

# CIVIL PROTECTION IN SLOVAK REPUBLIC AND SOCIETY PREPAREDNESS FOR CRISIS EVENTS

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**Abstract:** Changes in the security environment should therefore be reflected by this system in order to prepare the population on the crisis events that have not yet occurred or have not occurred to such an extent or magnitude. The aim of the article is to examine the current system of civil protection in the Slovak Republic from the point of view of activities devoted to the preparation of the population and to the analysis of the population itself for crisis events through the analysis of the questionnaire survey results. Initial results indicate clear deficiencies both in the civil protection systems and in the preparedness of the population for crisis situations.

**Keywords:** CIVIL PROTECTION, PREPAREDNESS, CRISIS MANAGEMENT, CRISIS EVENTS, QUESTIONNAIRE SURVEY

## 1. Introduction

An essential prerequisite for the development of contemporary society is its security. At the beginning of the 21st century, a comprehensive increase of *security* level represents one of the most important tasks and also a fundamental goal which is facing the whole society, national governments, but also the management of each company. At the same time, it is natural that the issue of *life protection* is also the goal of every person in the context of creating and improving the quality of life [1].

Ensuring an adequate level of security and creating the prerequisites and conditions for its increasing is an important task for society as a whole. This requirement must be taken into account and respected in the operation of the entire public administration system, in individual entities forming and ensuring the functioning of the society [1], but also in the activities of business entities [2, 3].

The view of safety is gradually changing and evolving [1, 4, 5]. In relation to the ongoing global climate changes, the role of individuals and communities within tasks of risk reduction and protection of society is currently highlighted [6, 7, 8]. This need is also highlighted by the Sendai Framework for DDR 2015-2030 [9]. One of its guiding principles is the requirement of the engagement from all of society [9]. In order to reflect this change it is necessary and desirable address and support the population's preparation sufficiently. That assumes also modified approach to this change also from the responsible authorities' perspective. In the conditions of the Slovak republic is the issue of preparations of the population for crisis events and emergency events addressed by the civil protection system.

The aim of the paper is to assess the current system of civil protection, with emphasis on the issue of population preparedness for crisis events. Current methods of preparation are analyzed and also the initial results of the survey focusing on the issue of preparedness of the population for the risks of natural hazards are also investigated.

## 2. Civil protection in the SR

Civil protection is a system of tasks and measures aimed at protecting life, health and property, in particular by analyzing the potential threat and taking measures to reduce the risks of the threat, as well as identifying procedures and actions to deal with the consequences of crisis events [10].

System of civil protection includes in particular the following tasks and measures [10]:

- organizing, managing and carrying out rescue operations, which mainly consist of rescuing persons, providing pre-medical and medical assistance, rescuing persons and removing the wounded,

- organization and provision of warning and information services,
- provision of emergency supplies and emergency accommodation,
- provision of shelters and evacuation,
- implementation of anti-radiation, anti-chemical and anti-biological measures,
- organization, management and implementation of civil protection preparation,
- assessment of the location of buildings and land use and observance of civil protection interests in the territory during the planning and construction proceedings, and technical parameters of civil protection facilities,
- provision and implementation of editorial, scientific and research activities in civil protection.

In the initial period (from 1918), the problem of security focused on the issue of securing and defending the external borders of the state, building state institutions of the newly established state (Slovakia was part of former Czechoslovakia) with experience from the activities of state authorities of the Austro-Hungarian monarchy, accepting positive experience of developed countries, knowledge of exile organizations and experience gained by the soldiers of the Czechoslovak Legion. Gradually the security system of Czechoslovakia has begun to shape.

In Slovakia, the issue of civil protection was dealt with until 1990, mainly in connection with the military threat to the state (World War II, Czechoslovakia became part of the Eastern Bloc). After the split of Czechoslovakia in 1993, Slovakia had to create the foundations of the legal environment also in the field of state defense, solution of crisis events, protection of persons and property and ensuring internal security and order in the state [1].

In new security system special attention was paid to the issues of prevention and resolution of non-military emergencies (natural disasters, industrial accidents, etc.). The first step in the field of civil protection was the adoption of the Act on Civil Protection of the Population in 1994 [10]. The law gives citizens the right to provide training for civil protection and to acquire the necessary knowledge and skills in self-defense and assistance to others in need [10].

Significant changes in the security system took place in 2001 when the following strategic documents were drafted: Security Strategy of the Slovak Republic, Defense Strategy of the Slovak Republic, Military Strategy of the Slovak Republic, laws concerning defense, e.g. Act on Defense of the Slovak Republic (No. 319/2002 Coll.), Act on Armed Forces of the Slovak Republic (No. 321/2002 Coll.). These documents were the results of the efforts related to the accession of the Slovak republic to the EU and NATO. Also other laws relating to not only military-nature crisis

events have been adopted: Constitutional Act on State Security in the Time of War, State of Ware, State of Exception, and State of Emergency (No. 227/2002 Coll.) and Act on the Organization of State in Crisis Situations Other than Time of War and State of Ware (No. 387/2002 Coll.).

Since then, this established system has changed only minimally, some minor amendments have been adopted with no significant changes in practice. In particular, the preparation for civil protection has stagnated for a long time and reflects the current conditions only partially. Past effort to optimize the security system have not been put into practice.

## 2. Preparedness for crisis events in the Slovak Republic

Generally, the preparedness can be understood as 'the knowledge and capacities developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of...disasters' [8]. In definitions of regulations of the Slovak Republic, the preparation of the population is understood to be the preparation of the population for self-protection and mutual assistance [10] specifically it is understood as 'purposeful and continuous process of preventive, educational and promotional activities, theoretical and practical training' [11]. These theoretical definitions are not put into practice.

The preparedness of the population lags behind the preparedness of the professional rescue services. In order to achieve the appropriate level of population preparedness the existence of a comprehensive system of training and education is needed. In the Slovak Republic, such a system has been implemented only partially, as it was mentioned, by the Act No. 42/1994 on civil protection and other related regulations (e.g. Decree No. 303/1996 Coll.).

Preparing the population for civil protection is currently targeted at primary and secondary school children and youth. An adult group is prepared only under an independent decision of the competent local government authorities or on own initiative of individuals which requires the motivation and own interest. As it is illustrated in Fig. 1, the adults represent the majority of the population (64% + 18% over 63 years) (Fig .1).

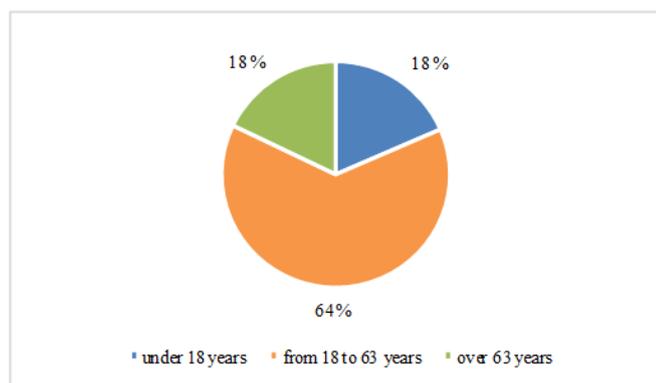


Fig. 1 Population age status in the Slovak Republic by age (data from 2017)[12]

Within crisis events preparation and education of children and youth, there have been two noticeable trends in primary school education. The first one dealt with the issue of civil protection within particular subjects (physics, civics, physical education) and the second one aimed to create a separate subject. The role of the subject at secondary schools is even more complicated. The security issue of civil protection issue was often seen as a burden. Currently, this education takes place at all types of schools (primary and secondary) through the inclusion of the issue of population protection in the curriculum to an appropriate extent.

The preparation for civil protection is carried out by district offices (Departments of Crisis Management and Civil Protection), municipalities, legal entities, natural persons - entrepreneurs, self-governing regions, and humanitarian associations (Slovak Red Cross, Office of Civil Protection of the Slovak Republic) [10]. For population plays the important role the municipality. The municipality ensures and performs the preparation of the population for self-protection and mutual assistance in cooperation with public-law institutions with a humanitarian mission [10].

The content and form of population preparation (except primary and secondary schools) for crisis events is actually chosen by the municipalities and given district offices [13]. Mostly it is done by non-formal one-off activities by various education types. These can be training sessions, discussions, workshops, meetings, seminars, and competitions of young rescuers, demonstrations of rescue techniques and rescue activities, as well as local TV channels. Information regarding the prevention and resolution of specific incidents (listed in [14]) can be distributed via bulletin boards, official announcements, local TV channels, municipal information centres, etc. In case of a current threat of a crisis event (e.g. a declaration of one of the flood activity levels), a higher interest in information can be assumed. At that time, it is recommended to publish it by the municipal radio and information centre, it can be distributed in the malls, health centres, post offices or by text messages in order to be available to as many people as possible. Occasionally, civil protection activities are practiced by the municipality and population within exercises related to the Population Protection Plan which is created for areas with a higher risk of selected disasters [10].

Obviously, the process of preparation in the field of civil protection is not systematic and continuous and is, therefore, not able to reflect the changing environment and current developments.

## 3. Questionnaire survey

In order to investigate population attitudes to risk of crisis events and population preparedness on crisis events, a questionnaire survey was carried out. A questionnaire survey was conducted between January 2019 and July 2019. A structured questionnaire was used, based on various sources [e.g. 15, 16, 17] and supplemented with questions and formulations that the authors considered appropriate with regard to the subject of the research. The questionnaire was distributed to randomly selected respondents and students of our university primarily in electronic form (several were also written). The survey was aimed at adults, i.e. respondents over 18 years of age. Number of participants was 794 (n).

The survey focused on a number of areas related to the issue of preparedness of the population for crisis events. The questionnaire focused on obtaining general information on populations such as gender, age, education, type of housing, place of residence, number of people living in the household, number of people in household in need of increased care (e.g. due to mobility problems or others disabilities, children, elderly people, etc.), etc.. In the next section, the questions were focused more specifically: on the experience with crisis situations, evacuation, vulnerability, consequences of crisis situations, disaster awareness and knowledge of resolution procedures, ways of behavior, subjective opinions on their readiness, etc.

## 3. Results and discussion

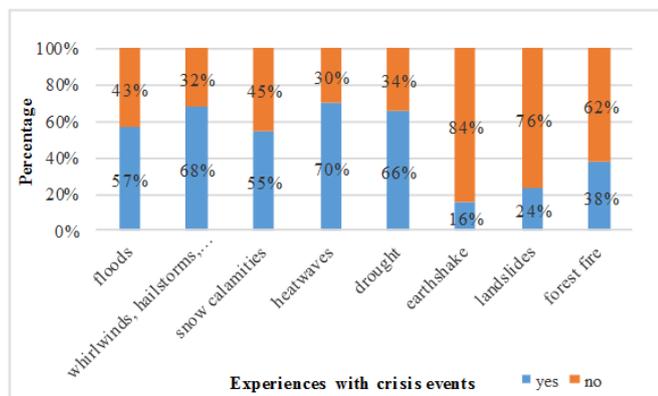
The survey dealt with the issue of population preparedness for crisis situations of various character typical for the conditions of the Slovak republic (floods, whirlwinds, hailstorms, heavy thunderstorms, snow calamities, heatwaves, drought, earthquake, landslides, forest fire, and others). Average age of participants was 29.35 year. More general information about participant in the survey are described in Table 1.

**Table 1:** General information about survey participants

General information		Share [%]
Gender	Male	52.39
	Female	47.61
Education	Basic, primary	0.38
	Secondary	59.82
	University	39.80
Living type	In flats	42.82
	In houses	57.18
Living place	Rural	48.36
	Urban	51.64

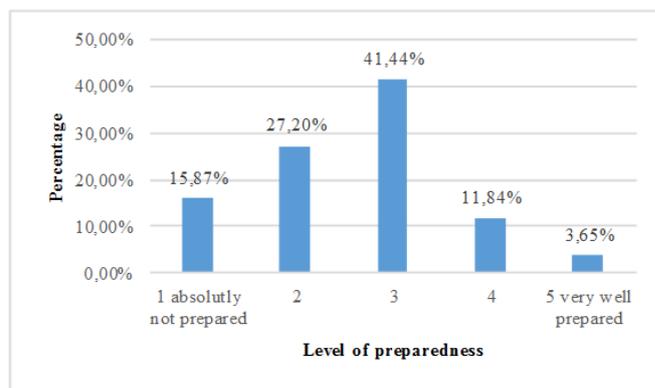
There are some specific information about participants with relation to their preparedness on the risk of a crisis event. 56.55% of participants has insured their property for the cases of a disaster, but from that 51.45% don't know which type of a disaster for. So, only 27.46% of participants have insurance and know which disaster for. 18.64% of participants don't have property insurance and 24.81 don't know if they have some type of insurance for case of a disaster.

Within survey' participants there is there is a relatively high proportion of direct or indirect experience (they were not directly affected but it happened at the place of residence) with various types of natural crisis events, see Fig. 2. Most of the respondents have experienced heatwaves (70%), whirlwinds, hailstorms or thunderstorms (68%), and drought (66%). Slightly less, but still more than half of the respondents, have experienced floods (57%) and snow calamities (55%). Forest fire, landslides and earthquake have experienced respondents less frequently. Of these who have experienced a crisis event, even 63%, have experienced a crisis event more than once.



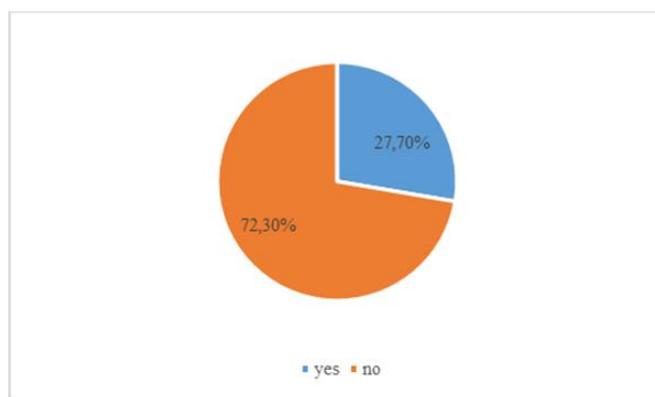
**Fig. 2** Percentage share of experience with crisis events

As you can see on the Fig. 3, the subjective opinion on the level of preparedness of the survey participants indicates that the preparedness level is at most average (mode=3, median=3, average=2.6). More than 43% of participants is not prepared (2) for crisis events or it is not prepared at all (1). These unfavourable views are also hampered by the preventive actions of citizens who only in 7.8% answers said that they have taken specific measures to prevent crisis situations in their homes (e.g. landscaping, water pumps, spare energy sources, sandbags, etc.).



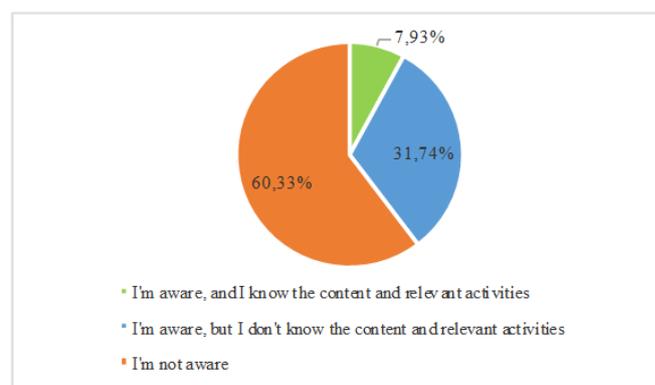
**Fig. 3** Opinion of the responders on the level of their own preparedness

In connection with the above mentioned and the connection to the ongoing system of population preparation and education in this field by the state, the proportion of information obtained on the issue of crisis situations solution and preparation was also investigated. Only 27.70% (n = 491) have recently encountered information on protection options against natural disasters (Fig. 4).



**Fig. 4** Share of information obtained regarding protection against crisis events among respondents

Respondents' knowledge of the risks to their safety, knowledge of prone zones near the respondents' place of living, knowledge of warning signs, if they are aware of emergency procedures, evacuation plans and other activities, these variables were examined separately. Initial results indicate that residents have low awareness of the hazards that threaten them and their knowledge of the crisis situation solution and evacuation procedures is rather weak. As an example, an evaluation in Fig. 5 is attached. It clearly shows that less than 8% of respondents are aware of an evacuation plan in the event of natural disasters and simultaneously are aware of its content and the appropriate activities related to its implementation. More than 60% of respondents don't know that they even exist.



**Fig. 5** Evacuation plans awareness

According to initial assessments, the population cannot be expected to know what to do in a crisis situation.

The results obtained appear alarming and it is necessary, on one hand, to look for the cause of this condition in order to eliminate it influence it if possible, and on the other hand we have to look for possibilities how to change the situation and strengthen the level of preparedness of the population. The research team intends to further analyze the results of the questionnaire survey and look for connections with the existing system and its development. Analysis of the current state of the civil protection system and analysis of the development of crisis situations in the Slovak Republic indicate that the most serious reasons are the lack of systematic preparation of the population, i.e. inactivity of the responsible authorities, and the lack of interest of the population on the issue of crisis situation solution and preparation. These assumptions will be further examined.

#### 4. Conclusion

In summary, the current civil protection preparation system does not sufficiently cover the needs of society in view of the development of crisis situations around the world. The activities are carried out, but their effect on the population is minimal due to the extent of the population addressed. This leads to lack in preparedness of the population, in view of theoretical knowledge, practical skills and habits of self-protection.

Poor preparedness and especially uncertainty of the population can be seen clearly in the subjective evaluation (Fig. 3), in which most respondents chose the middle way (evaluation 3), because in many cases they did not know what preparedness mean, they did not know what threatened them and how they can protect themselves. As already indicated by authors, this also indicates problems in the preparation system that need to be reflected.

Our goal is to further investigate and analyze the results of the survey and look for the causes, dependencies and options for addressing the current situation. Subsequently, the intention of the investigators is to propose the principles and sequence of steps to measure the awareness and preparedness of the population to the risks of natural disasters. The proposal should also include proposals for changes of the current state and proposals for application of the appropriate approaches to education and training of the population.

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