of May 29, 2014 in order to protect human life and (or) health, property, the environment, life and (or) health of animals and plants, and prevent actions that introduce consumer confusion.

This technical regulation establishes mandatory requirements for application and execution in the customs territory of the Eurasian Economic Union (hereinafter - the Union) for products intended for civil defense and protection from emergencies of a natural and man-made nature, released into circulation in the customs territory of the Union (hereinafter - the products) .

If other technical regulations of the Union are adopted in relation to the product, then the product must comply requirements of all technical regulations of the Union that apply to it.

2. This technical regulation applies to objects of technical regulation according to list according to the appendix.

3. This technical regulation does not apply to:

a) for products designed and modified for recognition, detection of bacteriological (biological) objects and radioactive materials that can be used for military purposes, or for protection against such objects and materials;

b) for products designed and modified to recognize, detect toxic chemicals used in chemical weapons and riot control chemicals or for protection against such chemicals and agents, as well as components specially designed for these products;

c) for products that are the subject of the technical regulations of the Customs Union "On the safety of personal protective equipment" (TR CU 019/2011).

## II. BASIC CONCEPTS

4. For the purposes of applying this technical regulation, the concepts established by the Protocol on technical regulation within the framework of the Eurasian Economic Union (Appendix No. 9 to the Treaty on the Eurasian Economic Union of May 29, 2014), standard conformity assessment schemes approved by the Decision of the Council of the Eurasian Economic Commission dated April 18, 2018 N 44 (hereinafter referred to as standard diagrams), as well as concepts that

mean the following:

"emergency rescue operations" - actions to search and rescue people, material and cultural values, protect the environment in the emergency zone and from dangers arising during military conflicts or as a result of these conflicts, localize and suppress or bring to the minimum possible level the impact of characteristic dangerous factors for them;

"emergency rescue equipment" - technical equipment intended for emergency rescue operations;

"emergency chemically hazardous substance" - a dangerous chemical substance that is used in industry and agriculture and in the event of an emergency release (spill) of which the environment can be contaminated in toxic doses affecting a living organism;

"automated workplace of an operational duty officer" - a software and hardware complex of control and communication tools, receiving, processing, transmitting and displaying information (situation) for receiving and transmitting control commands, automating the process of managing forces and means of civil defense and protection from emergency situations;

"automated public warning workstation" - a software and hardware complex for receiving warning signals and information from a civil defense control point, a unified duty dispatch service, processing, displaying, generating and transmitting control commands for launching equipment and monitoring terminal warning devices for all available technical communication, warning and mass information systems;

"biological (bacteriological) infection" - penetration into a living organism of a causative agent of an infectious disease or its waste products, leading to the development of an infectious process in the affected organism;

"auxiliary equipment for technical means of control and communication" - equipment intended for connecting, generating, converting, processing signals and messages transmitted or received over communication networks, as well as for power supply of technical means of control and communication;

"civil defense" - a system of measures to prepare for the defense and to protect the population, material and cultural values on the territory of a member state of the Union from dangers arising during military conflicts or as a result of these conflicts, as well as in emergency situations of a natural and man-made nature;

"unified duty and dispatch service" - a governing body of the state system for the prevention and liquidation of emergency situations of a member state of the Union, designed to coordinate the actions of duty and dispatch (duty and dispatch) services, forces and means of civil defense, prevention and liquidation of emergency situations in the administrative territory -territorial unit;

"civil defense protective structure" is an engineering structure designed to shelter people, equipment and property from dangers arising during military conflicts or as a result of these conflicts, as well as in emergency situations of a natural and man-made nature;

"zone of chemical contamination" is a territory within which there is a danger to the health of unprotected people in the event of their prolonged stay in this territory and in these conditions. The zone of chemical contamination is limited by the normatively established maximum permissible concentrations of exposure to hazardous chemicals in emergency situations or during military conflicts;

"emergency zone" - the territory where an emergency situation occurred;

"emergency response" - rescue and other urgent work carried out in the event of emergency situations and aimed at saving lives and preserving people's health, reducing the amount of damage caused to the environment and material losses, as well as localizing areas

emergency situations, termination of the hazardous factors characteristic of them;

"conventional weapons" - types of weapons not related to weapons of mass destruction, equipped ammunition or flammable substances;

"ultimate warning device" - a technical device that delivers signals and information notifications to the population;

"terminal subscriber terminal" - a technical device designed to provide the official of the control body (point) with the necessary communication service;

"hazardous chemical" is a chemical that has a direct or indirect effect on can cause acute and chronic illness or death in humans;

"management body" - a body of the state system for preventing and eliminating emergency situations of a member state of the Union, designed to perform tasks for managing civil defense and measures to protect against emergencies of a natural and man-made nature;

"weapons of mass destruction" - nuclear, chemical, bacteriological (biological) and toxin weapons;

"poisonous substance" - a poisonous chemical substance that has certain toxic and physicochemical properties and causes damage to people, contamination of the air, terrain, weapons, etc. technology;

"damaging factor" is a component of a dangerous phenomenon or process caused by the source of an emergency situation and characterized by physical, chemical and biological actions or manifestations that are defined or expressed by appropriate parameters;

"prevention of emergency situations" - a set of measures carried out in advance and aimed at minimizing the risk of emergency situations as much as possible, as well as preserving people's health, reducing the amount of damage caused to the environment and material losses in the event of their occurrence;

"anti-radiation shelter" - a civil defense protective structure designed to protect people sheltered from the effects of ionizing radiation due to radioactive contamination of the area, and allowing continuous stay in it for a specified period of time;

"control points" - specially equipped structures (premises) or vehicles equipped with the necessary technical means of communication and life support and designed to accommodate and ensure the effective operation of control bodies both in the event of emergencies and military conflicts, and in their absence;

"radioactive contamination" - the presence of radioactive substances on the surface, inside a material, in the air, in the human body or in another place in quantities exceeding the levels established by the legislation of a member state of the Union;

"mode of complete or partial isolation with regeneration of internal air", "mode III" - supply of a civil defense protective structure with air consisting of exhaust air restored to its original composition and properties for its reuse using certain physical and chemical processes, and (or) compressed air (oxygen) from cylinders, as well as from a limited volume of outside air purified using filter ventilation systems;

"filter ventilation mode", "mode II" - supply of civil defense protective structures with outside air purified using filter ventilation systems from gaseous emergency chemicals and other hazardous chemicals, aerosols and dust, including radioactive dust and aerosols of dangerous biological agents, up to the established maximum permissible concentrations;

"clean ventilation mode", "mode I" - supplying civil defense protective structures with external air purified from dust using filter ventilation systems;

"warning system" - an organizational and technical unification of forces, communication network channels, broadcast networks, communication and warning means, ensuring the delivery of warning signals and information to the population, government officials and civil defense forces in order to prevent and eliminate emergency situations;

"communication system" - an organizational and technical unification of forces and means of communication that ensure the exchange of information in the civil defense management system for the purpose of preventing and eliminating emergency situations;

"civil defense management system" - an integral part of the public administration system of a member state of the Union, intended to solve problems in the field of civil defense and representing a set of management bodies, as well as control points and technical means that ensure the management of civil defense;

"communication device" - a technical device that transmits, processes and receives messages in the system civil defense management;

"natural disaster" is a destructive natural and (or) natural-anthropogenic phenomenon or process, as a result of which a threat to human life and health may arise or has arisen, destruction or destruction of production and (or) non-production facilities, as well as environmental components, may occur ;

"technical means of monitoring emergency situations" - products, devices, instruments and information and computing (software and hardware) complexes designed to provide monitoring of the environment, man-made objects for the purpose of assessment, analysis and timely detection of changes in their condition, processes occurring in them and phenomena, as well as for information support when making decisions on the prevention and response to emergency situations;

"technical warning device" - a technical device that transmits, processes and receives warning signals and information;

"technical means of control and communication" - a technical device that transmits, processes and receives messages in civil defense management systems, prevention and response to emergency situations;

"shelter" - a protective civil defense structure designed to protect people for a specified period of time from the calculated effects of damaging factors of nuclear and chemical weapons and conventional weapons, dangerous biological agents, external radioactive radiation and damaging concentrations of emergency chemically hazardous substances that occur during accidents on potentially dangerous objects, as well as from

high temperatures and combustion products during fires;

"shelter (protective shelter)" - a civil defense protective structure designed to protect people, material and cultural values from the high-explosive and fragmentation effects of conventional weapons, as well as from destruction by debris of building structures of buildings and structures when they are destroyed as a result of exposure to conventional damaging factors means of destruction and emergency situations of natural and man-made nature;

"high-explosive action" - the action of ammunition in which the target is hit by the products of the explosion of the explosive charge and the resulting shock wave;

"chemical contamination" - the spread of hazardous chemicals in the environment in concentrations or quantities that pose a threat to people, farm animals and plants over a certain period of time;



c) the closing mechanism is designed to lock and seal the opening and must include a bevel gearbox, screw rods with wedges and steering wheels (handles). The latching mechanism must be located on the inside of the product and ensure its opening and closing on both sides. When tightened, the locking wedges of the shutter should press the blade against the box.

10. The tightness of security-hermetic and hermetic doors, gates and shutters must be ensured by special seal located around the perimeter of the canvas.

Protective-hermetic doors, gates and shutters must ensure the sealing of shelters and the protection of sheltered people from the calculated impact of an air shock wave, including the action of nuclear weapons, the high-explosive action of conventional weapons, from structural debris during the destruction of the upper floors of buildings, as well as from effects of external radioactive radiation and hazardous chemical substances.

Security-hermetic doors and gates should be used as external devices for vestibules, and also as external and internal devices for airlock vestibules.

Protective-hermetic shutters should be used as external and internal devices for installation in manholes, expansion chambers, filter installation chambers and other similar rooms.

Hermetic doors, gates and shutters must ensure the sealing of shelters based on the calculated impact of external radioactive radiation and hazardous chemical substances.

Hermetic doors and gates should be used as internal devices for vestibules, as well as external and internal devices for the vestibule of a diesel power plant.

Hermetic shutters should be used as internal devices and installed in manhole vestibules behind a protective-hermetic shutter and in other similar rooms.

Security and hermetic doors and gates must be swing or sliding.

Opening and closing of hinged devices should be carried out by rotating the blades around the hinges welded to the frame. For sliding devices, the canvas must be suspended on running trolleys that move along a monorail included in the welded structure of the box (coaming).

In civil defense protective structures, installation of protective-hermetic and hermetic doors, gates and shutters are manufactured according to design documentation.

Security-hermetic and hermetic doors, gates and shutters, with additional justification, can be equipped with a locking device - an electromagnetic latch, which prevents depressurization of the leaf (sash) without a signal from the control point.

All external surfaces of parts and assemblies of protective-hermetic and hermetic doors, gates and shutters, with the exception of rubbing, non-metallic and galvanized ones, must be painted.

The locking wedges of the closing mechanism must move without jolts or jamming, and the bolt when tightened must ensure uniform compression of the seal around the entire perimeter.

Hinged security-hermetic and hermetic doors, gates and shutters are installed so that On the side of greater pressure (impact), the canvas was pressed against the box and worked for pressure.

Hinged security-hermetic and hermetic doors, gates and shutters are installed with opening both to the right and to the left, for which they are rotated 180 degrees during installation. If there is an alarm device, the limit switch should be installed on the top of the box.

On the outside surface of protective-hermetic and hermetic doors, gates and shutters manufacturer, product code and date of manufacture.



increase in ambient temperature to 50°C;

lowering the ambient temperature to minus 50°C;

increasing relative air humidity to 98 percent at an ambient temperature of 50°C.

The reliability of devices and products should be characterized by the following indicator values:

average recovery time - no more than 5 hours;

the limit state criterion is metal corrosion.

The service life of devices must be documented by the manufacturer.

## 2. REQUIREMENTS FOR VENTILATION UNITS, FILTERS AND AIR REGENERATION UNITS OF PROTECTIVE STRUCTURES OF CIVIL DEFENSE

18. In civil defense protective structures, fans with electric and electric manual drive.

Electrically driven fans should be used depending on climatic zones for ventilation of shelters with a capacity of no more than 600 people.

Each electric manual fan should be equipped with a check valve - an air flow indicator.

When operating from an electric drive, the gearbox must be disconnected from the impeller shaft automatically by a coupling switching. In the absence of electricity, the shaft must be operated by rotating the gear handle.

The performance of electric manual fans when operating from an electric drive and a manual drive with a handle rotation speed of 45 minutes must meet the design demand of the shelter for the supplied air, taking into account the aerodynamic resistance of the installed filters.

19. To clean the outside air from dust and aerosol particles of combustion products in all modes, cell filters must be used that correspond to the design capacity of the ventilation system of protective structures of civil defense.

20. In the case of using prefilters in modes I and II, it is necessary to install cell filters with a cleaning coefficient of at least 0.8 in front of them, corresponding to the design capacity of the shelter ventilation system.

For fine purification of outside air from dust and aerosol particles in all modes should be used prefilters that are installed after the cell filters.

21. Regeneration of cell filters should be carried out when the aerodynamic resistance of the network is reached at 160 Pa, replacing contaminated filters with backup filters during their treatment.

22. Pre-filters used in modes I and II must have the following indicators:

a) productivity - no more than 1000 m/h;

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b) resistance to air flow - no more than 265 Pa;

c) breakthrough coefficient for standard oil mist - no more than 14 percent.



23. If during peacetime it is not necessary to clean the outside air from dust, it should be provided possibility of dismantling cell filter cells or prefilter cassettes.

The outside air should be cleaned of toxic substances, radioactive substances and bacterial agents in absorber filters.

24. Regeneration of internal air should be provided in regenerative cartridges over time protective effect at an initial concentration of carbon dioxide of  $20 \pm 2$  mg/l for at least 5 hours.

In peacetime, regenerative cartridges can only be used in emergency situations.

### 3. CONTROL AND COMMUNICATION EQUIPMENT

25. Technical means of control and communication according to operating conditions are divided into the following groups:

- a) for stationary premises and structures;
- b) for protective structures of civil defense;
- c) for mobile control points;
- d) for open spaces.

26. Technical control and communication means must function under the following conditions:

a) when placed in an open space:

ambient temperature - from minus  $50^{\circ}\text{C}$  to plus  $50^{\circ}\text{C}$ ;

relative air humidity - from 30 percent to 95 percent;

atmospheric pressure - from 74.8 to 106.7 kPa;

shell protection degree - not lower than IP 54;

b) when placed in closed heated rooms:

ambient temperature - from minus  $10^{\circ}\text{C}$  to plus  $45^{\circ}\text{C}$ ;

relative air humidity - from 30 percent to 78 percent.

27. The automated workplace of the operational duty officer must provide:

a) receiving and transmitting control commands, automating the process of managing civilian forces and means defense, as well as protection from emergency situations;

b) software compatibility and technical interface of automated workstations with each other at all levels of civil defense management and with automated workstations of interacting management bodies;

c) information security.

28. The terminal user terminal must provide the official of the control body with:

a) access to necessary communication services;

b) the ability to manage visual and audio information for the purpose of managing resources, communication services and data transmission.

29. Auxiliary equipment for technical control and communication means must provide:

- a) formation, transformation and processing of signals and messages transmitted or received over networks communications and data transmission;
- b) protection of information from unauthorized access;
- c) providing power supply to automated workstations of the operational duty officer and terminal subscriber terminals.

4. TECHNICAL MEANS OF NOTIFICATION OF DANGERS ARISING OUT OF MILITARY CONFLICTS OR AS A RESULT OF THESE CONFLICTS, AS WELL AS ABOUT EMERGENCY SITUATIONS

30. Technical means of warning are divided into the following groups:

a) according to functional purpose:

automated workstation for warning the population;

equipment for launching terminal warning devices;

terminal warning device;

b) according to operating conditions:

for stationary premises and structures;

for protective structures of civil defense;

for mobile control points;

for open spaces.

31. An automated public warning workstation must provide:

- a) software compatibility and technical interface of automated public warning workstations with each other at all levels of civil defense management and with automated workstations of interacting management bodies;
- b) receiving signals and warning information from controls at all levels;
- c) receiving data from monitoring systems for natural and man-made emergency situations and analyzing such data, preparing warning information, a list of notified subscribers and technical means used for public notifications;
- d) generation, transmission of warning signals and information in the following modes:
  - circular;
  - group;
  - selective;

e) transmission of the following types of signals and warning information:

sound notification;

voice message;

text message;

video message;

f) automatic retransmission of undelivered signals and alert information until received confirmation or achievement of the number of attempts of such transfer specified during setup;

g) transmission of pre-recorded signals and warning information on magnetic (electronic) media or direct transmission method;

h) recording signals and warning information;

i) the ability to quickly enter alert information or edit alert information entered previously;

j) conducting two-way exchange of voice messages in conference mode with one or a group automated public warning workstations with the ability to record sound;

k) preparation (recording), storage of audio, voice, text and video messages, warning programs, options and modes of their transmission;

l) establishing the priority of notifying subscribers (managing the priority of notifying subscribers in the notification list);

m) periodic monitoring of the state of technical means of warning the population and communication channels in standby mode and during the transmission of warning signals and information;

o) suspending or canceling the notification session upon command;

n) visualization of the notification process in real time with display of a list of notification objects, notification time (for each object) and channels through which notification is carried out;

p) formation of databases of information about the progress and results of the notification (with the ability to display this information for printing);

c) integrated use of networks and communication channels for transmitting warning signals and information.

32. The equipment for launching terminal warning devices is designed to switch communication channels and broadcast networks and turn on (disable) terminal warning devices for transmitting warning signals and information. The terminal alarm launch equipment must provide:

a) operation of terminal warning facilities over 2 independent types of communication;

b) switching communication channels and broadcast networks;

c) enabling (disabling) terminal warning facilities for transmitting warning signals and information;

d) work on digital and analog networks and communication channels, various combinations of communication channels.

33. The terminal warning device of the "speech reproducing installation" type is intended for transmitting sound signals and warning information and must be installed in places where the population is located, both inside

indoors and outdoors.

The final warning device of the "speech-reproducing installation" type must provide:

range of reproduced frequencies of the vocal tract - at least 0.3-3.4 kHz;

reliability of receiving speech information corresponding to the following characteristics:

syllable intelligibility - at least 90 percent;

verbal intelligibility - at least 97 percent.

The level of acoustic pressure created by the final warning device of the "speech reproducing installation" type on the acoustic axis, measured in an open area in calm weather, is set by the developer for a sinusoidal signal with a frequency of 1 kHz. Acoustic pressure deviation is allowed up to minus 14 dB from the level at a frequency of 1 kHz in the declared frequency range of the acoustic installation. The generated pressure parameter is measured at a distance of 30 m from the terminal warning device of the "speech-reproducing installation" type on the acoustic axis in calm weather.

When placed in an open space, a terminal warning device of the "speech-reproducing" type  
The installation must function stably under the following conditions:

ambient temperature - from minus 50°ÿ to plus 50°ÿ;

relative air humidity - from 30 percent to 95 percent;

atmospheric pressure - from 74.8 kPa to 106.7 kPa;

The degree of protection of the shell is not lower than IP 54.

When placed in closed heated rooms, a terminal warning device of the type  
The "speech reproducing installation" must function stably under the following conditions:

ambient temperature - from minus 10°ÿ to plus 45°ÿ;

relative air humidity - from 30 percent to 78 percent.

34. The terminal warning device of the "siren" type is designed to transmit sound warning signals of the "siren" type and should be installed in places where the population is located both indoors and in open spaces.

The terminal warning device of the siren type must be capable of transmitting continuous and intermittent siren signals.

The level of acoustic pressure created by the terminal warning device of the "siren" type in the sector of action declared by the developer is established by the developer and measured in open areas in horizontal directions at a distance of 30 m from the axis of the terminal warning device of the "siren" type in calm weather. The frequency of sound vibrations should be 400-450 Hz.

When placed in an open space, the terminal warning device of the siren type must function reliably under the following conditions:

ambient temperature - from minus 50°ÿ to plus 50°ÿ;

relative air humidity - from 30 percent to 95 percent;



d) emergency rescue vehicles, depending on their functional purpose, must be equipped with means of purifying atmospheric air from the effects of damaging factors to supply air to service personnel and evacuated victims;

e) emergency rescue equipment must have emergency stop devices in the event of a malfunction, including a sudden power outage (which may lead to an emergency);

f) electrical equipment and electrical networks of emergency rescue vehicles (if provided) must be reliably protected from mechanical damage during their operation and exposure to external environments, while all electrical networks must be protected from overloads and short circuits;

g) the safety of emergency rescue equipment should not be reduced under the influence of external climatic and mechanical factors permitted by operating conditions;

h) compliance with safety requirements must be ensured during the entire service life of the emergency life-saving equipment;

i) storage and service periods established for emergency rescue equipment and their components must be documented by the manufacturer;

j) operational documents must be attached to each rescue equipment.

37. The following requirements for their purpose are imposed on emergency rescue equipment:

a) rescue equipment in accordance with their type and class must be used when performing ground, mountain, surface (underwater) and underground rescue operations and organizing priority life support for the population in the areas:

radioactive contamination;

chemical contamination;

destruction;

fires;

floods and inundations;

biological (bacteriological) infection;

b) emergency rescue equipment must have mobility and performance at a level that ensures the implementation of such organizational and technological principles of emergency rescue operations as timeliness, continuity, all-weather, high pace and efficiency of their implementation;

c) emergency rescue vehicles at the transport base must have high maneuverability, the ability to maintain directional stability and the ability to freely maneuver at operational speed in a given working space;

d) rescue equipment of the same type and class must be electrically and mechanically compatible level of resistance to fluctuations in supply voltage and changes in frequency of supply voltage;

e) rescue equipment containing radio-electronic devices as part of its functional elements must be resistant to radio interference;



rescue equipment;

e) the design of emergency rescue equipment must ensure the possibility of their use at any time of the year and day during the entire declared service life and protection of functional equipment and technical means from overloads caused by violation of operational restrictions, sudden loss of power supply, damage by rodents and biological pests;

f) internal (on-board) power sources must be autonomous and provide a specified time continuous operation and autonomous functioning of emergency rescue equipment;

g) the strength characteristics of materials must ensure the reliability of rescue equipment when exposed to external factors (mechanical, climatic, radiation, special environments, thermal);

h) the components of emergency rescue equipment, depending on their purpose, must allow processing:

water, aqueous solutions of surfactants, alcohol-based solutions;

degassing, disinfecting and decontaminating solutions;

air flow;

mechanical impact with non-metallic brushes;

i) materials used in the manufacture of rescue equipment, working surfaces of parts of mechanisms and devices must have protective coatings that protect them from corrosive and abrasive destruction;

j) methods for connecting parts and assembly units to each other in rescue equipment must ensure reliable and quick connection manually or automatically and exclude the possibility of incorrect assembly;

k) self-propelled rescue vehicles and rescue vehicles at the transport base must be equipped with lighting devices, distinctive light-acoustic systems and sound signaling devices. In the dark and in unlit rooms, the operation of such emergency rescue equipment is permitted only with the lighting and distinctive running devices turned on.

41. The following transportability requirements apply to rescue equipment:

a) rescue equipment must be able to be transported by all possible types transport with and without the use of a transport container;

b) transportation of emergency rescue equipment under its own power on the basis of the vehicle chassis must be ensured throughout the entire service life without reducing functional efficiency;

c) transportation of emergency rescue equipment by air, rail, water transport must be provided without reducing the level of their technical condition, without limiting range and speed;

d) dismantling operations should be simple and take the minimum possible time. Allowed partial dismantling of emergency rescue equipment without loss of the ability to move under its own power;

e) each rescue vehicle must have a standard set of devices for wireless fastenings during transportation by any type of transport;

f) self-propelled rescue vehicles and rescue vehicles at a transport base must have devices that ensure their towing by another vehicle.



42. The following manufacturability requirements are imposed on emergency rescue equipment:

- a) accessibility and ease of maintenance and repair;
- b) specified reliability, ensuring restoration of operability during operation within the framework of the standard calculation.

43. Rescue equipment must meet the following special requirements:

- a) self-propelled rescue vehicles and rescue vehicles at the transport base must be equipped with means of communication and navigation;
- b) on all rescue vehicles equipped with communications and navigation equipment for power supply Radio equipment must have at least 2 sources of electricity (main and backup).

#### 5. TECHNICAL TOOLS FOR MONITORING EMERGENCY SITUATIONS

44. Technical means for monitoring emergency situations must comply with the classification according to functional purpose.

45. Monitoring of man-made emergency situations is carried out in relation to:

- a) technological processes;
- b) engineering life support and safety systems;
- c) engineering (load-bearing) structures of buildings and structures;
- d) facilities for transportation and storage of hazardous chemicals and explosives;
- e) radioactive contamination, chemical and biological contamination of the environment.

46. Monitoring of natural emergencies is carried out in relation to:

- a) geological processes and phenomena;
- b) meteorological processes and phenomena;
- c) hydrological processes and phenomena;
- d) natural fires.

47. Technical means for monitoring emergency situations must operate in continuous modes and (or) periodic monitoring.

48. Technical means for monitoring emergency situations must provide information for the performance of the following functions by management bodies:

- a) emergency risk management;
- b) forecasting emergency situations;
- c) assessing the effectiveness of emergency prevention based on monitoring results;
- d) information exchange between state emergency prevention and response systems situations of member states.

49. Technical means for monitoring emergency situations must perform the following functions in real time:

- a) sensors and measuring instruments for monitoring changes in the state of environmental parameters or its individual components - to monitor parameters characterizing the potential danger of sources of emergency situations;
- b) means of data transmission - ensure the communication of messages about dangerous changes in environmental parameters or its individual components, characterizing the potential danger of sources of emergency situations, through management bodies to the authorities of the Member States and facility managers;
- c) information and computing (software and hardware) monitoring systems - provide information support for decision-making at the level of authorities of the Member States, managers of facilities to prevent emergency situations and eliminate their consequences.

50. Information and computing (software and hardware) monitoring systems, data transmission tools, as well as sensors and measuring instruments for monitoring changes in the state of environmental parameters or its individual components must ensure compatibility and information and technical interface with automated control systems in accordance with technical conditions (requirements) for their connection (interface), determined by these authorities.

51. When monitoring emergency situations, information and computing (software and hardware) monitoring systems and data transmission facilities must ensure the protection of information from unauthorized access.

52. When monitoring emergency situations, it is allowed to use public communication network channels.

53. In case of failure of information transmission (temporary lack of connection), information and computing (software and hardware) monitoring systems must provide:

- a) storing transmitted information in a queue (database);
- b) cyclic repetition of attempts to transfer information from the queue until the successful completion of this operation;
- c) clearing the queue upon successful transmission of all information.

54. The average delay in issuing messages from sensors and measuring instruments for monitoring changes in the state of environmental parameters or its individual components should not exceed 30 seconds from the moment of a critical change in monitoring parameters.

55. Reliability indicators of technical monitoring equipment should have the following values:

- a) readiness rate - at least 99.8 percent;
- b) mean time between failures - at least 10,000 hours.

56. Technical means for monitoring emergency situations should provide for diagnostics of:

- a) operability of technical means for monitoring emergency situations;
- b) interfacing technical means for monitoring emergency situations with controlled systems;

c) interfacing technical means for monitoring emergency situations with external systems;

d) the state of performance of the operator of technical means for monitoring emergency situations by receiving responses to automatically sent control messages.

57. The service life of emergency monitoring equipment must be confirmed documented by the manufacturer.

58. Sensors and measuring instruments for monitoring changes in the state of environmental parameters or its individual components, as well as data transmission means must be resistant to mechanical and climatic factors.

59. Technical means for monitoring emergency situations should be included in the equipment with guaranteed power supply from backup power sources for at least 2 hours.

60. Technical means for monitoring emergency situations must remain operational when permissible deviations of the mains voltage:

a) when reduced to 15 percent;

b) upon increase to 10 percent.

61. Software for information and computing (software and hardware) complexes monitoring must meet the following requirements:

a) a convenient, intuitive graphical interface must be provided;

b) design style, quality of graphics of dialog boxes must correspond to the design style operating system used;

c) the operator's work should be carried out in the form of interactive manipulations with screen forms, built into the menu.

62. In the design part, technical means for monitoring emergency situations should be built according to modular and block-aggregate principle and provide:

a) interchangeability of replaceable components of the same type;

b) protection from unauthorized access to parameter control elements;

c) access to all elements, assemblies and blocks that require adjustment or replacement during operation.

## 6. REQUIREMENTS FOR PRODUCT LABELING

63. Products and packaging must be marked with the following information:

a) name of the product and its type (kind), brand, model;

b) purpose, main technical parameters and characteristics of the product;

c) name of the country of origin;

d) location and address of the legal entity that is the manufacturer (address of the place of implementation activities (if the addresses are different), telephone numbers and (or) email addresses);



technical regulations.

Assessment of product compliance with the requirements of these technical regulations is carried out in the form of certification according to one of the following schemes:

for mass-produced products - 1c and 2c;

for a batch of devices - according to scheme 3c;

for a single device - according to scheme 4c.

70. When confirming compliance, the applicant is a legal entity or individual registered in the territory of a Member State in accordance with its legislation as an individual entrepreneur:

for mass-produced products, the manufacturer (a person authorized by the manufacturer);

for a batch of products (single product) - manufacturer (person authorized by the manufacturer), seller (importer).

71. When conducting certification, the applicant:

a) submits an application for certification and a set of documents, which includes:

a copy of the technical (design, engineering, technological and (or) operational) documentation for the product, as well as a copy of the document(s) in accordance with which the product was manufactured (standard, organizational standard, technical specifications or other document) (if available);

list of standards (indicating their designations and names, as well as sections (clauses and subclauses), if compliance with the requirements of these technical regulations can be ensured by the use of individual sections (clauses, subclauses) of these standards, and not the standards as a whole), included in the list of standards, as a result of the application of which the implementation of these technical regulations is ensured (if they are applied by the applicant);

description of the adopted technical solutions and the results of risk assessment confirming the fulfillment of the requirements of this technical regulation, if the standards included in the list of standards, as a result of which the implementation of this technical regulation is ensured, are absent or have not been applied (if necessary);

a copy of the certificate of conformity of the management system, covering the production of certified products, confirming compliance of the management system implemented by the manufacturer with the requirements of the relevant management system standard and issued by the management system certification body (for scheme 2c);

copies of research (test) and measurement protocols for product samples (if available);

a copy of the agreement with the manufacturer (including a foreign manufacturer), providing for ensuring compliance of products supplied to the customs territory of the Union with the requirements of this technical regulation and responsibility for non-compliance of such products with the specified requirements (for a person authorized by the manufacturer) (for scheme 1c);

copies of the contract (supply agreement) and shipping documents identifying a single item product or batch of products, including its size (for schemes 3c and 4c);

information about the registration or account (individual, identification) number of the applicant, assigned during state registration of a legal entity or individual as

an individual entrepreneur in accordance with the legislation of the Member State;

other documents at the choice of the applicant, which served as the basis for confirming the product's compliance with the requirements of this technical regulation, as well as the requirements of other technical regulations of the Union (Customs Union), which apply to it (if any).

An application for certification and a set of documents are submitted to one of the accredited certification bodies included in the unified register of conformity assessment bodies of the Union and having valid accreditation in the required field of accreditation (hereinafter referred to as the certification body).

An application for certification is completed by the applicant in accordance with standard schemes. \_\_\_\_\_

The application for certification must also contain identifying characteristics of the product batch (for schemes 3c and 4c);

b) after completion of the conformity assessment procedures, applies a single sign of product circulation on the market Union in the manner approved by the Eurasian Economic Commission;

c) notifies the certification body in advance about changes in the production technology of products that may affect product compliance with the requirements of these technical regulations (for schemes 1c and 2c).

72. When conducting certification, the certification body:

a) analyzes the application for certification and the set of documents submitted by the applicant, and informs the applicant about the decision made, containing the conditions for certification;

b) carries out identification in accordance with Section III of these technical regulations and selection \_\_\_\_\_ product samples for research (testing) and measurements;

c) organizes research (testing) and measurements of product samples in an accredited testing laboratory (center) included in the unified register of conformity assessment bodies of the Union (hereinafter referred to as the accredited testing laboratory (center));

d) conducts an analysis of the state of production (for scheme 1c);

e) conducts an analysis of the results of work performed in accordance with the requirements of the applied certification scheme, and makes a decision on issuing or refusing to issue a certificate of product conformity to the requirements of these technical regulations (hereinafter referred to as the certificate of conformity);

f) in case of positive results of the analysis of the set of documents submitted by the applicant, research (testing) and measurements of product samples and analysis of the state of production, performed in accordance with the requirements of the applied certification scheme, draws up a certificate of conformity in a unified form approved by the Eurasian Economic Commission and issues it to the applicant;

g) enters information about the certificate of conformity into the unified register of issued certificates of conformity and registered declarations of conformity;

h) carries out periodic assessment of certified products during the validity period of the certificate compliance once a year through:

conducting research (testing) and measurements of product samples in an accredited testing facility laboratory (center) and (or) analysis of the state of production (for scheme 1c);

conducting research (tests) and measurements of product samples in an accredited testing laboratory (center) and analyzing the results of periodic assessment of the certified management system by the management systems certification body (for scheme 2c);

i) if the results of the periodic evaluation of certified products are positive, it confirms the action certificate of conformity, as indicated in the relevant act;

j) if the results of the periodic assessment of certified products are negative, decide to suspend or cancel the certificate of conformity;

k) brings the decision on the results of the periodic assessment of certified products to the applicant.

73. In the case of certification under schemes providing for certification of management systems, work on certification of management systems is carried out by the body for certification of management systems, registered on the territory of a Member State in accordance with its legislation and accredited in the accreditation systems of that State.

74. Validity period of the certificate of conformity:

a) for mass-produced products - is established for no more than 5 years;

b) is not established for a batch of products (single product).

75. The certification body and the applicant, after completion of certification, generate and store a set of evidentiary materials confirming the product's compliance with the requirements of these technical regulations, which includes:

a) documents provided for in subparagraph "a" of paragraph 71 of these technical regulations: \_\_\_\_\_

b) act(s) on identification and (or) selection of samples (samples) of products;

c) protocol(s) for conducting research (tests) and measurements;

d) results of analysis of the state of production (for scheme 1c);

e) certificate of conformity (copy of the certificate of conformity).

76. The set of documents generated after the procedure for confirming product conformity must be kept by the applicant for the following periods:

a) for mass-produced products - at least 5 years from the date of termination of the certificate of conformity;

b) for a batch of products (single product) - at least 5 years from the date of completion of the sale of the batch of products (single product).

77. Documents and materials confirming the results of certification are stored in the certification body that issued the certificate of conformity for at least 5 years from the date of expiration of the certificate of conformity.

#### VIII. MARKING WITH A SINGLE SIGN FOR PRODUCTS IN THE UNION MARKET

78. Products that comply with the requirements of this technical regulation, as well as the requirements of other technical regulations of the Union (Customs Union), which apply to it, and have passed the procedure for confirming compliance with the requirements of this technical regulation and other technical regulations of the Union (Customs Union), which apply to it is distributed and marked with a single sign of product circulation on the Union market.

79. Marking with a single sign of product circulation on the Union market is carried out before the release of products into circulation on the market.

80. The unified sign of product circulation on the Union market is applied to each unit of product in any way, ensuring its clear and clear image throughout the entire service life (shelf life) of the product.

81. If a single sign of product circulation on the Union market cannot be applied directly to product due to its characteristics, it is allowed to be applied to packaging and technical documentation.

Appendix to the  
technical regulations of the Eurasian  
Eurasian Economic Union "On the safety of products intended for  
civil defense and protection from natural and  
man-made emergencies" (EAEU TR 050/2021)

LIST OF OBJECTS OF TECHNICAL REGULATION, WHICH ARE COVERED BY THE TECHNICAL REGULATIONS OF THE EURASIAN  
ECONOMIC UNION "ON THE SAFETY OF PRODUCTS INTENDED FOR CIVIL DEFENSE AND PROTECTION FROM EMERGENCY  
SITUATIONS" NATURAL AND TECHNOGENIC CHARACTER" (EAEU TR 050/2021)

I. TECHNICAL MEANS OF PROTECTIVE STRUCTURES FOR CIVIL DEFENSE

1. Protective-hermetic devices and products for protective structures of civil defense:

- a) protective and hermetic doors, gates and shutters;
- b) anti-explosion protective sections;
- c) expansion chambers;
- d) hermetic valves;
- e) overpressure valves;
- e) control plugs.

2. Ventilation units, filters and regenerative installations of civil defense protective structures:

- a) fans with electric manual drive;
- b) electrically driven fans;
- c) cell filters;
- d) pre-filters;
- e) regenerative cartridges and installations (various regeneration technologies).

II. TECHNICAL CONTROL, COMMUNICATION AND NOTIFICATION EQUIPMENT



### 3. Technical means of control and communication:

- a) automated workplace of the operational duty officer;
- b) end user terminal;
- c) auxiliary equipment.

### 4. Technical means of warning the population about dangers arising during military conflicts or as a result of these conflicts, as well as about emergency situations:

- a) automated workstation (AWS) notification;
- b) equipment for launching and monitoring terminal warning devices;
- c) the final means of notification.

## III. EMERGENCY RESCUE EQUIPMENT

- 5. Emergency rescue vehicles.
- 6. Emergency rescue robotics.
- 7. Emergency rescue tool.
- 8. Tools for searching for victims.
- 9. Means of overcoming water obstacles during emergency rescue operations.
- 10. Life support equipment for rescuers and victims:
  - 10.1. Buildings and structures are mobile.
  - 10.2. Frame tents (pneumatic frame).
  - 10.3. Special protective clothing (equipment) for emergency rescue operations:
    - 10.3.1. Special protective clothing for general purpose rescuers.
    - 10.3.2. Special protective clothing (equipment) for the rescuer.
    - 10.3.3. Protective equipment for the rescuer's hands, feet, and head.

## IV. TECHNICAL TOOLS FOR MONITORING EMERGENCY SITUATIONS

- 11. Information and computing (software and hardware) monitoring systems.
- 12. Data transmission media.
- 13. Sensors and measuring instruments for monitoring changes in the state of environmental parameters or its individual components.

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