



**Andrea MAJLINGOVA**

## **INTRODUCTION TO CRISIS MANAGEMENT**



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**TECHNICAL UNIVERSITY IN ZVOLEN**  
**Faculty of Wood Sciences and Technology**

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**INTRODUCTION TO CRISIS MANAGEMENT**

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## FOREWORD

Crisis management is a concept that is mainly known from the field of economics. However, this is not the only area in which the term crisis management is encountered. Another, currently more important area is the area of public administration and the external and internal security of the Slovak Republic and its inhabitants. University textbook "Introduction to Crisis Management" aims in acquaintance of students, as well as other interested persons in studying this issue from the ranks of the professional and general public, with the basic terminology used in the field of internal security of the state. This terminology is especially used in the practice of crisis management and civil protection of the Slovak Republic. Among the other topics belong the legislation governing above mentioned areas, introduction of crisis management bodies and the structure of crisis management in the Slovak Republic, aims and scope of crisis planning, the organisation and procedures related to the economic mobilisation, state material reserves, legal requirements for the protection of critical infrastructure, role and mission of civil protection, the organisational, personnel and technical background for providing the rescue works, safety and security risks management framework.

The textbook is primarily intended as a basic study literature primarily for foreign students at the Technical University in Zvolen studying in the study field Safety and Security Sciences.

Since it is published exclusively in electronic form, it will enable its distribution to a wider circle of those interested in the subject matter. Thus, it will not only be a suitable study reference for students at the Technical University in Zvolen, but also for students at other universities providing education in the field of Safety and Security Sciences, as well as for other students and professionals interested in the study of this issue in English.

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# 1. PUBLIC ADMINISTRATION IN SLOVAKIA

From the point of view of crisis management, but also of civil protection of the population, it is important to know the organisation and bodies of public, or even state, administration, as well as to know their scope and competences.

**The aim of the chapter is to get acquainted with the concept of public administration, with the organizational structure of public administration in the Slovak Republic and with the scope and competences of state and local government bodies.**

## 1.1. PUBLIC ADMINISTRATION

Public administration ensures the exercise of public authority as part of the executive branch.

*"Public authority is exercised by the State primarily through the legislative, executive and judicial branches, and may be exercised by other entities under the same conditions."*

The National Council of the Slovak Republic is the body of **legislative power**, the **judicial power** is represented by the system of courts of the Slovak Republic (hereinafter referred to as "SR"), and the **executive power includes the** President of the Slovak Republic, the Government of the Slovak Republic (the supreme body of executive power), central and local state administration bodies, territorial self-government bodies, bodies of interest self-government, and other public law institutions (Figure 1.1)

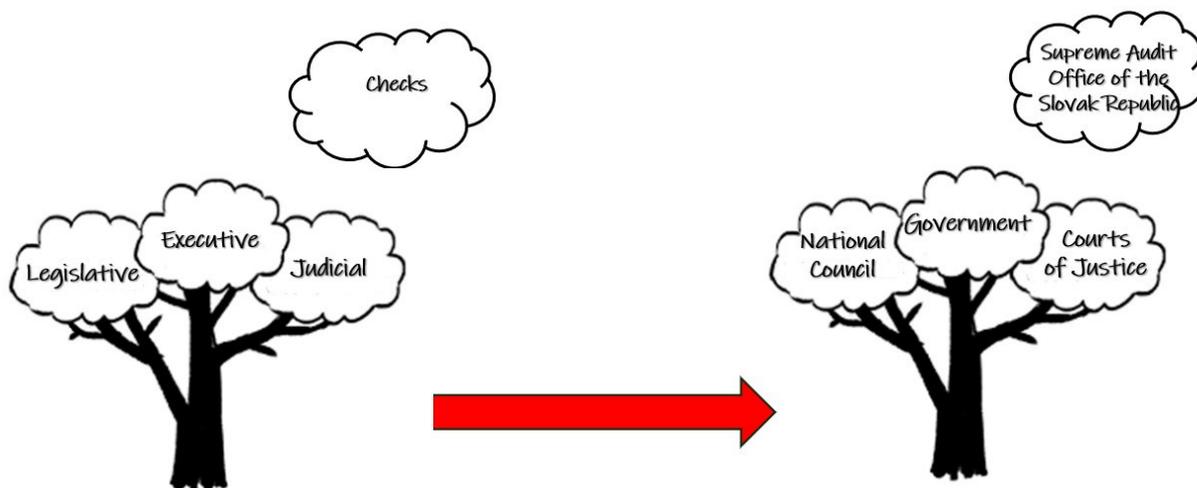


Figure 1.1 Separation of powers in the state (Source: Author)

**State** power is part of public power. In this case, it is a narrower concept than that of public authority. It is exercised through the *organs of state power*, i.e. **state authorities**.

*"State organs perform the functions of the State, act on behalf of the State and are backed by the coercive power of the State".*

**Other public power** is exercised by entities that are not state bodies, i.e. *public power is delegated to entities that are non-state in nature*, in particular local government, and interest self-government bodies.

**Public administration** can be understood as the *administration of public affairs*, which is carried out as an expression of executive power in the state.

The aim of public administration is the administration of public affairs, the interest in their administration *being a public interest*, and the entities that carry it out carry it out as a *duty imposed by law*, i.e. the scope and manner of their activities are established by law.

Public administration can be defined in terms of:

- **functional** (a complex of activities that must be carried out in an organised manner),
- **organisational** (organisation of public administration).

Public administration in its functional sense can be defined as *"the set of tasks that are carried out through public administration bodies"*. Thus, in the functional sense, public administration is defined by the tasks entrusted to it and the activities carried out by the various entities to fulfil those tasks.

From the point of view of the organisational concept, what is important is the internal organisation, the structure of the public administration as a whole and its bodies.

## 1.2. STRUCTURE OF PUBLIC ADMINISTRATION

To understand the organisation of public administration, it is first important to define the basic elements of its structure.

The basic elements of the structure of public administration are:

- personal components,
- material components,
- intangible components,
- means of public empowerment, subjective rights, and legal obligations.

**The personal components of public administration** are people in different social roles. The personal components are usually decisive in the organisation of public administration. In relation to them, the organisation of public administration represents an *institutionalised distribution of powers and duties among persons, which form the personal basis of public administration*.

**Tangible components of public administration** may be real estate, but also movable assets necessary for the performance of public administration. Funds necessary for the exercise of public administration may also be included here.

**Intangible components** are, e.g., items of intellectual property rights (software), personality rights, information, etc.

The peculiarity of public administration is that it also represents a **distribution of power** since public administration as an activity is usually associated with the authority to exercise public power. The division of tasks between persons and other parts of the public administration is referred to as the *division of powers*.

**Competence** is understood as *"the range of social relations within which a particular component of the organisational mechanism of public authority is active, the range of tasks it performs, the range of issues, the range of issues it addresses and the range of needs it provides for"*.

**Power, or competence**, is *"the legally established ability and (usually) also the obligation to influence the legal status of organisationally non-subordinate persons by a unilateral expression of will be secured by coercive power"*.

**Jurisdiction** is a concept that is distinct from both competence and authority. It expresses *"the assignment of a particular matter which is the subject of an administrative procedure to a particular decision-maker (a particular administrative authority)"*.

### 1.3. PUBLIC ADMINISTRATION ENTITIES

The organizational entities at the highest level are referred to as the **administering entities of the public administration** (Figure 1.2).

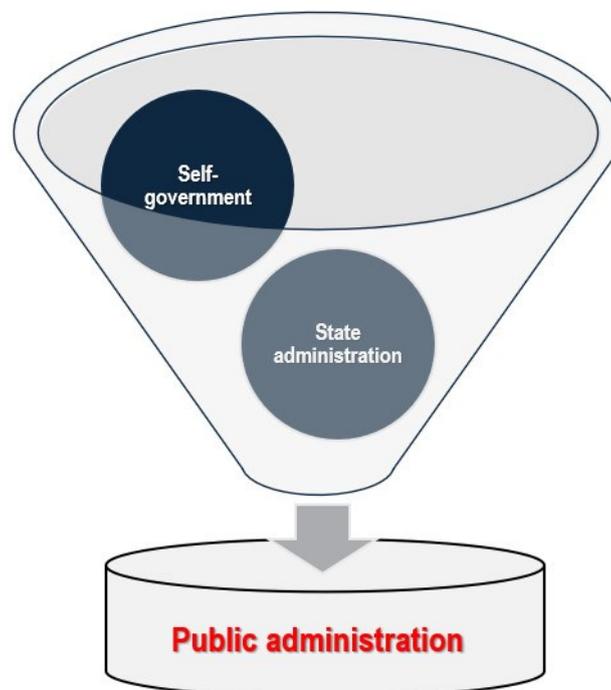


Figure 1.2 Public administration branches

The basic administering entity of the public administration is the **state**. The component of the public administration that represents the components of the state mechanism is referred to as the **public service**.

Other administering public administration entities are **local** and **interest self-government** entities, which are generally **public law corporations** (Figure 1.3).

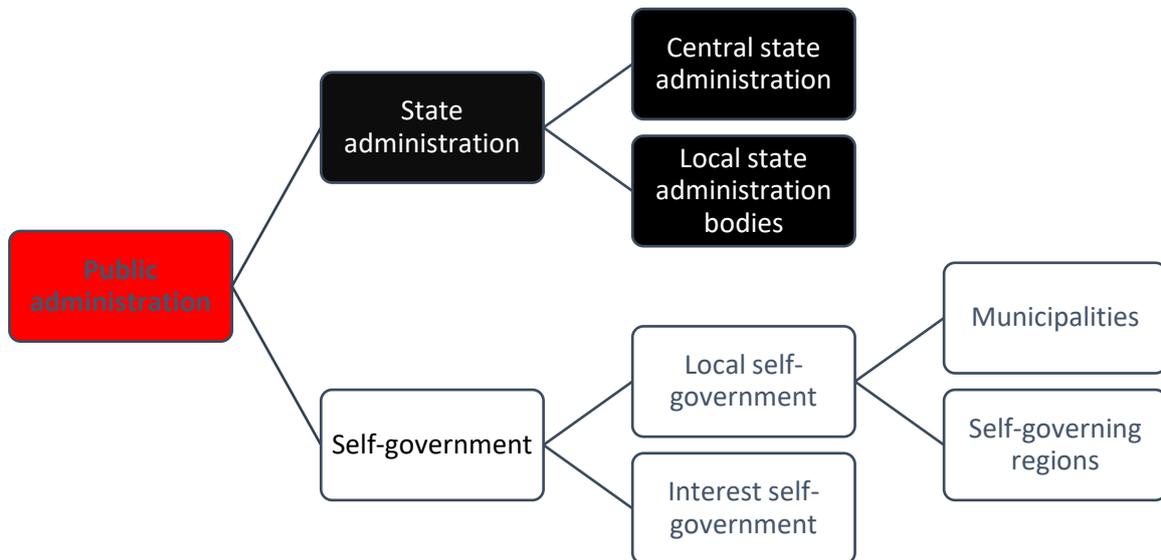


Figure 1.3 Slovak public administration organisation

The managing subjects of territorial self-government are territorial self-government units, which in the conditions of the Slovak Republic are **municipalities** and **self-governing regions**.

The governing bodies of the self-government of interests are mainly the **professional** organisations (e.g. *Slovak Bar Association, Slovak Medical Chamber*).

The other administering entities of the public administration are relatively autonomous departments that are not organised by membership. These are referred to as **public institutions, public bodies, or public funds**, as well as **other public administration entities**.

*For example, the Social Insurance Institution or Radio and Television of Slovakia is a public institution* under the law.

The term **public body** is used to refer to public institutions, which operate in the field of education, science and culture and have nationwide scope, for example, the *Slovak Mother of Life, the Slovak National Theatre, the Slovak National Gallery, the Literary Fund, the Music Fund, etc.*

In public administration practice, there are other administering public bodies that are not member-organised but are not designated as public bodies by law. As a rule, they are only local or regional in nature. Examples of such administering entities are *public primary and secondary schools, public health*

*facilities, public social services facilities, public libraries, theatres, museums, galleries, and outreach centres.*

In addition to the legal **entities** and **natural persons entrusted by** law or by virtue of the law with the exercise of public administration without being organisationally integrated into another administering public administration entity are also administering public administration entities.

This category of administering entities regarding their legal form may include *health insurers*. Another example of legal, but also natural, persons carrying out public administration based on the law are *persons operating technical inspection stations* and *persons operating emission control stations* and *persons operating originality control stations*.

Other components of the internal organisation of public administration entities include the **armed forces, public services** (the *Fire and Rescue Service* is a public service, the *Customs Officers* are a public armed corps, the *Police Corps*, the *Prison and Judicial Guard Corps*, the *Military Police* and the *Municipality Police* are public armed security corps).

These branches of the public administration cannot be considered as separate public administration entities, but neither do they have the status of public administration bodies. They do not have legal personality.

They are a collection of natural persons who are functionally included in them. The internal organisation of public bodies is characterised by hierarchical relations of superiority and subordination, which are pyramidally arranged. Within these relationships, management takes place through the orders of superiors. Members of the corps are authorised and obliged to carry out their activities throughout the territorial scope of the corps, even outside the hours of duty, under the conditions laid down by law.

Unlike public authorities, which mainly carry out individual-decision-making and possibly norm-setting activities, public forces mainly carry out immediate interventions and other measures of a similar nature, necessary for the operative establishment of a socially desirable situation.

## **1.4 PUBLIC ADMINISTRATION IN THE SLOVAK REPUBLIC**

From the point of view of the position of a state administration body in the system of state administration bodies, state administration bodies in the Slovak Republic can be categorised as follows:

- **Supreme authority of the state administration:** the Government of the Slovak Republic.
- **Central government authorities:** e.g. ministries, Statistical Office of the Slovak Republic, Nuclear Supervision Authority).

- **State administration bodies with national competence:** for example, Presidium of the Fire and Rescue Service, the Financial Directorate of the Slovak Republic, the Slovak Trade Inspection.
- **Local government authorities:** e.g. tax offices, district offices.

The direct executors of the state administration are:

- **Government of the Slovak Republic.**
- **Central government bodies** (ministries and other central government bodies),
- **Government bodies with national competence** (regulatory and supervisory, inspection and devolved),
- **Local government** (general and specialised)
- **Security forces** (armed or unarmed).

**Indirect implementers of state administration** are legal entities and their bodies, distinct from the state, to which the exercise of state administration has been delegated by law or based on a law, to a precisely defined extent.

Indirect implementers of state administration are:

- **municipalities, towns,** and their authorities
- **self-governing regions** and their authorities
- **interest self-government bodies** and their authorities,
- **public institutions,** public funds, and public corporations,
- other **public institutions** (e.g. secondary schools)
- **legal entities,**
- **natural persons,**
- **other indirect implementers of state administration** (e.g. state-owned enterprises, National Bank of Slovakia, consulates and diplomatic missions abroad).

**The Government of the Slovak Republic** is the *supreme body of the executive power of the Slovak Republic.*

It represents the *political leadership of the public administration.*

It has *the right of legislative initiative*, i.e. it can submit bills, and it has its own *standard-setting power*, i.e. it can issue regulations to implement the law and, within the limits of the law, regulations to implement the European Association Agreement, the so-called approximation regulations of the Government.

As a public-political body, it derives its legitimacy directly from the citizen, through elections. The government is usually formed by the president of the political party that received the most votes

in the elections. In Slovakia, the government of the Slovak Republic is organised and *functions through a system of government with a departmental system headed by a prime minister.*

Members of the government are the *prime minister, deputy prime ministers and ministers.*

Its tasks are the *implementation of state administration, ensuring its performance on the entire territory of Slovakia* (nationwide competence).

It has a general substantive competence, i.e. it manages, coordinates and controls everything that concerns the executive power: it secures the international, defence, political, economic, economic, and other interests of the state through its standard-setting activities, by implementing the laws of the National Council of the Slovak Republic. It exercises its controlling power only over the executors of the state administration; it influences the activities of non-subordinate entities (e.g. municipalities, self-governing regions, etc.) indirectly, through government policy.

### **Ministries and other central government bodies**

There are currently 15 ministries in Slovakia, headed by a minister:

- [Ministry of Economy of the Slovak Republic,](#)
- [Ministry of Finance of the Slovak Republic,](#)
- [Ministry of Transport of the Slovak Republic,](#)
- [Ministry of Agriculture and Rural Development of the Slovak Republic,](#)
- [Ministry of Interior of the Slovak Republic,](#)
- [Ministry of Defence of the Slovak Republic,](#)
- [Ministry of Justice of the Slovak Republic,](#)
- [Ministry of Foreign and European Affairs of the Slovak Republic,](#)
- [Ministry of Labour, Social Affairs and Family of the Slovak Republic,](#)
- [Ministry of the Environment of the Slovak Republic,](#)
- [Ministry of Education, Research, Development and Youth of the Slovak Republic,](#)
- [Ministry of Culture of the Slovak Republic,](#)
- [Ministry of Health of the Slovak Republic,](#)
- [Ministry of Investment, Regional Development and Informatization of the Slovak Republic,](#)
- [Ministry of Tourism and Sport of the Slovak Republic.](#)

Each ministry is divided into *sections* and *departments*.

**Other central government bodies** operating in Slovakia include:

- Office of the Government of the Slovak Republic,
- Antimonopoly Office of the Slovak Republic,
- Statistical Office of the Slovak Republic,

- Office of Geodesy, Cartography and Cadastre of the Slovak Republic,
- The Office of Nuclear Supervision of the Slovak Republic,
- Office for Standardization, Metrology and Testing of the Slovak Republic,
- Public Procurement Office,
- Industrial Property Office of the Slovak Republic,
- Administration of the State Material Reserves of the Slovak Republic,
- National Security Agency.

Central government bodies are legal entities with their own legal personality. They are directly linked to the state budget.

The activities of ministries, through ministers, and the activities of other central government bodies, through their statutory bodies, are managed, coordinated, and controlled by the Government of the Slovak Republic.

**Bodies with national competence** are, for example, **regulatory and supervisory bodies with national competence**, such as the *Broadcasting and Transmission Council*, the *Telecommunications Office of the Slovak Republic*, the *Office for Personal Data Protection*, the *Office for Regulation of Network Industries*.

The **inspection bodies of the state administration with nationwide competence** include, for example, the *National Labour Inspectorate*, the *State Institute for Drug Control*, the *Slovak Trade Inspection*, the *Slovak Environmental Inspection*.

**Decentralised government bodies with a national scope** are, unlike regulatory, supervisory and inspection bodies, are subordinate to the relevant ministry or other central government body. For example, the *Main Mining Office*, the *Monuments Office of the Slovak Republic*, the *Transport Office*, the *Central Office for Labour, Social Affairs and Family*, the *Presidium of the Fire and Rescue Corps*.

**Local government authorities** are government bodies established by law with general or with special or specialised subject-matter competence for a certain, precisely defined, part of the territory of the Slovak Republic.

**Local government bodies with general competence** are an integrated system of government bodies that encompasses several government departments, hence their universality.

These include **district offices** and **district offices** in the seat of the region, which carry out general state administration, in the sections of general internal administration, trade business, environmental protection and creation, education, construction and zoning proceedings in stage II, road transport, land communications, housing policy, cadastral administration, state property management, civil protection, forestry and others.

The territorial scope of **local government bodies with special (specialised) competence** is limited to a certain part of the territory of the state. Based on this fact, they are divided into:

- **Local government bodies with regional competence** (e.g. regional headquarters of the Fire and Rescue Service, regional headquarters of the Police Service, regional traffic inspectorate, regional public health offices),
- **Local government bodies with district competence** (e.g. district headquarters of the Fire and Rescue Service, district headquarters of the Police Service, district traffic inspectorate, labour, social affairs, and family office).

**The public corps** perform the exercise of state administration primarily in matters of administrative supervision, mostly by members of these corps, whose duties and powers are directly established by law.

## 1.5. SELF-GOVERNMENT IN THE SLOVAK REPUBLIC

Self-government is one of the forms of public administration in the Slovak Republic.

In terms of whether self-government is implemented on a territorial or interest-based basis, it is divided into:

- **local self-government** (municipalities, higher territorial units),
- **Interest-based self-government** (professional chambers).

**The municipality** is the basis of **local self-government**.

Local self-government consists of a **municipality** and a **higher territorial unit**.

Both are separate local self-governing and administrative units of the Slovak Republic, *associating persons who have permanent residence on their territory*.

Municipalities and higher territorial units are *legal entities* which, under the conditions laid down by law, independently manage their own property and financial resources. They finance their needs primarily from their own revenues as well as from state subsidies.

Local self-government is carried out by *assemblies of the inhabitants of the municipality*, by *local referendum*, by *referendum on the territory of a higher territorial unit*, by *the authorities of the municipality* or by *the authorities of a higher territorial unit*.

In matters of local self-government and to ensure the tasks arising for self-government from the law, a municipality and a higher territorial unit may issue **generally binding regulations**.

**The bodies of the municipality** are:

- Municipality Council.
- Mayor.

**The municipal council** is made up of *members of the municipal council*. Members are elected for a four-year term by the inhabitants of the municipality who reside permanently in the municipality.

**The mayor of a municipality** is elected by the inhabitants of the municipality who are permanent residents of the municipality for a four-year term. The mayor is the *executive body of the municipality*, exercises the administration of the municipality and represents the municipality externally.

**The authorities of the higher territorial unit** are:

- Council of a higher territorial unit.
- Head of the higher territorial unit.

The representation of a higher territorial unit consists of the members of the representation of the higher territorial unit. The representatives shall be elected by the inhabitants residing in the territorial district of the higher territorial unit for a term of four years. The election of members shall be by universal, equal, and direct suffrage by secret ballot.

**The head of the higher territorial unit** is elected by the inhabitants who permanently reside in the territorial district of the higher territorial unit for a four-year term. The head of the higher territorial unit is the *executive body of the higher territorial unit*, exercises the administration of the higher territorial unit and represents the higher territorial unit externally.

**Interest-based self-government** is a type of self-government that does not constitute an internally coherent and orderly system or institution. In a broader sense, it includes all entities which are formed by associational law for the purpose of pursuing a common goal and which have internal self-government. In a narrower sense, it is a self-government of interests linked to the exercise of public administration, i.e. part of a system of public administration. In Slovakia, it is mainly represented by self-governing professional organisations (i.e. chambers of regulated professions, also known as professional chambers) and economic associations.

## CONTROL QUESTIONS

1. [Define the term public administration.](#)
2. [Name the government bodies.](#)
3. [What is the basis of local self-government?](#)
4. [Give at least 2 examples of interest-based self-government institutions.](#)
5. [What are the authorities of the higher territorial unit?](#)



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## 2. CRISIS MANAGEMENT TERMINOLOGY

A prerequisite for a proper understanding of crisis management issues but also civil protection, is not only the knowledge of the basic terms used in these fields, but also the understanding of their content and the differences in their meaning.

***The aim of the chapter is to become familiarized with selected terminology used in the field of crisis management and civil protection as with its meaning.***

The following is a list of selected terms in the subject area. Each term is given a legal definition from the law, if it is supported by the legislation in force, or a definition taken from the [Glossary of Crisis Management Terminology](#), use of which was approved by the Government of the Slovak Republic in 2019.

### **SAFETY / SECURITY**

Safety / Security can be characterised as *"the state of a social, natural, technical, technological or other system which, under specific internal and external conditions, enables the fulfilment of specified functions and their development in the interests of man and society"*.

### **CRISIS MANAGEMENT / DISASTER MANAGEMENT**

[Act of the National Council of the Slovak Republic No. 387/2002 Coll.](#) on the Management of the State in Crisis Situations Outside Wartime and State of War, crisis management is defined as *"the totality of the management activities of crisis management bodies aimed at analysing and evaluating security risks and threats, planning, taking preventive measures, organising, implementing and control of the activities carried out in preparation for and response to crisis situations"*.

In addition to the term crisis management, the term **crisis management** is often used in safety / security practice. This is defined in the [Glossary of Crisis Management Terminology](#) as *"the totality of activities of substantively competent institutions designed to analyse security risks and threats, the monitoring of risk factors, the prevention of crisis situations and the planning, organisation, implementation and control of activities designed to create the conditions for the management and resolution of crisis situations"*.

Crisis management can be defined from three basic perspectives:

- ***From a functional point of view, it is a*** specific activity of the management of the managing entity, or a managed system aimed at resolving the crisis situation, using specific principles,

methods and procedures in order to overcome its negative consequences and restore the functioning of the system.

- ***From an institutional point of view, it is a*** set of institutions (personnel) dealing with the analysis of the possibility of crises in each system, their causes and possible consequences and the search for measures and tools to prevent and eliminate negative consequences in the event of their occurrence.
- ***From a theoretical point of view, it is*** a logically arranged set of knowledge about possible crises, their causes and consequences at the level of ensuring the security of the state, society as a whole, economic activity and property, about the principles, possible methods and measures for their solution.

Crisis management also includes crisis planning, i.e. preparation for emergencies and rescue work, especially at the level of the region, district, municipality, legal entity, or natural person - entrepreneur.

### **CRISIS PLANNING**

Crisis planning can be defined as *"a set of processes and activities carried out by public authorities, business legal entities, individuals and other persons based on an analysis of and risk assessment in order to develop measures, tools and resources to prevent, address and recover from crisis situations"*.

### **CRISIS PLAN**

The [Glossary of Crisis Management Terminology](#) defines it as follows: *"set of systematically determined information, documents and measures in electronic and paper form designed to deal with crisis situations and emergencies by the crisis management authorities, processed based on their tasks in the crisis management system or in response to an analysis and evaluation of their internal and external risks and threats"*.

It is a crisis management documentation that contains measures for prevention of emergencies/crisis situations, their resolution at the time of their occurrence and restoration of systems damaged because of the impact of an emergency at the level of the Slovak Republic, region, district, municipality, legal entity, natural person - entrepreneur).

The most used types of crisis plan include *prevention plans*, *contingency plans for the onset and escalation of a crisis*, and *recovery and reconstruction plans*.

One of the sub-areas of crisis planning is civil emergency planning.

## **CIVIL EMERGENCY PLANNING**

From the point of view of the Act of the National Council of the Slovak Republic No. 387/2002 Coll., civil emergency planning is characterised as *“the preparation and coordination of measures to ensure the functionality of public authorities, the economy, internal order and security of the state and the civil protection of the population in times of crisis”*.

The [Glossary of Crisis Management Terminology](#) provides the following definition of civil contingency planning: *“a system for the comprehensive provision of resources, forces and assets necessary for the management of non-military emergencies and for the civilian support of armed forces and military operations”* (both in accordance with Article 5 of the Washington Treaty and outside this framework).

It ensures the preparation and coordination of measures taken by public authorities to ensure internal order in the state, the protection of the population, the economy of the state and the continued functionality of the state administration and local self-government during a crisis.

Basic objectives of civil emergency planning (national and NATO):

- maintaining the functionality of state and local government during crisis situations, including war, and ensuring its recovery after disruption,
- Ensuring an acceptable level of social and economic life during crisis situations, including war,
- support and protect the life, health, and property of the population during crisis situations, including war,
- cooperation with and support to the armed forces in peacetime and in crisis situations, including war (the provision of experts),
- support for NATO measures to prevent and manage crisis situations,
- advising NATO on civilian support to humanitarian and military operations.

## **CRISIS STAFF**

According to the Act of the National Council of the Slovak Republic No. 387/2002 Coll., the crisis staff is defined as *“an executive body of a crisis management body whose task is to analyse the risks of a crisis situation, propose measures to deal with it and coordinate the activities of the components within its remit during a crisis situation”*.

It is an executive element of crisis management created by the statutory representative of a public authority or legal entity from the decisive senior staff, crisis management staff and possibly other invited experts for risk analysis, prevention of crisis situations and their resolution, and administrative and technical conditions and resources created for its activities.

The Crisis Staff is established to perform crisis management tasks in times of crisis. in its territorial district. It is not a permanent body; it is activated only when there is an imminent danger of a crisis or when a state of crisis is declared; it operates only temporarily.

### **EMERGENCY**

Emergency is *"a serious, temporally difficult to predict and spatially limited event, caused by a natural disaster, technical or technological accident, operational failure, or deliberate human action, which has caused a disruption of the stability of the system or of ongoing events and activities, threatening the lives and health of persons, material and cultural assets or the environment"*.

The Act of the National Council of the Slovak Republic No. 42/1994 Coll. on Civil Protection of the Population does not provide a definition of an emergency, but it does provide for different types of emergencies (natural disaster, accident, catastrophe, terrorist attack).

### **NATURAL DISASTER**

Natural disaster is *'an emergency in which there is an undesirable release of accumulated energies or masses as a result of the adverse action of natural forces, in which hazardous substances may be present or destructive factors are at work which adversely affect life, health or property'*.

It is an emergency triggered by destructive natural forces, resulting in the release of accumulated energies and masses, or by the action of hazardous substances or other destructive factors having a negative impact on humans, animals, material values and the environment.

### **ACCIDENT**

Accident is defined as *"an incident which causes a deviation from a steady state of operation resulting in the release of hazardous substances or other destructive factors affecting life, health or property"*.

It is an emergency caused by the operation of technical and technological equipment and buildings due to the disruption of the operational process and the subsequent release of hazardous substances into the environment and the emergence of other destructive factors that have a negative impact on the lives and health of people, property, animals, and the environment.

### **DISASTER / CATASTROPHE**

A disaster is defined as *"an emergency in which there is a build-up of destructive factors and their subsequent accumulation as a result of a natural calamity and accident"*.

It is an emergency of a large scale resulting from the accumulation of the destructive factors of a natural disaster or accident, which has serious direct consequences on the population, material values, the environment, and possibly also on the functioning of public administration.

## **TERRORIST ATTACK**

A terrorist attack is *"an organised action by an individual, a group of persons or an organisation, usually militantly oriented, aimed at gross and often drastic intimidation of the population, various attacks against organisations, institutions and their representatives, objects, systems, installations, facilities, services and systems"*.

It is an attack on objects concentrating many persons, with the aim of causing loss of life, health, and property, creating an atmosphere of insecurity and fear, seriously endangering the population, compelling a government or an international organisation to act or refrain from acting, seriously destabilising or destroying the fundamental political, constitutional, economic or social establishment of a country or an international organisation.

In addition to these basic types of emergencies, it is necessary to mention also public health threat of the second degree, the definition of which is based on the Act of the National Council of the Slovak Republic 355/2007 Coll. on the protection, promotion, and development of public health and on the amendment and supplementation of certain acts.

## **SECOND DEGREE THREAT TO PUBLIC HEALTH**

Second degree threat to public health occurs when action is required pursuant to a special regulation, in particular in the event of a radiation accident or radiation accident, the occurrence of a communicable disease, suspicion of a communicable disease or suspicion of death from a communicable disease above the expected level, the release of chemical substances endangering life, health, the environment and property, or the release of micro-organisms or toxins from confined spaces.

## **EMERGENCY SITUATION**

The legal definition of an emergency is provided by the Act of the National Council of the Slovak Republic No. 42/1994 Coll. on Civil Protection of the Population.

An emergency situation is, according to this law, *"a period of threat or a period of exposure to the effects of an emergency on life, health or property, which is declared under the Act on Civil Protection of the Population; during it, measures are taken to save life, health or property, to reduce the risks of danger or activities necessary to prevent the spread and effects of the emergency"*.

It is a temporally and spatially determined threat to life, health, property and the environment, the economy of the state, as well as public administration bodies, caused by the negative consequences of emergencies, which requires the use of crisis management procedures, tools, resources, and forces.

## **CRISIS SITUATION**

A crisis situation can be defined in terms of the [Glossary of Crisis Management Terminology](#) as *"a temporally and spatially defined or limited course of phenomena and processes following a disturbance of the equilibrium state of social, natural and technological systems and processes, which threaten the lives of people, the environment, the economy, the spiritual and material values of the State or region and its inhabitants, and the functioning of the institutions of public authority may be disrupted"*.

Legislative definition of a crisis situation is introduced in the Act of the National Council of the Slovak Republic No. 387/2002 Coll. A crisis situation as defined by this Act is *"a period outside the time of war and martial law, during which the security of the state is imminently threatened or disturbed and the constitutional authorities may declare a state of emergency, a state of emergency, a state of emergency after the fulfilment of the conditions laid down"*.

Crisis management tools are applied to support the resolution of the crisis situation, including the declaration of a state of crisis under Constitutional Act No. 227/2002 Coll. on State Security in Times of War, State of War, and State of Emergency.

## **CRISIS**

The crisis can be described as *"a complex, intractable and dangerous situation or course of events in the life of society, in nature, in the operation of technical means and in technological processes, the negative consequences of which may seriously threaten their function or even their existence"*.

This is a critical moment or period that may be followed by a fundamental change in the evolution of the system. It is a complex, difficult to overcome and dangerous condition in nature, in the life of society, in the operation of technical systems, which has negative consequences for their function or existence.

## **STATE OF CRISIS**

Crisis state is *"a legal state declared by a competent public authority in a particular territory to deal with a crisis situation in direct relation to its nature and extent"*.

It is associated with the failure of generally applicable management procedures, tools, and mechanisms and the need to apply crisis management principles, including temporary restrictions on fundamental rights and freedoms. The conditions for declaring individual states of crisis are set out in Table 2.1.

Table 2.1 Conditions for declaring individual states of emergency (Source: Author)

Responsible authority	Crisis state	When/where/on what basis	Legislation
<b>President of the Republic</b>	Declaration of War	Based on the decision of the National Council of the Slovak Republic	Constitutional Act No 227/2002 Coll.
	Declared State of War	On the proposal of the Government of the Slovak Republic (on the territory of the Slovak Republic)	Constitutional Act No 227/2002 Coll.
	State of emergency	At the proposal of the Government of the Slovak Republic (only in the affected or immediately threatened area and for the necessary time, not exceeding 60 days)	Constitutional Act No 227/2002 Coll.
<b>Government of the Slovak Republic</b>	State of emergency	Only in the affected or imminently threatened area and for the necessary period, not exceeding 90 days	Constitutional Act No . 227/2002 Coll.
	Emergency situation	If the extent of the affected area exceeds the jurisdiction of the district office, and the municipality, legal entity and natural person	Act of the National Council of the Slovak Republic No. 42/1994 Coll.
<b>District office in the seat of the region</b>	Emergency situation	If the extent of the emergency extends beyond the territorial area of the district office	Act of the National Council of the Slovak Republic No. 42/1994 Coll.
<b>District Office</b>	Emergency situation	In its territorial district	Act of the National Council of the Slovak Republic No. 42/1994 Coll.
<b>Mayor of the municipality</b>	Emergency situation	In its territorial district	Act of the National Council of the Slovak Republic No. 42/1994 Coll.
<b>Entrepreneur</b>	Threats	In its area of competence	Act of the National Council of the Slovak Republic No. 42/1994 Coll.

### **STATE OF EMERGENCY**

State of emergency is "a set of measures specified by the State which, in an affected or imminently threatened territory, may control, restrict and adapt the activities of State and local authorities and

*institutions, economic operators and social organisations, and restrict fundamental rights and freedoms to the extent necessary and for the time necessary, according to the gravity of the threat and impose obligations, specify the duties and tasks of the armed forces if there has been, or is threatened to be, a threat to the life and health of persons, to the environment or to significant property values as a result of a natural disaster, catastrophe, industrial, transport or other operational accident”.*

State of emergency *"shall be proclaimed also by the President of the Republic on the proposal of the Government, provided that, a terrorist attack, widespread street disturbances associated with attacks on public authorities, looting of shops and warehouses, or other mass attacks on property, or other mass violent unlawful acts, the extent or consequences of which substantially threaten or disrupt public order and the security of the State, if they cannot be averted by the action of public authorities and if the effective use of lawful means is prevented".*

It constitutes a set of State measures that can be used to control, restrict and adapt the activities of State and local government bodies and institutions, economic operators and social organisations in the affected or imminently threatened territory, to restrict fundamental rights and freedoms and to impose obligations, to the extent and for the time necessary, to specify the duties and tasks of the armed forces in an affected or imminently threatened territory, if there is a mass violent unlawful act which, by its scale or consequences, substantially threatens or undermines the security of the State, if it cannot be averted by the action of the public authorities and if the effective use of lawful means is prevented.

It applies only to the affected or imminently threatened area.

## **WAR**

In the Glossary of Crisis Management Terminology, war is characterised as *"a state of society characterised by the imminent threat or use of armed force as a violent means of achieving the political objectives of decisive political actors".*

A declaration of war is an act of international law. It is declared by the President based on a decision of the National Council of the Slovak Republic and applies to the entire territory of the Slovak Republic. The condition is that the Slovak Republic is invaded by a foreign power that has declared war on it or which has violated its security without a declaration of war, or under the following conditions, by declaring war it fulfils obligations arising from membership in a mutual collective security organisation or from an international treaty on common defence against attack.

A declaration of war is associated with a set of measures of the State by which the activities of State and municipal authorities and institutions, economic entities and social organisations may be controlled, restricted and adapted throughout the territory of the State, to the extent necessary

and for a necessary period of time, to restrict fundamental rights and freedoms and to impose or specify the duties and tasks of the armed forces.

### **STATE OF WAR**

State of War is *"a set of measures specified by the State by which, throughout the territory of the State, the activities of State and local government bodies and institutions, economic entities and social organisations may be directed, restricted and adapted, the fundamental rights and freedoms restricted to the necessary extent and for the necessary period of time, and obligations imposed, the duties and tasks of the armed forces specified in a situation where there is an imminent threat of a declaration of war or an imminent threat of invasion by a foreign power without a declaration of war"*.

It is proclaimed by the President based on a government proposal and applies to the entire territory of the Slovak Republic.

### **ECONOMIC MOBILISATION**

Economic mobilisation can be defined as *"the totality of economic, organisational and other measures, prepared in peacetime as part of the preparations of the state for defence and crisis situations, which create the preconditions for ensuring the needs necessary for the survival of the population and for ensuring the activities of the armed forces, armed security forces and other parts of the public administration"*.

It is a system of economic and organisational activities and measures prepared and carried out in a state of security or during a crisis situation.

Economic mobilisation measures ensure the protection of the basic security interests of the state, the preparation of the state for defence, the resolution of crisis situations and the mitigation of their consequences.

### **STATE MATERIAL RESERVES**

State material reserves are *"assets created, replenished, managed, stored and protected on the territory of the Slovak Republic"*.

They are created, replenished, managed, protected and stored to protect the economy of the state and to deal with a crisis situation, an emergency, a higher level of flood activity, an emergency in the energy sector, an emergency in the thermal energy sector, a crisis in the gas sector, food security, an oil emergency, for the needs of the armed forces, economic mobilisation entities or to meet the requirements arising from international obligations.

According to the designation, the state material reserves are divided into material reserves, mobilisation reserves, emergency reserves.

State material reserves are owned by the State. If it is economical and the conditions for storage and protection are met, the State material reserves may also be owned by legal entities or natural persons based on a contract with the State Material Reserves Administration.

### **CRITICAL INFRASTRUCTURE**

Critical infrastructure can be defined as *"objects of special importance, other important objects, selected information and communication facilities, facilities for the production and supply of water, electricity, oil and natural gas, and other parts of the State's assets and of entrepreneurial legal entities and natural persons designated by the Government of the Slovak Republic or other competent state administration authority, which are necessary to cope with crisis situations, to protect the population and property, to ensure the minimum operation of the economy and administration of the State, as well as its external and internal security, and which need to be specially protected"*.

These are facilities, services, and information systems vital to the population and the governance of the State, the malfunction or destruction of which may threaten the security interests of the State.

### **CIVIL PROTECTION**

The concept of civil protection is defined in the Act of the National Council of the Slovak Republic No. 42/1994 Coll. on Civil Protection of the Population as *"a system of tasks and measures aimed at the protection of life, health and property, consisting in particular in the analysis of possible threats and in the adoption of measures to reduce the risks of threats"*.

The term civil protection can also be defined as *"the totality of systemic measures, activities, procedures and means applied by competent authorities, organisations, units and the population aimed at preventing, protecting and minimising the negative impacts of potential crisis situations on human health and life, animals, property and living conditions"*.

### **RESCUE WORKS OR RESCUE OPERATIONS**

Rescue works are defined under the Act of the National Council of the Slovak Republic No. 42/1994 Coll. on Civil Protection of the Population as *"activities to save life, health of persons and rescue property, as well as to remove them from endangered or affected areas. Rescue work includes activities to prevent the spread and effects of the consequences of the emergency and to create the conditions for the elimination of the consequences of the emergency"*.

### **INTEGRATED RESCUE SYSTEM**

The legal definition of the integrated rescue system is given in the Act of the National Council of the Slovak Republic 129/2002 Coll. on the integrated rescue system. Based on this Act, an integrated rescue

system is “a coordinated procedure of its components in ensuring their readiness and in carrying out activities and measures related to the provision of assistance in distress”.

However, it can also be defined as “a set of measures intended for rapid notification, activation and effective use and coordination of forces and resources of rescue services (basic and other services of the IRS) in providing necessary assistance to persons in distress, to protect property and the environment threatened as a result of a crisis situation”.

## QUESTIONS

1. Define the emergency
2. Define the difference between an emergency and a emergency situation.
3. Define the differences in declaring a state of emergency.
4. Name 5 examples of critical infrastructure objects.
5. Define the term economic mobilisation.



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- [2]. [Ústavný zákon NR SR č. 227/2002 Z. z.](#) o bezpečnosti štátu v čase vojny, vojnového stavu, výnimočného stavu a núdzového stavu v znení neskorších predpisov / [Constitutional Act of the National Council of the Slovak Republic No. 227/2002 Coll.](#) on State Security in Times of War, State of War, and State of Emergency, as amended.
- [3]. [Zákon NR SR č. 42/1994 Z. z.](#) o civilnej ochrane obyvateľstva v znení neskorších predpisov / [Act of the National Council of the Slovak Republic No. 42/1994 Coll.](#) on Civil Protection of the Population, as amended
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- [5]. [Zákon NR SR. č. 355/2007 Z. z.](#) o ochrane, podpore a rozvoji verejného zdravia a o zmene a doplnení niektorých zákonov / [Act of the National Council of the Slovak Republic No. 355/2007 Coll.](#) on the protection, promotion and development of public health and on the amendment and supplementation of certain acts.

### 3. CRISIS MANAGEMENT LEGISLATION

Legislation in the field of crisis management and civil protection contains an overview of the most important legislation and some operational management acts, based on which district authorities act and decide or regulate the rights and obligations of natural persons and legal persons arising from the scope of crisis management of the Ministry of the Interior of the Slovak Republic.

***The aim of the chapter is to be familiarized with the current legislation in the field of crisis management, civil protection of the population and the integrated rescue system, as well as the subject of their regulation.***

In general, the existing legislation in the field of crisis management, used mainly for the preparation for and actual handling of crisis situations in peacetime, i.e. outside times of war and war threats, can be divided into 2 basic groups:

- legal norms dealing with preparation for non-military crisis situations and their resolution,
- legal norms that are currently of decisive importance for crisis management in the Slovak Republic.

#### 3.1. LEGAL NORMS DEALING WITH THE PREPARATION FOR AND HANDLING OF NON-MILITARY CRISIS SITUATIONS

##### **CONSTITUTIONAL PROVISIONS**

- [Constitution of the Slovak Republic](#) (Constitutional Act No. 460/1992 Coll., as amended)

The articles 15, 20 and 40 of the Constitution of the Slovak Republic grant **everyone the** right to protection of health, life and property. This means that the Constitution of the Slovak Republic guarantees everyone the right to help persons affected and to rescue property in the event of accidents, disasters, natural disasters and other catastrophes, as a permanent part of the security policy of the State.

- [Constitutional Act No. 227/2002 Coll. on State Security in Times of War, State of War, State of Emergency and State of Emergency, as amended.](#)

The constitutional law defines the various states of crisis (war, state of war, state of emergency and state of emergency), which may be declared by the President or the Government of the Slovak Republic at the time of disruption of the security of the state, when it is necessary to take all necessary measures for the defence of the state and the preservation of its security, for the protection of life and health of persons, for the protection of property, for the observance of fundamental rights and freedoms, for the

averting of a threat or for the restoration of the disrupted economy, in particular the proper functioning of supply, transport and public services in the municipalities, and the proper functioning of the constitutional authorities.

## **LAWS**

- **[Act of the National Council of the Slovak Republic No. 42/1994 Coll. on Civil Protection of the Population, as amended.](#)**

The law regulates the handling of non-military threats, focusing on procedures and activities in dealing with the aftermath of an emergency. Its purpose is to regulate the conditions for effective protection of life, health and property against the consequences of emergencies, as well as to establish the tasks and responsibilities of state administration bodies, self-governing regions, municipalities and the rights and obligations of natural persons and legal entities in ensuring civil protection of the population

- **[Act of the National Council of the Slovak Republic No. 129/2002 Coll. on the Integrated Rescue System, as amended.](#)**

The Act regulates the organisation of the integrated rescue system, the competence and tasks of state administration bodies and rescue components within the integrated rescue system, the rights of and obligations of municipalities and other legal entities, natural persons authorised to do business and other natural persons in the coordination of activities related to the provision of assistance, when life, health, property or the environment is in imminent danger.

- **[Act of the National Council of the Slovak Republic No. 387/2002 Coll. on State Management in Crisis Situations Outside Wartime and state of war, as amended.](#)**

The Act establishes the competence of public authorities in the management of the state in crisis situations outside times of war and martial law, the rights and obligations of legal entities and natural persons

in preparing for and dealing with crisis situations outside times of war and martial law, and penalties for breach of the obligations laid down in this Act.

- **[Act of the National Council of the Slovak Republic No. 319/2002 Coll. on the Defence of the Slovak Republic, as amended.](#)**

The Act regulates relations in the field of defence of the Slovak Republic, establishes tasks for state authorities, municipalities, higher territorial units and obligations for legal entities, natural persons entitled to do business and natural persons in preparation for the defence of the state and defines liability for breach of these obligations.

- **[Act of the National Council of the Slovak Republic No. 570/2005 Coll.](#) on Conscription and on Amendments and Additions to Certain Acts.**

The Act regulates the scope of conscription, national registration, conscription, medical fitness examination and reserves of the Armed Forces of the Slovak Republic. It also regulates the call-up, performance, exemption, dismissal, and termination of extraordinary service in times of crisis.

- **[Act of the National Council of the Slovak Republic No. 179/2011 Coll.](#) on Economic Mobilisation and on Amendment and Supplementation of Act No. 387/2002 Coll. on State Management in Crisis Situations Outside Wartime and state of war, as amended.**

The purpose of the Act is to establish in the field of economic mobilisation in preparation for a crisis situation and for the period of a crisis situation the roles of the subjects of economic mobilisation; the competence of ministries and other central state administration bodies; local state administration bodies, municipalities and higher territorial units; the rights and obligations of legal persons, natural persons - entrepreneurs and natural persons who are not economic mobilisation subjects, as well as economic mobilisation subjects; conditions for the procurement of vital goods for the survival of the population and necessities necessary to ensure the activities of the armed forces, armed security forces, crisis management bodies, information and emergency services of the Integrated Rescue System.

- **[Act No 372/2012 Coll.](#) on State Material Reserves and on the Amendment to Act No 25/2007 Coll. on Electronic Toll Collection for the Use of Specified Sections of Land Roads and on Amendments and Additions to Certain Acts, as amended.**

The Act regulates legal relations related to the creation, financing, management, control and ownership relations to the State Material Reserves as well as the competence of the State Material Reserves Administration of the Slovak Republic.

- **[Act of the National Council of the Slovak Republic No. 45/2011 Coll.](#) on Critical Infrastructure.**

The Act establishes the organisation and competence of state administration bodies in the field of critical infrastructure, the procedure for determining the critical infrastructure element and the obligations of the operator in the protection of the critical infrastructure element and liability for breach of these obligations.

- **[Act of the National Council of the Slovak Republic No. 128/2015 Coll.](#) on the prevention of major industrial accidents and on amendment and supplementation of certain acts, as amended.**

The Act lays down the conditions and procedure for the prevention of major industrial accidents in enterprises with the presence of a dangerous substance and for limiting their consequences for human health, the environment and property.

- **[Act of the National Council of the Slovak Republic No. 541/2004 Coll. on the Peaceful Use of Nuclear Energy \(Atomic Act\) and on Amendments and Additions to Certain Acts, as amended.](#)**

The Act regulates the conditions for peaceful use of nuclear energy, the conditions for the exercise of state administration, the conditions for the exercise of state supervision and the competence of the Office of Nuclear Supervision of the Slovak Republic in the field of nuclear safety of nuclear installations; in the peaceful use of nuclear energy; in the transport of radioactive material; in the physical protection of nuclear installations, nuclear materials, spent nuclear fuel; in the physical protection in the transport of radioactive material, and in emergency planning.

It also lays down measures to protect the public in the event of accidents at nuclear installations.

- **[Act of the National Council of the Slovak Republic No. 7/2010 Coll. on flood protection](#)**

The Act establishes flood protection measures and obligations in the assessment and management of flood risks in order to reduce the adverse effects of floods on human health, the environment, cultural heritage and economic activity; the planning, organisation and management of flood protection; the obligations and rights of state administration bodies, flood protection authorities, higher territorial units and municipalities; the obligations and rights of legal entities, natural persons - entrepreneurs and natural persons in flood protection; and liability for breach of the obligations imposed by this Act.

- **[Act of the National Council of the Slovak Republic No. 50/1976 Coll. on spatial planning and building regulations \(Building Act\) as amended.](#)**

The law legally defines the basic roles and obligations of the parties involved in the construction.

- **[Act No. 314/2001 Coll. of the National Council of the Slovak Republic on fire protection as amended.](#)**

The Act regulates the conditions for the protection of life and health of natural persons, property and the environment against fires and establishes the competence of state administration bodies and municipalities in the field of fire protection and firefighting units in carrying out rescue work in the event of unwanted events.

## GOVERNMENT REGULATIONS

- [\*\*Slovak Government Regulation No. 130/1994 Coll.\*\*](#) **on one-off extraordinary compensation for injury to health or death in connection with assistance provided in the performance of civil protection tasks, as amended.**

The Regulation specifies to whom and in what amount the one-off extraordinary compensation is due/is granted.

## DECREES

- [\*\*Decree of the Ministry of the Interior of the Slovak Republic No. 328/2012 Coll.\*\*](#), **laying down details on evacuation**

The decree regulates the details of planning and arranging evacuation.

- [\*\*Decree of the Ministry of the Interior of the Slovak Republic No. 314/1998 Coll.\*\*](#) **on the details for ensuring the management of civil protection material, as amended.**

The decree regulates the procurement and management of the material, as well as the storage, use, treatment and marking of the material.

- [\*\*Decree of the Ministry of the Interior of the Slovak Republic No. 388/2006 Coll.\*\*](#) **on details for ensuring technical and operational conditions of the civil protection information system, as amended.**

The Decree regulates the details for ensuring the technical and operational conditions of the civil protection information system.

- [\*\*Decree of the Ministry of Interior of the Slovak Republic No. 533/2006 Coll.\*\*](#) **on details of protection of the population against the effects of hazardous substances, as amended.**

The Decree establishes details to ensure the protection of the population from the effects of hazardous substances in the event of an emergency associated with their release in an object or in a complex of objects in which hazardous substances are produced, stored and handled; in the event of the transport of hazardous substances; in the event of a threat to the population from a terrorist attack or other deliberate or accidental use; in the event of a threat to the population from the secondary consequences of emergencies; in the event of a threat from other states.

- [\*\*Decree of the Ministry of the Interior of the Slovak Republic No. 523/2006 Coll.\*\*](#) **on the details for ensuring rescue works and organizing civil protection units, as amended.**

The decree regulates the details of rescue works and civil protection units.

- [\*\*Decree of the Ministry of the Interior of the Slovak Republic No. 303/1996 Coll.\*\*](#) **on the provision of training for civil protection, as amended.**

The Decree regulates the details for the provision of training of civil protection units for the preparation of the population for self-defence and mutual assistance, as well as for the provision of first aid.

- **[Decree of the Ministry of Interior of the Slovak Republic No. 532/2006 Coll.](#) on the details for ensuring construction and technical requirements and technical conditions of civil protection facilities, as amended.**

This Decree regulates the type and scope of construction and technical requirements of civil protection facilities aimed at the protection of life, health and property, which are not regulated by a special regulation, and the technical conditions of civil protection facilities.

- **[Decree of the Ministry of Interior of the Slovak Republic No. 599/2006 Coll.](#), which establishes the details of expenditure on civil protection of the population from the state budget, as amended.**

The Decree lays down details of expenditure on civil protection of the population from the state budget.

- **[Decree of the Ministry of Transport Posts and Telecommunications of the Slovak Republic No. 164/2003 Coll.](#), establishing details on the organisation of telecommunication services for the period of a crisis situation.**

It shall regulate the organisational, personnel and material-technical measures to ensure priority connections for the period of a crisis situation.

- **[Decree of the Ministry of Environment of the Slovak Republic No. 453/2000 Coll.](#), implementing certain provisions of the Building Act.**

This Decree regulates the details of the content of decisions under the Act, proposals for the issuance of decisions and the scope and content of the documentation to be attached to them, notification of minor constructions, building modifications and maintenance works.

- **[Decree of the Ministry of the Environment of the Slovak Republic No. 55/2001 Coll.](#) on spatial planning documents and spatial planning documentation.**

The Decree establishes details on the content and method of processing of spatial planning documents, spatial planning documentation and their assignments, registration sheets of spatial plans and on the content of spatial planning activities.

- **[Decree of the Nuclear Supervision Authority of the Slovak Republic No. 55/2006 Coll.](#) on details in emergency planning in the event of an accident or emergency.**

The Decree regulates details on the content of emergency plans, the procedure for their submission and approval; measures, procedures and activities, including the determination of the severity levels of events according to international criteria; information to the Authority and the public; the details of the

documents required for the application for approval of the size of the hazard area, the size of the common hazard area, including the deadline for its submission; monitoring systems; training, exercising and updating of emergency plans; data provided and the timing of an accident or incident at nuclear installations and in the transport of radioactive materials; how to report operational and transport events.

- **[Decree of the Ministry of the Interior of the Slovak Republic No. 7/2012 Coll.](#), which establishes details of professional competence in the field of civil protection of the population.**

The Decree establishes details on the procedure for submitting an application for training and examination, training and examination for obtaining professional competence in the field of civil protection of the population; the content and scope of training, examination, training and examination; the composition and activities of the examination board; documentation of training and training.

### **3.2. LEGAL NORMS OF DECISIVE IMPORTANCE FOR THE FIELD OF CRISIS MANAGEMENT IN THE CONDITIONS OF THE SLOVAK REPUBLIC**

- **[Act of the National Council of the Slovak Republic No. 387/2002 Coll.](#) on State Management in Crisis Situations Outside Wartime and Martial Law.**

This Act establishes the competence of public authorities in the management of the state in crisis situations outside times of war and martial law, the rights and obligations of legal persons and natural persons in preparing for and dealing with crisis situations outside times of war and martial law, and penalties for breach of the obligations laid down in this Act.

- **[Act of the National Council of the Slovak Republic No. 42/1994 Coll.](#) on Civil Protection of the Population.**

The purpose of the Act is to regulate the conditions for the effective protection of life, health and property against the consequences of emergencies, as well as to establish the roles and responsibilities of state administration bodies, municipalities and the rights and obligations of natural persons and legal entities in ensuring the civil protection of the population.

- **[Act of the National Council of the Slovak Republic No. 129/2002 Coll.](#) on the Integrated Rescue System.**

The Act regulates the organisation of the integrated rescue system, the scope and tasks of state administration bodies and rescue services within the integrated rescue system, the rights and obligations of municipalities and other legal entities, natural persons authorised to do business

and other natural persons in the coordination of activities related to the provision of assistance when life, health, property or the environment is in imminent danger.

## QUESTIONS



1. [Provide a breakdown of legislation in the field of crisis management.](#)
2. [Name the legal norms of decisive importance for the field of crisis management in the conditions of the Slovak Republic.](#)
3. [Specify the content of the legal regulation of the Act of the National Council of the Slovak Republic No. 387/2002 Coll.](#)
4. [Specify the content of the legal regulation of the Act of the National Council of the Slovak Republic No. 42/1994 Coll.](#)
5. [Specify the content of the legal regulation of the Act of the National Council of the Slovak Republic No. 129/2002 Coll.](#)

## 4. CRISIS MANAGEMENT BODIES AND ORGANISATION

The Crisis Management Section of the Ministry of the Interior of the Slovak Republic is the Ministry's expert department for the integrated rescue system, civil protection, crisis management, civil emergency planning, critical infrastructure protection, economic mobilisation, civil protection material management and humanitarian aid.

**The aim of the chapter is to be familiarized with the individual bodies fulfilling tasks in the field of crisis management in the Slovak Republic and also with their organization and powers at their disposal.**

Crisis management bodies are involved in the management of processes related to crisis management (Figure 4.1).

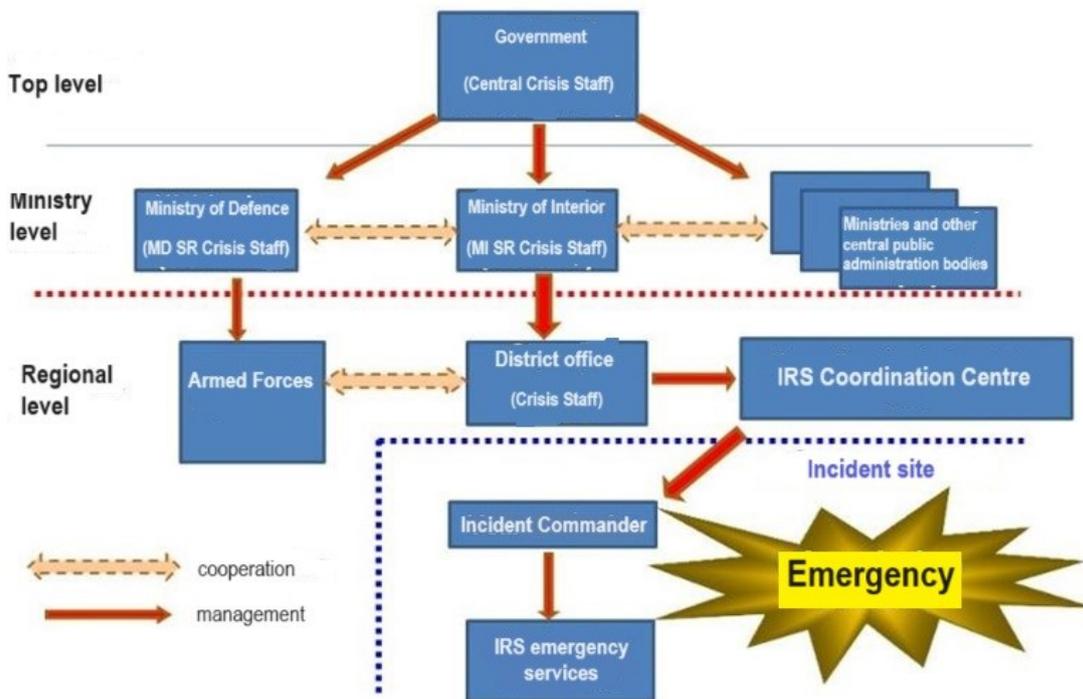


Figure 4.1 Structure of crisis management bodies (Source: Author)

The crisis management bodies in the Slovak Republic are:

- Government of the Slovak Republic,
- Ministries and other central government bodies,
- National Bank of Slovakia ,
- Security Council of the Slovak Republic,
- Regional Security Council,

- *District Office,*
- *District Security Council*
- *Municipality.*

The competencies of the Government of the Slovak Republic in the field of crisis management are introduced in Figure 4.2.

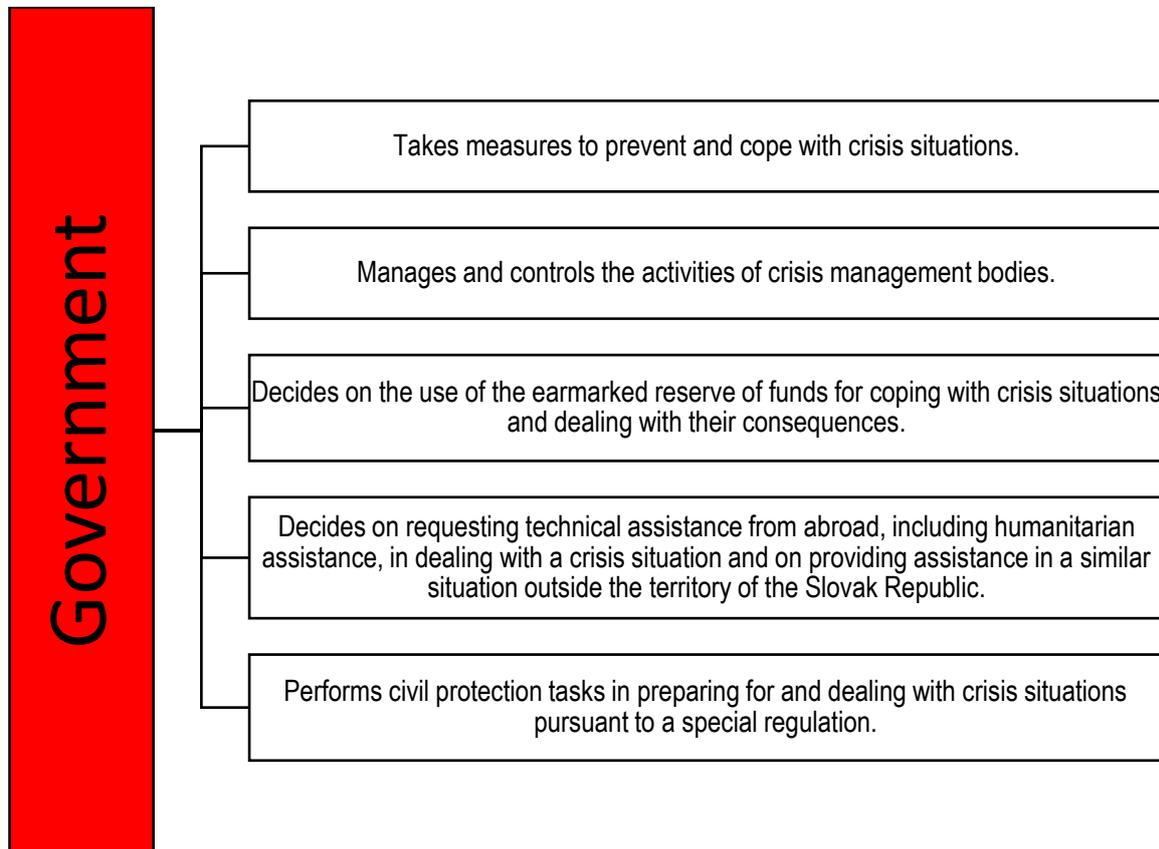


Figure 4.2 Competencies of the Government in the field of crisis management (*Source: Author*)

The government, in addition to the activities listed in Figure 4.2:

- establishes a Central Crisis Staff
- cooperates with the Security Council of the Slovak Republic in the preparation of measures to address the crisis situations.

**Central Crisis Staff** is the coordinating body of the Government of the Slovak Republic for dealing with crisis situations outside times of war and martial law. During a crisis situation, it coordinates the activities of state administration bodies, territorial self-government bodies, crisis staffs and other components, as well as the activities of crisis staffs. It shall cooperate with the Security Council of the Slovak Republic in the preparation of measures to deal with the crisis situation. It shall monitor the implementation of tasks and measures imposed by the Government of the SR in dealing with a crisis situation. Prepares proposals for measures to deal with the crisis situation and supporting documents

for the adoption of decisions in the Government of the SR. Evaluates the procedures for dealing with the crisis situation, generalises the experience gained and uses it in its activities.

*The Minister of the Interior of the Slovak Republic is the Chairman of the Central Crisis Staff.*

The powers of **ministries and other central government bodies** are set out in Figure 4.3.

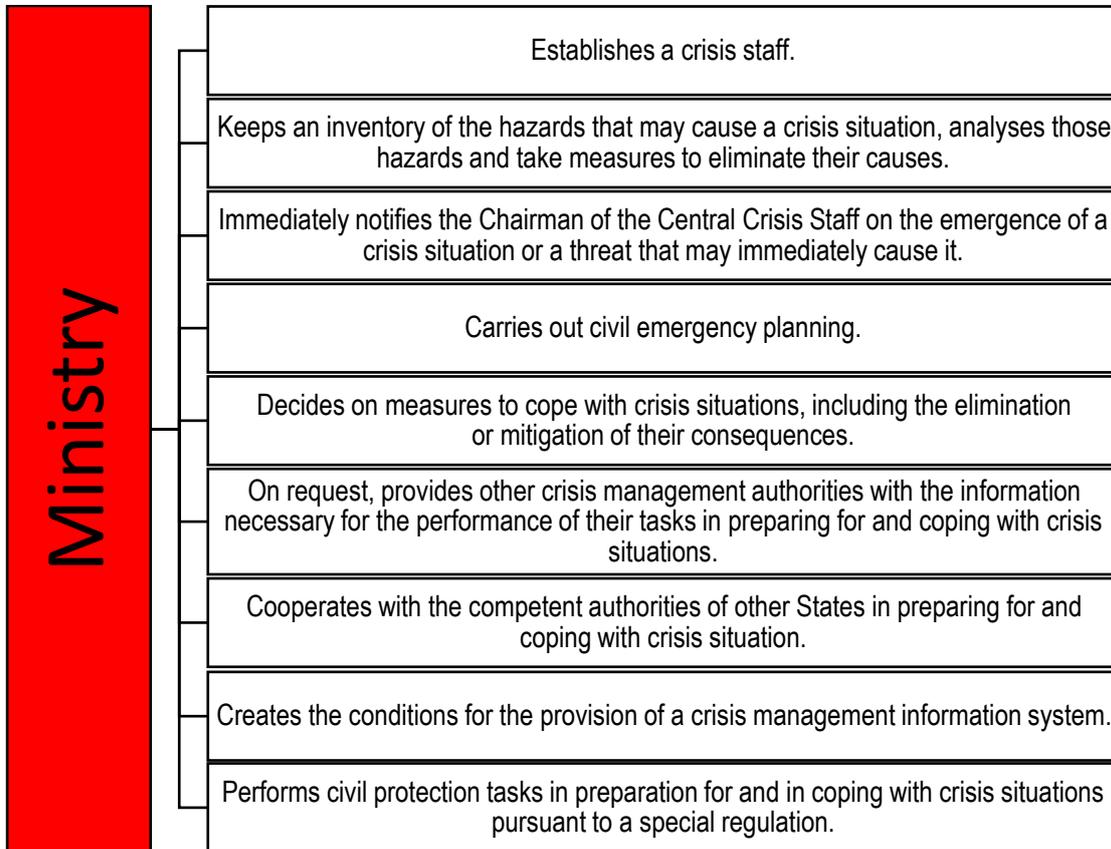


Figure 4.3 Competences of ministries and other central government bodies (Source: Author)

**Ministries** in particular:

- establish a crisis staff,
- keep an overview of the sources of risks that may cause a crisis situation, analyse them, take measures to eliminate their causes, decide on measures to resolve crisis situations.

The Ministry of the Interior has special competences in the field of crisis management and civil protection of the population Slovak Republic, see Figure 4.4.

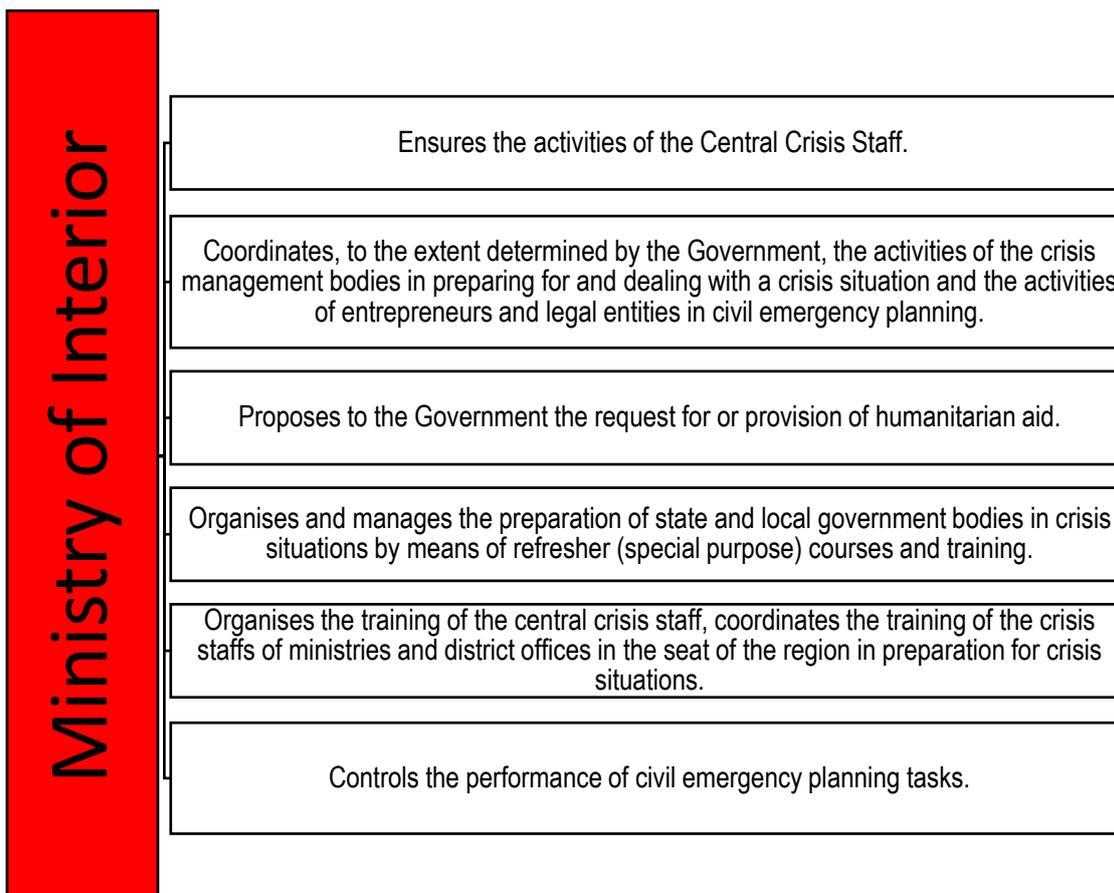


Figure 4.4 Competencies of the Ministry of Interior of the Slovak Republic (Source: Authors)

**Ministry of Interior of the Slovak Republic** (in addition to the activities of the ministries):

- ensures the activities of the central crisis staff and organises its training,
- organises and manages the preparation of state and local government bodies, coordinates the activities of crisis management bodies in preparing for and dealing with a crisis situation, coordinates the preparation of crisis staffs of ministries (and other activities).

**The National Bank of Slovakia** also plays a role in preparing for and dealing with crisis situations. In preparing for and coping with crisis situations, performs tasks within the scope of its competence.

**Security Council of the Slovak Republic (SC SR):**

- the Chairman of the Council of Ministers is the Prime Minister,
- the Deputy Chairman of the SC SR is the Deputy Prime Minister entrusted by the Chairman of the SC SR.

In addition to the Prime Minister of the Slovak Republic (President of the SC SR), the following are members of the SC SR:

- Minister for Finance,
- Minister of Defence,

- Minister of the Interior,
- Minister for Foreign and European Affairs,
- Minister for Economic Affairs,
- Minister for Transport and Construction,
- Minister of Justice,
- Minister for Health,

*The Chairman of the SR* has the right **to propose the** convening of the Security Council and to **participate in** its meetings.

Competence of the Council of the Slovak Republic:

- serves as an advisory body **in times of peace**. It participates in the creation and implementation of the security system of the Slovak Republic, assesses the security situation in the Slovak Republic and in the world, and prepares proposals for the Government (among others) to resolve the crisis situation; and other activities.
- **In time of war, martial law, or state of emergency**, if the government is prevented from acting, exercises its constitutional powers (with exceptions)

### **Regional Security Council**

The chairman of the regional security council is the **head of the district office in the seat of the region**. The other members are:

- a representative of the Armed Forces designated by the Ministry of Defence of the Slovak Republic,
- Director of the Regional Police Headquarters,
- Director of the Regional Directorate of the Fire and Rescue Service,
- the president of a higher territorial unit

The tasks of the Secretariat of the Regional Security Council related to its activities are provided by the *Crisis Management Department of the District Office in the seat of the Region*.

Regional Security Council:

- based on an assessment of the security situation, prepares and adopts measures to ensure the security of the region and proposals for dealing with crisis situations in cooperation with district security councils, state authorities and the higher territorial unit and submits them to the Security Council of the Slovak Republic
- is authorised to impose binding tasks on entities in the territorial district of the Region through its members and to request information on their implementation based on adopted resolutions of the Regional Council

In times of a state of emergency or state of emergency, the county safety council:

- coordinates the activities of district offices and municipalities in preparing for a crisis situation and its resolution, and the activities of businesses and legal entities in civil emergency planning,
- implement crisis resolution measures.
- performs the tasks established by the Government and, to the extent determined by the Government, by the Central Crisis Staff in preparing for and dealing with crisis situations.

#### **District Security Council**

- evaluates the security situation in the territorial district of the district office.
- prepares proposals for measures to maintain the security of the district in the territorial perimeter of the district office and measures to prevent a crisis situation.

The chairman of the district safety council is the head of the district office. The District Security Council in times of crisis, performs tasks related to maintaining or restoring democratic order, organising activities to protect the life and health of persons, property and the environment, ensuring the proper functioning of the economy, supply, transport, health care and public order, and other activities.

To ensure the fulfilment of the above tasks, the District Security Council imposes tasks on other state bodies and municipalities within its territorial jurisdiction.

In times of a state of emergency or a state of emergency, the county safety council:

- coordinates the activities of district authorities and municipalities in preparing for and dealing with a crisis situation and the activities of businesses and legal entities in civil emergency planning,
- implement crisis resolution measures,
- performs the tasks established by the Government and, to the extent determined by the Government, also by the central crisis headquarters and the district office in the seat of the region in preparing for and resolving crisis situations.

#### **District Office** (among other activities):

- perform civil protection tasks,
- implement crisis resolution measures,
- establishes a crisis staff,
- coordinates the activities of municipalities in preparing for and dealing with a crisis situation,
- performs tasks established by the Government and, to the extent determined by the Government, by the Central Crisis Staff.

#### **Municipalities** (among other activities):

- perform civil protection tasks,

- establishes a crisis staff,
- implement crisis resolution measures,
- requires assistance from the district office,
- collects personal data on the number of persons and the identity of persons who are in the territory of the municipality at the time of a crisis situation,
- performs the tasks established by the Government and, to the extent determined by the Government, by the central crisis staff and district authorities in preparing for and dealing with crisis situations.

The executive body of the crisis management authority shall be the **crisis staff**. The Crisis Staff is **not a permanent body**. It is activated only when there is an imminent danger of a crisis situation or when a state of crisis is declared, it **acts only temporarily**.

The following legislation regulates crisis management bodies:

- **Security Council**
  - Constitutional Act of the National Council of the Slovak Republic No. 227/2002 Coll. on State Security in Times of War, State of War, State of Emergency and State of Emergency, as amended.
  - Act of the National Council of the Slovak Republic No. 110/2004 Coll. on the functioning of the Security Council of the Slovak Republic in times of peace.
  - Statute of the Security Council of the Slovak Republic approved by a resolution of the Government of the Slovak Republic No. 1177/2004, amendments and additions approved by Resolution No. 702/2015.
  - Rules of Procedure of the Security Council of the Region, approved by a resolution of the Government of the Slovak Republic No. 152/2017.

- **Crisis Staff**

The concept of crisis staff is defined in the Act of the National Council of the Slovak Republic No. 387/2002 Coll. on State Management in crisis situations outside times of war and martial law, as amended.

## QUESTIONS



1. Designate the crisis management authorities operating in the Slovak Republic.
2. What tasks does the Security Council perform in peacetime and what tasks does it perform in times of war or state of emergency?
3. Which ministry, and specifically which of its departments, is the expert unit for crisis management and civil protection of the population?
4. What are the tasks of the Ministry of Interior SR in addition to the activities of other ministries?
5. Describe the activities of the Central Crisis Staff.

## REFERENCES

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- [2]. Rokovací poriadok Bezpečnostnej rady kraja schválený uznesením vlády SR č. 152/2017 / Rules of Procedure of the Security Council of the Region approved by Government Resolution No. 152/2017
- [3]. Ústavný zákon NR SR č. 227/2002 Z. z. o bezpečnosti štátu v čase vojny, vojnového stavu, výnimočného stavu a núdzového stavu v znení neskorších predpisov / [Constitutional Act of the National Council of the Slovak Republic No. 227/2002 Coll.](#) on State Security in Times of War, State of War, State of Emergency and State of Emergency, as amended
- [4]. Zákon NR SR č. 42/1994 Z. z. o civilnej ochrane obyvateľstva v znení neskorších predpisov / [Act of the National Council of the Slovak Republic No. 42/1994 Coll.](#) on Civil Protection of the Population, as amended
- [5]. Zákon NR SR č. 387/2002 Z. z. o riadení štátu v krízových situáciách mimo času vojny a vojnového stavu v znení neskorších predpisov / [Act of the National Council of the Slovak Republic No. 387/2002 Coll.](#) on the management of the state in crisis situations outside times of war and martial law, as amended
- [6]. Zákon NR SR č. 110/2004 Z. z. o fungovaní Bezpečnostnej rady SR v čase mieru / [Act of the National Council of the Slovak Republic No. 110/2004 Coll.](#) on the functioning of the Security Council of the Slovak Republic in peacetime

## 5. CRISIS PLANNING

**Planning** is one of the most important functions of management.

**Crisis planning** is one of the most important tools in crisis management. It is understood as a *purposeful activity of the managing entity which, within the intent of the set objective and based on the available information, purposefully coordinates the use of executive components in time and space so that tasks are accomplished with the optimum use of possible material and financial resources.*

It is one of the prerequisites for achieving the required level of safety and thus preparedness to deal with crisis situations.

*The aim of the chapter is to familiarize with the content of the concept of crisis planning, crisis plan, different types of crises plans, their structure and content.*

Crisis planning is also understood as the *preparation and coordination of measures to ensure the functionality of public authorities, the economy, internal order and national security and civil protection of the population in a crisis situation.* It can also be defined as a set of procedures, methods and measures used by the relevant authorities to prepare for activities in crisis situations and to minimise potential sources of crisis and negative impacts.

Crisis planning in the Slovak Republic can be divided into three basic types of crisis planning from a system perspective, which are defence planning, civil emergency planning and emergency planning (Figure 5.1).

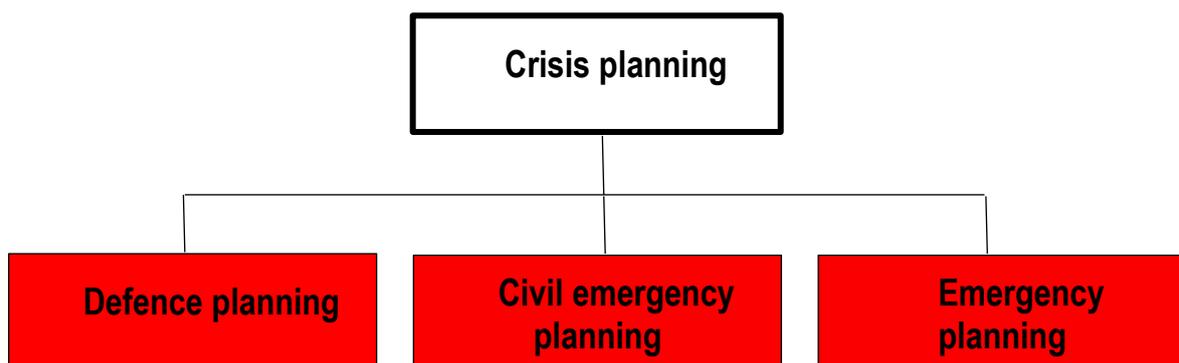


Figure 5.1 Classification of crisis planning in the Slovak Republic (Source: Novák, 2010)

**Defence planning** is a set of activities by means of which the competent state authorities create short-, medium- and long-term plans for the provision of national defence tasks and determine the responsibilities of the entities assigned to the performance of these tasks.

**Civil emergency planning** is a system for the comprehensive provision of resources, forces and means necessary to deal with non-military emergencies and to provide civilian support to armed forces and military operations (both in accordance with Article 5 of the Washington Treaty and outside this framework). It shall ensure the preparation and coordination of measures taken by the public authorities to ensure the internal order of the State, the protection of the population, the economy of the State and the continued functioning of the State administration and local government during a crisis situation.

While the aim of defence planning is to create optimal conditions for ensuring defence by appropriate measures in the armed forces, in the state administration and individual departments, in the state economy and in critical infrastructure, the basic objectives of civil emergency planning (both national and NATO) can be expressed in the following tasks:

- maintaining the functionality of state and local government during crisis situations, including war, and ensuring its recovery after disruption,
- ensuring an acceptable level of social and economic life during crisis situations, including war,
- support and protect the life, health and property of the population during crisis situations, including war,
- cooperation with and support to the armed forces in peacetime and in crisis situations, including war (the provision of experts)
- support for NATO measures to prevent and manage crisis situations,
- advising NATO on civilian support to humanitarian and military operations.

**Emergency planning** has the character of crisis planning, but in terms of its objective and content, it cannot be classified as civil emergency planning, although it shares some features with it. In simplified terms, it can be defined as an important systemic tool for the prevention of major industrial accidents, for their resolution and for limiting their consequences for human life and health, the environment and property.

In general, the success of the planning process in general is conditioned by the respect of basic rules, approaches, among which the following are important:

- **Rationality, scientificity** - the use of positive experiences, scientific approaches, and the transfer of scientific knowledge into practice.
- **Systematicity and comprehensiveness** - the logic of the internal structure of the plan, the unity of the content and formal aspects of the plan, the mutual compatibility of several plans (allows a certain degree of standardization of plans).

- **Optimality** - means accepting the optimal alternative solution.
- **Efficiency** - especially in the use of human and material resources.
- **Expediency** - the plan should approximate a solution to the situation for the stated objective.
- **Feasibility** - adequacy to the nature of the situation, conditions, and possibilities to implement the plan and, on the other hand, adequacy to the forces and means, resources and supplies available for the implementation of the plan.
- **Adequate precision and detail** - spatial, temporal, material, and human dimensions.
- **Harmoniousness** - plan structure, operability, and flexibility.
- **Accuracy** - in the delegation of tasks, competences, and responsibilities.
- **Controllability of performance** - enables effective feedback of the entire management process.

***The aim of crisis planning is to ensure sufficient resources, as well as forces and means to deal with the crisis situations that arise***, depending on the economic possibilities of the processor. In turn, it provides effective methods, tools and procedures that can be used to deal with specific crisis situations and to eliminate their negative impacts on society. To achieve this objective, crisis management uses in the crisis planning process a variable set of procedures, methods, and the links between them, which co-create a functional, orderly system with flexible planning structures. The system is based on the use of standard procedures, which are complemented by specific procedures used only in the context of crisis planning.

Crisis planning includes:

- *a set of specific management activities*, carried out by crisis managers of designated entities, to prepare them for the emergence of crises, to prevent the build-up of crises and minimizing their negative consequences on the entity itself and on the environment, or creating conditions for securing the state and its population, with an emphasis on the executive elements of crisis management,
- *organisational, personnel, economic and material security measures and other specific measures to:*
  - a) participate in reducing the likelihood of crises that may threaten the security of the Slovak Republic,
  - b) to manage the progress of the crisis at the symptom stage and thus prevent it from escalating to the point where specific tools would have to be used,
  - c) to gain control of the crisis, influence its future direction and propose acceptable solutions,
  - d) to ensure the most favourable conditions for resolving the crisis and to prevent it from escalating into uncontrollable proportions (e.g. military conflicts),

- e) to deal effectively with crises that arise to minimise losses loss of human life and prevent significant damage to property,
- f) to comprehensively provide both the executive elements of crisis management and citizens with everything necessary to deal with a crisis and to exist during it.

The tasks of crisis planning are performed by several public administration institutions, components of the armed forces, armed security forces, executive elements of rescue systems, business entities and other legal entities.

Crisis planning actors can be divided into the following basic groups:

- entities that are ordered to carry out crisis planning by the relevant legal norm: the Government of the Slovak Republic, ministries and other central state administration bodies, local state administration bodies, regional self-government bodies and others,
- entities which have been entrusted with the tasks of economic mobilisation by a decision of a competent authority, e.g. a central government body,
- entities that perform crisis planning tasks because the subject of their activities is a potential source of threat to their own organisation as well as to their surroundings,
- entities that may be threatened externally because of crisis situations.

***The critical level of crisis planning is the crisis planning of central government and local government authorities.*** Its aim is to ensure the activities of the public administration in protecting citizens, property and ensuring internal security and order in the state and in the defence of the Republic, the necessary needs for the survival of the population and ensuring their comprehensive security. It is necessary to coordinate crisis planning in such a way that the entities concerned can cope with emergencies that arise, as well as complex crisis situations, and to reduce the loss of life, health and property of citizens to a minimum.

**The structure of the crisis planning process at the level of central government** (Figure 5.2) is based on the establishment of national objectives in the field of state security. These objectives are set for both external and internal state security, influenced by current external and internal security environment, as well as the focus of the state's foreign policy, its integration into international organisations and security structures, economic opportunities, and social orientation. The process of elaboration and adoption of the national security strategy allows to assess the current risks and possible threats to the security of the state and to take decisions on how to increase the level of security in the given conditions. The paths, procedures, and tasks of implementing the strategy in practice need to be elaborated in a variant way to seek optimal solutions

and minimise costs. Following the selection of the optimal variant, tasks can be set for individual ministries to incorporate them into crisis plans. A review of the implementation of the tasks in increasing state security may show the need to modify the initially set objectives and to modify the share of individual ministries in crisis management.

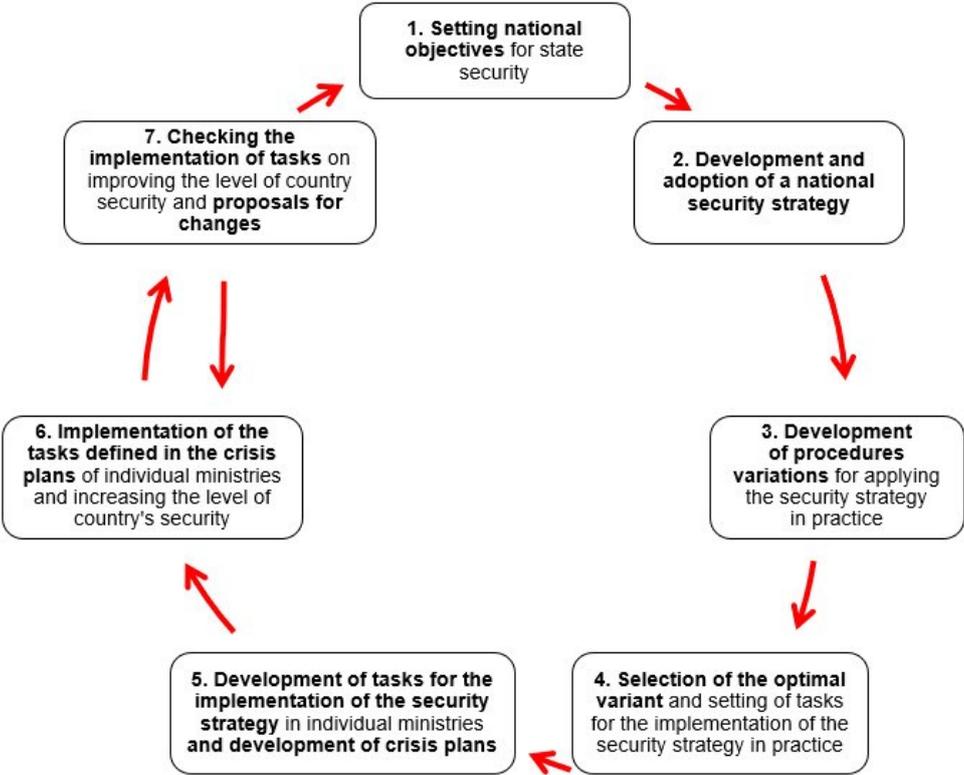


Figure 5.2 Structure of the crisis planning process at the level of central government (Source: Novák, 2010)

**Crisis planning in individual crisis management entities** (local state and municipal authorities, selected business entities, executive elements of rescue and security forces...) must respect the national security objectives, but also the specific position of a given entity in the security system of the state (Figure 5.3). Crisis management objectives are based on national security objectives, considering the specific focus of the institution's activities and its position in the security system of the state.

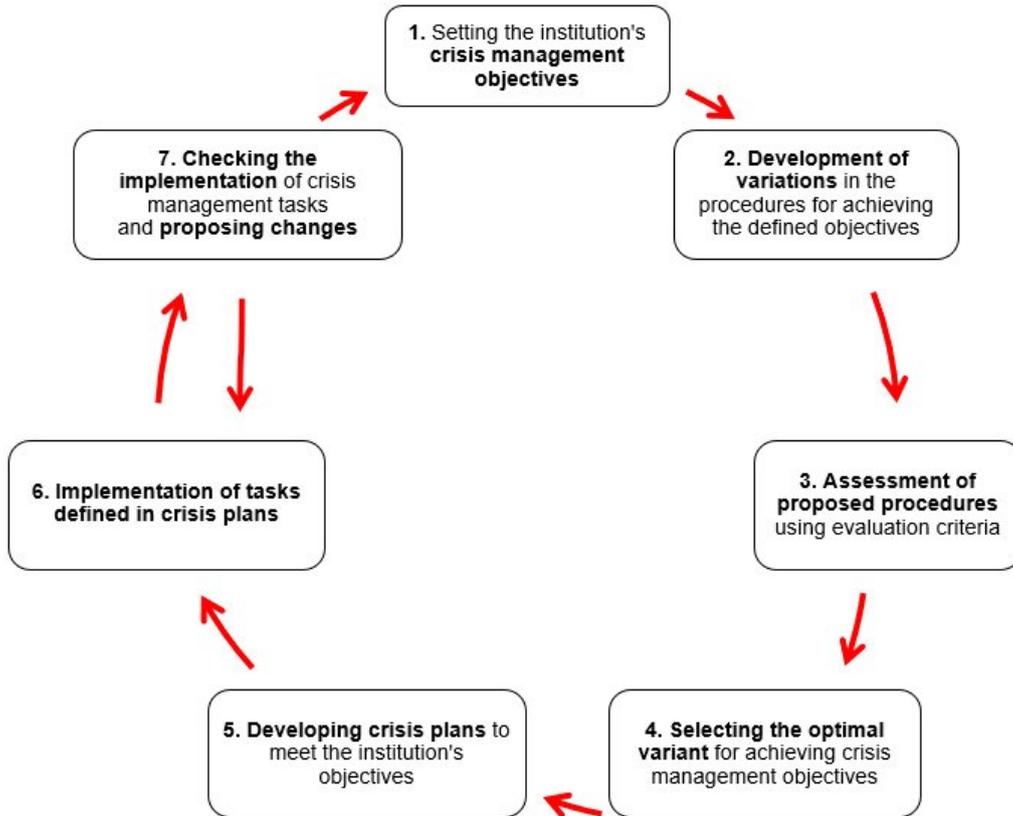


Figure 5.3 Structure of the crisis planning process of a crisis management entity (Source: Novák, 2010)

**The crisis planning process is carried out cyclically** at most organisational levels of crisis management **with a period of one** or two years. Some of the crisis plans prepared at the level of central government are prepared prospectively for periods of up to five years. Crisis plans are usually updated semi-annually, immediately in the event of major changes. Some types of crises plans, which are designed to deal with a specific crisis, are prepared on an operational basis.

Documents called crisis **plans** are used for crisis planning (Figure 5.4). These are documents that purposefully elaborate measures to deal with a potential crisis situation along certain technical, spatial and temporal dimensions. Crisis plan contains a summary of crisis measures and procedures to address a crisis situation.

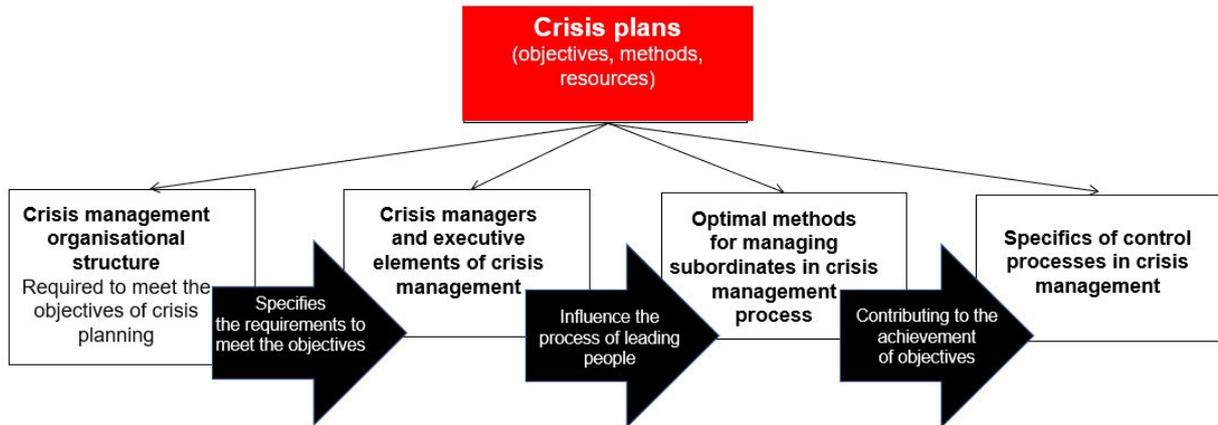


Figure 5.4 Crisis Plans - Elements and Processes of Crisis Planning (Source: Novák, 2005)

The tasks of the crisis plans are binding on all stakeholders. Crisis plans allow to coordinate the requirements of all components of the integrated rescue system with the energy, material, financial, technical and personnel capacities of the economy of the whole country, possibly also of regions, specific towns and villages, complexes, and objects.

Different types of crisis plans are used in crisis management. The most used types of crisis plans are those shown in Figure 5.5:

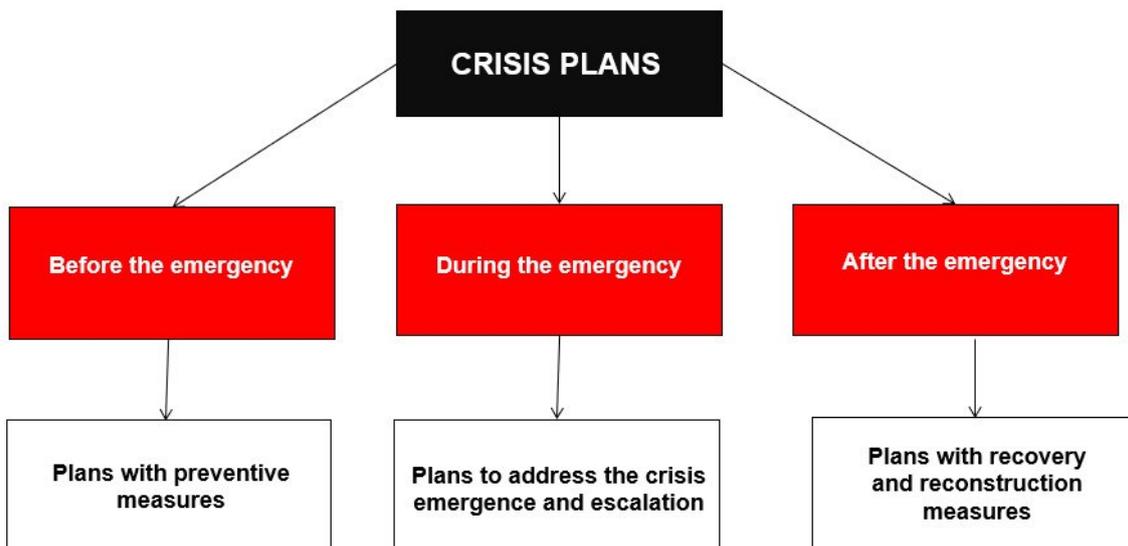


Figure 5.5 The most commonly used types of crises plans (Source: Own elaboration)

The provisions of the following legislation shall be used for the development of crisis plans:

- [Constitutional Act No. 227/2002 Coll.](#) on state security in time of war, state of war, state of emergency and state of emergency,

- [Act of the National Council of the Slovak Republic No. 387/2002 Coll.](#) on the management of the state in crisis situations outside times of war and martial law, as amended,
- [Act of the National Council of the Slovak Republic No. 129/2002 Coll.](#) on the integrated rescue system as amended,
- [Act of the National Council of the Slovak Republic No. 42/1994 Coll.](#) on civil protection of the population as amended,
- [Act of the National Council of the Slovak Republic No. 7/2010 Coll.](#) on flood protection as amended,
- [Act of the National Council of the Slovak Republic No. 45/2011 Coll.](#) on critical infrastructure,
- [Act of the National Council of the Slovak Republic No. 128/2015 Coll.](#) on prevention of major industrial accidents and on amendment and supplementation of certain acts,
- [Act No. 569/2005 Coll.](#) on alternative service in times of war and martial law, as amended,
- [Act No. 321/2002 Coll.](#) on the Armed Forces of the Slovak Republic, as amended,
- [Act No. 319/2002 Coll.](#) on Defence of the Slovak Republic as amended,
- [Act No. 570/2005 Coll.](#) on conscription and on amendment and supplementation of certain acts, as amended,
- [Act No. 179/2011 Coll.](#) on economic mobilisation and on amendment and supplementation of the Act.

## 5.1. PLANS WITH PREVENTIVE MEASURES

They include **measures that must be implemented immediately before a crisis occurs..**

Their content should be, first and foremost:

- an early warning and public address system,
- a system for timely stockpiling,
- a system for distributing the food, medicine and energy needed to cope with the expected crisis.

These plans also include the **education of the population to cope with the conditions of a crisis situation.**

Examples of such plans include:

- documentation of warning of the population and notification of persons,
- monitoring of the territory,
- individual protection plans,
- Forage, food and water conservation plans,

- plans for the control of the movement of persons and the provision of iodine prophylaxis (nuclear accident).

## **5.2. PLANS TO ADDRESS THE CRISIS EMERGENCE AND ESCALATION**

These plans should include:

- plans for the dispensing of protective equipment and substances (masks, medicines),
- evacuation plans for population, livestock,
- shelter plans,
- flood plans,
- plans for hygienic and special cleaning of terrain, buildings, and materials,
- dosimetry plans (nuclear accident),
- arrangements for operating in crisis conditions,
- plans for the rescue or protection of critical infrastructure objects,
- plans for the protection of cultural monuments and other assets that cannot be evacuated.
- other plans.

## **5.3. PLANS WITH RECOVERY AND RECONSTRUCTION MEASURES**

These plans are **developed based on the analysis of the recovery from past crises, the characteristics of the territory, but mainly based on information on the likely affected area and the analysis of own capabilities.**

They included:

- recovery plans for individual buildings (energy sources and networks),
- information network recovery plans,
- plans for the reconstruction of road junctions and the entire transport system,
- plans for the renewal of industrial and agricultural production.

These plans include loss estimates, estimates and evaluation of anticipated material needs, relief plans, first medical aid arrangements, plans for emergency accommodation, emergency supply, feeding and clothing of the affected population.

## 5.4. FACILITY CRISIS PLAN

A quality planning process at the facility level depends on understanding its content, objectives and background, the specifics of the analysis of the area in terms of possible emergencies, risks and population protection objectives.

Structure and content of the facility crisis plan:

**I. Protection plan for employees and persons taken into care** contains tasks, measures and procedures to ensure the protection of the population in the event of an emergency and is drawn up in the structure and content as follows:

*(a) An extract from an Analysis of the district's area in terms of the occurrence of potential emergencies for the need of a facility.*

*b) Plans of:*

- evacuation,
- sheltering,
- material and technical equipment of civil protection forces,
- preparations for civil protection.

*(c) Documentation:*

- management of rescue operations for individual emergencies and coordination of forces the name, surname and function of the person authorised to manage rescue operations.
- measures to warn the population and notify persons.
- radiation protective measures.
- chemical protective measures, including measures to cope with possible scenarios of a major industrial accident as described in the safety report and with regard to possible domino effects, as well as emergency preparedness measures.
- biological protective measures.
- emergency supply and emergency accommodation.

**II. Flood safety plan of the object, which is located on a watercourse or in an inundation area.**

**III. Flood rescue plan of legal persons and natural persons - entrepreneurs whose buildings, objects or facilities on the territory of the municipality may be affected by flood** and are prepared based on the general binding regulation of the municipality.

**IV. Documentation of measures to ensure the protection of the population in the area threatened by a surge wave in the event of an emergency on a water structure:** applies only to objects in the area at risk.

**V. Excerpts from emergency plans of objects** that may endanger the population of the municipality.

## **5.5. MUNICIPALITY / CITY CRISIS PLAN**

Quality planning process at municipality or city level depends on the understanding of its content, objectives and background, the specifics of the Analysis of the territory in terms of possible emergencies, risks and population protection objectives. The development of a (crisis) plan for the protection of the population is considered on two levels:

- **External:** areal threats to the territory with potential internal threats on a specific territory, with their assessed and developed risks (own emergency plans) and assessed sources of threat, also according to internal risks of threats on the territory, using the basis of the analysis of the territory of the region in terms of potential emergencies.
- **Internal:** internal protection plan of entities with their own emergency plans and territorial characteristics of municipalities, towns and organisations in a specific territory. In this context, we also consider the so-called cross-border threats from neighbouring countries. This involves planning for mutual assistance in the event of large-scale natural disasters and technological accidents.

Structure and content of the municipality/city crisis plan:

### **I. Crisis Staff Documentation.**

**II. Population Protection Plan** which contains the tasks, measures, and procedures for ensuring the protection of the population in the event of an emergency and is drawn up in the following structure and content as follows:

*(a) An extract from an analysis of the county area in terms of the occurrence of potential emergencies for the use of the municipality/city.*

*b) Plan of:*

- evacuation,
- sheltering,
- material and technical equipment of civil protection forces,
- preparations for civil protection.

*(c) Documentation:*

- management of rescue operations for individual emergencies and coordination of forces the name, surname and function of the person authorised to manage rescue operations.
- measures to warn the population and notify persons.
- radiation protective measures.
- chemical protective measures, including measures to cope with possible scenarios of a major industrial accident as described in the safety report and with regard to possible domino effects, as well as emergency preparedness measures.
- biological protective measures.
- emergency supply and emergency accommodation.

**III. The flood plan, which constitutes the flood rescue plan.** The flood rescue plan of the municipality includes the flood rescue plans of legal entities and natural persons - entrepreneurs whose buildings, objects, or facilities on the territory of the municipality may be affected by flood and are prepared based on the general binding regulation of the municipality.

**IV. Documentation of measures to ensure the protection of the population in the area threatened by a surge wave in the event of an emergency on a water structure:** applies only to municipalities in the threatened area.

**V. Excerpts from emergency plans of objects** that may endanger the population of the municipality.

## **5.6. DISTRICT CRISIS PLAN**

A quality planning process at the district level depends on an understanding of its content, objectives and background, the specifics of the analysis of the territory of the county in terms of potential emergencies, risks and population protection objectives.

Structure and content of the district crisis plan:

**I. Analysis of the territory in terms of potential emergencies in its territorial district.**

**II. Security Council documentation.**

**III. Crisis Staff Documentation.**

**IV. Population Protection Plan:** contains the tasks, measures, and procedures to ensure the protection of the population in the event of an emergency and is drawn up in the following structure and content as follows:

*a) Conclusions and recommendations from the analysis of the territory in terms of the occurrence of potential emergencies.*

*b) Plan of:*

- evacuation,
- sheltering,
- material and technical equipment of civil protection forces,
- preparations for civil protection.

*(c) Documentation:*

- management of rescue operations for individual emergencies and coordination of forces the name, surname and function of the person authorised to manage rescue operations.
- measures to warn the population and notify persons.
- radiation protective measures.
- chemical protective measures, including measures to cope with possible scenarios of a major industrial accident as described in the safety report and regarding possible domino effects, as well as emergency preparedness measures.
- biological protective measures.
- emergency supply and emergency accommodation.

**V. Flood plan**, which consists of a **flood safety plan** and a **flood rescue plan**.

**VI. Documentation of measures to ensure the protection of the population in the area threatened by a surge wave in the event of an emergency on a water structure.**

**VII. Documentation in the field of economic mobilisation** - crisis plan.

**VIII. Documentation in the field of national defence.**

## **5.7 CRISIS PLAN OF THE REGION**

The quality of the planning process at the district level in the county seat depends on the understanding of its content, objectives and background, the specifics of the analysis of the county territory in terms of potential emergencies, risks, and population protection objectives.

Structure and content of the county crisis plan:

**I. Analysis of the territory in terms of potential emergencies in its territorial district.**

**II. Security Council documentation.**

**III. Crisis Staff Documentation.**

**IV. Documentation in the field of the integrated rescue system** - Plan for the provision of assistance.

**V. Public Protection Plan:** contains the tasks, measures, and procedures to ensure the protection of the population in the event of an emergency and is drawn up in the following structure and content as follows:

*a) Conclusions and recommendations from the analysis of the territory in terms of the occurrence of potential emergencies.*

*b) Plan of:*

- evacuation,
- sheltering,
- material and technical equipment of civil protection forces,
- preparations for civil protection.

*(c) Documentation:*

- management of rescue operations for individual emergencies and coordination of forces the name, surname and function of the person authorised to manage rescue operations.
- measures to warn the population and notify persons.
- radiation protective measures.
- chemical protective measures, including measures to cope with possible scenarios of a major industrial accident as described in the safety report and regarding possible domino effects, as well as emergency preparedness measures.
- biological protective measures.
- emergency supply and emergency accommodation.

**VI. Flood plan, which consists of a flood safety plan and a flood rescue plan.**

**VII. Documentation of measures to ensure the protection of the population in the area threatened by a surge wave in the event of an emergency on a water structure.**

**VIII. Documentation in the field of economic mobilisation - crisis plan.**

**IX. Documentation in the field of national defence.**

## **5.8. CRISIS PLAN OF THE SLOVAK REPUBLIC**

The quality of the planning process at the level of the SR depends on the understanding of its content, objectives

and background, the specifics of the analysis of the territory of the region in terms of possible emergencies, risks and population protection objectives.

Structure and content of the crisis plan of the Slovak Republic:

**I. Territory analysis of the Republic in terms of possible emergencies.**

**II. Documentation of the Central Crisis Staff.**

**III. Crisis Staff Documentation.**

**IV. Population Protection Plan:** contains the tasks, measures, and procedures to ensure the protection of the population in the event of an emergency and is drawn up in the following structure:

*a) Conclusions and recommendations from the Analysis of the territory in terms of the occurrence of potential emergencies.*

*b) Plan of:*

- evacuation,
- sheltering,
- material and technical equipment of civil protection forces,
- preparations for civil protection.

*(c) Documentation:*

- management of rescue operations for individual emergencies and coordination of forces the name, surname and function of the person authorised to manage rescue operations.
- measures to warn the population and notify persons.
- radiation protective measures.
- chemical protective measures, including measures to cope with possible scenarios of a major industrial accident as described in the safety report and with regard to possible domino effects, as well as emergency preparedness measures.
- biological protective measures.
- emergency supply and emergency accommodation.

**V. Flood plan, which consists of a flood safety plan and a flood rescue plan.**

**VI. Documentation of measures to ensure the protection of the population in the area threatened by a surge wave in the event of an emergency on a water structure.**

**VII. Documentation in the field of economic mobilisation - crisis plan.**

**VIII. Documentation in the field of national defence.**

## QUESTIONS

1. [Define the term crisis planning.](#)
2. [List the types of plans most commonly used.](#)
3. [Describe the content of the Preventive Action Plan.](#)
4. [Describe the contents of the municipality/city crisis plan.](#)
5. [Identify the differences in the content of crisis plans of the object, municipality, district, region and Slovak republic.](#)



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## 6. ECONOMIC MOBILISATION

At the time of a declared state of emergency, state of emergency or state of exception, the district authority may, on its own initiative, order the implementation of an economic mobilisation measure for the purpose of declaring specific emergency regulatory measures and economic mobilisation measures in its territorial district and to recommend to the State Material Reserves Administration the implementation of an economic mobilisation measure. It may also order the implementation of an economic mobilisation measure in its territorial jurisdiction for the purpose of ensuring the provision of services necessary to mitigate the effects of a crisis situation.

***The aim of the chapter is to become familiar with and understand the concept of economic mobilisation and other terms used in the field of economic mobilisation. In addition, to know the subjects of economic mobilisation and their remit and competences in the field of economic mobilisation, the measures and financing of economic mobilisation.***

The basic legal regulation governing the area of economic mobilisation in the Slovak Republic is the [Act of the National Council of the Slovak Republic No. 179/2011 Coll.](#) on economic mobilisation and on amendment and supplementation of the Act of the National Council of the Slovak Republic No. 387/2002 Coll. on the management of the state in crisis situations outside times of war and martial law, as amended by later regulations.

### 6.1. DEFINITION OF BASIC CONCEPTS IN THE FIELD OF ECONOMIC MOBILISATION

**Economic mobilisation** means a *set of economic activities and organisational activities and measures carried out in a period of crisis or in preparation for and carried out in a state of security.*

Economic mobilisation serves to:

- ensuring the protection of the fundamental security interests of the Slovak Republic,
- the implementation of national defence preparations,
- addressing crisis situations and mitigating their consequences through economic mobilisation measures.

Economic mobilisation creates the preconditions for securing the resources that are the vital goods and services necessary for the survival of the population and the necessities necessary for to ensure the activities of the central authorities, the armed forces, the armed security forces, rescue services, crisis management bodies, information, and intelligence services, as well as economic mobilisation entities.

**Crisis planning** is defined as the activity of economic mobilisation entities, which establishes the way in which economic mobilisation measures are to be implemented.

**An economic mobilisation crisis plan** is a set of organised information in electronic or paper form on how economic mobilisation measures are to be implemented by the economic mobilisation entity.

**A data document** is information in paper or electronic form that is relevant for deciding how to implement economic mobilisation measures, provided between economic mobilisation entities.

**A vital product or vital good** is a product or good the lack of which in a crisis situation may endanger the life or health of the population or jeopardise the performance of the tasks of the armed forces, armed security forces and rescue services.

**A vital resource** is a resource whose disruption or degradation due to a risk factor may cause a threat to or disruption of the political and economic functioning of the State or endanger the life and health of the population, particularly a source of drinking water, a productive energy source, an element of the energy and gas distribution system and a source of fuel and oil reserves.

**Protection of a vital resource** means a set of measures to prevent, avoid or mitigate the effects of a risk factor on a vital resource,

**The organisation of the supply of vital products or vital goods** is the purposeful arrangement for the distribution of vital products or vital goods to a designated location.

**Exceptional regulatory action** means the sale of vital products and vital goods on rationing, the sale of limited quantities of vital products and vital goods and ensuring price stability of vital products and vital goods.

**The unified information system of economic mobilisation (JISHM)** means a set of technical means, software means, and methodological instructions used by economic mobilisation entities for processing, evaluation, and transmission of data on economic mobilisation and for collecting and sorting information for decision-making of central authorities, municipalities and higher territorial units and other economic mobilisation entities.

**Material fulfilment of obligations of a legal entity, natural person-entrepreneur and natural person** is the obligation to provide material means for the implementation of economic mobilisation measures, where material means immovable property and movable property, including technology, energy, water and documentation.

**Work duty** means:

1. the employee's obligation to remain in employment and to carry out work elsewhere than the agreed place of work and agreed type of work, if the employer is an economic

mobilisation entity and if the workplace in question is a workplace in the organisational structure of the economic mobilisation entity during a crisis situation,

2. the obligation of a natural person to carry out the tasks necessary to cope with economic mobilisation measures in a crisis situation.

**Preservation of production capabilities** means the continuous maintenance of the operability of production and other facilities necessary to ensure production to compensate for the consumption and losses of the armed forces, armed security forces and rescue forces in time of war, state of war, state of emergency or state of emergency,

**Production organisation** is understood as the totality of organisational, material and technical and personnel measures to ensure the production and manufacture of vital products or vital goods for the population and to ensure the activities of the armed forces, armed security forces and rescue services in times of crisis,

**Service organisation** means the arrangement of municipal services and repair services or other services necessary for the population and for ensuring the activities of the armed forces, armed security forces and rescue services in times of crisis,

**A withdrawal office** is an area defined by a municipality, with jurisdiction for a municipality or for several municipalities, adapted for the issue and settlement of withdrawal licences according to the population register,

**A purchase authorization** is a written document that authorizes an individual to purchase vital products or vital commodities during a declared regulatory emergency,

**State property designated for the purposes of economic mobilisation** means movable property and immovable property designated for the implementation of economic mobilisation measures and procured partly or wholly from the State budget,

**The organisation of health care provision** shall be understood as:

1. creation of an expanded bed fund of the Slovak Republic through a network of economic mobilisation entities formed from health care providers to ensure the provision of health care to the population, members of the armed forces and armed security forces and rescue services in times of crisis,
2. implementation of hygienic and anti-epidemiological measures to ensure health care for the population, members of the armed forces and armed security forces and rescue services during a crisis situation.

**The organisation of transport security** is understood as a set of measures for the optimal use of transport capacities for the transport of people and freight and a set of organisational and material-

technical measures to ensure the maintenance and restoration of the operation of objects and facilities of the transport infrastructure to the original or required state,

**The organisation of postal services** is understood as a set of organisational, material-technical and personnel measures to ensure the use of the public postal network for the needs of the armed forces, armed security forces, rescue services, state administration bodies, municipalities and higher territorial units, economic mobilisation entities, as well as for the needs of the population in times of crisis,

**The organisation of the provision of electronic communications networks and electronic communications services** is the totality of organisational, material, technical and personnel measures to ensure the operation and provision of public electronic communications networks, public electronic communications services or public electronic communications networks and public electronic communications services for the needs of the armed forces, armed security forces, rescue services, state administration bodies, municipalities and higher territorial units, economic mobilisation entities and the population in times of crisis,

**The organisation of construction and remediation activities** is the totality of organisational, material-technical and personnel measures to ensure the restoration of energy, production or distribution facilities or other objects; the organisation of construction and rehabilitation activities in the field of building production is the sum of organisational, material and technical and personnel measures to ensure the production of construction elements and the restoration of designated production facilities by economic mobilisation entities within the scope of the Ministry of Transport of the Slovak Republic.

**The organisation of veterinary care** is the preventive and anti-epidemiological measures taken to protect animals.

**Financial security** means the raising of funds and the management of these funds in the implementation of economic mobilisation measures,

**Banking services related to financial security** means services related to the provision of financing of the State budget in times of crisis and the related payment and maintenance of the accounts of the State budget,

**Social security organisation** means:

1. implementation of measures for insured persons and beneficiaries,
2. implementation of measures by state social support providers for recipients of state social support benefits,
3. implementation of measures by social assistance providers for the population in need to social assistance.

**Manpower records for the purpose of duty** shall mean the maintenance of manpower records for the purpose of imposing duty during a period of crisis:

1. in an economic mobilisation entity, it is a register of employees who are obliged to remain in employment and to carry out work at a place of work other than the agreed place of work and the agreed type of work, if the place of work is a place of work in the organisational structure of the economic mobilisation entity during a crisis situation; the records shall be processed by the economic mobilisation entity in a specific application programme of the unified economic mobilisation information system or in another proprietary software tool and the outputs from the proprietary software tool shall be incorporated into the specific application programme of the unified economic mobilisation information system as far as possible,
2. in the district office and the registration of the population for the purpose of imposing work obligations in the territorial district of the district office in cooperation with the labour, social affairs and family offices or the Social Insurance Institution in its territorial district.

**Record-keeping of means in kind for the purpose of performance in kind** shall mean the keeping of records of means in kind for the purpose of imposing performance in kind:

1. in an economic mobilisation entity, this means the registration of its own material resources which it will need for the implementation of economic mobilisation measures imposed on it by a decision or order of the central authority in its jurisdiction or of a higher territorial unit in its constituent jurisdiction, and records of other means in kind which may be used for in-kind performance but are not intended for the performance of economic mobilisation measures; the records shall be processed by the economic mobilisation entity in the specific application programme of the unified economic mobilisation information system or in another in-house programme tool and the outputs of the in-house programme tool shall be incorporated, as far as possible, into the specific application programme of the unified economic mobilisation information system,
2. in the district office also the registration of means in kind owned by economic mobilisation subjects for the needs of in-kind performance in the territorial district of the district office and the registration of other means in kind owned by entrepreneurs who are not designated as an economic mobilisation subject, in cooperation with the municipalities in their territorial area.

**Reduced educational process** means a set of organisational and material-technical and personnel measures to reduce the scope or change the mode of teaching in primary, secondary and higher education institutions.

**Cultural heritage protection** means a set of organisational, material-technical and personnel measures for the protection of national cultural monuments, collections, historical archival documents, historical library documents and historical library holdings.

**The organisation of fuel supplies** is a set of measures to ensure the supply of fuel to selected standby filling stations for the needs of the armed forces, armed security forces and rescue services, central authorities, municipalities and higher territorial units, economic mobilisation entities and the population in times of crisis, as well as the provision of spare sources of electricity at selected standby filling stations.

**A centre of concentrated social assignment** is a place of concentrated action of institutions providing social services to citizens in times of crisis.

## **6.2. ECONOMIC MOBILISATION ENTITIES**

**Central authorities, entrepreneurs and other legal entities not designated as economic mobilisation subjects and natural persons shall also participate in the** implementation of economic mobilisation measures.

**The subject of economic mobilisation is:**

- *the central authority designated by the Government of the Slovak Republic,*
  - *district office,*
  - *municipalities, towns and cities,*
  - *an entrepreneur, a budgetary organisation, a contributory organisation, a public university, a non-profit organisation providing services of general benefit or another legal entity implementing measures in the field of social security designated as a subject of economic mobilisation:*
    1. by a decision of the central authority within its jurisdiction or of a higher territorial unit within its jurisdiction issued in a state of security; or
    2. by written order of the head of the central authority in its jurisdiction, the head of the district authority in its territorial district, the head of the district authority in the seat of the region in the territorial district of the region or the president of a higher territorial unit in its constituent jurisdiction issued in a period of crisis situation; no appeal is admissible against the order.
- *National Bank of Slovakia,*
  - *Radio and Television of Slovakia,*
  - *Social Insurance Office,*
  - *Treasury,*
  - *Higher territorial unit.*

## COMPETENCE OF PUBLIC AUTHORITIES

**Government of the Slovak Republic** on a proposal from the Ministry of Economy:

- designates or abolishes central authorities as economic mobilisation entities and determines the scope for implementing economic mobilisation measures,
- issues government regulations for the implementation of economic mobilisation measures and on the financing of economic mobilisation measures in times of crisis; the Government Decree on the implementation of economic mobilisation measures shall be promptly announced in the press and in the broadcasts of the Radio and Television of Slovakia and shall be published in the Collection of Laws of the Slovak Republic.

**Central authorities** designated by the government as economic mobilisation entities:

- control the implementation of economic mobilisation measures within the scope of their competence,
- by decision or, in a crisis situation, by order of the head of the central authority:
  1. determine the economic mobilisation entities within their remit, including the scope for implementing economic mobilisation measures,
  2. change the scope of the designated entities to carry out economic mobilisation measures,
  3. abolish designated entities within their jurisdiction, including the implementation of economic mobilisation measures,
- provide information on the status of the implementation of economic mobilisation measures to the Ministry of the Economy upon request within a specified time limit,
- methodically guide and coordinate the implementation of economic mobilisation measures with the economic mobilisation entities in their area of competence,
- process and update information in the specific application programme of the unified information system for economic mobilisation,
- propose to the Ministry of the Economy the implementation of economic mobilisation measures during a crisis situation and their scope,
- administer State property designated for the purposes of economic mobilisation,
- cooperate with the Ministry of Economy in the preparation of the structure and scope of expenditure on economic mobilisation from the state budget,
- propose to the Minister for Economic Affairs to order an emergency regulatory measure,

- coordinate the economic mobilisation entities within their remit, which have been assigned by the Government to implement economic mobilisation measures pursuant to a special regulation,
- determine the content and scope of information that economic mobilisation entities within their jurisdiction are obliged to provide to the municipality during a crisis situation,
- inform the district offices in the seat of the region about the designated legal entities and natural persons-entrepreneurs in their jurisdiction for the subject of economic mobilisation by a written order of the head of the central authority in the period of crisis situation,
- specify by written instructions to the economic mobilisation entities within their competence the method of processing and updating the data monitored in the specific application programme of the unified information system for economic mobilisation or in another own assigned programme tool.
- methodically guide and coordinate the economic mobilisation entities in their area of competence in the preparation of the economic mobilisation crisis plan according to the instructions of the Ministry of Economy,
- determine the access rights of users from economic mobilisation entities within their remit and on their behalf within the specific application programme of the unified economic mobilisation information system or other own assigned software.

**Ministry of Economy:**

- submits to the Government proposals for the designation or abolition of economic mobilisation entities among the central authorities and proposals for determining the scope of implementation of economic mobilisation measures,
- submits proposals to the Government for the implementation of economic mobilisation measures in times of crisis,
- requests from Radio and Television of Slovakia the provision of airtime to inform the public about the crisis situation and the measures needed to resolve the crisis situation,
- issues subscription authorisations and keeps a central register of them,
- coordinates with economic mobilisation entities the preparation of the structure and scope of expenditure on economic mobilisation from the state budget,
- decides on the appeal:
  1. municipalities against the decision of the district authority to establish a dispensary for subscription rights,

2. against the decision of the district office,
3. against the decision of the economic mobilisation entity,
4. against the decision of the higher territorial unit and against the decision of the district authority,
  - coordinates the processing of the economic mobilisation crisis plan by the economic mobilisation entities,
  - methodically coordinates and guides the Radio and Television of Slovakia, the National Bank of Slovakia, and the higher territorial unit in the preparation of the crisis plan for economic mobilisation,
  - determines access rights for users from municipalities within the specific application programme of the unified information system for economic mobilisation.

**Ministry of Defence:**

- applies the requirements of the Armed Forces for replenishment of losses and consumption in times of crisis to economic mobilisation entities,
- applies requirements for the preservation of production capabilities in economic mobilisation entities,
- in applying the requirements under points (a) and (b), it shall proceed in accordance with a special regulation,
- in cooperation with the Ministry of Health, coordinates the organisation of medical provision in medical establishments designated as subjects of economic mobilisation by the Ministry of Defence.

**Ministry of Interior:**

- applies the requirements of the Police Force, Railway Police, Fire Brigade the Fire and Rescue Service and the Mountain Rescue Service for replenishment of losses and consumption in times of crisis in economic mobilisation entities,
- applies requirements for the preservation of production capabilities in economic mobilisation entities,
- coordinates the activities of the district offices,
- in applying the requirements, it shall proceed in accordance with a special regulation,
- in cooperation with the Ministry of Health, coordinates the organisation of medical provision in medical facilities designated as subjects of economic mobilisation by the Ministry of the Interior,
- coordinates with the district offices in the county seat the preparation of the structure and scope of expenditure on economic mobilisation from the state budget,

- coordinates and supervises district offices in the management of state budget funds for financing economic mobilisation expenditure,
- determines access rights for users from district offices within the specific application programme of the unified information system for economic mobilisation.

**Ministry of Health:**

- creates from health care providers a network of economic mobilisation entities within its competence to ensure the provision of health care to the population, the armed forces, the armed security forces and emergency services and allocates hospital beds based on their requirements in times of crisis,
- coordinates with the Ministry of Defence, the Ministry of the Interior, higher territorial units and the Ministry of Economy the preparation of a network of economic mobilisation entities from health care providers,
- applies requirements for the preservation of productive capacities in economic mobilisation entities which, by their products and services, provide the activities of health care providers classified as economic mobilisation entities,
- coordinates the organisation of medical provision with designated entities, designated as economic mobilisation entities by the Ministry of Health, the Ministry of Defence or the Ministry of the Interior,
- manages and coordinates the activities of the separate health crisis management departments of the regions in the implementation of economic mobilisation measures and coordinates the activities of higher territorial units in the field of the organisation of health security,
- manages and coordinates the activities of health insurers in the implementation of public health insurance in times of crisis is ensured through economic mobilisation entities, which are responsible for the organisation of health security, to inform the district authorities of the number of sick or dead inhabitants causally linked to the pandemic during the period of crisis.

**Ministry of Finance:**

- apply in writing to the National Bank of Slovakia requirements for the provision of selected cash banking services for the needs of the activities of the armed forces, armed security forces, information and intelligence services and the Fire and Rescue Service during a crisis situation,
- submits in writing to the Treasury requests for the execution of payment transactions and the maintenance of accounts for the needs of the Treasury's clients in times of crisis.

### **Ministry of Labour, Social Affairs and Family:**

The Ministry of Labour, Social Affairs and Family activates the activities of the Centre for Concentrated Social Security in times of crisis.

### **Central authorities not designated as economic mobilisation entities**

Central authorities that are not designated as economic mobilisation entities may carry out an economic mobilisation measure in a state of security and shall apply the provisions of this Act and the implementing regulations, as appropriate, when processing an economic mobilisation crisis plan or data document or shall provide the required data documents to the economic mobilisation entity.

In order to ensure action for the period of a crisis situation, the central authorities may, in a state of security, make requests to the economic mobilisation entities concerned.

### **District Office** in its territorial district:

- keeps records through a specific application programme of the unified information system for economic mobilisation
1. legal entities and natural persons-entrepreneurs in the territory of the district, which are determined as subjects of economic mobilisation,
  2. legal entities and natural persons-entrepreneurs in the territory of the district that may be designated as subjects of economic mobilisation,
  3. natural persons who may be subject to a labour obligation,
  4. legal persons, natural persons-entrepreneurs and natural persons who may be ordered to perform in kind and on the means in kind that may be used for performance in kind,
  5. subscription rights;
    - decides on the municipality's obligation to establish a dispensing station for the dispensing of subscription rights and exercises control over them,
    - manages, coordinates and controls the activities of municipalities in the implementation of economic mobilisation measures,
    - acts in matters of administrative offences and misdemeanours,
    - apply to the district office in the county seat the requirements of the municipalities located in the territorial perimeter of the district office to order the implementation of economic mobilisation measures,
    - informs the district office in the seat of the region at its request, if the information is not available through a specific application programme of the unified information system for economic mobilisation:

1. on legal persons or natural persons-entrepreneurs who may be designated by order as subjects of economic mobilisation and selected natural persons; they may be ordered by order of the district authority to carry out a measure of economic mobilisation,
2. on legal persons, natural persons-entrepreneurs and natural persons who may be subjected to in-kind performance and on in-kind means located in the territory of the district which may be used for in-kind performance
  - processes and updates the information necessary for the implementation of economic mobilisation measures in the specific application programme of the unified information system for economic mobilisation,
  - in implementing economic mobilisation measures, it cooperates with municipalities, the Social Insurance Institution, social and family labour offices, other local government authorities and economic mobilisation entities in its territorial district.

The register of legal entities, natural persons-entrepreneurs and natural persons includes:

- the trade name or name of the legal entity, its registered office, identification number and the subject of its activity,
- the name and surname of the natural person-entrepreneur, his/her identification number, if assigned, the subject and place of his/her business,

District office in a period of crisis:

- initiates the district office in the seat of the region to order the implementation of economic mobilisation measures,
- after ordering the implementation of economic mobilisation measures on the territory of the district, requires the Social Insurance Institution to provide data on insured persons from the register of insured persons or the Labour, Social Affairs and Family Offices to provide data on jobseekers from the register of jobseekers by occupation for the purpose of imposing a work obligation,
- by order of the head of the district office within its jurisdiction:
  1. determines the subjects of economic mobilisation, including the scope for implementing economic mobilisation measures,
  2. changes the scope for designated entities to carry out economic mobilisation measures,
  3. abolish designated entities, including the implementation of economic mobilisation measures,
    - after ordering the implementation of economic mobilisation measures, issues or cancels a written order to a natural person to carry out a work obligation or a written order to a legal person, a natural person-entrepreneur and a natural person for performance in kind or a

written order to a legal person and a natural person-entrepreneur for an economic mobilisation measure in the field of service provision; the written order shall also specify the scope of the economic mobilisation measures to be carried out,

- decides to exempt a natural person from his/her work obligation based on his/her written request,
- organises the distribution of off-take entitlements to municipalities following the imposition of emergency regulatory measures,
- informs the district office in the seat of the region about:
  1. legal entities or natural persons-entrepreneurs, which he/she has designated by order as the subject of economic mobilisation and assigned to them to carry out economic mobilisation measures,
  2. the natural persons who have been ordered by the order to carry out an economic mobilisation measure in kind and the means in kind, located in the territory of the district, which may be used for the in-kind performance,
  3. natural persons registered in the territory of the district on whom a labour obligation has been imposed or may be imposed,
  4. the number of subscription authorisations issued,
  5. the state of livestock and crop commodities in the territory of the district from data requested from the municipalities in the territorial district,
- based on the request of the designated entity, it ensures the replenishment of human resources and material resources for the purpose of implementation of a specific economic mobilisation measure, which is carried out by the designated entity based on a decision or an order; it ensures the replenishment of human resources in cooperation with municipalities.
- carries out an economic mobilisation measure within the scope of the road transport organisation, the implementation of which it ensures:
  1. cooperation with the higher territorial unit and economic mobilisation entities within the competence of the Ministry of Transport,
  2. designating economic mobilisation entities to carry out economic mobilisation measures,
  3. the imposition of a work obligation or performance in kind,
- request written consent from the central authority or a higher territorial unit to issue a work order or an in-kind performance order if it issues an in-kind performance order to an economic mobilisation entity that has been designated as an economic mobilisation entity by a decision or order of the central authority, or a work order to an employee of such an economic

mobilisation entity, if such an economic mobilisation entity or its employee is subject to such an obligation,

- request written consent from the central authority or higher territorial unit to issue an order for the implementation of an economic mobilisation measure if it issues an order for the implementation of an economic mobilisation measure to an economic mobilisation entity that has been designated as an economic mobilisation entity by a decision or order of the central authority and if such an economic mobilisation entity is subject to this obligation.

**The district office at the seat of the county** in addition to the above activities:

- directs, coordinates and controls the activities of the district offices under its jurisdiction in the implementation of economic mobilisation measures,
  - applies the requirements of the district offices in the territorial district of the region, municipalities and higher territorial unit for the implementation of economic mobilisation measures to the relevant central authorities,
  - informs the Ministry of Economy in times of crisis about the issuance of a regulation for the implementation of economic mobilisation measures in the territorial district of the region,
  - in times of crisis, informs the central authorities designated as the economic mobilisation entity, at their request, of the means in kind that can be used for in-kind implementation, located in the territorial perimeter of the county and of legal persons and natural persons-entrepreneurs registered in the territorial district of the county, which may be designated as subjects of economic mobilisation,
  - keep a register of off-take authorisations and provide information on them to the Ministry of the Economy at its request,
  - coordinate with the Ministry of the Interior the preparation of the structure and scope of expenditure for economic mobilisation from the state budget,
  - designates or abolishes, by order of the head of the district office, the subjects of economic mobilisation within its competence in its territorial district; in the order, it also designates, changes or abolishes the scope of implementation of economic mobilisation measures,
  - coordinates in the district offices in the territorial district of the county the registration:
1. legal entities and natural persons-entrepreneurs on the territory of the district, which are designated as subjects of economic mobilisation and proposed for inclusion in the register of the central authority,

2. legal entities and natural persons-entrepreneurs in the territory of the district that may be designated as subjects of economic mobilisation,
3. natural persons who may be subject to a labour obligation,
4. legal entities, natural persons-entrepreneurs and natural persons who may be subject to in-kind performance in the territory of the district and on in-kind means in the territory of the district that may be used for in-kind performance,
5. of off-take entitlements and their distribution following the imposition of emergency regulatory measures,
6. the state of livestock and plant commodities during a crisis situation; this information shall be submitted at the request of the Ministry of Agriculture and Rural Development,
  - processes and updates the information necessary for the implementation of economic mobilisation measures in the specific application programme of the unified information system for economic mobilisation and cooperates in processing and updating the information with the district offices in the territorial area of the region and with the Ministry of the Interior.

The district office in the seat of the region cooperates in the implementation of economic mobilisation measures with the higher territorial unit, central authorities, other local government authorities and economic mobilisation entities in the territorial district of the county.

## **THE POWERS OF LOCAL AUTHORITIES**

### **Higher territorial unit**

Economic mobilisation measures shall be carried out by a higher territorial unit as a **delegated exercise of state administration**.

Higher territorial unit:

- carry out economic mobilisation measures in times of crisis and cooperates with the central authorities and municipalities in the territory of the higher territorial unit,
  - cooperates in the implementation of economic mobilisation measures in times of crisis with the district office in the seat of the region in the application of requirements to the central authorities,
  - by a decision or, in times of crisis, by order of the president of the higher territorial unit:
1. determines the subjects of economic mobilisation, including the scope for implementing economic mobilisation measures,
  2. changes the scope for designated entities to carry out economic mobilisation measures,
  3. abolish designated entities, including the implementation of economic mobilisation measures,

- keeps records of data on legal entities and natural persons-entrepreneurs designated as subjects of economic mobilisation by the higher territorial unit and, upon request of the district office in the seat of the region, informs it about these persons,
- processes and updates the information necessary for the implementation of economic mobilisation measures by the higher territorial unit in the specific application programme of the unified information system for economic mobilisation,
- methodically guides and coordinates the implementation of economic mobilisation measures with the economic mobilisation entities it has designated,
- controls the implementation of economic mobilisation measures and provides the Ministry of the Economy with information on the implemented measures at its request,

When issuing a decision, the higher territorial unit shall invite, in addition to the subject concerned the Ministry of Economy and other central authorities designated by the Government as subjects of economic mobilisation as other parties to the administrative procedure and coordinate the implementation of economic mobilisation measures according to the designated scope.

Higher territorial unit:

- cooperates with the Ministry of Health in the establishment of a network of health facilities designated by the Ministry of Health as subjects of economic mobilisation and authorised to operate by a higher territorial unit,
- informs the Ministry of Health of forthcoming changes to the decisions for the authorisation of the operation of health facilities included in the network of economic mobilisation entities of the Ministry of Health pending their issue and entry into force.

The higher territorial unit shall provide the Ministry of Labour, Social Affairs and Family with data on the number and distribution of individual types of social facilities and the number of persons placed in them, their maximum capacities, the number of persons affected by the crisis situation, and the financial costs to be submitted for the resolution of the crisis situation. These data shall be provided by at the request of the Ministry of Labour, Social Affairs and Family or on an ongoing basis through a specific application programme of the unified information system for economic mobilisation, cooperating in their processing and updating with the Ministry of Labour, Social Affairs and Family and the Social Insurance Institution.

After its activation, the higher territorial unit shall appoint social services staff to the Centre of Central Social Security.

The higher territorial unit shall provide the Ministry of Education with data on the number and distribution of individual types and types of schools and school facilities, on the number of pupils, pedagogical and non-teaching staff of schools and school establishments, on the accommodation and catering capacities of these schools and school establishments, on the estimated financial costs necessary to resolve the crisis situation in schools and school establishments, and other data determined by the Ministry of Education. It provides these data on request of the Ministry of Education or on an ongoing basis through a specific application programme of the unified information system for economic mobilisation, while cooperating with the Ministry of Education and economic mobilisation entities within the scope of the Ministry of Education in their processing and updating.

The higher territorial unit cooperates in the implementation of economic mobilisation measures with the district office in the seat of the region.

The higher territorial unit processes the crisis plan of economic mobilisation according to the instructions of the Ministry of Economy and methodically guides and coordinates the economic mobilisation entities in its jurisdiction in the processing of the crisis plan of economic mobilisation.

The higher territorial unit shall determine the access rights of users for itself and for the economic mobilisation entities it has designated as economic mobilisation entities within the specific application programme of the unified economic mobilisation information system.

**Municipality** carries out economic mobilisation measures within the scope of competence under this Act as a delegated exercise of state administration.

The municipality:

- applies the requirements for ordering the implementation of economic mobilisation measures at the district office,
- establishes dispensaries for the dispensing of off-take authorisations according to the decision of the district authority and creates the material and organisational conditions for their operation after the declaration of extraordinary regulatory measures; it carries out this activity as a delegated exercise of state administration,
- apply for subscription rights at the district office.
- provides information to the district authority through a specific application program of the unified information system for economic mobilisation or, at the request of the latter, also through another proprietary software tool. o:
  1. legal entities and natural persons-entrepreneurs on the territory of the municipality, which may be designated as subjects of economic mobilisation,
  2. natural persons who may be subject to a labour obligation,

3. legal persons, natural persons-entrepreneurs and natural persons who may be ordered to perform in kind, and on the means in kind which may be used for performance in kind,
4. the measures taken for the purpose of implementing the economic measure.

In times of crisis, the municipality:

- carries out economic mobilisation measures as a **delegated exercise of state administration**,
- is provided to the district office through a specific application programme of the unified information system for economic mobilisation or, upon request, through another own programme means:
  1. the information needed to carry out economic mobilisation measures,
  2. information on the status of issued subscription rights that have been distributed to specific dispensing points of off-take entitlements following the imposition of emergency regulatory measures,
  3. a summary of the inventory and condition of livestock and crop commodities on the territory of the municipality from data requested from economic mobilisation entities under the jurisdiction of the Ministry of Agriculture and Rural Development, legal entities that are not economic mobilisation entities, and natural persons and natural persons-entrepreneurs owning livestock or growing crop commodities,
    - requires natural persons or natural persons-entrepreneurs and legal persons owning livestock or growing crop commodities on the territory of the municipality to provide information on the status and inventory of livestock and plant commodities,
    - in the event of a shortage of drinking water, it shall ensure the supply of drinking water, within the framework of which it shall designate drinking water distribution points for the replacement supply of drinking water.

The municipality processes and updates the information necessary for the implementation of economic mobilisation measures in a specific application programme of the unified information system for economic mobilisation.

In implementing economic mobilisation measures, the municipality cooperates with the Ministry of Economy, the higher territorial unit and the district office in whose territorial district it is located, and other economic mobilisation entities.

The municipality in its jurisdiction of establishment provides the Ministry of Education with data on the number and location of individual types and types of schools and school facilities, on the number of pupils, teaching and non-teaching staff of schools and school facilities, on the accommodation and warning capacities of these schools and school establishments, on the estimated financial costs

needed to deal with the crisis situation in schools and school establishments, and other data determined by the Ministry of Education. It provides these data on request of the Ministry of Education or on an ongoing basis through a specific application programme of the unified information system for economic mobilisation, cooperating with the Ministry of Education and economic mobilisation entities within the scope of the Ministry of Education in their processing and updating.

The municipality will provide free of charge a space for the Centre for Concentrated Social Security after its activation.

## **THE RIGHTS AND OBLIGATIONS OF THE DESIGNATED ENTITY, ENTREPRENEURS AND OTHER LEGAL ENTITIES AND NATURAL PERSONS**

### **Rights and obligations of the designated entity**

The designated entity is entitled to:

- request in writing to the relevant district office to exempt its employees from the work obligation imposed,
- to claim compensation for the restriction of the right of ownership or the right of use in rem and for the performance of a work obligation.
- require the district authority to ensure the replenishment of human and material resources for the purpose of implementing a specific economic mobilisation measure, which it is carrying out by decision or order.

The performance in kind or work obligation does not apply to a designated entity that performs specific economic mobilisation measures during a crisis situation based on a decision or order, or where it is foreseeable that it will be ordered to carry out economic mobilisation measures within five days during a crisis situation following the imposition of a work obligation or performance in kind. A work obligation may be imposed on an employee of a designated entity by order if the employee is not performing work at a workplace which is a workplace in the organisational structure of the designated entity during a crisis situation to ensure the implementation of a specific economic mobilisation measure.

Based on the decision, the designated entity is obliged to process and update the information necessary for the implementation of economic mobilisation measures in the specific application programme of the unified information system for economic mobilisation (JISHM) or in another programme tool assigned or recommended by the central authority or higher territorial unit that has designated it as an economic mobilisation entity.

At the request of the central authority, district authority or municipality, the designated entity is obliged to provide additional data and information necessary for the implementation of economic mobilisation measures, which are not processed in the specific application programme of the unified information system for economic mobilisation.

The Designated Entity is required in the state of security:

- to keep a record of all means in kind that may be used for the purpose of in-kind contributions during a crisis situation,
- prepare a crisis plan of the economic mobilisation entity and update it according to the instructions of the central authority or higher territorial unit.

The designated entity is obliged in times of crisis:

- comply with regulatory measures for electricity and gas consumption, heat consumption, water consumption and consumption of oil and petroleum products,
- comply with the emergency regulatory measures,
- comply with the economic mobilisation measures imposed on it by the decision and specified in the order,
- to provide, at the request of the municipality or the Ministry of Agriculture and Rural Development, information on the condition and inventory of livestock and inventory of plant commodities located in the territory of the municipality, if it implements economic mobilisation measures.

A designated subject who has been ordered to perform a work duty or to perform in kind under a special regulation may not be subjected to those duties under this Act.

#### **Obligations of entrepreneurs and other legal persons who are not a designated entity**

During a crisis situation, an entrepreneur and other legal entity that is not a designated entity is obliged to:

- submit to in-kind compliance with the District's order,
- comply with regulatory measures for electricity and gas consumption, heat consumption, water consumption and consumption of oil and petroleum products,
- comply with the emergency regulatory measures,
- provide information on the status and inventory of livestock and crop commodities upon request of the municipality.

An entrepreneur and other legal entity that is not a designated entity shall comply with and comply with the above-mentioned obligations if they are related to the implementation of an economic mobilisation measure.

An entrepreneur and other legal person who is not a designated entity that has been ordered to perform in kind under a special regulation may not be imposed this obligation under this Act.

A business and other legal entity that is not a designated entity shall, in a state of security, provide, upon request of a county office or municipality, information related to related to the material performance.

This information shall be related to the provision of a road vehicle or a special vehicle, such as its name, designation, category, type, type of body, number, technical condition, year of manufacture or age, disposition, superstructure and chassis and associated identification data such as designation, type of fuel and average fuel consumption.

### **Rights and obligations of a natural person**

In a crisis situation, an individual has the right to be supplied with essential goods in the range and quantity necessary for survival. This right shall be exercised against the municipality where the person has his/her permanent address.

During a crisis situation, the individual is obliged to:

- comply with regulatory measures for electricity and gas consumption, heat consumption, water consumption and consumption of oil and petroleum products,
- to submit to the organisation of health and social security,
- to submit to a work obligation as ordered by the district office,
- Submit to in-kind compliance with the District's order,
- to submit to a reduced educational process,
- comply with the emergency regulatory measures,
- provide, upon request of the municipality, an inventory of livestock and an inventory of plant commodities owned by a natural person; the deadline for the submission of the requested information shall be set by the municipality in the request.

A natural person *is obliged to* fulfil these obligations if they are related to economic mobilisation measures.

This is without prejudice to the right of a natural person to compensation. Compensation for damages shall be claimed by with the economic mobilisation entity for whose benefit the performance in kind was made.

A natural person who has been placed under a work obligation shall:

- to remain in an employment relationship or similar employment relationship if their employer is carrying out economic mobilisation measures and the natural person is pre-designated to carry out economic mobilisation tasks,
- to carry out work other than the agreed type of work or in a different location if his employer is carrying out economic mobilisation measures and the natural person is not pre-designated to carry out economic mobilisation tasks,

- to carry out his/her work duty at the place and to the extent specified in the order, if his/her employer does not carry out economic mobilisation measures and the natural person is not pre-designated to carry out economic mobilisation tasks.

A work obligation cannot be imposed during a period of crisis:

- an employee with reduced working capacity and a severely disabled person,
- a natural person under the age of 18 and over the retirement age,
- a pregnant woman, a mother up to the end of the ninth month after childbirth, a woman who is breastfeeding and a woman until the end of the third month after childbirth if the child is stillborn, has died or is not cared for by the woman,
- a natural person who permanently cares for a child under the age of 15,
- a natural person who permanently cares for a child over 15 years of age who has a long-term adverse health condition or is severely disabled for a long time and requires special care,
- a natural person who takes care of a natural person who is mostly or completely helpless or over 70 years of age and cannot provide care for this person by placing him/her in a social services facility, or a natural person who takes care of a natural person with severe disabilities who is dependent on care,
- a natural person performing professional service or special service and a natural person who has voluntarily undertaken conscription,
- a natural person exempted from performing extraordinary service under a special regulation,
- to a natural person enjoying extraterritoriality under international law and to a person belonging to foreign diplomatic missions, foreign consular offices, authorities of foreign states or international bodies, if these offices or bodies operate in the territory of the Slovak Republic with the consent of the competent authorities and are not citizens of the Slovak Republic,
- other foreigners to the extent resulting from international treaties or international law.

The obligation to work in times of war and martial law may not be imposed on a natural person performing alternative service.

The county office shall, by written order, cancel the duty to work if the individual is performing the duty to work and has been called by the county office in the county seat to perform extraordinary duty or alternative service.

A natural person may take on a work obligation voluntarily, except for a natural person who is an employee with reduced working capacity and a citizen with severe disabilities, a pregnant woman, a mother up to the end of the ninth month after childbirth, a nursing woman and a woman up to the end of the third month after childbirth, if the child is stillborn, has died or the woman is not taking care of the child, and a natural person under the age of 18 years.

The reason for exemption from work on the grounds of physical or mental incapacity must be proved by an official medical certificate or a decision of the competent state authority.

The obligation to submit to in-kind compensation shall not apply to a natural person whose livelihood or that of his family would be endangered by the provision of in-kind compensation; when imposing in-kind compensation, account shall also be taken of the non-endangerment of the operation of his economic facilities.

During a crisis situation, a natural person is obliged to provide, at the request of the district office or municipality, information related to the material performance or work obligation to the extent of.

**National Bank of Slovakia** prepares and implements measures in times of crisis:

1. in the field of foreign exchange, including the protection of foreign exchange reserves,
  2. for the provision of selected cash banking services for the needs of ensuring the activities of the armed forces, armed security forces, information and intelligence services and the Fire and Rescue Service based on a written contract concluded with the Ministry of Finance and the State Treasury,
    - controls the implementation of economic mobilisation measures within its scope of competence,
    - processes and updates the information necessary for the implementation of economic mobilisation measures in the specific application programme of the unified information system for economic mobilisation.
- prepares an economic mobilisation crisis plan in accordance with the instructions of the Ministry of Economy,
  - determines the access rights of users for themselves within the specific application programme of the single economic mobilisation information system.

**Radio and Television of Slovakia:**

- implements an economic mobilisation measure,
- coordinates and controls the implementation of economic mobilisation measures within its scope of competence,
- provides information on the state of implementation of economic mobilisation measures at the request of the Ministry of Economy,
- carry out an economic mobilisation measure during a crisis situation,
- processes and updates the information necessary for the implementation of economic mobilisation measures in the specific application programme of the unified information system for economic mobilisation,
- prepares an economic mobilisation crisis plan in accordance with the instructions of the Ministry of Economy,

- determines the access rights of users for themselves within the specific application programme of the single economic mobilisation information system.

**Social Insurance Office:**

- coordinates with the Ministry of Labour, Social Affairs and Family the preparation of the structure and scope of expenditure on economic mobilisation from the state budget,
- provides information to the Ministry of Labour, Social Affairs and Family on the state of implementation of economic mobilisation measures,
- carries out economic mobilisation measures within the scope of its competence in times of crisis,
- cooperates with district offices in the implementation of economic mobilisation measures in times of crisis,
- provides information on insured persons of the Social Insurance Institution in the implementation of economic mobilisation measures to the Ministry of the Interior, the Ministry of Labour, Social Affairs and Family or other economic mobilisation entities,
- provides information on insured persons of the Social Insurance Institution for the purposes of the regulation of the work obligation in the implementation of economic measures at the request of the district office,
- processes and updates the information necessary for the implementation of economic mobilisation measures in the specific application programme of the unified information system for economic mobilisation,
- prepares a crisis plan for economic mobilisation in accordance with the instructions of the Ministry of Labour, Social Affairs and Family,
- determines the access rights of users for themselves within the specific application programme of the single economic mobilisation information system,
- designate the staff of the relevant branches to the Concentrated Social Security Centre once it has been activated.

**Treasury:**

- cooperates with the Ministry of Finance and the National Bank of Slovakia in the implementation of economic mobilisation measures in terms of **financial security**,
- ensures, in accordance with written instructions from the Ministry of Finance, the execution of payment transactions and the maintenance of accounts for the needs of the clients of the State Treasury in times of crisis,

- processes and updates the information necessary for the implementation of economic mobilisation measures in the specific application programme of the unified information system for economic mobilisation,
- prepares an economic mobilisation crisis plan in accordance with the instructions of the Ministry of Finance,
- determines the access rights of users for themselves within the specific application programme of the single economic mobilisation information system.

### **6.3 ECONOMIC MOBILISATION MEASURES**

**Economic mobilisation measures** are:

- crisis planning,
- organisation of production and organisation of services,
- regulation of the distribution and consumption of electricity and heat and regulation of the distribution and consumption of gas,
- preservation of production capabilities,
- organising the supply and sale of vital goods using emergency regulatory measures,
- the establishment of dispensing points for subscription authorisations,
- organisation of medical provision,
- organisation of transport security,
- protecting vital resources,
- organisation of construction and remediation activities,
- organisation of veterinary care,
- financial security,
- social security organisation,
- the creation and management of state material reserves,
- the use of state material reserves, unless a special regulation provides otherwise,
- dealing with an oil emergency, unless a special regulation provides otherwise,
- keeping records of human resources for the purpose of carrying out work tasks,
- work obligation,
- recording of means in kind for the purpose of performance in kind,
- performance in kind,
- reduced educational process,

- the provision of the airtime necessary to inform the public about the crisis situation and the measures needed to address the crisis situation to the Ministry so that the information is accessible to all persons, including persons with a sign language disability,

- protection of cultural heritage,
- protection of objects of special importance and other important objects,
- implementation of banking services related to financial security,
- organisation of postal services,
- organisation of the provision of electronic communications networks and electronic communications services,
- organisation of fuel supplies.

The economic mobilisation entity shall carry out in a state of security some of the economic mobilisation measures imposed on it by the Government of the Slovak Republic by resolution.

An economic mobilisation entity must draw up an **economic mobilisation crisis plan** as part of the implementation of an economic mobilisation measure.

The municipality as an economic mobilisation entity in the framework of the implementation of economic mobilisation measures shall keep only a set of information maintained in a specific application programme of the unified information system for economic mobilisation or in another own programme tool according to the instructions of the Ministry of Economy.

The selected designated entities prepare a plan for the protection of vital resources for their area, which is part of their economic mobilisation crisis plan.

The economic mobilisation entity shall obtain, process and store personal data of the economic mobilisation entity's employees or natural persons for the purposes of crisis planning, notification of the economic mobilisation entity on the declaration of an emergency, state of emergency, state of exception, state of war and declaration of war or on the order to implement economic mobilisation measures, the imposition of labour obligations, performance in kind, the issue of purchase cards or ration cards or the registration of employees for the district office in the seat of the region for the purposes of their exemption from extraordinary service intended to ensure the security of the Slovak Republic or the defence of the Slovak Republic and kept by in a specific application program of the unified information system of economic mobilisation or in another own program means within the scope of:

- name, surname and academic title,
- place and date of birth,
- birth number,
- address of permanent residence or temporary residence,

- gender,
- nationality,
- marital status,
- educational attainment,
- professional employment of a natural person,
- a landline telephone number, mobile telephone number, fax number or e-mail address of a natural person or employee of the economic mobilisation entity at which he or she can be contacted both during and outside working hours,
- data on an individual related to his or her employment, such as job classification, personal number assigned within the employer, driver's license, National Security Agency certification, military classification.

For the purpose of implementing economic mobilisation measures, the economic mobilisation entity concludes contracts for supplies necessary for the survival of the population and for ensuring the activities of the armed forces, armed security forces, crisis management bodies, intelligence and information services and rescue services in a crisis situation, or are directly related to the implementation of economic mobilisation measures, are carried out in a state of security and are intended to ensure the protection of the fundamental interests of the Slovak Republic.

To ensure the implementation of economic mobilisation measures, the economic mobilisation entity shall process data in a specific application programme of the unified economic mobilisation information system or in another proprietary programme tool. Other economic mobilisation entities shall process data to ensure the implementation of economic mobilisation measures in a specific application programme of the unified economic mobilisation information system.

The Ministry of Transport, the higher territorial unit and the municipality shall cooperate with each other in the implementation of the economic mobilisation measure so as to ensure that the tasks are carried out to the extent and according to the priorities ordered by the Government.

The Ministry of Labour, Social Affairs and Family and the higher territorial unit shall cooperate with each other in the implementation of economic mobilisation measures so as to ensure that the crisis situation of individuals, families or communities is resolved through the provision of social services.

Ministry of Education, higher territorial unit and the municipality shall mutually cooperate in the implementation of economic mobilisation measures so as to ensure education and training in schools and school establishments in the school system and school establishments.

The Ministry of Culture, a higher territorial unit and a municipality shall cooperate with each other in the implementation of economic mobilisation measures.

The Ministry of Health and the higher territorial unit shall cooperate with each other in the implementation of the economic mobilisation measure so as to ensure the provision of health care by health care providers and the implementation of the public health measure.

#### **6.4. EPSIS® UNIFIED INFORMATION SYSTEM FOR ECONOMIC MOBILISATION**

The Joint Information System for Economic Mobilisation (JISHM) is a system of technical means, software means and methodological instructions used by economic mobilisation entities.

EPSIS®JISHM application software is designed for the needs of economic mobilisation entities within the meaning of Act No. 179/2011 Coll. of the National Council of the Slovak Republic as amended and for information support of the Ministry of Economy of the Slovak Republic within the framework of crisis management. It is designed for the purposes of economic mobilisation and is adapted to the requirements of economic mobilisation entities.

EPSIS®JISHM application program is created and operated by the selected economic mobilisation entity, VUJE, a.s. under the guarantee of the Department of Security and Crisis Management of the Ministry of Economy of the Slovak Republic, which performs the function of the system integrator of the application programme within the information system. VUJE, a.s. provides complex system integration in cooperation with the entities.

EPSIS is designed as a client server information system, with the server part of the JISHM project deployed in two separate sites:

- the main workplace is located in Trnava, premises of VUJE, a.s,
- the back-up office is located in Bratislava, on the premises of the Ministry of Economy of the Slovak Republic.

The main workstation is designed to be primary and used in preference. It hosts the full set of servers and technical equipment of the JISHM project. The servers are in an active state and provide services in a full-fledged manner.

The system operator is responsible for the availability and functionality of the server part of the application.

System integrator - VUJE, a.s. is responsible for: administration and maintenance of hardware (HW), system software (SW) and infrastructure (prevention of problems, control of running servers and other infrastructure components, detecting the causes of possible failures; rebooting or reinstalling HW and SW components if necessary; in agreement with application manufacturers installation of new versions and patches of the operating system, database, etc.); administration and maintenance of security software (maintenance and creation of new users, cancellation of old users,

issuing and returning tokens, controlling access to applications, etc.); administration and maintenance of application SW (correct operation of the application, minor modifications according to user requirements, testing and installation of new versions of application SW); administration and maintenance of substantive content (codebooks, terminology, data access control, methodological instructions, activity procedures, approval of planning documentation of entities, control of data filling, management of requests for changes to application SW, etc.); provision of training for new users of the system.

In addition to these tasks, the system integrator also provides support services:

- emergency via telephone line,
- emergency via email.

Emergency telephone service is provided from 7.00 AM - 3.00 PM on working days. The staff member responsible for answering the call will ascertain from the caller the scope of the problem and connect the caller to the appropriate professional. Emergency e-mail service is provided between 7.00 AM and 3.00 PM on working days, with response to e-mail from the responsible staff member is within 60 minutes of receipt from the system user. The Responsible Officer is designated by the Emergency Duty and Troubleshooting Responsibilities Schedule.

## **6.5 FINANCING ECONOMIC MOBILISATION**

State budget resources for financing economic mobilisation expenditures shall be budgeted in relation to the individual chapters of the State budget.

The state budget of the Slovak Republic shall finance the expenditure of for economic mobilisation through the chapters of the economic mobilisation entities which are the central authority.

State budget resources for financing economic mobilisation expenditure for *district offices* shall be budgeted in the budget chapter of the *Ministry of the Interior of the Slovak Republic*.

State budget resources for financing economic mobilisation expenditure for *higher territorial units and economic mobilisation entities designated by the higher territorial unit*, municipalities, the National Bank of Slovakia, Radio and Television of Slovakia shall be budgeted in the chapter of *the Ministry of Economy of the Slovak Republic*.

State budget resources for financing economic mobilisation expenditure earmarked for the implementation of economic mobilisation measures:

- shall be budgeted in the chapter of the Ministry of Defence of the Slovak Republic, if it is to ensure the requirements of the Armed Forces during a crisis situation,

- shall be budgeted in the chapter of the Ministry of Interior of the Slovak Republic, if it concerns the provision of requirements of the armed security forces and rescue forces within the competence of the Ministry of Interior in the period of a crisis situation,
- shall be budgeted in the chapter of the Ministry of Health of the Slovak Republic, if it is to ensure the requirements of the Armed Forces during a crisis situation.

State budget resources for financing economic mobilisation expenditure for the Social Insurance Institution shall be budgeted in the chapter of the Ministry of Labour, Social Affairs and Family.

State budget resources for financing economic mobilisation expenditure for the State Treasury shall be budgeted in the chapter of the Ministry of Finance of the Slovak Republic.

State budget resources for financing of economic mobilisation expenditures earmarked for the implementation of economic mobilisation measures shall be budgeted in the chapter of the Administration of State Material Reserves of the Slovak Republic.

State budget resources for financing economic mobilisation expenditure intended for the implementation of economic mobilisation measures related to a specific programme of the unified information system for economic mobilisation shall be budgeted in the chapter of the Ministry of Economy of the SR, if it concerns the maintenance of programme resources and methodological instructions to be carried out uniformly within the programme resources and methodological instructions for all economic mobilisation entities, otherwise they shall be budgeted in the chapter of the individual economic mobilisation entities which are the central authority.

The maintenance of technical means shall be budgeted in the chapter of the economic mobilisation entity. Central authorities may budget from their own chapter for the purchase and development of their own software, which is not a specific application programme of the single economic mobilisation information system.

State budget resources for financing economic mobilisation expenditure earmarked for the maintenance of programme resources and methodological guidelines related to the preparation of for the implementation of economic mobilisation measures shall be budgeted in the chapter:

- of the Ministry of Economic Affairs, in so far as they relate to the preparation and implementation of emergency regulatory measures for the sale of vital goods,
- of the Ministry of Agriculture and Rural Development of the Slovak Republic, if related with the production of agricultural and food commodities or with the supply of vital goods and services,
- of the Ministry of Interior, if they are related to the activities of district offices, the Police Force, the Railway Police, the Fire and Rescue Service and the Ministry of the Interior.

## QUESTIONS

1. [Define the term economic mobilisation.](#)
2. [Name the subjects of economic mobilisation.](#)
3. [What must be developed by the economic mobilisation entity in the framework of the implementation of economic mobilisation measures?](#)
4. [What EPSIS@JISHM is used for?](#)
5. [How are the costs of the economic mobilisation of district authorities financed?.](#)



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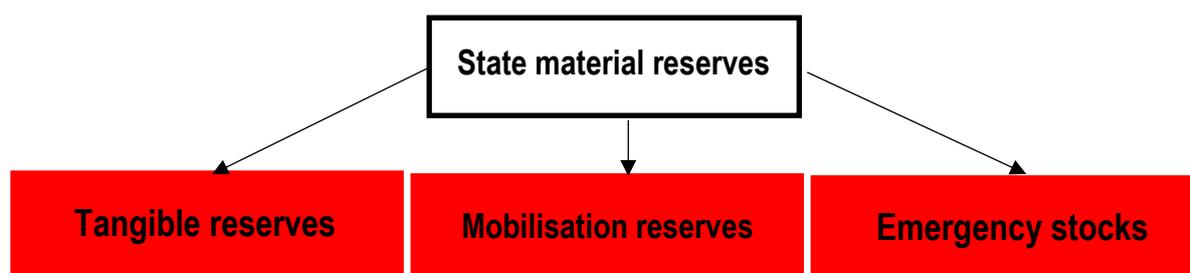
## 7. STATE MATERIAL RESERVES

State material reserves shall be created to protect the economy and to deal with a crisis situation, an emergency, stage III flood activity, an emergency in the energy sector, food security of the state, for the needs of the armed forces or requirements arising from international obligations of the Slovak Republic.

***The aim of the chapter is to get acquainted with the procurement, ownership, management of the state material reserves and also the content and purpose of material reserves, mobilisation reserves and emergency stocks.***

### 7.1. INTRODUCTION TO THE ISSUE

State material reserves are assets created, replenished, managed, stored and protected on the territory of the Slovak Republic. According to their purpose, state material reserves are divided into (Figure 7.1):



*Figure 7.1 Schematic of the distribution of the state material reserves (Source: Author)*

**State material reserves are owned by the State.** If it is economical and the conditions for storage and protection are met, the State material reserves may also be owned by legal entities or natural persons based on a contract with the Reserve Administration.

State material reserves, which are owned by the State, shall be administered by **the Reserves Administration** [372/2012 Coll.](#) on State Material Reserves on State Material Reserves.

Management of reserves is the central body of the State administration for the State material reserves and for the coordination and methodological guidance of measures to deal with oil emergencies. It is a budgetary organisation of the State, which is connected to the State budget of the Slovak Republic by its revenues and expenditures. In addition to the resources of the State budget, it also uses extra-budgetary resources for its activities.

Management of reserves provides:

- the creation, financing, management and control of state material reserves,
- carrying out property management of the state material reserves,
- the deployment of state material reserves and their storage in its own storage capacities,
- the readiness of the State's material reserves for their use for their intended purposes,

- coordination of the activities of central and other state bodies in the field of state material reserves,
- liaison with foreign countries for the efficient and effective management of state material reserves,
- the provision of professional services for remuneration in areas directly related to the activities and expertise of the Reserve Administration, provided that this does not compromise its core mission,
- the performance of founding functions vis-à-vis legal persons providing tasks in the field of state material reserves, the founder of which is the Reserve Administration,
- analytical and operational records of the State Material Reserve stocks,
- collecting data on available material reserve resources,
- other activities in the field of state material reserves, which are related to the performance of tasks defined by this Act and related regulations.

For the **creation of state material reserves**, the *central state administration bodies* apply the requirements resulting from the crisis plans and other tasks of the central state administration bodies and the requirements of the Ministry of Defence of the Slovak Republic (MoD SR) to the Reserve Administration.

The creation of the State Material Reserves shall be carried out *according to the schedule of the plan for the creation of the State Material Reserves*.

*Management of reserves* creates state material reserves **by purchasing on domestic markets, foreign markets or through commodity exchanges**.

The stocks of the State Material Reserves are sold by the Reserve Administration in the framework of exchanges, swaps and releases. Sales through commodity exchanges are also considered to be contractual sales.

State material reserves (hereinafter referred to as the "SMR") are intended to deal with crisis situations. They are not intended to deal with short-term supply shortfalls, to purchase and store market surpluses, for intervention purchases or to influence the market. **Both the creation and the maintenance of the SMR are fully covered by the State budget**. The SMR are stored in **the Reserve Administration's factories** or with **custodians based on a custody contract**.

The Reserve Administration's plants are designed for efficient storage of SMR. Reserve Administration currently has 4 plants. Each of the plants has sufficient storage capacity, technical and handling equipment for the storage of different types of SMR while maintaining optimal conditions for their protection and care of the stored stocks. The Reserve Administration places emphasis on the continued usability of SMR as well as on the constant readiness for their operational retrieval in the event of crisis situations. In the past, the Reserve Administration has repeatedly and promptly stockpiled the necessary materials, machinery, apparatus, tools and equipment, which has greatly contributed to minimising the

subsequent damage. Inspections of stored and protected commodities are regularly carried out and necessary repairs are carried out and operational faults and deficiencies rectified. SMR are ready for quick retrieval and use at any time if they are needed.

## 7.2. TYPES OF STATE MATERIAL RESERVES AND THEIR MANAGEMENT

Based on the division of the state material reserves shown in the diagram in Figure 7.1, we divide them into material, mobilisation and contingency reserves.

### 7.2.1. Tangible reserves

Tangible reserves (hereinafter referred to as "TR") are intended for the protection of the economy, for ensuring the energy and food security of the state, for the needs of the armed forces and for temporarily dealing with the consequences of large-scale emergencies. This may also include dealing with a sudden economic crisis which, given the dependence and low self-sufficiency of the Slovak Republic in the energy and food sectors, may pose a significant problem for the functioning of the State in the event of its occurrence. Therefore, the TR consists **primarily of food items** (e.g. wheat, sugar, etc.), see Figure 7.2.



Figure 7.2 Material Reserve Warehouse (Source: SŠHR SR, 2020)

A special type of material reserves are **emergency stocks of crude oil and petroleum products**, which are intended to help bridge the period of crisis in the event of a failure of oil supplies to the territory of the Slovak Republic, or in the event of an oil crisis. In accordance with the current EU legislation, Member States are required to hold emergency stocks for at least 90 days. The Slovak Republic has consistently maintained a higher volume of emergency stocks than the EU requirement. From a strategic point of view, the material reserves are intended to protect the basic interests of the State and the EU requirements in the field of food and energy security of the State. Material reserves can also be referred to as a 'rescue package of last resort' in the event of the emergence and prolonged duration of a large-

scale crisis and once other resources (both commercial and state) on the food or energy market have been exhausted. The formation, structure of TR items and their limits are determined by the Government of the Slovak Republic, the proposal is made to the Government by the Chairman of the Reserve Administration. Similarly, the use of material reserves is decided by the Government of the Slovak Republic based on a proposal by the Chairman of the Reserve Administration for the release of TR.

*Tangible reserves may be withdrawn without the consent of the Reserve Administration only if it is to avert the consequences of an emergency.*

A conservator who removes material reserves without the consent of the Reserve Administration shall, **within 10 days of the removal**, submit a report to the Reserve Administration on the reasons for such removal.

If the Reserve Administration does not recognise the justification for the removal of material reserves without its consent, it shall be deemed to be an unauthorised use of the State's material reserves.

In the management of material reserves, the Reserve Administration applies **the principles of expediency, economy** and realisation:

- protection of material reserves,
- replacement and exchange of material reserves,
- loan of material reserves,
- release of material reserves.

**When exchanging and replacing tangible reserves** the *Reserve Administration* shall set **replacement periods** for each item of physical stocks, which shall be determined according to the technical storage conditions and quality indicators for each item of physical stocks.

The exchange of items of tangible reserves shall be handled by the Reserve Administration, if one item of tangible reserves, or part thereof, exceeding the minimum limit needs to be exchanged for another item in accordance with the limits for items of tangible reserves approved by the Government.

The replacement and exchange of material reserves shall be carried out by the conservator based on a contract between the conservator and the Reserve Administration.

The exchange or replacement of material reserves shall be carried out:

- *the simultaneous replacement or substitution of material reserves* so that there is no decrease or increase in stocks at the end of the calendar month,
- *a non-contemporaneous replacement or exchange of material reserves* such that, during the period of the replacement or exchange of material reserves, there may be a decrease or an increase in the stock; an adjustment to the quantity or asset value of the material reserves is made at the end of the non-contemporaneous exchange or swap of tangible reserves.

Replacement of material reserves before the expiry of the specified replacement period may be carried out with the written consent of the Reserve Administration.

When borrowing tangible reserves, the Reserve Administration may determine that the volume of tangible reserves, in excess of the minimum limit of one item shall be used in the relevant year for the purpose of the loan. The Reserve Administration shall decide on the granting of a loan of tangible reserves based on an **application**. The borrower shall return to the Reserve Bank, within the contractually agreed time limit, stocks of material reserves of the same type, quantity and quality.

When granting a loan, the Reserve Administration charge the borrower a fee for the temporary transfer of tangible reserves, calculated as the product of the fee base and the European Central Bank base interest rate in force on the effective date of the loan agreement, increased by 8 percentage points. The basis of the fee shall be the cost of the borrowed tangible reserves according to the accounting records at the time they were borrowed. The fee shall be a revenue of the State budget. If the borrower is in default in returning the borrowed material reserves, the Reserve Administration shall invite him in writing to fulfil his obligation within **15 days of receipt of the Reserve Administration's summons**. On expiry of the time limit referred to in the preceding sentence, the security in the amount of the borrowed material reserves shall be forfeited to the Reserve Administration. The Reserve Bank may grant an extension of the agreed loan period only at the request of the borrower.

If the material reserves are to be used for the protection of the economy, for use in a period of energy emergency, for food security of the state, for the needs of the armed forces, or for the temporary resolution of the consequences of an emergency, **they shall be released based on a decision of the Government**. The proposal for the release of material reserves shall be submitted to the Government by the Chairman of the Reserve Administration.

**When releasing material reserves, the material reserve items to be released may temporarily fall below the minimum limit approved by the Government.** Management of reserves at the same time, propose a timetable for replenishing the material reserves to the minimum limit.

Management of reserves may sell material reserves, see [Act of the National Council of the Slovak Republic No. 218/2013 Coll.](#) on emergency stocks of crude oil and petroleum products and on solving the oil emergency and on amending and supplementing certain acts.

### **7.2.2. Mobilisation reserves**

Mobilisation reserves (hereinafter referred to as "MR") consists of selected basic raw materials, materials, semi-finished products, finished products, special machines, instruments, tools and preparations, freight equipment, bridge and support structures and other materials necessary for economic mobilisation entities operating under the responsibility of individual central government bodies. They are intended for the implementation of economic mobilisation measures in times of crisis. MR can

also be used in the period from the declaration until the end of the emergency situation, the state of emergency in the energy sector, the state of oil emergency and stage III flood activity, or for other uses if it is economical to do so.

MRs are created, maintained and replenished based on aggregate requirements of individual central government bodies submitted to the Reserve Administration.

The use of the MR after the declaration of an emergency situation and after the declaration of level III flood activity is decided by the Chairman of the Reserve Administration based on the opinion of the competent central government authority.

In times of crisis, energy emergency and oil emergency, the Government of the Slovak Republic decides on the use of MR. Management of reserves with the consent of the relevant central government authority, may also decide on other use of MR if such use is efficient, effective, economical and does not jeopardise the purpose for which the MR are intended in a security situation.

MRs have been used on several occasions, e.g. in dealing with flood situations (Figure 7.3) and in flood relief and forest fires.



*Figure 7.3 Mobile flood barriers - part of the state material reserves*

*(Source: NWRs, 2020)*

Mobilisation reserves thus constitute funds earmarked for economic mobilisation entities for the implementation of economic mobilisation measures in times of crisis. **Mobilisation reserves are state property administered by the Reserve Administration.**

**Only the economic mobilisation entity** for which the mobilisation reserves are intended may be **the custodian of the mobilisation reserves.**

**Mobilisation reserves shall be established based on requirements for the implementation of economic mobilisation measures.** Requests for the creation of mobilisation reserves for the following three calendar years shall be submitted by the custodians to the relevant central government authorities

by 31 March of the calendar year preceding the first request. The relevant central government authorities, after evaluating the requests from the custodians, shall submit to the Reserve Administration a summary request for the replenishment of mobilisation reserves by 30 April of the calendar year preceding the first request. In justified cases, an amendment to the aggregated request for replenishment of mobilisation reserves may be submitted for the following calendar year after 30 April of the calendar year.

Management of reserves in consultation with the relevant central government authorities, shall carry out **within 45 days after the entry into force of the State Budget Act for the relevant year**, a schedule of the creation and replenishment of mobilisation reserves and send it to the relevant government bodies and the defenders who have made the request.

**The Custodian may use mobilisation reserves only based on a decision of the Government or the Reserve Administration.**

*Mobilisation reserves consumed in use shall be proposed by the custodian to the Reserve Administration through the relevant central government authority for write-off due to their consumption and subsequent removal from the stock records.* Mobilisation stocks so depreciated or damaged in use that repair is impossible or uneconomical shall be proposed by the conservator to the Reserve Administration, through the relevant central government department, for earmarking. At the same time, the conservator shall immediately request the Reserve Administration, through the competent central government authority, to replenish them. Mobilisation reserves damaged during their use so that their repair is possible and economical shall be proposed by the conservator to the Reserve Administration, through the relevant central government authority, for repair.

If mobilisation reserves are consumed, devalued, destroyed or damaged in such a way that repair is not possible or would be uneconomical, the competent crisis management authority which has requested the use of mobilisation reserves shall, in cooperation with the custodian, within 10 days after the end of the crisis situation, emergency, level III flood activity, energy emergency and oil emergency, a *damage report*, indicating the designation, type and quantity of mobilisation reserves consumed, devalued, destroyed or damaged.

If the relevant central government authority decides to dissolve an economic mobilisation entity which is also a custodian, it shall notify the Reserve Administration of this fact and propose the transfer of the mobilisation reserves to another custodian under its responsibility or the earmarking of mobilisation reserves. The Reserve Administration shall decide on the transfer, the earmarking of mobilisation reserves, the transfer to another type of State material reserves or their other use for the fulfilment of the tasks of the Reserve Administration.

The Custodian shall prepare annually a Report on the mobilisation reserves it protects with an assessment of their necessity and expediency for the implementation of economic mobilisation

measures. The Custodian shall send the report referred to in the first sentence to the relevant central government authority and the Reserves Administration by 31 March.

By 31 March each year, the Custodian shall request a financial limit for current expenditure related to the protection of mobilisation reserves for the following calendar year.

If the custodian is declared bankrupt or allowed to restructure under a special regulation, the custodian shall immediately inform the Reserve Administration and the relevant central government authority thereof. The Reserve Administration notify the bankruptcy administrator or the restructuring administrator in writing that the debtor is a custodian of State property in the Reserve Administration. The Reserve Administration shall request in writing the competent central government authority to issue a proposal for the allocation of mobilisation reserves or for the transfer of mobilisation reserves. The bankruptcy trustee or the restructuring trustee shall be obliged to protect the State's assets in the administration of the Reserve Administration until the procedure under a special regulation has been completed based on the decision of the Reserve Administration to allocate the mobilisation reserves or until the mobilisation reserves have been taken over based on the decision to transfer the mobilisation reserves or based on the decision to reassign the mobilisation reserves.

**Management of mobilisation reserves** means:

- protecting mobilisation reserves,
- mobilization reserve replacement,
- replacement of mobilisation reserves,
- borrowing mobilisation reserves,
- rental of mobilisation reserves,
- earmarking, redeployment and redeployment of mobilisation reserves.

#### ***Protection of mobilisation reserves***

*Mobilisation reserves shall be stored separately from the Custodian's own stocks so as to prevent their deterioration, substitution, misuse or theft, and so that they are controllable, reachable and ready for rapid retrieval. Mobilisation reserves shall be prominently **marked with the symbol "P 222"**. Fuel and oils may be stored with the custodian's own supplies.*

They may only be stored in the storage facilities of the custodian based on a contract between the custodian and the Reserve Administration. The custodian is obliged to comply with the custody conditions laid down in the custody contract. The authorised persons of the Reserve Administration are entitled to check compliance with the conditions of conservation.

If mobilisation reserves are stored in the warehouses of the Reserve Administration, the custodian is obliged to comply with the conditions of protection according to the protection contract between the custodian and the Reserve Administration.

**Mobilization reserve testing**, which shall be carried out by the Custodian **at least twice a year**, may be carried out only with the written consent of the Reserve Administration. Damage caused by unprofessional handling during the testing of mobilisation reserves shall be the responsibility of the conservator, who shall immediately remedy it at his own expense.

The Custodian ensures the technical capability of mobilisation reserves based on the manufacturer's service recommendations. In the case of road vehicles and special vehicles, the Custodian shall test them **once every six months** with a test drive of not more than 30 km. Roadworthiness inspections and tests shall be recorded by the custodian in the logbook. The custodian shall be reimbursed by the Reserve Administration for the costs demonstrably incurred in ensuring the roadworthiness and testing of mobilisation reserves.

#### ***Replacement of mobilisation reserves***

The custodian shall request the Reserve Administration to **replace the mobilisation reserves** based on the findings of the last inventory **by 31 March of the calendar year for the following year**, according to the expiry of their storage period, according to the manufacturer's, supplier's or custodian's warranty conditions or technological and production procedures. The replacement of mobilisation reserves shall be ensured by the custodian. The decision to carry out the replacement of mobilisation stocks shall be issued by the Reserve Administration by 30 June of the calendar year preceding the year of the planned replacement of mobilisation reserves. Mobilisation reserves may be replaced in parts and stages. Each stage shall be considered as a separate replacement of mobilisation stocks.

If the replacement of mobilisation reserves is carried out within one calendar month, it shall be carried out without a financial guarantee. Performance shall be effected by the Parties by offsetting claims against each other.

If the replacement of mobilisation reserves is carried out over a period of more than one calendar month, it shall be carried out with a financial guarantee.

The financial security to secure the exchange of mobilisation reserves shall be deposited by the custodian in the current account of the Reserve Administration in the amount of the purchase price of the mobilisation reserves to be exchanged, as specified in the exchange contract between the custodian and the Reserve Administration, including value added tax.

In the event of imminent damage to the stored mobilisation reserves, an extraordinary replacement of the mobilisation reserves may be carried out based on a request from the custodian and a decision of the Reserve Administration.

Regular replacement of mobilisation reserves can also be agreed in the protection contract.

### ***Exchange of mobilisation reserves***

The replacement of mobilisation reserves shall be proposed to the Reserve Administration by the Custodian **by 31 March of the calendar year for the following year**, if another type of mobilisation reserves will more effectively ensure the implementation of economic mobilisation measures.

The decision on the exchange of mobilisation reserves shall be issued by the Reserve Administration based on the consent of the competent central government authority. The exchange of mobilisation reserves shall be carried out by the Reserve Administration based on an exchange contract. The Reserve Administration shall provide the funds for the price differences for the exchange of mobilisation reserves.

In the event of a change of technology, a change of supplier of mobilisation reserves, imminent damage to mobilisation reserves or the emergence of new requirements for the implementation of economic mobilisation measures, the custodian may also submit a proposal for the exchange of mobilisation reserves or its change during the calendar year preceding the year of implementation of the exchange of mobilisation reserves, after prior agreement with the Reserve Administration.

The Custodian shall request the replacement of mobilisation reserves if it is shown that, in view of their technical obsolescence, low efficiency or unreliability, they are no longer usable or cannot be provided with qualified personnel for their construction or operation.

Mobilisation reserves can be interchanged in parts and stages.

### ***Borrowing mobilisation reserves***

*Mobilisation reserves can be given by the Reserves Administration on loan to a state budget organisation, a state contributory organisation, a municipality or a higher territorial unit based on a loan agreement for a **maximum period of one year**.*

An application for the loan of mobilisation reserves shall be submitted by the borrower to the custodian. If the relevant central government authority gives its consent to the application for the loan of mobilisation reserves, the custodian shall forward the application together with the consent of the relevant central government authority to the Reserve Administration.

Borrowing mobilisation reserves is **free of charge** for the borrower.

If the borrower wishes to continue to use the mobilisation reserves after the expiry of the loan period, the mobilisation reserves may be leased to the borrower.

The borrowing of mobilisation reserves may be terminated by the Reserve Administration based on the need to use mobilisation reserves to deal with crisis situations and emergencies.

Mobilisation reserves can be given by the Reserves Administration to an entrepreneur based on a written contract.

An application for the lease of mobilisation reserves or an application for an extension of the lease of mobilisation reserves shall be submitted by the applicant or lessee to the Custodian at least **two months before the commencement of the lease or the expiry of the lease**. If the relevant central government authority gives its consent to an application for the lease of mobilisation reserves or to an application for the extension of the lease of mobilisation reserves, the custodian shall forward that application, together with the consent of the relevant central government authority, to the Reserve Administration at least one month before the commencement of the lease or the expiry of the lease, together with the consent in question. If the relevant central government authority does not grant consent to the application for a lease or consent to the application for an extension of the lease, the Conservator shall reject the application pursuant to the first sentence.

#### ***Allocation, transfer and redeployment of mobilisation reserves***

If the mobilisation reserves become impracticable for the implementation of economic mobilisation measures, the custodian shall immediately submit a request to the relevant central government authority for the earmarking of such mobilisation reserves.

The relevant central government authority shall consider the request for the allocation of mobilisation reserves of the custodian, reconsider the allocation or propose the transfer of mobilisation reserves and shall immediately submit to the Reserve Administration a proposal for the earmarking of mobilisation reserves or a proposal for the transfer of mobilisation reserves if, according to the economic mobilisation crisis plans or other data documents, the mobilisation reserves have become unusable by the custodian and the creation of the same type of mobilisation reserves is required by another custodian.

Based on the proposal of the relevant central government body for the allocation of mobilisation reserves and after its assessment, the Reserve Administration shall issue a decision on the allocation of mobilisation reserves or a decision on the reassignment of mobilisation reserves.

Based on a proposal by the relevant central government authority for the transfer of mobilisation reserves, the Reserve Administration shall issue a decision on the transfer of mobilisation reserves.

When road vehicles and special vehicles bearing a vehicle registration number are earmarked, the custodian shall submit the registration certificate to the Reserve Administration for the change to be made the registration of motor vehicles. If the registration certificate consists of two parts, the keeper shall submit both parts to the Reserve Administration.

The decision of the Reserve Administration on the allocation of mobilisation reserves, on the reassignment of mobilisation reserves or on the transfer of mobilisation reserves is without prejudice to the obligation of the custodian to protect these mobilisation reserves until the end of the procedure according to a special regulation based on the decision of the Reserve Administration on the allocation of mobilisation reserves or until their takeover by another custodian based on the decision of the Reserve

Administration on the transfer of mobilisation reserves or a decision of the Reserve Administration to reassign mobilisation reserves.

A new valuation of mobilisation reserves proposed for allocation under a special regulation shall be ensured by the custodian by expert opinion or valuation by an expert commission appointed by the statutory body of the custodian. Valuation by an expert committee shall be carried out for mobilisation stocks proposed for earmarking, the registration price of which does not exceed EUR 1 659 per unit of measurement.

### 7.2.3. Emergency stocks

Emergency stocks (ES) are selected items intended for immediate assistance in saving lives, health and property of the population of the Slovak Republic affected by various crisis situations, emergencies or 3<sup>rd</sup> degree of flood activity.

The ES consists of *material means necessary for ensuring the basic needs of the population in the period of an emergency and technical means for providing the components of the integrated rescue system*. These include, for example, food and drinking water (Figure 7.4), basic hygiene supplies, clothing and footwear, means for rest, emergency lighting, spare sources of electricity, technical means to ensure the operability of rescue services and special material for the provision of humanitarian aid. They are intended for immediate and gratuitous assistance.



Figure 7.4 Contingency stocks – Drinking water (Source: SHR SR, 2020)

The ES are created in accordance with the Reserve Administration's crisis plan in cooperation with the relevant central state administration authorities and district authorities, with priority being given to ensuring the basic living needs of the Slovak population in situations where the local government is unable to provide the necessary assistance from its own resources for various reasons. The use of ES is planned for survival, accommodation and provision of basic hygienic needs for a specified number of inhabitants for a period of 24 or 48 hours. In the event of a larger scale emergency, the use of the PoC may be combined with the use of TR food items and necessary MR. In the event that some of the material is no

longer available for use in MR, the material can be reassigned to ES and used for humanitarian aid both within and outside the territory of the Slovak Republic. The decision on the use of TR shall be made by the Chairman of the Reserve Administration, except for the use of TR for humanitarian aid purposes outside the territory of the Slovak Republic.

Emergency stocks are divided into:

- **repayable**, consisting of items and technical means to ensure the operability of the basic rescue services and other rescue services,
- **non-repayable**, consisting of items and technical means necessary to ensure the survival of persons in the affected territory of the Slovak Republic.

The creation, financing and management of emergency stocks shall be carried out by the Reserve Administration. Emergency stocks shall be established in cooperation with the relevant central government authorities and district offices in accordance with the Reserve Administration's crisis plan.

Management of reserves draws up a *proposal for the creation of emergency stocks for a period of two calendar years*, which is **approved by the Government** based on a **recommendation from the Security Council of the Slovak Republic**.

Management of reserves draw up an annual report on the state of emergency stocks, which, based on a recommendation of the Security Council of the Slovak Republic, shall be taken into account by the Government. In the year in which the Reserve Administration submits a proposal for the establishment of emergency stocks to the Government, the information on the state of emergency stocks shall form part of the proposal.

The Reserve Administration shall decide on the use of contingency stocks to deal with crisis situations except for the use of emergency stocks for the purposes of humanitarian aid outside the territory of the Slovak Republic, which is decided by the Government. Based on a request from the Ministry of Interior of the Slovak Republic, the Reserve Administration may decide on the use of emergency stocks for the purpose of humanitarian aid outside the territory of the Slovak Republic in the public interest.

Management of reserves may, at the request of the relevant central government authority, give consent to other uses of emergency stocks if such uses are efficient, effective and economical and do not compromise the purpose for which the emergency stocks are intended.

Emergency stocks provided by the Reserve Administration based on a written request signed by the statutory body of the crisis management authority.

In the event of an emergency, the **municipality is entitled to make a *written* request to the Reserve Administration through the district authority's crisis management body for the provision of emergency stocks**.

If there is an imminent threat to the lives of the inhabitants of the municipality or their property, the mayor of the municipality is authorized to request emergency supplies directly from the Reserve Administration.

The district authority's crisis management authority shall claim requirements for the provision of emergency stocks from the Reserve Administration. Such a request is the sum of the requests of the municipalities

in the territorial area of the district authority and the district authority's own requirements.

A written request for emergency supplies shall include:

- the name and contact details of the district authority or municipalities making the request,
- the name of the district office or municipalities to which the request is addressed,
- the day, month, year and time of the request,
- the day, month, year and time of the declaration of the state of emergency and the emergency response situation,
- the name, quantity and type of the emergency stock item and the reason for use,
- the name, surname and telephone number of the person responsible for taking over the emergency stocks,
- the name, surname and telephone number of the person responsible for the transport of emergency stocks,
- the signature of the statutory body of crisis management, the statutory body of the municipality or the statutory body of the district authority.

The provision of emergency stocks shall be made based on a decision of the Reserve Administration, which shall be notified without delay to the custodian and the applicant. The provision of emergency stocks shall be subject to the duration of the state of emergency. The decision shall specify the place, date and time of receipt.

The carrier shall acknowledge receipt of the emergency supplies from the custodian's warehouse or the Reserve Administration warehouse on the emergency supply release slip.

The statutory authority of the crisis management authority making the request shall be responsible for the receipt and allocation of emergency stocks, for preventing the misuse of emergency stocks and for the return of returnable emergency stocks.

Within 10 days of the end of the emergency and crisis management situation, the competent crisis management authority to which the emergency stocks have been provided shall draw up a *damage report on the returnable emergency stocks that have been damaged, worn out, destroyed or rendered useless.*

Management of reserves decide on their repair, replacement or disposal based on the damage report referred to in the first sentence.

Emergency stocks which have been provided to deal with crisis situations and emergencies and which have not been redistributed, damaged, destroyed or devalued, shall be returned by the competent crisis management authority to the Reserve Administration or the relevant conservator within 30 days of the end of the crisis.

#### Management of emergency stocks

Management of emergency stocks means

- Protecting emergency stocks,
- replacement of emergency stocks,
- replacement of emergency stocks,
- borrowing of emergency stocks,
- rental of emergency stocks,
- reassignment of emergency stocks.

#### ***Protecting emergency stocks***

Emergency stocks shall be stored separately from the custodian's own stocks so that, to prevent their deterioration, substitution, misuse or theft and to be controllable, reachable and ready for quick retrieval. Emergency stocks shall be prominently marked with the symbol '**ES Programme**'.

If emergency stocks cannot be stored in the warehouses of the Reserve Administration or if it is more economical to store them in other warehouses, they shall be stored in other warehouses based on a written safeguarding contract between the conservator and the Reserve Administration, in which the scope of the conservator's activities is agreed.

#### ***Replacement of emergency stocks***

Replacement of emergency stocks shall be carried out by the Reserve Administration or another conservator based on the findings of the last inventory according to the expiry of their storage period, according to the manufacturer's or supplier's warranty conditions or according to the time limits specified by the certificates of the bodies authorised by the for their issue.

#### ***Replacement of emergency stocks***

Replacement of emergency stocks shall be carried out by the Reserve Administration

#### ***Borrowing of emergency stocks***

Returnable emergency stocks can be given by the Reserve Administration on loan to a state budget organisation, a state contributory organisation, a municipality or a higher territorial unit based on a loan agreement for a maximum period of one year.

### ***Rental of emergency stocks***

Returnable emergency stocks can be given by the Reserve Administration to a state budget organisation, a state contributory organisation, a municipality or a higher territorial unit based on a contract.

An application for the lease of emergency stocks or an application for the extension of the lease of emergency stocks shall be submitted by the applicant or lessee to the Reserve Administration.

### ***Reclassification of emergency stocks***

Management of reserves may decide to **reclassify contingency stocks to mobilisation reserves** if they have ceased to fulfil the purpose for which they were established and the same stocks are needed based on a submitted mobilisation reserve plan by another custodian.

Management of reserves shall establish current accounts in the *State Treasury* to finance exchanges, swaps, creation, replenishment and loans of the State's material reserves.

Duties and powers of the custodian:

- to ensure the continued availability of the State's material reserves on a permanent basis,
- to allow access to representatives of the Reserve Administration and persons authorised by the Reserve Administration to carry out inspections of the State material reserves and their management; this is without prejudice to the exercise of control under a special regulation,
- to keep analytical and operational records of the movement of stocks and immovable property of the State under the administration of the Reserve Administration,
- to withdraw state material reserves based on instructions from the Reserve Administration.

Management of reserves as the administrator of the state material reserves and the custodians of the state property under the administration of the Reserve Administration, carry out a contractually agreed set of activities related to the care of the property entrusted to them, in particular:

- protection against theft, loss, damage, destruction and preservation of its operational capability and usability,
- provision of energy required for operation and storage, waste disposal from operation, maintenance and repairs,
- carrying out exchanges, substitutions, allotments and stock checks,
- storage,
- other activities, the scope of which will be the subject of the protection contract.

Protection is provided by the Reserve Administration based on a preservation contract between the Reserve Administration and the preserver entrusted with the preservation of such assets.

## CONTROL QUESTIONS



1. [For what purpose are state material reserves created?](#)
2. [Who owns the state material reserves?](#)
3. [What are material reserves used for?](#)
4. [What constitutes mobilisation reserves?](#)
5. [What constitutes emergency stocks?](#)

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## 8. CRITICAL INFRASTRUCTURE

Ensuring the security of the state, the functioning of the economy, i.e. productive and non-productive sectors and services, as well as the functioning of public administration and the provision of the basic necessities of life of the population, depend on a specific infrastructure. We refer to such infrastructure as **critical, i.e. vital, infrastructure due** to its importance. Its disruption has a negative impact on the provision of the basic functions of the state.

***The aim of the chapter is to introduce the meaning of the term critical infrastructure, the organisation and responsibilities of state administration bodies in the field of critical infrastructure, the procedure for designating an element of critical infrastructure and the obligations of the operator in the protection of a critical infrastructure element and liability for breaching these obligations.***

Damage, disruption or destruction of critical infrastructure can be caused by natural disasters or human factors. It may be a failure of technology and technological failures, or deliberate actions involving terrorism and organised crime.

**The aim of critical infrastructure protection** must therefore be to **minimise the impact of disruptions to the activities of these infrastructures** so that disruption to functions, activities or services is short-lived, manageable at least provisionally or alternatively, and spatially limited so as to affect the smallest possible number of the population.

Reducing the vulnerability of the Slovak Republic is a long-term task. The process of drafting the Critical Infrastructure Act began with the approval of the document "*Concept of Critical Infrastructure in the Slovak Republic and the Method of its Protection and Defence*", which was approved by Resolution No. 120 of the Government of the Slovak Republic of 14 February 2007. This resolution instructed the Minister of Interior of the Slovak Republic, in cooperation with the ministers and chairmen of other central state administration bodies of the Slovak Republic, to prepare and submit to the Slovak Government a draft law on critical infrastructure.

The process continued with the development of the National Programme for the Protection and Defence of Critical Infrastructure in the Slovak Republic, which was approved by the Government of the Slovak Republic by Resolution No. 185 of 26 March 2008. In this document, individual ministries and other central government bodies prepared a first identification of the most important sectors and sub-sectors of the national infrastructure and assessed the current state of play.

[Act of the National Council of the Slovak Republic No. 45/2011 Coll. on Critical Infrastructure](#)

was adopted on 8 February 2011. The aim of this Act on Critical Infrastructure is to improve the existing protection of critical infrastructure, in particular against the growing threat of terrorist attacks, in accordance with the relevant EU Council Directive. Such Directive - **EU Council Directive 2008/114/EC on the identification and designation of European critical infrastructures and assessment of the need to improve their protection** - has been implemented into law.

The Critical Infrastructure Protection Act provides for:

- the organisation and competence of state administration bodies in the field of critical infrastructure,
- the procedure for designating a critical infrastructure element,
- the obligations of the operator in protecting the critical infrastructure element and the liability for breach of these obligations.

**Critical infrastructure** is defined as a **system that is** divided into sectors and elements.

- **A critical infrastructure sector** is a part of critical infrastructure that includes critical infrastructure elements, and may include one or more critical infrastructure subsectors.
- **An element of critical infrastructure** is, in particular, an **engineering structure, a service in the public interest and an information system in the critical infrastructure sector**, the disruption or destruction of which, according to the sectoral criteria and the cross-cutting criteria, would have serious adverse consequences on the implementation of the economic and social function of the state, and thus on the quality of life of the population in terms of the protection of their life, health, safety, property, as well as the environment.
- **An element of European critical infrastructure** is, in particular, an engineering structure, a service in the public interest and an information system in the sector, the disruption or destruction of which, according to the European sectoral criteria and the European cross-cutting criteria, would have serious adverse consequences in the Slovak Republic and in at least one other Member State of the European Union.

The **protection of a critical infrastructure element means**, in particular, ensuring the functionality, integrity and continuity of the element in order to prevent, avert or mitigate the threat of its disruption or destruction.

In terms of ensuring the protection of critical infrastructure elements, a **risk analysis of the sector is carried out**, i.e. a document is produced which includes an assessment of the threat of disruption

or destruction of the sector, its vulnerabilities as well as the expected consequences of a disruption or destruction of the sector.

**In addition, a security plan** shall be developed for these elements, which shall include a description of the possible ways in which the element could be compromised or destroyed, the vulnerabilities of the element and the security measures to protect it.

**The security measures** serving to protect the critical infrastructure element are mainly mechanical barriers, technical security devices, physical protection, organisational measures, control measures and their mutual combination.

The extent of the security measures to protect the element shall be determined by an assessment of the threat of disruption or destruction of the element.

## **8.1. ORGANISATION AND COMPETENCE OF STATE ADMINISTRATION BODIES IN THE FIELD OF CRITICAL INFRASTRUCTURE**

State administration in the field of critical infrastructure is performed by:

### **1. Government of the Slovak Republic**

- approve the critical infrastructure concept, setting out the objectives, priorities and targets for the period concerned and the means of implementing them,
- Approves the interdepartmental critical infrastructure programme for the financial provision of tasks arising from this Act,
- sets sectoral criteria, European sectoral criteria, cross-cutting criteria and European cross-cutting criteria,
- decides on the designation of an element and its inclusion in a sector, as well as on the decommissioning of an element from the sector.

### **2. Ministry of Interior of the Slovak Republic**

- develops, in cooperation with the central authorities, a draft critical infrastructure concept, which it submits to the Government,
- coordinates the exercise of state administration by the central authorities,
- submits its draft sectoral criteria and European sectoral criteria to the government with its opinion,
- draw up, in cooperation with the central authorities, a proposal for cross-cutting criteria and European cross-cutting criteria, which it shall submit to the Government,

- submits with its opinion to the Government a proposal for the designation of the element and its classification sector, as well as a proposal for the removal of the element from the sector,
  - notify the competent central authority of the decision to designate an element and to include the element in the sector, as well as the decision to remove the element from the sector,
  - develops, in cooperation with the central authorities, a draft inter-ministerial programme for critical infrastructure, which it submits to the Government,
  - determines the scope of sensitive information within its remit,
  - designates the person authorised to inspect the sensitive information,
  - maintains a non-public central register of elements in electronic form,
  - is the focal point for the protection of Europe's critical infrastructure,
  - may cooperate within the scope of its competence with a similar institution established abroad.
3. **Central government body:** *Ministry of Economy of the Slovak Republic, Ministry of Finance of the Slovak Republic, Ministry of Investment, Regional Development and Informatization of the Slovak Republic and Ministry of Transport and Construction of the Slovak Republic, Ministry of Environment of the Slovak Republic, Ministry of Health of the Slovak Republic and Ministry of Agriculture of the Slovak Republic Ministry of Agriculture and Rural Development of the Slovak Republic*
- draft sectoral criteria and European sectoral criteria, which it shall submit to the Ministry,
  - draw up a proposal for the designation of the element and its classification in the sector, as well as a proposal for the removal of the element from the sector, which it shall submit to the Ministry,
  - notify the operator of the decision on the designation of the element and the inclusion of the element to the sector, as well as the decision to remove the element from the sector,
  - reviews the element on an ongoing basis against sectoral and cross-cutting criteria and the European Critical Infrastructure element against the European sectoral criteria and European cross-cutting criteria,
  - prepares a risk analysis of the sector and its update, which it submits to the Ministry of Economy of the Slovak Republic,
  - comment in writing on the security plan and its update; notify the Ministry of Economy of the Slovak Republic of the extension of the deadline for the implementation of the security plan,
  - determines, in cooperation with the controller, the scope of sensitive information,
  - designates an authorised person,

- maintains a non-public register of elements in electronic form,
- draw up the focus of control activities and control the fulfilment of the operator's obligations,
- submit to the Ministry a summary report on the control of operators by 31 March of the following year for the previous calendar year,
- hear misdemeanours and other administrative offences,
- may cooperate within the scope of its competence with a similar institution established abroad.

The following critical infrastructure sectors are under the jurisdiction of central government authorities (Table 8.1):

*Table 8.1 Critical infrastructure sectors under the competence of central government authorities*

<b>Sector</b>	<b>Subsector</b>	<b>Central government authority</b>
Transport	Road transport	Ministry of Transport, Construction Ministry of Transport and Regional Development of the Slovak Republic
	Air transport	
	Water transport	
	Rail transport	
Electronic communications	Satellite communication	Ministry of Transport, Construction Ministry of Transport and Regional Development of the Slovak Republic
	Fixed networks and services and mobile electronic communications	
Energy	Mining	Ministry of Economy of the Slovak Republic
	Electric Power	
	Gas Industry	
	Petroleum and petroleum products	
Information and communication technologies	Information systems and	Ministry of Finance of the Slovak Republic
	Internet	
Mail	The provision of postal services, postal payment and procurement activities	Ministry of Transport of the Slovak Republic

<b>Sector</b>	<b>Subsector</b>	<b>Central government authority</b>
Industry	Pharmaceutical industry	Ministry of Economy of the Slovak Republic
	Metallurgical industry	
	Chemical industry	
Water and atmosphere	Meteorological service	Ministry of the Environment of the Slovak Republic
	Water structures	
	Provision of drinking water	
	Healthcare	Ministry of Health of the Slovak Republic

## **8.2. PROCEDURE FOR THE DESIGNATION OF A CRITICAL INFRASTRUCTURE ELEMENT**

Critical infrastructure element shall be determined according to sectoral criteria and cross-cutting criteria. At least one sectoral criterion and at least one cross-cutting criterion shall be required for the designation of an element.

The European Critical Infrastructure Element shall be identified according to the European sectoral criteria and the European cross-cutting criteria. At least one European sectoral criterion and at least one European cross-cutting criterion shall be required for the designation of a European Critical Infrastructure Element. European Critical Infrastructure Element may only be designated in agreement with the competent authority of the Member State concerned.

The sectoral criteria and the European sectoral criteria shall be determined according to the characteristics of the sector concerned. The cross-cutting criteria and the European cross-cutting criteria shall be established according to what is foreseen:

- the number of persons at risk, of whom killed and injured,
- the economic impact, which is the extent of economic losses, the deterioration in the quality of goods, the deterioration in the quality of the public service or the extent of the negative impact on the environment,
- the impact on the population, which is the disruption of the quality of life of the population in terms of the severity of the failure of the supply of goods and the time for its restoration, the severity of the failure of the provision of a public service and the time for its restoration, the availability of a substitute for the supply of goods, or the availability of a substitute for the provision of a public service.

The following procedure shall be followed for the identification of the European Critical Infrastructure Element and the European Critical Infrastructure Element:

**Stage 1:** sectoral criteria are applied in order to make a first selection of foreseen elements within the sector. If any of the envisaged elements meets at least one sectoral criterion, it is considered in the second stage.

**Stage 2:** cross-cutting criteria are applied to the anticipated elements selected in Stage 1. If any of the envisaged elements meets at least one of the cross-cutting criteria, it is proposed for element identification and for inclusion in the sector.

**Stage 3:** European sectoral criteria are applied to select the envisaged European Critical Infrastructure Elements from the elements proposed in the second stage. If any of the envisaged European Critical Infrastructure Elements meets at least one European sectoral criterion, it shall be assessed in the fourth stage.

**Stage 4:** European cross-cutting criteria are applied to the anticipated European critical infrastructure elements selected in Stage 3. If any of the envisaged European Critical Infrastructure Elements meets at least one European cross-cutting criterion, it shall be proposed for designation as a European Critical Infrastructure Element and for inclusion in a sector.

This procedure shall not apply to a nuclear installation which is an element of critical infrastructure under this Act.

The state administration authorities in the field of critical infrastructure and the operator are obliged to coordinate their activities and procedures accordingly.

### **8.3. THE OBLIGATIONS OF THE OPERATOR IN THE PROTECTION OF THE CRITICAL INFRASTRUCTURE ELEMENT AND LIABILITY FOR BREACH OF THESE OBLIGATIONS**

The operator is a legal entity, a natural person - entrepreneur or a natural person, who is the owner of the element or operates the element for another legal reason. The operator is obliged to protect the element from disturbance or destruction. For that purpose, the operator shall:

- apply technology to the upgrade of the element that ensures its protection,
- implement the security plan with the prior opinion of the competent central authority within six months of receipt of notification of the designation of the element and of its inclusion in the sector, unless, in an exceptionally justified case, an extension of this time limit is agreed with the

competent central authority; the time limit may be extended only once, for a maximum of three months,

- review the security plan on an ongoing basis and, if necessary, implement an updated security plan with the prior agreement of the competent central authority,
- make their employees aware of the safety plan to the extent necessary,
- practice, according to the security plan, at least once every three years, a model situation of a threat of breach or destruction of an element,
- designate an authorised person who is also the contact person for the European critical infrastructure element,
- to provide the competent central authority with the assistance, in particular the data, documents and explanations necessary for:
  1. the identification of the element and its inclusion in the sector, as well as the removal of the element from the sector,
  2. an assessment of the protection of the element, including the provision of protection of the element by the operator of the guard service or the armed security force,
  3. development of a sector risk analysis,
  4. management of the elements register;

(h) to follow the security plan in the event of a threat of disruption or destruction of the element.

The operator shall immediately notify the competent central authority:

- a change in the object of the activity which may affect the designation of the element and its classification in the sector,
- the transfer or transfer of an element to another, including the sale of an undertaking or part of an undertaking, as well as changes in persons who have a direct or indirect participation in the operator to an extent exceeding a participation of 10 % in its share capital or voting rights or have the possibility of exercising an influence over the management of the operator comparable to that of that share,
- entering into liquidation, commencement of bankruptcy proceedings, restructuring proceedings or other similar proceedings, execution or other similar enforcement proceedings, as well as the commencement of the enforcement of a pledge or other similar right in relation to the operator or its property, regardless of whether the proceedings are within the jurisdiction of the authorities of the Slovak Republic.

This shall not apply to an operator who draws up an emergency plan or equivalent safety document pursuant to a special regulation.

A natural person commits an offence in the field of critical infrastructure if he or she breaches the obligation to maintain confidentiality of sensitive information, even after the termination of his or her authorisation to become acquainted with sensitive information. Similarly, another natural person shall also be guilty if he intentionally discloses sensitive information.

Offences under the Critical Infrastructure Act shall be dealt with by the central authority under whose jurisdiction the infringement of the obligation giving rise to the offence has occurred. For offences in the field of critical infrastructure, the central authority shall impose a fine of between EUR 200 and EUR 3 000.

#### **8.4. COOPERATION BETWEEN THE SLOVAK REPUBLIC AND THE EUROPEAN UNION IN THE FIELD OF CRITICAL INFRASTRUCTURE**

The first specific area of cooperation between the Slovak Republic and the European Union (EU) in the field of critical infrastructure is the use of the Critical Infrastructure Web Information Network (CIWIN). Although the use of this network is only voluntary, it enables the exchange of information between EU Member States, e.g. on common threats, vulnerabilities, best practices in the field of critical infrastructure protection and appropriate measures, including risk mitigation strategies. It will consist of a network of experts and contacts for the electronic exchange of data. In the long term, all critical infrastructure owners and operators in all EU Member States will have access to CIWIN through a national coordinating body. It can be accessed at <https://ciwin.europa.eu>

The transfer of data and software to another web-based communication platform, [SINAPSE](#), is currently being considered. This provides open access services to the European Commission.

The issue of critical infrastructure protection is extremely broad, yet in the Slovak Republic, over the course of several years, it has been possible to clearly identify critical infrastructure and the tasks necessary for its protection. However, it is important to realise that the protection of critical infrastructure is not a one-off activity, but a process that requires ongoing attention. This means that the ministries responsible for individual sectors of critical infrastructure, or the operators of critical infrastructure elements themselves, must pay constant attention to critical infrastructure protection and continuously develop its methods and incorporate the latest trends and knowledge in this area into its improvement.

## QUESTIONS



1. [Define the term critical infrastructure.](#)
2. [Define the term element and European Critical Infrastructure Element.](#)
3. [Name the state administration bodies in the field of fire protection.](#)
4. [Define the obligations of the operator in relation to the protection of elements of critical infrastructure.](#)
5. [Who and under what conditions can commit an offence in the field of protection of critical infrastructure?](#)

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## 9. CIVIL PROTECTION AND HUMANITARIAN AID

[The Glossary of Crisis Management Terminology](#) defines civil protection as *"the totality of systemic measures, activities, procedures and means applied by competent authorities, organisations, units and the population aimed at preventing, protecting and minimising the negative effects of potential crisis situations on human health and life, animals, property and living conditions"*.

***The aim of the chapter is to familiarize with the meaning of the term civil protection, the history of the development of civil protection of the Slovak Republic, its tasks, the documentation of crisis management, which is developed in this section, the Civil Protection Mechanism of the European Union and the conditions for providing humanitarian aid. The last area is that of training and competence in the field of civil protection and crisis management.***

### 9.1. DEVELOPMENT OF CIVIL PROTECTION ON THE TERRITORY OF THE SLOVAK REPUBLIC

In the former Czechoslovak Republic, Act No. 82/1935 Coll. was adopted on 11 April 1935. on protection and defence against air attacks. Based on this Act, a Government Decree of 18 October 1935 was issued laying down regulations on the procurement of gas masks and certain obligations of municipalities in protecting and defending themselves against air attacks.

In accordance with these documents, the "Civil Air Defence" was established, which carried out its tasks between 1935 and 1948. The name protection (in the sense of civil protection) was used only until 1951. Since then, the term 'civil defence' has been used. After the end of the Second World War, civil defence was built up almost exclusively as part of national defence. Based on the principles of defence management of the Czechoslovak Socialist Republic (hereinafter referred to as 'the CSSR') and in order to improve civil defence, the 'Directive on Civil Defence of the CSSR' was approved at the 33rd meeting of the Council of National Defence on 9 December 1982. The whole concept of civil defence was almost exclusively aimed at protection against weapons of mass destruction in the state's defence readiness.

Gradually, it was necessary to move from the global concept of protecting the population and the national economy as a whole to dealing with the micro-sphere of civil defence, i.e. to action in individual locations to protect individuals and groups. These efforts have taken on a broader significance in the aftermath of natural disasters such as the earthquakes in Armenia and Iran, and major operational accidents such as those at Seveso, Bhopal and Chernobyl. Disaster situations have proved to be very similar in content, scale of destruction and character to those that can arise after an armed conflict waged

with conventional weapons. Both the preparation for protection and the arrangements for rescue work in wartime are often identical to those for disasters in peacetime.

And so the originally marginal task assigned to civil defence, namely to participate in rescue work during natural disasters, accidents and disasters in peacetime, gradually became the basic, main task.

With the change of the socio-political system after November 1989 and especially with the signing of Additional Protocols I and II to the Geneva Conventions by the President of the former Czech and Slovak Federal Republic (hereinafter referred to as "CSFR") on 19 January 1990, new conditions were created for the status, role and activities of civil defence. The year 1991 was an important milestone in the development of civil protection, when the tasks of the Concept of Civil Defence of the former Czechoslovak Republic were elaborated for the conditions of the Slovak Republic. This elaboration was approved by a resolution of the 6th meeting of the Slovak Defence Council on 29 November 1991 with the strategic intention to build up the civil defence of the Slovak Republic, while fully respecting the provisions of the Additional Protocols of the Geneva Conventions, as well as Article 31 of Constitutional Act No 23/1991 Coll. (the Charter of Fundamental Rights and Freedoms).

In order to ensure the basic functions of civil defence in the Slovak Republic in the new conditions of formation and development of society, the Deputy Prime Minister of the Slovak Republic - Chief of Civil Defence of the Slovak Republic issued "Guidelines for activities in the non-military part of the Civil Defence of the Slovak Republic for the transitional period", years 1991-1992. The purpose of these directives was to unify approaches to the provision of tasks and measures of the Slovak Republic civil defence in the non-military part of the civil defence, especially in terms of protection against possible emergencies. After the parliamentary elections in 1992, during the implementation of the programme declaration of the Government of the Slovak Republic, the issues of the transition of civil defence from federal competence to the competence of the Slovak Republic were addressed, and at the same time it was incorporated into the Ministry of the Interior of the Slovak Republic (hereinafter referred to as the Ministry of the Interior of the Slovak Republic). This was done based on Act No. 42 of the National Council of the Slovak Republic of 16 December 1992, and the Ministry of Interior of the Slovak Republic became the central authority for civil protection in accordance with that Act. This document changed the name 'defence' to 'protection'. It can be stated that 1993 was the year of the transition of civil protection to the new conditions.

Since the establishment of the independent Slovak Republic in 1993, the field of civil protection of the population (hereinafter referred to as "civil protection") has undergone dynamic development. The primary task has been to establish a legal framework for civil protection in the Slovak Republic. With the adoption of [Act No 42/1994 Coll. on Civil Protection of the Population](#), as amended (hereinafter referred to as the Civil Protection Act), implementing decrees and regulations of the Government of the Slovak Republic, the legislation in the field of civil protection was harmonised with the Constitution of the Slovak Republic,

international humanitarian law, the Geneva Conventions, Articles 61, 62 and 66 of the Civil Protection Act and Additional Protocols I and II, and the legislation of the European Union (hereinafter referred to as 'EU').

The Civil Protection Act ***created a legal basis for ensuring the constitutional right of citizens to protect life, health and property from the consequences of emergencies.***

At the same time, it established the roles and responsibilities of state and local government bodies, as well as the rights and obligations of natural persons and legal entities in ensuring civil protection tasks.

**Civil Protection** (hereinafter referred to as "CO") ***is a system of tasks and measures aimed at the protection of life, health and property, consisting in particular in the analysis of potential threats and the adoption of measures to reduce the risks of threats, as well as the determination of procedures and activities in the elimination of the consequences of emergencies*** (hereinafter referred to as "MU").

The mission of the CO is to ***protect life, health and property and to create conditions for survival in emergency and during a declared emergency situation*** (hereinafter referred to as "MS").

***Civil protection is managed by the Ministry of the Interior of the Slovak Republic.***

The Capital City of the Slovak Republic Bratislava and the City of Košice have competence in the field of civil protection and cooperation with municipal districts regulated in the statute of the city.

In the performance of civil protection tasks, the Ministry of the Interior of the Slovak Republic cooperates with state authorities, self-governing regions, municipalities, legal entities and natural persons and public institutions with a humanitarian mission, which, within the scope of their competence, are active in cases of an emergency or an emergency situation in rescue work; however, this must not affect the performance of their tasks laid down by special regulations.

Expenditure on civil protection is financed from the state budget of the Slovak Republic through the budget chapter of the Ministry of the Interior of the Slovak Republic.

The following shall participate in the financing of civil protection to the extent provided for in this Act municipalities, legal entities, natural persons - entrepreneurs, and natural persons who manufacture, transport, store or handle hazardous substances in quantities endangering life, health or property.

## **9.2 CIVIL PROTECTION TASKS AND MEASURES**

Civil Protection includes in particular the following tasks and measures:

- **Organisation, management and execution of rescue work, which consists mainly in rescuing persons, providing pre-medical and medical assistance, rescuing persons and removing the wounded**

**Rescue work** are activities to save life, health and property, as well as their removal from endangered or affected areas. Rescue work includes activities to prevent the spread and effects of the consequences of an emergency and to create the conditions for the elimination of the consequences of an emergency.

Details on the provision of rescue work and the organisation of civil protection units are set out in [Decree of the Ministry of the Interior of the Slovak Republic No. 523/2006 Coll.](#)

- **Organisation and provision of reporting and information services**

Reporting service and the civil protection information service form the **civil protection information system** (acronym *IS CO*).

**Reporting service** ensures early warning of the population and notification of persons involved in dealing with the consequences of an emergency and municipalities of the threat or the occurrence of an emergency.

Warning of the population and notification of persons involved in dealing with the consequences of an emergency and municipalities about the threat or the occurrence of an emergency is technically ensured:

- a siren network consisting of sirens and a siren control system,
- through radio and television broadcasting,
- home radios,
- local information means of the municipality,
- automated notification systems,
- via public electronic communications networks.

**The Information Service collects**, processes, evaluates and provides information.

The collection of information is carried out:

- observation,
- monitoring and collecting data from telemetry monitoring networks,
- by monitoring forecasts from meteorological, hydrological, seismological and other specialised centres,
- by selecting data from the information of state administration bodies, information of local self-government bodies and information of legal entities and natural persons,
- by selecting data from information from national and international contact points.

**The regular information** shall contain data for the processing and updating of the analysis of possible emergencies, the planning of civil protection measures, which shall be submitted to the receiving information point at the times, in the form and content determined by it, and on the status and progress of rescue or evacuation operations, and shall be drawn up after the declaration of an

emergency situation. They shall be submitted to the information point responsible for the area daily, with the status at 6.00 AM and 6.00 PM, as follows:

- the information point of a legal entity or natural person - entrepreneur to the information point of the municipality until 6.30 AM. and until 6.30 PM,
- information point of the municipality to the information point of the district office until 7.00 AM and until 7.00 PM,
- the information point of the district office to the information point of the county office by 8.00 AM and by 8.00 PM,
- the information point of the regional office to the information point of the Ministry of Interior by 9.00 AM and by 9.00 PM.

**Irregular information** shall be submitted immediately to the territorially competent information points, irrespective of a previous request, if it contains data on:

- threat or emergency,
- the tendency of the development of the emergency,
- the need to warn the population and notify persons,
- declaring or lifting an emergency,
- a change in the radiation, chemical or biological situation,
- changes in the meteorological and hydrological situation,
- reaching readiness to perform the tasks of civil protection units,
- the evacuation committee<sup>9)</sup> and the evacuation facility have reached readiness,
- the time and status of the commencement or completion of rescue operations,
- the time and status of the start and end of the evacuation,
- an incident that disrupts rescue work or evacuation.

The information is transmitted in the following order:

- information on the occurrence of an emergency,
- information on the need to warn the population and notify persons,
- information on the declaration and lifting of an emergency,
- information on the radiation, chemical and biological situation,
- information on the meteorological and hydrological situation,
- other irregular and regular information.

Details concerning the provision of technical and operational conditions of the civil protection information system are set out in the [Decree of the Ministry of the Interior of the Slovak Republic 388/2006 Coll.](#)

- **Provision of emergency supplies and emergency accommodation**

**Emergency supply** is the provision of temporary minimum food, minimum rations of drinking water and other basic needs to persons affected by an emergency within the limits of existing survival conditions, in particular the provision of electricity, heat and basic medical care.

Emergency supply, depending on the circumstances, can be implemented either at the site of the consequences of the emergency, if the dwellings in the affected area are preserved and if the nature of the emergency permits, or after the evacuation has been declared in evacuation facilities and during the movement of evacuees. Supply arrangements for evacuation shall include the emergency supply of evacuees, in particular with basic foodstuffs, drinking water and clothing.

**Emergency accommodation** is the provision of temporary housing for persons at risk or affected by the consequences of an emergency.

Emergency supply and emergency accommodation can be provided in several ways:

- *Imposing an order on a legal person or natural person - entrepreneur* who owns, leases or uses a catering establishment, a shop or a food warehouse or an accommodation facility.
- *By requesting the release of emergency stock items from the State Material Reserve Administration of the Slovak Republic.* The emergency stock items will be provided to the affected population through the municipality.
- *By concluding a contract or a future contract with a legal person or natural person - entrepreneur* who owns, leases or uses a catering establishment, a factory, a warehouse or a grocery store or an accommodation facility.
- **Providing and carrying out shelter and evacuation**

**Sheltering** means the protection of persons in protective structures from the possible consequences of emergencies. Construction and technical requirements and technical conditions of civil protection facilities (protective structures or also shelters) are laid down by [Decree of the Ministry of the Interior of the Slovak Republic No. 532/2006 Coll.](#), as amended by the Decree of the [Ministry of the Interior of the Slovak Republic No. No. 444/2007 Coll. of the Ministry of the Interior of the Slovak Republic](#) and also in the wording of Decree No. [399/2012 Coll. of the Ministry of the Interior of the Slovak Republic](#).

**Evacuation** is the removal of endangered persons, animals or property from an area. Details on evacuation are laid down in [Decree of the Ministry of the Interior of the Slovak Republic No. 328/2012 Coll.](#)

- **Implementation of anti-radiation, anti-chemical and anti-biological measures**

**Anti-radiation, anti-chemical and anti-biological measures** are measures designed to reduce or to eliminate the effects of exposure to dangerous substances.

- **Organisation, management and implementation of civil protection training**

The focus of activities in the performance of the tasks of crisis management, economic mobilisation, civil protection of the population, civil emergency planning, protection of critical infrastructure, management of civil protection material and national defence for municipalities, legal entities and natural persons is set out in [Decree of the Ministry of the Interior of the Slovak Republic No. 75/2012 Coll.](#), amending and supplementing [Decree of the Ministry of the Interior of the Slovak Republic No .303/1996 Coll.](#) on the provision of preparation for civil protection.

- **Assessment of the placement of buildings and the use of the territory and compliance with the interests of civil protection in the territory during the planning and construction procedure and the technical parameters of civil protection facilities**

It is applied in the framework of the design and approval of spatial planning documentation and in the design, siting and permitting of civil protection facilities built separately and in buildings in accordance with the provisions of Sections 43 to 43e of [the Building Act](#).

- **Ensuring and carrying out editorial, scientific research and development activities in civil protection**

In terms of editorial activities, the Crisis Management Section of the Ministry of the Interior of the Slovak Republic has been publishing the professional journal "[Civil Protection, a journal for civil protection of the population](#)". This is addressed to all those who are actively involved in the implementation of the tasks of the Act of the National Council of the Slovak Republic No. 42/1994 Coll. on civil protection of the population, as amended, as well as to other readers who are interested in the issue of civil protection of the population. In its individual sections, it provides up-to-date information on civil protection, critical infrastructure protection and civil emergency planning at home and abroad, discusses the issue of the integrated rescue system, publishes the works of experts in the field of anti-radiation, anti-chemical and anti-biological (bacteriological) protection and crisis management, and publishes methodological annexes devoted to the practical performance of CO tasks. A separate space is devoted to self-government. In particular, mayors of municipalities and teachers teaching the subject Protection of Life and Health.

### **9.3. CIVIL PROTECTION DOCUMENTATION**

Civil protection is a system of tasks and measures aimed at protecting life, health and property of persons, which are provided based on an analysis of the territory in terms of possible

emergencies (hereinafter referred to as 'Territory Analysis"). These measures are further summarised in written form in the Public Protection Plan.

**Territory Analysis** is an assessment of the hazard in the event of an emergency with respect to the sources of the hazard. The site analysis shall be prepared in the form of a set of documents.

Territory analysis from the point of view of the occurrence of possible emergencies is processed in accordance with the operational instruction of the Director General of the Crisis Management Section of the Ministry of the Interior of the Slovak Republic, which regulates the structure and content of the document prepared at all levels of state administration.

This instruction specifies its:

- Content,
- Structure,
- Scope.

*Content and structure of the document set Territory analysis:*

1. Geographical characteristics of the territory.
2. Demographic characteristics of the territory.
3. Economic, economic and social characteristics of the territory.
  - 3.1 Economic characteristics of the territory.
  - 3.2 Agriculture and forestry.
  - 3.3 Transport and telecommunications infrastructure.
  - 3.4 Watercourses and water structures - basic data on watercourses and water structures.
  - 3.5 Medical and veterinary care.
  - 3.6 Education, science and culture.
4. Determination of the probability of emergency occurrence in the given area.
  - 4.1 Natural disasters.
  - 4.2 Accidents.
  - 4.3 Disasters.
5. Assessment of the area at risk of an emergency.

**Civil protection plan** is a document that contains tasks, measures and procedures to ensure the protection of the population in the event of an emergency.

Population protection plan contains in particular:

- *the conclusions and recommendations of the analysis of the territory* in terms of the occurrence of possible emergencies,
- *Plan:*

1. evacuation,
  2. of concealment,
  3. material and technical security of civil protection units,
  4. preparations for civil protection,
    - *documentation:*
1. management of rescue operations for individual emergencies and coordination of forces and resources to be deployed during the emergency, with name, surname and the function of the person authorised to manage the rescue operations,
  2. measures to warn the population and notify persons,
  3. radiation protective measures,
  4. chemical protective measures, including measures to cope with possible scenarios of a major industrial accident as described in the safety report and with regard to possible domino effects, as well as emergency preparedness measures,
  5. biological protective measures,
  6. emergency supply and emergency accommodation.

Population protection plan **elaborates:**

- Ministry of Interior,
- district office at the seat of the region,
- district office,
- municipality.

#### **9.4. CIVIL PROTECTION MECHANISM**

The EU Civil Protection Mechanism coordinates the response to natural and man-made disasters at EU level. Its objective is threefold:

- promote cooperation between national authorities in the field of civil protection,
- Increase public awareness and preparedness for disasters,
- to enable rapid, effective and coordinated assistance to the affected population.

The mechanism, first introduced in 2001, was reformed in 2013 with a focus on disaster prevention and preparedness.

The Union Civil Protection Mechanism includes a European capacity for emergency response. It is a voluntary pooling of resources pre-allocated by Member States for immediate deployment within or outside the EU.

One of the components is the European Medical Corps. It is a grouping of medical and public health professionals that can be rapidly deployed for preparedness and response operations.

The operational core of the Civil Protection Mechanism is the Emergency Response Coordination Centre: it works around the clock to coordinate the EU's disaster response efforts.

On 7 March 2019, the Council adopted a decision amending the Union Civil Protection Mechanism. The new rules aim to:

- to create an additional set of resources available in situations where the total existing capacity is insufficient,
- Strengthen the existing voluntary grouping of national capacities,
- Improve risk prevention by requiring Member States to further develop their risk management capability assessment and risk management planning,
- promote training and knowledge exchange.

## **9.5. HUMANITARIAN AID**

After joining the Organisation for Economic Co-operation and Development (OECD), the European Union (EU) and the North Atlantic Treaty Organisation (NATO), the Slovak Republic has assumed an increased share of the responsibility of economically developed countries for providing assistance to those countries of the international community whose own economic and social development is dependent on the provision of development and humanitarian aid.

The Ministry of the Interior is the coordinator and implementer of the provision of official humanitarian aid of the Slovak Republic abroad of the Slovak Republic. The Ministry of the Interior of the Slovak Republic ensures activities related to humanitarian aid also through the Crisis Management Section.

A significant step in the development of the humanitarian assistance system was the involvement of the Ministry of Interior of the Slovak Republic as the National Focal Point in the UN/DHA project on the use of military and civil protection assets in rescue operations, to which the Slovak Republic acceded by government resolution. The Civil Protection Office of the Ministry of the Interior of the Slovak Republic and later the Crisis Management Section became the National Contact and Coordination Centre for the provision and reception of humanitarian aid. The implementation of humanitarian aid was carried out by the Ministry of the Interior. The Ministry of the Interior of the Slovak Republic has been officially involved in the provision of humanitarian aid since the adoption of Government Resolution No 727/1996, which instructed it to establish a national management and coordination centre for the provision and reception of international humanitarian aid, acting at the same time as a national contact point.

Since 2003, the Ministry of Foreign Affairs of the Slovak Republic (MFA SR), in cooperation with other ministries, has gradually developed and improved the mechanism for providing development assistance, while the Ministry of the Interior The Ministry of Interior of the Slovak Republic has been building a mechanism for the provision of material humanitarian assistance. The accession of the Slovak Republic to the EU has significantly increased the requirements for the volume, speed and flexibility of the Slovak humanitarian mechanism. Slovakia responded to and engaged in humanitarian crises around the world based on ad hoc decisions, without well-defined rules and procedures.

In 2006, the MFA SR, in cooperation with other ministries, submitted to the Government a material prepared by the MFA SR after long-term consultation with the Ministry of the Interior, the Ministry of Foreign Affairs, the Platform of Non-Governmental Development Organisations and other partners. Following the approval of the government resolution No. 310/2006 of 12 April 2006 on the mechanism for the provision of humanitarian aid abroad, for the first time the distribution of powers and competences of the main actors in the provision of Slovak humanitarian aid was set out in detail. The provision of its various forms was elaborated in more detail and the tasks for the Ministry of the Interior and the Ministry of Foreign and European Affairs, which were originally set out in the Slovak Government Resolution No. 1223/2002 on the proposal for a coordinated approach to the provision of humanitarian aid, with an emphasis on the implementation of the priorities of the Slovak Government's foreign policy, were supplemented.

Slovakia uses international humanitarian organisations such as the International Committee of the Red Cross (ICRC), the UNICEF Children's Fund, the Office of the United Nations High Commissioner for Refugees (UNHCR), the International Organisation for Migration (IOM) and others to provide financial humanitarian assistance. The world's largest provider of food aid is the World Food Programme (WFP), technically supported by the Food and Agriculture Organisation (FAO), the United Nations Development Programme (UNDP) and others, to which Slovakia contributes annually.

## **9.5. COMPETENCE IN THE FIELD OF CIVIL PROTECTION**

Professional competence in the field of civil protection of the population is provided for in Section 18a of [Act No. 42/1994 Coll. of the National Council of the Slovak Republic on civil protection of the population](#), as amended, and in details in [Decree No. 7/2012 Coll. of the Ministry of the Interior of the Slovak Republic](#), which establishes the details of professional competence in the field of civil protection of the population.

Decree of the Ministry of the Interior of the Slovak Republic No. 7/2012 Coll., which establishes the details of professional competence in the field of civil protection of the population contains:

- the procedure for submitting an application to undertake training and examination, training and testing for professional competence,
- the content and scope of training, examinations, training and examinations,
- the composition and operation of the Board of Examiners,
- documentation of training and training.

**Professional competence** is the *sum of the theoretical knowledge and practical skills required to:*

- developing and updating a **population protection plan**,
- drawing up and updating a **plan for the protection of staff and persons taken over care**,
- **educational activities** in the field of civil protection.

The target group are employees of the state administration, self-government (self-governing regions, founders and employees of their facilities), legal entities and natural persons - entrepreneurs, institutions, organizations and components of the rescue system, employees of schools carrying out activities in the system of civil protection, cultural facilities, (galleries, museums), employees of health care facilities and social care facilities of the VUC (higher territorial unit), tradesmen and employees of private organisations and educational institutions.

The organiser of the training is the Crisis Management Section of the Ministry of Interior of the Slovak Republic.

Training for the acquisition of professional competence shall be carried out **against payment**; this shall not apply to an employee of a ministry, other central government body, other central government body, district authority, self-governing region and municipality. The payment shall correspond to the extent of the necessary costs and shall be a revenue of the State budget.

The cost of providing the training per participant is EUR 140. The fee for participation in the training for professional competence shall be paid by wire transfer to the account of the Ministry of the Interior of the Slovak Republic.

The applicant shall sign the electronically transmitted application at the latest at the start of the vocational education or training.

**Application for training and examination for professional** competence in civil protection pursuant to Section 18a of the Act, as well as the application for training and examination shall be submitted at least 30 days before the date of commencement of training or training in written or electronic form to the postal or e-mail addresses listed below, according to the territorial jurisdiction

**Training for the extension of the certificate of professional competence in the field of civil protection**

A competent person shall be obliged to attend training **every five years from the date of the examination** and to undergo an examination at the end of the training; if he fails to attend the training or fails the examination, he / she shall lose his / her competence. A person who loses professional competence shall immediately surrender the certificate to the Ministry of the Interior of the Slovak Republic.

**The content of the training** is aimed at the renewal and supplementation of the required theoretical knowledge and practical skills necessary for the implementation of relevant activities in the field of civil protection according to paragraph 1 of Decree of the Ministry of Interior of the Slovak Republic No. 7/2012 Coll.

The examination committee verifies professional competence based on the extent of the applicant's theoretical knowledge and practical skills demonstrated by a written examination pursuant to Section 18a of Act No. 42/1994 Coll. on Civil Protection of the Population as amended and Decree No. 7/2012 of the Ministry of the Interior of the Slovak Republic, which establishes details of professional competence in the field of civil protection of the population. The examination takes place on the day following the end of the training. The Ministry shall issue a certificate of successful completion of the examination. Conduct of the examination, remedial examination and the examination, including the criteria for their assessment, shall be governed by the examination regulations of the Ministry (Measure of the Minister of the Interior of the Slovak Republic No 94/2016 of 13 September 2016 on the establishment of an examination board for the acquisition of professional competence in the field of civil protection of the population).

The training is organised by the Crisis Management Section of the Ministry of Interior of the Slovak Republic.

## QUESTIONS

1. [Define the term civil protection.](#)
2. [List the basic tasks performed by civil protection in Slovakia.](#)
3. [Which civil protection documents are developed at the district office level?](#)
4. [What is the content of the Population Protection Plan?](#)
5. [For which activities is a professional competence in the field of civil protection required?](#)



## REFERENCES

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- [4]. Vyhláška MV SR č. 523/2006 Z. z. o podrobnostiach na zabezpečenie záchranných prác a organizovania jednotiek civilnej ochrany / [Decree of the Ministry of the Interior of the Slovak Republic No. 523/2006 Coll.](#) on the details for ensuring rescue works and organisation of civil protection units.
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- [9]. Zákon NR SR č. 42/1994 Z. z. o civilnej ochrane obyvateľstva v znení neskorších predpisov / [Act of the National Council of the Slovak Republic No. 42/1994 Coll.](#) on Civil Protection of the Population, as amended

## 10. MEANS OF COLLECTIVE AND INDIVIDUAL PROTECTION OF THE POPULATION, EMERGENCY SURVIVAL OF THE POPULATION

Collective protection of the population is provided by sheltering and evacuation. Individual protection of the population is ensured by equipping the population with individual protection equipment and special means. An important difference between collective protection and individual protection of the population is that protection by sheltering or evacuation constitutes a specific method of protection, whereas the use of protective equipment partly enables protected persons to move temporarily, for a limited period of time, and to carry out other activities in an environment contaminated with hazardous substances. However, this movement is controlled to allow the fastest possible and safest possible escape from the hazardous area, using respiratory and eye protection.

***The aim of the chapter is to become more familiar with the means of collective protection of the population, which is the evacuation and sheltering of the population, and individual protection of the population, as well as with the measures of emergency survival of persons.***

### 10.1. MEANS OF COLLECTIVE PROTECTION OF THE POPULATION

Collective protection of the population includes a number of different measures. Among the most important are sheltering the population, evacuation of the population from the most threatened places of the territory, emergency accommodation and emergency catering for the population, and measures of a medical, supply, orderly and organisational nature related to the provision of this task.

#### 10.1.1. Evacuation

Evacuation is one of the most important tools for protecting the population from the consequences of various crisis phenomena. Evacuation means, in accordance with the provisions of Article 3(10) of Act No 42/1994 Coll. of the National Council of the Slovak Republic, 'the **removal of endangered persons, animals or things from a certain area**'.

Basically, it is a complex of activities and measures, which includes preparation and removal of endangered persons, animals, or material values from the territory or object threatened by the emergence or duration of a crisis situation.

Decree of the Ministry of the Interior of the Slovak Republic No. 328/2012 Coll., laying down details on evacuation, as a generally binding legal regulation clearly sets out the tasks and measures for all authorities, organisations, legal entities and natural persons - entrepreneurs and natural persons in the field of protection of the population by evacuation.

Evacuation shall be planned, arranged and executed:

- **from the vicinity of the nuclear installation:**

1. from zone A for all population.

2. from zone B for the immediately endangered part of the population.

3. from the territory at closer risk for the endangered part of the population, with the size of the zone of danger determined by the decision of the Office of Nuclear Supervision of the Slovak Republic with reference to Act No. 541/2004 Coll. on the Peaceful Use of Nuclear Energy (Atomic Act) and on amendment and supplementation of certain acts, as amended.

- **from an area at risk of contamination in the event of an accident or other emergency involving the release of a chemical hazardous substance or biological hazardous substance.**

- **from the area threatened by a storm surge in the event of an accident at a water construction site.**

- **from the territory in which the consequences of a natural disaster, catastrophe, or terrorist attack.**

- **from the territory designated for the provision of national defence tasks in times of war and martial law.**

Evacuation arrangements are continuously being made to implement and ensure evacuation and for the practical implementation of the evacuation, expert measures are prepared in the areas of law and order and security, transport, health, supply and veterinary, the management of which is shared by the relevant ministries at the level of the Republic.

The management and provision of evacuation shall be carried out based on evacuation plans prepared in advance by ministries, other central authorities, local government bodies, local governments, legal entities and natural persons - entrepreneurs.

### **Management of evacuation after it has been declared**

**In the building**, the evacuation is managed by the legal entity or natural person - entrepreneur through the civil protection staff.

**In the municipality**, the evacuation is managed and arranged by the mayor of the municipality and through the municipality's evacuation commission or crisis staff.

**In the district**, the evacuation shall be managed and arranged by the head of the district office and through the district evacuation committee or the crisis headquarters, if it is necessary to carry out evacuation outside the territory of the municipality in the territorial perimeter of the district office.

**In the territorial district of the county**, the evacuation is managed and arranged by the head of the district office in the county seat and through the county evacuation commission or the crisis headquarters if it is necessary to evacuate outside the territorial district of the county office.

The mayor of a municipality, the mayor of a city, the head of a district office and the head of a district office in the seat of a region may create an **evacuation commission** as their expert advisory body.

Evacuation is divided into:

- **short-term evacuation** with possible return of evacuees within 72 h,
- **long-term evacuation** with possible return of evacuees after 72 h.

The temporal extent of the evacuation shall be determined when the evacuation is declared, if possible in view of the scale and consequences of the emergency.

Spontaneous evacuation is solved without delay by directing the disorganised leaving of the threatened area, specifying evacuation routes and preventing the population from accessing the threatened area.

The principles of safe evacuation are shown in Figure 10.1.

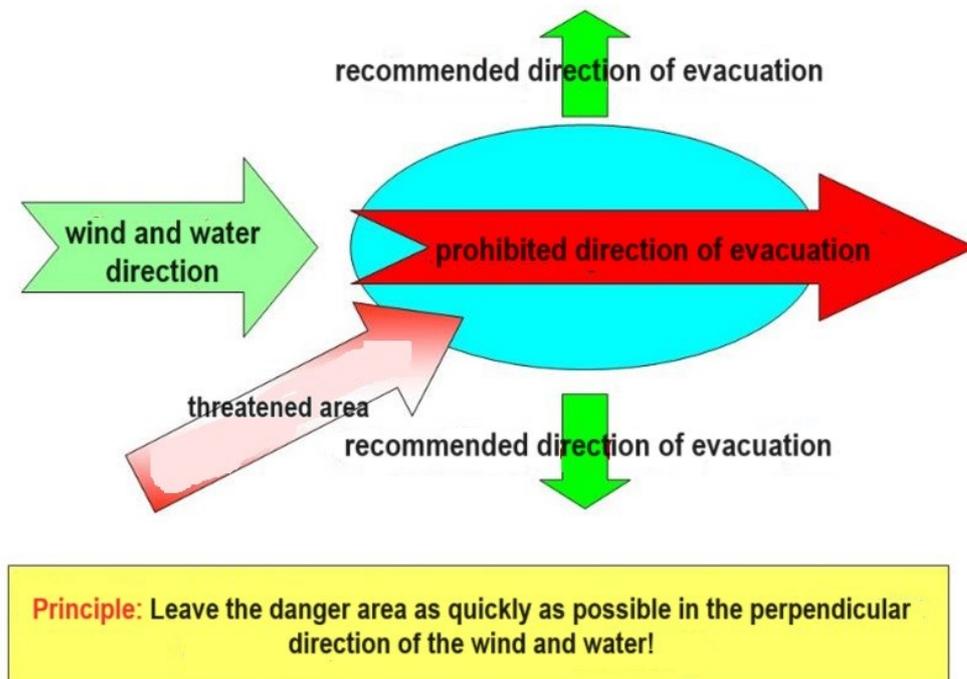


Figure 10.1 Principles of safe evacuation (Source: Authors)

## **EVACUATION MEASURES**

Evacuation measures for long-term evacuation are:

- Determination:
  1. notification and readiness of the evacuation committee and the evacuation facility,
  2. evacuation declaration,
  3. number of evacuees,
  4. forces and resources to ensure evacuation,
  5. material and technical security of evacuation,
  6. the method and organisation of the transfer of evacuees,
  7. evacuation routes,
  8. preparation of the population, evacuation commissions and civil protection units for the operation of the evacuation facility,
- order and security, transport, medical, supply and veterinary evacuation.

For short-term evacuation, the extent of evacuation measures shall be determined by the scale and consequences of the emergency.

In addition to evacuation measures, the protection of evacuees can be ensured by sheltering and the use of personal protective equipment.

## **EVACUATION OF THE POPULATION**

The population is divided into the following groups for the purpose of evacuation planning and provision:

1. kindergarten children, primary school pupils, secondary school pupils, as well as children and pupils of the school establishment,
2. mothers and other eligible persons in the household with children,
3. persons placed in a health care facility, social services facility and a facility for the social protection of children and social guardianship,
4. persons with disabilities living in a household with a family member or with a person who provides assistance to the disabled person,
5. the rest of the population.

When evacuating, time priority may be given to populations classified in Groups 1 to 4 and pregnant women.

**Evacuation of the population shall be carried out by means of personal transport; if this is not possible or expedient, on foot.**

Evacuation procedure by population groups:

- **Kindergarten children, primary school pupils, secondary school pupils, as well as children and pupils of the school establishment:**
  1. kindergarten children are handed over to the parent or other authorized person,
  2. Primary school pupils, secondary school pupils and school children and pupils are sent home,
  3. children and pupils for whom it is not possible to proceed according to the first and second points are evacuated through the evacuation centre; kindergarten, primary school, secondary school and the educational establishment shall act as an evacuation centre,
  4. in case of shortage of time, especially for short-term evacuation, children and pupils under the first and second points shall be evacuated through the evacuation centre.
- **Persons placed in a health care facility, social services facility and in a facility for the social protection of children and social guardianship** shall be evacuated to a similar facility outside the threatened area; the health care facility, social services facility and social protection of children and social guardianship facility shall act as an evacuation centre.
- **Mothers and other eligible persons in a household with children, persons with disabilities in a household with a family member or with a person who with a disability, as well as other members of the public,** shall be evacuated through an evacuation centre.

If possible, the immobile person shall be evacuated by a means of transport that is adapted for that purpose.

## **EVACUATION LUGGAGE**

The weight of the evacuation luggage may be no more than:

- 25 kg adult,
- 15 kg child,
- and 5 kg as a hand luggage.

Recommended contents of evacuation luggage (see Figure 10.2):

- personal documents, money and other valuables,
- medicines and essential medical supplies,
- basic food and drinking water for two to three days,
- personal hygiene items,
- pocket lamp,
- blanket or sleeping bag,
- spare personal underwear, spare clothing, spare footwear and waterproof jacket,
- other essential personal items.



Figure 10.2 Content of evacuation luggage (Source: [Internet](#))

## EVACUATION FACILITIES

Evacuation facilities are evacuation Council point, evacuation centre, embarkation station, disembarkation station, control station, checkpoint and place of emergency accommodation for evacuees.

### Evacuation collection point:

- gathers evacuees from the evacuation districts of a territorially larger municipality,
- keep records of evacuees,
- manages and directs the movement of evacuees to the evacuation centre,
- organises the activities of evacuees, ensures peace and order,
- provides evacuees with information on evacuation,
- inform the evacuation centre of its activities and the status and progress of the evacuation.

### Evacuation centre:

- keep records of evacuees,
- organises and manages the transfer of evacuees to accommodation,
- ensures, to the extent necessary, the dispensing of basic foodstuffs and drinking water and clothing to evacuees,
- ensures maximum utilisation of means of transport,
- providing emergency medical care and maintaining order and security in the evacuation centre,
- inform the evacuation committee of its activities.

**Boarding and alighting station for evacuees:**

- concentrates evacuees before and after the start of the transport, ensures calm and order in the designated areas,
- organise the arrival, departure and maximum utilisation of means of transport,
- ensures the smooth and rapid transfer of evacuees to their place of accommodation,
- inform the evacuation committee of its activities.

**Regulatory point:**

- organises and directs the transfer of evacuees from the exit station to the place of accommodation,
- ensures maximum use of transport resources,
- ensuring the provision of emergency medical care and the maintenance of peace and order,
- inform the evacuation committee of its activities.

**Checkpoint:**

- carries out contamination control of evacuees, means of transport and other items,
- classifies evacuees into groups into contaminated and uncontaminated by the effect of the hazardous substance,
- classifies means of transport and other objects into those contaminated and those not contaminated by the effect of the dangerous substance,
- ensures and maintains the mode of life, ensures smooth and rapid transfer of evacuees after decontamination to the original evacuation route,
- aggregates data on the traffic situation,
- registers evacuees, vehicles and other items,
- performs the tasks of a regulatory post, unless it is established separately,
- inform the evacuation committee of its activities.

**Place of accommodation (see Figure 10.3):**

- provides reception and emergency accommodation evacuees,
- keep records of evacuees,
- organises and ensures the integration of evacuees into the supply system,
- create the conditions for organising a civil protection unit of evacuees,
- inform the evacuation committee of its activities and the number of evacuees.



Figure 10.3 Accommodation place (Source: [Internet](#))

**The time to put evacuation equipment on standby** from the declaration of a long-term evacuation:

- evacuation picking up points within 3 hours,
- evacuation centre within 3 hours,
- boarding station: bus station within 3 hours and others within 5 hours,
- bus exit station within 4 hours,
- regulation station within 4 hours,
- checkpoint within 4 hours,
- place of accommodation within 4 hours.

In the case of a short-term evacuation, the time for putting the evacuation equipment on standby shall be adjusted accordingly to the actual situation and its expected development.

### **EVACUATION OF ANIMALS**

Evacuation of animals is planned and carried out mainly for the rescue of breeding animals and other valuable animals.

Evacuation animals shall be evacuated by moving the animals from the place of keeping to the place of destination, except for pets which shall be evacuated together with the population.

Evacuation animals and the export of feed is planned and implemented:

- means of transport, if possible, specially adapted for the transport of animals,
- by driving animals up to 10 km from the place of rearing after their fitness has been assessed by a veterinarian.

The evacuation of animals shall be carried out in a manner appropriate to the conditions under which the evacuation is carried out.

*Documentation of animal evacuation:*

PART A. The text part of the animal evacuation documentation shall include:

- the intention to evacuate the animals,
- recording of reports and notifications on the progress of the evacuation of animals.

PART B. The graphical part of the animal evacuation documentation shall include

- a graphical overview of the destination,
- a location plan showing the number of animals.

PART C. Tabular part of animal evacuation documentation.

## **EVACUATION OF THINGS**

Evacuation of belongings is planned and carried out for protection:

- movable national cultural monuments, collection objects,
- historical library documents,
- historical library collections,
- archival documents,
- movable technical equipment
- and other material values.

Evacuation of belongings is carried out **after the evacuation of the population**, if the scale and consequences of the emergency permit. If it is not possible or expedient to evacuate items, they shall be stored in a non-threatening area of the object of their permanent storage.

Evacuation belongings shall be carried out from their place of storage to their destination. Where possible, specially adapted means of transport shall be used to evacuate the items.

Documentation of the evacuation of belongings shall be kept in accordance with special regulations.

## **EVACUATION COMMISSION**

The head of the district office, the mayor of the city and the mayor of the municipality may establish an evacuation commission as their **expert advisory body**.

The statutes of the evacuation committee shall include in particular the composition of the evacuation committee, its tasks and the time of putting it on standby.

The evacuation committee statute is approved by the head of the district office, the mayor of the city and the mayor of the municipality.

## **POLICING AND SECURED EVACUATION**

The policing and security of the evacuation includes:

- the closure of the area at risk from which the evacuation is being carried out,
- directing traffic on the evacuation route,
- ensuring order in the area at risk and in the evacuation facility,
- control of access and entry to the threatened area.

Order and security of the evacuation is the task of the **Police Force**.

*Documentation of order and security provision for evacuation:*

PART A. The text part of the evacuation order and safety provision includes:

- evacuation regulation and security plan,
- an overview of the deployment of the Police Force forces and resources that will be used to ensure the evacuation,
- the tasks of the Police officer in charge of order and security of the evacuation,
- the tasks of the police and traffic patrols in the threatened area, on the evacuation route and in the place of accommodation,
- an overview of evacuation routes and the location of evacuation facilities,
- material and technical security of the Police officer, including special means of individual protection, accommodation and catering,
- the principles of liaison with other authorities involved in the evacuation,
- recording of evacuation messages and reports.

PART B. The graphic part of the evacuation order and safety provision shall indicate:

- the location of the source of the hazard with an assessment of the area at risk,
- location of evacuation equipment,
- the location of the regional headquarters of the Police Corps, the district headquarters of the Police Corps and the district department of the Police Corps,
- evacuation route or alternative route,
- deployment of Police forces and resources on the evacuation route or on an alternative route.

## **TRANSPORT ARRANGEMENTS FOR EVACUATION**

Evacuation transport arrangements include planning, preparation and transport of evacuees, animals and belongings outside the threatened area.

Evacuation shall be carried out by road and rail. Evacuation by air and water transport may be carried out according to the actual situation, taking into account the type of emergency and the availability of forces and resources.

Other transport, except during an emergency situation, may be temporarily restricted or interrupted to carry out the evacuation.

The arrival of road means of transport shall be organised according to the evacuation transport schedule and depending on the number of evacuees, luggage, the type of animals to be evacuated and their number, the quantity of items to be transported, the expected number of means of transport and the length of the evacuation routes.

Luggage other than hand luggage must be labelled with the name and surname, address of residence or telephone contact and, if possible, locked when transported.

Loading and unloading of animals and goods is ensured by the customer of the transport.

If the carrier is unable to carry out the carriage for an objective reason, he shall immediately notify the customer of this fact.

*Documentation of the evacuation transport arrangements:*

PART A. The text part of the evacuation transport documentation shall include

- the intention of the transport provision of the evacuation, namely:
7. transport of evacuees, animals and belongings,
  8. an overview of evacuation routes and the location of evacuation facilities,
  9. an overview of carriers and means of transport for evacuation,
- a future contract with the legal entity or natural person - entrepreneur providing the means of transport,
  - recording of reports and messages on the progress of the evacuation.

PART B. Tabular part of the documentation of the evacuation transport security:

### **MEDICAL PROVISION FOR EVACUATION**

The medical provision of evacuation includes the provision of emergency medical care to evacuees in the threatened area and on the evacuation route, as well as the provision of medical care, emergency medical care and the implementation of anti-epidemiological and hygiene measures at the place of accommodation.

*Documentation of medical support for evacuation:*

PART A. The text part of the medical evacuation documentation shall include

- the intention of medical provision of evacuation, namely:
1. the provision of emergency healthcare,
  2. provision of outpatient, specialised and inpatient healthcare,
  3. implementation of anti-epidemiological and hygiene measures,
- recording of reports and messages on the progress of the evacuation.

PART B. Tabular part of the medical evacuation documentation.

## **EVACUATION (EMERGENCY) SUPPLY**

The provision of supplies for evacuation includes the emergency supply of evacuees with basic foodstuffs, drinking water and clothing.

Emergency supply shall be provided on the evacuation route and in the evacuation facility.

Evacuees can be provided with selected items of [emergency supplies](#).

*Documentation of evacuation supply arrangements:*

PART A. The text part of the evacuation supply documentation shall include:

- evacuation supply plan,
- recording of reports and messages on the progress of the evacuation,
- a future contract with a legal entity or natural person - entrepreneur providing accommodation and catering services.

PART B. Tabular part of the evacuation supply documentation.

## **VETERINARY EVACUATION**

Veterinary provision for evacuation shall include measures to determine the animal's fitness for evacuation and to prevent the animal becoming ill.

An examination of the animal's health is carried out before evacuation.

An animal shall not be considered fit for evacuation if it is injured, shows physiological weakness or a pathological process, in particular if:

- is not able to move independently,
- shows symptoms of a notifiable disease.

If the animal is not fit for evacuation, another method of handling the animal shall be determined.

*Documentation of veterinary support for evacuation:*

PART A. The documentation of the veterinary evacuation shall include:

- the veterinary evacuation plan,
- recording of reports and messages on the progress of the evacuation,
- the accompanying document for the evacuation of animals.

PART B. Accompanying document for the evacuation of animals.

## **EVACUATION PLAN**

The evacuation shall follow the **evacuation plan**.

The evacuation plan shall be updated **by 31 December of the calendar year or immediately if there is a substantial change, in particular concerning the expected number of evacuees, the evacuation route and the composition of the evacuation committee.**

The evacuation plan shall be followed even during a crisis situation.

An evacuation plan extract shall be prepared for the evacuation facility.

*Contents of the evacuation plan:*

#### **PART A. District Office**

- The text part of the evacuation plan contains in particular:
  1. the main task of the evacuation, the method of ensuring the evacuation according to the type of threat, the determination of the evacuation route, the type of transport, the location of evacuation facilities, an overview of the evacuated villages and the number of evacuees, animals and belongings,
  2. an overview of the forces and means to ensure evacuation,
  3. the composition of the evacuation committee and proof of receipt of the letters of appointment of the members of the evacuation committee,
  4. the method of notifying and convening the members of the evacuation committee,
  5. documentation on the preparation of the evacuation committee,
  6. supporting documentation.
- The graphic part of the evacuation plan includes in particular the type of threat, the marking of evacuation routes, evacuation facilities and evacuated villages, as well as the number of evacuees.

#### **PART B. Municipality**

- The text part of the evacuation plan contains in particular:
  1. the main task of the evacuation, the method of ensuring evacuation according to the type of threat, the determination of the evacuation route, the type of transport, the location of evacuation equipment and the number of evacuees, animals and belongings,
  2. an overview of the forces and means to ensure evacuation,
  3. the composition of the evacuation committee and proof of receipt of the letters of appointment of the members of the evacuation committee,
  4. the method of notifying and convening the members of the evacuation committee, including contact details,
  5. documentation on the preparation of the evacuation committee,
  6. supporting documentation.
- The graphic part of the evacuation plan includes in particular the type of threat, the marking of evacuation routes, evacuation facilities and the number of evacuees.

#### **PART C. Legal entity and natural person - entrepreneur**

- The text part of the evacuation plan contains in particular:
  1. the objective of the evacuation and how it will be managed and secured,
  2. the method of notifying staff and persons taken into care,

3. personnel, material and technical support for evacuation,
4. Number of evacuees, animals and belongings,
5. records of reports and reports to the municipality,
6. supporting documentation.
  - The graphic part of the evacuation plan shall include in particular the marking of the evacuation route and the evacuation equipment.

### 10.1.2. Sheltering

A special and important component of the protection of the population is its concealment.

Shelter can be understood as a complex of measures designed to protect persons in protective structures from the possible consequences of crisis situations.

Shelter and protection areas, or shelters, if they meet the specified conditions, greatly reduce civilian casualties, even in those cases where the most effective weapons and weapons of mass destruction will be used. They can be prepared in a relatively short time, within a few hours, with a minimum of material from local sources, with a relatively small number of persons to be sheltered in this modified area.

Details for ensuring the construction and technical requirements and technical conditions of civil protection facilities are set out in [Decree of the Ministry of the Interior of the Slovak Republic No. 532/2006 Coll.](#), as amended.

**Civil protection facilities** are protective structures and buildings or their parts and technological components, which are predetermined for the performance of civil protection tasks, while protective structures are considered to be protective structures built for civil protection purposes according to the type of protection and structures for decontamination of hazardous substances. They also include protection systems for underground transport structures.

Protective structures are divided into:

- **pressure resistant** (public) shelters, which have been built for the population protection against weapons of mass destruction impact,
- pressure non-resistant **gas-proof** shelters - these have been built for the population protection against impact of the luminous and radiant radiation, strident radiation, radioactive dust contamination and partly against pressure impacts of the weapons of the mass destruction.
- **protected workplaces**, which serve civil protection bodies for the implementation of tasks and measures for the protection of the population,
- **improvised** (private) shelters, which should have as low number of the windows and as possible and better is when there is not necessary to do lot of the masonry proofing.

Construction-technical requirements with respect to the protective factor of the building to ensure the protection of the population by sheltering are applied in such a way that the protective structures are according to financial and material possibilities:

- are built in underground floors, or by modifying the above-ground floors of building objects, or as detached buildings, which form an operationally closed unit and may not lead through transit utility networks that are not related to it,
- propose to the places of greatest concentration of persons who need to be sheltered within a walking distance of 500 m or less, placed at least 100 m from containers of volatile substances and gases with toxic effects which could endanger the safety of persons in shelter,
- positioned so that access roads allow access to the building for shelter persons and meet the conditions of unhindered accessibility, with a capacity of 150 or more shelter persons,
- have microclimatic conditions provided indoors; rooms which are of a permanent nature shall be equipped with forced ventilation facilities,
- meet the protective properties expressed by the protection coefficient of the building  $K_0$ .

Construction-technical requirements for protective structures are developed in the planning documentation in the section of public transport and technical equipment of the territory in the zoning districts as follows:

- in buildings providing shelter for the largest shift of employees and for persons taken into care,
- in buildings providing services to the population, in particular in hospitals, hotels, hostels, boarding houses, all types of schools, banks, theatres, cinemas, insurance companies, physical education facilities, providing shelter according to the operational and accommodation capacity for staff and persons taken into care,
- in hypermarkets, shopping centres and multi-functional buildings according to the projected capacity of attendance for staff and persons taken into care,
- in the buildings of state authorities, local state administration and self-government bodies for the planned number of employees and for persons taken into care.

The construction of protective structures is provided in a differentiated way, according to the analysis of the territory and the size of the sources of threat to the territory of the Slovak Republic resulting from the risks of the possibility of emergencies and for the period of war and martial law in the territorial districts as follows:

- in the area with the possibility of radiation accident, serious industrial accidents with the release of dangerous chemical substances, natural disasters, in resistant and gas-proof shelters in the hazard area,
- in the area with the possibility of chemical and biological hazards, natural disasters in gas-proof shelters in the threaten area,
- in an area with a low possibility of emergencies, common contamination of hazardous substances in gas-proof shelters or in simple shelters built on their own,
- in the area with minimal threat, according to the analysis of the territory and the possibility of emergencies in residential and family houses with a capacity of up to 50 persons in gas-proof shelters or in simple shelters built by themselves and in residential houses with a capacity of more than 50 persons in gas-proof shelters.

### **Requirements for protective structures**

Protective structures are being built:

- **in a state of security as dual-purpose resistant and gas-proof shelters** with priority for peaceful use while maintaining their protective function,
- **after the declaration of a state of emergency and in times of war and martial law**, as **improvised shelters**, by adapting suitable premises in buildings according to sheltering plans.

### **PRESSURE RESISTANT SHELTERING**

Pressure resistant shelters are resistant structures for protection against external static and dynamic loads, for ensuring the gas-tightness of the structure, for ensuring the supply of filtered air for sheltered persons, for creating conditions for long-term stay of sheltered persons, for at least five days. The long-term stay of persons in hiding shall be assured:

- **a drinking water supply**, including filtration, with a volume equivalent to 3 litres per person per day, a supply of water for decontamination in the amount of 2 000 l per day for the containment unit, a supply of cooling water for the diesel generator and the filtration and ventilation equipment; the quantity shall be determined taking into account the type and type of technological equipment,
- **the fuel supply** for the diesel generator set calculated for its continuous operation for the duration of the shelter use, taking into account the type and type,
- **supply of filtered air** 2.5 - 5.0 m<sup>3</sup> per person per 1 hour.

In terms of layout, resistant shelters are divided into:

- **main rooms** - rooms for persons in hiding and service rooms,

- **auxiliary premises** - operating rooms, i.e. technical-operating block and internal communications, entrances and exits, the resistance of which is 1.4 times the resistance of the protective structure.

**Pressure resistant shelter spaces** are divided into **clean** and **unclean parts** according to their purpose in operation.

The design of resistant shelters must meet the conditions to ensure protection against:

- pressure effect,
- radiation contamination,
- thermal effect in fires,
- effect in the event of a spillage of hazardous substances,
- flooding.

Persons enter the protective structure by individual entrances through:

- UG-8 closure at a throughput of 500 persons for the duration of the occupation of the protective structure,
- 1 200 mm wide doors with a throughput of 400 persons for the duration of the occupation of the protective structure,
- 800 mm wide doors with a throughput of 250 persons for the duration of the occupation of the protective structure. Only monolithic shelters may be used for the construction of resistant shelters or prefabricated reinforced concrete structures.

The gas-tightness of the resistant shelters is ensured by the outer and inner shell, while:

- **the outer jacket** ensures gas-proof separation of the inner space from the outside environment,
- **internal gas-proof compartments** ensure separation of internal clean parts and the dirty parts of the resistant shelters.

Resistant shelters are being equipped:

- water supply and sewerage facilities,
- electricity supply equipment,
- filtration and ventilation equipment,
- telecommunications technology,
- a signalling device to indicate their position when swamped,
- facilities to ensure the conditions necessary for the stay of persons in hiding,
- fire extinguishers, h. tools for extrication from a damaged shelter.

Systems and elements of engineering and technical facilities shall be designed so that they can be used

for operation even in a state of safety.

The owner or custodian shall prepare a protective structure record sheet on the resistant shelter.

## **GAS-PROOF SHELTERS**

Pressure non-resistant gas-proof shelters are protective structures that:

- ensure the gas tightness of the building,
- provide a supply of filtered air for the sheltered persons,
- create conditions for the short-term stay of persons in hiding, for at least two days.

For the short-term stay of persons in hiding the following must be ensured:

- a drinking water supply, including filtration, with a volume equivalent to 3 litres per person per day,
- a water supply for decontamination of 2 000 l/1 day for the containment unit,
- cooling water supply for filtration and ventilation equipment; the quantity shall be determined taking into account the type and type of process equipment,
- supply of filtered air 2.8 - 3.9 m<sup>3</sup> per person per hour.

Gas-proof shelters are divided in terms of layout into:

- rooms for persons in hiding,
- premises for technological equipment and their operation,
- entrances and exits.

Gas-proof shelters are equipped with:

- filtration and ventilation equipment,
- sanitary facilities,
- telecommunications technology,
- wiring,
- tools for rescue from the damaged shelter,
- fire extinguishers,
- a signalling device to indicate their position when swamped.

The external envelope shall have as few openings and penetrations as possible to meet the protection against radioactive contamination and penetration of hazardous substances. Prefabricated structures and masonry partitions may be used in the design of structural solutions. Gas-tightness shall be ensured by a gas-proof outer skin and internal gas-proof partitions. The owner or manager of the gas-proof shelter shall draw up a record sheet of the protective structure

## **IMPROVISED SHELTERS**

Suitable underground or aboveground areas of buildings constructed in a state of security shall be selected for simple self-constructed shelters, which, after self-constructed specific modifications, shall provide partial protection against the effects of emergencies and weapons used in time of war and martial law.

Suitable underground and above-ground areas of structures selected for simple shelters may be considered as protective structures only after specific modifications have been made that are necessary to make the structures ready to fulfil the purpose for which they were built.

Selected suitable underground or above ground areas of structures for simple shelters shall meet the requirements for:

- the distance of the whereabouts of persons in hiding so that they can take shelter in time in the event of a threat,
- ensuring protection against radiation contamination and the ingress of hazardous substances,
- minimising the amount of work necessary to adapt their premises,
- static and protective properties,
- ventilation by natural or forced ventilation with outside air, filter and ventilation equipment,
- sealing.

Legal entities and natural persons - entrepreneurs shall draw up a designation sheet of simple shelters in the buildings they own or in which they do business, about which they shall inform the municipality in whose territory the simple shelters are located.

During peacetime, the natural protective properties of buildings and living spaces are used to shelter from the toxic effects of hazardous substances. For sufficient protection, it is necessary to locate rooms and areas away from the source of the hazard and seal them against the ingress of hazardous substances. However, it is necessary to take into account what has escaped, what substance, whether it is heavier or lighter than air, and on that basis to choose a suitable place of shelter.

## **10.2. INDIVIDUAL PROTECTION OF THE POPULATION**

Individual protection of the population is one of the basic forms of protection. Its aim is to protect the population from the effects of hazardous substances released in industrial and transport accidents, natural disasters and catastrophes, as well as from the effects of weapons of mass destruction. It is currently seen as a possible supplementary means of protecting the population.

In terms of purpose, it belongs to anti-radiation, anti-chemical and anti-biological measures, which are intended to reduce or eliminate the effects of exposure to hazardous substances, which are natural or synthetic substances which, by their chemical, physical, toxicological or biological properties, alone or in combination, may cause a danger to the life and health of the public.

Personal protective equipment (PPE) includes respiratory (protective mask), eye and body surface protection, medical equipment for individuals, diagnostic dosimetry equipment, as well as improvised protective equipment.

Personal protective equipment shall be provided by improvised means and special personal protective equipment, which shall be used without prompting, immediately after warning the population following the occurrence of an emergency associated with the release of a hazardous substance:

Means of individual protection in the event of emergencies associated with the release of hazardous substances released during accidents or traffic accidents are not issued - the protection of the population from the threatened area is solved by short-term evacuation, depending on the type of hazardous substance (NL) also by sheltering. They are only issued in states of crisis such as a state of war, within 5 days of the decision of the crisis management authorities.

Improvised means personal protective equipment are designed to protect the respiratory tract and eyes, unless protective masks and body surface protective equipment have been issued. Improvised personal protective equipment is used in particular for:

- transferring people to shelters,
- leakage from an area contaminated with a hazardous substance,
- overcoming the contaminated area,
- evacuation of the population.

### ***Head protection***

It is recommended to use hats, scarves, scarves to protect the head, over which it is advisable to pull the hood, or put on a protective helmet (preferably cycling, work, ski, etc.). The most appropriate way to protect the mouth and nose is to cover these parts with a piece of flannel or a terry towel slightly moistened with water, aqueous soda or citric acid. Protect your eyes with closed-type goggles - diving, swimming, skiing, etc. Tape the ventilation holes on the goggles with adhesive tape.

### ***Hull protection***

As a general principle, each type of clothing provides a certain level of protection, with a greater number of layers increasing the protection coefficient. For protection, you can use long winter coats, jackets, trousers, overalls, scuba sports kits. The protective clothing used must be sufficiently sealed at the neck, sleeves and trousers. Leaky fastenings and various unwanted tears in the garment must be

taped over with adhesive tape. A waterproof jacket (e.g. raincoat) or a tarpaulin thrown over the head should be used with all protective clothing.

### ***Hand and foot protection***

Rubber gloves are a very good means of hand protection. For foot protection, rubber and leather boots or leather high boots are best. When using low boots, it is advisable to make covers from plastic bags or pouches. When using improvised protection, the following principles must be observed: the entire body surface must be covered, all protective equipment must be sealed as tightly as possible, more protective equipment must be combined or multi-layered clothing must be used to achieve higher protective effects.

## **10.3. EMERGENCY SURVIVAL OF THE POPULATION**

Emergency survival of the population in the territory affected by the consequences of an emergency according to the legislation in force is ensured by the municipality, legal entities and natural persons - entrepreneurs whose business activity is the operation of catering and accommodation facilities, management of public water supply and supply of drinking water, as well as state administration bodies which are responsible for protecting the population during a crisis situation or for applying economic mobilisation measures.

Following the occurrence of an emergency and the declaration of an emergency situation, emergency survival of the population is ensured, if necessary, by taking measures for emergency supply and emergency accommodation.

**Emergency supply** is the provision of temporary minimum food, minimum rations of drinking water and other basic needs to persons affected by an emergency within the limits of existing survival conditions, in particular the supply of electricity, heat and basic medical care.

**Emergency accommodation** is the provision of temporary housing for persons at risk or affected by the consequences of an emergency. This task, which the civil protection service performs, is primarily based on the remit of 'the municipality, which is obliged to provide the necessary immediate assistance to the inhabitants of the municipality in their sudden distress caused by a natural disaster, accident or other similar event, in particular to provide them with shelter, food or other material assistance'. The municipality provides this assistance to the inhabitants of the municipality and to persons located the municipality.

Emergency supply, depending on the circumstances, can be implemented either at the site of the consequences of the emergency, if the dwellings in the affected area are preserved and if the nature of the emergency permits, or after the evacuation has been declared in evacuation facilities and during the movement of evacuees. Supply arrangements for evacuation shall include the emergency supply of evacuees, in particular with basic foodstuffs, drinking water and clothing.

Emergency supply and emergency accommodation can be provided in several ways:

- **By imposing an order on a legal person or a natural person - entrepreneur**, which owns, leases or occupies a catering establishment, a grocery shop or warehouse or an accommodation facility.
- **By requesting the release of emergency stock items** from the State Material Reserve Administration of the Slovak Republic. The emergency stock items will be provided to the affected population through the municipality.
- **By concluding a contract or a future contract with a legal person a natural person or a natural entrepreneur** who owns, leases or occupies a catering establishment, a factory, a warehouse or a grocery store or an accommodation facility.

The municipality, as a public administration authority in the field of public water supply, ensures the conditions for emergency water supply by providing the means for storage and dispensing of drinking water at the points of distribution. In the event of an interruption in the supply of water through the public water supply system, the municipality shall provide an alternative water supply and, in the event of extremely difficult conditions, an emergency water supply. To this end, the municipality is empowered to draw up a *general binding regulation for the replacement water supply*.

**Emergency supply water** in the village can be solved:

- **By the municipality's own forces and means** (municipal, private wells, means of transport owned by the municipality, legal entities, natural persons, entrepreneurs, natural persons, containers suitable as drinking water storage tanks).
- **Applying the requirement to the public water supply operator** (water distribution by tanker).
- **Applying the requirement for bottled drinking water** (through entities carrying out commercial activities with this type of goods on the territory of the municipality, applying the requirement to the State Material Reserves Administration of the Slovak Republic, as one of the items of emergency stocks).

The minimum drinking water requirement for emergency drinking water supply is:

- 10 litres (l) per person per day,
- 5 litres (l) per person per day in extremely adverse conditions, for a maximum of three consecutive days.

## QUESTIONS



1. [How do we divide evacuation in terms of evacuation time?](#)
2. [How do we divide evacuation in terms of the subject of evacuation?](#)
3. [Specify the permissible weight and contents of the evacuation luggage.](#)
4. [Provide a breakdown of civil protection structures \(shelters\).](#)
5. [What is the purpose of protected workplaces?](#)

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## 11. PROTECTION AGAINST THE EFFECTS OF HAZARDOUS SUBSTANCES

One of the risks to life and health is indoor and outdoor contamination with hazardous substances. Internal contamination is the most dangerous, as once a hazardous substance enters the lungs, vital organs are subsequently invaded through their large surface area (80–100 m<sup>2</sup>). The respiratory organs, the digestive tract and the open wound in the skin are the gateways of entry for hazardous biological substances and biological agents; for hazardous radioactive substances and hazardous chemical agents, the intact skin is also a gateway of entry.

In areas and zones of hazardous substance threat, the rescue units of the Integrated Rescue System (IRS) must necessarily take into account the risk of contamination of the ground surface, buildings and materials, as well as means of transport, in order to protect their own life and health, as well as that of other persons present.

***The aim of this chapter is to define the concept of hazardous substances from the point of view of the protection of the population, and to understand the issue of protection of persons from the effects of chemical, biological and radioactive hazardous substances.***

### 11.1. HAZARDOUS SUBSTANCES FROM THE POINT OF VIEW OF PUBLIC PROTECTION

The Act of the National Council of the Slovak Republic No. 42/1994 Coll., §3 (3) defines hazardous substances as "*natural or synthetic substances which by their chemical, physical, toxicological or biological properties, alone or in combination, may cause a threat to life, health or property*".

Dangerous substances from the point of view of the above mentioned law, we divide into three basic groups: chemical substances (possible leakage during production, storage, transport), biological substances (microorganisms such as viruses, bacteria, etc. occurring freely in nature, possibly leakage from a laboratory) and radioactive substances (mainly fission products in nuclear reactors radionuclides<sup>131</sup>I, <sup>137</sup>Cs, <sup>60</sup>Co).

In this chapter, we take a closer look at chemical and biological agents, as these are the types that rescue forces encounter most often when carrying out rescue work.

Details on the protection of the population against the effects of hazardous substances are subject to the legal regulation of the Decree of the Ministry of the Interior of the Slovak Republic No. 533/2006 Coll.

### 11.1.1. Chemical hazardous substances

The issue of hazardous chemical substances and hazardous chemical mixtures is regulated by [the Act of the National Council of the Slovak Republic No. 67/2010 Coll.](#) on the conditions for placing chemical substances and chemical mixtures on the market and on amending and supplementing certain acts (the Chemical Act). When imposing the obligation, the Act refers to two higher-order legal regulations: [Regulation \(EC\) No 1907/2006 of the European Parliament and of the Council of 18 December 2006](#) concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency and [Regulation \(EC\) No 1272/2008 of the European Parliament and of the Council of 16 December 2008](#) on classification, labelling and packaging of substances and mixtures (CLP Regulation).

REACH Regulation applies to most businesses, but the scope of the obligations imposed will vary considerably depending on the activities of the entity to which the obligations apply. REACH obligations apply to actors in the supply chain, such as manufacturers, importers, suppliers and downstream users of chemicals.

REACH requires any manufacturer or importer of a substance in quantities of 1 t or more per year to register the substance with the European Chemicals Agency (ECHA). In order to register, a dossier with information on the substance's properties, uses and risk management measures must be submitted to ECHA. REACH also imposes obligations on suppliers and users of chemical substances to ensure, in particular, that the information obtained through registration is passed down the supply chain and used effectively for risk control. REACH also imposes obligations on downstream users to provide new hazard information to their supplier and where risk control measures are not appropriate (providing information upstream).

Among other things, REACH implies that the manufacturer, importer or downstream user supplies a safety data sheet (hereinafter referred to as "KBU") together with the chemical, or an extended KBU which also contains exposure scenarios for each use of the substance). The safety data sheet is divided into 16 sections. It shall contain all available information about the hazardous chemical substance or mixture. The exposure scenarios shall include measures to reduce the risks arising from the hazardous properties of the substances. If the downstream user is unable to obtain an SDS with an exposure scenario for his use or is unwilling to accept the measures in the relevant exposure scenario, he must prepare a chemical safety report using the information in the KBU and develop his own exposure scenario.

If an incident involving the release of a hazardous substance occurs during the transport of hazardous substances, then, in preparing for and ensuring the protection of persons who may be endangered:

- the carrier of hazardous substances is involved in the notification of persons, the regulation of the movement of persons and means of transport, the elimination of spillages of dangerous

substances, if this does not belong to within the competence of state administration authorities or municipalities,

- carrier of dangerous substances cooperates with local government authorities and with municipalities in dealing with the aftermath of a hazardous substance spill incident in a manner that leads to a reduction of the hazard.
- According to the European Agreement concerning the carriage of dangerous goods by road (ADR), the carriage of other dangerous goods may only be authorised after:
- the terms and conditions set out in Annex A of the Agreement for these dangerous goods, with particular reference to their packaging and labelling requirements; and
- the conditions set out in Annex B of the Agreement below, with particular focus on the requirements for the construction, equipment and operation of vehicles carrying these dangerous goods.

Rail transport of dangerous goods in the Slovak Republic is a national and international transport is carried out in accordance with the Regulations for the International Carriage of Dangerous Goods by Rail (RID).

The carriage of dangerous goods by air is governed by ICAO (International Civil Aviation Organization) / IATA ( ) rules.

The hazard identification number of a substance (official name; other names: hazard identification number, Kemler code, substance hazard code, substance hazard code, hazard number) is a code that indicates the hazardousness of a dangerous substance for the purposes of transport under the ADR and RID contracts. In Slovakia, the identification numbers are listed e.g. in the Notification of the Ministry of Foreign Affairs No 444/2005 Z. z.

The most frequently occurring chemical hazardous substances in the Slovak Republic include chlorine, ammonia, hydrogen cyanide, formaldehyde and sulphur dioxide.

**Chlorine** (Cl<sub>2</sub>) is a non-flammable, yellow-green, pungent-smelling, corrosive poisonous gas or colourless liquid. As a gas (mist) it is heavier than air and slightly soluble in water.

**Ammonia** (NH<sub>3</sub>) is a colourless, toxic, flammable, explosive gas characterised by a pungent, suffocating, alkaline odour - irritating to the respiratory tract. It is freely soluble in water. Due to its mole weight, it is lighter than air.

**Cyanobacteria** (HCN) is a colourless, particularly poisonous, flammable liquid with the smell of bitter almonds. Under normal conditions, it occurs as a gas (vapour) that is lighter than air. It is soluble in water. The vapour forms an explosive mixture with air.

**Formaldehyde** (CH<sub>2</sub>O) is a flammable, colourless, pungent-smelling, poisonous, reactive gas. It is readily soluble in water. It is only slightly heavier than air.

**Sulphur dioxide** (SO<sub>2</sub>) is a non-flammable, colourless, poisonous gas, heavier than air.

### Toxicity of chemical hazardous substances

Any chemical hazardous substance is characterised by its effect on the human body, i.e. toxicity. This effect may lead to death or loss of ability to perform the required activity. In the literature, this is referred to as lethality or incapacitation. The characteristic data are the lethal dose (lethal doses, where LD<sub>50</sub> is the dose of a toxic substance that results in 50% mortality of all exposed experimental animals within a relatively short period of time. On the other hand, the inhibitory dose (The inhibition dose ID<sub>50</sub> is the dose that does not kill but incapacitates 50% of all affected animals.

LD<sub>50</sub> can be used to roughly estimate the hazard of a substance. However, its value may not be indicative of the body's response to chronic exposure to low doses. Thus, it may not accurately reflect the full spectrum of toxicity or hazard in relation to exposure to the chemical. Nevertheless, chemicals are classified according to their LD<sub>50</sub> value into a specific toxicity class. The Gosselin, Smith and Hodge classification is often used for classification. The classification of substances based on likely oral toxicity to humans (oral LD<sub>50</sub> values) is given in Table 11.1. However, this classification does not provide information on dermal or inhalation toxicity.

*Table 11.1 Classification of substances based on their oral toxicity according to Gosselin, Smith and Hodge*

Toxicity assessment	Toxicity class	Oral LD <sub>50</sub> (mg/kg)	Relative amount of substance for a person weighing 70 kg
6	Supertoxic	< 5	Slight amount, less than 7 drops
5	Extremely toxic	5 -50	4 ml (7 drops to 1 teaspoon)
4	Highly toxic	50 - 500	30 ml
3	Moderately toxic	500 - 5 000	30 - 600 ml
2	Mildly toxic	5 000 - 15 000	600 - 1 200 ml
1	Virtually non-toxic	> 15 000	> 1 200 ml

As the dose increases, its effect usually increases as well. A dose that does not yet produce an observable change is called a subthreshold dose. The threshold dose is the lowest dose, that produces a response that can already be assessed. A threshold dose cannot be established in general for any adverse effects on the body, but only for certain effects, e.g. For acute toxic effects. However, it cannot be set for any carcinogenic effects.

The dose-dependence of the effects is entirely individual and depends not only on the amount but also on the type of organism that is exposed to the chemical.

Damage to the body because of exposure to a chemical can be reversible (reversible) or irreversible (irreversible), depending on the regenerative capacity of the damaged parts of the body.

The effects of toxic substances on the body can be local or systemic. Local effects are manifested at the point of first contact of the substance with the biological system. In contrast, for systemic effects, it is a prerequisite that the entry of the toxic substance into the organism is followed by its distribution to a distant site where the harmful effects are manifested. Most substances have systemic effects.

### 11.1.2. Biological hazardous substances

Biological (bacteriological) hazardous substances are pathogenic micro-organisms that cause various diseases through their action. Their pathogenic action consists in the fact that after entering the body of a living organism, they invade cells, penetrate their interior, and feed on their contents, causing them to die. In this process, toxins are produced as a product of the putrefactive process of dead cells and as a product of the metabolism of pathogens. They also use this environment for their reproduction, where a new generation of microorganisms is produced every 20 min as they divide. The development of the disease is characterised by the so-called incubation period, which is the period of time between the entry of the pathogen into the organism and the appearance of the first symptoms of the disease. The incubation period ranges from hours (cholera, salmonellosis), days, weeks, months or years (slow viruses, e.g. HIV), depending on the pathogen, the amount of the pathogen present in the organism and the route of entry into the organism.

Biohazardous substances can be used in the form of:

- aerosols (bacteria, viruses) produced in the air or in a confined space directly or through ventilation equipment,
- by releasing infected insects (lice, fleas, flies, etc.),
- infecting water sources, food or feed.

As a rule, the ingestion of biological agents is not immediately detected by the affected person after ingestion.

If ingestion is suspected, the occurrence is detected by sampling and subsequent microbiological analysis.

Biological hazardous substances are also often used as **biological weapons**. Biological weapons are defined as weapon systems based on the action of pathogenic microorganisms, i.e. bacteria, viruses; rickettsiae, fungi capable of causing mass infectious diseases in humans, animals and plants.

**Bacteria** are very small always unicellular microorganisms, they do not contain a solid cell nucleus, so their DNA is loosely stored in the cell. When their living conditions deteriorate, e.g. when food is scarce, they form highly resistant, permanent spore-like forms that can withstand even the harshest environmental conditions for decades. Spores are formed by the shrinkage of the original cells and the formation of a resistant covering, called a spore. When suitable living conditions are restored, the

spore changes back into a living bacterium. The size of the bacteria ranges from 1.5 to 10  $\mu\text{m}$ . Gram-positive and gram-negative bacteria are distinguished according to their staining ability. This ability characterises their cell wall. Gram-positive bacteria can be stained and are more sensitive (susceptible) to antibiotics than gram-negative bacteria. They can be rod-shaped (bacilli) or spherical (cocci). They are capable of multiplying and forming filamentous clusters. Because of their ability to survive for long periods of time in the form of spores, they are considered the most likely biohazardous agent to be exploited in terrorist and military attacks. The bacteria cause the diseases anthrax, plague, bacillary dysentery, and brucellosis.

**Rickettsia** are bacteria that multiply in living cells. They have the properties of both cells and viruses at the same time. Like cells, they have metabolic enzymes and a cell membrane, consume oxygen, and are sensitive to broad-spectrum antibiotics. However, they are unable to reproduce outside the infected cells. These are the causative agents of spotted typhus, Q-fever, Rocky Mountain fever.

**Mould** (lower multicellular fungi), yeasts (unicellular) are parasitic microorganisms. Up to 100 species can cause disease in humans. They are especially dangerous if the human immune system is weakened. They are typical in their pathological action, as they are the causative agents of mycoses (deep, superficial, subcutaneous), toxoplasmosis.

**Viruses are not** separate cells, they are genetic material protected by a protein capsule using the cell's metabolism to its advantage. They multiply inside living cells. They are the smallest particles of living matter (0.01 - 0.027  $\mu\text{m}$ ) that are not capable of spontaneous reproduction. For this they need living tissue culture cells. The nucleic acids of the virus (DNA, RNA) penetrate the cell where they pass on their genetic information. The result may then be the ultimate inhibition of biosynthesis, i.e. destruction of the host cell, or the released virions (viral particles carrying viral infections outside the cell) invade neighbouring cells or pass into the blood. They cause diseases such as smallpox, influenza, Ebola, dengue, Zika.

**Toxins** are poisons of biological origin (bacterial toxins) produced by the breakdown of cells and metabolism of bacteria - botulinum toxin, staphylococcal enterotoxin. They are poisonous chemicals that can be produced by bacteria. They are usually formed by chains of amino acids with a molecular weight of several hundred (peptides) or hundreds of thousands (proteins).

Toxins are divided into microbial toxins (exotoxins and endotoxins), zootoxins and phytotoxins.

*Exotoxins* are produced by living bacteria. They are more poisonous but less resistant (except botulinum toxin). They provoke diseases such as botulism, diphtheria, tonsillitis, tetanus. Conventional disinfectants are used to eliminate them.

*Endotoxins* cause plague, cholera, typhoid, paratyphoid, meningitis.

*Zootoxins* are poisons produced by various species of animals, snakes, fish, scorpions, frogs and insects. In many cases they have exceptional toxic properties (e.g. batrachotoxin,  $\alpha$ -latratoxin and others).

*Phytotoxins* are poisons derived from various plants such as ricin. These include alkaloids and glycosides.

Table 11.2 gives an overview of the biological threats caused by each pathogenic microorganism.

Table 11.2 Biological threats caused by pathogenic micro-organisms

Disease	Method of dissemination	Vector	Possibility of infection	Incubation time	Untreated mortality
Bacteria					
Plague	aerosol, insects, rodents	rodents, insects, persons	very large	1 - 7 days	up to 100%
Splenic anthrax (anthrax)	biological aerosol	Infected animals	not	1 - 7 days	up to 100%
Cholera	biological aerosol	feces, vomit of the sick, bacilli carriers	very large	1 - 5 days	up to 50%
Typhoid fever	contaminated water, food	sick people, bacilli carriers	Large	3 - 38 days	up to 10%
Rickettsia					
Spotted typhoid fever	aerosol, insects	sick people	only when stitching	6 - 15 days	10 - 80 %
Q fever	aerosol, insects	warm-blooded animals, insects	small	14 - 26 days	up to 4%
Rocky Mountain Fever	aerosol, insects	rodents, insects	not	3 - 10 days	20 - 60 %
Viruses					
Yellow fever	mosquitoes	mosquitoes	large at occurrence mosquito	6 - 15 days	80 %
Mould					
Coccidioidomycosis	aerosol	mosquitoes	not	10 - 14 days	Progressive form up to 100%
Protein toxins (botulinum toxin)					
Botulism	contaminated water, food	does not transmit from the sick to other persons	—	6 -72 h	—

Selected diseases caused by bacteria, viruses, rickettsia and toxins are listed below.

### Anthrax

Anthrax (Splenic anthrax) is caused by the bacterium *Bacillus anthracis*. It is an acute infectious disease of animals that is transmissible to humans, in whom it causes a typical skin, lung or intestinal disease. The bacterium is a gram-positive, aerobic, 5–6 µm long microorganism, 1–1.5 µm in size, cylindrical in shape (Figure 11.1). It is capable of producing oval-shaped spores that are highly resistant to environmental influences.



Figure 11.1 *Bacillus anthracis* (Source: [Internet](#))

As mentioned above, anthrax is originally a disease of animals (mainly cattle), which are infected by ingesting bacterial spores while grazing. *Bacillus anthracis*, when expelled from the body of a sick animal, immediately envelops itself and forms a so-called spore, which is very resistant and able to survive in the environment for decades. These spores germinate when they enter another body - releasing the original bacteria. This bacterium begins to produce the toxin (poison) responsible for the disease called anthrax. This is a substance that causes swelling of the infected tissue, its blood supply and necrosis (death). The whole cycle thus proceeds so that cattle are infected by ingestion of the spore, in which the disease is very serious, affecting the internal organs (especially the digestive tract and the spleen, which is enlarged, blackened and dead - hence the Slovak name splenic anthrax). During its illness, the animal secretes bacteria into the environment, forming spores capable of infecting other animals and, of course, humans. Humans can become infected either through contact with the animal (owner, veterinarian, etc.) or with its products (most often skin, wool, fur). Depending on the route by which the bacterium enters our body, three forms of anthrax are distinguished.

The cutaneous form is the most common. The bacterium enters the body through abrasions on the skin (even very small ones), here it multiplies and produces anthrax toxin. The Slovak name for this form is coal, because the site of penetration of the bacterium first turns red, then a blood-soaked blister appears on it, which gradually develops into a blackish ulcer. If left untreated, the disease can lead to sepsis (blood poisoning), which directly threatens the patient's life.

The pulmonary form is caused by smaller particles that are able to reach the lower airways and lungs. From there they are carried by the cells of our defence system to the local lymph nodes between the lungs –in the interstitium. These nodes enlarge and are engorged and destroyed by the inflammation taking place in them. This allows the lymph node to spread into the surrounding area and inflammation of the mediastinum occurs. Bacteria enter the blood in large quantities and sepsis occurs again. The pulmonary form must be recognised and treated immediately, otherwise it is 100% fatal. Because the bacteria are

diverted to the lymph nodes, many of them do not remain directly in the lungs and are therefore not spread by droplets when coughing. Interpersonal transmission is therefore unlikely.

The intestinal form occurs after ingestion of contaminated food. It is manifested by severe abdominal pain, nausea, vomiting, bloody diarrhoea. These symptoms are atypical and in our countries are mostly caused by other diseases. Here, too, it can spread rapidly to the blood and the patient dies of so-called blood poisoning.

Anthrax in all forms is treated with large doses of antibiotics—penicillin. The patient must be admitted to the inpatient ward not only for the administration of drugs that are injected into the vein, but primarily because of the need to monitor his state of health, it is a disease with a high mortality rate. The risk factor is contact with sick animals, also with a person having the cutaneous form or the intestinal form, which of course must be avoided. However, it is a very rare disease in our republic, but it is often spoken about in connection with terrorism. *Bacillus anthracis* has already been used as a biological weapon by the Japanese in the Manchurian War, and there is a well-known attempt to disperse this bacterium on the streets of Tokyo in the 1990s.

### **Cholera**

Cholera is an infectious disease caused by the bacterium *Vibrio cholerae* (Figure 11.2). This produces an exotoxin that results in massive fluid loss through the lining of the intestine. It is thus a gastrointestinal disease associated with general intoxication of the body, which can easily spread and cause an epidemic. It is also called *Cholera asiatica* according to the place of its most common occurrence.

The bacterium is a gram-negative, motile hooked rod that does not produce spores. It has dimensions of 1.5–4  $\mu\text{m}$  in length and 0.2–0.4  $\mu\text{m}$  in width.

It is poorly resistant to environmental influences and dies quickly when exposed to sunlight. It survives longer in faeces and stagnant waters (up to several weeks).



Figure 11.2: *Vibrio cholerae* (Source: [Internet](#))

Cholera is an acute disease of the digestive tract of humans. Typical manifestations are abdominal pain, severe watery diarrhoea, vomiting, extensive fluid loss (dehydration), which can lead to shock. The typical manifestation is the so-called Hippocratic face, i.e. cold skin covered with cold sweat.

The more dangerous form of cholera, however, is its dry form, without diarrhoea. Its progression is so rapid that the warning signs do not even appear in time. In this form, there is a massive accumulation of fluid in the intestine, which further leads to cramps and general poisoning of the body. Death occurs within hours to days.

The source of infection is the faeces and vomit of infected people (bacillus carriers). The infection spreads very quickly with poor hygiene. It enters the body through inhalation and the digestive tract. It can therefore be spread by aerosol, food, water and, in the summer months also by insects. Humans are very susceptible to infection and therefore most often become ill after an incubation period that can last 1–5 days, but usually 3 days. Mortality in treated patients tends to be 3–30% and 50–80% in untreated patients. Those who have overcome the disease acquire immunity for a relatively long period of time. Artificial immunity can only be provided for a period of 6–12 months. The treatment consists of the administration of chloramine and sulphonamide.

### **Plague**

Plague is a very severe, acute, rapidly progressing disease that manifests itself in the form of lymph node involvement (bubonic form), blood poisoning (sepsis), and lung damage (pulmonary form). The disease is caused by the bacterium *Yersinia pestis*, which is transmitted by infected rodents via arthropods (fleas).

The bacterium is rod-shaped with a size of 1.5–4  $\mu\text{m}$  (Figure 11.3). It forms filamentous, coccoid or balloon-shaped clumps. It does not form spores, is gram-negative, immobile and aerobic.



Figure 11.3: *Yersinia pestis* (Source: [Internet](#))

The resistance of the bacterium to environmental influences is low. It reproduces very well in nutrient soils at temperatures between 0 °C and 40 °C.

The incubation period of the disease is 1–7 days.

The most common form of the disease is the bubonic form. It is manifested by fever up to 40 °C, headache, chills, vomiting and severe malaise. In the first 2-5 days, the organism suffers from great hypersensitivity, feelings of fear and anxiety. The skin over the nodes is blue-red. After 8–10 days, there is an oozing of bloody fluid containing large amounts of bacteria. The affected areas then continue to fester. The mortality rate for untreated scald is 60–70%.

The pulmonary form of the disease can be primary or secondary. The primary form is characterized by intense headache and considerable malaise for 24–48 h. Breathing difficulties occur and a cough characterized by bloody mucus appears. The disease is usually accompanied by enlargement of the spleen and skin rashes.

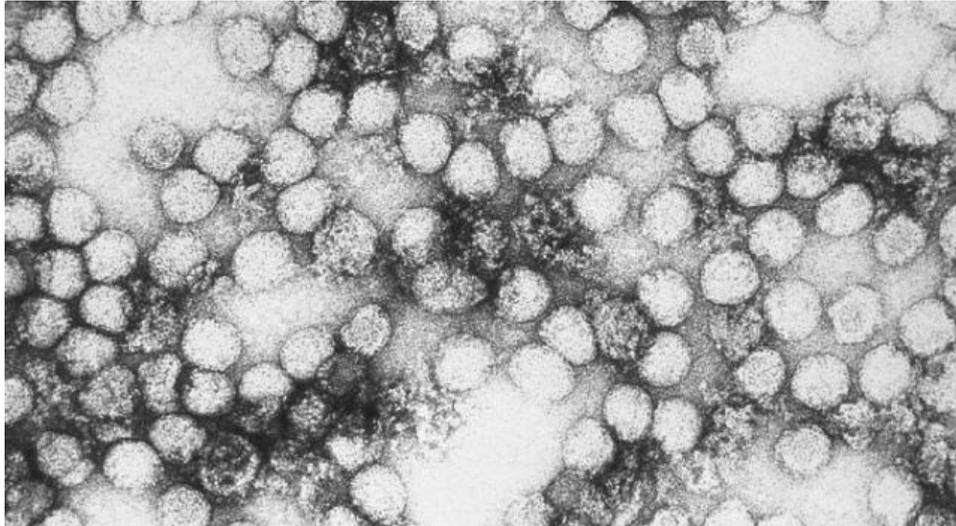
The septic form has a very sharp course. It is a severe blood poisoning, which manifests itself by blood eruptions on the mucous membranes and on the delicate parts of the skin. The disease lasts for about 48–72 h.

The natural vector of the disease is insects from infected rodents. The bacterium can be dispersed as an aerosol under suitable conditions. When inhaled, a particularly dangerous and difficult-to-treat pulmonary form is produced. The general susceptibility is reduced by charring once passed. However, the possibility of recurrent disease is not excluded. Immunisation is possible by administration of antipimoral serum or vaccination with the Haffkin vaccine or newer vaccines.

Treatment consists of the administration of antibiotics, e.g. streptomycin, chloramphenicol, together with sulphonamides. However, treatment for the pulmonary form may not be 100% successful, especially if not given in time.

### **Yellow fever**

Yellow fever occurs primarily in South America and equatorial Africa. The infectious disease is caused by the yellow fever virus (Figure 11.4), which is one of the so-called flaviviruses (insect-borne).



*Figure 11.4 Yellow fever virus (Source: [Internet](#))*

The incubation period is 3–6 days.

The disease is manifested by sudden fever associated with chills, back and muscle pain, nausea and vomiting. The person falls into a state of general exhaustion. The mucous membranes become congested and, in more severe cases, jaundice develops, the liver may be damaged, there may be bleeding into the skin and digestive tract (black stools are typical), nosebleeds and even gynaecological haemorrhage.

Yellow fever has a rapid course, with either complete recovery or death following within two weeks. In tropical areas, up to 5% of natives die from it, but for visitors to affected areas who are not vaccinated, the mortality rate can be as high as 50%.

The yellow fever virus is transmitted by the bite of an infected mosquito. However, it can be sprayed in aerosol form. The source of infection tends to be monkeys in the rainforest and infected humans in populated areas.

There is no antidote to cure the disease. However, there is a vaccine for immunization (strain D 17). The vaccination becomes effective after 10 days and is effective for at least 10 years. The virus is able to survive low temperatures and dies when heated above 78 °C.

### **SARS**

It is a serious, often fatal disease caused by SARS-CoV (Severe Acute Respiratory Syndrome Coronavirus), Figure 11.5, presenting as severe pneumonia (pneumonia), caused by a coronavirus identified in 2003. It was transmitted to humans from the civet. The main symptoms are fever, difficulty breathing, headache and muscle aches. It appeared in 2003 in China, Hong Kong and Taiwan, where it is customary to eat civet meat. The SARS epidemic is reported to have claimed 774 victims from 30 countries. There have been no new cases of infection with this type of coronavirus since 2004.

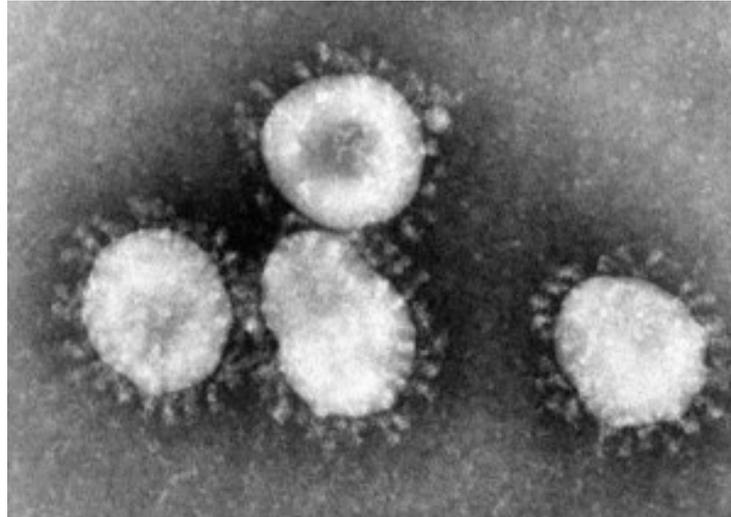


Figure 11.5: SARS-CoV virus (Source: [Internet](#))

The disease predominantly presents as severe atypical pneumonia. The main symptoms are high temperature (above 38°C), dry cough, shortness of breath, difficulty breathing. Other symptoms such as headache, muscle stiffness, lack of appetite, rash, diarrhoea may also be present. The incubation time is estimated at 2 to 10 days (normally 2 to 5 days).

However, the causative agent of SARS is quite different from the known human coronaviruses. It is therefore thought to have reached humans from its animal host, the civet (the virus isolated from a healthy civet was almost identical to the SARS causative agent.) The disease was mainly found in China, Hong Kong and Taiwan. That is, in areas where civet meat is considered a delicacy. The virus was also easily transmitted to nursing staff and spread by air travel to other countries - e.g. Canada.

Transmission occurs mainly by droplets during sneezing, speech, coughing, but also by direct contact. Diagnosis is laboratory-based. Effective therapy is not yet known. Treatment is generally symptomatic.

### **MERS**

It is a viral respiratory disease caused by the Middle East Respiratory Syndrome Coronavirus (MERS-CoV), Figure 11.6, which first broke out in 2012 in the Middle East. It was later found to have been transmitted to humans from camels, possibly also from bats, and has been labelled as human-to-human transmissible. As of September 2012, more than 1 000 cases of the disease have been reported worldwide, mainly in Middle Eastern countries (Saudi Arabia, the United Arab Emirates, Qatar, Jordan, Oman, Kuwait, Egypt, Yemen, Lebanon and Iran). In May 2015, an epidemic of this new disease was also recorded in South Korea. Approximately 30%-40% of ill persons succumb to the disease.

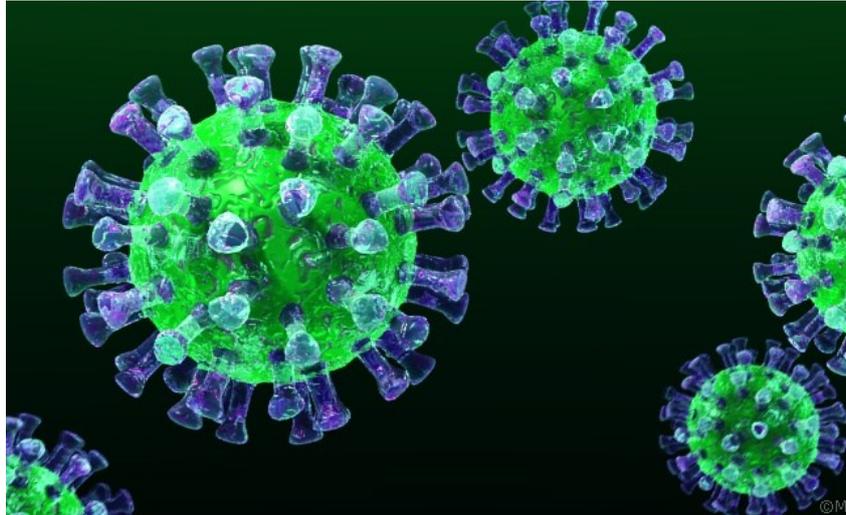


Figure 11.6 MERS-CoV virus (Source: [Internet](#))

It is transmitted by droplet infection from an infected person. Almost all new diseases arise in health care settings or in close (family) contacts of the sick person. It is also possible to become infected with MERS-CoV through contact with one-humped camels and by consuming undercooked animal products from infected camels. The incubation period (the period from infection of the organism to the onset of symptoms of the disease) is two to 14 days, with an average of five days.

The disease is manifested by fever, cough and shortness of breath. In some sick people, indigestion has been noted. In severe cases, it can result in pneumonia and multi-organ failure, which can end in death. The course of the disease is more severe in patients with compromised immunity or other chronic disease (e.g. cancer, diabetes mellitus, kidney disease, lung disease).

Risk of infection exists particularly in affected countries in the Middle East, where animal-borne infections and minor epidemics occur in connection with stays in a health facility where MERS-CoV patients are hospitalised. According to scientific studies, MERS-CoV does not have a high pandemic potential. Close contacts (family members), medical staff caring for MERS-CoV patients and other patients in healthcare facilities are the most likely to be infected from sick persons.

Effective anti-infective therapy against most viral diseases does not exist, which is true for the treatment of infections caused by coronaviruses. Thus, only symptomatic treatment is possible; the efficacy of treatment with known antivirals is not proven. In the most severe cases, intensive care is necessary for patients with respiratory failure in pneumonia. Effective vaccines against coronavirus disease are not available. Research into SARS-CoV vaccines and drugs is under way in several countries, but will take at least several months to develop. Trials using known antivirals have not been very successful for SARS and MERS.

## COVID-19

COVID-19 is an infectious disease caused by a coronavirus called SARS-CoV-2 (Figure 11.7).

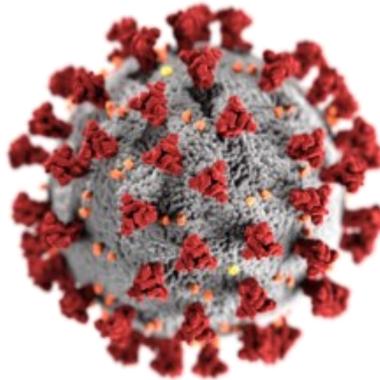


Figure 11.7: SARS-CoV-2 virus (Source: [Internet](#))

The name of the virus is derived from the English name for *Severe Acute Respiratory Syndrome Coronavirus 2*, i.e. severe acute respiratory syndrome.

The name of the virus itself comes from the English name COronaVirus Disease, which translates to into Slovak language means "coronavirus disease". The numeral in the name of the virus says indicates the year of discovery of the disease.

SARS-CoV-2 virus transmission confirmed over time from human to human. The duration of the incubation period ranges from 2 to 14 days (average 5.1 days) and there is a possibility of transmission even during the incubation period, i.e. during the symptom-free period.

The virus is transmitted by droplets of secretion when coughing, sneezing and talking; persons at risk are after close or prolonged contact with an infected person - at a distance of up to 2 m and more than 15 min. Transmission of infection also occurs through contaminated objects. Contaminated food may be contaminated. Urinary shedding of the virus has also been observed.

The disease mainly affects people from the household and surroundings of the sick person and health workers. Patients are predominantly male, elderly and with associated chronic diseases; young children are more rarely infected.

The initial cases were linked to a large livestock market, so it was assumed from the beginning that the virus was zoonotic in origin. This means that the virus was produced by eating an animal that contained disease-causing micro-organisms.

The virus dies out when it has no host or when the immunological memory of the population increases. Individuals develop antibodies, the virus is destroyed and may become extinct. However, this is not straightforward, as the virus is constantly mutating and may become resistant to certain antibodies. When the virus was discovered in December 2019, it was thought that the summer weather

and an increase in temperatures would make it impossible for the virus to spread, but this claim was later disproved by laboratory tests.

On February 7, 2020, a virus sample was discovered in a protected scavenger used in traditional Chinese medicine that is 99% similar in sequence to SARS-CoV-2.

SARS-CoV-2 is a virus that attacks the lungs. In the beginning, the symptoms of this disease were not very significant because they resembled the common flu or SARS virus, but as more people started to develop respiratory illness and similar symptoms, they began to specify these symptoms to the virus.

The main symptoms include increased temperature or fever, dry cough, which can sometimes lead to breathing problems and shortness of breath. Shortness of breath is defined as difficulty breathing or a feeling of suffocation. A typical temperature is more than 38 °C. This temperature persists for several days. Fever is a major sign that the body is fighting some hidden illness. Some people experience sore throats, headaches and diarrhoea, and loss of smell and taste may also be a symptom. In particular, loss of sense of smell, technically anosmia, has been seen in patients without other symptoms who were eventually found to have coronavirus.

In 10 - 15% of cases people have only this symptom, but it should be noted that in most cases the occurrence of only this one symptom occurs in younger patients. It is necessary to be particularly attentive to continuous coughing, which may last for several hours or may occur in different time episodes during 24 h. A dry cough is a cough that rather expectorates without mucus production, irritates the airways, strains the mucous membranes, impairs circulation and sleep.

The course of COVID-19 varies from person to person. The disease manifests in people of all ages, but the course of the disease ranges from mild to severe. When infected with the virus, they may not observe it but may spread it further. The manifestation of the disease depends on many things such as a person's physical health, age, lowered immune system or the conditions in which the person lives. Elderly people and people with pre-existing health problems such as asthma, diabetes, heart disease, high blood pressure are more likely to have a severe course of the disease and may even lead to death.

On average, it takes five days for symptoms to start, but some people get them much later. The World Health Organization (WHO acronym) says the incubation period lasts up to 14 days. This is the longest known incubation period for the disease to date.

### **Spotted typhoid fever**

Spotted typhoid fever is a severe disease caused by *Rickettsia prowazeki* (Figure 11.8), a nonmotile, gram-negative, polymorphic microorganism. It produces various forms from coccoid to filamentous. It can survive for a long time under normal conditions, but perishes when exposed to higher temperatures (at 45 °C in 15 to 30 min).

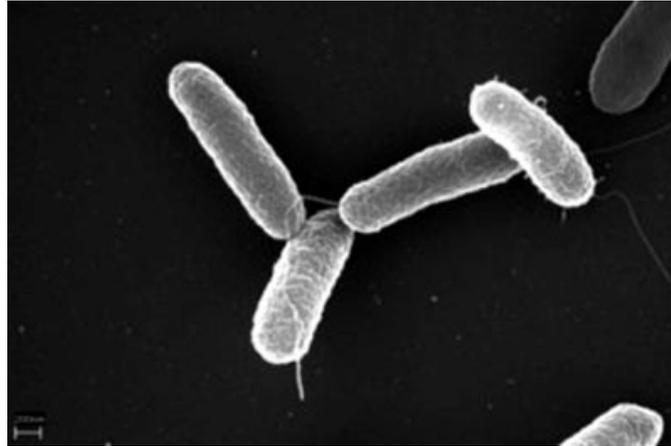


Figure 11.8 *Rickettsia prowazekii* (Source: [Internet](#))

Scrub typhus affects the central nervous system and the bloodstream. High fevers (40 °C), severe headaches, reddening of the conjunctivae and the appearance of red spots on the face are typical of this disease. These gradually appear on the whole body. Once the rashes appear, there is a general deterioration in health. Disturbances of consciousness, spontaneous leakage of urine and faeces follow. Between 9–18 days, coma may occur and death follows.

The source of infection can be a sick person. It is most common in Central and South America, North Africa and the Far East.

The vector is lice. Susceptibility to the disease is very high. After overcoming the disease, the organism acquires immunity, which, however, is not permanent. Immunisation can also be created artificially, by vaccination. The incubation period of the disease is 5–16 days. Mortality depends on the speed and mode of spread, including the timeliness of intervention. It ranges from 10–80%. Treatment consists of the administration of antibiotics (tetracycline and chloramphenicol).

### **Q fever**

Q fever is known as Nine Miles Fever. It is caused by the rickettsia *Coxiella burnetii* (Figure 11.9). It is a gram-negative polymorphic microorganism of various shapes with a size range of 0.24–1.5 µm. It is capable of surviving up to 60 days under suitable conditions.

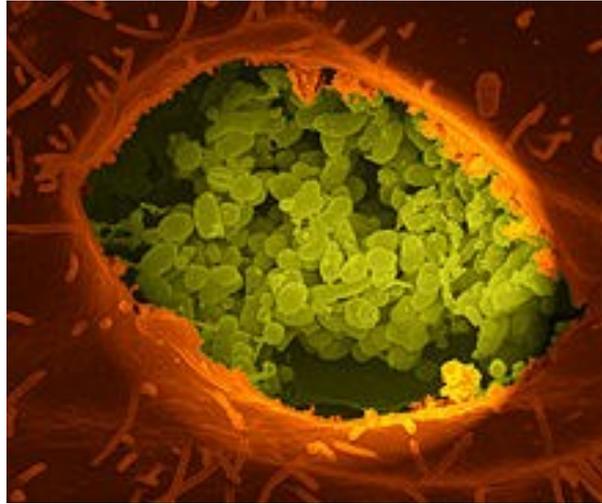


Figure 11.9 *Coxiella burnetii* (Source: [Internet](#))

The source of infection is usually infected insects and warm-blooded animals. Humans are highly susceptible to the disease. It usually enters the body through the respiratory tract, the digestive tract, the conjunctival sac, and by being stung by infected insects, especially ticks. It occurs worldwide.

After the incubation period, which lasts 10–14 days, acute infectious disease occurs. Headache, chills and fever are the typical manifestations, and this continues for 14 days. These manifestations are accompanied by muscle weakness, nausea, difficulty breathing and loss of appetite. When entering through the respiratory organs, atypical pneumonia may occur. Mortality may be as high as 4 %.

Cases of human-to-human transmission are unknown but cannot be excluded. It is a very resistant and easily reproducible micro-organism. The advantage is that it can be prevented by vaccination, the effects of which last up to 5 years. Antibiotics are used for treatment, especially tetracycline, doxycycline, chloromycetin, aureomycetin and others.

### **Botulinum toxin**

Botulinum toxin causes so-called botulism, i.e. poisoning of the body with one of the most potent poisons.

It is a chemical substance of protein nature, containing 19 kinds of amino acids. It is the product of a bacterium called *Clostridium botulinum* (Figure 11.10), which is commonly found in the intestines of humans and cattle.

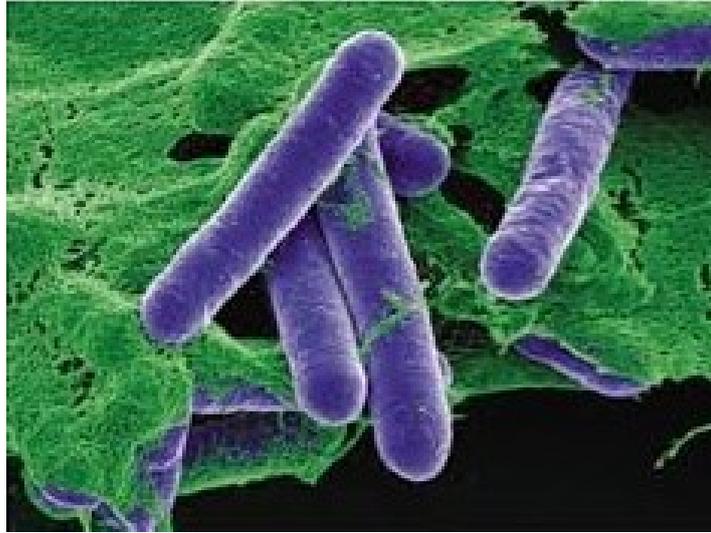


Figure 11.10 *Clostridium botulinum* (Source: [Internet](#))

It occurs in several types that produce spores. These enter the soil through the faeces, where they can survive for decades and, under the right conditions, awaken to activity again. They are not very resistant to oxygen, but can withstand higher temperatures well. They die after 1 h when cooked at 120 °C. Under normal conditions they are harmless, but under anaerobic conditions the bacteria start to produce a nerve poison - neurotoxin.

The latency period for initial symptoms is usually 72 h after entry into the body. The initial signs of poisoning are drooping eyelids, dry mouth and throat, difficulty speaking and swallowing, blurred and double vision. The weakness is subsequently manifested on the face and continues symmetrically towards the throat, chest and extremities. The effect on the organism usually builds up within 24 h, being slower when the toxin is inhaled than when it is ingested. If treatment is not started in time, poisoning eventually ends in respiratory and cardiac arrest. The mortality rate can be 60-80%. If survived, recovery is very lengthy and some muscles may be flaccid for several months.

Botulinum toxin enters the body by ingestion and then through the mucous membrane of the mouth, by inhalation and then through the lungs into the bloodstream or through a wound on the skin. It does not penetrate intact skin and is not transmissible from person to person. It is highly toxic, as little as 1 g can kill up to 1 million people if sprayed on the surface and then inhaled.

Treatment is usually supportive and includes respiratory support. The effect of botulinum toxin can be neutralised by the timely administration of a specific serum. Later administration is usually ineffective and the patient ends up in the intensive care unit.

In addition to military or terrorist use of biological agents in the form of special munitions transported to the target by aircraft, missiles, aerosol aggregates, or diversionary (terrorist) use, other means such as infecting water sources, food, and air are also used to spread biohazardous agents.

After the application of the biological agent, a biological cloud is formed. The distance of penetration of the biological plume depends on the weather conditions, the nature of the terrain, the biological properties of the agent used. When sprayed from an aircraft, it can be expected to spread over several tens of km.

### 11.1.3. Radioactive hazardous substances

**A radioactive substance** is a substance with spontaneous nuclear transformations of atomic nuclei. In each nuclear transformation, alpha or beta radiation is emitted and is virtually always accompanied by gamma radiation.

**Radioactivity** is the ability of the nuclei of atoms to change into the nuclei of other atoms and emit alpha, beta, gamma and neutron radiation.

**Alpha radiation** is a stream of positively charged helium nuclei moving at  $20\,000\text{ km}\cdot\text{s}^{-1}$ . It penetrates a layer of air several centimetres thick or thin metal foils.

**Beta radiation** is essentially a stream of electrons travelling at  $280\,000\text{ km}\cdot\text{s}^{-1}$ . It's about 100 times more penetrating than alpha radiation. The emitted electrons are produced in the nucleus by the decay of neutrons.

**Gamma radiation** is an electromagnetic wave, similar to visible light, but has a shorter wavelength (10-11 to 10-13 m). It is the most penetrating part of nuclear radiation. It consists of a stream of photons (particles with no charge) moving at approximately the speed of light.

Activity characterises the rate of radioactive decay of a nucleus. It is given by the number of decays per unit time. The unit of activity is one becquerel (Bq).

**A radiological emergency** is an incident caused by a loss of control of radiation sources which results in the unauthorised release of radioactive substances or ionising radiation into the environment to such an extent that measures are required to protect the public.

**A nuclear accident** is a loss of control of a nuclear reactor resulting in the unauthorised release of radioactive substances or ionising radiation into the environment to such an extent that measures are required to protect the public.

One of the properties of ionising radiation is its ability to damage the human body. The degree of biological damage depends on the amount of dose and the size of the irradiated area of the body. Ionising radiation produces damage similar to that caused by skin irradiation. The skin turns red, blisters and ulcers form, with the subsequent possibility of skin cancer. Depending on the size of the absorbed dose, the damage either heals without major consequences or, in more serious cases, surgical treatment (plastic surgery) is necessary. Lower but repeated doses of ionising radiation cause late chronic damage. They are characterised by a long period of asymptomatic, indeterminate onset, slow and worsening progression.

The following are classified as very dangerous radionuclides, see Table 11.3.

Table 11.3 Very dangerous radionuclides

Radionuclide	Half-life	Type of radiation
Bismuth <sup>210</sup> Bi	5 days	alpha, beta
Caesium <sup>137</sup> Cs	33 days	beta, gamma
Strontium <sup>90</sup> Sr	20 years	beta
Americium <sup>231</sup> Am	500 years	alpha
Plutonium <sup>299</sup> Pu	2,4·10 <sup>4</sup> years	alpha, gamma

In an atmospheric release, radioactive substances in the form of a radioactive cloud are entrained in the direction of the wind and are dispersed in the environment, which they contaminate.

***The level of contamination depends on the distance from the source of the release, the amount and activity of the released material, the wind speed, the overall meteorological situation, the physical and chemical form of the escaping material***

## 11.2. PROTECTION OF PERSONS FROM THE EFFECTS OF CHEMICAL, BIOLOGICAL AND RADIOACTIVE HAZARDOUS SUBSTANCES

In this subchapter of the text, we take a closer look at the issue of protection of persons against the effects of chemical, biological and radioactive hazardous substances.

### 11.2.1. Protection of persons from the effects of chemical substances

Among gaseous and liquid chemicals, those which are toxic or irritating on contact and in vapour form by inhalation, adhere well to surfaces and remain on surfaces unchanged for long periods of time, are very dangerous.

Contamination of persons can occur from careless handling of the contaminant, careless handling of contaminated material, movement in the contaminated area, removal and disposal of the contaminant.

**Protection of the population from the effects of chemical hazardous substances** is ensured in terms of the possibility of an emergency occurrence in the facility during the production, storage and handling of a hazardous substance (when handling a hazardous substance), when transporting a hazardous substance on transport roads, when the population is threatened by a terrorist attack or other intentional use, when the population is threatened by the secondary effects of an emergency, when threatened from other states, by means of anti-chemical measures: monitoring of the area, warning of the population and notification of persons, evacuation and sheltering of persons, regulation of movement of persons and means of transport, pre-medical first aid and emergency medical care, individual protection of persons, hygienic cleansing of persons, decontamination of terrain, buildings and materials, protection of employees who cannot finish their work and are in the area of danger, elimination of leakage of hazardous substances and prevention of their uncontrolled spread, prophylaxis, prohibition and regulation

of consumption of contaminated food, water and feed, veterinary measures and measures to ensure rescue work.

**Territory monitoring** is a measure necessary to identify and assess the situation prior to the occurrence of an incident involving a release of a hazardous substance, during the period of its duration and after its aftermath. The objective of monitoring the area at risk is to assess the state of the environmental compartments and the health status of persons and animals that are at risk from a hazardous substance release incident. The legal entity and the natural person - entrepreneur shall carry out the monitoring on the premises, with the following links to the civil protection information system continuously from the start of operation of the source of danger, and in the area of the hazard, i.e. outside the premises, it shall provide a system of continuous or mobile monitoring on predetermined routes and points; it shall make the monitoring data available via the civil protection information system.

**Warning of the population and notification of persons:** from the point of view of the population (persons who are in threat), the response to the warning is important, consisting of a warning signal and additional verbal information. Warning the public is one of the first actions to be taken immediately after the occurrence of a threat.

*Warning* is a set of organisational and technical measures that provide a warning effect and initial information to the population about an imminent hazard designed to reduce or to eliminate the consequences.

*Notification* is a set of organisational and technical measures to ensure the penetration of signals and information to designated legal entities within specified time limits and natural persons.

*Warning of the population and notification of persons is technically ensured by:* a siren network (Figure 11.11), consisting of sirens and their control systems; by radio broadcasts and television broadcasting; by public address systems; by local public address systems; by local municipal information means; by automated warning systems; by public electronic communication networks.

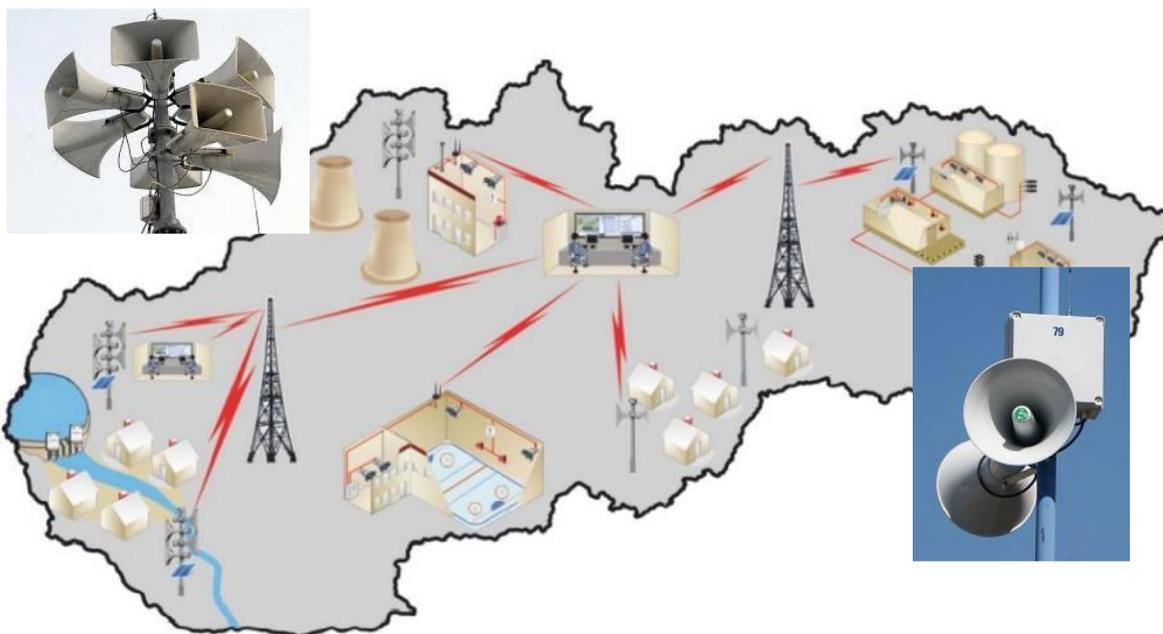


Figure 11.11 Multilevel warning system of the Slovak Republic (Source: Ministry of the Interior of the Slovak Republic, 2020)

**The regulation of the movement of persons and means of transport** shall be carried out simultaneously with the warning of the population, without waiting for the results of the monitoring and the decision of the relevant crisis staff. Regulation of the movement of persons and means of transport shall mean the diversion of traffic, preventing unauthorised persons from entering the area of threat, ensuring the smooth passage of the IZS rescue forces, ensuring the smooth removal of persons from the area of threat, preventing the evacuated population from returning prematurely, preventing the spread of the effects of the hazardous substance outside the area of threat.

**Pre-medical assistance** when the body is affected by a chemical substance, it implies transferring the affected person to fresh air outside the contaminated environment, furthermore, avoiding manifestations of indiscipline and panic. Ensure the affected person is calm, restrict walking, prohibit smoking. Refer persons with the most serious signs of exposure to professional medical assistance.

**Hygienic cleansing of persons** is one of the anti-chemical measures and is aimed at limiting the exposure to or removing hazardous substances from the body surface of persons. It is subdivided into partial, which ensures that exposure to hazardous substances is reduced to the lowest possible level and shall be carried out immediately after contamination by available means, and full, which shall ensure the removal of the hazardous substances from the body surface; it shall be planned in advance and shall be carried out as soon as possible after leaving the contaminated area by special civil protection units or in other suitable areas.

**Partial hygienic cleansing** shall be carried out immediately on site, if possible and necessary, immediately after leaving the contaminated area, before sheltering residents in flats

or workplaces if contamination is suspected, after sheltering residents in flats or workplaces, in communal shelters, shall be carried out in the sanitary facilities of buildings and shelters.

Partial hygienic cleansing is carried out on your own, immediately after leaving the contaminated area. It is possible to use bathrooms in own households, temporary accommodation, civil protection facilities designated by the decision of the district authority for hygienic cleansing of persons. Partial hygienic cleansing of persons is carried out by washing hands, cleaning nails, combing and washing hair, washing hands again, wiping face, neck, rinsing eyes with lukewarm water, wiping ear and nose openings, gargling mouth with water, wiping face with a clean handkerchief, washing hands, complete shower.

**A complete hygienic cleansing** will ensure the removal of hazardous substances from the surface of the body. It shall be planned and carried out as soon as possible after leaving the contaminated area by special civil protection units. Although effective, a full hygienic cleansing must be, but at the same time gentle, which means that procedures must not be used which could compromise the integrity of the skin to prevent dangerous substances from entering the body.

The basic principle of hygienic cleansing of persons is to detect the type of contaminant and the extent of contamination with special detection devices. Then, depending on the type of contaminant, determine the decontamination procedure and the necessary decontamination agent. It is particularly important to carry out the clean-up in a timely manner, especially for liquid contaminants. Less effective agents may also be used to avoid wasting time and waiting for later delivery of special agents. In addition, it is necessary to establish roles for the members of the decontamination teams and for the actual hygienic clean-up, to ensure sufficient personal protection for plant operators, to assess the hazardousness of decontamination wastes and to provide for their containment and removal.

Upon entering buildings, affected persons shall place contaminated material (clothing, footwear, protective equipment), as a rule, in airtight containers (polypropylene, polyethylene and other bags), which shall be stored in suitable and designated storage areas. The method of donning and doffing of individual items of clothing plays an important role. Clean parts of the body must not come into contact with contaminated clothing. At the same time, the rule is that protective gloves should be the last to be removed from protective suits.

Partial hygienic cleansing of persons by washing hands, cleaning nails, combing and washing hair, washing hands again, wiping face and neck, rinsing eyes with lukewarm water, wiping ear and nose openings, gargling mouth with water, wiping face with a clean handkerchief, complete shower.

Table 11.4 gives an overview of decontamination agents and reagents suitable for hygienic cleaning.

Table 11.4 Overview of decontaminants and agents suitable for hygienic cleaning

Contaminant	Decontaminating agent (mixture)
Inorganic substances	
Acids	5 % to 10 % sodium carbonate (soda) or potassium carbonate solution
Alkalis	dilute acetic acid solution (kitchen vinegar) or 5 % citric acid solution
Ammonia	dilute acetic acid solution (kitchen vinegar)
Chlorine	5 % to 10 % sodium carbonate (soda) or potassium carbonate solution
Cyanide	5% to 10% sodium carbonate solution (soda)
Organic substance oxidizing agents	
Sulphur carbon	5 % aqueous calcium hypochlorite solution
Organophosphates	5 % aqueous sodium hypochlorite solution (SAVO)
	5 % aqueous calcium hypochlorite solution
Aldehydes	5 % aqueous calcium hypochlorite solution
Isocyanates	0,5 % hydrochloric acid solution
Toxic chemicals	
All types of toxic chemicals	2 % aqueous suspension of calcium hypochlorite with 0,5 % detergent and 1 % diesel

**Individual protection of persons** shall be provided by improvised means and special means of individual protection which shall be used unprompted immediately after warning the population following an emergency involving a release of a dangerous substance, improvised means being those made for the protection of the respiratory tract, eyes and uncovered parts of the body by means of commonly available materials which are designed to only for the necessary evacuation time or for short-term necessary movement outdoors.

**Improvised means** are devices made to protect the respiratory tract, eyes and uncovered parts of the body from commonly available materials (Figure 11.12), which are designed to for use in transferring persons to shelters, escaping from an area contaminated with a hazardous substance, crossing a contaminated area, evacuating the population.

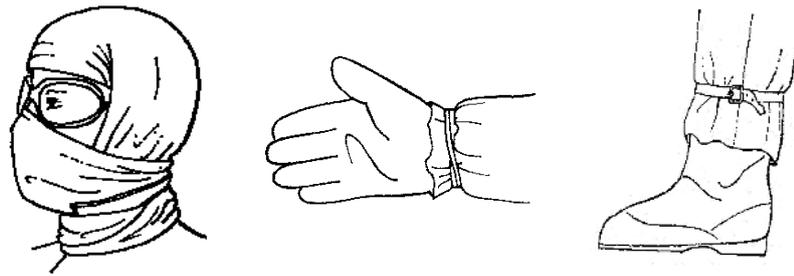


Figure 11.12 *Improvised means individual protection of persons*

(Source: District Office in Banska Bystrica, 2016)

It is recommended to use hats, scarves, scarves over which it is advisable to pull the hood, or put on a protective helmet (e.g. cycling, work, ski, etc.) to protect the head. The most suitable way to protect the mouth and nose is to cover these parts with a piece of flannel cloth, a terry towel slightly moistened with water, an aqueous solution of soda or citric acid. Protect the eyes with closed-type goggles (diving, swimming, ski goggles, etc.). Tape the ventilation holes on the goggles. When protecting the torso, the principle applies that each type of clothing provides a certain degree of protection, with a greater number of layers increasing the protection coefficient. For protection we can use long coats, jackets, trousers, overalls, shushing sportswear. The protective clothing used must be sufficiently sealed at the neck, sleeves and trousers, e.g. with adhesive tape, and finally it is advisable to use a waterproof raincoat or a tarpaulin thrown over the head. For hand protection, rubber gloves are a very good means of hand protection. For foot protection, rubber and leather boots, leather high boots are most suitable. When using low boots, it is advisable to make covers out of plastic bags or pouches.

When using improvised protection, the following principles must be observed: the entire surface of the body must be covered, all protective equipment must be sealed as well as possible, multiple protective equipment must be combined, or clothing must be used in several layers to achieve higher protective effects.

Special personal protective equipment means protective equipment for the respiratory tract and body surface counteracting the effects of hazardous substances.

**Prophylaxis** is the totality of preventive, protective and curative measures to prevent the occurrence of diseases in humans and animals. Specific prophylaxis is applied in the event of a chemical spill, which is the provision of timely administration of drugs to limit the toxic effects of chemical hazardous substances on the body.

**Decontamination of terrain, buildings and materials** is planned in the area of threat depending according to the type and nature of the hazardous substances and shall be provided according to the importance of the traffic routes and the importance of the buildings affecting the life of the population of the territorial unit, while special decontamination of terrain, buildings and material is the removal of

chemical hazardous substances from their surfaces. Several methods are used for decontamination, i.e. the removal of contaminants from surfaces and materials. Mechanical methods are used to remove contaminants by tapping, shaking, brushing, mechanical abrasion, or isolation of the entire contaminated surface layer. This also includes covering the contaminated surface with an insulating material. The application of physical methods consists of removing contaminants by evaporation, washing with mixtures, water or solvents, sorption on sorbents, etc. Chemical methods are based on the chemical reaction of contaminants with a suitable reagent, in which the hazardous substance is completely decomposed or converted into a compound or form of compound that is easier to remove from the surface. It is most effective to use a combination of the above methods, e.g. vapour pressure decontamination using chemical agents. Depending on the type of contaminant to be removed, decontamination is divided into special cleaning based on the decomposition, neutralisation and subsequent removal or elimination of chemical hazardous substances from contaminated ground, building and material surfaces. Disinfection and disinsection is the destruction of pathogens and arthropods that pose a hazard as vectors of pathogens following an incident involving a release of a biohazardous substance. Extermination is the destruction of rodents or animals that pose a danger as vectors of pathogens, arthropods or dangerous substances causing disease to humans and animals following an emergency.

**Special decontamination of terrain, buildings and materials** is planned and provided according to the importance of individual traffic roads, the importance of individual buildings and their complexes for the proper and smooth operation of life and economy in the territory of a particular territorial unit.

The use of self-contained breathing apparatus and pressurized (hermetically sealed) protective clothing is a matter of course and a necessity when performing rescue and disposal work by the rescue forces deployed in intervention. Without skin protection, their individual protection cannot be comprehensively ensured, as hazardous chemicals penetrate the body even through intact skin, accumulate and affect vital organs. The above special personal protective equipment (special PPE) provides the required degree of protection when working in life and health threatening environments.

A serious risk arising from contamination of clothing with a hazardous chemical is the possibility of secondary inhalation poisoning, which is a risk even after leaving the contaminated area after removing the special PFD. In addition to its high adhesion to skin and porous surfaces, the hazardous property of the hazardous chemical is its ability to penetrate deep into materials by diffusion through pores and crevices. If the chemical protective clothing is not fully sealed or is damaged (i.e. not sealed), there is also a risk of leakage of the hazardous chemical and thus contamination of the work clothing under the protective clothing with possible skin exposure. Residues of hazardous chemicals can often become trapped in the folds of clothing. Affected persons removed from the contaminated area are likely to have

high levels of contamination in clothing, footwear, carried material and equipment. Such 'perfumed' clothing may be particularly hazardous to life and health when in a confined space, e.g. a transport vehicle, ambulance, etc. The degree of risk is directly proportional to the toxicity of the hazardous chemical, its effective concentration and stability in the field, the time of exposure and the susceptibility of the persons at risk, and inversely proportional to the quality of the special PPE used or improvised PPE made by the user from his/her own material resources. In these cases, prompt removal of contaminated clothing, footwear, equipment and material, partial hygienic cleansing and subsequent special cleansing are necessary. Partial decontamination in the course of an activity is of particular importance as it prevents, in a very real sense, the most dangerous internal contamination of the organism.

After an incident involving a release of a chemical hazardous substance from a stationary source, the size of the hazard area around the facility shall be assessed and determined by the operator; up-to-date information shall be provided by the civil protection information service. In emergencies, according to the actual situation, depending on the quantity and type of hazardous substance released, the meteorological situation, the duration of the release and the results of monitoring, the area of the hazardous substance shall be determined and evaluated; if the type of hazardous substance is not known. For the purpose of immediate action, the danger area shall be divided into a zone of direct danger from hazardous substances, the outer boundary of which shall be at least 50 m from the source of danger, given by a median angle of  $360^\circ$ , and a protection zone, the outer boundary of which shall be at least 100 m from the source of danger, given by a median angle of  $360^\circ$ , a chemical hazardous substance vapour hazard zone which, for the purposes of the preliminary assessment, is defined by a  $40^\circ$  line centred on the direction of the surface wind, and finally a safety zone in which the hazardous substance is not expected to be present and which is at least 100 m away from the hazardous substance.

### **11.2.2. Protection of persons in biological hazards**

The protection of persons in a biological hazard, as in a chemical hazard, consists of several basic steps that need to be implemented: prevention, monitoring and warning, medical measures, anti-epidemiological measures, cooperation with the media in informing the public, and ensuring public order and safety.

By prevention we mean in particular legislative measures, preparation and training of professional rescuers, medical specialists. Furthermore, the collection, examination and evaluation of information, the conduct of basic and applied research, the creation of vaccines, disinfectants, disinsecticides and exterminating agents, the provision of means of individual and collective protection, the preparation of the population for self-protection and mutual assistance and, finally, the prevention of uncontrolled leakage of biohazardous substances from microbiological laboratories.

Monitoring and warning means monitoring by stationary and mobile means, sampling, evaluation of the biological situation, warning of the population and notification of persons, and the action of the population according to emergency information from mass information media.

Health measures are understood as securing the site of the outbreak with regard to the possibility of spread, decontamination of affected persons, removal of affected persons, isolation of patients, diagnosis and treatment of affected persons, containment, quarantine, specific prophylaxis, disinfection, disinsection and deratisation, decontamination of premises, materials and equipment, including disposal of contaminated waste, anti-epizootic measures.

Anti-epidemiological measures mainly concern the training of general practitioners, the operation of special facilities, the updating of population protection plans, and the updating of trauma plans.

In case of a suspected spill or a spill of a biological substance or the use of biological agents, the following procedure is recommended. When the siren warning signal sounds while inside the building, persons should remain inside or take shelter in a shelter (if available). Subsequently, it is necessary to create an isolated enclosed space, i.e. close and seal windows, doors, ventilators, shut down air conditioning. Prepare improvised protection for respiratory tract, eyes and exposed body parts, turn on the radio, television and watch the broadcast and follow the broadcast instructions, prepare evacuation luggage. Telephones should be used only in an emergency so as not to place unnecessary strain on telephone lines. If necessary, assistance should be given to the sick, disabled, persons unable to move, the elderly and to unattended children. One of the requirements is to maintain composure and calm. Persons are not allowed to leave buildings until instructed to do so.

Of the above activities, it is especially necessary to focus on strict compliance with quarantine hygiene, anti-epidemiological and anti-epizootic measures, to monitor the information on the situation provided by the local government, to regularly check body temperature, to report suspected disease, or increased incidence of diseases in persons and animals to the municipal authorities or to the catchment area health facility, or to the civil protection authorities, restrict movement outside the building and leave the building only for the necessary time (e.g. to purchase basic necessities of life), carry out disinfection in their flats and houses on an ongoing basis within the limits of their capabilities.

When a quarantine is declared, there shall be a ban on the Council of persons and on free movement outside enclosed areas without wearing protective equipment.

The basic measures to protect the population from the effects of biological hazardous substances include: monitoring of the territory, warning of the population and notification of persons involved in dealing with the consequences of the emergency, evacuation of persons, regulation of the movement of persons and means of transport, first pre-medical aid and first medical aid to the population, use of special means of individual protection by their employees and persons taken into care, hygienic cleansing of persons,

veterinary measures in the field of veterinary care, ensuring the protection of workers in the facility who cannot finish their work activity and are in the area of danger, elimination of the leakage of hazardous substances and prevention of their uncontrolled spread.

Additional measures in view of the possibility of a release of a biological substance are specific prophylaxis of persons, and disinfection, disinsection and extermination of the area at risk.

Broad-spectrum and specific prophylaxis shall be applied in the event of a release of biological agents, which is the provision of a system of measures to prevent disease or the spread of disease in accordance with specific regulations.

Disinfection, disinsection and extermination (hereinafter referred to as DDD) is divided into protective (preventive) DDD, outbreak DDD, which is carried out as long as the risk of transmission and the emergence of other infectious diseases in the outbreak persists (intermediate) and before the declaration of the end of the outbreak (final).

Disinfection is characterised as a chemical or physical process by which the growth, multiplication or existence of bacteria and viruses is partially or completely inhibited. It is carried out with solutions of chemicals by sprinkling or wiping surfaces. Disinfestation is a chemical or physical process aimed at destroying insects that pose a risk of transmitting pathogens. Extermination is an activity aimed at destroying (reducing the incidence of) rodents (mice, rats) that pose a risk of transmitting pathogens.

The immediate threat of biological agents is announced by a 2-minute fluctuating tone and mass media, the end of the threat is announced by a 2-minute steady tone, without repetition, and by mass media.

In terms of regime measures, the area of the expected threat is divided into the zone of immediate threat (the occurrence of a threat to life, health), the protection zone (the possibility of occurrence in the subsequent transmission through natural transmission routes). In the case of a release of biological hazardous substances, the determination of the size of the area of threat is the responsibility of the authorities of the Ministry of Health of the Slovak Republic and the Ministry of Agriculture of the Slovak Republic.

In general, there are six basic types of organisational arrangements:

- **Intensive medical surveillance** - Active search for infectious patients, carrying out special medical examinations followed by isolation and hospitalization. The measure is organised in cases where the sick are not the source of infection (for most animal-to-human transmissible diseases).
- **Obsession** - is introduced when a very dangerous infection is suspected. It involves intensive medical and veterinary surveillance with additional measures. It includes restrictions on entry, exit and engine passage. vehicles, a ban on the export of material without prior disinfection (or disinsection and deratisation) with the approval of a doctor and a veterinarian. This is usually the

area around the quarantine area, approximately 5-20 km away, where the epidemiological situation is strictly monitored.

- **Quarantine** - All surveillance measures shall be maintained and supplemented by additional measures. In particular, a strict closure and guarding of the area shall be organised, a prohibition of exit from the area of infection, prohibition of Council of citizens, distribution of citizens according to the severity of the disease, supply only via a defined contact point, control of regime measures, control of quarantine measures, health education (plague, cholera, etc.)

The mode of life in a threatened area is characterized by organized and controlled contact between the unaffected area and the threatened area, which is carried out through entry points. The quarantine area and the people in it are divided into smaller units which are monitored separately. For an isolated area, the supply shall be provided in such a way that spread of the disease. Body temperature is taken twice a day and recorded, as well as other data relating to household members. The records are handed over to the Slovak Red Cross patrol or civil protection unit. No one may leave the quarantine area who does not have the appropriate permit. Prohibition of movement and Council of residents shall apply. To carry out DDD in the area of threat, to destroy infectious disease agents or their vectors. Persons shall be protected by personal protective equipment (PPE) or improvised PPE as directed. Hygiene principles shall be strictly observed and hygiene rules. Disinfection of hands, shoes and gloves must be carried out frequently, e.g. by wrapping door handles with fabric saturated with disinfectant before entering the building. All affected persons shall carry out special cleansing of persons as soon as possible. A quarantine in a district shall be declared by the head of the district authority (hereinafter referred to as 'the authority') on the proposal of the competent district health and veterinary authorities. The quarantine shall be terminated if there is no further case of the disease in the isolated group for a period corresponding to the maximum incubation period of the disease concerned.

### **11.2.3. Procedures in case of highly dangerous diseases in the Slovak Republic**

Highly dangerous contagion (hereafter referred to as 'VNN') is an 'inter-human', rapidly spreading infectious disease that poses a significant health risk.

The clinical symptoms of VNN depend on the causative agent of the disease. The most common manifestation is high fever and any of the other clinical signs, including a positive epidemiological history such as: 1. Bleeding (from body orifices, skin or body cavities) 2. Intense cough, headache, joint or muscle pain, vomiting, diarrhoea, abdominal pain or other clinically severe symptoms such as impairment or loss of consciousness, or failure of vital signs 3. Indications that the ill person reports in the past three weeks: Residence in exotic countries (endemic area), or direct close contact with persons who have been to these areas and exhibited similar signs of illness on contact, or percutaneous (needle) wounding or mucosal exposure to body fluids, tissues, or biological material of

a probable or confirmed case, participation in burial rituals without personal protective equipment, direct contact with animals or eating or touching the flesh of wild animals in endemic areas.

VNN is characterised by a severe clinical course in the acute phase of the disease, possibly with a high mortality rate or leaving serious permanent clinical sequelae. It may have a serious public health impact, requiring special preventive measures, a higher degree of biosecurity and a higher level of technical support in laboratory work (depending on the pathogenicity, the threat to public health, the handling of biological material, the possibility of treatment and prophylaxis).

The issue of transmission of highly dangerous diseases is still relevant today. Intercontinental migration and open borders in Europe are risk factors for the transmission of these diseases. The Emergency Health Service has reflected on the guidance of the Chief Hygienist of the Slovak Republic - on the coordination of procedures for the detection of highly dangerous diseases in the territory of the Slovak Republic. Every year, a plan of the main tasks is issued by the crisis management of the Košice Rescue Service, where these procedures are constantly practiced and at the same time the readiness of the IZS components is checked. Košice Rescue Service has BioHazard crews (Figure 11.13) in Košice, Prešov and Žilina regions. This is the type of ambulance crew that is in the network of crews, which provide emergency medical care and, following a call from the emergency medical services operations centre, can intervene in the event of a suspected highly dangerous infection.



Figure 11.13: BioHazard crew (Source: Majlingová et al., 2019)

The focus is on eliminating the transmission of the disease and preventing the spread of the disease to other populations. The procedure for detecting a highly dangerous disease based on the guidance of the Chief Hygienist of the Slovak Republic (2015) is as follows.

- The Regional Operations Centre of the Ambulance Health Service (hereinafter referred to as "KOS ZZS") receives a request on the emergency line from a caller to provide urgent care to a person with symptoms of an infectious disease.

- The KOS ZZS, through verbal communication and by answering relevant questions, ascertains initial lay clinical and anamnestic epidemiological data from the person.
- KOS ZZS upon suspicion of a disease of HAV, immediately report the incident to the territorial competent regional hygienist of the Regional Office of Public Health (hereinafter referred to as "RUVZ") according to the place of detection of the disease.
- Based on positive clinical and anamnestic epidemiological data, the territorially competent regional hygienist of the RUVZ according to the place of detection of the infection shall immediately order: the KOS of the Ambulance Service to send a designated crew of the Emergency Medical Service (hereinafter referred to as "EMS") with the assistance of the police to carry out safe (isolated) transport of the person suspected of being ill with VNN to a designated infectiology workplace; and the epidemiologist to carry out anti epidemic measures in the caller's home.
- The territorially competent regional hygienist of the RUVZ according to the place of detection of the disease shall request the competent regional hygienist of the RUVZ based in Bratislava or the RuVZ based in Banská Bystrica or the RUVZ based in Košice to issue an order to the designated infectiology unit to prepare for the admission, isolation and provision of health care to a person suspected of having contracted VND.
- KOS ZZS based on the order of the territorially competent regional hygienist RUVZ according to the place of detection of the disease sends a designated crew of ZZS with the assistance of the police to the facility to carry out safe (isolated) transport of a person suspected of being ill with VNN.
- The ambulance crew, assisted by the police, will safely (isolated) transport the person suspected of having an VNN to a designated infectiology unit.
- The staff of the designated infectiology workplace, based on an order of the competent regional hygienist of the Regional Health Inspectorate based in Bratislava or the Regional Health Inspectorate based in Banská Bystrica or the Regional Health Inspectorate based in Košice, shall take over, isolate and provide medical care to a person suspected of having contracted VNN.
- After the above measures have been taken, the territorially competent regional sanitary inspector of the RUVZ according to the place where the disease was detected shall report the incident and the measures taken to the Chief Sanitary Inspector of the Slovak Republic.
- The Chief Hygienist of the Slovak Republic shall notify the Minister of Health of the occurrence and the measures taken and shall take measures to monitor the results of microbiological tests of biological samples taken from a person suspected of having contracted VNN and shall also determine which microbiological workplace will carry out laboratory diagnostics.

A graphical overview of the ZZS stations designated for intervention in the event of a VNN occurrence is presented in Figure 11.14.



Figure 11.14: Graphical overview of the ZZS stations designated for intervention in the event of an outbreak of VNN (Source: ÚVZ SR 2015)

Tasks of the Operational Centre of the Slovak Emergency Medical Service:

- KOS ZZS will take over the decision of the regional hygienist to carry out safe isolated transport of a person with suspected VNN. The decision of the Regional Hygienist will be given verbally and subsequently in writing.
- Based on the decision of the regional hygienist, the KOS ZZS operator will instruct the relevant ZZS crew to carry out a safe isolated transport of the person with a suspected case of VNN. The instruction shall specify the place of intervention, the use of personal protective equipment (hereinafter referred to as 'PPE') and biohazard bag for protection against HAV and the target infectiology workplace.
- The operator of KOS ZZS shall request the Police Corps of the Slovak Republic for cooperation and assistance to carry out a safe isolated transport of a person suspected of being ill with VNN to the appropriate infectiology workplace.
- The ZZS KOS operator informs the control and monitoring operation centre of the ZZS SR about the receipt of the decision of the regional hygienist and about the dispatch of the EMS crew and police assistance to carry out a safe isolated transport of a person with suspected VNN.

- On receipt of information from the EMS crew about readiness to perform safe isolated transport, notifies the infectiology department of the estimated time of arrival of the ZSS crew and requests information about readiness to receive the patient.
- The KOS ZZS operator will instruct the EMS crew to initiate safe isolated transport.
- During the transport, the KOS ZZS operator communicates with the EMS crew and obtains information about the health status of the transported person.
- The KOS ZZS operator receives information from the EMS crew about the handover of the person to the infectiology workplace and issues instructions for transfer to the EMS crew station area.
- In case of receiving a call to the emergency line, the KOS ZZS operator will identify the suspect person of VNN disease in the household, in addition to the clinical symptoms, he/she shall also take a travel history. He/she then contacts the relevant regional public health authority and consults on further action.

#### Tasks of the Emergency Medical Service:

- A designated EMS crew to carry out safe isolated transport of a person suspected of having VND shall be dispatched by the relevant ZZS KOS.
- Upon arrival at the scene, the EMS crew will don PPE and prepare the bio bucket for use.
- Provide the person suspected of having VNN with urgent medical care, establish basic identification data about the person, place the person in a biohazard.
- Performs, via a manual decontamination kit, surface disinfection of the bioweapon surface and mutual surface disinfection of PPE.
- After the exposure period of the disinfectant solution has elapsed, the surface of the bio bag and the protective clothing are rinsed with clean water using a manual decontamination kit, the protective clothing is taken off and placed in transport containers.
- He'll load the biohazard into the ambulance.
- Notify the police escort of the start of the transport and the description of the transfer.
- Announce KOS ZZS readiness to commence safe isolated transport and the estimated time of arrival at the designated medical facility.
- During transport, it monitors the health status of the person in the bio bucket, the functionality of the filtration-ventilation unit of the bio bucket.
- Upon arrival at the hospital area, he will unload the bio bucket from the ambulance and transfer it to the isolation unit, where he will place it on the prepared bed.
- He/she shall pass on information about the person in the bio bucket and his/her state of health to the doctor of the infectiology department.

- Notify the KOS ZZS of the transfer of the person suspected of having VNN to the appropriate infectiology department.
- After returning to the station of the EMS provider, he/she carries out an extraordinary disinfection of the entire mobile ambulance of the EMS, its material and technical equipment using the decontamination solution prescribed for the use in case of VNN, from which the isolated person is suspected.

### **Forces and means of the health sector dedicated to the implementation of activities in the event of an outbreak of a highly dangerous disease in the Slovak Republic**

The preparedness of the Department of Health for the implementation of activities in the event of a possible outbreak of highly dangerous infections (hereinafter referred to as "VNN") is ensured through health facilities, which enter into technology-driven processes to take the necessary measures to ensure the elimination of the spread of VNN and the implementation of measures aimed at protecting the public health of the Slovak population. Considering the probability of the place of possible occurrence of VNN in the health department, the following health facilities are included in this issue:

- a general practitioner's surgery for adults or a general practitioner's surgery for children and adolescents or an ambulance service for first aid,
- a central receiving department or another department of the healthcare facility,
- an ambulance crew.

Since the detection of a possible occurrence of a person with suspected VNN disease will usually be unexpected and sudden, this imposes requirements for equipping the above-mentioned health facilities with basic PPE and, in connection with other activities, with the necessary equipment serving to isolate the source of the HNS, the safe isolated transport of the sick person to the appropriate specialised department and PPE for medical and authority staff for the protection of public health for the implementation of basic anti-epidemic measures.

A specific requirement arising from the possible occurrence of a person with suspected of VNN disease is the preparedness of the ambulance crews for the possible detection of a person with suspected VNN disease within the framework of their intervention carried out to provide emergency medical care in the home. Such a threat implies the necessity for an ambulance crew dispatched to provide emergency medical care in the home, as per preliminary communication with the ill person, to be equipped with PPE.

Therefore, the preparedness of the above mentioned health facilities in terms of the location of a possible VNN outbreak requires:

- Routine provision of PPE such as protective drapes, disposable gloves, goggles and their use in routine practice by health care personnel.
- In case of suspected VNN, equip medical personnel with protective clothing at least at BSL 3-4 level, transport isolation equipment, manual decontamination kit.
- Equipping infectiology workplaces with isolation chambers with decontamination units.
- Regular training of health personnel in the principles of PPE use and disposal of hazardous biological waste.
- Regular training of health personnel on how to ascertain anamnestic and clinical data on a person suspected of having VNN.
- Ensuring that the room is ready for temporary insulation or an isolation chamber (isolator).
- Managing the system of staff communication with the concerned health elements (KOS ZZS, with the designated infectiology unit and with the RUVZ) to carry out further activities.
- Ensuring the availability of sufficient disinfectants and equipment to carry out disinfection of the premises of the VNN site and the PPE used.

The above shows that the Department of Health is addressing the possible occurrence of VNN:

- Healthcare facilities where a person with suspected VNN is most likely to be present, i.e. an adult general practitioner's surgery or a paediatric general practitioner's surgery or a first-aid clinic, a central admissions department or other department of a healthcare facility, and the home.
- Designated health care providers, that is, emergency medical services crews designated as biohazard teams, designated infectious disease clinics and public health authorities.

The resources available to the Department of Health to address the potential occurrence of VNN are:

- **Basic PPE such as protective drapes, disposable gloves, goggles, disposable disinfectants, plastic containers for biological waste.**
- **Special protective clothing with filter-ventilation units, providing protection for personnel at BSL level 4.**
- Isolation chambers for the temporary accommodation of a person with suspected VNN disease at BSL level 3+.
- Transport isolation equipment providing safe isolated transport of a person suspected of being ill with VNN ensuring protection of personnel at BSL level 4.
- Isolation chambers with a decontamination unit located in the infectiology departments to allow the storage of a person suspected of being ill with VNN for the purpose of providing healthcare at BSL level 3+.

- Hand-held decontamination kits enabling surface disinfection of protective clothing of the intervening ZZS personnel and surface disinfection of transport isolation equipment.
- Supplementary assortment used for decontamination of transport isolation agent, such as decontamination barrel, hangers for drying and storage of decontaminated protective clothing, hepa-filters for filter-ventilation units for protective clothing and transport isolation agents, and chargers for filter-ventilation unit sources.
- Pathology bag.

#### 11.2.4. Protection of persons against the effects of radioactive hazardous substances

Exposure pathways in the event of an accidental release of radioactive substances:

- Direct exposure from the crashed equipment (workers, emergency services, dosimetry personnel).
- Direct exposure from a radioactive cloud (gamma radiation).
- Inhalation, inhalation of radioactive substances (gases, vapours, aerosols).
- Exposure from radioactive fallout (gamma radiation).
- Contamination of clothing and body surfaces (alpha, beta, gamma emitters).
- Consumption of contaminated food.
- Use of water.

**Direct exposure from a crashed facility:** workers at the nuclear power plant or residents in the immediate vicinity are exposed. Nuclear power plant workers are regularly trained in health protection in the event of a radiation or nuclear accident and have special protective equipment is available. Similarly, emergency services are trained and equipped.

**Direct exposure from a radioactive cloud:** how and in what concentrations it will propagate depends on the course of the accident and the atmospheric conditions around the nuclear installation (temperature, pressure, wind, rain). It is necessary to restrict movement in the open and to take shelter in buildings. The best protection against direct radiation from the cloud is provided by underground rooms, cellars or special shelters.

**Inhalation, inhalation of radioactive substances:** radioactive substances released into the atmosphere are dispersed in the air, depending on weather conditions, where they can be trapped on solids, water droplets, etc. When they enter the breathing zone of a person, they can penetrate into his or her body, causing dangerous so-called internal contamination through the respiratory tract. While in the body, they irradiate internal organs. To prevent radioactive substances from entering the body, it is necessary to protect the respiratory tract. It is not necessary to use special protective masks; an ordinary handkerchief, a piece of cloth, etc. will suffice. It is recommended to put toilet paper in the folded

handkerchief as an additional filter insert. It is necessary to seal the windows and doors well, e.g. with insulating tape.

Among the significant elements released into the air in an accident are radioisotopes of iodine (radioactive iodine), which account for up to 40% of all radioactive substances from the accident nuclear facility. When inhaled, iodine enters the bloodstream and is stored in the thyroid gland, which it irradiates. An effective protective method to prevent the deposition of radioactive iodine in the thyroid gland is **iodine prophylaxis**. Based on expert advice, it has been decided that iodine preparations will be distributed to residents living within 30 km of an operating nuclear power plant. When a radiation or nuclear accident is declared and if called upon, residents will take the specified doses of potassium iodide. *The use of higher doses of potassium iodide does not increase the protective effect.*

**Exposure from radioactive fallout:** radioactive substances from the cloud can settle on the surface of the ground, buildings, plants and can cause radiation exposure to people and animals. Dosimetry measurements allow an objective assessment of the situation. Based on the results, protective measures such as curfews and evacuations are taken according to pre-arranged plans. Special cleaning (decontamination) of the territory, buildings, roads, terrain, vehicles and other objects is used to remove radioactive contamination in the affected area. It is carried out by special means of the Ministry of the Interior of the Slovak Republic.

The swirling of radioactive dust deposited on the ground is prevented by watering, humidifying, using foam or covering with various foils.

*The comprehensive special clean-up* is repeated before the scheduled arrival of evacuees and the radiation levels are checked with dosimeters afterwards. Based on the results obtained, a decision will be made on the further use of the area. Attention shall be paid to watercourses and local sources of drinking water.

*Evacuation of the population* is also an effective protective measure. The evacuation shall be decided by the evacuation committee according to an evacuation plan prepared in advance, in which routes are determined and evacuation points depending on the direction of the wind and the movement of the radioactive cloud. Evacuation shall be carried out in order to protect the health and lives of the population. Therefore, the instructions and regulations of the organisers must be respected.

**Contamination of clothing and body surfaces:** ionising radiation can affect humans as an external source (a radiator outside the body) or an internal source (a radionuclide in the body). A definite precursor to internal contamination is radioactive contamination of clothing and body surfaces. Effective protection is provided by covering the body (e.g. with a plastic jacket), using goggles, helmets, gloves, rubber boots. The more layers of clothing used, the better the protection against body contamination. When moving from one place to another, layers of clothing should be removed to avoid

transmitting higher activity where lower activity is anticipated. When undressing, preferably with clean parts of the body, do not touch dirty parts of the clothing. Do not reuse respiratory protective equipment, but place it in a plastic bag or bucket etc. located at the entrance to the house when you return. If the entire surface of the body is contaminated, special cleaning (decontamination) must be carried out, which must be both effective and gentle, so that radioactive substances are not allowed to enter the body. The most effective method of decontamination is to take a shower with lukewarm to cold water (it does not dilate the pores of the skin). Common detergents, soaps, shampoos, etc. can be used to cleanse the body and hair. There is no need to use intensive special products. It is not recommended to use deodorising sprays, colognes, aftershave after showering as they can cause radioactive substances to penetrate the body.

**Consumption of contaminated food:** The amount of radioactive contamination plays a decisive role in the harmful effects of food. No or very low contamination is assumed for canned food, food stored in refrigerated facilities, packaged food stored in buildings. After a radiation or nuclear emergency has been declared, it is advisable to provide food with additional packaging, e.g. put it in plastic bags, store it in refrigeration equipment, lockable cabinets, suitcases, boxes, etc. It is also advisable to think about pets and, if possible, cover their food with plastic sheeting.

The usability of contaminated food is determined by the half-life of the contaminating radioactive substances. By appropriate treatment, e.g. drying, canning, freezing, it is possible to preserve the food until such time as the short-lived radioactive substances have died out and the food has become harmless in terms of radioactivity. Food contaminated with long-lived radionuclides cannot be used and must be destroyed in accordance with the specified principles

*Disposal of contaminated food:* One of the critical tasks is to prevent the degradation of underground sources of drinking water. Radioactive food is not buried in the ground but stored in plastic bags until final disposal. Expert assistance will be provided by the Regional Public Health Office.

**Use of water:** the level of radioactivity of the water is continuously monitored. If contamination of drinking water is detected, it shall be supplied from alternative sources or distributed by tanker. Drinking water from individual water sources can be used without significant risk, from deeply drilled and cased wells. Here too, water contamination should be prevented, e.g. by effectively sealing the well casing or covering it with plastic.

The protection of the population and the environment against radioactive substances and ionising radiation from both man-made and natural sources is based on information on the state of the radiation situation.

The actual protection of the population, property, life and the environment is carried out with regard to:

- the amount of radioactive hazardous substance released,

- the pathway for the release of a radioactive hazardous substance,
- conditions for the dissemination of a radioactive hazardous substance,
- population density,
- the time elapsed since the release of the radioactive hazardous substance.

Protective measures to prevent, cope with or mitigate the consequences of accidents are elaborated in the emergency plan in the event of an accident associated with a release of radioactive and hazardous substances

from nuclear power installations.

**Radiation protective measures** are intended to reduce or eliminate the consequences of hazardous substances, to ensure the protection of the population in the event of an emergency (hereinafter referred to as "MU"). In terms of the possibility of emergency occurrence, these measures are divided into:

- Basic
- Supplementary

**The basic measures** are:

- monitoring of the territory,
- warning and notification of the population ,
- evacuation of the population,
- regulation of the movement of persons and means of transport,
- first pre-medical and medical aid,
- the use of special personal protective equipment,
- hygienic cleansing,
- veterinary measures,
- ensuring the protection of workers on the premises who cannot finish their work and are in the area of danger,
- elimination of spills of hazardous substances and prevention of their uncontrolled spread.

**Complementary measures** are:

- special cleaning of terrain, buildings and materials,
- concealment of persons,
- disinfection, disinsection and extermination of the threat area.

**Territory monitoring** is carried out in accordance with the Decree of the Ministry of the Interior of the Slovak Republic No. 533/2006 Coll. on details of protection of the population against the effects of hazardous substances. Territorial monitoring is a measure necessary to detect and assess the situation before the occurrence of an emergency situation, during its duration and after the consequences have

been eliminated. The aim of monitoring the area under threat is to assess the state of the environmental compartments which are threatened by the operation of a facility handling radioactive substances and which may endanger life, health or property in the event of an emergency involving the release of radioactive hazardous substances. The operator of the source of the hazard shall be involved in ensuring the monitoring of the area within the hazard area. Depending on the type of contamination in the event of a release of hazardous substances, monitoring is divided into: - chemical monitoring - radiation monitoring - biological monitoring

**Radiation monitoring** is carried out in order to detect the actual radiation situation in the territory and in the event of emergencies related to the release of radioactive substances. Radiation monitoring shall be carried out continuously by stable monitoring equipment. Radiation monitoring, like chemical monitoring, shall be carried out by civil protection units of the facilities equipped with dosimetry instruments. Chemical and radiation surveys shall be carried out networks of radiation level detectors and mobile survey units shall be put on standby.

*Radiation level detectors* (RLDs), i.e. automatic devices registering ionising radiation continuously or at set intervals, with an acoustic or light signal connected to a warning device, are used to detect radioactive radiation.

The following are used as radiation level detectors:

- intensimeters: used to detect the degree of dose rate,
- radiometers: used to measure the degree of contamination,
- radiation indicators.

The CO control chemical laboratories are equipped with a mobile radiation laboratory, which:

- monitor the gamma radiation situation in the air,
- provide and coordinate the monitoring of the radiation situation in the crisis management departments of the district offices,
- carry out analyses of soil, water and food chain samples to detect the presence of artificial and natural radionuclides,
- provide measurements and expertise in the transport of commodities with elevated ionising radiation (legal transport, interception of illegally transported).

Monitoring of the radiation situation is carried out:

- continuous (gamma equivalent dose rate in air by radiation monitor RM - 60 )

- periodically (designated locations at regular intervals with the DC-3E-83 radiometer and gamma spectrometric monitoring of radionuclide content in soil, equivalent dose rate at stationary sites)
- operational (measurement and monitoring in case of radiation accidents, accidents, interception of suspicious materials).
- as personal (monitoring of sites with sources of ionising radiation for the personal protection of workers with personal dosimeters)

The aim of the **radiation survey** is:

- detect the type and degree of contamination in a timely manner,
- inform the population about the dangers of radioactive contamination,
- to establish the background to the radiation situation for the governing bodies.

Principles of radiation survey:

- timeliness,
- continuity,
- credibility.

In order to protect the population and establish a regime of life, it is necessary to ascertain:

- the occurrence of contamination for an early declaration of a general alert signal,
- observe the progression of contamination levels,
- basic data on contamination of persons, animals, food, feed, machinery and materials,
- the contamination level falls below a specified limit and the general alert signal is withdrawn.

## QUESTIONS

1. [Give the definition of hazardous substances according to Act No. 42/1994 Coll.](#)
2. [Which hazardous chemicals are most frequently found in the Slovak Republic?](#)
3. [Define the difference between lethal and inhibitory dose.](#)
4. [Name the most well-known diseases caused by viruses.](#)
5. [Explain the difference between the protection of persons in chemical and biological hazards.](#)



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Slovak Republic No. 67/2010 Coll. on the conditions for placing chemical substances and chemical mixtures on the market and on amending and supplementing certain acts (Chemical Act).

## 12. RESCUE WORKS

Rescue works are *activities to save the life, health of persons and property, and to remove them from endangered or affected areas*. Rescue works include activities to prevent the spread and effects of the consequences of an emergency and to create the conditions for the elimination of the consequences of an emergency.

***The aim of the chapter is to learn and understand the concept of rescue works, to know the activities that are carried out as part of the performance of rescue works, the organization of the performance and management of rescue works.***

### 12.1. RESCUE WORK WITHIN THE MEANING OF THE PROVISIONS OF THE CIVIL PROTECTION OF THE POPULATION ACT

Details on the provision of rescue works and the organisation of civil protection units are provided in [Decree of the Ministry of the Interior of the Slovak Republic No. 523/2006 Coll.](#), which is also an implementing decree to [Act No. 42/1994 Coll.](#) on civil protection of the population, as amended.

Rescue works are carried out by:

- **First responders of the [Integrated Rescue System](#)** (hereinafter referred to as "IRS"): Fire and Rescue Service (FRS), Emergency Medical Service (EMS), Civil Protection Control Chemical Laboratories (CO CCHL), Mountain Rescue Service (MtRS), Mining Rescue Service (MRS);
- **Other responders of the IRS:** Armed Forces of the Slovak Republic (municipality/local voluntary fire brigades, enterprise fire brigades/departments, workplaces performing state supervision, civil protection units (COU), Municipality Police, Slovak Red Cross, other legal entities and natural persons, the object of whose activity is to provide assistance in the protection of life, health, property and the environment;
- **persons called upon for personal acts.**

***Rescue works are carried out depending on the type, extent, and time of the emergency.***

Ministry of Interior of the Slovak Republic, the district office in the seat of the region and the district office may send to the place of occurrence of an emergency to the headquarters of ***the commander of the intervention*** or to the crisis headquarters of a lower management level.

Tasks and orders in rescue work are issued to:

- putting forces and resources on standby,
- development of the management staff site,
- planning a safe reserve place,

- designation of roads for rescue work,
- enclosure of the threatened or affected area,
- creating conditions for the survival of vulnerable or affected populations,
- the completion of work in an area threatened or affected by an emergency,
- the profession for personal acts,
- a call to performance in kind,
- recall of subjects after rescue work has been carried out.

Measures to ensure the activities of entities carrying out rescue work include:

- drinking water and food supply,
- supply of electricity for lighting and operation of workplaces and drive aggregates,
- fuel supply,
- material provision of civil protection units,
- financial security.

## 12.2. ACTIVITIES CARRIED OUT DURING RESCUE WORK

The activities carried out during rescue work include in particular:

- **warning the population and notifying persons** at risk of an emergency and when the situation changes during rescue operations,
- **conducting reconnaissance and observation in the affected area** to locate persons affected by the emergency, to mark contaminated and life-threatening areas,
- **rescuing affected persons** from the rubble of destroyed and disturbed buildings, wreckage of vehicles, protective structures, flooded areas and burning buildings,
- **supply of air and water to persons** in flooded areas and protective structures,
- **individual protection of persons in the contaminated area** and their removal from the area,
- **provision of first pre-medical aid and emergency medical care to injured persons**, including removal of the injured to medical facilities,
- **locating and eliminating fires** threatening affected persons and deployed forces and resources,
- **control of contamination and exposure of persons**, control of contamination of the territory, air and buildings,
- **provision of iodine and special prophylaxis**,
- **hygienic cleansing of affected persons**,

- **elimination of spills of hazardous substances** and prevention of their spread,
- **special cleaning and decontamination of the territory**, buildings, premises, means of transport and communications necessary for the operation of deployed forces and assets,
- **disinfection, disinsection and extermination of the territory**, buildings, premises, means of transport and communications necessary for the activities of the deployed forces and assets,
- **regulating the movement of people and vehicles** in the affected area,
- **Closure of the affected area**,
- **protection of affected persons and deployed forces and assets from adverse weather** and the consequences of the emergency,
- **removal of uninjured persons from the affected area**,
- **emergency supply and emergency accommodation persons who are deprived** of the necessities of life because of an emergency,
- **providing veterinary assistance to affected and endangered animals** and carrying out veterinary cleansing,
- **disconnection of damaged power grids** and equipment threatening affected persons, deployed forces, and assets,
- **monitoring of the affected area and control measurements**,
- **strengthening or demolition of damaged structures**, buildings and structures endangering affected persons and deployed forces and assets,
- **releasing impounded watercourses**,
- **clearing of designated roads and railway lines**, creation of passages and crossings necessary for carrying out rescue work and removal of affected persons,
- **pumping and discharging water from flooded parts of buildings and the area** where rescue work is being carried out,
- **capture of oil products in watercourses and areas**,
- **identification, removal, and burial of the dead**,
- **storage, removal and disposal of contaminated material and ecological remediation of hazardous substance residues**,
- **psychological help and spiritual help**.

After completion of rescue works, to claim reimbursement of expenses related to the rescue works carried out during the emergency situation according to the [Decree of the Ministry of the Interior of the Slovak Republic No. 599/2006 Coll.](#), which establishes the details of expenses for civil protection of the population from the state budget funds, as amended, and the *"Instruction of the DG of the IZCO Section*

of the Ministry of the Interior of the Slovak Republic No. IZCO-48-44/2012 of 17 December 2012 on the claiming of reimbursement of the actual expenses for the civil protection of the population from the funds of the state budget through the budget chapter of the Ministry of the Interior of the Slovak Republic (No. 5)/XXVI/5)" at the territorially competent district office, in the case of flood rescue works according to the [Decree of the Ministry of the Environment of the Slovak Republic No. 251/2010 Coll.](#), which establishes the details on the evaluation of expenditures for flood protection works, flood rescue works and flood damage.

### 12.3. RESCUE MANAGEMENT

Rescue work shall be managed based on the actual situation and its expected development as expressed on a map in the plan or in a geographical information system (CIPREGIS).

When determining the tasks for carrying out rescue work, it is based primarily on the needs to carry out the work so that, while ensuring the safety of persons carrying out rescue work, first aid is effectively provided to the rescued and affected persons, while care must be taken to ensure that the rights and protected interests of the owner, administrator the rights and interests of the owner, occupier or tenant of the property and to prevent further damage.

**Before issuing an order to carry out rescue work**, it is necessary to assess the situation after the emergency, in particular to assess its extent and impact on the lives and health of persons, as well as the extent of material and financial damage to the affected area.

***Rescue work shall be controlled from the control position or from a back-up control position.***

If the situation permits, rescue work may be directed from a location close to the area of the threat or the occurrence of the emergency.

**A control site** is an area adapted for the management of rescue operations if the evolution of the situation permits.

If the situation does not allow the rescue work to be managed from the control position, the management shall be carried out from a back-up control position.

**A back-up management site** is an area not threatened by an emergency, modified for the management of rescue operations.

Documentation is processed, maintained, and recorded to ensure rescue work. The documentation shall be kept in writing, graphically on maps, in plans or on recording media and shall be divided into:

- management documents, in particular processed orders, recorded tasks, maps, plans and diagrams,
- reporting and information documents, in particular completed forms, spreadsheets, logbook,

- auxiliary documents, in particular records of calculations, summaries, recording and filing aids, prepared forms.

The content, scope and form of the documentation to be processed and maintained shall be determined by the legal entity and the natural person - entrepreneur for the activities carried out in the premises they own or uses.

The content, scope and form of the documentation to be processed and maintained shall be determined by the municipality, district office and the district office in the seat of the region for the activities carried out within its competence.

After the salvage work is completed, a selection of documentation is made for its further use.

## 12.4. INTEGRATED RESCUE SYSTEM OF THE SLOVAK REPUBLIC

The creation of conditions for the establishment of the Integrated Rescue System, the establishment of coordination centres of the Integrated Rescue System as well as the establishment of the emergency call line 112 is addressed in Slovakia by [the Act of the National Council of the Slovak Republic No. 129/2002 Coll. on the Integrated Rescue System](#), as amended, which was approved by the National Council of the Slovak Republic on 15 February 2002 and entered into force on 1 July 2002.

**Integrated Rescue System** (hereinafter referred to as "IMS") defined as the ***coordinated action of its components in ensuring their preparedness and in carrying out activities and measures related to the provision of assistance in distress.***

**Distress** is characterised as a ***condition in which life, health, property or the environment is in imminent danger and the person affected is in need of urgent assistance.***

The focus of providing immediate professional, medical, technical and other assistance in distress based on the instruction of the coordination centre or the operation centre is placed on the basic rescue forces, which are parts of the Fire and Rescue Service, the Emergency Medical Service, the Mountain Rescue Service, the Mining Rescue Service and the Control Chemical Laboratories of Civil Protection. The Police Force participate in the provision of immediate assistance in distress within the scope of tasks pursuant to specific legislation.

The main organisational element of the IZS integrating the activities of rescue services is the **IRS coordination centres** (hereinafter referred to as "coordination centre") established as of 1 July 2003. The Coordination Centres also include the **Regional Emergency Medical Service Operations Centres**. They are organised and technically established in accordance with the concept until 2010 as part of the district offices in the county seat. The tasks of the coordination centre under the law are formulated in such a way that they can respond adequately to any situation involving the provision of assistance in

distress, it being irrelevant whether the threat was caused by an individual's accident or by the consequences of an emergency or other crisis. The linking of the coordination centres to the activities of the crisis staffs of the district offices in the county seat makes them an element in the crisis management system enabling a timely response to a 'standard scale' crisis.

The basic organisational components of the IRS are:

- Ministry of Interior of the Slovak Republic,
- Ministry of Health of the Slovak Republic,
- District offices in the county seat,
- Emergency components of the IRS.

**The Ministry of Interior of the Slovak Republic** manages and coordinates, among other activities, the performance of tasks in the field of the IRS and, in cooperation with the Ministry of Health, develops the concept of the organisation and development of the IRS. In cooperation with the Ministry of Health, it shall provide training for the staff of coordination centres, emergency call centres and dispatching centres, dispatch Integrated Rescue System rescue components to help in distress between regions, request assistance and dispatch Integrated Rescue System rescue components within the framework of international assistance and humanitarian cooperation.

**The Ministry of Health of the Slovak Republic** coordinates the preparation of trauma plans, which are obligatory to be prepared by health care institutions of inpatient health care to ensure the tasks related to the provision of assistance in distress in events with a high number of people in danger of life or health damage, and in cooperation with the Ministry of the Interior develops a concept for the organisation and development of the IRS.

**The district office in the seat of the region** coordinates and methodically manages the performance of tasks in the Integrated Rescue System on the territory of the region. For these purposes, it establishes a coordination centre, creates the technical conditions for its activities, decides on and pays compensation for expenses and damage caused by the emergency.

The basis of the IRS infrastructure are the **coordination centres**, whose priority task is to coordinate the activities of all IRS services in the territorial jurisdiction of the district office and to ensure the reception of emergency calls in the event of a threat to life, health or property. For this purpose, since 1 July 2003, a single European emergency number "112" has been established by the Telecommunications Authority on the public telecommunications network, as is the case in all European Union countries.

The IRS operates:

- First responders.

- Other responders.

**First responders** provide professional, medical, technical and other necessary assistance in an emergency without delay on the instructions of the coordination centre or their emergency call centre. During the period of preparation for an emergency, they shall carry out organisational, technical and other measures to provide assistance in an emergency and shall equip themselves with technical and material resources and participate in training for that purpose. They shall compile data on their activities, forces and means and submit them to the district authority in the county seat by the end of February for the previous calendar year; if they are emergency medical service providers, also to the Ministry of Health.

**First responders shall generally operate within its intervention perimeter** and the operation of basic rescue units in the IRS shall be without prejudice to their status as and tasks laid down by special legislation.

**The first responders of the IRS are:**

- Fire and Rescue Service.
- Emergency Medical Service Providers.
- Civil Protection Control Chemical Laboratories.
- Mountain Rescue Service.
- Mining rescue service.
- Police Force.

**Fire and Rescue Service:**

- performs tasks in fighting fires, helping, and carrying out rescue work in the event of accidents, natural disasters, and other emergencies, and in protecting the environment,
- helps in the case of a threat to the life and health of natural persons, property of legal entities and natural persons,
- carries out rescue works during emergency removal of structures and ice barriers,
- participates in the tasks of removing the wounded and sick, especially in the event of fires, accidents, natural disasters, and other emergencies, and in the provision of medical care under the conditions laid down in special regulations,
- is involved in providing emergency supplies and emergency accommodation for the population and humanitarian aid,
- participates in the eradication of outbreaks of animal diseases,
- within the scope defined by special regulations, it also participates in the performance of the tasks of the IRS, Civil Protection, in preparation for national defence and tasks related to mobilisation preparations.

**The Emergency Medical Service** provides emergency medical care to a person in the event of a sudden change in the person's state of health which immediately threatens the person's life or any of his or her essential life functions and the person is dependent on this type of assistance.

**The Civil Protection Control Chemical Laboratories (CO CCHL)** are specialised workplaces to address the issues of professional provision of protection of the population against the effects of hazardous substances with emphasis on conducting monitoring, expert, research, analysis, control, and educational activities in the field of hazardous substances and combating poisoning agents. There are 3 CO CCHLs:

- **CO CCHL Nitra** - performs tasks in Bratislava, Trenčín, Nitra and Trnava regions, its activities focus on the analysis of pesticides, herbicides, petroleum substances, phenols, heavy metals using ultraviolet spectrophotometry, gas chromatography and infrared spectrometry.
- **CO CCHL Slovenská Ľupča** - performs tasks in Banská Bystrica and Žilina region, deals with determination of petroleum substances in soil and water and organic toxic substances by infrared spectrophotometry and gas chromatography with mass spectrometer.
- **CO CCHL Jasov** - performs tasks in the Košice and Prešov regions, analyses heavy metals and inorganic toxic substances by ultraviolet spectrometry and determination of radionuclides with low activities.

**The Mountain Rescue Service** in mountain areas, including caves and chasms, organises and carries out rescue, transport, and emergency transport in the rescue of persons, in particular in cooperation with the Helicopter Emergency Medical Service.

**The Mining Rescue Service (MRS)** carries out activities related to rescuing people and property in mining accidents, but also to securing mining operations against mining accidents. Among the main and certainly the most important task of the MRS is the rescue of miners working underground who are in danger of their lives. Rescue operations consist in bringing them out or carrying them out of endangered areas and is also connected with providing first aid. Rescue activities are not always directed only underground but are also carried out on the surface when the progress of underground work is threatened.

**The units of the Police Corps** participate in the provision of immediate assistance in distress within the scope of the tasks of the Police Corps based on an instruction from the Police Corps Operations Centre. They shall carry out organisational, technical and other measures related to their activities in the Integrated Rescue System and participate in training with the rescue forces. They process data on their activities, forces and resources for the needs of the district office.

**The Police Corps Operations Centre** shall ensure the reception of the emergency call and its evaluation, and shall immediately inform the Coordination Centre and the relevant Emergency Operations Centre in its intervention district by voice and data transmission of the receipt of an emergency call for the

provision of assistance by the basic rescue services, cooperates with the rescue components of the Integrated Rescue System operating in its intervention district, participates in the performance of tasks related to the execution of rescue work based on a decision of the state authorities pursuant to special regulations.

**Other emergency services** perform the same tasks as the basic rescue forces and are called upon for rescue work based on the nature of the emergency and their ability to intervene. Within the IZS, *they provide professional, medical, technical, and other necessary assistance in distress based on a call by the coordination centre or the emergency operations centre or based on an instruction from their dispatch centre*. They shall, on request, notify the coordination centre of the details of their forces and means which they can provide for the response and of the method of their activation for the purpose of drawing up a plan for the provision of assistance and in the event of a call for intervention. They shall decide on their integration into the information and communication network of the Integrated Rescue System, including the provision of means of communication, and shall participate in training. The operation of other rescue services in the Integrated Rescue System shall be without prejudice to their status and tasks as laid down by specific legislation.

**Other emergency services IRS** consists of:

- Armed Forces of the Slovak Republic.
- Voluntary Fire Brigades of Municipalities / Towns.
- Enterprise Fire Departments.
- Enterprise Fire Brigades.
- Workplaces carrying out state supervision or activities according to special regulations.
- Civil Protection Units.
- Municipal Police.
- Slovak Red Cross.
- Other legal entities and natural persons whose object of activity is to provide assistance in the protection of life, health and property.

**The IRS Coordination Centre** is an essential integrating element to ensure the functionality of the Integrated Rescue System. Its continuous operation, mutual interconnection with emergency call centres creates the basic prerequisites for ensuring timely activation of rescue services for intervention, coordination of their activities and continuous flow of necessary information between rescue services.

The Coordination Centre ensures the reception of emergency calls on the emergency call line number 112, processes and evaluates information about the emergency call. It also draws up a plan for the provision of assistance and maintains an overview of the forces and resources of the rescue components

of the Integrated Rescue System, legal entities and natural persons authorised to engage in business, which are available for the purpose of providing assistance in an emergency. It shall keep documentation and records of the activities of the Integrated Rescue System. To raise the professional level of the rescue services that intervene in an emergency, it shall carry out their training. Requests, through the Ministry, the assistance of rescue units of the Integrated Rescue System from another region if its own forces and means are insufficient for the intervention. If there is a risk of delay, it may request assistance directly from another coordination centre. For archiving purposes, it shall keep a record of the audio recordings of calls related to the emergency call and store them for three years from the date of recording on an electronic non-rewritable medium.

The Coordination Centre is authorised to issue instructions and call on the relevant basic rescue service or one of the other rescue services to take action, or to redirect the emergency call to the relevant emergency operations centre, dispatcher's workplace or the operations centre of the Police Corps. In order to ensure the functionality of the system, it shall be entitled to request data on the forces and means available for intervention from state administration bodies, municipalities and other legal entities and natural persons authorised to conduct business. In the event of danger of an emergency or in the event of an emergency, the Coordination Centre shall ensure the warning of the population, notify the state administration bodies and other legal entities that provide tasks related to rescue work in emergencies. The continuous performance of activities at the coordination centre is ensured by operators, who are representatives of the district authority, the Ministry of Health and the Fire and Rescue Service, and, in the event of a threat or crisis situation, also by a representative of the Police Corps, if requested by the district authority.

***As a rule, emergency call centres are set up by the basic rescue service.*** Operations centre:

- ensures the reception of emergency calls and their evaluation,
- dispatches a first responders to an intervention and directs its activities in its intervention territory,
- requires assistance from the emergency services of the Integrated Rescue System operating in the intervention territory of the first responders,
- shall immediately inform the coordination centre by data transmission on receiving an emergency call, of the dispatch of its own emergency service to the intervention as well as of its re-alerting,
- cooperates with the commander of the intervention or with an authorized person in requesting personal assistance and material, keeps an overview of the forces and means of the first responders and records of their activities.

Receiving emergency calls:

- emergency call **150** is provided by the **Fire and Rescue Service** Operational Centre.

- emergency call **155** is operated by the regional operations centre of the **Emergency Medical Services**.
- emergency call **158** is operated by the **Police Force** Operational Centre.
- emergency call **112** is operated by the operators of the **IRS Coordination Centre**.

**The purpose of the Integrated Rescue System is to ensure that, when life, health or property, the person affected shall receive the necessary assistance immediately and without delay.**

## **12.5. CIVIL PROTECTION UNITS**

**A civil protection unit** is an organised group of persons, professionally prepared and materially equipped to perform civil protection tasks.

Civil Protection Units are composed of:

- Civil Protection Management Staff.
- Civil Protection Units.

Civil Protection Units are formed as:

- Civil Protection Rescue Units.
- Specialized Civil Protection Units.
- Civil Protection Units for the Operation of Evacuation Facilities.

**Civil Protection Management Staff:** in particular, prepares documents and prepares a draft order to carry out rescue work, manages the activities of specialist units, evaluates the performance of tasks, carries out control activities, ensures communication, material security, ensures rotation, rest, supply of drinking water), food and replenishment of protective equipment, ensures the synergy of specialist units with rescue forces, monitors, collects and evaluates reports, organises measures according to the Population Protection Plan (PPP).

**Civil Protection Rescue Units:** carry out rescue work in the event of a hazard or after the occurrence of an emergency, minimizing the risk of endangering the life and health of the deployed persons, in particular:

- search for flooded protective structures and individual flooded persons, create passages to them, rescue them and take measures to prevent the situation of the affected persons from deteriorating,
- create passages and crossings on flooded roads,
- participate in the implementation of technical measures to prevent the occurrence of consequential damage, the demolition or reinforcement of parts of buildings that threaten the forces and assets and persons located in the threaten area,

- participate in the rescue of affected and endangered persons during floods and in cooperation with the Fire and Rescue Service, the Armed Forces of the Slovak Republic and with other entities, carry out technical measures to direct the water course and for the drainage of water from the flooded area,
- participate in the implementation of deactivation, special cleaning, disinfection, disinsectisation and extermination of access and exit roads, work areas and stations for special civil protection units, terrain, and buildings, with emphasis on areas important for carrying out rescue work, areas of concentration of persons affected by an emergency and areas important for the normalisation of the life of the population and the operation of the State's economy,
- participate in the search for affected persons and, in coordination with the Fire and rescue services and emergency medical service providers are involved in in the provision of first aid,
- concentrate the affected persons and participate in ensuring their removal to a designated medical facility for medical assistance,
- in cooperation with the Police and Air Transport units of the Ministry of the Interior of the Slovak Republic, the Railway Police and the municipal police in maintaining public order and security, ensuring the regulation of transport of entities for the execution of rescue works and the removal of the affected,
- contribute to creating conditions for the survival of disabled and vulnerable people in cooperation with legal persons and natural persons – entrepreneurs and public institutions with a humanitarian mission,
- participate in the provision of water for human consumption, in the preparation of and the distribution of food, the provision of emergency accommodation for threatened and disabled persons, the issue of clothing, footwear, protective equipment and basic hygiene supplies.

**Specialized Civil Protection Units:**

- ensure the implementation of hygienic cleaning, decontamination, and special cleaning,
- in the station removes hazardous substances from the clothing and footwear of persons and from all surfaces of objects,
- in the chemical laboratories, they ensure the control of samples and issues proposals for hygienic cleaning of persons, decontamination of materials, techniques, terrain of communications and buildings.

- ensure the issue of material to civil protection unit members and all actions related to the issue of Personal Protective Equipment (PPE),
- in the protective structure, they ensure the operation of technical equipment, especially filter-ventilation equipment. It also implements fire-fighting measures, establishes the regime of life, provides first aid to the sheltered.

**Civil Protection Unit for the Operation of Evacuation Facilities** implements the measures specified for the implementation of evacuation from emergency threatened premises.

Breakdown of civil protection units by place of operation:

- **for the needs of the district/county area:** the district office is based on an analysis of the area of potential emergencies for a specific district,
- **for the needs of the municipality:** the municipality establishes a civil protection unit in accordance with the extract from the Territorial Analysis,
- **for the needs of legal persons, natural persons - entrepreneurs:** object units CO.

## QUESTIONS

1. [Which legislation addresses the field of rescue work?](#)
2. [Who is involved in the rescue work?](#)
3. [List at least 5 activities carried out as part of the rescue work.](#)
4. [When is a back-up management site established?](#)
5. [Define the concept of civil protection units and give their division.](#)



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## 13. SAFETY AND SECURITY RISKS

Safety and security risk management methods and tools have been successfully used to build an effective crisis management and civil protection system not only abroad.

***The aim of the chapter is to introduce the basic aspects of the security of the Slovak Republic, especially in relation to internal security and the theory and current requirements for security risk management.***

### 13.1. SECURITY IN THE SLOVAK REPUBLIC

The Slovak Republic is an independent, sovereign, democratic state governed by the rule of law, which claims to the universal values and principles of freedom, pluralistic democracy, human rights and freedoms, justice, human dignity, solidarity, and a market economy.

From the perspective of strategic security planning, the starting document can be in the conditions of the Slovak Republic is the Security Strategy of the Slovak Republic. The Security Strategy is followed by other cross-cutting and sectoral documents (strategies, policies, concepts, frameworks, programmes, plans and priorities).

One of the fundamental tasks of the state is to guarantee the security and protection of all its citizens, their rights, freedoms, and property. Fulfilling this task requires increasing the state's preparedness to face security challenges, threats, and crises, contributing to the maintenance of security, preventing situations threatening the security of the state and its citizens and having adequate resources, tools, and policies to address them.

Security threats that may negatively affect the Slovak Republic and its citizens in the coming years:

- uncontrolled large-scale migration,
- the impact of climate change and related threats, (emergence of emergencies with widespread consequences caused by extreme weather, flash floods, landslides, droughts, fires, windstorms, snow calamities, etc.),
- terrorism and organised crime,
- vulnerability of critical infrastructure and related threats in the field of energy security, information and communication infrastructure (cybercrime, cyber-attacks),
- inter-state conflict with regional impact,
- hazardous substances (spills, explosions, finds, dumps),
- social events and conflicts (life situations that the population cannot cope with by its own strength and resources).

In peacetime, the focus of crisis management is mainly on internal security.

*"Internal security can be characterised as a state in which threats to the state and its interests from within are eliminated to a minimum degree and the state has a sufficient legal environment, institutions, resources, forces, means and mechanisms in place to deal with possible crisis situations. It is also a level of democracy, economic prosperity, protection of citizens and application of legal norms accepted by society, the enforcement of which is one of the one of the fundamental functions of the State'.*

Nowadays, emergencies, especially of a natural origin, such as floods, windstorms, wildfires, landslides, etc., are occurring more and more frequently in the territory of the Slovak Republic (SR), in other countries of the European Union (EU), as well as globally. As a result of the increasing frequency of natural and man-made disasters, countries around the world have begun to engage in risk management, which identifies potential threats to the population, analyses them and takes measures to protect life, health, property, and the environment.

The most frequently occurring *risks or emergencies in the Slovak Republic* include:

- **floods** (especially flash floods in recent times),
- **landslides**,
- **snow calamities**,
- **windstorms**,
- **wildfires**,
- **hazardous substances** (spills, landfills).

Currently, there are several response plans for natural disasters and other man-made emergencies, but they do not have a standardised approach to emergency prevention and response. The plans are produced in different formats and are inconsistent. Although each plan has its strengths and weaknesses, it is required to, that all plans are developed to achieve common objectives and should have a standard format and define specific measures to mitigate or limit the impact of an emergency. At a minimum, these aspects should be included in emergency response plans to ensure the effectiveness of rescue operations and minimise damage.

Based on the analysis of the emergency response plans, the following gaps can be identified:

- the absence of a risk management strategy,
- the absence of a comprehensive national risk management plan for the Slovak Republic, as well as national plans for the management of specific risks.

## 13.2. SAFETY AND SECURITY RISK MANAGEMENT

The most important civil protection document in the identification of risks located on the territory of the Slovak Republic is the **Territory Analysis from the point of view of possible emergencies** (Territory Analysis).

Territory analysis *is developed at three levels:*

- district,
- county,
- national.

The document is prepared based on the **Act of the National Council of the Slovak Republic No. 42/1994 Coll. on Civil Protection of the Population** as amended and the **instruction of the Director General of the Crisis Management Section of the Ministry of the Interior of the Slovak Republic No. XXVII/2**, which regulates the *structure and content of the document prepared at all levels of state administration entitled "Territory Analysis of the Territory from the point of view of possible emergencies"*.

Territory analysis The analysis of the Slovak Republic in terms of potential emergencies is regularly carried out at national and regional level. It is absent at the local level (municipality level), which is a prerequisite for effective risk management at the local level, i.e. as close as possible to the inhabitants.

Understanding vulnerability at the population level is critical for subsequent risk management. Awareness of vulnerability and the consequential damage that the manifestation of a threat can cause, already at the individual level, is the starting point for reducing the vulnerability of society.

Therefore, it is necessary to develop a standard process for assessing risks and using the information needed to implement specific measures to reduce vulnerability and increase resilience of the compromised system, i.e. a comprehensive security risk management process.

**Risk Management** can be defined as a complex set of activities aimed at identifying threats, the occurrence of which can be considered in a given territory, given its nature as well as the nature of the systems existing in it, and to assess the susceptibility and vulnerability of the territory or the systems existing in it, which may be damaged by internal or external negative factors, and to identify measures aimed at improving the level of the different systems and communities occurring/living in the territory.

**Risk** is often used as a generalized term to express its individual components, which most often include: threat, hazard, susceptibility, vulnerability, exposure, and resilience. However, from the perspective of risk theory, risk is the probability of a certain phenomenon occurring, most often a negative phenomenon with specific impacts, from the perspective of crisis management and civil protection of the population. This means, we do not only consider the probability that a given phenomenon, a given event,

will occur, but also that its specific impacts will occur (e.g. a hundred-year flood, a five-year flood), i.e. a specific scenario for the development of the event.

**Hazard** is the predisposition of a systems area to the occurrence of a particular emergency. It is closely linked to another component of risk - susceptibility. When identifying threats in a territory, it is necessary to identify potential sources of future threats. An example of a threat in terms of potential flooding is the existence of the watercourse or waterworks itself, which, e.g. in the event of prolonged or extreme rainfall, may spill out of its channel, or in the event of a technical accident at a waterworks, may cause flooding of the surrounding area, thus endangering the life, health, and property of the population.

**Danger** can be characterised as a situation where critical values of monitored parameters are reached in an area or in relation to a certain system. These situations are often associated with the issuing of alerts. For example, in the case of a flood, it is the reaching of levels of water level or flow that are associated with flood risk and the declaration of individual flood stages.

**Susceptibility** can be characterised as the predisposition of an area/system to damage by internal or external negative factors due to its characteristics. For example, in the case of floods, the most susceptible areas in terms of flood susceptibility are cultivated agricultural land, grassland, while the least susceptible are forest areas, due to their highest water retention capacity, i.e. the ability to retain water in the soil.

**Vulnerability** can be characterised as the potential impact of a negative phenomenon. These can be modelled using mathematical methods or computer-aided modelling. In the case of flooding, this is the area that will be potentially flooded under a particular flood scenario. Within this flooded area, it is possible to identify the persons or population groups that will be at risk, the buildings and other objects or selected elements of the environment that will be inundated or damaged by the flood. These elements at risk are identified and the degree of damage is assessed as part of a risk assessment component called Exposure.

**Resilience** is a concept that expresses the ability of a system that has been damaged by a specific negative phenomenon to return to its original state and continue to perform its functions after the damage. This concept expresses a certain elasticity. It is distinct from the concept of resilience, which characterises the ability of a system to withstand the action of a negative phenomenon to such an extent that its functions may not be impaired or damaged at all. For a system to return to its functions after damage, it is necessary to ensure that it is not destroyed. This is possible through planning and subsequent implementation of measures aimed at minimising the impact or restoring and reconstruction. The planning and implementation of preventive measures are more related to the prevention of damage and are therefore linked to the resistance (resilience) of these systems. The nature of these three groups of measures can be personnel, material, technical, technological, legislative, financial, etc.

Control and monitoring activities are also part of risk management. The **control activity** concerns the control of the correctness and completeness of the implementation of planned measures as well as the evaluation of their effectiveness and the degree of fulfilment of the risk management objective, i.e. the achievement of an acceptable level of risk. **Monitoring** is a continuous activity, which involves the monitoring of critical factors associated with specific types of threats that are typical for a particular territory, the identification of hazards and, where appropriate, the triggering of warning and notification mechanisms for the population and the relevant crisis management authorities.

The most important thing for understanding the risks is their awareness and identification, therefore the key task of the present time is to build the National Security Threat Register of the Slovak Republic, which should be a document created at the national level in cooperation with all relevant authorities, organizations, and institutions. The document should contain the identification of all threats located on the territory of the Slovak Republic.

The aim of risk assessment is, in turn, to design and implement measures based on risk identification to reduce vulnerability, improve preparedness and resilience to protect life, health and property, as well as the sustainable development of society.

The current shortcomings in risk assessment in the Slovak Republic are mainly:

- The absence of a comprehensive database of data on emergencies and damage caused.
- The current level of awareness and information about threats and their impact is not sufficient for effective risk management and mitigation.
- The absence of standard risk assessment procedures and their multi-sectoral understanding.
- Lack of an information system for the acquisition, collection and distribution of data needed for effective risk assessment.
- Insufficient use of the knowledge base for risk assessment. Effective prevention and preparedness require informed and sufficiently prepared citizens, volunteers, and communities, able to identify risks, participate in prevention, preparation, protection of self, family and community during hazards, and recovery after disasters.
- Insufficient use of local experience and local knowledge in crisis prevention, as well as a high turnover of experts in the field who have the necessary knowledge.

Risk Management is based on understanding:

- the frequency, size, and impact of the threat,
- and the social and structural vulnerability of the population to this threat.

Vulnerability assessment is a major challenge for the Slovak Republic. Risk assessment is usually based on a comparison of a wide range of socio-economic and on threats that have been collected over several decades.

The main vulnerability criteria are:

- number of casualties related to a single incident.
- and the amount of economic damage relating to a single incident.

Given the threats facing the Slovak Republic, there is a need to continue to improve data collection and research to ensure more accurate risk assessment at national, regional, and especially local levels.

Given the cross-cutting nature of the risk management process, an integrated approach, cooperation and effective coordination at all levels of management is needed to reduce the potential risk to life, health and property of every citizen of the Slovak Republic to the greatest extent possible.

The Slovak Republic has a long history of building and implementing emergency preparedness and response. At present, the Slovak Republic has an established system of crisis management authorities responsible for preparedness and response to emergencies and crisis situations, but this system needs further improvement.

Mitigation of the consequences of emergencies uses means and measures taken before or after the occurrence of an emergency, aimed at reducing or eliminating its impact on the population, infrastructure, and the environment. Implementing appropriate and targeted mitigation initiatives can offer significantly lower costs.

Reducing risk and vulnerability through preventive measures leads to increased resilience in the event of an emergency. In the prevention and preparedness phase, coordinated planning at all levels, application of lessons learned, forecasting and consideration of the most vulnerable areas and elements are important.

The legislation of the Slovak Republic includes legislation governing the protection of the population, property, the environment and the security of the state and its components against emergencies. Crisis management authorities play an important role. Decisions and coordination at local, district, regional and national level are primarily aimed at the implementation of rescue operations, the protection of the population, property, objects and the environment. The issue of emergency preparedness and response in the Slovak Republic is dealt with at international, national, regional, and local level.

**Emergency preparedness** primarily includes the provision of resources, forces and assets and services needed in the response and recovery phase and the preparedness of individual communities from the municipal to the national level within the definition of the potential hazard framework. Of particular importance are the resources, the existing awareness of the crisis management authorities

threat awareness, logistics and personnel preparedness of the Slovak Republic. In the prevention phase and preparedness phase, an important role is played by synergy exercises between crisis management authorities, armed security forces, armed forces, Fire and Rescue Corps, rescue services, legal entities, and natural persons - entrepreneurs with the involvement of the population in the framework of the implementation of civil protection measures. Risk management is based not only on planning, but also on the application of behavioural experience reflected in methodological documents. The collection of data for early warning and continuous risk assessment is also a prerequisite for adequate preparedness.

**Emergency response** includes actions taken in anticipation of, during and immediately after an event to ensure that its effects are minimised and associated with an immediate assessment of the scale and potential impact of the emergency. In the response phase, direct actions are taken and applied to eliminate the emergency and its trigger or originator. Timely and adequate resources are of great importance for a coordinated response approach. A coordinated approach requires a clear delineation of roles and responsibilities of those involved in response activities and their understanding of their function and interoperable information sharing. The response relies on the primary responsibility of local governments for managing the emergency or crisis.

The response, already moving into the recovery phase, involves providing immediate shelter, life support and meeting the human needs of those affected by the emergency. Mitigation is the activities carried out during operations in the response phase.

**The recovery phase** is a coordinated process of supporting affected communities to rebuild physical infrastructure, restore the economy and environment, and support the emotional, social, and physical well-being of those affected.

**Evaluating the performance of measures** taken at all stages of the incident life cycle is important to ensure future actions are taken in a similar situation and is part of the continuous improvement of emergency management measures. Analysis of measures can lead to confirmation of good practice or identification of problems that need to be addressed to improve the management of future events.

From the perspective of security risk management, it is also necessary to mention Section 5(1)(b) of **the Act of the National Council of the Slovak Republic No. 387/2002 Coll. on the Management of the State in Crisis Situations Outside Wartime and state of war**, as amended, according to which **each ministry 'shall keep an overview of the sources of risks that may cause a crisis situation, analyse these risks and take measures to eliminate their causes'**.

## QUESTIONS



1. [Define the term internal security.](#)
2. [Which emergencies occur most frequently in Slovakia?](#)
3. [Define the term risk management.](#)
4. [Define the term vulnerability.](#)
5. [Describe the current state of preparedness of the Slovak Republic to deal with crisis situations.](#)

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## LIST OF ABBREVIATIONS

NATO	North Atlantic Treaty Organisation
IRS	Integrated Rescue System
SR	Slovak Republic
SC SR	Security Council of the Slovak Republic
JISHM	Unified Information System of Economic Mobilisation
TR	Tangible Reserves
EU	European Union
MR	Mobilisation Reserves
ES	Emergency Stocks
CSSR	Czechoslovak Socialist Republic
CSFR	Czech and Slovak Federal Republic
CO	Civil Protection
OECD	Organisation for Economic Co-operation and Development
MFA SR	Ministry of Foreign Affairs of the Slovak Republic
ICRC	International Committee of the Red Cross
UNICEF	United Nations International Children's Emergency Fund
UNHCR	United Nations High Commissioner for Refugees
IOM	International Organisation for Migration
WFP	World Food Programme
FAO	Food and Agriculture Organisation
UNDP	United Nations Development Programme
ECHA	European Chemicals Agency
KBU	Safety Data Sheet
ADR	European Agreement concerning the carriage of dangerous goods by road
RID	Regulations for the International Carriage of Dangerous Goods by Rail
ICAO	International Civil Aviation Organization
IATA	International Air Transport Association
LD	Lethal Dose
DNA	Deoxyribonucleic acid
RNA	Ribonucleic acid
SARS-CoV	Severe Acute Respiratory Syndrome Coronavirus
DDD	Disinfection, Disinsection and Extermination
VNN	Highly Dangerous Contagion
KOS ZZS	Regional Operations Centre of the Ambulance Health Service
RUVZ	Regional Office of Public Health
EMS	Emergency Medical Service
RLD	Radiation Level Detectors
FRS	Fire and Rescue Service
MtRS	Mountain Rescue Service

MRS	Mining Rescue Service
CO CCHL	Civil Protection Control Chemical Laboratories
PPE	Personal Protective Equipment

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