

THE EFFICIENCY OF DISASTER AND CRISIS MANAGEMENT POLICY AT THE LOCAL LEVEL:

Jasmina Tanasić
Vladimir M. Cvetković



LESSONS FROM SERBIA

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Dr. Jasmina TANASIĆ
Prof. Dr. Vladimir M. CVETKOVIĆ

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Professor Dr. Vladimir M. Cvetković

Editor

Professor Dr. Aleksandar Ivanov

Reviewers

Prof. Dr. Tin Lukić
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Dr. Jasmina Tanasić
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When we face crises and disasters, a community's true strength and resilience come to light. Each of us can be affected, but together, we can resist and find the best paths for recovery and progress. This book, "The Efficiency of Disaster and Crisis Management Policy at the Local Level: Lessons from Serbia," is dedicated to the citizens of Serbia, whose tireless strength and dedication to crisis management inspired every page of this work. Through these pages, readers will discover how local authorities in Serbia deal with the challenges before them, from natural disasters like floods and earthquakes to techno-ecological and social crises. By analyzing policies and practices, the book focuses on lessons that can benefit anyone facing similar situations, anywhere in the world. We dedicate this book to all citizens who have contributed to shaping a more resilient society through their actions, whether as individuals or as collectives. Your experiences and stories were crucial in understanding how policies can and should be applied in real-world conditions. Your courage, innovation, and solidarity are the foundations of this book. May this book serve as a testament to your unwavering spirit and as a guide for future generations who will continue to fight for a better and safer world.

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PREFACE

The scientific monograph is a comprehensive work that examines various dimensions of crisis management policies in Serbia. Drawing on extensive research experience in disaster studies, the authors investigate the strengths and weaknesses of different levels of management in crisis and disasters through an original and multi-method approach. In terms of design, subject matter, objectives, and procedures, the monograph is a multidimensional, multi-method work, predominantly qualitative. It is based on a qualitative approach, specifically examining crisis management policies in 23 cities in Serbia. Besides enhancing knowledge about the complex field of crisis management policies at the local level, the aim is to create recommendations for necessary methodological and organisational transformations in the work of local authorities and decision-makers. This includes legal regulations and protocols, security strategies, emergency response, decision-making, coordination, cooperation, communication, transparency, education, and information dissemination.

Regarding the social justification of the research, conclusions and suggestions regarding the quality, efficiency, transparency, and shortcomings in the application of crisis management concepts in Serbian cities were derived from empirical research results. Specific recommendations and proposals were provided to qualitatively improve the concept in areas where deficiencies or ambiguities were identified. The social justification of the research lies primarily in enhancing the capacity of local governments for better preparedness, response, and crisis recovery, strengthening the culture of safety, and developing "resilient local communities."

In the first part of the scientific monograph, the authors analyze and elaborate on five thematic units distributed across the same number of chapters. In the first chapter, the authors address crises and emergencies as political constructs, elaborating on the concepts of crises and emergencies, and discussing theoretical differences between related terms such as crises, emergencies, risks, accidents, and disasters. Special attention is given to the characteristics of crises and emergencies, including a typology: classical, modern, and combined.

The second chapter deals with theoretical concepts of crisis and disaster management, including strategic management and

leadership in crises and emergencies; crisis management and disaster management; characteristics of crisis and disaster management; models of crisis and disaster management processes; crisis and disaster management in public administration; and organizational crisis and crisis management.

In the third chapter, the authors comprehensively examine crisis and disaster management policies. This chapter discusses issues related to identifying crises and emergencies; decision-making in crises and emergencies; interpreting crises and emergencies in the context of political communications; risk communication regarding crises and emergencies; ending crises and emergencies: blame games and accountability; crisis-induced learning - opportunities for changes and reforms, and organizational learning.

The fourth chapter discusses community resilience in crises and emergencies, describing the characteristics of resilient communities, urban safety, criteria for safe cities, and citizen responses in crises and emergencies.

In the fifth chapter, the authors explore crisis and disaster management practices in the European Union and European countries, including the institutional framework for crisis and disaster management in the EU. Systems of crisis and disaster management in European countries are analyzed and described.

The second part of the monograph details the methodological framework of the conducted research. It covers the subject, goals, and tasks of the research, the hypothetical framework, scientific and social justification, data sources and types, data collection and processing methods, and an overview of key indicators.

The third part of the monograph provides a comprehensive description of the analytical dimensions of the research results from 2014-2017. The first chapter of the third part discusses the cultural and historical dimensions of crisis and disaster management policies in Serbia, including the administrative-territorial framework, central and local levels of management, responsibilities of various administrative levels, types of responsibilities for crisis preparedness and response, regulatory mechanisms and procedures, constitutional and legislative frameworks, legal reforms, the degree of normative regulation of crisis management at the local level, the state and social culture, power distance, and the level of individualism/collectivism.

In the second chapter of the third part, the authors explore the dimensions of crisis and disaster management as public policy, the socio-economic context of crisis and disaster management in Serbian cities, the strategic framework for crisis and disaster management in Serbian cities, the development of the strategic and institutional framework for security and crisis management at the local level, local strategic security documents, the number and type of intersectoral bodies for security at the local level, changes in local government as a factor of stability in crisis and disaster management policies, the operational framework for disaster management at the local level, the institutional framework for crisis and disaster management at the local level, the financing of crisis and disaster management at the local level, the functioning and cooperation of various sectors of local government under normal circumstances, coordination and cooperation between agencies/actors at the local level responsible for crisis and disaster management, oversight, inspection, and evaluation of public policies within the cities' jurisdiction and crisis management, monitoring and evaluation of crisis and disaster management at the local level, and databases on resources for crisis and disaster management at the local level.

In the third chapter, the authors discuss issues of partnership and cooperation in the process of crisis and disaster management in Serbian cities, the relationships between the state, local government, and citizens in crisis management policy in Serbia, the level of expectations of local government towards citizens, the level and type of expectations of citizens towards the state regarding the protection of their interests, the types of crises and the way citizens perceive them as real in Serbia, risks identified in national/local strategic documents, the types of crisis and disaster management situations involving volunteers, the degree of readiness for voluntary participation of citizens during crises and emergencies in the local community, cooperation with neighboring municipalities in crisis and disaster management, projects related to crisis and disaster management in local governments in Serbia, and the level and type of regional/international cooperation in crisis and disaster management at the local level in Serbia.

Finally, in the fourth chapter, the authors address the dimensions of information and education about crises and emergencies in Serbian cities, training for mayors in crisis and disaster management, crisis communication at the local level, and infor-

mation and education as part of preventive crisis management activities at the local level.

Given the complexity of the scientific monograph's subject matter, the authors owe special gratitude for the improvement of the text to reviewers Prof. Dr. Tin Lukić, Prof. dr Aleksandar Ivanov, Prof. Dr. Srđan Milašinović, Prof. Dr. Slavoljub Dragičević, and Prof. Dr. Hatidža Beriša.

Authors

Dr. Jasmina Tanasić
Prof. Dr. Vladimir M. Cvetković

Introduction

We live in a world of global interdependence, more vulnerable and sensitive to changes than ever before, where the whole affects the parts and vice versa at an increasing speed.¹ With its foreign policy orientation and geopolitical position, Serbia is directed towards the European Union, which has been shaken by various crises for some time. Some of these crises are global in nature, such as the energy crisis, the Ukrainian crisis, the global economic crisis, terrorism, cyber security, the migrant crisis, climate change, the emergence of new war zones, and security polarization.

Crisis and emergencies are, conditionally speaking, the result rather than the cause of problems. Low economic growth rates, unemployment, unequal development among member countries, and the fear of a new economic crisis further burden the European Union and its member states, albeit unevenly. By their nature and the fact that they spill over from one sphere to another, these crises cannot be clearly confined to the so-called "civil sector" of crisis management. A particular challenge is that member states and the European Union address some critical issues in different ways. The rise of populism and the extreme right in member states is becoming more pronounced, compromising ideas of a common Euro-identity and shared proclaimed values. The EU and its member states have differing stances regarding the treatment of migrants. The EU aims for social inclusion of migrants and, in this sense, plans appropriate public policies while preventing the escalation of xenophobia on one hand and combating the radicalization of Islamism and terrorism on the other. The views of individual member states and various political factions differ significantly. Inadequate conditions and care for migrants during 2016-17 were a kind of humanitarian test for European countries and the EU.

¹ Cvetkovic, V. M. (2019). Risk Perception of Building Fires in Belgrade. *International Journal of Disaster Risk Management*, 1(1), 81-91; Perić, J., & Cvetković, V. (2019). Demographic, socio-economic and psychological perspective of risk perception from disasters caused by floods: case study Belgrade. *International Journal of Disaster Risk Management*, 1(2), 31-43; Cvetković, V., & Todorović, S. (2021). Comparative analysis of disaster risk management policies in the region of south-east Europe. *International yearbook Faculty of Security Studies*, 1, 7-17.

Terrorism, endangered environment, climate change, infectious diseases, and the vulnerability of strategic infrastructure systems (energy, transport, communication, etc.) test the common value system. This has contributed to the European Union experiencing a sort of crisis of identity, shared values, and a vision of a common future in recent years.² A particular dilemma is how the EU will respond to the complex crisis: will it be through deeper integration or not ("multi-speed Europe").

As a sort of beacon for the directions of the EU's development in recent periods, the annual address of the President of the European Commission to the European Parliament has been taken into account. Jean-Claude Juncker's 2017 State of the Union address was much more optimistic compared to the previous year's address (when Europe was shaken by the migrant wave). Among his top priorities, immediately following trade and industry, were the fight against climate change, the establishment of a Cybersecurity Agency, migration policy, the European Solidarity Corps—a volunteer network, and the protection of external borders.³ *Crisis management is prominently placed on the political agenda of the European Union as one of the priority public policies for the period from 2017 to 2025. The common institutional framework for crisis management as a public policy for the EU is largely established.*⁴ European countries, each in their own way, have normatively, institutionally, and operationally regulated the field of crisis and disaster management, and these, so to speak, local traditions have persisted. Due to the nature of modern crises and multi-

² Cvetković, V. (2012). Zadaci vatrogasno-spasilačkih jedinica u terorističkom napadu izazvanom upotrebom oružja za masovno uništavanje. Zbornik radova – Suprostavlanje organizovanom kriminalu i terorizmu, Kriminalističko – policijska akademija, Beograd, 146-160; Mlađan, D., Cvetković, V. (2011). Stanje i novi izazovi vatrogasno – spasilačkih službi u svetu. Zbornik radova, Suprostavlanje organizovanom kriminalu i terorizmu, Kriminalističko – policijska akademija, 95-109.

³ European Commission - Speech, President Jean-Claude Juncker's State of the Union Address 2017* Brussels, 13 September 2017. http://europa.eu/rapid/press-release_SPEECH-17-3165_en.htm.

⁴ Cvetković, V., Popović, M. (2011). Mogućnosti zloupotrebe oružja za masovno uništavanje u terorističke svrhe. Bezbednost, 53 (2), 149-168; Cvetković, V. (2015). Mogućnosti zloupotrebe biološkog oružja u terorističke svrhe. Bezbednost, 55 (1), 122-140; Cvetković, V. (2012). Zadaci vatrogasno-spasilačkih jedinica u terorističkom napadu izazvanom upotrebom oružja za masovno uništavanje. Zbornik radova – Suprostavlanje organizovanom kriminalu i terorizmu, Kriminalističko – policijska akademija, Beograd, 146-160.

hazard risks, crisis management systems in European countries have begun to change, adapt, and align with EU standards and requirements.⁵ There are many examples of this, with crisis management in cities posing a particular challenge, especially in the case of terrorism. From 2004 to 2017, there has been an increasing frequency of terrorist attacks in European cities with a high number of casualties: Madrid (2004); London (2005); Moscow (2010; 2011); Toulouse (2012); Brussels (2014); Paris (January and November 2015); Copenhagen (February 2015); Istanbul (February-July 2016); Brussels (March 2016); Nice (July 2016); Berlin (December 2016); Paris (February-March 2017); London (March 2017); Saint Petersburg (April 2017); Stockholm (April 2017).

Crisis management in cities affected by terrorist attacks has become a way of life and a daily implemented public policy: armed military and police forces are a daily sight for residents of Brussels after the 2016 terrorist attack. Barcelona has not yet recovered from the terrorist attack in the summer of 2017, and the attempted secession from Spain placed it under emergency administration. Moscow, Berlin, Paris, London, and Brussels, after a series of terrorist attacks, keep their services on high alert (not only in security sectors), but also in transportation, healthcare, public utilities, media and communication, energy (threat to the nuclear power plant in Brussels), social policy, environmental protection, and others. Effective, reliable, efficient, and coordinated implementation of these public policies by the public sector, in partnership with the private and civil sectors, is a necessary condition primarily for prevention, timely detection, and effective response in crisis management in any sector, given the processual, potentially amorphous, and transformative nature of crises.

Apart from sharing Europe's fate regarding current crises, Serbia follows the European Union in harmonizing regulations, developing its own public policies, and reforming state administration and local self-government. In 2009, after almost two decades, Serbia also established a new crisis management system as a public policy and as part of a broader national security system. The key document was the Law on Disasters.⁶ By its nature, this system

⁵ Bossong, R., Hegemann, H. (2014). ANVIL Deliverable 4. 2: Final Analytical Report Critical Findings and Research Outlooks; Institute for Peace Research and Security Policy at the University of Hamburg.

⁶ Law on disaster risk reduction and emergency management, ("Official Gazette of RS", no. 87/2018)

had "features of civilian but with elements of command and hierarchical structure; it combined the use of professional, trained non-professional, and untrained non-professional forces and entities; it encompassed preventive, protective-rescue, and remedial functions; it is focused on the protection of people, material, and cultural assets. Also, it is an extremely open system, which is closely connected to other systems and dependent on cooperation with them."⁷

Institutionally, at the national level, the disaster management system is positioned within the Ministry of Internal Affairs - the Sector for Disasters. The Sector has decentralized Departments for Disasters at the level of cities and municipalities. The aforementioned Law also defined the concept, and the closest term related to crisis is the term "disasters." The crisis resolution concept in Serbia is legally structured so that it is primarily resolved at the place where it originated, namely at the level of local self-government. If the disaster exceeds the capacities of local self-government, the responsibilities are transferred to the district or autonomous province, and then to the central level of authority.

The existence of the Law was necessary but not sufficient condition for the system to fully and successfully function. The accompanying sublegal acts were not timely prescribed, which largely prevented the implementation of the Law. Additionally, there was a lack of personnel, financial, and material-technical conditions for the system to be fully established.⁸ At the same time, the sensitivity to crisis and the culture of crisis preparedness have not been sufficiently developed. A real, significant, and tragic test was the entire year of 2014, with a series of disasters, from floods, landslides, heavy metal spills into river watercourses, mosquito invasions, and the risk of West Nile fever infection, to contamination of the water supply sources of Lake Vrutci, ending with snowstorms and multi-day power outages for the region of eastern Serbia. The most dramatic were the May floods with catastrophic losses (53 people lost their lives, 40 flooded cities and municipalities affected 1.6 million people; 32,000 were evacuated). World Bank data from 2017 show that the damage and losses caused by

⁷ Milosavljević, B. (2014). Konceptijske postavke sistema zaštite i spasavanja: Predlozi za preispitivanje, Časopis za javnu politiku Polis, br. 8: 5.

⁸ Kešetović, Ž. (2014). Kapaciteti lokalne samouprave u Srbiji za upravljanje u vanrednim situacijama, Časopis za javnu politiku Polis, br. 8: 11-16.

the May floods alone amounted to 5% of GDP; 125,000 were pushed into poverty and 52,000 lost their jobs in the long term.⁹

The absence of prevention has often been cited in subsequent analyses by experts and authorities as one of the main reasons for the problems encountered in responding to and resolving the crisis. This significantly contributed to the failure to timely detect and prepare for the crisis by those responsible. The monitoring, early warning, information, and alert system prior to the critical events of 2014 were not adequately established (normatively, institutionally, and operationally), and the communication with the population during crises was not effectively carried out.¹⁰ There is no concrete accountability for the failures in fulfilling the aforementioned legal obligations, and there is no practice of legal sanctions, oversight, or accountability at the level of local self-governments.¹¹ Taking into account the above, one aspect of this work is crisis management at the basic-local level as a reformed public policy with a special focus on cities; that is, assessing the capacities and levels of preparedness of cities regarding the normative, institutional, strategic, operational, and financial framework of crisis management in Serbia's cities. This will be, in the broadest sense, an analysis and evaluation of the results, scope, efficiency, and experiences of implementing the crisis management policy concept in Serbia. Special emphasis will be placed on the degree of implementation of existing regulations, strategic planning, operational and tactical capacities of the system at the local level to respond to crisis management challenges.

Public administration reform has been a political priority of the Government of the Republic of Serbia since 2015. Special attention is paid to the reform of the functioning of local self-government and strengthening the capacities of local administrations. Local self-government in Serbia is of a mono-typical nature. Its functions include areas of public policy (creation, implementation, monitoring, and evaluation); regulatory (issuing regulations/individual acts based on general norms); administrative;

⁹ World Bank Group: Tracking Earthquake and Flood Risks across Europe and Central Asia to Enhance Disaster Resilience, <http://www.worldbank.org/en/news/feature/2017/01/20/tracking-earthquake-and-flood-risks-across-europe-and-central-asia-to-enhance-disaster-resilience>.

¹⁰ Milosavljević, B. (2014). Konceptijske postavke sistema zaštite i spasavanja: Predlozi za preispitivanje, Časopis za javnu politiku Polis, br. 8: 7.

¹¹ Milosavljević, B. (2014): pp. 7.

provision of public services and inspection supervision in certain areas. In the field of public policy, local self-government has responsibilities for communal activities; local transportation and road networks; water supply; environmental protection; housing policy; agriculture, local economic development, education (especially preschool and primary); primary health care and public health; social protection; culture; sports and youth policies; tourism and protection from natural disasters and emergencies. Virtually all of these public policies can be categorized under some dimension of human security.

In the event of a crisis or disaster, public policy makers at the local level become part of the state's institutional response to an emergency. Mayors serve as commanders of emergency headquarters. Timely crisis detection and preparedness largely depend on decision-makers' perceptions and experiences, cultural patterns, and the prioritization of political elites. When the situation spirals out of control for decision-makers, that is, when it cannot be resolved through daily means and normal rules cease to apply, a period known as a crisis emerges. In this case, trust in local authorities is shaken, creating a crisis of legitimacy, which can easily spread to other levels in democratic societies, thus creating a vicious circle.

A crisis for which local authorities are responsible can erupt or be reflected in any of the areas listed as the original responsibilities of local self-government. Public policy – in one or more areas – can be the epicenter of a crisis. At the same time, regardless of the area in which it arises or to which it pertains, a crisis response will require the engagement, coordination, and cooperation of multiple institutions, private and civil sectors, and implementers of one or more public policies. The functioning of administration in normal circumstances should, conditionally speaking, be flawless to respond to crisis challenges. If there is no awareness of a crisis, or if it is inadequate, political, managerial, and executive structures in local self-government will be destabilized to a greater or lesser extent at all stages of crisis management, starting from its detection, decision-making processes, political interpretation of the crisis, and crisis communication. The end of a crisis is a political construct and does not necessarily mean that the crisis has disappeared.

Reforms triggered by a crisis are the result of the system's and actors' ability to learn from the crisis. Therefore, another as-

pect of this work concerns crisis management as a system response of local self-government in a crisis, using the example of Serbian cities for the period from 2014 to 2017. The perception of various actors has been researched: mayors, officials in city administrations responsible for disasters, professionals in the Sector for Disasters, and citizens regarding: the degree of preparedness, prevention, cooperation, education, and communication in crisis management. The research results indicate organizational constraints for crisis management, the role of decision-makers, the importance of information, coordination, and cooperation, and the degree of institutionalization of lessons learned – the system's ability to learn from crises.

The structure of the scientific monograph is divided into theoretical and empirical parts, analysis of results, and conclusions. In the first, theoretical part of the work, a review of the literature related to the concepts of crisis as a political construct; the relationship between crisis management and organizational crisis; crisis management policy; resilient communities; EU practices and practices of European countries in crisis management is conducted across five chapters.

The first chapter deals with crisis as a political construct and the concept of crisis in contemporary conditions. The concept of crisis is distinguished from related terms: conflict, confrontation, disturbance, risk, accident, state of emergency, and catastrophe. Characteristics, typology of crises, and the crisis cycle are described: prevention, preparedness, response, and recovery from crises. Crisis management and related concepts are the subject of the second chapter, as well as the characteristics and models of processes in crisis and disasters management; crisis cycle and crisis and disaster management in public administration; organizational crisis and crisis management.

The third chapter provides an overview of crisis management policy: concept, distinction from similar concepts, characteristics, and models, and phases: from crisis detection phase, through decision-making, political interpretation of the crisis, crisis communication, to conclusion. For public administration, the question of whether learning in crisis is possible, that is, whether crises are a way for reforms and opportunities for positive change, is crucial.

The fourth chapter addresses resilient communities, urban security, criteria for safe cities, and citizen response in crisis and disasters management.

The fifth chapter in the theoretical part of the work is dedicated to the practice of the European Union and European countries in crisis and disasters management. Empirical research relates to four analytical dimensions: cultural-historical, public-political, partnership and cooperation dimension, information, and education.

I CRISIS, DISASTERS, AND MANAGEMENT AS PUBLIC POLICY

The youngest theoretical concept of security is the concept of human security. Then United Nations Secretary-General Kofi Annan described it in 2000 as follows: "Human security, in its broadest sense, encompasses much more than the absence of violent conflict. It includes human rights, good governance, access to education and health care, as well as creating conditions in which every individual has the opportunity and choices to realize their own potential. Every step in this direction is also a step towards reducing poverty, achieving economic growth, and preventing conflict. Freedom from want, freedom from fear, and the freedom for future generations to inherit a healthy environment - these are inter-related blocks of human, and therefore national, security."¹²

Theoretical considerations in this work will be within the framework of the constructivist theoretical approach, focusing primarily on various aspects of human security in crisis conditions, the political nature of the crisis, and crisis management. The UNDP Report from 1994 listed seven components of human security: economic security - based on productive and gainful employment; food security, meaning that all people, at all times, have physical and economic access to food; health security, especially for the poor; environmental security, defined as a healthy physical environment; personal security, in the form of reduced threats to individuals from violent crimes; community security, i.e., security through membership in a group (provided that social norms and group behavior do not endanger the physical security of the individual), and political security, which implies that people "live in a society that respects their basic rights."¹³

Advocates of the theoretical concept of human security are critical of the state-centric model of security and abstract definitions of "national interest." They believe that despite divisions based on nations, states, faiths, languages, or cultures, there are

¹² Vinzlou, D. (2006). *Ljudska bezbednost, Zbornik tekstova Ljudska bezbednost I*, Beograd: Fond za otvoreno društvo: 13.

¹³ Report UNDP (1994): 25 – 33.

common categories that include the need for physical security, economic opportunities beyond the survival line, freedom of speech, legal, and political rights. These categories are reduced to three dimensions of the concept of human security: absence of fear (people's security), equality and social justice (freedom from want), and freedom and the rule of law.

This conceptualization of human security is not only understood as an argument for ensuring basic human rights. It also encompasses understanding potential threats to these rights, or their denial, as well as the types of institutions, conditions under which they operate, and forms of governance (both domestic and international) necessary for these categories of human security to endure, that is, to be available to all.¹⁴

Despite the fact that human security in the current strategy, nor in the security policy of the Republic of Serbia, does not occupy the place it undoubtedly deserves in contemporary circumstances, some of the most important threats to human security have been recognized in the National Security Strategy. This provides an initial impetus for addressing the issues of human security, which are becoming increasingly serious to the point of requiring a separate strategic document to thoroughly and systematically address the issue of human security.¹⁵

Furthermore, in order to minimize deficiencies in strategic documents in the future, experts must be involved in their creation, and they must be based on empirical research. Only the results of empirical research can be a good indicator of real threats, challenges, and risks that society and the state face. This way, special attention will also be devoted to reference points that are most vulnerable and to the most common threats to their values. Finally, the National Security Strategy has not entirely neglected the human component; it has even included some of the most common threats to human security.¹⁶

When the core values or life-supporting systems of a community are faced with an imminent threat, during which normal

¹⁴ Hampson, F. O. (2006). Višeznačnost pojma ljudske bezbednosti, *Ljudska bezbednost*, Zbornik tekstova I., Fond za otvoreno društvo, Beograd: 29-32.

¹⁵ Popović, M., Cvetković, V. (2013). Suprostavljjanje savremenom terorizmu kao doprinos zaštiti ljudske bezbednosti u Republici Srbiji. Zbornik radova, Suprostavljjanje organizovanom kriminalu i terorizmu, Kriminalističko – policijska akademija, 169-177.

¹⁶ *Ibidem*.

modes of operation no longer apply, and which politicians must control and during which they must make urgent decisions in conditions of high uncertainty, a period defined as a crisis emerges.¹⁷ A crisis is a transitional state, but it can easily turn chronic, as we see in the example of some environmental problems, such as global warming. It can be resolved without major consequences and damage; some actors may even profit from it, while for others, it may have irreparable consequences. However, throughout all this time, there is an obligation for decision-makers: presidents and mayors, local and national politicians, managers, and public servants in managerial roles to manage the crisis.

The origin of the term "crisis management" is attributed to American President John F. Kennedy, in relation to managing the Cuban Missile Crisis in 1962. For the modern understanding of crisis management, there is consensus that it emerged from the handling of the Tylenol poisoning crisis by the Johnson & Johnson company.¹⁸ It encompasses planning, organizing, leading, controlling, and managing human and other resources before, during, and after a crisis. In one of the quantitative research studies on preparedness perception for responding to crisis situations, the following conclusions were reached:¹⁹ - The assessment of preparedness for response is highest among households (M = 3.03) and lowest among the bodies of local self-government units (M = 2.86).

Gender of the respondents is statistically significantly associated with the perception of individual preparedness and household preparedness. Judging by the results, the assessment of these types of preparedness is higher among males than among females.

- Age is statistically significantly associated with the perception of household preparedness and state organs. Citizens aged 18 to 28 noted the highest level of assessment of household preparedness for response, unlike citizens aged 28 to 38 who noted the highest level of assessment of the preparedness of bodies of local self-government units.

- Employment status is statistically significantly associated with the perception of preparedness of state organs. Employed citizens most often emphasize that state organs are ready to respond.

¹⁷ Boin, A., Hart, P. 't., Štern, E., Sandelijus, B. (2010), *Politika upravljanja krizama*. Fakultet bezbednosti. Beograd: Službeni glasnik: 12.

¹⁸ *Ibidem*: 53

¹⁹ Cvetković, V. (2017). Krizne situacije – pripremljenost države, lokalne zajednice i građana. *Vojno delo*, 69(7), 122-136.

- Income level is statistically significantly associated with the perception of preparedness of state organs, bodies of local self-government units, and households. Citizens with incomes over 90,000 dinars noted the highest level of assessment of household preparedness. The assessment of the preparedness of state organs and bodies of local self-government units is highest among citizens with incomes up to 50,000 dinars.

- Fear is not statistically significantly associated with the perception of preparedness.

- Previous experience is statistically significantly associated with the perception of preparedness of state organs, bodies of local self-government units, and households. Among citizens who had previous experience with floods, a higher level of assessment was observed: assessment of individual preparedness, preparedness of bodies of local self-government units, and state organs for responding to natural disasters caused by floods.

Reviewing the history of crisis management research, according to Edward Deverell, can be chronological, covering specific areas.²⁰ Since 1940, disasters have been studied with a focus on managing collective stress.²¹ In international relations, research has predominantly focused on conflict and war, balancing on the edge of warfare.²² The first wave of studies on contemporary crisis management in the public sector focused on executive power as part of American foreign policy crisis management, with a focus on the president and his closest collaborators. Although useful in providing insights into the role of leadership in crisis, decision-making political structures, high politics, and leadership personalities, it is challenging to generalize and apply them to other contexts and organizations within the public sector.²³

²⁰ Deverell, E. (2010). *Crisis-induced learning in public sector organizations*, CRISMART PhD Dissertation. A Publication of the Crisis Management Europe Research Program Sverige, Stockholm: Elanders, 29.

²¹ Quarantelli, E. L. and Dynes, R. R. (1977). Response to Social Crisis and Disaster, *Annual Review of Sociology* 3: 23-49.

²² Rosenthal, U., Charles, M. T. and 't Hart, P. (1989). The World of Crises and Crisis Management. In U., Rosenthal, M. T. Charles and P. 't Hart (eds) *Coping with Crises: The Management of Disasters, Riots, and Terrorism*. Springfield: Charles C. Thomas.

²³ Paige, G. D. (1968). *The Korean Decision* [June 24-30, 1950]. New York: The Free Press; Hermann, C. F. ed. (1972) *International Crises: Insights from Behavioral Research*. New York: Free Press; Khong, Y. F. (1992). *Analogies at*

Psychology as a science has made a significant contribution to the study of crisis management. Many studies have emerged as critiques of the cognitive stream versus the behavioral approach. The classic model of decision-making was questioned, in which decision-makers approached relevant information and made decisions based on the most rational choice and the best option.²⁴ The credit to cognitive psychology lies in discovering how individual limitations (beliefs, expectations, mental shortcuts, and analogies) for assessing and processing information can influence decision-making and behavior in a crisis.²⁵ The relationship between crisis characteristics—threats, urgency, and uncertainty—and psychological reactions such as stress, denial, and paralysis has been studied.²⁶ Research has revealed the extent to which stress narrows the scope of attention and the ability to process and analyze complex meaningful information.²⁷

Theories stemming from disaster research have focused on mass and group responses to disasters. These scientists developed the disaster response theory and identified a typology of organizations and groups in disaster management.²⁸ The relationship between existing behaviors, values, and social issues and their impact on disaster response has been studied.²⁹ Disaster researchers have also collected and analyzed a wealth of data related to catastrophes. Examples such as Three Mile Island, the gas leak in Bhopal³⁰, and the Exxon Valdez³¹ case have been analyzed. The listed events fall into the category of highly specific occurrences, indus-

War: Korea, Munich, Dien Bien Phu and the Vietnam Decision of 1965. Princeton: Princeton University Press.

²⁴ Deverell, 2010: 29

²⁵ Stern, E. (1999). *Crisis Decisionmaking: A Cognitive-Institutional Approach.* Stockholm University Political Science Dissertation. Stockholm.

²⁶ *Ibidem*; Janis, I. L. (1982). *Groupthink: Psychological Studies of Political Decisions and Fiascoes.* 2nd ed. Boston: Houghton Mifflin.

²⁷ Svedin, L. M. (2009). *Organizational Cooperation in Crises.* Farnham: Ashgate.

²⁸ Dynes, R. D. (1970). *Organized Behavior in Disaster.* Lexington MA: D. C. Heath.

²⁹ Quarantelli, E. L. and Dynes, R. R. (1977). 'Response to Social Crisis and Disaster', *Annual Review of Sociology* 3: 23-49.

³⁰ Pauchant, T. C. and Mitroff, I. I. (1992). *Transforming the Crisis-Prone Organization: Preventing Individual, Organizational, and Environmental Tragedies.* San Francisco: Jossey-Bass.

³¹ Birkland, T. A. (1997). *After Disaster: Agenda Setting, Public Policy, and Focusing Events.* Washington: Georgetown University Press.

trial or natural disasters. Over time, the focus has shifted to much more common situations, everyday crises that concern organizations.

Both crisis management and public policy are two young scientific disciplines, both emerging in the second half of the 20th century. The translation of the term "public policy" originated due to the different meanings of the translation of "policy" in the Serbian language. In English, the terms "politics" and "policy" denote two different concepts. The term "politics" has a procedural meaning (politics as a political process) and implies the emergence, expression, conflict, mediation, and reconciliation of interests of subjects in the field of public action, as well as relations, methods, and mechanisms for regulating conflicts. This includes classical political concepts such as power, conflict, consensus, and legitimacy. The term "policy" has a functional meaning. It refers to the contents of public decision-making and the manner of implementing political decisions, processing, and solving problems through the administrative management system. The result of this is binding decisions and their implementation.

Until the mid-20th century, there was a trend focusing on formal administrative structures and political institutions. A new approach to studying phenomena in the field of public life, known as the Policy Approach, was first mentioned by Harold Lasswell. The novelty lies in "studying a given phenomenon while considering the entire context to which it belongs."³² The importance of science, or knowledge, as a key factor in solving problems within a society is emphasized. Public policy science has three main characteristics: multidisciplinary; multi-methodological approach, and focus on concrete problems.³³

The term public policy refers to the science of decision-making on matters of general or public interest. It involves the process of identifying and defining problems, considering, selecting, and implementing specific solutions in which all interested parties should be involved.³⁴ It consists of initiation (identifying

³² Lasswell, H. (1951). "The Policy Orientation. In D. Lerner and H. Lasswell, *The policy sciences: recent developments in scope and method*. Stanford, Stanford University Press: 3-15.

³³ Laswell, D. H. (1970): The emerging conception of the policy sciences, *Policy Sciences*: 3-14.

³⁴ Lucic, S. (2001). Pojam javne politike, *Evaluacija javnih politika-teorija i praksa*, Beograd: 10.

and defining problems), formulation (generating possible solutions, options, choosing a specific policy option), implementation of that option, evaluation of the selected and implemented public policy (evaluation), and correction of that option (improvement). Correction can also contribute to redefining the problem itself³⁵ – so, the system has learned something. Public policy is applied in all areas of public interest: health, education, environmental protection, social policy, justice, defense, and others, and responsibility for implementation can be assigned to central, regional, and local levels, or a combination thereof.

Drawing on Giddens' theory of structuration, by the end of the 20th century, concepts such as policy networks and policy games were conceptualized. Based on this, a new definition of public policy emerged, stating that public policy is "the result of the interaction process among many actors, of which only a small number of state organs will gradually become widely accepted".³⁶ The concept of policy networks as a framework for describing and analyzing the environment in which public policy develops and is applied is increasingly attracting the attention of researchers. It starts from the premise that when a public policy actor attempts to manage the process of public policy, they must take into account the characteristics of that network. Networks are described as "more or less stable patterns of social relations among mutually separate actors that form around public-policy problems or clusters of resources and are formed, maintained, and changed by a series of games."³⁷

A policy network is generally a stable context within which decision-making games in public policy take place. A policy game entails "a continuous series of actions by various actors, conducted and guided by formal and informal rules, revolving around issues in which actors have an interest."³⁸ Characteristics of a policy network primarily depend on actors who are interdependent and must communicate with each other through a series of interactions to achieve their goals. This establishes a pattern of mutual depend-

³⁵ *Ibidem*: 12-14

³⁶ Klijn, E. H., Koppenjan, J., Termeer, K. (1995). Managing Networks in the Public Sector: A Theoretical Study of Management Strategies in Policy Networks; *Public Administration* Vol. 73: 437-454.

³⁷ *Ibidem*, according to: Klijn and Teisman (1991).

³⁸ *Ibidem*, according to: Allison (1971); Crozier and Friedberg (1980); Rhodes (1981).

ence relationships. The continuation of games within the network reflects the balance of resources such as power, status, legitimacy, knowledge, and money.

The distribution of resources influences future games within the network, but it also alters and strengthens the network. Besides actors, relationships, and resources, network characteristics also include rules established by participants in the network. Rules determine what is acceptable, which positions actors can occupy, which games they can participate in, which activities are associated with a position, how decisions can produce benefits, and whether assumed gains correlate with behavior. Rules are ambiguous, subject to interpretation, and change during gameplay.³⁹ Only some members of the network are involved in the game, using strategies to achieve certain goals. In a Policy game, strategy is a cohesive series of actions in which the desires and ambitions of individuals are linked to the assessment of the desires and ambitions of other actors.⁴⁰ At the same time, the actor in the game usually tries to achieve not just one, but several different goals simultaneously, and discovers new goals during the game. The power position of an individual player depends on the combination of resources that they can potentially mobilize in combination with their own strategic abilities, but ultimately relies heavily on others' perception of their assumed power. Therefore, an individual's power in the game is a social-political construct, just like the rules of the game.

Human resources are a critical factor that influences the successful implementation of the concept of sustainable development, or strategies for achieving sustainable development of local self-governments. Formulating, implementing, and controlling the strategy of sustainable development of local self-governments, especially the strategy of a sustainable environmental protection system, requires knowledge and analysis of available human resources. Environmental protection of local self-governments involves a clearly defined orientation of local governance based on external environmental analysis and internal analysis of local self-government (SWOT analysis) to formulate a successful strategy. In the overall strategic process, human resources are a factor of great

³⁹ *Ibidem*, according to: Morgan (1986); Giddens (1984); Burns and Flam (1987).

⁴⁰ *Ibidem*, according to: Crozier and Friedberg (1980).

importance for all phases of the process.⁴¹ The outcomes of public policy (Policy) are public-political measures and activities resulting from Policy games: enacted laws and regulations, changes in the status of certain institutions, introduction of new measures, altered quotas, criteria, agreements, etc.

Theories of public administration are relatively young. Traditional bureaucratic public administration has changed in two main directions: the first is the so-called market orientation, an approach focused on the user of the system. Ideas from the private sector have been applied, concerning customer satisfaction with services. Secondly, there has been an increase in the flexibility of employees: there are few who work in the same place in modern public administration for 20 years. This can have an impact on the learning capabilities of public organizations.⁴² The changes mentioned have set the stage for a new discourse: if the techniques and methods used in the private sector were applied in public administration, the efficiency of public service would be automatically improved.⁴³ The new public management is defined as "the reduction and deregulation of bureaucracy, using market mechanisms, shifting responsibility downwards and outwards in organizations, increasing productivity and efficiency, as well as empowering employees to achieve results, improving quality, and customer satisfaction".⁴⁴

The concepts of organizational structure and organizational culture are useful for understanding organizational crisis management and crisis management policy in all phases.⁴⁵ The question arises: what is the role of organizations in crises and how does a crisis affect the organization? This becomes an increasing challenge for researchers: the role in planning, coordinating, and allocating resources, managing, and taking responsibility for minimizing the consequences of crises.⁴⁶ When it comes to organizational theories, it is noted that the concept of crisis has so far been insuf-

⁴¹ Nikolić, N., Cvetković, V., & Zečević, M. (2019). Human Resource Management in Environmental Protection in Serbia. *Bulletin of the Serbian Geographical Society*, 100(1), 51-72.

⁴² Deverell, 2010: 45-48.

⁴³ Osborne, S. P. (2006). 'The New Public Governance, *Public Management Review* 8(3). 377-387.

⁴⁴ Deverell, 2010: 47.

⁴⁵ *Ibidem*: 48-50.

⁴⁶ Shaftitz, J. M. and Ott, J. S. (2001). *Classics of Organization Theory*. 5th edn. Belmont CA: Wadsworth Group/Thomson Learning.

ficiently incorporated into them.⁴⁷ Most of these theories deal with issues of crisis resilience, preparedness, and planning.⁴⁸ The concept of high reliability organizations has been developed, however, the criteria under which these organizations function are difficult to apply to public administration institutions and other "ordinary" organizations.⁴⁹ Centralized decision-making is a myth of successfully managed crises. This thesis has been somewhat revised in favor of a networked, decentralized crisis response.⁵⁰

The myth is that in a crisis, actors abandon their original goals and interests. Myths about human behavior in disaster conditions are a topic that has not been sufficiently explored, and there are several scientific papers in the literature that provide an overview of the most prevalent myths about human behavior and the reactions of individual services during disasters. Because the consequences of myth-based human behavior are unfavorable for the entire civil protection system of the Republic of Serbia, it is necessary to pay more attention to this topic.⁵¹ In etymological terms, the myth originates from the Greek word "mythos," which means: word, speech, or story of gods. A myth is a narrative in which the main roles are played by gods, heroes, or mythical beings, and the plot is directed towards explaining their origin, as well as the origin of the world, humanity, or metaphysical events. For the ancient Greeks, mythology was what science is for modern man, a way to understand themselves and the world around them, and myths represented true stories, whereas in the present world, they are more experienced as false beliefs.⁵²

⁴⁷ Roux-Dufort, C. (2007). 'Is Crisis Management (Only) a Management of Exceptions?', *Journal of Contingencies and Crisis Management* 15(2): 105-114.

⁴⁸ Pauchant, T. C. and Mitroff, I. I., (1992).

⁴⁹ Weick, E. K., Sutcliffe, M. K., Obstfeld, D. (1999). Organizing for High Reliability: Processes

of Collective Mindfulness, *Research in Organizational Behavior*, R. S. Sutton and B. M. Staw (eds), Volume 1., Stanford: Jai Press: 81–123.

⁵⁰ Hart, P. 't., Rosenthal, U., Kouzmin, A. (1993). Crisis Decision Making: The Centralization Thesis Revisited, *Administration & Society*, 25 (1): 12–44.

⁵¹ Cvetković, V., & Jovanović, M. (2020). Examination of the factors that influence public perception of mythically-based human behavior in disaster conditions. *Glasnik Srpskog geografskog društva*, 100(2), 161-179.

⁵² Cvetković, V., & Marina, J. (2021). *Mitovi o katastrofama: istine i zablude*. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama.

In literature, there are numerous myths that do not correspond to reality, among which the following stand out:⁵³

1) Disasters are rare and extraordinary events - the reality is that disasters are part of normal life and social processes, they are dependent on them, and they often occur;

2) Disasters affect all people in the same way, regardless of their class or economic status - poor and marginalized individuals are more exposed to the risk of disasters than the rich, i.e. members of higher classes;

3) Earthquakes cause suffering to a large number of people - the collapse of buildings due to ground shaking causes suffering to a large number of people;

4) People can survive for quite a long time under rubble - most people who survive are rescued from the rubble within the next 12 hours after an earthquake, possibly after 24 hours;

5) Panic is a common reaction during disasters - people generally behave rationally and soberly, although panic cannot be completely ruled out. Some sociologists and psychologists consider it insignificant or unlikely;

6) People will seek refuge outside the disaster-affected area - the opposite effect occurs, i.e. people gather in the disaster-affected area, and few survivors will leave the given area;

7) People who survive disaster strikes are usually lonely and apathetic - the fact is that survivors do not have time to be lonely, but immediately start clearing and cleaning their households. Therefore, activism is more common than fatalism, and in the most difficult cases, only a small number of people experience certain disorders;

8) Conditions after disasters are worse than they seem because authorities take certain measures to conceal damages and victims from the public - in real life, leaders of various sectors never cover up the consequences because it would cause additional destabilization;

9) Deviant and criminal behaviors in the form of theft are quite common in the period after disasters - in fact, such behaviors are rare and limited to specific cases;

10) After every disaster, epidemics automatically occur - adequate epidemiological surveillance and health protection are sufficient to stop any epidemic;

⁵³ *Ibidem.*

11) Disasters cause collapse and are difficult to manage - decades of research have provided sufficient levels of theoretical and empirical knowledge for adequate disaster risk management;

12) Disasters occur as a result of a lack of resources, which also prevent adequate management - resource scarcity is a lesser problem, given that they can always be provided later. Problems arise when allocating resources, as well as their use;

13) Any kind of assistance is welcome and very useful provided that it is delivered quickly enough - accelerated initiatives to provide assistance can cause even greater collapse, given that it is necessary to provide other logistical prerequisites that will contribute to their exploitation;

14) Disasters create spontaneous manifestations of antisocial behavior - in practice, social solidarity and sacrifice are more common than antisocial behavior;

15) Technology can save or contribute to disaster protection - the root causes of disasters are largely social factors, and

16) Disaster victims die due to lack of food - people die from various infections due to the inadequacy of certain foods, as well as from other diseases.

Traditional approaches, from classical organizational theories to theories of order, have advocated for the functional separation of bureaucracy and politics. Bureaucracy was associated with the execution of duties, order, hierarchy, and authority necessary for establishing coordination. Public administration, with its offices, agencies, and employees, was seen as neutrally competent, responsible for implementing political decisions. The political aspect implied interests, conflict, and ideology. The bureaucratic-political perspective deals with the strategic dimensions of relationships within and between government agencies.⁵⁴

The basic characteristics of biro-politics are: a multitude of actors on the policy-making scene; actors with different and conflicting interests; no actor has overwhelming influence; decisions are compromises; outcomes of decisions do not necessarily imply effective implementation. The scale of the impact of biro-politics on political decision-making ranges from: limited competition; biro-politics; to bureaucraties, indicating the degree of compromise-making. In bureaucraties, creating compromises is very difficult,

⁵⁴ Rosenthal, U., 't Hart, P., Kouzmin, A. (1991). The Bureau-Politics of Crisis Management, *Public Administration*, 69: 211–233.

and there is a significant difference between policy creation and implementation, making it dysfunctional.⁵⁵

Bureaucratic political theories have elicited reactions from proponents of traditional public administration theories, particularly due to the legitimization of conflict. Critiques argue that bureaucratic politics undermines the principles of democratic governance by introducing many actors and interests into the decision-making process, ultimately leading to a situation where no one is accountable for the compromise.⁵⁶ Furthermore, bureaucratic politics strengthens already recognized tendencies of bureaucracy, making them less oriented towards service users.⁵⁷ Thirdly, it appears that the bureaucratic political process disrupts the implementation of administrative procedures.⁵⁸ And finally, the extreme form - bureaucratization - fosters the impossibility of reaching any consensus (the so-called "bureaucratic paralysis"); it leads to situations where a lot of time and resources are needed to achieve consensus ("bureaucratic inefficiency") and a consensus that is only loosely connected to the needs of the given situation ("bureaucratic incapacity").⁵⁹

Researchers of bureaucratic perspectives recognize the possibility that partial fragmentation and competition within public administration, both internally and among different departments and agencies, can enhance rather than diminish the quality of decision-making.⁶⁰ It seems that bureaucratic politics comes to the fore during crisis management. In critical circumstances, political and administrative roles may become blurred, decision-making expands to involve a larger number of actors (networked response), decisions may become routine compromises in addressing sub-crises, information overload and the inability to evaluate decisions lead to a new cycle of bureaucratic politics.⁶¹ However, bureaucratic politics in crisis does not necessarily lead to negative outcomes. An example is the position of institutes and public health agencies, whose survival was questioned by health insurance and system reforms. The floods of 2014 provided an oppor-

⁵⁵ *Ibidem*: Rosenthal (1988).

⁵⁶ *Ibidem*: Bovens (1990); Thompson (1980).

⁵⁷ *Ibidem*: Breton and Wintrobe (1982).

⁵⁸ *Ibidem*: Bobrow (1972).

⁵⁹ *Ibidem*

⁶⁰ *Ibidem*, according to: Hart (1990); Lerner (1986).

⁶¹ Rosenthal, U., Hart, P., Kouzmin, A. (1991).

tunity for this part of the healthcare system to demonstrate its capabilities by engaging in a large portion of activities in response to the floods and the subsequent recovery efforts.

The scientific monograph is based on the political-institutional side of crisis management, which has been most developed by researchers at the Dutch Center for Crisis Research at Leiden University (Uriel Rosenthal, Arjen Boin, Paul 't Hart) and the National Center for Crisis Management Research and Training (CRISMART) at the Swedish National Defense College in Stockholm (Erik Stern, Bent Sändelius). Crisis poses a challenge to public governance while simultaneously impacting the organization, triggering organizational crises. This all contributes to the questioning of the legitimacy of elected authorities.

Crisis management in political systems, challenges related to crisis detection, decision-making, interpretation - political communication, crisis resolution and responsibility games, learning from crises, and crisis-induced reforms - are all topics addressed by the mentioned authors, as well as researchers from the fields of public administration, management, sociology, political science, and psychology.⁶²

Public governance in crisis management is a "shortcut for a set of interconnected extraordinary challenges for government. It represents the ultimate test of the flexibility of political systems and their elites."⁶³ Public governance in crises arises when vital values are threatened in the public domain, whether at the local, regional, national, or international level. At that moment, citizens have high expectations from the authorities. At the same time, politicians have a moral and social responsibility towards them and society as a whole. Furthermore, if authorities have not responded preventively to the crisis, it can lead to a loss of trust, suspicion of political and social institutions, and even the values themselves that are under threat. In such a situation, those responsible at the strategic, tactical, and operational levels must make decisions in a situation of uncertainty and time constraints, all under the watchful eye of the media and interested parties: citizens, opposition, civil society organizations, and the international community.⁶⁴

⁶² Boin, A. (2008) *Crisis Management*, Volume II-III, Sage Publications Inc., London.

⁶³ *Ibidem*: pp. 11.

⁶⁴ Kešetović, Ž., Toth, I. (2012): *Problemi kriznog menadžmenta*. Veleučilište Velika Gorica: Kolumna doo: 42-44.

This is the intersection of the concepts of crisis management and public policy.

For the concept of local self-government, there are several terms, depending on the political and social context, ranging from local democracy, local government, local autonomy, local administration, local authorities, territorial self-government, to local governance systems. A definition that incorporates elements of local self-government states: it is "a special level of public authority with the status of a legal entity, elected bodies, and its own property, organized in parts of the state territory and under the control of state authorities, having a constitutionally and/or legally guaranteed scope of its own affairs which it carries out independently and enjoys legal protection of its autonomy."⁶⁵

With the civic revolution, critiques of excessive centralization of power began in Europe from the mid-19th century onwards. The most common criticisms included neglect of specific local needs, bureaucratization, excessive control by central authorities, lack of citizen involvement in public affairs, suppression of local initiatives, and the strengthening of autocracy. Life unfolded under the dictate of a single center of power, usually from the capital, which would decide on even the smallest local issues. An example of this was the rule of Prince Miloš in Serbia.⁶⁶ It can be said that local self-government is a hallmark of modern democratic states. Countries like Norway and Sweden have a history of decentralization and the development of local self-government spanning 200 years, a period longer than the sovereignty of the state itself in the case of Norway. The development of local self-government in Western European societies varies, especially when considering the models of England and the continental part of Europe (France, Scandinavian countries).⁶⁷

Traditionally, the European Union and its member states continuously strengthen and transform their public administration systems, searching for optimal solutions. Solutions are sought in the doctrine of New Public Management, which emerged in the United Kingdom in the early 1990s. With the aim of increasing ef-

⁶⁵ Milosavljević, B. (2009) *Sistem lokalne samouprave u Srbiji*. II dopunjeno i izmenjeno izdanje. Beograd: Stalna konferencija gradova i opština: 4.

⁶⁶ Guzina, R. (1955). *Knežina i postanak srpske buržoaske države*. Beograd: Kultura.

⁶⁷ Đorđević, S. (2003) *Renesansa lokalne vlasti: uporedni modeli*, Fakultet političkih nauka i Beograd: Čigoja štampa.

efficiency and reducing costs, a market approach was developed in the public sector. Public services were outsourced to the private sector, competitions and public procurement were introduced, and emphasis was placed on the lowest cost of service provision. Public-private partnerships were developed, and there was an insistence on cost reduction, workforce reduction, performance measurement, competitiveness, and customer orientation.

The goals of New Public Management are directed towards the market economy rather than democracy. As a form of critique of this approach to public administration in Europe, a new administrative doctrine called Good Governance has emerged. The focus is on the best possible process in decision-making and implementation, rather than on the quality of the decision itself (whether it is "good" or "correct"). Good governance is responsible, transparent, adheres to the rule of law, is sensitive to the needs of the local community, participatory, efficient and effective, fair, and inclusive.

The new paradigm of public administration implies customer orientation and flexibility, which poses a challenge for classical bureaucratic systems. Western and Eastern European countries significantly differ regarding customer orientation in public administration.

Public administration systems in Eastern European countries are less ready for changes and less productive, management styles are less focused on the customer and collaboration within the system. However, the aspect of culture and values within public administration in these countries is above average compared to the global average.⁶⁸ In light of the new administrative doctrines, crisis management as a public policy in European countries less frequently involves transferring responsibilities to the private sector. Constant public administration reform is the context in which reforms of local self-government in European continental systems take place, accompanied by the process of Europeanization and the

⁶⁸ Ćukić, T. (2016). Efikasnost državne uprave u službi korisnika usluga“, prezentovano na skupu „Lokalna samouprava za budućnost - reforme u službi pružanja javnih usluga po meri građana“ u organizaciji MDULS 4. marta 2016. u Beogradu. See more at: <http://www.mduls.gov.rs/doc/zajedno/Efikasnost%20drzavne%20uprave%20u%20sluzbi%20korisnika%20usluga,%20Toma%20Cukic>.

principle of subsidiarity.⁶⁹ The goals of reforms aim to find a compromise between the principles of efficiency and democracy through better management of public affairs and policies, reducing public costs, and increasing the legitimacy and trust of citizens, as evidenced by higher voter turnout. Research in Denmark, the most decentralized and developed state, has shown that citizen trust correlates with the population size of local self-government: it is highest in self-governments with populations ranging from 15,000 to 20,000 and lowest in cities with over 100,000 inhabitants.⁷⁰

For the reform to achieve its goal, economic stability is necessary: at least 40% of original revenues and a positive correlation with the size of the local self-government unit. Problems accompanying local self-government reforms in Europe include unclear levels of jurisdiction, their overlaps, and covert deconcentration in original jurisdictions. It has also been concluded that strong local self-governments are possible in countries with a high level of social welfare (Denmark, the Netherlands, Finland, Norway, Sweden, Austria, etc.). The question of the measure and method of decentralization is a key part of the functional aspect of these reforms. Cities in this context occupy a special position compared to municipalities: they have more jurisdiction, a higher degree of financial autonomy, and autonomy.

From the 1960s until the breakup of the SFRY, Serbia had experience with developed local self-government and civic participation in public affairs management, influenced by the ideology and the times it was in. From 1990 to 2000, there was a period of strong centralization, which has not completely disappeared to this day, and since 2016, the trend has been strengthening again. Since the beginning of the 21st century, under the influence of European integration policies, decentralization, strengthening of local self-government, and insistence on greater citizen participation in the conduct of public affairs at the local community level have been carried out, only to see a resurgence of centralization trends from 2017 onwards. It can be said that this situation also applied to the

⁶⁹ Vučetić, D. (2016). Reforma lokalne samouprave u kontinentalnim upravnim sistemima, prezentovano na skupu „Lokalna samouprava za budućnost - reforme u službi pružanja javnih usluga po meri građana“ u organizaciji MDULS 4. marta 2016. u Beogradu. <http://www.mduls.gov.rs/doc/zajedno/Reforma%20lokalne%20samouprave%20u%20kontinentalnim%20%20upravnim%20sistemima,%20Dejan%20Vucetic.pptx>

⁷⁰ *Ibidem*, according to: Morisen, Danska.

other former republics of the SFRY.⁷¹ The principle that is commonly used alongside decentralization and civic participation is subsidiarity: transferring responsibilities to the level closest to the users, i.e., citizens. Serbia has placed a reservation on this article of the European Charter on Local Self-Government and ratified the Charter, except for the principle of subsidiarity.

When local self-government units, regardless of size, population, and other differences, have the same competencies and are structured in the same way, it is called a monotypic local self-government. When local self-government units are given the freedom to choose the way of organization, as well as the level of competencies related to their capacity and development, size, and selection of executive bodies, it is called a polytypic local self-government.

The concept of decentralization in this context is related to the concept of local self-government. Decentralization means transferring power from the central to the local level, transferring some state authority to a decision-making body outside the state structure. If viewed according to the nature of the body to which state affairs are transferred, it is divided into real, personal, and territorial decentralization. Real decentralization occurs when responsibilities are transferred from the state to individual collectives that are not part of the state organization (universities, schools, social welfare centers, municipal enterprises). When the state transfers its competencies to social groups, it is referred to as personal decentralization. Territorial decentralization involves transferring power from the state to territorial collectives (local self-government, regions, territorial autonomy). They are recognized the right to independently decide on public affairs as original competencies.

In the English-speaking world, the term for this is devolution and is considered the highest degree of decentralization. In this context, the relationship between the state and local self-government is based on principles of cooperation, not subordination. The state retains the right to control the constitutionality and legality of the performance of these tasks.⁷² Local government bodies have full responsibility for decision-making, financing, man-

⁷¹ Zlokapa, Z., Damjanović, D. (ur.) (2007): *Modeli organizacije lokalne samouprave: Slovenija, Hrvatska, Bosna i Hercegovina, Makedonija i Srbija*, Beograd: Palgo centar.

⁷² Milosavljević, B. (2009): 5-19.

agement, and implementation of their original competencies. When the state transfers certain competencies from the central to the local level, retaining the right to regulate laws and control their implementation, while local self-government only executes those tasks, it is referred to as the transfer (delegation) of competencies.

Decentralization is an administrative concept originating from French administrative practice. It involves the establishment of branch offices, decentralized branches of central government bodies. The state retains the right over them concerning financing, management, functioning, responsibility, and work control. Examples of this in Serbia include school administrations, employment branches, branches of the Republic Health Insurance Fund, Revenue Administrations, etc.

For the purposes of this monograph, the term local self-government will be used with the understanding: the right and ability of local authorities to, within legal constraints, regulate matters and perform a significant part of public affairs under their responsibility and in the interest of the local population.⁷³; each local community (municipality, city) is formed in accordance with the law within a specific area of state territory; a particular form of association and management of local communities is directly by the residents of those communities or through elected representatives and other bodies of those communities.⁷⁴

The discourse of crisis management is a distinct research topic, and various terms can cause confusion. In domestic literature, the closest term associated with crisis management is "disaster," which implies "a state when risks and threats or the consequences of disasters, emergencies, and other hazards to the population, environment, and material goods are of such magnitude and intensity that their occurrence or consequences cannot be prevented or mitigated by regular action of competent authorities and services, requiring special measures, resources, and intensified work regime for their mitigation and elimination."

Defining the term "natural disaster" is conditioned and accompanied by defining the notions of essential properties that remain constant under various circumstances. The linguistic expres-

⁷³ European Charter of Local Self-Government (1985): article of the law 1.

⁷⁴ Milosavljević, B. (2009): 4.

sion of this notion is represented by the term "natural disaster."⁷⁵ In literature, it is often encountered that authors connect the same conceptual contents or express them using different terms. Conversely, it is not uncommon for different conceptual contents about natural disasters to be designated by the same terms. Although there are extensive and multi-year studies, the literature still exhibits a broad range of interpretations of disasters, sometimes inconsistent and contradictory. Definitions stemming from an "interpretive stance" are also frequently encountered, highlighting disasters as what people say they are. Moreover, authors often mention disasters in the context of "opportunity," but it seems they are more concerned with the disaster as a "cause" of behavior than the "context" in which that behavior is realized. Legal definitions pose a particular problem, often insufficiently grounded from the perspective of existing theoretical knowledge. To address all these issues, a systematic approach to defining and describing disasters is necessary.⁷⁶

In accordance with the International Strategy for Disaster Risk Reduction⁷⁷, Disasters are defined as a serious disruption in the functioning of a community or society, involving comprehensive human, material, economic, and environmental losses and impacts that exceed the ability of the affected community or society to cope with it using its available resources. It is important to emphasize that disasters are often described as a consequence of the combination of exposure to hazards, existing conditions of vulnerability, and insufficient capacity or measures to reduce or cope with potential negative consequences. On the other hand, according to the Law on Disaster Risk Reduction and Emergency Management⁷⁸ According to the Law on Disaster Risk Reduction and Emergency Management (Official Gazette of the Republic of Serbia, 87/18), disasters are understood as natural disasters or technological accidents whose consequences endanger the safety, life, and health of people and material or cultural assets to a greater extent, and whose occurrence or consequences cannot be prevented

⁷⁵ Cvetković, V. (2015). Fenomenologija prirodnih katastrofa – teorijsko određenje i klasifikacija prirodnih katastrofa. *Bezbjednost, policija i građani*, 11 (3 – 4), 311-335.

⁷⁶ *Ibidem*.

⁷⁷ ISDR, 2009.

⁷⁸ Official Gazette of the Republic of Serbia," 87/18.

or mitigated by the regular actions of competent authorities and services.

Due to the inconsistent discourse related to the concepts of crisis and crisis management, the research relies on the existing normative framework, which defines the concepts of disasters and disaster management.

The scientific monograph is based on the political-institutional concept mainly from the Dutch and Swedish schools of crisis management, structuration theory, and biopolitical theories. It will also include authors from the fields of political science, sociology, organizational sciences, law, disasters, local self-government systems, history, and psychology.

1.1. Crisis and Disasters as Political Constructs

The phenomenology of crises in the modern world is increasingly diverse, with their frequency on the rise. Whether an event or phenomenon is labeled as a crisis or not is a matter of political construct, often depending on the power positions of interested parties and the perception of the threatened values. An example of this in Europe is terrorist attacks, especially in major cities. Terrorism as a phenomenon was previously publicly condemned in Europe by political and intellectual elites. Condemnations were of a diplomatic and political-declarative nature, as the public did not feel threatened, viewing civilian casualties in terrorist attacks primarily as a phenomenon associated with the Middle East. This has changed significantly in recent years with the increasingly frequent terrorist attacks on European soil, especially in major cities. Transportation infrastructure is particularly vulnerable, with attacks often occurring on trains, metros, and airports. The crisis caused by terrorist attacks reshapes citizens' everyday lives, affects public policies, the economy, and finances, alters public discourse, and lowers economic growth rates. Living with terrorism on the horizon has become almost a daily reality in Europe and is defined as a crisis.

One of the most important tasks of the modern state is finding the most adequate ways to counter terrorism. Regardless of how economically stable or powerful its military might be, no state is spared from the threat and fear of terrorism, which has become a powerful weapon for those who are unable to achieve their political goals through other, legitimate means. The most important

doctrinal and strategic documents of states place terrorism at the top of the security threats agenda due to its unpredictability and the severe consequences it leaves behind. Such a position indicates that states are particularly vulnerable to terrorism, and the situation is further complicated by the decades-long problem of defining terrorism, the resolution of which would greatly facilitate the fight against terrorism using legal means.⁷⁹

Countries, with their systems, are adapting and reshaping their public policies, modes of functioning, coordination, intersectoral, and international cooperation on the topic of combating terrorism and addressing the migrant issue. Serbia, as one of the countries on the migrant route, pursues a responsible and humane policy towards migrants and asylum seekers. However, this does not mean that crises related to this phenomenon do not arise at the local level. Public policies under the jurisdiction of the national level to some extent lag behind the actual situation locally.

One example pertains to public health safety and healthcare organized for the needs of migrants during 2015-16. It was provided in camps by primary healthcare teams. The costs incurred in this manner were treated as debts of primary healthcare centers, whose founders, until 2019, were cities and municipalities. The regulatory framework during crises does not always align with the situation on the ground, requiring adjustments and changes to ensure compliance with the law. Migrants housed in camps did not pose a risk to public health safety as much as individuals who were not visible in the system, which could mostly be detected at the local level.

Budget lines for communal activities, fire protection, housing, and communications in some local self-governments were emptied for the needs of migrants in 2016 after one month. These situations were not labeled as "crises" in the discourse of national politics, but they certainly represented sources of crises for the functioning of certain local self-governments. With regard to migrant policy, Serbia, as an integral part of Europe, shares its fate. Another characteristic of the global nature of crises: crises from the global and international, through the regional and national, quickly reach the local level.

⁷⁹ Popović, M., Cvetković, V. (2013). Suprostavljjanje savremenom terorizmu kao doprinos zaštiti ljudske bezbednosti u Republici Srbiji. Zbornik radova, Suprostavljjanje organizovanom kriminalu i terorizmu, Kriminalističko – policijska akademija, 169-177.

The situation is similar with climate change. The occurrence of uncharacteristic storms and hurricane-force winds in Europe is increasingly common. A severe storm that struck Central Europe in 2017, particularly in Poland and the Czech Republic, caused significant damage and loss of human lives, interrupting traffic, communication links, and water, food, and electricity supplies. Floods hit the Western Balkans in May 2014: Croatia, Bosnia, and Serbia. Czechia and Poland were hit by hurricane-force winds in October 2017 (100,000 people without electricity, at least five fatalities). Italy was exposed to a series of earthquakes during 2016-17. Central parts of Italy were hit by a devastating earthquake in 2016, resulting in around 250 casualties. A year later, another earthquake hit the same region, while snowfall at the same time caused landslides burying an improvised hospital in the ruined town of Amatrice. In early 2017, a snow avalanche buried a hotel in the same region, leaving 29 people beneath it.

Sometimes, one type of crisis situation triggers another, more serious one. Environmental protection policy is the most demanding, most regulated, and probably the most expensive public policy pursued by the EU. Romania became an EU member in 2007. Several years before joining the EU, in January 2000, a major environmental catastrophe occurred in the Baia Mare valley mines. After snow melting caused floods, improper handling of toxic waste from the mines and smelters led to the discharge of 100,000 m³ of water contaminated with 120 tons of cyanide and heavy metals into watercourses. Rivers in Romania, the Tisza in Hungary and Serbia, the Danube over a length of 2000 km, and the Black Sea were contaminated.⁸⁰ There was a massive fish kill, and the lead concentration in the blood of children and adults living nearby was several times higher than allowed. The same happened three months later in Baia Borș, also in Romania, where due to floods and rainfall and the failure of the system, 100,000 m³ of sludge with a high percentage of heavy metals was released into watercourses. Besides rivers in Romania, the Tisza in Hungary and Serbia were also contaminated.

Another highly regulated public policy pursued by the EU is protecting external borders from infectious diseases. In Romania, there has been a measles epidemic since 2016 due to low vaccina-

⁸⁰ UNEP/OCHA Report on the Cyanide Spill at Baia Mare, Romania. <http://archive.rec.org/REC/Publications/CyanideSpill/ENGCyanide.pdf>

tion rates among children. A year after the epidemic started, 3,400 people fell ill, and 17 children died. The epidemic also appeared in Serbia in the fall of 2017. The COVID-19 pandemic has hit the entire planet in an unprecedented manner. Crises know no boundaries, and interpretations of crises and responsibilities are also largely political.

The interdependence and interconnectedness of states and systems in meeting some strategically important needs, such as supplying electricity, pose a particular kind of challenge. Due to the disconnection of a power line over the River Ems to allow a ship to pass in Germany in November 2006, there was a simultaneous interruption in electricity supply in Germany, France, Austria, Belgium, and Spain, disrupting Morocco's supply as well. Traffic stopped (trains, planes, metros); people were stranded in elevators en masse, firefighters were inundated with rescue calls, and a large part of Europe was left in darkness. An energy company spokesperson stated that the fault lay with countries that had not invested in modernizing the energy transmission system. German ministers sharply criticized the energy company. The Italian Prime Minister proposed the formation of energy supply supervision in the EU. Experts concluded that the electricity transmission and supply network was designed for each country individually, not for the European network, highlighting weaknesses, especially in terms of coordination.⁸¹

By putting certain situations or clusters of events on the political agenda, by recognizing, evaluating, and labeling them as crises, decision-makers implicitly assume responsibility for resolving them. At the same time, an event labeled as a "crisis" transforms into a political act.⁸² In Slovenia, in February 2014, around 10,000 households were left without electricity overnight due to freezing rain and snow, with 88,000 experiencing supply problems. The Prime Minister and Defense Minister visited the most affected areas the following morning. The event was characterized as a major disaster. In Serbia, Maydanpek was hit by flash floods in May and August 2014. In December of the same year, due to a power line failure during a snowstorm, Timočka Krajina and the municipality of Maydanpek were without electricity, water, central

⁸¹ See more at: <http://www.dw.com/sr/berlin-sta-je-uzrok-nestanku-struje/a-2658039>.

⁸² Boin, A., Hart, P. 't. (2003). Public Leadership in Times of Crisis: Mission Impossible. *Public Administration Review*, 63(5): 544–553.

heating, and food supply for five days. The Minister of Energy visited Maydanpek on the third day without electricity, stating that it was "force majeure that is unpredictable and difficult to resolve".⁸³ The same day, a session of the disaster staff of Maydanpek was held to discuss the possibility of declaring a state of emergency. The Assistant Minister for Disasters stated that in such a situation, a state of emergency is declared.⁸⁴ The Red Cross delivered water and food to the population; Naftagas provided gas cylinders, and the municipality of Obrenovac and the Ministry of Defense provided heaters for the halls where evacuated residents were accommodated. The Bor Mining and Smelting Basin sent oil and generators. The event was characterized by the municipal disaster staff as a local crisis event, insufficient for declaring a state of emergency.

From the examples provided, it can be observed that a crisis is a complex phenomenon: one event often triggers a cascade effect, concentric circles, or a spiral, causing new crisis effects: over a larger territory, across multiple countries, in multiple sectors, under the jurisdiction of multiple public policies, and multiple administrative and territorial levels of governance. The prioritization by political elites is taken as a criterion for the size of the problem. Upward trends in the frequency and diverse phenomenology of crisis events, their comprehensive, long-term impact on societies, states, and the European Union, have contributed to crisis management as a public policy being more than ever a priority on the political agenda throughout Europe.

The determinants of the concept of "crisis" are relatively broad, originating from different sciences: medicine, military doctrine, politics. What is more complex than the concept itself is the context and moment in which an event gains the meaning of a crisis. Whether a crisis exists or not is determined by the elites. The scale on which an event is placed is broad: from risk, accident, disaster, conflict, major disaster, catastrophe. Whether and when an event will be labeled as "crisis" largely depends on the political consensus of the elites, but precisely for this reason, it is important to further clarify the theoretical foundation, discourse, characteristics, and typology of a crisis.

⁸³ See more at: <http://rtvbor.rs/arhiva/drustvo/16279-majdanpek-treci-dan-bez-struje.html>.

⁸⁴ See more at: https://www.b92.net/info/vesti/index.php?yyyy=2014&mm=12&dd=04&nav_id=932182.

1.2. The concepts of crisis and disasters

The excessive use of the term "crisis" threatens to trivialize and introduce confusion into the meaning of that concept. There is no generic definition of security; it depends on the field it relates to and the socio-political context in which it occurs and is defined.⁸⁵ Similarly, with a crisis: it is always experienced in relation to someone or as a crisis of something, individually, collectively, organizationally, at the state or societal level.⁸⁶ A generic definition of crisis would require a process-oriented approach: a crisis is not a fixed state, but a dynamic category, often of a nonlinear type, where the process of disturbance is rooted in a combination of external and internal factors.⁸⁷

The provocative connotation of the term crisis means that politicians, scientists, media, and citizens are equally interested in it. However, each has their own perception of what crisis means in a specific case. Two power outages in Sweden were labeled as a crisis because they deeply shook the perception of citizens and the state about a stable and secure society, and as such, they became the subject of scientific research.⁸⁸ Similar was the case with the power outage in New York in 2003. In Serbia, during the 1990s, power outages lasted for days, and the public and the state considered it normal under the circumstances of wartime. Even today, power outages in Serbia, whether announced or sudden, are not considered events with crisis characteristics. For an event to be labeled as a crisis, it must be named as such primarily by political elites.⁸⁹ The case of the Bhopal poisoning illustrates this: for the responsible company, the poisoning and death of thousands of people were an "incident"; for the Indian government, an "accident"; for the victims, a "catastrophe"; and for social activists, a "tragedy," "massacre," or "industrial genocide."⁹⁰ Regardless of the

⁸⁵ Buzan, B., Waever, O. and de Wilde, J. (1998). *Security: A New Framework of Analysis*, London: Boulder: Rienner: 35-42.

⁸⁶ Stern, E. (2003): 5.

⁸⁷ Kešetović, Ž. u Keković, Z., Kešetović, Ž.: (2006): 26-27.

⁸⁸ Stern, E. (2003).

⁸⁹ Stern, E. (2003); Brändström, A., Bynander, F., Hart, P. 't (2004). *Governing by Looking Back: Historical Analogies and Crisis Management*, *Public Administration*, 82 (1); Boin et al.: (2010).

⁹⁰ Kešetović, Ž. u Keković, Z., Kešetović, Ž.: (2006): 31, iz: Srivastava, P. (1992): *Bhopal, Anatomy of Crisis*. 2nd ed., London: Paul Chapman Publishing.

socio-political constructivism of the concept of crisis, there is a need for a more precise definition.

The term "security" in English, "Sicherheit" in German, "Sécurité" in French, and "Sicurezza" in Italian, all derive from Latin: "Securitas, atis", f. - meaning peace of mind, carefreeness, security, safety. A parallel in the development of its meaning throughout history can be drawn from the translation of this single word. Initially, security was a psychological category. The ancient Romans were protected from worries by the goddess of security, Securitas. The word "crisis" originates from ancient Greek and meant to separate, choose, decide, judge, measure, dispute, fight. It referred to situations in the life of a community and individuals where irrevocable decisions were made, marking a choice between extremely sharpened alternatives: victory and defeat, life and death, survival and destruction.

In wars, this word was used for a decisive battle. Hippocrates designated it as a critical phase of illness between life and death. In Latin, the word "crisis" was used in medicine and had the same meaning as in ancient Greek. In theology, it denoted the Judgment of God.⁹¹ During the time of the Roman Republic (509-27 BCE), the constituted Republic had a mechanism for resolving crisis situations: the appointment of a dictator in power, as a temporary measure, involving a six-month suspension of democratic elections for consuls and other lower-ranking state officials. Instances of civil war, anarchy, and crime were cited as crises during this period.⁹² By the end of the Middle Ages, its meaning was transferred to politics, economics, and history. When discussing scientific terms, one of the oldest and probably most well-known theories of motivation, Maslow's hierarchy of needs, certainly places security second in the hierarchy essential for human biological survival: right after physiological needs. Additionally, security is classified as one of the basic social motives.⁹³ Of course, the root of the need for security, given that it's assessed as basic for human survival, isn't solely conditioned by human vulnerability to hostile environmental conditions: the harshness of nature and the dangers it poses. Conflict as a social phenomenon is the other side of

⁹¹ Kozeek, B. (1987). Some questions about crisis management history: Kšiřof, M.: *O krizi*. Novi Sad: Knjiřevna zajednica.

⁹² Bradley, P. (2000). *Ancient Rome: Using Evidence*. Cambridge University Press.

⁹³ Ibidem.

the "security" concept, and the theoretical frameworks of researching social conflicts serve as precursors to security system theories.⁹⁴ Politically, the term "security" has been used since ancient Rome (*securitas Augusti*) as a symbol of the stability of power. Since the Middle Ages, it has been associated with public safety (*securitas publica*), in peace as the protection of subjects from the ruler, and in war as the obligation of subjects to the ruler.

According to Michael Hobbes, a crisis is "an unanticipated change that disrupts customary forms of adaptation and requires the use of new adaptive pathways; it denotes a sudden and unanticipated disruption of great significance for the everyday activities, understanding, and expectations of a social unit".⁹⁵ Charles Fraser Herman provides his definition: A crisis is a situation in which the high-priority goals of decision-makers are threatened, they are surprised by crisis events, and they have a time constraint for making new decisions.⁹⁶ Ole Holsti later reformulates "high-priority goals" as "core values".⁹⁷ From the perspective of the state, this definition was later formulated to define a crisis as "a situation with three necessary and sufficient conditions arising from changes in the external or internal environment. All three conditions must be contained in the perception of the highest-level decision-makers: the endangerment of core values, lack of time for response, and a high probability of involvement in military hostilities".⁹⁸ The criterion of surprise is also eliminated from Hermann's definition, who himself later distanced from the element of surprise in his own definition. For the purposes of this monograph, the term crisis will be understood as:

A crisis is a serious threat to the basic structures or fundamental values and norms of a social system which, under condi-

⁹⁴ Milašinović, M. R., Milašinović, M. S. (2007). *Osnovi teorije konflikata*, Beograd: Fakultet bezbednosti, 24.

⁹⁵ Hobbs, M. (1984). Crisis intervention in theory and practice: a selective review, *The British Journal of Medical Psychology*, 57: 23-34.

⁹⁶ Hermann, F. C. (1963). Some Consequences of Crisis Which Limit the Viability of Organizations, *Administrative Science Quarterly*, 8,61–82.; Hermann, C. F. ed. (1972). *International Crises: Insights from Behavioral Research*. New York: Free Press.: 13.

⁹⁷ Holsti, O. R. (1972). *Crisis, Escalation, War*. Montreal: McGill-Queens University Press: 13.

⁹⁸ Stern, E. (2003): 6, prema: Wilkenfeld, J. and Brecher, M. (1988) Crises in the Twentieth Century Vol. II: *Handbook of Foreign Policy Crises*. Oxford: Pergamon Press: 2.

tions of time pressure and uncertainty, requires the making of urgent decisions.⁹⁹

1.3. Crisis, disasters, and related terms

The excessive use of the term "crisis," the insufficient clarity of the concept, the lack of a universal definition, and often imprecise translation from English, both in practice and in literature in the Serbian language, frequently lead to confusion. This is especially true in cases of translation from English to Serbian, where terms often get mixed up: adversity; contingency; accident; major incident; disaster; emergency, etc.

1.3.1. Crisis and conflict, disturbance

A disturbance is a state that arises from the disruption of some order and arrangement of relations, that is, a deviation from the concept of equilibrium or homeostasis.¹⁰⁰ A disturbance represents a form of deviation from the concept of wholeness, or homeostasis, that is, a time-limited dysfunction within normal occurrences that does not require excessive potential to overcome the problem.¹⁰¹ Whether a disturbance will develop into a crisis largely depends on the capacity of the affected entity to overcome the problem. Conflicts (from the Latin *conflictus*: clash, struggle, dispute) are social phenomena, variable and multifaceted, usually caused by opposing interests, values, or significant resources (both material and spiritual) that the parties to the conflict wish to control.¹⁰² They are as old as humanity itself and involve a series of interactions of varying scope, intensity, and violence. The most significant are social conflicts, which can arise and develop slowly and gradually, or suddenly, and in extreme cases, lead to the complete destruction of a system or social entity.

⁹⁹ Rosenthal, U., Charles, M. T. and 't Hart, P. (1989): 10.

¹⁰⁰ Vidanović, I. (2006). Rečnik socijalnog rada. Udruženje stručnih radnika socijalne zaštite Srbije. Beograd: Tiro-erc.

¹⁰¹ Kešetović, Ž., Milašinović, S. (2008). Krizni menadžment i slični koncepti: pokušaj razgraničenja"; *Bezbednost* br. 1-2 Beograd: 49.

¹⁰² Milašinović, S., Keković, Z. (2008). Prevencija i razrešavanje društvenih konflikata, *Vojno delo* 2: 9-28.

The motivational drivers of social conflict are interests, which, from the standpoint of the likelihood of their emergence and the effects they produce, can be viewed as different, opposed, and contradictory. Different interests are directed toward mutually independent goals (goods) and, in principle, do not lead to social conflicts. Opposed interests are directed toward different and interrelated goals and, as a rule, cause social conflict.

Resolution of conflict caused by opposed interests can be achieved through compromises. Contradictory interests are opposed but without the possibility of compromise, where satisfying the interests of one side excludes the possibility of compromise for the other and requires the imposition of dominance or a radical change in social conditions that generate contradictory interests.¹⁰³ For a conflict to transition from a latent to a manifest state, three complementary factors need to be present: contact and visibility of differences; perceived incompatibility; and perceived usefulness of the conflict.¹⁰⁴

The first condition is the existence of a partner and interaction with them. When participants engage in interaction, they perceive incompatible activities. Here, the perceived incompatibility, rather than the objective incompatibility, is crucial. Even when incompatibilities are objectively recognized, conflict may not occur unless one or both parties believe they will gain or lose more by entering the conflict. The structure of conflict consists of: the conflict situation, conflict behavior, and the attitudes and perceptions of the participants. The criteria by which conflicts are classified include: the nature of the conflict; the actors involved in the conflict interaction; the sphere in which the conflict occurs; the subject of the conflict; and the goal, that is, the effects of the conflict-induced change.¹⁰⁵ Regarding the character, Louis Koser distinguishes between realistic and unrealistic conflicts. In realistic conflicts, the conflict is just one means to achieve a goal. Unrealistic conflict is caused by the need to release tension for at least one of the participants. The subject of the conflict is incidental; the conflict is an end in itself.

¹⁰³ Stojiljković, Z. (2008). Konflikt i/ili dijalog, Ogleđi o sindikatima, tranziciji i demokratiji, Swiss Labour Assistance (SLA). Beograd: Fakultet političkih nauka: 10-11.

¹⁰⁴ *Ibidem*: 12-13.

¹⁰⁵ *Ibidem*: 21.

According to the actors and their relationships, conflicts can be ethnic, gender-based, national, religious, etc.; involving two or more sides, intragroup or intergroup. The third criterion—the sphere/domain in which the conflict manifests—is conditional and determined primarily by the nature of military, economic, ideological, political, cultural, etc., predominance. High social stratification in society is a prerequisite for an increased risk of conflict.

The criterion of the subject basis distinguishes conflicts of interest, values, and identity. Conflicts arising from conflicts of interest are considered conditionally the simplest and easiest to resolve compared to conflicts of values and identity because the subject of the conflict of interest is situated within a mutually accepted value system. Conflicts arising from conflicts of value systems and identity threaten the existing social system, often without the possibility of compromise. Examples include religious, radical, national, and political conflicts. On the other hand, prohibiting the expression of the struggle for different interests is a characteristic of rigid and authoritarian societies.¹⁰⁶ The fifth criterion relates to the degree of radicalism of the intended change; thus, conflicts are divided into moderate and systemic. Moderate conflicts do not question the foundations of the system. Systemic conflicts question the survival of the system itself. According to this division, the most important forms of systemic conflicts are war, revolution, and social crisis.¹⁰⁷

The crisis as a form of systemic conflict is explained as a process of either driving the system out of equilibrium (crisis as a process) or a state of system imbalance (crisis as a result). In political theory, Klaus Offe's theory of crises addresses this concept¹⁰⁸. In his work on the welfare state, crisis is defined as a process in which the structure of the system is questioned, endangering the identity of the system. Identity is defined in relation to the overall range of possible events in the system.

Crisis is defined in two ways: as a "sporadic crisis concept," when crisis is conceptualized as an external event that enters the system and threatens it. The starting point of the "sporadic crisis concept" is that crises are separate, acute, unpredictable, and sud-

¹⁰⁶ Coser, L. (1956). *The Functions of Social Conflict*. New York: The Free Press: 5-8.

¹⁰⁷ Stojiljković, Z. (2008): 34-36.

¹⁰⁸ Offe, C. (1984). edited by Keane, J., *Contradictions of the Welfare State*. London: Hutchinson&Co Ltd: 33-37.

den events that therefore require decision-making under pressure and within a limited time frame. According to this view, crisis is reduced to an event or a chain of events in a single point or a short period of time. It is difficult to explain societies or social systems prone to crisis using this definition, nor are qualitative connections established within the system. This approach is suitable for analyzing well-defined sub-systems (e.g., the economy).

The second approach in Offe's consideration of crisis does not focus on the level of events but on the "superordinate levels of mechanisms that generate events."¹⁰⁹ In this context, crisis is a process with developmental tendencies and an uncertain outcome that connects different parts of the system. Considering the contradictions and possible sustainability of the welfare state, Offe concluded that it operates thanks to fiscal resources, administrative rationality, and mass loyalty, which legitimizes the system. Crisis arises when the political-administrative system lacks the ability to resolve economic crisis conditions, leading to the breakdown of mass loyalty necessary to maintain legitimacy.¹¹⁰ The neoliberal approach identifies the causes of social crisis in the relationship between growing demands and excessive costs, namely excessive public spending and insufficient governmental capacity to meet them.¹¹¹

Summarizing the relationship between crisis and conflict, it can be said that it is multifaceted and multilayered. It ranges from crisis being a kind of foundation for the outbreak of conflict to defining crisis as a subtype of systemic conflict. In any case, a crisis can exist without conflict, but conflict without crisis is unlikely.

1.3.2. Risk, accident, state of emergency, and disaster

Risk (English: risk, hazard) denotes an abstract danger, the probability of an accident occurring within a certain period, circumstances, and with certain negative consequences. The definition of risk in the English-speaking area is "the possibility that something bad will happen" or "doing something with the possibility of a bad outcome."¹¹² The concept of risk has different meanings

¹⁰⁹ *Ibidem.*

¹¹⁰ *Ibidem*: 53-55.

¹¹¹ Stojiljković, Z. (2008): 37.

¹¹² See more: <http://dictionary.cambridge.org/dictionary/english/risk>.

in various disciplines such as medicine, finance, security, safety, etc. One of the most prevalent definitions in disaster theory is by Ansel and Norton, according to which risk is the product of the probability and consequence of an event. This definition implies that risk can be managed by influencing either the probability (through mitigation and preparedness activities) or the consequences of a catastrophe (through mitigation, preparedness, response, and recovery activities). In the literature on risks in disasters, most authors, when defining the concept of risk, mention that it originates from the Chinese word "wei ji," which suggests a combination of "danger" and "opportunity." The concept of risk has always been a topic of interest for researchers in various scientific disciplines over the past fifty years. Therefore, each definition of risk reflects the scientific discipline from which it originated.¹¹³

Risk and risk management, as subjects of definition, are often misunderstood or equated with risk identification, risk assessment, risk analysis, and risk communication. In the literature, three key questions regarding risk are also mentioned:¹¹⁴ 1) What could go wrong?; 2) How likely is it to happen?; and 3) What are the consequences if it does happen? The first question - what could go wrong - refers to possible event scenarios, so-called risk scenarios. The second question pertains to examining the probability of such scenarios, while the third question focuses on the potential consequences of such scenarios. The meaning of the term risk is conditioned by various cultural and ethnic characteristics. For example, in Arabic, "risq" means everything given by the Lord and from which a lesson can be drawn.

An accident is an extraordinary event caused by factors beyond control, resulting in endangerment of human or animal lives or health and material damage. An accident denotes an event caused by human factors, including technology, that exceeds the framework of the technical-technological structure in which it occurred.¹¹⁵ A technical-technological accident or incident is a sudden and uncontrolled event or series of events that have gone beyond control while handling certain work equipment and dealing with hazardous materials in production, use, transportation, traffic, processing, storage, and disposal. Examples include fires, ex-

¹¹³ Cvetković, V. (2022): 275-276.

¹¹⁴ Garrick, B. J. (2008). *Quantifying and controlling catastrophic risks*: Academic Press.

¹¹⁵ Kešetović, Ž., Milašinović, S. (2008): 39-41.

plosions, accidents in road, river, rail, and air traffic, accidents in mines and tunnels, breakdowns in cable cars for transporting people, dam collapses, accidents at power, oil, and gas plants, accidents in handling radioactive and nuclear materials, all of which endanger the safety and lives of people, property, and the environment.¹¹⁶

An disaster is a state where the risks, threats, or consequences of disasters, emergencies, and other hazards to the population, environment, and material goods are of such magnitude and intensity that their occurrence or consequences cannot be prevented or mitigated by the regular actions of competent authorities and services. Therefore, special measures, resources, and forces, along with an intensified operational regime, are necessary for their mitigation and elimination. An disaster may not necessarily be a crisis if competent services and systems (Ministry of Interior, military, emergency services sector, firefighters, etc.) provide a response using established means, with limited involvement of other services and sectors.

In contrast, a state of emergency is indeed a crisis because it involves a temporary suspension of normal government and public administration functioning, regulated by law and established through a special legal act, as the usual response measures to an disaster are insufficient. During a state of emergency, the ordinary way of life of citizens is suspended to protect their lives or property. The state, along with its institutions and public services, acts according to plans for handling emergencies.¹¹⁷ The causes for declaring a state of emergency are most commonly disasters, war, civil unrest, etc.¹¹⁸

¹¹⁶ Cvetković & Čaušić (2022). Ibidem.

¹¹⁷ Cvetković, V., Martinović, J. (2021). Upravljanje u nuklearnim katastrofama. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama; Cvetković, V. (2021). Bezbednosni rizici i katastrofe. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama; Cvetković, V. (2020). Upravljanje rizicima u vanrednim situacijama. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama; Cvetković, V. (2019). Upravljanje rizicima i sistemi zaštite i spasavanja od katastrofa. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama; Cvetković, V. (2017). Metodologija naučnog istraživanja katastrofa – teorije, koncepti i metode. Beograd: Zadužbina Andrejević.

¹¹⁸ Kešetović, Ž., Milašinović, S. (2008): 41-42.

1.3.3. Disaster

In scientific literature, both domestic and international, the theoretical definition and classification of natural disasters represent a very topical issue. The necessity and motivation of authors to establish concise definitions arise from the need for clear differentiation of disasters from everything else, especially from related concepts such as hazards, crises, and risks. Certainly, the interest in defining them stems from the need to describe the field of study and create conditions for the accumulation of knowledge and the development of theories. In doing so, researchers in the field of disaster studies also encounter discussions and debates about distinguishing the conceptual definition of disasters from emergencies.

The research results show that the theoretical definition of natural disasters has been influenced by: the social environment in which it emerged, the scientific discipline from which it originated, its purpose, the geographic region of occurrence, etc. When examining their origins, it is noticed that the first definitions were provided by linguists and largely reflected the specificities of the culture and language in which they originated. Over time, they evolved in line with various changes in the world. A large number of definitions, although seemingly contradictory at first glance, emerge within the same categorical domain. They are based on different theoretical and empirical foundations. Moreover, there is a difference between defining a disaster as a phenomenon or an area of study. Researchers often fall into the trap of substituting conceptual foundations of phenomena such as disasters with explanations of what constitutes them and how society acts in such situations.¹¹⁹

The term "catastrophe" originates from the Greek word "katastrephein" (καταστρεφειν), meaning "to overturn, to turn upside down." It is synonymous with the final outcome of an event with a bad ending, accompanied by significant losses. Unlike a crisis, whose outcome is ambivalent, it can be said that a catastrophe is a crisis with a bad ending. The social evolution of understanding

¹¹⁹ Cvetković, V. (2015). Fenomenologija prirodnih katastrofa – teorijsko određenje i klasifikacija prirodnih katastrofa. *Bezbjednost, policija i građani*, 11 (3 – 4), 311-335.

and defining catastrophes began from the 1950s onwards. It ranges from those approaches that focus on the causes and consequences of catastrophes, which are considered classical approaches, to more modern ones that deal with catastrophe as a social construct and the societal disruptions it causes.

One of the classic definitions of a catastrophe, known as the "Fritz's definition," originates from a team of researchers at the National Opinion Research Center (NORC) at the University of Chicago¹²⁰ He says that a catastrophe is an event concentrated in time and space in which society or some of its parts suffer material damage and social disturbances, so that all or some essential functions are impaired. The definition is still used today, but since 1970, a constructivist approach to defining the concept of "catastrophe" and distinguishing it from other similar concepts (crisis, accident, etc.) has been developed. Studying the impact of "catastrophes/disasters" on mental health, Quarantelli¹²¹ encounters difficulties and concludes that defining and using the term "catastrophe" largely depends on the context and language used. Additionally, it notes that the concept of "catastrophe" is often used and equated in the context of: catastrophes as a physical cause/agent; catastrophes in terms of physical impact on any physical agent; catastrophes as a response to a physical agent; social disturbance as a consequence of events with physical impacts, which is a social construct of reality in observed crisis situations that may or may not involve physical impacts; political definitions of certain crisis situations and imbalances in rational response to the crisis situation. Such diversity in interpreting the concept of catastrophe has not facilitated access to researching catastrophes or responding to them.

There still isn't a universally accepted definition that separates catastrophe from accident and similar terms, but each country legally defines what a catastrophe is. For Serbia, a catastrophe

¹²⁰ Fritz, C., Gorden, R., Krauss, I., & Quarantelli, E. (1950). Some problems for social and sociological research in disaster situations. Unpublished manuscript, Disaster Research Center Resource Collection, University of Delaware, Newark, DE.

¹²¹ Quarantelli, E. (1985). What is disaster? The need for clarification in definition and conceptualization in research. Newark, DE: University of Delaware Disaster Research Center.

is a natural disaster or other misfortune and event that, by its size, intensity, and unexpectedness, endangers the health and lives of a larger number of people, property, and the environment, and whose occurrence cannot be prevented or mitigated by the regular actions of competent services, state administration bodies, and local self-government units, as well as accidents resulting from war damage or terrorism. The term "Natech catastrophe" (Natural hazards triggering technological risks) was introduced by Prof. Steven Picou after Hurricane Katrina hit New Orleans in the USA.¹²² It denotes a catastrophe of a technical-technological origin, triggered by a natural catastrophe (hurricane, tsunami, earthquake, flood, etc.). An example is Fukushima in Japan. The determination of the term "natural disaster" is conditioned and accompanied by defining the essential properties that are constant under various circumstances. The linguistic expression of this idea is represented by the term "natural disaster." In literature, authors often encounter the situation where they connect the same conceptual contents or express them with different terms. Furthermore, it is not uncommon for different conceptual contents regarding natural disasters to be denoted by the same terms. Although there have been extensive and multi-year studies, literature still exhibits an overly broad range of interpretations of catastrophes, sometimes inconsistent and contradictory. Definitions stemming from an "interpretative stance" are often encountered, emphasizing that catastrophes are what people say they are. It is not unusual for authors to mention catastrophes in the context of "opportunity," but it seems they are more inclined to consider catastrophes as a "cause" of behavior rather than the "context" in which that behavior is realized. Legal definitions also pose a particular problem, often insufficiently grounded from the perspective of existing theoretical knowledge. A systematic approach is necessary to prevent all of the above, in defining and describing catastrophes. Therefore, the review of literature on the theoretical determination (definitions) of natural disasters will focus on: identifying relevant definitions Phenomenology of natural disasters as a broader concept and "natural disasters" as their subtypes; categorizing all definitions into specific periods of their occurrence; distinguishing from other related concepts, pri-

¹²² Picou, J. S. (2009). Katrina as a Natech Disaster Toxic Contamination and Long-Term Risks for Residents of New Orleans. <http://stevenpicou.com/pdfs/katrina-as-a-natech-disaster.pdf>, скинуто са интернета 18. 11. 2017.

marily natural hazards and crises; summarizing relevant theoretical definitions to formulate a comprehensive definition with clear content and scope of the concept of natural disasters. Generally, the theoretical determination of catastrophes has followed: the social environment in which it originated; the scientific discipline from which it originated (e.g., sociology, geography, management); the purpose of definition (e.g., academic or for practical purposes); the geographical region of occurrence (e.g., western or eastern countries), etc.¹²³

1.4. Characteristics of crises and disasters

Within the previously mentioned definition, the concept of crisis entails the following characteristics:¹²⁴ a) Threat - refers to the key values that are endangered (life, security, health, integrity, justice, wealth, etc.). Key values are a social construct and depend on the socio-political context to which they refer; b) Time pressure - if they do not produce acute problems, serious threats do not cause a sense of crisis (global warming, aging population, depopulation, state of pension funds, etc.). When the threat is on the urgent political agenda, it transitions into the crisis phase; c) Uncertainty - refers to the nature and potential consequences of the crisis. Unlike state-centric definitions of crises that emerged during the Cold War, the necessary criteria for a modern definition of crisis are provided by Rosenthal, T. Hart, and Charles¹²⁵, Defining crisis as "a serious threat to the basic structures or fundamental values and norms of the social system, which, under time pressure and highly uncertain circumstances, requires critical decision-making." In conditions of global insecurity and interdependence, more than ever before, the complexity of the concept of "crisis" comes to the fore. Few terms are as commonly used in such diverse scientific disciplines: from medicine, psychology, through econom-

¹²³ Cvetković, V. (2015). Isto.

¹²⁴ Kešetović, Ž., Toth, I. (2012). *Problemi kriznog menadžmenta*. Veleučilište Velika Gorica Velika Gorica: Kolumna doo: 42-44.

¹²⁵ Rosenthal, U., Charles, M. T. and 't Hart, P. (1989). The World of Crises and Crisis Management. In U., Rosenthal, M. T. Charles and P. 't Hart (eds) *Coping with Crises: The Management of Disasters, Riots, and Terrorism*. Springfield: Charles C. Thomas: 9-10.

ics, politics, ecology, sociology, history, law. What is common to them is the possibility of viewing the development of society as alternating between peaceful periods of "plateaus" and brief, turbulent periods of acceleration of historical processes, during which new relationships, patterns, values, and ideas are established.¹²⁶

The subjects of this acceleration, or exposure, can be individuals, groups, organizations, states, or societies. In the mentioned disciplines, crisis has signified a brief, sharply focused moment in historical, evolutionary, or economic development where old patterns of functioning are no longer effective, prompting the search for and transition to new, more effective solutions. Crisis inherently contains a developmental element; it is a transitional state.¹²⁷

Disasters, social conflicts, accidents caused by human error – they're nothing new. What puts them into focus in more recent times is the vulnerability of modern society.¹²⁸ Climate change, geopolitical transitions, transnationalization, globalization, technological and informational development, the global media arena, and the erosion of state authority are all conditions in which an adverse event can shake the systems and institutions responsible for responding to that event.¹²⁹ "There is no universal definition of a crisis; it varies from one field to another".¹³⁰

¹²⁶ Vljaković, J. (2005). *Životne krize, prevencija i prevazilaženje*. III, Beograd: IP Žarko

Albulj: 4-5.

¹²⁷ Tom, R. (1987): *Kriza i katastrofa*, u: Kšišof, M.: *O krizi*, Novi Sad: Književna zajednica.

¹²⁸ Cvetković, V., Gačić, J. (2016). *Evakuacija u prirodnim katastrofama*. Beograd: Zadužbina Andrejević; Ivanov, A., Cvetković, V. (2016). *Prirodni katastrofi – geoprostorna i vremenska distribucija*. Univerzitet „Sv. Kliment Ohridski“ - Bitola, Fakultet za bezbednost, Skopje; Bošković, D., Cvetković, V. (2017). *Procena rizika u sprečavanju izvršenja krivičnih dela eksplozivnim materijama*. Beograd: Kriminalističko-policijska akademija; Cvetković, V., Bošković, D., Janković, B., & Andrić, S. (2019). *Percepcija rizika od vanrednih situacija*. Beograd: Kriminalističko-policijska akademija; Miladinović, S., Cvetković, V., & Milašinović, S. (2017). *Upravljanje u kriznim situacijama izazvanim klizištima*. Beograd: Kriminalističko-policijska akademija; Cvetković, V., Filipović, M. (2017). *Pripremljenost za prirodne katastrofe – preporuke za unapređenje pripremljenosti*. Beograd: Zadužbina Andrejević.

¹²⁹ Kešetović, Ž. (2006). *Teorijski koncept krize*, u: Keković, Z., Kešetović, Ž.: (2006): *Krizni menadžment i Prevencija krize*, Fakultet bezbednosti, Beograd: Filip Višnjić: 73-76

¹³⁰ *Ibidem*: 35.

The complex interdependence of the modern world means that a crisis can start in one area and spread to others: from environmental to socio-economic, from health to administrative-legal, from financial to military. It can originate in one place and, ever more rapidly, transfer to other continents and a significant portion of the planet. Crises can result from human error or intention, natural events; they can cause high or low damage, be more or less predictable and manageable, fast or slow, conventional or modern.¹³¹ However, there is one constant in this diverse pattern: crises fundamentally have a political character.¹³²

A common misconception regarding the study of crisis phenomenology is their uniqueness. To some extent, this is true: each crisis has its own scenario, physical characteristics, and conflicted history. However, if the concept of crisis is understood as a "period of profound uncertainty and urgent challenges in addressing the capacity problems of the socio-political order in which they arise"¹³³, The sense of uniqueness of a crisis fades away. Individuals and organizations tasked with responding to a crisis draw from individual or collective memories and experiences, seeking effective solutions; crises are connected through time.¹³⁴

Policy makers and decision-makers, political leaders, are confronted with the fact that crises cannot be completely prevented due to the inability of the social system to control the disruptions that lead to them. There is also mention of the decreasing resilience of modern society due to dependence on contemporary technologies: energy, information, communication, and others. The more complex the social system, the harder it is to manage. Previously, there was a perception of linear dynamics in crisis development: a large consequence arises from a large cause. However, findings are moving towards nonlinear dynamics: many smaller incidents can lead to significant consequences. The question is whether the system is capable of isolating, recognizing, and identifying them as potential triggers of the crisis.¹³⁵ "When essential values or life-support systems of a community are threatened, a

¹³¹ *Ibidem*: 48-72.

¹³² Boin at al.: (2010): 7.

¹³³ Brändström, A., Bynander, F., Hart, P. 't (2004). Governing by Looking Back: Historical Analogies and Crisis Management, *Public Administration*, 82 (1): 191.

¹³⁴ *Ibidem*: 191.

¹³⁵ Boin at al.: (2010): 15-17.

crisis occurs. The deeper the crisis is, the more life depends on the endangered values."¹³⁶



Figure 1. Disasters in Serbia.¹³⁷

¹³⁶ *Ibidem*: 12-13.

¹³⁷ Lukić, T., Gavrilov, M. B., Marković, S. B., Komac, B., Zorn, M., Mlađan, D., Prentović, R. (2013). Classification of natural disasters between the legislation and application: experience of the Republic of Serbia. *Acta Geographica Slovenica*, 53(1), 149–164. <https://doi.org/10.3986/ags53301>

1.5. Classification of crises and disasters

The classification is not only important for science but is also one of the basic components of rational thinking. It is used in a process that goes from identification to comparison, as a logical action. For classification to be feasible, it needs to be supported by a detailed description of the subject under consideration or research. Research that has been conducted so far, which is predominantly focused on the classification of disasters, is very rare. Moreover, scientific endeavors that deal with the description and explanation of individual research subjects related to emergencies or research as a whole are far more prevalent, where these research efforts partially relate to the classification of emergencies. This means that classifications of disasters, partially or entirely, are present, but only as secondary contents of descriptive and explanatory research in the field of emergency issues. At the same time, this is part of research related to disasters that is most often conducted at a low level. This can be argued by the absence of an analysis of derived classifications of disasters from the perspective of their validity. As a result, there is confusion in the meaning of individual concepts that are important for understanding the concept of disasters, their main attributes, their transformation into criteria (principles of division), as the content of classification, i.e., these classifications that relate to certain types of emergencies.¹³⁸

Given the broad concept of crisis, the typology of crises and emergencies is very diverse. The simplest division is into classical, modern, and combined types.¹³⁹ In the literature, there are numerous works dedicated to the classification of disasters and emergencies. According to their place of occurrence, disasters can be classified into geophysical (earthquakes, volcanoes, tsunamis); meteorological (tornadoes, lightning, storms with hail, snowstorms, blizzards, heatwaves, cold waves, etc.); hydrological (floods, flash floods); biological (epidemics and insect infestations); and extraterrestrial. Considering the source of occurrence, disasters can be endogenous (earthquakes), exogenous (floods),

¹³⁸ Mlađan, D., Cvetković, V. (2013). Classification of Emergency Situations. International scientific conference "Archibald Reiss days" Thematic conference proceedings of international significance., Belgrade, The Academy of Criminalistic and Police Studies, 275-291.

¹³⁹ Kešetović, Ž., Korajlić, N. (2008). *Krizni menadžment*. Beograd: Pravni fakultet.

and anthropogenic (floods caused by dam failures). Based on the speed of occurrence, they are distinguished into sudden (earthquakes) and slow-onset (drought). According to the spread of consequences, they can be intensive and localized (earthquakes and tornadoes) or scattered or diffuse and widespread (floods and droughts). Some authors differentiate four types of disasters: a) disasters of instantaneous impact and large scale (they are completed before anyone can take action and usually destroy the entire affected area); b) localized disasters of instantaneous impact (the consequences are local, while the rest of the community remains unaffected); c) progressive disasters of large scale (they can last for several hours or weeks, affecting the entire community and broader areas); d) progressive, localized disasters (forest fires).¹⁴⁰

¹⁴⁰ Cvetković, V. (2021). Pravni i bezbednosni aspekti upravljanja rizicima od prirodnih i antropogenih katastrofa. Izdavač: Pravni fakultet u Novom Sadu i Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama; Cvetković, V. (2021). Taktika zaštite i spasavanja u vanrednim situacijama: iskustva sa terena i pouke. Zbornik radova, Prvi nacionalni seminara iz oblasti vanrednih situacija, Zadužbina Kolarac, od 16. do 18. aprila 2021. godine, Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama i Međunarodni institut za istraživanje katastrofa, Beograd.

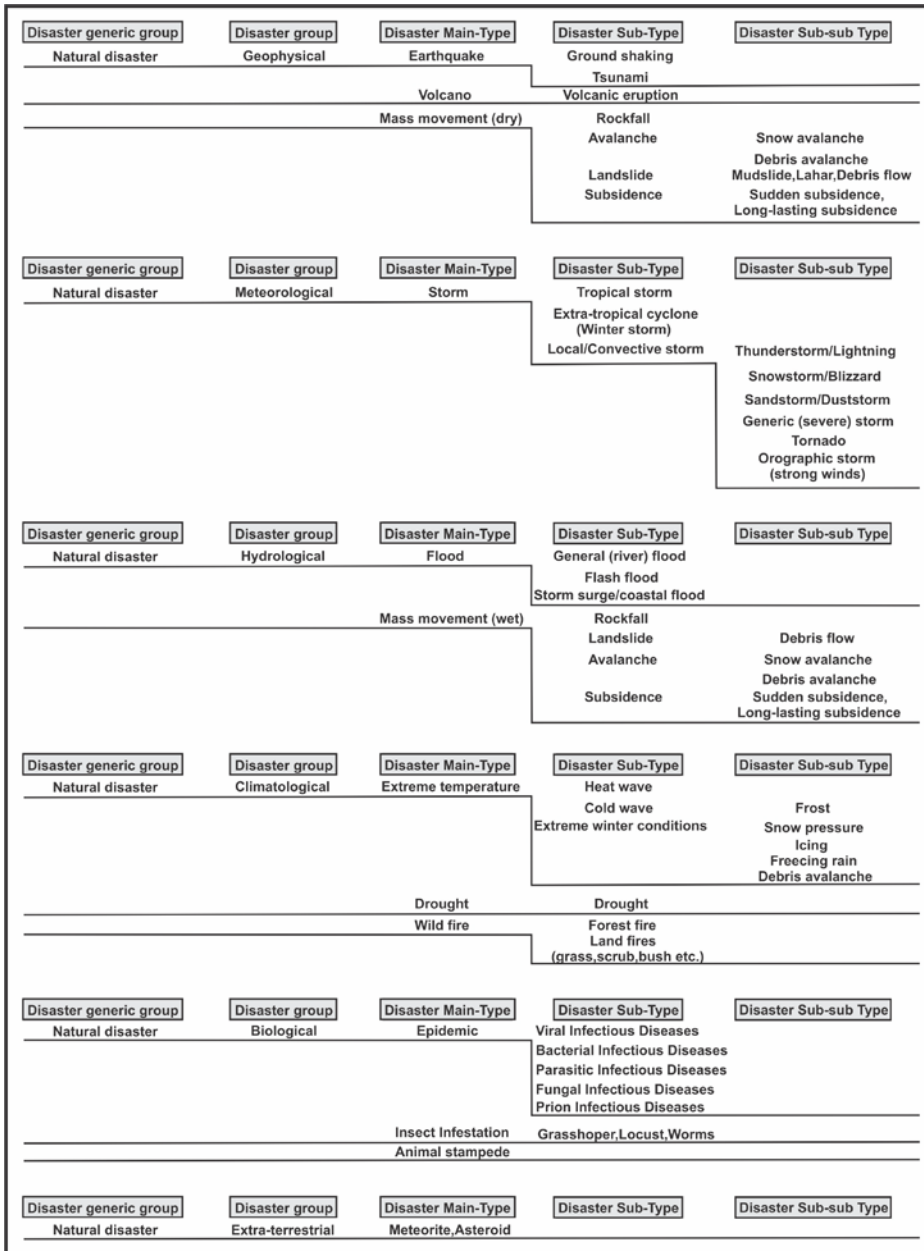


Figure 2. Disaster and crisis classification.¹⁴¹

¹⁴¹ Lukić, T., Gavrilov, M. B., Marković, S. B., Komac, B., Zorn, M., Mladan, D., Prentović, R. (2013). Classification of natural disasters between the legislation

A precondition for the classification of emergencies is the unambiguous determination of the subject of division. A newly created or analyzed classification of emergencies should meet the conditions of a valid classification in terms of theory and logical requirements. Each disaster and its characteristics have their causes of occurrence, a unique scenario, impact on humans and the environment, dimensions, and severity of consequences. This implies that emergencies can be classified based on numerous characteristics that take into account these complex phenomena from different perspectives. However, differences between classifications result from different definitions of emergencies as subjects of division. Additionally, numerous definitions of emergencies may have national or cultural characteristics that hinder the standardization of the term. Regarding international classification, the most accepted and cited classification of emergencies is provided by CRED (Centre for Research on the Epidemiology of Disasters), an organization that has been striving for years to adopt international definitions and classifications of emergencies. As a result, numerous classifications of emergencies express the specificities of the countries of their origin. Although intensified efforts have been made by international organizations, governmental bodies, and individuals to adopt their proposed classifications of emergencies as universal, the aforementioned classifications by various authors, organizations, and institutions worldwide unequivocally indicate that this has not yet happened. Therefore, we can say that there is no accepted (adopted) and universal classification of emergencies. Generally speaking, all emergencies can be classified into three broad types: natural emergencies, emergencies directly or indirectly related to human beings (referred to as anthropogenic, technological, technical-technological, social), and hybrid emergencies (a combination of natural forces and the impact of human decisions). Thus, the mentioned classifications are derived using criteria of causes that have a generic-structural characteristic, fulfilling logical classification conditions. A common characteristic of all emergencies, regardless of type, is related to their consequences.¹⁴²

and application: experience of the Republic of Serbia. *Acta Geographica Slovenica*, 53(1), 149–164. <https://doi.org/10.3986/ags53301>

¹⁴² Mlađan, D., Cvetković, V. (2013). *Ibidem*.

1.5.1. Classical typology

The classical typology is somewhat the simplest: it distinguishes crises caused by natural factors and those caused by human factors. This group is further divided into technological and social crises. This is a popular typology because it identifies potential influences on the crisis. However, the complexity of crises makes this typology somewhat less operational. Namely, an environmental crisis can quickly become political, a natural disaster carries technological, financial implications, and a terrorist act using biological or chemical weapons - these are all examples where this typology is not overly useful.

1.5.2. Modern typologies

The dynamics of crises in the present are more frequent, so the procedural nature of the crisis has come to the forefront. Therefore, classical typologies have been replaced by more dynamic models. Stefan Gundel has proposed new typologies based on two new criteria: the predictability of the crisis and the possibility of influencing the crisis before its occurrence and during its duration.¹⁴³ Combining these two criteria, a crisis matrix with four subclasses has been developed, providing a greater ability to assess exposure to different types of crises, response to crises, and frequency. This cluster distinguishes between conventional, unexpected, unmanageable, and fundamental crises.

Conventional crises are predictable, and the degree of knowledge about the possibility of their impact is well developed. Examples include disasters in technological systems. From an organizational perspective, planning and preparation for crises are covered by standard procedures, the probability of events, preventive measures, and possible consequences are well known, so despite the significance of the losses, these crises are considered manageable (fires, explosions, ship sinkings, collisions, etc.).

Unexpected crises have a low degree of predictability and potential impact. The level of threat is higher than with conventional crises, but they are rarer, so the level of preparedness is low-

¹⁴³ Gundel, S. (2005). Towards a New Typology of Crises, *Journal of Contingencies and Crisi Management*, 13 (3): 106-115.

er. They may result from technological causes, human errors, omissions (anomalies), or natural causes. Responsible parties cannot anticipate such crises in time (fire in the Karpan tunnel in Austria). Since the crisis was not considered a possibility, no preventive measures were taken. If they had been taken, an adequate response to the crisis could have been provided. In such cases, the most important aspects are information and experience exchange, skilled personnel, the use of information technologies, and the formation of teams capable of dealing with such situations. Decentralization of decision-making in such situations has proven to be an effective crisis response. Like conventional crises, unexpected crises are spatially and temporally isolated as isolated events.

Unmanageable crises are characterized by a low degree of manageability and a high degree of predictability. Unmanageability as a characteristic arises due to the characteristics of the threatened system, so crisis preparation is difficult, or the response is greatly hindered. When conflicts of interest among stakeholders are high, countermeasures are prevented. These crises often cause greater damage than unexpected ones, so they are treated as more dangerous. Some of these damages are irreparable, and the systems that can be affected are both technological and social and natural. Examples most commonly mentioned are the Chernobyl disaster and the Heysel Stadium. Effective countermeasures relate to political and legal regulation, often involving the international community.

Fundamental crises are treated as the most dangerous in this cluster, as they have a high degree of unmanageability and a high degree of unpredictability. The response to such crises is usually inadequate, as they arise suddenly, for unknown reasons, from responsible actors, so preparedness for them is low. They are relatively rare. They begin suddenly, can last a long time, and can transform over time. The problem is that even experts for such crises are quite unreliable. There are many actors in such crises, which further complicates the situation. The crisis itself can be a technological or natural disaster, as well as a social crisis. One of the crises that has changed the world and continues to this day is the terrorist attack on New York on September 11, 2001. The global economic crisis could also fall into this cluster.

1.5.3. Combined typologies

Viewing crisis as a process, four dynamic patterns of crisis can be identified:¹⁴⁴ The fast-burning crisis suddenly occurs, lasts briefly, is sharp, and is extinguished relatively quickly. Tension escalates until it reaches a critical point. Decisions made at these moments are crucial. Hijackings and hostage rescues are typical examples.

The cathartic crisis emerges gradually over a long period. Tension gradually builds up until someone makes a breakthrough decision. Afterward, it is relatively quickly extinguished. Examples include conflicts between authorities and extremist groups, as well as international conflicts between large and small countries.

Slow-burning crises develop slowly, do not get resolved, and do not end but gradually diminish and fade away (e.g., Vietnam, Afghanistan). High-level policymakers, regardless of field reports, make decisions that do not lead in the desired direction until everyone involved pays a high price. Acceptance of defeat and changing the political discourse among decision-makers take a long time.

Chronic crises are most commonly environmental pollution crises. Since they do not meet the priority conditions on the political agenda of decision-makers, they often turn into slow-burning crises. There are many stakeholders with conflicting interests, who buy time and make these crises discredited as non-existent or unreliable due to expert uncertainty or inconsistency. Also, there is often a lack of a sense of urgency, so decisions are not made promptly.

In summary, the phenomenon of crisis is highly present in the contemporary world. Due to its procedural, amorphous, overlapping, and universal nature, discourse related to crisis and its phenomenology is the subject of debate. It is difficult to set temporal and spatial boundaries for a crisis in an event or cluster of events, just as it is challenging to place crisis action within one or more systems. Crisis is a political construct that emerges when the perception of defended values is threatened. An event becomes a crisis when decision-makers label it as such, in conditions of uncertainty and lack of time. These characteristics of crisis justify a highly differentiated approach to crisis management and its differentiation from similar concepts.

¹⁴⁴ Kešetović, Ž., Korajlić, N. (2008).

2. CRISIS AND DISASTER MANAGEMENT

The dilemma of whether crisis management is a necessary expense or a moral and strategic necessity has been addressed through the development of a systemic-strategic approach to crisis management.¹⁴⁵ It is not accidental that the systemic-strategic approach was first developed in the manufacturing and corporate sector, given the numerous anthropogenic crises and the fact that the sense of success often leads to a sense of omnipotence. The question "What can hurt us?" was changed to "What can hurt our users?" and the thesis that a crisis is something that attacks the organization from the outside was changed to the view that the organization itself can be a potential danger to others. Depending on which aspect organizations predominantly prefer, crisis management is divided into five different but interconnected clusters. These relate to strategic; technical and structural; evaluation and diagnostic; communication; psychological and cultural efforts in crisis management.

For these five clusters, 37 tools have been developed. The crisis management cluster that prefers strategic efforts can undertake: drastic changes in organizational philosophy; integrating crisis and disaster management within the concept of organizational excellence and the strategic planning process; involving external actors in the management system; establishing a sector for crisis and disaster management; organizing training and workshops, crisis simulations, etc. Technical and structural efforts include: establishing an organizational unit and a dedicated budget for crisis and disaster management; computer databases of resources (people, equipment, capabilities); creating a "war room"; reducing risky products, services, and production; creating technological reserves, such as backup databases; using so-called external services and experts in crisis and disaster management, etc. Evaluation and diagnostic efforts in crisis and disaster management involve legal and financial review of threats and obligations; review of insurance obligations; environmental impact and compliance with safety

¹⁴⁵ Pauchant, T.,C., Mitroff, I. I., Lagadec, P. (1991). Toward a Systemic Crisis Management Strategy: Learning from the Best Examples in the US, Canada and France, *Industrial Crisis Quarterly*, 5 (3): 209-232.

standards; ranking the most critical activities for daily functioning; early detection of warning signals, scanning, problem management; targeted research of potential hidden dangers; critical monitoring of past crises, etc. Undertaking communication efforts in crisis and disaster management includes media training and public relations; greater awareness of the local community; better connection with intervention groups (police, firefighters, media, etc.); improved cooperation or lobbying among stakeholders in the organization; using new information technologies, etc. Psychological and cultural efforts include strong top management commitment to crisis management; better interconnection of intervention groups and stakeholders; improved acceptance of whistleblowers; increased knowledge of criminal behavior; increased visibility of the impact of the crisis on employees; psychological support for employees; managing stress and anxiety and symbolic reminders of past crises and dangers.

Depending on the applied aspects of crisis and disaster management, organizations range on a scale from "crisis-prepared" to "crisis-prone." If organizations apply at least one strategy from each cluster, they are considered crisis-prepared. Not all strategies are applied evenly. The technical-structural cluster is 200 times more developed than the psychological-cultural one.¹⁴⁶ Decision-makers in crisis-prone organizations confuse the nature of prevention with the nature of crisis management (considering it a kind of insurance policy—they just need to buy a lot of it); and they apply it as a reactive strategy that will be used only after an immediate disaster, as a sort of insurance policy.¹⁴⁷

Given the numerous types of management and concepts that are very similar, the following chapters will briefly outline the fundamental differences between strategic management, crisis management, and crisis leadership, as well as between crisis management and other similar concepts. The characteristics and process models of crisis management will be examined in more detail. Topics that deal with the crisis cycle and crisis management in public administration follow. Finally, the natural conclusion of this chapter's content is the relationship between crisis management and organi-

¹⁴⁶ Mitroff, I., Pauchant, T. and Shrivastava, P. (1988). The structure of man-made organizational crisis: Conceptual and empirical issues in the development of a general theory of crisis management. *Technological Forecasting and Social Change*, 33: 83-107.

¹⁴⁷ Pauchant, T.,C., Mitroff, I. I., Lagadec, P. (1991).

zational crisis, as it represents the theoretical context of crisis management policy in cities.

2.1. Strategic Management and Leadership in Crisis and Disasters

Strategic management involves three processes: analyzing (analysis of general and specific goals, external and internal environments, intellectual property, and other capacities); decision-making (strategy formulation); and acting (strategy implementation). It directs the organization towards the future (setting vision, mission, and ultimate goals). The decisions made consider the organization's future while also taking into account the current state of affairs: the perspective taken is both long-term and short-term simultaneously. A balance between effectiveness ("doing the right thing") and efficiency ("doing things the right way") is recognized. In the decision-making process, numerous actors (stakeholders) are also considered. It consists of analyses, decisions, and actions that the organization undertakes to create and maintain competitive advantages.¹⁴⁸

Crisis management has been systematically studied by scholars primarily in business, international relations, and public administration/public policy. Given that crisis management is of more recent origin and that many terms originate primarily from the English language, there is a problem in distinguishing the terms "crisis management" and "management/leadership in a crisis": Crisis management is a multi-layered concept and denotes three concepts:¹⁴⁹ A set of functions or processes aimed at identifying, studying, and predicting possible crisis situations and establishing specific methods that will enable the organization to prevent a crisis or react effectively and resolve it successfully, minimizing consequences and returning to a normal state as quickly as possible; all types of activities directed at dealing with a system in a state of disruption: prevention, preparation, mitigation, response, and recovery. It involves shaping procedures, agreements,

¹⁴⁸ Dess, G., Lumpkin, G. T., Eisner, A. B. (2007). *Strategijski menadžment teorija i slučajevi*. Treće izdanje, Beograd: Data status 11.

¹⁴⁹ Kešetović, Ž., Korajlić, N. (2008): 55.

and decisions that influence the course of the crisis and encompasses the organization, preparation, measures, and allocation of resources for overcoming it; a theoretical concept that in research terms encompasses a special group of events (crises) that have certain common regularities but also significant mutual differences. When a crisis occurs, citizens have expectations from the authorities and the public administration to respond appropriately. On the other hand, public administration traditionally relies on the stability of bureaucratic procedures and focuses on routine in planning and implementing program activities in public policies. Although ensuring bureaucratic routines in the execution of authorities' competencies is the main concern, the biggest challenge is crisis management. Therefore, crisis management in the public sector involves interventions that the authorities and public administration undertake in preventing, responding to, and recovering from a crisis.¹⁵⁰

Crisis leadership is also a multi-layered concept and involves a set of strategic tasks that encompass all activities related to the stages of crisis management.¹⁵¹ ¹⁵² An example of the complexity of crisis management, especially concerning the public interest, is the jurisdiction over water management in the Republic of Serbia, as well as the institutional framework provided for it.

The Republic Directorate for Water is an administrative body within the Ministry responsible for agriculture, forestry, and water management. In accordance with the Law on Ministries, the Republic Directorate for Water performs state administration tasks and professional tasks related to: "water management policy; multipurpose water use; water supply, excluding water distribution; water protection; implementation of measures for water protection from pollution and planned rationalization of water consumption; regulation of water regimes; monitoring and maintenance of watercourse regimes that form and intersect the border of the Republic of Serbia; inspection supervision in the field of water management, as well as other tasks determined by law." The Republic Directorate for Water prepares sub-legal acts and strategic and planning documents for the territory of the Republic of Serbia. Other ministries are also involved in water-related activities: the

¹⁵⁰ Putra, F. (2009). Crisis Management in Public Administration, *Planning Forum* Volume 13/14: 152-177.

¹⁵¹ Boin at al (2010): 18.

¹⁵² *Ibidem*: 11.

Ministry of Environmental Protection, the Ministry of Mining and Energy, the Ministry of Construction, Transport, and Infrastructure, and the Ministry of Health.¹⁵³

The management of water resources falls under the jurisdiction of multiple ministries, highlighting the necessity for good and effective cooperation for rational and efficient water management. Besides the ministries responsible for state administration at the Republic level, water management tasks are also undertaken by the autonomous provinces and local self-government units, each within their respective competencies. The autonomous province, through its administrative institutions (Provincial Secretariats), implements water management within its administrative boundaries, including the adoption of planning documents and administrative acts.¹⁵⁴

Local self-government is, according to several laws, responsible for implementing obligations from the mentioned laws, especially in accordance with the Law on Disaster Risk Reduction and Emergency Management, where numerous obligations are defined in Article 29. The Law on Waters is responsible for the management of secondary water resources, issuing water permits for locally significant facilities, as well as permits for discharging wastewater into public sewers. Among its most significant activities is the performance and development of communal activities (water purification and distribution for drinking, collection and treatment of wastewater, etc.), regulated by a special law. At the local level, administrative and other tasks related to water are carried out within various organizational bodies (secretariats, directorates, institutes, and other forms). The Law on Public Health (2016) prescribes the responsibilities of local self-governments in monitoring and public health control of drinking water, wastewater, swimming pools, and pools.

Public water management companies operationally perform tasks of general interest related to water management in a specific territory. These companies prepare plans and programs, organize the maintenance of water facilities and systems in public ownership, and defense against floods and erosion protection, prepare opinions for issuing water permits, identify surface and groundwa-

¹⁵³ Draft National Strategy for Disaster Risk Reduction and Emergency Management, 2023. Annex - Project Activities. Annex 8. Organization and Competencies of Institutions.

¹⁵⁴ *Ibidem*.

ter bodies intended for human consumption, maintain registers of protected areas, and information systems for their territory.¹⁵⁵

In the territory of the Republic of Serbia, there are two public water management companies: "Serbiavode" and "Vode Vojvodine." The operational implementation of activities within the water sector, such as flood and ice defense, maintenance and management of water facilities and systems, and the performance of other entrusted tasks of general interest, are carried out by water management and other companies. According to the Law on Waters, these companies must have the appropriate license in terms of technical and technological equipment and organizational and personnel capacity, issued by the ministry responsible for water management. In the previous period, a large number of water management companies obtained the appropriate license. Ownership transformation has been carried out in many water management companies. In addition to the mentioned entities, tasks related to water are also handled by special organizations within state administration and local self-government, as well as public enterprises and other organizations operating outside the water sector.¹⁵⁶

The Fiscal Risk Monitoring Sector (FRMS/ Sector), within the Ministry of Finance, was established on December 20, 2018. The Group for Other Fiscal Risks (as one of three groups within the Sector) is responsible for monitoring fiscal risks from natural disasters (ND) and their impact on the national budget and budgets of local self-governments. As part of the regulatory framework, the Government of the Republic of Serbia adopted the Unique Methodology for Monitoring Fiscal Risks in the Republic of Serbia (Official Gazette of the Republic of Serbia, No. 99 dated October 22, 2021), within which is included the Methodology for Monitoring Fiscal Risks resulting from natural disasters, which represents the primary regulatory act applied by our Group, i.e., Sector.¹⁵⁷

The Republic Hydrometeorological Institute is responsible for technical and administrative tasks in the fields of meteorology and hydrology. In addition to this, there are other institutions, including those significant for the water sector such as health protection institutes, occupational safety institutes, nature protection insti-

¹⁵⁵ *Ibidem.*

¹⁵⁶ *Ibidem.*

¹⁵⁷ *Ibidem.*

tutes, geological institutes, and seismological institutes. Also, chambers of commerce, the Environmental Protection Agency, the Serbian Red Cross, etc., have their roles. Scientific research organizations and institutes, faculties, design and planning organizations, as well as engineering, industrial, and other service-oriented companies, represent an indispensable segment for the successful functioning and development of the water sector.¹⁵⁸

The Ministry of Defense and the Serbian Armed Forces provide assistance to civilian authorities in case of natural disasters, technological accidents, and other emergencies as part of their third mission, upon the request of state organs and local self-governments and based on decisions and orders received from the President of the Republic of Serbia (Articles 5, 6, and 26 of the Law on Disaster Risk Reduction and Emergency Management).

The Ministry of Environmental Protection, the Ministry of Internal Affairs, and the Ministry of Agriculture, Forestry, and Water Management carry out activities related to the implementation of the Convention on Transboundary Effects of Industrial Accidents, in cooperation with the Ministry of Foreign Affairs, the Ministry of Construction, Transport, and Infrastructure, the Ministry of Mining and Energy, and the Ministry of Labor, Employment, Veterans' Affairs, and Social Affairs. In order to successfully implement the Convention on Transboundary Effects of Industrial Accidents, the Agreement on the Establishment of a Joint Body for the Implementation of the Convention on Transboundary Effects of Industrial Accidents was concluded in 2011 at the initiative of the Ministry responsible for environmental protection. This body was tasked with monitoring, discussing, and coordinating activities related to the realization and fulfillment of the rights and obligations of the Republic of Serbia under the Convention. The Joint Body consisted of representatives from the ministries responsible for environmental protection, internal affairs, foreign affairs, water management, and occupational safety and health. Upon the proposal of the Joint Body, in 2018, the Ministry of Environmental Protection initiated the conclusion of a new Agreement, taking into account the obligations of the Republic of Serbia under the Law on Ratification of the Convention on Transboundary Effects of Industrial Accidents, as well as the provisions of the Law on Ministries, according to which ministries responsible for environmental pro-

¹⁵⁸ *Ibidem.*

tection (the Focal Ministry), disasters, water management, mining and energy, urban planning, foreign affairs, and occupational safety and health should carry out activities related to the implementation of the Convention. This Agreement entered into force in January 2019.¹⁵⁹

Based on the Information from the Expert-Operational Team of the Republic Disasters Headquarters for taking preventive and operational measures for protection against landslides, mudflows, and erosion on the territory of the Republic of Serbia during 2012, Conclusions were adopted by the Republic Disasters Headquarters. Among other things, it was envisaged that relevant ministries review defined legal responsibilities and initiate necessary amendments to regulations within their jurisdiction related to preventive and operational measures for protection against landslides, mudflows, and erosion in the Republic of Serbia. In line with the above, the Ministry of Mining and Energy expanded the jurisdiction of the Geological Survey of Serbia in the amendments and supplements to the Law on Mining and Geological Research ("Official Gazette of the RS, No. 101/15), in terms of preparing Geological Hazard and Risk Maps, which will significantly contribute to the proper and sustainable land use and thus reduce the risk of landslides and mudflows.¹⁶⁰

The Directorate for Radiation and Nuclear Safety and Security, in accordance with the Law on Radiation and Nuclear Safety and Security, prepares a proposal for an Action Plan in the event of a nuclear or radiological emergency and prescribes measures to protect individuals, the population, and the environment from the harmful effects of ionizing radiation. The Directorate for Radiation and Nuclear Safety and Security, through its organizational structure, has planned 48 positions, out of which 33 are filled. In the Department for Population Exposure Control, the Section for Monitoring, Control, and Disasters, which prepares the proposal for the Action Plan in the event of a nuclear or radiological emergency, cooperates with other relevant institutions of the Republic of Serbia in establishing and maintaining the Plan for Action in the event of nuclear and radiological emergencies in accordance with the National Protection and Rescue Plan in emergencies, participates in the implementation of the Plan for Action in the event of

¹⁵⁹ *Ibidem.*

¹⁶⁰ *Ibidem.*

nuclear and radiological emergencies, monitors and analyzes data from the early accident notification system, participates in the preparation and implementation of projects of the Directorate in the field of radiation and nuclear safety and security, and collaborates with relevant international organizations regarding the monitoring and control of radioactivity and response in the event of emergencies. Three positions are planned for this purpose, out of which one is filled. With the aim of ensuring the protection of human life and health and the protective environment from the harmful effects of ionizing radiation resulting from emergencies, nuclear, or radiological emergencies, the Republic of Serbia has established a system based on taking all practical measures and activities to prevent or mitigate the consequences of such events and to ensure readiness and response in the event of nuclear or radiological emergencies in accordance with applicable domestic and international regulations.¹⁶¹

Humanitarian organizations and associations participate in the preparation and implementation of tasks related to protection, rescue, and assistance to populations affected by the consequences of disasters. Civil society associations and other organizations consider issues crucial for reducing disaster risks and are recognized as partners of public authorities in creating and implementing disaster risk reduction policies. During 2022, an agreement on scientific and professional cooperation was signed between the Ministry of Internal Affairs of the Republic of Serbia, the Sector for Disasters, and the Scientific and Professional Society for Risk Management in Disasters. Civil society associations and other organizations contribute to building a culture of risk prevention and raising awareness about the need to strengthen individual and societal preparedness and resilience to cope with the consequences of disasters. Higher education institutions and other organizations engaged in scientific research actively participate in the implementation of protection, rescue, and disaster risk reduction tasks through involvement in headquarters, expert-operational teams, and operational staffs. The Sector for Disasters, upon request from entities of special importance, organizes and conducts training for civil protection commissioners and deputy commissioners. In carrying out training sessions, drills, and exercises organized for members of civil protection units, local government units, and

¹⁶¹ *Ibidem.*

others, entities of special importance actively participate, with particular emphasis on cooperation with the Red Cross of Serbia.

2.2. Crisis management, disaster management, and similar concepts

Crisis management is often associated with similar concepts such as risk management, disaster management, civil protection, disaster management, and issues management.¹⁶²

Risk denotes the likelihood of an accident occurring within a specific time frame, circumstances, and with certain negative consequences. Risk management entails attempting to measure/assess risks and devising strategies to mitigate them. It involves identifying risks and assessing potential harm that may be incurred. Based on conclusions drawn, one of several strategies is adopted, which may include risk avoidance, risk transfer to another party, risk mitigation, or acceptance of consequences. Risk management is considered an attempt to handle uncertainties: as uncertainty increases, so do risks. If risks are not managed, uncertainty prevails, and when a critical decision must be made under time constraints, it transitions to the terrain of crisis management. If the risk materializes, it shifts to disaster management.

Disaster management involves directing entities responsible for protection and rescue in executing their duties and tasks. In this definition, disaster management primarily pertains to the coordination aspect of operational and tactical levels of crisis management. Systems and actors tasked with rescue work to control the situation. However, if authorities cannot bring the situation under control, a crisis may ensue.

Civil protection is a part of the protection and rescue system, a humanitarian and non-military activity of general interest. It is organized and prepared for in war and peace, in accordance with Additional Protocol I of the 1977 Geneva Conventions on the Protection of Victims of War from 1949. The international recognition sign for civil protection personnel is an equilateral triangle of blue color on an orange field. Civil protection has two meanings: as

¹⁶² Kešetović, Ž., Toth, I. (2012). *Problemi kriznog menadžmenta*, Veleučilište Velika Gorica, Velika Gorica: Kolumna doo: 58-62.

an activity related to protection and rescue and as part of the system (organization) implementing protection and rescue.

Disaster management does not deal with the event causing the disaster but rather with its consequences: reducing human casualties and material destruction. It typically involves rescue activities during and after a disaster.

Issues management entails managing risks in an organization's social environment. It arose as a result of corporate struggles to resist pressures from social activism for socially responsible business practices (advocates for environmental protection, human rights, animal welfare, etc.). It involves anticipating issues that may become publicized and damage the organization as a result. Issues management is a tool for identifying, analyzing, and managing potential issues before they become publicized. If an issue is not anticipated and the right strategies are not put in place, it may escalate into a crisis, prompting a transition to crisis management.

2.3. Characteristics of crisis management and disaster management

If crises are highly ambiguous situations in which causes and effects are unknown;¹⁶³ for which there is a low probability of occurring, but still pose a significant threat to the survival of society/organization¹⁶⁴ and organizational actors;¹⁶⁵ that there is little time for crisis response decisions¹⁶⁶ thus often catching actors by surprise¹⁶⁷ who are in a dilemma for a decision that will result in changes for better or worse,¹⁶⁸ accordingly, crisis management has characteristics that respond to the challenges of the crisis itself. The first characteristic is related to circumstances: the need for decision-making and response arises suddenly and often unexpectedly. The challenges faced by decision-makers and other actors usu-

¹⁶³ Dutton, J. (1986). The processing of crisis and non-crisis strategic issues. *Journal of Management Studies*, 23,501-517; Quarantelli, E. L. (1988). Disaster crisis management: A summary of research findings. *Journal of Management Studies*, 25: 373-385.

¹⁶⁴ Shrivastava et al. (1988). Understanding Industrial Crisee, *Journal of Management Studies*.

¹⁶⁵ Shrivastava (1987).

¹⁶⁶ Quarantelli (1988).

¹⁶⁷ Hermann (1963).

¹⁶⁸ Aguilera (1990). Slaikeu (1990).

ally do not match their previous experience. Information is either lacking or there is too much of it, without prior verification of reliability and relevance. Priorities must be set without delay, with an exception from regular procedures. Crises in the external environment often trigger crises in sectors of public administration/organizations responsible for response. In unclear situations, it happens that the responsibilities of different actors overlap, or that there is a "vacuum." Crisis management is associated with taking non-standard, radical, and extraordinary measures, which are divided into strategic and tactical/operational.¹⁶⁹

Strategic measures are aimed at significant reorganization of the functional structure of the system: introducing a crisis staff and emergency response teams, new functions needed for crisis response, and forming/activating a crisis information environment and system. Emergency response teams are formed for the purpose of analyzing and mapping the situation, forecasting and modeling the spread of the crisis, assessing the necessary resources for response, operational and tactical planning in organizing specific activities, determining priorities, rescue, and mitigating the consequences. In contrast, operational/tactical measures do not change the essence of the usual functions and organizational responsibilities: they are mostly the same but take place under more challenging circumstances.

Table 1. Comparative characteristics of management systems.
Source: Arkhipova, Kulba, 1984.

Comparative characteristics of management systems	
Traditional systems	Emergency/crisis systems
Permanent operational mode	Different operational modes
Rigid structure and clear division of functions over a long period of time	Absence of rigid structure and clear division of functions over a long period of time, flexibility, aggressiveness
Narrow functional orientation	Wide and partially unpredictable range of activities
Monolithic structure	Polystructure
Prescribed flow of information	Dependence on the flow of information about the specific situation

¹⁶⁹ Kešetović, Ž., Toth, I. (2012): 66.

Precise information	Unreliable information
Excessive information	Insufficient information
Low degree of change	High degree of change
Predictability of the situation	Unpredictability of the situation, orientation towards previous experience, usually has no effect
Principle of unity of authority and responsibility	Combination of the principles of indivisibility of management and division of authority and responsibility
Functional potential	Organizational potential
Dominance of socio-economic goals and criteria of operation	Objectives: efficiency, success in addressing the causes of crisis situations and their consequences; criteria: minimization of time to achieve objectives, minimum losses (casualties) in addressing crisis situations

2.4. Models of crisis and disaster management processes

The crisis cycle resembles the life cycle: it has its conception, birth, growth, and demise, and depending on the concept, it can have from three to five phases.¹⁷⁰ The cited examples of the crisis process can be divided into proactive and reactive. In the reactive model, decision-makers do not anticipate possible crises but rather wait for the crisis to occur and then make decisions instantly, without prior simulation. Decisions made in a crisis can significantly jeopardize the organization/society, making this a risky approach to crisis management. The proactive model of the crisis process begins with mapping weaknesses/analyzing the situation and strategic planning as its first phase. In the presented models, researchers (Pirson and Mitroff; Crandall, Parnell, and Spillan, 2009) introduce organizational learning as the final phase in their model. This phase is questionable because it raises the question of whether public administration, with its bureaucratic principles, is slow and resistant to change, capable of collective memory and learning from crises.

¹⁷⁰ Crandall, W. Parnell, J. A., Spillan J. E. (2009). *Crisis Management in the New Strategy Landscape*. 1 edition. SAGE Publications Inc. 8.

The U.S. Federal Emergency Management Agency has developed a process model consisting of four temporally distinct phases, with two being pre-crisis and the other two post-crisis. The first phase is mitigation/prevention, in which activities are undertaken to reduce the likelihood of a crisis occurring or mitigate its effects. This is followed by preparation/planning and resource allocation. The third phase is response, which encompasses the period during and immediately after the crisis event. The fourth phase is recovery, which can vary in duration depending on the degree of system damage and future vulnerability. Regardless of the division, the phases of crisis management are interconnected, complex, and interdependent.

Table 2. Crisis Management Process Matrix (Source: Osmanagić-Bedenik, 2003).

	PHASES				
	Prevention	Early detection	Crisis management	Rehabilitation	Learning from crisis
LEVELS	How can a crisis be prevented?	How can an impending crisis be anticipated?	How can the consequences of the current crisis be mitigated?	How can the minimum positive level before the onset of a crisis be achieved?	How to extract lessons (benefits) from a overcome crisis?
Contents/Process	Moment of occurrence (What is happening?)				

es	
Informational	Information gathering
Organizational	(Who collects and sends information?)
Communicational	Bearers of specific tasks
Psychological	(Who takes on which tasks and roles?)

A two-dimensional matrix resulting from the intersection of five crisis management phases and five levels of crisis impact enables an analysis of the causes and consequences of the crisis at each phase and on every level. The 4Cs matrix (causes, consequences, caution, and coping) offered by Shrivastava provides a slightly different solution.¹⁷¹ Causes are the underlying conditions and immediate failures that enabled the crisis. Consequences refer to immediate and long-term impacts. Caution entails measures taken to mitigate the impact of a potential crisis or prevent it altogether. Coping involves response measures to address the crisis that has occurred.

2.5. Crisis and disaster management in public administration

Crisis management in the public sector can generally be viewed as the implementation of basic management elements such as planning, organizing, decision-making, coordination, and control. Rosenthal identified key phases of crisis management as prevention, planning, response, and recovery from the crisis.¹⁷² The last phase, addressing consequences/recovery, is not typically part of the traditional discourse of public administration. Similarly, key aspects of crisis management at the level of public administration include a preventive aspect, which involves planning, preparation, and/or mitigation of crises. Another important aspect is recovery.

¹⁷¹ Shrivastava, P. (1993). Crisis theory/practice: Towards a sustainable future. *Industrial and Environmental Crisis Quarterly*, 7: 23–42.

¹⁷² Putra, F. (2009). *према: Rosenthal, Uriel, R. Boin A., and Louis Comfort. Managing Crises: Threats, Dilemmas, Opportunities.* Springfield, IL: Charles C. Thomas.

ery/rehabilitation, which encompasses response, reaction, and recovery. The third aspect is coordination, which is not specific to crisis management in general but often emerges as a significant element in crisis management within the public administration system, according to many researchers.¹⁷³ In the absence of time and resources, urgent requests for various types of assistance place authorities and public administration in a position to seek help from various actors: international and domestic communities, private, civil, and public sectors. In such a situation, it is crucial to effectively and timely coordinate the provision of aid, avoiding overlap and confrontation among actors, which can be a major challenge for the public administration system and authorities.

Prevention as part of the crisis cycle within public administration involves raising the level of organizational performance of the public administration system by embedding concepts of reliability and security into the system of organizational behavior and culture. This primarily falls under the role of leaders: embedding concepts of security and reliability into the value system of public administration and motivating employees to behave accordingly. This has been a neglected aspect so far, particularly significant due to security threats related to terrorism. Risk assessment and crisis management plans are mandatory. This involves motivating and educating all actors: decision-makers, leaders, employees within the public administration system, other stakeholders, and community members to adopt a value system of security and crisis prevention.

Leaders/decision-makers are responsible for integrating security into the organizational culture of public administration. Assessment, planning, and plan implementation constitute three steps in prevention as part of the crisis cycle. Risk assessment involves identifying potential risks/threats: current international, regional, local climate, the probability of risk to public administration institutions (water supply, schools, healthcare facilities, etc.), the probability of collateral damage from a high-risk neighbor (proximity to a factory, for example). It is necessary to identify what we are protecting and what makes them vulnerable. There are various protection strategies for children, the elderly, adults, women, property, data, etc. Adopted preventive measures and activities aimed at reducing identified risks and threats will never

¹⁷³ Putra, F. (2009).

completely eliminate them. Reliable and responsible performance of duties in various areas of public administration (municipal activities, health, education, environmental protection, etc.), oversight, and control of their implementation will greatly reduce the likelihood of risks.

Risk assessment, planning, establishing a chain of responsibility, control, and communication are links in the crisis management process. The chain of command, control, and communication are of paramount importance. Therefore, the plan must clearly and precisely specify who is responsible for what. In the planning process, attention should be paid not only to the immediate response to the crisis but also to the long-term consequences. Additionally, alongside emergency services such as fire brigades and police, parts of the system dealing with social rehabilitation, damage compensation, and insurance should be included. When people expect protection from authorities in case of a disaster, they will also expect legitimate compensation for damages.¹⁷⁴

Planning in crisis management has two specific elements: forming a crisis team and creating so-called escalation rules for employees to detect, prevent, and control crises. This is considered the essential part of crisis prevention in the public administration system. The goal is to have employees who can timely detect problems, alert their superiors, so they can make decisions and respond to the problem, preferably before it becomes critical. This entails a high level of organizational culture where employees are encouraged and feel secure to report concerns to their superiors without fear of negative consequences, including ridicule from peers and superiors, and fear of not being taken seriously. This strengthens the culture of safety, prevents crises in development, and provides management with insight into the problem and the opportunity for timely response.

The crisis team—or the Disasters Staff, as defined by the Law on Disaster Risk Reduction and Emergency Management in Serbia—is formed by key actors. Crisis team members are available to the leader 24/7, meaning round the clock, until the crisis is resolved. Their task is to perform command, control, and communication functions to gather as much critical and reliable information

¹⁷⁴ Local Authorities confronting Disasters and Emergencies, 2nd International Conference, Amsterdam, (22-24 April 1996) http://ec.europa.eu/echo/files/civil_protection/civil/prote/cpactiv/cpact01k.htm.

as possible so that the team leader can make decisions that would end the crisis in the best possible way. The team should be well-coordinated and complex, and the cohesion of the crisis team should be built preferably before the crisis through exercises in simulated crisis situations.

The crisis response consists of five phases: warning and informing; alert; protection of lives and property; ensuring public welfare; and recovery. In responding to the crisis, pre-assigned functions of various actors are activated. Making decisions under time pressure requires an efficient response chain: command, control, and communication. The command center is where the crisis team meets, exchanges information, negotiates, establishes command, control, and communication. During the crisis response, evidence is collected for later crisis interpretation and decision argumentation.

The crisis response has several levels: strategic, operational, and tactical. This crisis response model is based on the military model of war ranking and civilian/corporate performance measurement.¹⁷⁵

Operational or "frontline response" is provided by services that react first on the scene: firefighters, police, emergency medical services, military, etc. Tactical response involves overall coordination of all actors in response to the event, resource requests, and crisis communication. Strategic response involves setting priorities in operational response, studying the long-term consequences of the crisis event, and establishing long-term goals. An example of this is the London Incident Management System: "gold, silver, and bronze" (London Incident Management System. Major Incident Procedure Manual).¹⁷⁶ "Gold," "Silver," and "Bronze" are names associated with roles rather than ranks of different actors. The "Gold" role is strategic: it is the commander responsible for the crisis resolution strategy, having command over all resources, agencies, and institutions. At the outset of the incident, the "Gold" formulates and documents the crisis resolution strategy and revises it as needed. "Gold" delegates tactical decisions to "Silver," who

¹⁷⁵ Kešetović, Ž., Milašinović, S. (2012). Upravljanje krizama i katastrofama-pouke iz prošlosti, *Kultura polisa*, IX (18): 251-270.

¹⁷⁶ *Ibidem*, according to: London Incident Management System. Major Incident Procedure Manual. London Emergency Liaison Panel, 2004. Извор: Canton, L., G. Emergency management - Concepts and Strategies for Effective Programs, Wiley, Hoboken, New Jersey, 2007.

goes to the scene, assumes command, and determines the tactics to achieve the objectives set by "Gold." "Silver" does not need to directly engage in activities but rather stays at a distance. "Bronze" (operational) engages and controls the resources of their service in executing activities within their functional and local jurisdiction, assigned by "Silver." The names do not denote ranks but rather the function of individual persons. This is a dynamic system: as the incident evolves, the level of supervision increases, and individual responsibilities increase; functions are attributed within the Gold, Silver, and Bronze structure. A prerequisite for such a crisis response is the prior connection and coordination of all relevant parties.

Local crisis response is based on a system of coordination and cooperation among numerous actors and systems, each with its role and jurisdiction. On the other hand, the paradox is that disasters are most often first responded to by those with the least experience: the local community.¹⁷⁷ Therefore, the connection of local self-government with the community is extremely important. In prevention, response, and recovery from a crisis, there are numerous actors involved. The public administration system can either be a logistical support in a crisis or be affected by the crisis itself. Therefore, it is necessary for all actors at different levels to know potential risks and threats, be aware of the resources at their disposal, their own and others' jurisdiction and responsibilities, recognize their weaknesses and potential vulnerabilities, know how to act in different situations, and whom to turn to. Within the public administration, it is useful to have individuals responsible for following the security plan by sectors, who are responsible for updating the plan, organizing training and drills, and reporting (so-called security managers).

The complexity of crisis management requires that relationships between all actors be built and strengthened in advance. Establishing good relations, coordination, and communication between different services in public administration, the community, and other actors is desirable before a crisis occurs. This is particularly important if public services are under the jurisdiction of different levels of government: for example, municipal police and regular police. Therefore, it is useful to conduct joint exercises and training, competitions, sports games where members of different

¹⁷⁷ Kešetović, Ž., Milašinović, S. (2012).

public services can informally get to know each other. It is considered that community and government exercises, training, role-playing, and refreshing reactions in the plan are of essential importance.¹⁷⁸ Exercises and role-playing ensure that the crisis response plan is feasible, updated, present in people's minds, and contributes to the adoption of a security culture by developing a sense of security. Another level of building relationships and cooperation in crisis management is the establishment of joint bodies: security committees/councils.

Partnerships at the city/municipality level are very useful, especially when it comes to risk identification, resource planning and utilization, and overlapping jurisdictions. With good leadership, high professionalism, and accountability, the collaborative work of security councils/committees can contribute to the public administration system and the community accepting the plan and implementing planned activities more easily, which can make the difference between success and failure in crisis management. Furthermore, this type of partnership allows for effective agreements without revealing too many details about other actors, which may pose a security problem for some actors. A good security council/committee is a significant link between authorities and citizens in the community. The task of the council is, among other things, to contribute to consensus on the perception of threats/risks and established priorities.

Building a security culture is a long-term process. For public administration and the community to adopt security as a value they strive for, and for security plans to be usable, it is necessary for everyone to recognize and adopt their role in the security plan. Plans must be regularly reviewed and refreshed: an outdated and unupdated plan can cause more harm than not having one at all. Establishing a training program to refresh and improve security skills is useful. The issue of security should be a long-term topic for communities and governance, not a reactive one-time solution to sudden events, among other reasons because the latter solution is much more expensive and less effective than a planned, preventive, proactive approach. Training and exercises in public admin-

¹⁷⁸ Curtiss-Lusher, B., Greenblatt, J. A. (2015). Protecting Your Jewish Institution: Security Strategies for Today's Dangerous World <https://www.adl.org/sites/default/files/documents/Protecting-Your-Jewish-Institution-2015-Edition-Final-docx.pdf>

istration and the community send a positive message to the public and institutions that decision-makers are committed to long-term security.

2.6. Organizational crisis and crisis management

In any phase of the crisis management process in public administration, the public administration system itself can experience one or more of its own organizational crises. The multidimensional definition by Christine Pearson and Judith Clair states that an "organizational crisis is a situation of low probability but high impact on the sustainability of the organization. It is also a subjective experience of personal and social threat by individuals and employees. Ambiguity regarding the causes, effects, and means of resolving organizational crises leads to disappointment or a sense of loss of belonging to the organization, as well as to a sense of loss and change in individual value systems.

Efficient management of organizational crisis presupposes minimizing potential risks before the onset of an event. At the moment of a crisis event, effective crisis management involves improvisation and interaction among key actors, so that individuals and the collective create a shared sense and share common beliefs in decisions and reconstructed roles in crisis response. After the crisis event, efficient management of organizational crisis presupposes adjusting basic organizational assumptions, behaviors, and emotional responses for the purpose of recovery and adaptation.

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This definition of organizational crisis and crisis management is the result of a holistic approach: observing the crisis from psychological, socio-political, and structural-technological perspectives. The complexity of the crisis makes it difficult to consider these perspectives together due to the lack of a unified insight into the nature of the crisis.

The psychological dimension of organizational crisis can be observed at the level of decision-making and/or the experience of those affected by the crisis event. Individuals play a significant role in organizational crisis. The causes of organizational crisis can be "behaviors, ineffective orientations, or cognitive limitations of individuals or groups of employees (including leaders) in interaction

¹⁷⁹ Pearson, M. Clair, J. A. (1998). Reframing Crisis Management, *Academy of Management Review*, 23(1): 59–76.

with organizational structures and/or technologies. The consequences of the crisis in the psychological dimension can include blaming employees who are involved in any way and harmed in the incident, "shattering" basic assumptions about oneself and the organization, or creating beliefs that one's own system is threatened.¹⁸⁰ The organization should proactively recognize its own vulnerability and the danger of victimization consequences. To avoid these risks, the organization needs to systematically assist in cognitive adaptation in assumptions, behavior, and emotional response of employees.

The socio-political perspective of the crisis deals with cultural symbols and prevailing ideologies, arising when there is a breakdown of shared values, legitimacy, and institutionalization of socially constructed relationships. The crisis equates to a "cultural collapse" when, in certain situations, there is a nullification of values that have served the community's well-being.¹⁸¹ Jürgen Habermas discusses the spiral transformation of crises in economic systems. The crisis of rationality (when producers cannot manage economic growth) evolves into a crisis of legitimacy (followers withdraw support and loyalty from key decision-makers) and questions the existing social structure and institutions. Habermas's framework presents a crisis as a crisis of trust among followers in leadership, the existing social order, and traditional values.¹⁸²

Following the spiral, one arrives at a motivational crisis characterized by atomized individualism and a lack of belief in society and common values.¹⁸³ For an organizational crisis, the socio-political perspective is always relevant, primarily because it suggests that all crises represent a common breakdown of socially constructed reality. Any event (such as criminal activities of politicians, a political assassination, plane crash, fire in a building with social housing, faulty vaccines and medications, lynching based on racial, national, or fan-based reasons, etc.) is evidence of the collapse of collective beliefs. Secondly, the socio-political perspective indicates that the majority of organizations will experience a crisis of leadership and trust following an event that serves as the trigger for the crisis. Organizational leadership will be under public scru-

¹⁸⁰ *Ibidem*, according to: Taylor (1983).

¹⁸¹ *Ibidem*, according to: Turner (1976).

¹⁸² *Ibidem*, according to: Habermas (1975).

¹⁸³ *Ibidem*, according to: O'Connor (1987).

tiny, and changes and protests are possible.¹⁸⁴ Thirdly, members of the organization will question the organizational culture and belief system.¹⁸⁵ The socio-political perspective suggests that managing an organizational crisis requires a significant reform of organizational culture and leadership. The cause of the crisis is perceived as a breakdown of shared beliefs in the value system and role structuring. The consequences may include the collapse of valid norms, values, and beliefs, organizational breakdown, extreme individualism, a rise in violence, and demotivation.

The technological-structural perspective of the crisis involves not only organizational machinery and tools but also management procedures, policies, practices, and routines.¹⁸⁶ According to Perrow, high-risk technologies are characterized by "interactive complexity" and "tight coupling," making them prone to increased risks of breakdowns. Catastrophes in these technologies are considered "normal accidents."¹⁸⁷ Immediately after the publication of his work, accidents occurred (the explosion of the Challenger in the USA and the gas leak in Bhopal, India) that confirmed these theses. From a technological-structural perspective, the cause of the crisis is interactive, tightly coupled technologies that communicate with managerial, structural, and other factors within/outside the organization in a potentially incomprehensible and often unpredictable manner. There are two ways for an organization to respond to this challenge: high attention to risky technologies and improvement of both structural system design (strengthening infrastructure, additional physical protection, etc.) and organizational system design (training, physical readiness, simulations, safety culture, etc.).

¹⁸⁴ *Ibidem*, according to: Hurst (1995).

¹⁸⁵ *Ibidem*, према: Bartunek (1984,1988).

¹⁸⁶ *Ibidem*, according to: Pauchant & Douville (1994).

¹⁸⁷ *Ibidem*, according to: Perrow (1984).

3. MANAGEMENT POLICY IN CRISIS AND DISASTERS

Similar to the concept of "policy," which encompasses both policy in the procedural sense and policy in the functional sense (public policy), crisis management is a term that implies more than one determinant. Management entails the act of governance, hence the terms crisis management and crisis governance are often used interchangeably. Crisis governance is primarily associated with the political (procedural) context, while crisis management is mostly employed in an organizational-functional context.¹⁸⁸

Policy in crisis management entails: policy in crisis management, within the context of the term "politics," refers to a set of interconnected extraordinary challenges faced by local and national authorities. It represents the ultimate test of the flexibility of political systems and their elites, with a focus on the political dimensions of crisis management: issues of conflict, power, and legitimacy.¹⁸⁹; and policy in crisis management, within the context of the term "policy," involves the process of identifying and defining problems, considering, selecting, and implementing specific solutions that should involve all interested parties.¹⁹⁰

Policy in crisis management entails five phases or tasks: crisis recognition, decision-making, crisis interpretation, and learning from the crisis. These phases are not linearly arranged but often run concurrently, contributing to their complexity and interdependence. Policy in crisis management is the most sensitive area of crisis management. Each of these phases presents its own challenges.¹⁹¹

Contemporary risk society is characterized by fostering a culture of concern, in which prevention holds a significant place. On the other hand, the neoliberal approach to public policies insists on cost reduction, including crisis prevention. According to

¹⁸⁸ Keković, Z. u: Keković, Z., Kešetović, Ž. (2006): 448-449.

¹⁸⁹ Boin, A., Hart, P. 't., Štern, E., Sandelijus, B. (2010). *Politika upravljanja krizama*. Fakultet bezbednosti. Beograd: Službeni Glasnik: 11-12.

¹⁹⁰ Lucic, S. (2001). Pojam javne politike, *Evaluacija javnih politika-teorija i praksa*. Beograd: 10.

¹⁹¹ Boin at all. (2010); Kešetović, Ž., Toth, I. (2012).

Boine and Hart, crisis management policy (in terms of politics) requires the optimization of prevention, during which political leaders confront popular expectations, which they often cannot fulfill.¹⁹² Firstly, there is the expectation that public safety should be the top priority for leaders.

Prosperity and security are positively correlated, but unidirectional: economic progress accompanies security, but not vice versa. Hence, the decision to prioritize prevention or invest in the economy is a political, rather than an economic act. Another popular expectation is that leaders should be prepared for the worst-case scenario; however, most leaders are reluctant to prepare for their role in future crises. Crisis planning and preparation are primarily undertaken by leaders with previous experience in crisis and disaster management.

A third popular expectation is that leaders should heed warnings about crises. Research on major catastrophes and anthropogenic disasters has shown that they were preceded by incubation periods during which dangers were warned about, but the warnings either did not reach leaders or were neglected or misinterpreted.

Furthermore, the popular expectation that during a crisis, leaders take responsibility and provide clear direction for crisis management operations has also been refuted by research. It has been found that crisis operations require a multi-organizational, trans-jurisdictional, and polycentric network response with lateral coordination, rather than hierarchical top-down command and control.

Leaders fall into the trap of making unrealistic promises to victims, as they are expected to compensate victims to the greatest extent possible, which in the vast majority of cases does not happen. Finally, the myth that leaders learn from crises is debunked. In democratic societies where fateful events are not used to explain major accidents and catastrophes, politics is responsible for failures in crisis and disaster management. Crisis management policy transitions into the phase of crisis interpretation and seeking scapegoats. In an atmosphere of blame and struggle for survival in

¹⁹² Boin, A., Hart, P. (2003). Public Leadership in Times of Crisis: Mission Impossible?, *Public Administration Review*, 63(5): 544–553.

power, institutional learning and system improvement are lost in post-crisis politics.¹⁹³

3.1. Identification of crises and emergencies

Crisis recognition is a strategically essential phase of crisis management, accompanied by many challenges and constraints. These constraints relate to the characteristics of systems, organizations, or individuals. From the state perspective, according to Breshner, a crisis is a situation with three necessary and sufficient conditions, arising from changes in the external and/or internal environment. All three conditions: a threat to core values, a high probability of conflict or military threats, and a limited timeframe for decision-making, depend on the perception of the highest decision-makers. The definition relies on the unity of behavior and perception of external and internal actors in the crisis situation.¹⁹⁴ In relation to the aforementioned Herman's definition, here the crisis doesn't necessarily have to be a sudden event, and the decision time doesn't have to be short; rather, there is an awareness that time is limited. Most warnings themselves don't say anything. The perception of the highest decision-makers is crucial in building perceptions of threat and crisis recognition. Regardless of how real it is, if decision-makers lack the perception of a threat to core values, the situation won't be labeled as a potential crisis (such as the U.S. refusal to sign the Kyoto Protocol and withdrawal from the Paris Climate Agreement in 2017; Stalin's refusal to believe that Hitler would attack the Soviet Union). Political and bureaucratic leaders set priorities, and if they govern with significant political power and don't need coalitions for power, many crisis situations will never make it to the priority list.

When it comes to organizational constraints, the question of a safety culture arises. Many organizations are not focused on potential problems; they measure success by the goals they aim for, not situations they have avoided but could have occurred. Recognizing risks, extracting essential information from a scattered and separated system of many information channels, having mechanisms for crisis recognition, and competent teams are conditions for good crisis recognition.

¹⁹³ *Ibidem*.

¹⁹⁴ Brecher, M. (1979). State Behavior in International Crisis: A Model, *Journal of Conflict Resolution*, 23(3): 446–480.

Organizations often fall victim to the "normalization of risk," lulled into a false sense of security, or excessive planning or risk minimization. Also, there's an impression that "warnings of possible crises are only considered urgent if they are perceived as an immediate threat to the lifestyle that protects and serves the political-administrative elites."¹⁹⁵ In this phase, it is unpopular to be the bearer of bad news, so decision-makers can become "victims of silence." Those with prior experience have a better-developed perception of crisis recognition and are more successful at handling pressure. Research has shown a peculiar absurdity that the potential causes of many major modern disasters (Bhopal, Challenger, Chernobyl) lie precisely in key interactions between technology and organizational failures responsible for preventing the crisis from occurring.¹⁹⁶ The security aspect of organizational culture is crucial: if hazard recognition is considered a weakness or criticism of organizational excellence, it is unpopular to be the bearer of bad news. Therefore, crisis-prepared organizations have adopted the concept of existential anxiety: one of the fundamental lessons for human beings is to be "rightly disturbed without succumbing to fear."¹⁹⁷

Limitations in crisis recognition in individuals are interpreted in different ways depending on the approach. The cognitive approach in psychology links these limitations to inadequate cognitive schemas of leaders, which, if reoriented, would significantly reduce the risk, particularly of organizational crises.¹⁹⁸ The psychoanalytic approach traditionally deals with issues of mental health and the unconscious. Schwarz examines the psychoanalytic roots of the Challenger space shuttle explosion, arguing that unconscious factors contributed to the accident.¹⁹⁹ According to the research by Paushan and Mitroff, personality disorders, mental health, and individual defense mechanisms play a significant role not only in crisis recognition and decision-making but also in the

¹⁹⁵ Boin et al.: (2010): 34.

¹⁹⁶ *Ibidem*, according to: Barry A. Turner, B., A. (1978). *Man-Made Disasters*. Wykeham Publications, (first edition).

¹⁹⁷ Pauchant, T.,C., Mitroff, I. I., Lagadec, P.: (1991). Toward a Systemic Crisis Management Strategy: Learning from the Best Examples in the US, Canada and France, *Industrial Crisis Quarterly*, 5 (3), 209-232. према: (Kierkegaard (1844); May (1950); Tillich (1952); Becker (1973).

¹⁹⁸ Pearson, M. Clair, J. A. (1998). према: Nystrom and Starbuck (1984).

¹⁹⁹ *Ibidem*, according to: Schwartz (1987).

creation of organizational crises. According to their study, individuals in "crisis-prone" organizations are seven times more likely to use defense mechanisms such as denial, repression, fixation, grandiosity, and projection than those who work in "crisis-prepared" organizations.²⁰⁰

Bureaucratic and political leaders are under stress in normal circumstances, exposed to a vast amount of information and the need to make daily decisions. Crisis recognition represents additional stress, occurring when the individual perceives that their values are threatened or anticipates that a stressful stimulus will lead to such a situation. Therefore, the threat is not only the assessment of the stimulus but also depends on the subject's assessment of the possible consequences.²⁰¹ The stress induced by stress creates a need for information and answers about the causes. The first reactive step in coping with stress in crisis recognition is the search for information, which can be obtained through ordinary or special channels.

The required search can be modest or thorough, depending on the level of stress. Information can be received with an open mind or bias; it can be colored by ideology or previous experience. The received information will be shared with a certain number of individuals or groups, and the number, level of receptiveness, and size of the group will also depend on the level of stress. Consultations can be held rarely or frequently and are held before and/or simultaneously with the formation of the crisis team. Changes in the intensity of stress caused by the crisis affect the pattern of consultations and the structure of decision-making, the size and type of crisis staff.²⁰² Crisis managers often avoid seeking professional help in coping with stress in crisis management. Seeking assistance from organizations that reactively respond to the crisis is interpreted as weakness.²⁰³

3.2. Decision-making and making decisions in crisis and disasters

²⁰⁰ *Ibidem, according to:* Pauchant and Mitroff (1992).

²⁰¹ Brecher, M. (1979); Holsti and George (1975).

²⁰² Brecher, M. (1979).

²⁰³ Pauchant, T., C., Mitroff, I. I., Lagadec, P. (1991).

Decision-making is the most stressful phase in crisis management. During a crisis, usual patterns of social, political, and organizational interactions are disrupted. The entrenched myth of a leader making crucial decisions in isolation is highly popular. Bureaucratic expectations of centralized decision-making have become the basis of the theoretical and administrative framework of crisis management. The research directions of the political-institutional approach on which this work relies (the so-called Dutch and Swedish schools) advocate the thesis that successful crisis management depends not so much on centralistic decision-making but rather on coordination, implementation, and cooperation through somewhat decentralized, networked response systems.²⁰⁴

In revising the thesis on the centralization of decision-making in crisis management, seven patterns have been identified: informal and formal decentralization, non-decision (the decision not to decide), non-assumption of decision-making responsibility, decision of inaction, paralysis, situational domination, and strategic withdrawal. Informal decentralization is mainly influenced by two factors: time pressure for decision-making and overload of central authorities. Pre-planned, formal decentralization of decision-making during a crisis mostly arises as a product of experience from previous crises. Non-decision-making represents a kind of failure in the decision-making phase. The decision not to decide can be subject to criticism in the crisis interpretation phase and demonstrates the strong influence of widely-based normative intervention doctrines (for example, the Heysel Stadium crisis and the minister's refusal to decide on suspending the match).

On the other hand, the pattern of indecision operates at the meta-level: it affects the organization and process of crisis management rather than the crisis events themselves. Slowing down decision-making at the political level can create chaos, but it can also contribute to the absence of political interference in operational matters in the acute phase of a crisis, which is often a problem for field executives. Paralysis refers to situations in which decision-makers, overwhelmed by stress, are unable to take action/make decisions. Situational domination is a form of functional adaptation that arises in part due to the lack of precise planning,

²⁰⁴ Hart, P. 't., Rosenthal, U., Kouzmin, A. (1993). Crisis Decision Making: The Centralization Thesis Revisited, *Administration & Society*, 25 (1): 12–44.

which would otherwise entail a centralized response. Faced with extreme threats, operatives directly react to the given situation. Strategic withdrawal/reticence is the transfer of responsibility for decision-making to other actors.

How relevant these seven alternatives to centralized decision-making in a crisis will be depends on several factors: the personal characteristics of key actors, the level of time pressure, the strategic and operational decision-making levels, organizational structure and practices, and infrastructural limitations (availability of communication facilities).²⁰⁵ Operational and strategic levels of decision-making react differently to and experience time pressure, which can be particularly problematic at the operational level. When considering the pre-crisis organizational structure, two models differentiate: mechanistic and pragmatic.

The mechanistic model corresponds to a routine-oriented bureaucratic structure and formal chains of command and communication. The pragmatic model is associated with some form of matrix or project organization, which experiences less stressful time pressure for decision-making, resulting in a more effective crisis response than in centralized bureaucratic organizations. Comparing centralized and decentralized decision-making responses in a crisis, it has been concluded that "reasonable decentralization" in a networked response is a good solution.²⁰⁶ Strategic centralization aims to increase control over crisis operations at the highest level, which is beneficial. The risk involves overwhelming decision-makers, with the consequences of hypervigilance (excessive sensory sensitivity accompanied by heightened intensity of behavior), as was the case with President Carter during key phases of the crisis in Iraq;²⁰⁷ or decision paralysis (the case of Amsterdam's mayor Van Hall in June 1966).²⁰⁸

Decisions made in a crisis have very significant consequences, often requiring compromise or tragic choices, carrying great uncertainty and responsibility. They are confusing in terms of their consequences and the development of events for decision-makers. Moreover, choices must be made under time pressure. Stress, a surplus or lack of information, media and political pressure, and fatigue all affect decision-making. The longer the decision is post-

²⁰⁵ *Ibidem.*

²⁰⁶ Boin et al.: (2010): 129.

²⁰⁷ Hart, P. 't., Rosenthal, U., Kouzmin, A. (1993).

²⁰⁸ *Ibidem.*

poned, the more impaired the ability to conclude and decide becomes. Irving Janis distinguishes between cognitive, affiliative, and egocentric rules that leaders resort to in a crisis when making decisions.²⁰⁹ Cognitive rules involve simplifying the perception of complex situations to make quick and easy decisions. The process continues with an active, highly selective choice of information that confirms the previously selected option. Comparisons with previous events are often used to aid in decision-making. Affiliative rules entail making non-confrontational decisions, neither favoring superiors nor subordinates. Egocentric rules stem from a strong need for satisfying the leader's personal motives for control, self-assertion, and personal enhancement, often arising from feelings of incompetence and insecurity.

Research on decision-making under high stress indicates the presence of strong cognitive and affective tendencies that diminish the effectiveness of decisions.²¹⁰ The most common tendencies include: tendencies for excessive action during a crisis; the need for absolute control and security; bias in establishing blame and fault; shortening of the time perspective; chronic tendency to reduce the number of considered issues; over-evaluation of positive news and neglect of potential problems; development of a sense of invulnerability within the group; temporary attempts to hold onto previous reference frames; tendency to create reality; dangerous inclination to present oneself as a hero or savior of the situation or desire to be saved by an idealized person or organization.²¹¹

If a leader is unable to make decisions in conditions of uncertainty and confusion, it is unlikely that the crisis will be successfully resolved. A leader will never have perfect information during a crisis. The essence is to make the best possible decision in the absence of perfect information. Experienced and cautious leaders know that after the crisis ends, regardless of how it is resolved, critical examination of the decisions made during the crisis begins. Leaders concerned about this perspective may become paralyzed

²⁰⁹ Boin et al. (2010): 38-39.

²¹⁰ Pauchant, T., C., Mitroff, I. I., Lagadec, P. (1991).

²¹¹ *Ibidem*, according to: Hertzler (1940); Bettelheim (1963); Kets de Vries (1977); Smart and Vertinsky (1977); Holsti (1978); Billings et al. (1980); Staw et al. (1981); Anderson (1983); Dutton (1986); Raphael (1986); Lystad (1988); Miller (1988); Weick (1988); Janis (1989).

or make compromise decisions that may further worsen the outcome of the crisis event.

Research by Pauchant and Mitroff has shown that crisis managers use 31 defense mechanisms (or "dangerous games") in rationalizing their lack of capacity to manage the crisis.²¹² Some of these defense mechanisms include outright denial ("this can't happen to us"); using the concept of organizational excellence as an excuse for inaction in crisis management; limited acknowledgment of potential crises; projection: attributing the cause of the problem to others, especially towards the media or government; the aforementioned idealization - attributing magical abilities to others to save the day in case of a crisis ("our leader can do anything"). It should be noted that rationalization, projection, and idealization are useful up to a point. They develop as a defense mechanism for individuals under great stress and allow them to act despite the threatening situation; they are at the root of innovation and heroism. However, if extreme or used too frequently, they represent a risk factor in crisis management.²¹³

When it comes to mayors, there are some additional complicating factors in crisis decision-making: in France, this includes interference from institutions not under their jurisdiction and the overlapping responsibilities of municipal police and other institutions.²¹⁴ In the Netherlands, mayors are legitimately responsible for decision-making, but practice has shown that centralized coordination does not enable this.²¹⁵ The leader forms a team to assist them during the crisis. Group dynamics within the crisis team are crucial. Two extreme forms are conflicts and conformity. In the first case, representatives from different agencies and institutions may clash because it is a misconception that the crisis absorbs previous organizational/political conflicts. The second situation is the "new group syndrome": team members feel secure, and decision-making becomes a victim of "false cohesion." This is a group defense mechanism under stress. This often escalates into the "bun-

²¹² Pauchant, T., C., Mitroff, I. I., Lagadec, P. (1991).

²¹³ *Ibidem*

²¹⁴ Jong, W., Dückers, M., van der Velden, P. G. (2006). Leadership of Mayors and Governors during Crises A Systematic Review on Tasks and Effectiveness, *Journal of Contingencies & Crisis Management*, Volume 24, 46-58.: према: Boin et al., (2006).

²¹⁵ *Ibidem*, according to: Scholtens (2008).

ker syndrome," i.e., tendencies of group closure into isolation and self-sufficiency.

During a crisis, decisions are also made at the operational and tactical level in public administration. If responsibilities are not adequately performed during peaceful periods, they will be even worse during a crisis. If the authority of power is usually weak, it will completely disappear during a crisis. Even if the exercise of authority and responsibilities between different agencies and officials proceeds normally, there will be problems during the acute phase of the crisis. It has been shown that these problems are not related to the power structure but to decision-making.²¹⁶ During a crisis, public administration operates within established mandates, and officials continue to perform formal authorities and duties, so the chain of command and power structure do not overly affect effectiveness. If certain personnel are lacking, they are filled from lower ranks, and decisions are made that would not otherwise be made.

The urgency of the situation contributes to even rigid bureaucrats accepting the new situation when the question of urgent organizational response or decision arises. Decentralized organizational decision-making is common during disasters.²¹⁷ One misconception concerns the belief that the response to a crisis can be unsuccessful due to conflicts of interest among employees in management and institutions, stemming from concerns for their own families. The likelihood of a crisis will not change the usual pattern of personnel at the operational and tactical levels. However, when it comes to organizational decision-making in a crisis, there are four problematic areas: loss of senior staff due to excessive workload; conflicts of organizational authority due to new tasks; conflicts of organizational jurisdiction, and the creation of organizational legal distinctions.²¹⁸ Burnout among senior staff can be prevented by ensuring that key decision-makers take breaks and/or rotate at intervals. Conflicts of organizational authority can be a serious issue due to unexpected tasks that are not part of the job description of a specific institution/agency.

Effective crisis planning could partially alleviate this problem. Anticipating which part of the management will take on new

²¹⁶ Quarantelli, E. L. (1988). Disaster crisis management: A summary of research findings. *Journal of Management Studies*, 25. (4): 373–385.

²¹⁷ *Ibidem*.

²¹⁸ Quarantelli, E. L. (1988).

responsibilities is a good solution, provided that decision-makers are involved in the planning process. Conflicts of organizational jurisdiction are often unavoidable due to assuming responsibilities in a specific territory. Often, there develops a sense of sensitivity between the "locals" and "outsiders." Bureaucratic political literature highlights rational motives for this type of conflict (fighting for limited budgetary resources).

Research in social psychology deals with "social categorization," the need to separate the "us versus them" type, and "cognitive categorization" in which one group emphasizes stereotypes in the perception of different government agencies. The result is rivalry, in a situation where everyone must cooperate for an apparent common goal.²¹⁹ This conflict cannot be prevented by planning, but it could be mitigated by tactics aimed at reducing it to a "personality conflict." Unclear legal delineations of authority levels are usually the most difficult and can exacerbate crises at the sub-level. In the case of unclear jurisdictional lines during peacetime, this problem does not come to the forefront excessively. However, in the event of a crisis, it surfaces and creates additional crisis hotspots. Tactically, a good solution is temporary consensus on areas of responsibility with an agreement that there will be no formal transfer of authority after recovery. This way, accusations, loss of territorial or functional jurisdiction could be avoided eventually.

Some organizations are more successful in managing crises than others (primarily referring to the military, police, firefighters, rescue organizations, chemical and nuclear facilities, etc.). It has been concluded that their success lies in their awareness of safety, decentralization, and training.²²⁰

3.3. Interpretation of Crisis and Disasters in the Context of Political Communications

The interpretation of a crisis is a phase that lasts from the beginning to the end of the crisis for political decision-makers. If politicians do not understand this, they may become victims at the end of the crisis, regardless of the success of their response to the crisis. The interpretation of a crisis is the process of 'producing facts, images, and scenes with the aim of acting on socio-political

²¹⁹ Parker, C. F. Stern, E. K. (2002). Blindsided? September 11 and the Origins of Strategic Surprise Source: *Political Psychology*, 23(3): 601–630.

²²⁰ Boin at al.: (2010): 42.

uncertainty and conflicts caused by crises.²²¹ A crisis turns into a symbolic struggle for the social meaning of a certain domain.²²² When a society enters a phase of crisis, its fundamental values are threatened and may not survive. The usual rules do not apply, and routine is insufficient for ensuring predictability. Nothing is certain anymore, and the public expects a vision of a probable future. In this context, actors have different perceptions of naming, understanding, and assessing the crisis. The political decision-maker harmonizes these varying perceptions through their interpretation of the crisis²²³ to obtain the 'consensus of permission' necessary for implementing decisions and strengthening their reputation.²²⁴

Interpreting a crisis is a process that influences public perception and emotions by framing the crisis, using crisis rituals, and masking certain dimensions of the crisis.²²⁵ A well-established framework for the crisis significantly eases the situation. The language used is rhetorical and professional. The use of professional language has proven to be an effective way to depoliticize the issue.²²⁶ Once a crisis is well-framed and the public accepts the inevitability of making difficult decisions through critical choices, risks and facts become less prominent in decision-making compared to the psychopolitical dilemmas faced by high-level decision-makers. Political rituals in shaping public response, such as public expressions of sympathy, initiating investigations, or implementing punishments, help people somewhat reduce anxiety by experiencing a certain degree of internal locus of control, even though their actual influence may be insignificant.²²⁷ "The thesis that 'a crisis gives the government the right to lie'²²⁸ is often challenging for decision-making and management structures. Masking as a strategic approach to crisis interpretation involves downplaying the severity of threats and dangers, withholding the full truth, obfuscating certain aspects of anti-crisis operations, and denial. These tactics usually

²²¹ *Ibidem*: 66.

²²² Boin at al: . (2010): 67 према: Schon, D. A., Rein, M. (1994). *Frame Reflection: Toward the resolution of intractable policy controversies*. New York: Basic Books: 29.

²²³ Klijn, E. H., Koppenjan, J., Termeer, K. (1995).

²²⁴ Boin at al: . (2010): 68.

²²⁵ *Ibidem*: 78-84.

²²⁶ *Ibidem*, according to: Snider (2004).

²²⁷ *Ibidem*, according to: Edelman (1971).

²²⁸ *Ibidem*: this was claimed by the Assistant Secretary of Defense in the Kennedy administration, Halper (1971: 17).

aim to buy time, which can be unsuccessful if the timing is poorly judged. The very fact that an event is labeled as a crisis invokes archetypal images that shape public expectations regarding the seriousness of the problem, the sequence of events, resolution, and assignment of responsibility: who are the culprits and who are the saviors.²²⁹ Credibility is a crucial characteristic for political survival in this situation and has three fundamental dimensions:²³⁰ Attractiveness, reliability, and expertise are the key dimensions. However, it should be noted that credibility and trust are hard to earn and easy to lose. Two common situations that undermine a leader's credibility are the so-called 'overemphasis on rosy scenarios' and making promises whose fulfillment is uncertain. Research has shown that the personal charisma and motivation of a mayor contribute to boosting morale and maintaining hope for the future during the crisis interpretation phase.²³¹ Experts also play a similar role, especially when mayors refer to their opinions: this provides additional security and strengthens public trust.

3.4. Communication about risks of emergency and crisis situations

The interpretation of a crisis is a phase that relies heavily on crisis communication, which is a complex area with its own rules and characteristics. The relationship with the media and communication skills are crucial. Controlling public understanding of the crisis is difficult even when conventional media (television, newspapers) are involved, and in the age of the internet, it becomes almost an impossible mission. Leaders who lack developed communication skills, who avoid communication during a crisis with the media and citizens, or who conflict with them, have little chance of political survival during a crisis, at least in democratic societies. The context of shaping public opinion occurs in a triangular relationship among governmental and non-governmental political ac-

²²⁹ *Ibidem*, according to: Heath (2004).

²³⁰ *Ibidem*, according to: Ohanian, R., (1991). The impact of celebrity spokesperson's perceived image on consumers' intention to purchase. *Journal of Advertising Research*, 31 (1): 46-52.

²³¹ Jong, W., Dückers, M., van der Velden, P. G. (2016).

tors, the media, and citizens.²³² The success of government crisis communication will depend on the level of preparedness for this function, the degree of coordination of disseminated information, and the level of professionalism. Crisis communication is a distinct form of public relations, consisting of predicting and preparing for possible crisis events, crisis resolution, communication with stakeholders, and post-crisis evaluation of measures taken.²³³

The general rules of successful crisis communication include: the ability to establish empathy towards the public; expertise and credibility of the spokesperson; transparency, openness, and honesty in providing information; and commitment and accessibility of the crisis communicator.²³⁴ The frequently applied rule in crisis communication 'say everything quickly' has its limitations, which relate to risk, coordinating the flow of information, and overseeing the shaping of information.²³⁵ Risks relate to the legal aspects of potential consequences. Coordinating the flow of information involves a strategy of collaboration with mass media and the public. Oversight of shaping information represents a strategic advantage, taking a proactive stance in interpreting the crisis and shaping public and media perception.

In crisis communication, two groups of problems stand out. The first relates to the lack, unreliability, or overload of information. The second group of problems concerns the unenviable position of crisis communicators, as they are exposed to pressure from the public and media on one hand, and responsible and supervised by the system they represent on the other hand. Some of the applied strategies in crisis communication include: denying that the crisis exists; avoiding or downplaying the connection between the crisis and the subject that is the subject of the crisis; self-aggrandizement by emphasizing previous merits; portraying the subject as a victim and seeking sympathy; penitential behavior - seeking forgiveness, caring for victims, rectifying mistakes; attacking the one who uncovered the crisis; excusing that the crisis would have occurred independently of the crisis subject who is not at fault; mitigating - portraying the event as harmless; rectifying -

²³² *Ibidem*, according to: Graber et al. (1998): 4.

²³³ Kešetović, Ž., Toth, I.: (2012). According: Novak, B. (2001). *Krizno komuniciranje*. Zagreb: Binoza press.

²³⁴ *Ibidem*: 112.

²³⁵ Kešetović, Ž., Korajlić, N (2008). *Krizni menadžment*. Fakultet bezbednosti. Beograd: Službeni Glasnik: 132-174.

mitigating consequences and taking preventive measures for the future; and justification - acknowledging responsibility and compensating for damage.²³⁶

The most common mistakes in crisis communication from an organizational aspect are: ignoring the crisis (the so-called 'ostrich technique': 'head in the sand'); reacting after the public's reaction; insisting on organizational excellence ('how dare anyone doubt us, when everyone knows who we are'); adopting a hostile attitude towards the media; losing the advantage in crisis communication, being reactive instead of proactive; giving statements in expert language unintelligible to the public; neglecting the factor of public perception and relying on the assumption that the facts will speak for themselves ('everything is clear, the truth speaks for itself'); focusing on facts and neglecting people's feelings; providing only written statements, without personal interaction with interlocutors; unreliable assessment of damage using subjective methods; and repeating the same mistakes hoping for a different outcome.²³⁷

Information management is a crucial part of crisis management, with the flow of information being vital. Proactive, preventive crisis management favors a progressive information flow, where information before the crisis flows from bottom to top, supplying middle and senior management layers with fresh data. In the event of a crisis, the direction of information changes, and the progressive information flow shifts to retrograde (from top to bottom). Open communication channels and the free circulation of information to management structures enable a constant preventive approach to the crisis.²³⁸ The existence of a strategic crisis communication plan is essential. It specifies the form, structure, and methods of crisis communication. It outlines who communicates, when, to which audience, and with what purpose.

After the crisis, it is appropriate to analyze past events, compare the extent to which the crisis communication plan was implemented, focusing on mistakes made. The goal is to prepare for future crises and improve the crisis communication system on one hand, and on the other hand, to gain a realistic picture of the crisis in the

²³⁶ *Ibidem*, according to: Coombs, T. (2005). *Crisis communication* in Roberth, L. Heath (ed.) *Encyclopedia of Public Relations*, Vol. 2, London: Sage Publications.

²³⁷ *Ibidem*.

²³⁸ *Ibidem*.

public eye. The path to this model is long; changes in information management should start from the bottom up, beginning at the local and regional levels of government.²³⁹

Crises on a symbolic, communication level are a category in themselves, which sequentially trigger real crises (such as the bombing attack by Islamist extremists on the Charlie Hebdo magazine in Paris in 2016 due to provocative cartoons of religious content). Sensationalist journalism, rumors, thoughtless statements, cyber crises, attacking ("hateful", full of hate) websites are platforms through which communication and symbolic crises can escalate into real crises. All crises must be viewed as media events. And vice versa: if the media define a situation as a crisis, it is a crisis with its consequences. Without media coverage, managing emergencies is impossible. The media inform the public, warn and alert the population, help resolve collective stress, and interpret the responsibilities of political and government officials.²⁴⁰ Therefore, authorities should not wait for a crisis event to occur to establish good relationships with the media. They should build these relationships even in the planning cycle. In addition to international and national media networks, local and regional media play a significant role during disasters and emergencies.

3.5. Ending crises and emergencies: blame games and accountability

The crisis ends at both the political and operational levels. The simplest scenario is when operational and political endings coincide (end of World War II). Another scenario is when the crisis ends politically, meaning it falls out of the focus of political priorities, but operationally it continues (case of the African continent: famine and civil wars). The third scenario is when the crisis ends operationally but continues politically (case of multiple explosions in Brussels in 2016). The fourth scenario is when the crisis remains open until further notice: the operational level lasts as long as the

²³⁹ Maretić, M., Mrkonjić, A., Razović, M. (2007). Komunikacijske paradigme: Županija – Javnost *Informatologia* 40, 2: 118–125.

²⁴⁰ Local Authorities confronting Disasters and Emergencies, 2nd International Conference, Amsterdam, (22-24 April 1996) http://ec.europa.eu/echo/files/civil_protection/civil/prote/cpactiv/cpact01k.htm.

crisis remains on the list of political priorities (September 11).²⁴¹ Assessing the timing of ending a crisis is crucial. There are two ways to get the timing wrong: too early and too late. When a leader ends a crisis prematurely, the success of operational activities may be disrupted, and public reaction can be sharp and critical. Ending the crisis too late can result in the "bunker syndrome": the crisis team becomes self-sufficient, losing the ability to see the bigger picture of events. Some regimes deliberately prolong or provoke crises to divert attention from key issues or to remain in power.²⁴²

When a crisis ends, the phase of determining responsibility ensues. Evaluating crisis events is necessary for system improvement and learning from the crisis. Another reason is on a socio-psychological level: determining responsibility provides an opportunity for individual and collective catharsis, relief, acceptance of past events in the symbolic domain, and preparation for a new image of the future. In the case of ignoring responsibility for crisis events, the sense of collective anxiety continues to exist. Determining responsibility is accompanied by bureaucratic, legal procedures, rituals, and protocols, and when rationally conducted, it reduces the risk of falling into uncontrolled group emotional states. On the other hand, a well-implemented process of determining responsibility fosters a collective sense of resilience among the people and unity among the authorities, the people, and the system.²⁴³

If the process is ritualized, conditioned by realpolitik tendencies where the parliamentary majority supports dictated views of the leader regardless of the actual state of affairs, the process will not be therapeutic or constructive.²⁴⁴ During the process of determining responsibility, when questioning the existence of a systemic error, answers can be sought through an analysis of the dimensions of care and competence. Investigation results can often be somewhat absurd, as shown by the analysis of the tragedy at Cave Creek in New Zealand in 1995, when a platform 30 meters high collapsed with 18 people on it. The judge responsible for the investigation discovered that the platform was built by "well-intentioned but unskilled" individuals, and that systemic failure was contained in the organizational culture of the responsible

²⁴¹ Boin et al.: (2010): 90-104.

²⁴² *Ibidem*.

²⁴³ *Ibidem*.

²⁴⁴ *Ibidem*.

agencies: "doing more with less," and bureaucratic language termed it "careful incompetence."²⁴⁵

The process of determining responsibility often serves as an introduction to another crisis, where the focus shifts from operational action to critiquing effective, lawful, competent, and legitimate governance. It transitions to politics, and that's when blame games and avoidance of responsibility come into play. Avoidance of responsibility games is described as a strategic choice in dimensions of severity (how bad is the situation?), causality (how did this happen?), and responsibility (who is to blame and whom to punish?).²⁴⁶ The most common tactics of avoiding responsibility include denial, minimization, positive spin, discrediting contributions, discrediting power, blaming decision-makers, disqualifying investigations, justification, preventing labeling, finding a scapegoat, remorse, and symbolic change.²⁴⁷

Determining responsibility is an arena for various actors: moralists, seekers of political victims, spin masters, camouflage artists, bureaucratic fanatics, and media guerrillas.²⁴⁸ In these conditions, it is uncertain whether truth and merit will come to the forefront. In such conditions, there is a shifting of responsibility: leaders distance themselves from lower levels of authority, which claim they lacked financial conditions to fulfill their duties or that the levels of authority were unclearly defined, thus bureaucratic-political games obscure the benefit that can be gained from learning from mistakes. Blame management strategies may involve delegating to prominent representatives, lower levels of authority, or other actors (so-called "lightning rods"). Socio-psychological and public-political research has identified a tendency for responsibility delegation strategies from the political level to parts of the system (in the case of the EU, this is particularly characteristic in environmental protection and occupational safety, for example). This puts politicians "in the happy circumstance of being able to blame everyone else for the crisis".²⁴⁹

²⁴⁵ Gregory, R. . (1998). Political Responsibility for Bureaucratic Incompetence: Tragedy at Cave Creek, *Public Administration*, 76: 519–538.

²⁴⁶ Boin at al., Brandstrom and Kuipers (2003).

²⁴⁷ Boin at al.: . (2010): 95-99.

²⁴⁸ *Ibidem*: 103.

²⁴⁹ Hood, C. (2002). The Risk Game and the Blame Game, *Government and Opposition*, 37(1): 15–37.

This is explained by politicians' tendency to prioritize avoiding responsibility and blame on the scale of desirable goals over potential gains in the political arena before the voters. This thesis echoes the famous Machiavellian sentence that "princes should refrain from enacting unpopular measures and retain only the distribution of services in their hands".²⁵⁰ In the system of new public management and risk regulation, according to Wiver, in the game of avoiding blame and taking responsibility for crises, "the ideal design for a regulatory regime is one in which standards are set by international experts, overseen by autonomous agencies, and implemented by local authorities - leaving politicians in the fortunate position of being able to blame everyone else instead of accepting responsibility when things worsen."²⁵¹

3.6. Learning triggered by crises and emergencies - opportunity for change and implementation of reforms

The final phase of crisis management is learning from crises and the possibility of changes/reforms. This phase is also characterized by the myth that the system learns from crises and incorporates that knowledge into organizational and institutional memory. The evaluation of past events should serve the organization by adapting and changing to contribute to better responses to future crises. Theoretically, this should be the most important phase in disaster response.²⁵² The dilemma arises right from the definition of organizational learning from crises. The parameters of organizational learning vary and range from: the development of new routines, standards, operational and accounting procedures;²⁵³ cumulative production skills;²⁵⁴ the development of consensus;²⁵⁵ the deter-

²⁵⁰ *Ibidem*, according to: Machiavelli, N. (1961). *The Prince*, tr. G. Bull, Harmondsworth, Penguin: 106.

²⁵¹ Weaver, R. K. (1986). The Politics of Blame Avoidance, *Journal of Public Policy*, 6 (4): 371-398. doi: 10.1017/S0143814X00004219.: 390.

²⁵² Carley, K. M., Harrald, J. R. (1997). Organizational Learning under Fire: Theory and Practice, *American Behavioral Scientist*, 40 (3): 310-332.

²⁵³ *Ibidem*, according to: Cyert & March (1963); Johnson & Kaplan (1987); Levitt & March (1988); March (1981); March & Olsen (1975); Nelson & Winter (1982).

²⁵⁴ *Ibidem*, according to: Argote et al. (1987); Dutton & Thonjas (1984); Rosenberg (1982).

²⁵⁵ *Ibidem*, according to: DeGroot (1974); Hastie (1986).

mination of optimal decision rules;²⁵⁶ the creation of effective communication structures²⁵⁷ and the improvement of problem-solving accuracy.²⁵⁸ There are significant differences in the understanding of organizational learning from crises in theory and practice. Research shows that in practice, it is not always clear what the outcome of organizational learning is and whether those changes have contributed to improved organizational performance in crisis management. Specifically, when it comes to training and experience, data indicate that the loss of personnel can either worsen or improve the organization's performance.²⁵⁹

In response to the question of the extent to which a crisis correlates with organizational changes, Schein suggested that the process of so-called "unfreezing" is crucial.²⁶⁰ Organizations operate according to established routines and procedures, and changing them requires the compulsion of some extraordinary event. This is the point of "unfreezing." However, this unfreezing window is very limited, and once it passes, the likelihood of organizational change is small. Changes mainly occur during and immediately after a crisis. Therefore, organizations prepared for crises learn from crises in leaps: from crisis to crisis, rather than smoothly and continuously. Another crucial point is perception. Crises, especially disasters, are low-probability events, so individuals often perceive that such rare events cannot happen to them. When a crisis does occur, all activities and changes focus on that specific type of event: after floods, actors primarily deal with flood response. The same applies to fires, terrorist attacks, earthquakes, ecological disasters, etc. It has been concluded that there is a kind of paradox: preparedness for response degrades over years without a crisis.²⁶¹ From this, it follows that the type of organizational learning corresponds to a specific type of disaster at the same time.

In the process of institutionalizing learned lessons, several misconceptions are present. Organizations that have successfully

²⁵⁶ *Ibidem*, according to: DeGroot (1970); Grofman & Owen (1986); McGuire & Radner (1986).

²⁵⁷ *Ibidem*, according to: Cohen (1962); Guetzkow & Dill (1957); Shaw & Rothschild (1956).

²⁵⁸ *Ibidem*, according to: Carley (1992a); Lin & Carley (1992).

²⁵⁹ *Ibidem*, according to: Argote et al. (1987); Price (1977); Tushman, Virany, & Rpmannelli (1989).

²⁶⁰ *Ibidem*, according to: Schein (1972).

²⁶¹ *Ibidem*, according to: Harrald, Marcus & Wallace (1990).

dealt with a crisis incorporate rules into their everyday routines and processes, gaining a sense of false security. The negative effect also comes from avoidance games of responsibility: the administrative apparatus spends time and energy documenting their absence of responsibility at every phase of the crisis. Blame games, for the same reason, do not provide a conducive atmosphere for objective analysis of failures and errors and learning from them. The outcome of learning from crises is an improvement in crisis preparedness and organizational performance.²⁶² In all learning theories, feedback that enables performance improvement comes in the form of assessing the distance from the set goal (how far are we from the goal?). The more accurate and faster the feedback, the better the organizational performance. The organization's ability to learn from feedback diminishes when it is not objective, when institutional problems prevent the acceptance of feedback, and when employees and management do not accept it. In the case of organizations responsible for responding to emergencies, there is an absurd tendency not to learn from mistakes, as the process of internal feedback is generally not ensured.²⁶³

On the other hand, the use of standard operating procedures leads to a rigid, bureaucratic approach insensitive to changes caused by exceptions. The model of organizational learning taxonomy assumes that it occurs at levels of problem recognition, seeking solutions, and implementation.²⁶⁴ Eight potential outcomes have been developed, where organizational learning can fail due to failure at all three levels: failure to recognize problems, lack of readiness to learn, failure to solve problems, failure to change effects, etc. Organizations that fail to recognize problems have issues with so-called "scouting" functions: they do not identify potential critical problems, when and how they might arise. The military, as a high-reliability organization, uses simulations and war games to prevent errors and learn from them (so-called "hot washes" or critiques after exercises serve to mitigate potential failures in real events). Organizations in the USA, such as FEMA and the American Red Cross, have also begun to apply these methods. Organizations that do not attempt to have gaps in organizational strategy exhibit opportunism, avoidance, and system inertia. Organizations

²⁶² *Ibidem*, according to: Carley (1992a); Levitt & March (1988).

²⁶³ *Ibidem*.

²⁶⁴ *Ibidem*.

that have not learned the lesson from the crisis are defeatist: they assess that the problem exceeds their capabilities due to its complexity or the resources required. Regardless of the reason for the failure of organizational learning from crises, all suggest that management fundamentally does not consider the problem important and threatening to the organization's existence.²⁶⁵

3.6.1 Organizational learning

Organizations that have problems with unsuccessful problem-solving often struggle with organizational design or resource allocation approaches. These challenges are relatively easy to address: by redesigning the organizational structure or allocating more resources to the problems. The problem actually lies in the fact that these organizations have refused to learn in previous phases, so this is merely a form of operational outcome.

Table 3. Organizational learning, according to Carley, K. M., and Harrald, J. R. (1997).

1. Learning is not possible	A potential problem did not occur
2. Learning is not possible	The problem was not recognized due to inadequate feedback and data
3. Learning has not been attempted	A solution was not sought due to organizational avoidance
4. Learning has not been attempted	A solution was sought, but the problem was not resolved
5. Learning has not been attempted	A solution was found but not implemented due to organizational resistance/inertia
6. Learning is unsuccessful	The solution was implemented, but unsuccessfully, due to the wrong solution
7. Learning is unsuccessful	Unsuccessful attempts to implement the solution due to organizational resistance
8. Learning is successful	The problem does not repeat

During a crisis, the institutional and political apparatus is tested, and its survival is uncertain. After the crisis, weakened institutions are reluctant to delve into details that could provide opponents with arguments for confrontation. Everyone actually wants to return to routine as soon as possible. If they survive the crisis

²⁶⁵ *Ibidem*

period, the elites will tend to make slight adjustments after the crisis.²⁶⁶ Perception of organizational performance is crucial, especially when under intense public scrutiny. Therefore, during crises or situations of uncertain success of solutions (or even certain failure), for the sake of survival, these organizations more often resort to learning impression management rather than improving their standards and performance.²⁶⁷

When it comes to public administration, a kind of paradox emerges: the need for learning is highest under circumstances where it is most difficult to achieve. Under high levels of stress, defensive mechanisms, both group and individual, in the form of withdrawal and resistance, are activated, preventing the organization from learning.²⁶⁸ Introverted organizational behavior²⁶⁹ The factors that inhibit the learning of public administration will intensify if external pressure from public opinion combines with political pressure, in the form of criticism and condemnation for current or past events. Questions of the jurisdiction of public administration are usually outside the influence of politics in regular circumstances. During a crisis, certain issues that are otherwise routine become highly politicized, with policymakers and public servants expected to solve problems, enhance operational functions, and restore the legitimacy of the sector.²⁷⁰

Organizational learning has both cognitive and behavioral dimensions: it is seen as a link between organizational cognition and behavior. A particular research question is how politicization affects these two dimensions of organizational learning. The behavioral dimension relates to structural adaptations reflected in increased organizational knowledge and insights. If distributed and integrated into the organization's structure, learned lessons can have only long-lasting and widely spread effects. The cognitive dimension concerns the growing insight and change at the level of organizational knowledge through the filtration, processing, and interpretation of information for the purpose of learned lessons for

²⁶⁶ Boin et al. (2010).

²⁶⁷ Carley, K. M., Harrald, J. R. (1997).

²⁶⁸ Dekker, S., Hansén, D., (2004). Learning under Pressure: The Effects of Politicization on Organizational Learning in Public Bureaucracies, *Journal of Public Administration Research and Theory*, 14(2): 211–230.

²⁶⁹ *Ibidem*, according to: Hermann (1963); Janowitz (1959).

²⁷⁰ *Ibidem*.

the future.²⁷¹ The assumption is made that the organization is a cognitive system in itself, regardless of staff turnover and changes in leadership. It retains a kind of own memory composed of mental maps, memories, norms, and values over time.²⁷² Organizational memory can exist in explicit forms, such as rules, standard operating procedures, manuals, policy documents, instructions, computer software, etc. Implicit forms of organizational memory include routines, codes, rituals, norms, and beliefs.²⁷³ The cognitive dimension of learning assumes handling information (acquiring and creating information) as an important precondition for learning. The process ranges from informal forms, such as taking breaks or preferring to read certain news, to complex methods such as experimentation, benchmarking, research and development, evaluating regular performances, etc. For an organization to be able to learn, it is not enough to have accumulated available information; it is necessary to filter and interpret it, and then develop a conceptual framework based on the relationship: cause-effect-possible solutions.²⁷⁴

The politicization can contribute to increased organizational attention related to learning from previous crisis experiences, but also biases in the analysis of organizational failures. The technique of assigning blame on an individual level shifts attention away from structural problems and poses an obstacle to learning from crises, as the organization defends itself through closure and opportunism. A possible outcome is a series of recommendations related to redesigning organizational structures and swiftly identifying scapegoats. Knowledge dissemination is also a vital part of the learning process. Under political pressure to identify flaws in crisis events, spreading information within the organization can be facilitated. It has been shown that the acquired knowledge about learned lessons from one organizational sector is more easily disseminated throughout the entire organization or sector when the

²⁷¹ *Ibidem*, according to: Duncan and Weiss (1979).

²⁷² Hedberg, B. (1981). How organizations learn and unlearn. In *Handbook of organizational design*, ed.

P. C. Nystrom and W. H. Starbuck, 3–27. Oxford: Oxford University Press.: 6.

²⁷³ Olivera, F. (2000). Memory systems in organizations: An empirical investigation of mechanisms for knowledge collection, storage and access. *Journal of Management Studies* 37: 811–32.

²⁷⁴ Dekker, S., Hansén, D. (2004) .

problem is politically focused. Finally, to close the organizational learning loop from a crisis, it is necessary to embed experiences into explicit forms of institutional memory: rules, procedures, instructions, software, etc. Acquired experiences can be internalized by individuals or implemented through methods of social control and personnel policies. Politicization can contribute to the forced incorporation of acquired knowledge into public administration when the situation reaches a critical point and threatens public trust. On the other hand, at the political level, decisions about the institutionalization of acquired knowledge can be made without prior consultations with representatives of the administration, further creating a gap between these actors and complicating the implementation of institutionalizing acquired knowledge.

Every new disaster and crisis is different from the previous ones, so mechanical adoption of previous experience is useless and can even be harmful. Crisis-induced learning is generally learning from multiple experiences, with many details over a significant period of time. The recommendation to governments is that they should "avoid the pitfalls of excessive learning, that which occurs in too fast and fervent a manner. Learning from sophisticated information systems should be balanced according to the overall situation in a specific country or continent. Sophisticated informatics does not help in setting up low-tech solutions".²⁷⁵ On the other hand, the "last-minute" crisis management approach jeopardizes the ability to overcome a crisis and often does not provide enough time and space for accommodation and equipment in disasters. Comparative research has shown that a large number of governments are forced into what is known as incrementalism, which is a cautious decision-making style where changes are implemented gradually or in small steps and where they must "constrain elite desires and capacities for changing established policy priorities."²⁷⁶ Furthermore, studies show that governments generally come to power with unclearly defined and inconsistent political plans, which, due to crises, must be devised afterwards. In elections, they are constrained by the inherited decisions of previous

²⁷⁵ Local Authorities confronting Disasters and Emergencies, 2nd International Conference, Amsterdam, (22-24 April 1996) http://ec.europa.eu/echo/files/civil_protection/civil/prote/cpactiv/cpact01k.htm.

²⁷⁶ Keeler, J., T., S. (1993). Opening the Window for Reform: Mandates, Crises, and Extraordinary Policy-Making, *Comparative Political Studies*, 25(4): 433–486. Bunce (1981): 133.

governments, and they are afraid of the lack of time, money, information, expertise, energy, and other resources. In such a position, strategies of decision avoidance and decision postponement seem like a good choice.²⁷⁷

The new elites coming to power after a crisis see an opportunity for reformative changes. A crisis can have a catalytic effect in terms of accelerating psychological and administrative-political processes compared to the slow and inert power and state administration.²⁷⁸ Reforms triggered by a crisis must meet several conditions to succeed. The first condition is that the chosen strategy has political and social consensus on what the future should look like. The second condition is that leaders must maintain initiative throughout the entire crisis. The third also relates to the leader's skills in post-crisis politics.

Analysis of crisis-induced reforms has shown that they are often "the product of centralized and opportunistic political management. Strong rhetoric masks the dilemmas of implementing defended reforms, and appropriate processes pave the way for procedural shortcuts. Hence the paradox - reforms triggered by crises are likely to produce crises triggered by reform."²⁷⁹ The reform process, from individual insight to coalition-building, approval, implementation, and maintenance of changes, is very challenging, uncertain, and lengthy, often with conflicting interpretations by different actors. This can lead to constructive political and policy dialogues, but it can also be a basis for political obstruction that does not contribute to learning from the crisis. The ironic outcome is that a government, along with its administrative system, cannot assess the extent to which learning from the previous crisis has contributed to improving its capacity to overcome it until the next crisis occurs.²⁸⁰

²⁷⁷ *Ibidem*, according to: Light(1983); Hennessy (1989); Rose (1984, 1989); Rockman (1992).

²⁷⁸ Stern, E. (1997). Crisis and Learning: A Conceptual Balance Sheet, *Journal of Contingencies and Crisis Management*, 5(2).

²⁷⁹ Boin at al.: (2010): 138.

²⁸⁰ Stern, E.. (1997).

4. COMMUNITY RESILIENCE IN CRISIS AND DISASTERS

Researchers have concluded that establishing a strong and efficient crisis management system is one of the prerequisites for the formation of so-called "resilient communities." This rule is particularly relevant for large cities, which, due to their size and population density, develop their own robust crisis management systems. Resilience to disasters can be interpreted through five thematic areas:²⁸¹ 1) Governance - management; 2) Risk assessment; 3) Knowledge and education; 4) Risk management and vulnerability reduction; and 5) Disaster preparedness and response. For example, concerning the enhancement of disaster resilience within the governance context of a state, it is necessary to advance the following: a) policy, planning, priorities, and political commitment; b) legal and regulatory systems; c) integration with development policies and planning; d) integration with response and recovery; e) institutional mechanisms, capacities, etc.

In recent times, various concepts have emerged, such as resilient communities, safe cities, smart cities, cities desirable for living, etc. All these concepts, more or less, embed the concept of security within them. Local authorities should direct their efforts not only at their own or central levels of authority and administration but also actively participate in building capacities to overcome crises within their own local context: by connecting and activating groups of citizens, volunteers, civil society organizations, small and medium-sized enterprises, etc.

In 1973, the term resilience was first used to describe the persistence of a system and its ability to absorb changes and disruptions. However, it should be noted that the interconnectedness of vulnerability, resilience, and adaptive capacity has not been sufficiently explored. One of the significant characteristics of the resilience concept is its multidimensionality, ranging from bounce-back and human ingenuity to elasticity and resilience as properties

²⁸¹ Cvetković, V. (2020). *Upravljanje rizicima u vanrednim situacijama*. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama, str. 252.

of materials like steel. Moreover, the English word "resilience" derives from the Latin verb "resiliere," meaning to bounce back or recover. According to Alexander, resilience signifies the strength and ability of human society, exposed to various stresses, to devise means to resist disaster while maintaining integrity (cohesion).²⁸²

4.1. Resilient communities and urban safety

In the World Health Organization's (WHO) strategy for Europe, "Health 2020," creating resilient communities and supportive environments is one of the four stated goals. "Resilient communities proactively respond to new or unwanted situations, prepare for economic and social changes and changes in the environment, and better cope with crises and difficulties."²⁸³ The unpredictability and severity of potential consequences of earthquakes for people and residential buildings in Serbia point to the need for improving the resilience of local communities. In one of the studies²⁸⁴, the results of a quantitative study on the level and factors influencing citizens' awareness of seismic resistance of their residential buildings to earthquake consequences were presented.

Random sampling at multiple points was used to survey 1,018 citizens (face-to-face) during 2017 in 8 local communities: Kraljevo, Lazarevac, Jagodina, Mionica, Prijepolje, Vranje, Lapovo, and Kopaonik. The questionnaire consisted of two segments: questions about the demographic, socio-economic, and psychological characteristics of the respondents and questions regarding the seismic resistance of residential buildings to earthquake consequences. The results indicate that 35% of respondents reported living in residential buildings that are not earthquake-resistant, while 70.7% reported living in buildings constructed of reinforced concrete, which are considered safe. Additionally, 9.2% of respondents

²⁸² Cvetković, V., & Filipović, M. (2018). Koncept otpornosti na katastrofe. *Ecologica*, 25(89), 202-207.

²⁸³ World Health Organization: Regional Office for Europe: Health 2020: European policy framework supporting action across government and society for health and well-being. (Malta, 2012): <http://www.zdravlje.gov.rs/downloads/2012/Decembar/WHO2020.pdf>

²⁸⁴ Cvetković, V., Filipović, M., & Jakovljević, V. (2017). A survey of subjective opinions of population about seismic resistance of residential buildings. *J. Geogr. Inst. Cvijic*, 67(3), 265-278.

assessed the resistance of their structures to earthquake consequences. Inferential statistical analyses show that males are more likely than females to report that their buildings are resistant to earthquake consequences. Given the multidimensionality of citizens' vulnerability to earthquakes, it is necessary to conduct additional studies to further illuminate the sociological dimension of vulnerability and resilience.²⁸⁵

The experiences of the WHO show that community resilience is strengthened, particularly when local residents are involved and take ownership of issues crucial to community security: health, environmental protection, education, social welfare, safety, employment, transportation, and municipal infrastructure, etc. The World Bank regards community resilience as an important criterion for the competitiveness of a city.²⁸⁶ Thinking about resilience inevitably involves considering the dynamic nature and development of complex socio-ecological systems, and there are three central aspects that are interrelated: resilience, adaptability, and transformative capacity. There are several indicators of community resilience. Each of these dimensions has its variables: a) Ecological (wetland areas, erosion rates, percentage of impermeable surfaces, biodiversity, coastal defense structures); b) Social (demographics (gender, age, ethnicity, etc.), social networks and organizations, social cohesion, religious organizations); c) Economic (employment, property value, self-government financing); d) Institutional (participation in risk reduction programs, hazard mitigation plans, services, zoning and construction standards, protection and rescue plans, risk assessments); e) Infrastructure (critical infrastructure, transportation network, built structure); f) Community competencies (local risk understanding, presence of psychopathology, health and sports facilities, quality of life).²⁸⁷

The concept of urban security is relevant due to the global trend of population concentration in large cities (from 82% in North America, 80% in South America, 73% in Europe, to 40% in Africa). This trend is expected to continue over the next 30 years

²⁸⁵ *Ibidem.*

²⁸⁶ <http://safecities.economist.com/report/safe-cities-index-white-paper/> The Safe Cities Index: Assessing urban security in the digital age. A report by The Economist Intelligence Unit (2015).

²⁸⁷ Cvetković, V., Bošković, N. (2021). Konceptualne osnove i dimenzije otpornosti na katastrofe. Zbornik Radova – Taktika zaštite i spasavanja u vanrednim situacijama, Beograd.

and presents a challenge for policymakers, urban planners, governments, and the private sector. According to the United Nations (UN) data²⁸⁸ Some large cities have recently experienced a significant decline in their population due to phenomena such as declining fertility rates, disasters, economic changes, and crime rates. In the 21st century, the risks of cybercrime and especially terrorism are intensifying. That's why lists of cities desirable for living (Livability) are being created, and the criteria vary depending on cultural expectations. Regardless of geographical and cultural differences, security represents a fundamental condition for the status of a city where it is desirable to live.

In a major study, The Economist's list for the year 2015²⁸⁹ The concept of urban safety is relevant due to the global trend of urbanization (82% in North America, 80% in South America, 73% in Europe, up to 40% in Africa). This trend is expected to continue over the next 30 years, posing challenges for policymakers, urban planners, governments, and the private sector. According to the United Nations data, some large cities have recently experienced a significant decline in their population due to phenomena such as declining fertility rates, disasters, economic changes, and crime rates. In the 21st century, the risks of cybercrime and terrorism are intensifying.

As a response, lists of cities desirable for living (Livability) are being created, with criteria varying depending on cultural expectations. Security represents a fundamental condition for the status of a city where it is desirable to live.

In a major study, The Economist ranked the 50 safest large cities for living in 2015, with Tokyo topping the list. This is impressive, especially considering that Swiss Re, an insurance company, ranked Tokyo as the city at the highest risk of disasters. When the northern part of Japan was hit by an earthquake in 2011, triggering a tsunami and a nuclear disaster in Fukushima, Munich Re and Swiss Re, two global reinsurance companies, stated that it was the costliest disaster in human history. The last catastrophic earthquake to hit Tokyo was in 1923, so experts anticipate a similar magnitude earthquake soon.

²⁸⁸ See more: <https://esa.un.org/unpd/wup/publications/files/wup2014-highlights.pdf>. World Urbanization Prospects. The 2014 Revision. The Department of Economic and Social Affairs of the United Nations Secretariat.

²⁸⁹ The Safe Cities Index (2015).

Therefore, it is not surprising that safety was the number one goal when Tokyo announced a transformation plan for the 2020 Olympics. Tokyo authorities are forming community crisis management teams and upgrading buildings to withstand earthquakes. Tokyo's vision is to be a "sophisticated, disaster-resistant city." Besides earthquakes, cybersecurity is also a concern. For example, the opening of the 2012 Olympics in London was accompanied by tens of millions of cyberattacks on the games' and London's websites. Therefore, for the organizers of the Tokyo Games, combating cybercrime is one of the indicators of success. Special systems are being developed to defend sites from attacks.

All of this is being taken into account in restructuring the functioning of the city to justify Tokyo's position as the number one safest city in the world. It has been established that safety is closely linked to wealth and economic development, but they are not guarantees of security. Digital security is the highest ranked in US cities (New York, San Francisco, Los Angeles), while in Europe, it is relatively low (London ranks highest at 16th, while Rome is the lowest at 35th position). However, the priorities of American cities based on digital security do not necessarily include the physical safety of citizens, resulting in a higher crime rate compared to other ranked cities. It has been concluded that coordination and cooperation between authorities, the private sector, and the community before a crisis event are crucial. Some cities have appointed officials responsible for coordinating community resilience (such as San Francisco).²⁹⁰

His task is to enable coordination and communication among various actors in the city. Additionally, he is there to present to city authorities weaknesses in specific sectors - everything that tests community resilience and safety: from ethnic and racial conflicts, population density, climate change, social inequality, migration, to poverty. Community resilience is continuously linked to the overall state of environmental well-being and the treatment of its resources. Therefore, the concept of sustainable development is a central theme in resilience studies and considerations. Within the concept of natural disasters, sustainability is defined as the ability to tolerate and overcome damage, reduced productivity, and

²⁹⁰ *Ibidem.*

decreased quality of life in extreme situations without significant external assistance.²⁹¹

Statistical relative safety is not the same as safety perception. In American cities, there is a tendency for people to feel less safe than they should. On the aforementioned ranking list of 50 cities, only Zurich and Mexico City have equal levels of safety and safety perception. For example, residents of Chicago are scared about their safety (with a difference of 27 places in the ranking), while residents of Riyadh should be more cautious (33 places below the score). Working on real safety perceptions with the aim of strengthening community resilience is one of the important challenges for city governments.

Alongside the concept of resilience, there is the notion of vulnerability: individual, organizational, and community vulnerability. The theory of vulnerability comprehensively explains the susceptibility of individuals, groups, organizations, local communities, and states to losses due to disasters. The theory began to develop in the 1970s when it became apparent that the consequences of disasters were increasing despite the stagnation or reduction in their number. The idea of people's vulnerability was recognized as a key assumption in reducing the consequences of disasters. The pioneers of this theory were disaster theorists such as Hewitt (1983), Cuny (1983), Wijkman & Timberlake (1984), and others.²⁹²

Sources of human vulnerability are threefold: first, concentrations of energy, such as explosive and toxic substances (mostly in large industrial warehouses), easily ignitable substances (e.g., dry wood), and dams; second, concentrations of populations (in risky, vital, desirable communities), especially when large population densities are also exposed to high concentrations of explosive and toxic substances; third, concentrations of economic/political

²⁹¹ Aleksandar, I., Cvetković, V. & Sudar, S. (2016). Theoretical foundations related to natural disasters and measuring the resilience of the communities before disasters happens – establishing proposal variables. 7th International Scientific Contemporary Trends in Social Control of Crime, At Macedonia, Skopje, Faculty of Security, 79-89.

²⁹² Cvetković, V., & Milašinović, S. (2017). Teorija ugroženosti i smanjenje rizika od katastrofa. *Kultura polisa*, 14(33), 217-228.

power, as well as concentrations in the electricity industry, on the internet, and in food production.²⁹³

The term "vulnerability" has been used in various ways by scientists. Disagreements over the appropriate definition of vulnerability lead to misunderstandings in interdisciplinary research. Nevertheless, there are serious attempts to develop formal models of vulnerability. The concept of vulnerability originates from social sciences and emerged as a response to the perception of pure risk of disaster in the 1970s. Since then, other disciplines have developed their own concepts, and there are numerous definitions and different conceptual frameworks of vulnerability. Vulnerability is multidimensional (physical, social, economic, ecological, institutional, human factors define vulnerability); dynamic (it changes over time); scale-dependent (it can be expressed at various scales from individuals to states) and location-specific (each location may require its own approach).²⁹⁴

The results of a study conducted in Svilajnac show that the majority of respondents were directly threatened by the destructive consequences of flood risks, reflected in significant material damage at the household level, as well as in the educational, healthcare, and infrastructure sectors.²⁹⁵ The reason for the low number of physical injuries can be found in the characteristics of the flood wave itself, as well as the time it took to reach its maximum height. To prevent or reduce the material consequences of future floods, it is necessary to implement certain structural and non-structural protective measures. On the other hand, we can conclude that biological predispositions, physiological differences, and gender-dimensioned roles are not decisive in terms of the physical impact of floods on men and women, and that both genders are equally threatened by flood risks and their consequences. Women are not socioeconomically more threatened than men, but it is important to note that respondents as a whole are exposed to disaster risks caused by floods.

Therefore, it is necessary to further investigate the same indicators in relation to other variables such as economic, marital, educational status, or age, in order to take further measures to re-

²⁹³ Cvetković, V., Filipović, M., & Gačić, J. (2018). Teorijski okvir istraživanja u oblasti katastrofa. *Ecologica*, 25(91), 545-551.

²⁹⁴ *Ibidem*, str. 218.

²⁹⁵ Cvetković, V., & Svrđlin, M. (2020). Ugroženost žena od posledica prirodno izazvanih katastrofa: studija slučaja Svilajnac. *Bezbednost*, 62(3), 43-61.

duce the vulnerability of citizens, and thus mitigate and reduce the consequences of future disasters. However, a significant difference in the degree of experienced fear, worry, and psychosomatic symptoms such as insomnia and loss of concentration during floods, which does not favor women, can be closely related to their social responsibility within the family and society.²⁹⁶

The frequency of terrorism and disasters has changed the nature of urban security. One of the most important tasks of a modern state is finding the most adequate ways to counter terrorism. Regardless of how economically stable or how powerful its military might is, no state is spared the threat and fear of terrorism, which has now become a powerful weapon for those unable to achieve their political goals through legitimate means. The most important doctrinal and strategic documents of states place terrorism at the top of the security threat agenda due to its unpredictability and the severe consequences it leaves behind. Such a position indicates that states are particularly vulnerable to terrorism, and the situation is further complicated by the decades-long existing problem of defining terrorism, the resolution of which would greatly facilitate the fight against terrorism through legal means.²⁹⁷

Starting from the capability of consequences of catastrophes caused by terrorist attacks, a quantitative study has been conducted with the aim of scientifically describing citizens' attitudes towards significant issues concerning the possibilities of chemical weapons misuse for terrorist purposes.²⁹⁸ The research was conducted on a sample of 115 participants from the area of Belgrade using simple random sampling. The results indicate that a high percentage of citizens are aware of the negative consequences of chemical weapons. Additionally, it was found that citizens assess differently the probability of a terrorist attack with chemical weapons occurring in the Republic of Serbia. Furthermore, it is noticeable that the public in Serbia does not perceive chemical terrorism as a threat, along with a complete lack of trust among citizens in

²⁹⁶ *Ibidem*.

²⁹⁷ Popović, M., Cvetković, V. (2013). Suprostavljjanje savremenom terorizmu kao doprinos zaštiti ljudske bezbednosti u Republici Srbiji. Zbornik radova, Suprostavljjanje organizovanom kriminalu i terorizmu, Kriminalističko-policijska akademija, 169-177.

²⁹⁸ Cvetković, V., Mlinar, M. (2020). Ispitivanje stavova građana o mogućnostima upotrebe hemijskog oružja u terorističke svrhe: studija slučaja Beograd. Bezbednost, policija i građani, 16 (1-2), 3-18.

the preparedness of state and non-state institutions in the Republic of Serbia to respond to catastrophes caused by terrorist attacks using chemical weapons. The absence of an empirical basis on the possibilities of abuse of such weapons for terrorist purposes unequivocally attests to the scientific contribution of the conducted research.²⁹⁹

Biological terrorism certainly represents a new branch of epidemiology that requires increased activity at all levels of prevention. Although recognized bioterrorist attacks have been relatively rare, making the data relating to them very limited, biological weapons are unique because they are made from pathogenic organisms that can reproduce (except toxins) and cause uncontrolled infections in a large number of hosts.³⁰⁰ Furthermore, the modes of application of biological weapons via air, water, and food, as well as the longer time period for manifestation of contamination, particularly elevate the value of this weapon from the perspective of terrorist groups.

Hence, its use for terrorist purposes has a significant potential to induce psychological stress among victims and rescuers. For centuries, biological agents have been used for warfare, terrorist, or criminal activities. It seemed that the signing of the Biological Weapons Convention would contribute to making it an unpleasant memory of times past when it was employed. However, bioterrorism has become a reality of the modern world due to its characteristics and the consequences it provokes. In this regard, the expansion of high technology on one hand, and the capability of biological weapons to cause "mass destruction" or "mass casualties" on the other, shifts the focus of the public and experts from the question of "if" to "when" a terrorist attack with biological weapons will occur.³⁰¹

Energy, communication, and transportation systems must be robust enough to withstand sudden shocks and changes. In this regard, nuclear energy remains one of the most accessible choices in addressing environmental and societal issues due to the continuously growing energy demands worldwide. Although it remains an excellent source of energy due to its low cost and low emission

²⁹⁹ *Ibidem.*

³⁰⁰ Cvetković, V. (2015). Mogućnosti zloupotrebe biološkog oružja u terorističke svrhe. *Bezbednost*, 55 (1), 122-140.

³⁰¹ *Ibidem.*

levels, potential accidents remain a serious concern.³⁰² An example of this is the latest accident at the Fukushima Daiichi nuclear power plant (2011), which reminded the world of the potential risks of nuclear energy and whose consequences still have lasting effects. Serbia does not have a nuclear power plant, but there are around 15 nuclear power plants distributed across neighboring countries. Therefore, the Serbian government decided to study how the Serbian public perceives the risks associated with the potential construction of nuclear power plants in the country, nuclear energy in general, as well as the possible benefits and risks. In a study consisting of 270 randomized face-to-face interviews conducted in public squares in Belgrade in March 2019, logistic regression was used to examine the cumulative effects of different risk factors. The results showed that the majority of respondents are skeptical and do not support the construction of nuclear power plants in Serbia.³⁰³

At the organizational level, the question arises: which type of organizational design is more resilient and effective in crisis and disasters? It has been concluded that in the short term, organizations based on individual and team initiative are more successful, as they can more easily adopt lessons learned from crises and incorporate them into their experience.³⁰⁴ Individuals and teams in crisis and disasters rely on their own experience, reasoning, and initiative to come up with solutions. Long-term, centralized and hierarchical organizations, where staff follows standard operating procedures, are more resilient and have more capable teams, as acquired experience and lessons learned are incorporated not only into individuals but also into the existing hierarchy.³⁰⁵

Mental health is always threatened during crises, especially disasters and major accidents. However, vulnerability to such events is socially structured, with greater susceptibility among marginalized, impoverished, and socially excluded individuals and

³⁰² Cvetković, V., Öcal, A., Lyamzina, Y., Noji, E., Nikolić, N., & Milošević, G. (2021). Nuclear Power Risk Perception in Serbia: Fear of Exposure to Radiation vs. Social Benefits. *Energies*, 14, 2464.

³⁰³ *Ibidem*.

³⁰⁴ Lin, Z., & Carley, K. (1992). Maydays and Murphies: A study of the effect of organizational design, task and stress on organizational performance. *Sociological Abstracts*.

³⁰⁵ Carley, K. (1992). Organizational learning and personnel turnover. *Organization Science*, 3(1): 20–46.

groups. Access to resources in a crisis depends on socio-economic status and other stratification approaches, including gender, age, race, and ethnic background. The poor, socially isolated, members of minority groups, women, children, and the elderly are more vulnerable in a crisis than others. A holistic perspective on mental health takes into account not only the characteristics of acute crisis events but also secondary and cumulative stressors, socio-systemic sources of acute and chronic stress, and the internal and external capacities of victims.³⁰⁶ In one of the studies, the impact of selected factors on the level and state of public health in local government units in 2021 was examined, taking into account data from 2020 and 2019.³⁰⁷

This study covered 77 out of 145 local self-government units - authorities in the Republic of Serbia and examined six dimensions defined by the Law on Public Health: social care for public health of the city/municipality in terms of physical, mental, and social health of the population; health improvement and disease prevention; environment and health; work environment and population health; organization and functioning of the health system; and actions in emergencies. Pearson correlation results showed statistically significant correlations between the efficiency of implemented program budgets and microbiologically unsuitable samples of drinking water from so-called samples, the total number of air samples at the annual level for PM_{2.5}, and the number of fines imposed.

Logistic regression model results showed that local self-government units receiving assistance from the Permanent Conference of Towns and Municipalities were 5.6 times more likely to conduct analyses of their health status. Also, it was found that local self-government units appointing a health council coordinator identified vulnerable groups in health status analysis four and a half times more frequently. In contrast, local self-government

³⁰⁶ Tierney, K. J. (1999). Contraversy and Consensus in Disaster Mental Health Research, Department of Sociology and Criminal Justice and Disaster Research Center, University of Delaware, Paper is based on a presentation at the UCLA Conference on Public Health and Disasters, Redondo Beach, CA, April 11-14, 1999. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.956.1429&rep=rep1&type=pdf>.

³⁰⁷ Cvetković, V.M.; Tanasić, J.; Živković-Šulović, M.; Ćurić, N.; Milojević, S. State of Public Health at the Local Level in Serbia: Longitudinal Research. Preprints 2023, 2023010166.

units preparing health status analyses could be used to identify vulnerable groups in health status analysis six times more extensively. The results showed that it is necessary to provide systemic institutional support to cities and municipalities in improving public health at the local level. Based on these results, recommendations were provided for further support development, i.e., planning further activities to strengthen the capacities of health councils and local self-government units in this area.³⁰⁸

Aside from primary stressors, disasters cause secondary stressors such as job loss, loss of homes, property, forced displacement, socio-economic insecurity, loss of family members, friends, pets, etc. Empirical evidence shows that the consequences of stress are cumulative.³⁰⁹ Therefore, when assessing the effects of disasters on the mental health of affected individuals, aside from the traumatic experience of the immediate event, one should also consider the cascading psychological consequences of secondary stressors. An important question is how individuals cope with stress in these events. Individual capacities depend on intrapsychic processes and social support sources. Those who handle everyday life stressors more easily, cope better, and mitigate their effects, have good social support, greater access to resources, a better position on the social scale, and are better at overcoming stress caused by disasters.³¹⁰

On the other hand, crises differ in the effects they leave on those affected. The effects of a flood where only a few houses are flooded and there are no casualties are not the same as the effects of a submerged city with casualties and devastated infrastructure.³¹¹ Psychosocial support and rehabilitation after crisis events are important elements in community recovery and resilience-building. In recent decades, people have been more frequently confronted with serious direct and indirect consequences of natural disasters. Across the globe, societies have faced the consequences of 25,552 natural disasters, resulting in approximately 65 million lives lost, around 15 million injured, around 13 billion people affected, approximately 300 million left homeless, and material

³⁰⁸ *Ibidem.*

³⁰⁹ *Ibidem.*

³¹⁰ *Ibidem.*

³¹¹ *Ibidem.*

damage amounting to 5 billion US dollars.³¹² Citizens can experience both material and non-material consequences of natural disasters. By material consequences, for the purposes of this work, we will understand damage inflicted on material goods owned by citizens. This can include damage to the structure itself, items within the structure, vehicles, installations, etc. On the other hand, by non-material consequences, we will refer to health-physiological and psychological negative changes in individuals.³¹³

4.2. Criteria for safe cities

Criteria for assessing the level of safety and resilience of a city vary, but regardless of the matrix used, they represent essential indicators of community and crisis management system capacities. In the USA, a study by Insurance Providers com. investigated information based on three security factors: crime rate, risk of natural disasters, and driving safety.³¹⁴ Crime statistics were compiled from the FBI's Uniform Crime Statistics based on violent incidents per 100,000 people. Data from the United States Geological Survey and the National Oceanic and Atmospheric Administration were used to determine the likelihood of a city experiencing a natural disaster such as an earthquake, hurricane, or flood. All-state driving data was used to determine the safest cities for driving based on the average number of years between driver accidents in each city.

Considering the complexity of modern life risks in large cities, in the City Safety Index³¹⁵ Local Authorities Confronting Disasters and Emergencies (LACDE) is an international organization whose members include local governments, their associations, state and international agencies, experts, and other actors in the field of emergencies. Through collaboration among all stakeholders, criteria have been developed to assess the readiness of local

³¹² Cvetković, V., & Filipović, M. (2017). Posledice prirodnih katastrofa: faktori uticaja na percepciju građana Srbije. *Ecologica*, 24(87), 572-578.

³¹³ *Ibidem*.

³¹⁴ See more: <http://www.insuranceproviders.com/>

³¹⁵ The Safe Cities Index: Assessing urban security in the digital age. A report by The Economist Intelligence Unit (2015).

communities to respond to crises.³¹⁶ First, the degree of vulnerability of the natural, social, and technological environment in the community is assessed. This assessment determines the level of risk concerning technological, communal, and social infrastructure, as well as the life and work of people in the community. The next step is the evaluation of preventive activities to prevent risks, which may include terracing terrain to prevent landslides, implementing drainage and irrigation systems, transitioning from linear water and energy supply to grid-based systems, riverbed regulation and cleaning, shelter maintenance, developed contingency plans for food and medicine supply, banking systems and cash flow independent of electricity, etc.

Additionally, the extent to which the population is informed about the community's vulnerability and preventive activities to mitigate risks is assessed. Then, the existence of risk assessment and response plans for the community as a whole in response to emergencies is evaluated. Planning methods are monitored: whether the plan was developed by one actor or involved all stakeholders; whether the plans rely on cooperation with neighboring local governments and regions. The planning documents must have a visible structure of strategic, operational, and tactical levels of crisis management. Moreover, there must be a clear structure of management and coordination of activities, actors responsible for activities in individual cases, procedures for information flow, reporting, composing public announcements, and the forms include plans, manuals, decisions, regulations, good practice guides, etc.

In one study, the results of descriptive statistical analysis show that the majority of citizens are informed about emergencies through television (58.9%), followed by print media (31.7%), household members (31.2%), the internet (28.7%), radio broadcasts (15.7%), at school (14.3%), and finally, within the family (12%).³¹⁷ The results of inferential statistical analysis show that there is a statistically significant correlation between television as an information source and gender, marital status, and employment

³¹⁶ Jeraj, J. (1999). Merila za ocenjevanje pripravljenosti lokalnih skupnosti na nesreče, *UJMA*, 13,: 403-405. http://www.sos112.si/slo/tdocs/ujma/2000/u_clanek67.pdf

³¹⁷ Cvetković, V., & Filipović, M. (2017). Informing of citizens about emergency situations: influence factors and modalities. Paper presented at the 10th International Conference – Crisis management days: Security environment and challenges of crisis management, 24, 25 and 26 May 2017.

status. On the other hand, receiving information through radio broadcasts is associated with education level and prior experience. The mode of information dissemination via print media and the internet significantly influences gender, education, and marital status. Examining the modalities of informing citizens about emergencies holds significant scientific and social importance. The findings of the research can greatly influence the determination of the most appropriate information dissemination method for different categories of citizens.³¹⁸

The next criterion is the training and informing of the population about activities in case of emergencies: what to do in specific situations, first aid, evacuation plans, etc. Since the inception of human communities, there have been organized attempts to mitigate or reduce the consequences of emergencies and crises. In this regard, training people for adequate response or survival in such events has always been a priority in society. Recognizing the significance of such preventive activities, a study was conducted to assess the level of training and interest of citizens in attending specific training sessions using quantitative research tradition.

The interpretation of the obtained results shows that a concerning 5.6% of citizens stated that they were trained to respond, while on the other hand, one-third, more precisely 34.8% of citizens, expressed interest in such training.³¹⁹ Moreover, it has been determined that attendance of training is statistically significantly influenced by gender, age, education, parents' education, parenthood, previous experience, risk perception, and employment status of respondents, while marital status of respondents does not have an influence. Specifically, a higher percentage of training attendance was noted among men, employed respondents, respondents with previous experience, and those with higher income, etc. The originality of the research lies in the unexplored state and level of training of Serbian citizens to respond to emergencies. The research served to create scientific and practical assumptions for establishing a comprehensive and effective training program for Serbian citizens to respond to emergencies.³²⁰

A common condition is that the community is considered as a whole in all phases: from participation in planning, through

³¹⁸ *Ibidem.*

³¹⁹ Cvetković, V., Jakovljević, V., Gačić, J., & Filipović, M. (2017). Obuka građana za reagovanje u vanrednim situacijama *Ecologica*, 24(88), 856-882.

³²⁰ *Ibidem.*

preparations (training, education, exercises). As many stakeholders as possible should participate in the exercises. Procedures for coordinating and acting by different entities are also mandatory, as well as a crisis communication strategy with elaborated procedures, notices ensuring public order and peace in case of a disaster. Documenting how to ensure health safety in an disaster includes procedures on who and when provides medical assistance in case of evacuation, temporary shelter, who controls the epidemiological situation, prevention, and how continuous health care for affected residents is ensured. Identifying psychosocial support and rehabilitation for affected and displaced persons, informing the public and families about the temporary accommodation of the affected, providing translators is also part of the assessment.

Emergency and crisis situations often provide fertile ground for the development of epidemics or pandemics of infectious diseases, as they drastically disrupt the social and ecological balance in affected areas and can lead to a deterioration of the sanitary and epidemiological situation. Immediately upon the onset of an disaster, a rapid risk assessment is required, followed by defining the necessary additional assistance in the form of personnel, material resources, medicines, hospital capacities, and transportation means, and, ultimately, international assistance may be sought. Health problems that most commonly occur in disasters include injuries, psychological problems caused by emotional stress, the spread of infectious diseases, and an increase in the number of patients with endemic diseases that were already present in that area.³²¹ During that period, in addition to healthcare, psychosocial support for citizens is of great importance. Emergency situations require a special organization of the healthcare system to better protect public health. All events that potentially pose a threat to public health on an international level (Public Health Emergency of International Concern, PHEIC) are covered by the International Health Regulations (IHR), which provide a framework for the prevention and control of threats to global health and are coordinated by the World Health Organization (WHO).³²²

³²¹ Babić, J.S., Gačić, J., Nikolić, M., Cvetković, V., Rašeta, D. (2017). Globalni rizici po zdravlje i odgovor zdravstvenog sistema u vanrednim situacijama. Zbornik radova, Prva konferencija sa međunarodnim učešćem, ekološka bezbednost i zaštita na radu, 39-40.

³²² *Ibidem*.

Special measures are envisaged for the most vulnerable: children, elderly, poor, foreigners. Support in the process of identification, providing space for accommodating the deceased, autopsies, burials should also be a mandatory part of the planning documentation. A part of the emergency response plan should include a description of equipment. Special attention should be paid to communication equipment. The equipment inventory should take into account all available resources of all community stakeholders that can be relied upon, the time they are available, the method of disposal, and financing. In the plan for the functioning of public services, it is necessary to anticipate how the disaster will affect the regular provision of their services: water supply, electricity, transportation, sewage, waste disposal, telecommunications, energy supply, public order and safety, health services, etc. Provide a way to establish the minimum functions and reconstruction of these services, alternative sources, and subjects, priority users.

In terms of reconstruction, the way information is shaped and transmitted regarding priorities in aid and reconstruction is important. Under disaster recovery, all measures and activities undertaken by citizens, households, local communities, and states to eliminate all direct and indirect consequences of disasters for people and their material and other goods are implied. In fact, a more precise definition of disaster recovery depends on the perspective and dimension, as well as the protected value that needs to be restored. It could be defined as measures and activities taken to restore functions, conditions, processes, and values to normal or original, or improved states. It consists of actions that contribute to returning the affected area to often improved normal conditions.³²³

The recommendation is for the public to be involved in decision-making and be consistently informed about the ways assistance is provided, the measures, types, criteria, and priorities. Management and coordination of reconstruction and aid provision, including monitoring and evaluation, should be unified. The mentioned criteria indicate that community resilience in responding to emergencies requires clear division of responsibilities in the field of protection from natural and other disasters in all areas of

³²³ Cvetković, V. (2020). Upravljanje rizicima u vanrednim situacijama. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama, str. 518.

local self-government, integration of all stakeholders in public services, partnerships with businesses, and residents.

4.3. Citizen response in crisis and disasters

During the immediate aftermath of a crisis event (especially in the case of disasters and major accidents), crisis managers have limited control over the situation. It is crucial to accurately anticipate how the affected individuals will behave in order to provide an efficient and effective response.³²⁴ Contrary to expectations that people in immediate danger may behave antisocially and insensitively towards the suffering of others, and that they are prone to panic, research has shown that the majority behave in a fairly rational manner, and that in most cases, it is the "ordinary person" who saves lives in a crisis.³²⁵

In one of the studies, results were presented regarding the obstacles to improving readiness measures for responding to emergencies.³²⁶ The research was conducted in 2015 in 19 local communities in Serbia. At that time, using a household survey strategy and multistage random sampling, 2500 citizens were interviewed. The research results show that: 20.5% of respondents believe that emergency rescue services will help them, so they do not consider readiness measures necessary; 31.7% of respondents do not consider themselves or their households at risk from the consequences of disasters; 20.9% of respondents feel they do not have time for preparedness measures; 23.1% of respondents believe that taking such measures is very expensive; 19.4% believe they are not capable of it; 22.8% mention a lack of support from the local community; 27% believe they cannot prevent the consequences of natural disasters in any way.

The results of inferential statistics regarding gender, parenthood, employment, disability, previous experience, and mil-

³²⁴ Bartolucci, A., Magni, M. (2017). Survivors' Solidarity and Attachment in the Immediate Aftermath of the Typhoon Haiyan (Philippines), *PLoS Curr*: 9. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5258593/>.

³²⁵ Helsloot, I., Ruitenbergn, A. (2004). Citizen Response to Disasters: a Survey of Literature and Some Practical Implications, *Journal of Contingencies and Crisis Management*. Volume 12 (3): 98-111.

³²⁶ Cvetković, V. (2017). Prepreke unapređenju spremnosti građana za reaganje u prirodnim katastrofama. *Vojno delo*, 69(2), 132-150.

itary service show diverse results regarding their statistical association with obstacles related to readiness for response.³²⁷

The modern Western individual is reluctant to dedicate time or money to better confront potential risks. Therefore, it poses a particular challenge for governments, both local and national, to better prepare their citizens for crisis response. The citizens' response represents "all measures taken by individuals in preparation, during, and after disasters and major accidents, with the intention of helping themselves or others to limit the effects of these events."³²⁸ The definition does not assess the value of the measures taken, which may not always be optimal. Citizens typically prepare only for threats they perceive as immediate. The type of risk must be deemed worthy of their preparation efforts, as this helps them feel a sense of control over the assumed threat.³²⁹ Just as risk is a social construct, so is preparedness for an disaster conditioned by the perception of the threat. The perception of threat and readiness for a crisis are influenced by socio-economic factors such as income, education, and ethnic background.³³⁰ Members of minority groups and the impoverished are less prepared to respond to crises than others.

Planning activities related to risk response measures, in accordance with the assessment methodology, involve undertaking various planning measures to reduce the risk level to an acceptable level. These include risk information, activities, stakeholders involved, timing of implementation, collaborators in implementation, and reporting time and method. It is prescribed that preventive and response measures can be taken to reduce the risk of negative consequences, whereby a) preventive measures involve strategy, regulatory arrangements, plans, early warning systems, spatial planning, and legalization of objects, while b) response measures include readiness of response capacity, readiness of fire-fighting and rescue units, readiness of civil protection units, databases for civil protection planning needs, the ability of subjects that are particularly important for protection and rescue, and the state of mobility of communication links.³³¹

³²⁷ *Ibidem*.

³²⁸ *Ibidem*: стр. 99.

³²⁹ *Ibidem*, according to: Major, (1999).

³³⁰ Perry, R., Mushkatel, A. H. (1986), *Minority citizens in disasters*. University of Georgia Press.

³³¹ Službeni glasnik Republike Srbije, 80/19.

Citizens' response during a crisis can be jeopardized in the alarm phase, acute phase (rescue, medical assistance, shelter, etc.), and recovery or reconstruction phase. Citizens consider decisions made in the alarm phase critical. In this phase, they are bombarded with various information sources: through the media, which send them messages about what is happening and what they should do, through social networks that provide access to the experiences of other people on the ground, to friends, family, and neighbors, each of whom has their own opinion and recommendation on what to do. All received information is subject to interpretation, which repeats with each new piece of information.

Social media inform the public about the most important events and convey important information. Before, during, and after disasters, social media are used to disseminate information about disasters and collect data relevant to the implementation of preparedness, response, and recovery activities. Social networks are effective in disseminating information and warnings, as well as in public education. Using an online survey questionnaire and snowball sampling principle, a study was conducted in 2022 involving 247 respondents.³³² The research results indicate that there is no statistically significant relationship between the level of education of respondents and the assessment of the effectiveness of social media reporting on disasters. The use of social media can improve communication between stakeholders in disaster management and facilitate the coordination of efforts, encourage communication, and resource distribution. To effectively use social media in disaster management, decision-makers in the disaster management system must be aware of new technologies, their shortcomings and advantages, as well as methods of collecting and analyzing data from social networks.³³³

Research has shown that a critical point in the decision-making process of responding to a crisis is when the threat is perceived as "real".³³⁴ If warnings are not perceived as truthful, the recipient will not take them seriously. The perception of the truthfulness of the threat depends on two factors: the perceived reliability of those issuing the warnings (e.g., the number of previous un-

³³² Cvetkovic, V. M. ., Nikolic, A. ., & Ivanov, A. (2023). The role of social media in teh process of informing the public about disaster risks. *Journal of Liberty and International Affairs*, 9(2), 104-119.

³³³ *Ibidem*.

³³⁴ Helsloot,I., Ruitenbergn, A. (2004).

fulfilled warnings) and information related to the crisis: predicted locations, timing, and potential severity of the announced event. In this case, analogies are made regarding previously experienced similar situations. Citizens who do not believe in the information will tend to verify and confirm it. In such cases, collapses of telephone networks occur.³³⁵ When the message is perceived as real, the recipient contextualizes what it means to them and their social environment (family, friends, neighbors, colleagues). A response to the warning will only be considered when the recipient is certain that the threat will cause harm. Decisions regarding crisis protection measures also depend on whether the warning allows enough time for reaction. Another factor is whether the family is together or not: families hesitate when not all members are safe. During disasters and emergencies, families react as a group, not as individual members. The third factor is the availability of a security plan, which allows individuals to take safety measures.³³⁶

During the acute phase, there are two ways to deal with danger: intuitive and analytical. Both have their advantages and disadvantages. The first, intuitive way is fast, associative, affective, automatic, emotional, and unconscious. The second, analytical way is based on a rational approach, algorithms, and formal logic, making it more demanding, slower, more difficult, and requiring the capacity for learning and present awareness.³³⁷ The intuitive approach is used in acute situations, such as terrorist attacks, earthquakes, or fires. Citizens' response is intuitive and generally adequate. Myths about crisis response have existed since the late 20th century and have been challenged but still persist as the basis for government emergency preparations. These myths include: citizens panic in a crisis; citizens are helpless and dependent in a crisis, and looting occurs during and after disasters. When it comes to looting, it has been proven to be culturally conditioned (during the Bhopal disaster, India (1984), systematic looting and killings occurred, unlike the Fukushima disaster in Japan, 2011).

³³⁵ Fitzpatrick, C. and Mileti, D. S. (1994). Public Risk Communication, in: *Disasters, Collective Behavior, and Social Organization*, (eds), Dynes, R. R. and Tierney, K. J.: 73–75.

³³⁶ Perry, R. W. (1983). *Comprehensive Emergency Management: Evacuating Threatened Populations*, Technical Report, Battelle Human Affairs Research Center, Seattle, WA (USA): 66–70.

³³⁷ Helsloot, I., Ruitenbergen, A. (2004): 101-102.

Altruism and mass volunteerism are prevalent phenomena, especially during disasters and major accidents. During the earthquake in Mexico City, 10% of the population volunteered to help. Dean termed this phenomenon "situational altruism" and defined three forms of its expression³³⁸: The "massive rush" of volunteerism during and shortly after the crisis event; the activation of extended family networks in the search for their loved ones; voluntary engagement of local organizations and businesses.

According to Mawson's theory of social solidarity, people in immediate danger show a high degree of solidarity and care, both towards their family members and those they know, as well as towards strangers.³³⁹ Mawson proposes a "social connectedness model" according to which proximity to familiar people and places is sought before fleeing (which is a normal reaction to immediate danger). He defines response to threats and hazards as moving towards a situation perceived as safe (although it may not necessarily be so). By combining factors of perceived physical danger and the person's location to which they are attached, he has developed four typologies of behavior models with a wide spectrum of collective responses to threats and disasters.

Regardless of the typology in question, the response of citizens in a crisis, whether mass, group, or individual, must be taken into account when planning crisis management. The flow of information before and during a crisis should guide citizens in making rational decisions. Education for disasters, procedures, equipment, and assistance services should be tailored to the users. Preparing citizens for a crisis is more challenging if authorities themselves are not adequately prepared.³⁴⁰

³³⁸ Dynes, R. R. (1994). *Situational Altruism: Toward an Explanation Of Pathologies in Disaster Assistance*, paper presented at XIIIth World Congress of Sociology, Bielefeld.

³³⁹Mawson, A. R. (2012). *Mass Panic and Social Attachment: The Dynamics of Human Behavior*. Ashgate Publishing Ltd.

³⁴⁰ Helsloot, I., Ruitenbergn, A. (2004): 110.

5. CRISIS AND EMERGENCY MANAGEMENT - PRACTICES OF THE EUROPEAN UNION AND EUROPEAN COUNTRIES

Since 2008, the European Union has been constantly facing crises: starting from the global economic crisis, the Arab Spring, wars in Libya and Syria, cybercrime, the imposition of sanctions on Russia, terrorist attacks, and finally, the migrant wave. The general sense of insecurity due to public safety concerns, poorly timed responses, and equally poorly designed crisis response measures make the European Union face arguably its greatest challenge yet. The principles of mutual solidarity and interdependence, as the foundations of European unity, are in question. Dissatisfaction among citizens and member states with Brussels' policies is growing, viewing the EU's managerial-bureaucratic system as elitist, EU-centric, and disconnected from the problems of its citizens.

These various crises lead to a crisis of the principles on which the EU is based, and then to a crisis related to the survival of the European Union.³⁴¹ The rise of populism, xenophobia, and Eurocentrism is largely a consequence of the aforementioned crises and ineffective management. In such a complex situation, effective crisis management is a priority. The European Union has largely established an institutional and strategic framework for crisis management. At the same time, European countries and the European Union have their own crisis management systems, largely based on their own traditions, needs, and capabilities.

The region of Southeast Europe and the Balkan Peninsula is recognized as highly vulnerable to natural disasters. The countries in the region, especially the former Yugoslav states, still partly base their national risk management policies on solutions prescribed during the socialist era. The consequences of wars and political upheavals have left traces in insufficient communication and developed relationships necessary for bilateral and multilateral coop-

³⁴¹ Burkovskyi, P. (2016). in: Missiroli, A., Towards an EU global strategy – Consulting the experts, EU Global Strategy expert outreach and consultation process October 2015 – April 2016, Institute for Security Studies, Paris: 31.

eration within the region. The catastrophic floods of 2014 highlighted the need for cooperation in terms of prevention, response, and disaster recovery.³⁴²

5.1. The institutional framework for crisis and disaster management within the European Union

The institutional framework for crisis and disaster management in the European Union was first introduced and developed in response to two environmental disasters: the release of dioxin clouds in a chemical factory in the Italian town of Seveso in 1976 and the oil spill in France in 1978 (the Amoco Cadiz tanker incident). Following the Council of Europe Resolution on providing expert assistance and other resources to member states in cases of disasters and major accidents, the Joint Action Plan was adopted in 1997, establishing EU competence in the protection of people, the environment, and property.³⁴³

Through an analysis of the normative-legal frameworks of countries in the Southeast European region, an identical similarity was identified in all national disaster management policies, which is the emphasis of all states on disaster prevention rather than response and recovery, as has been the case so far. It seems that states have realized that investing in disaster prevention measures is much more cost-effective than paying compensation for damages after a disaster. This tendency is in line with international frameworks governing disaster risk management policies, such as the Hyogo and Sendai frameworks. All countries in the region understand the importance of creating a database of potential hazards and disasters, as well as risk mapping, and preparing for their possible occurrence.³⁴⁴

Global events during the period from 2000 to 2004 (the terrorist attacks of September 11, 2001, and the Asian tsunami in 2004) contributed to the European Union's focus on strengthening

³⁴² Cvetković, V., & Todorović, S. (2021). Comparative analysis of disaster risk management policies in the region of south-east Europe. *International yearbook Faculty of Security Studies*, 1, 7-17. doi:10.20544/IYFS.39.1.19.P01

³⁴³ Missiroli, A. (2015). *The EU and the world: players and policies post-Lisbon A handbook*, EU Institute for Security Studies, Paris: 63-64.

³⁴⁴ Cvetković, V., & Todorović, S. (2021). *Ibidem*, pp.15.

coordination and crisis response. In October 2001, the Council of Europe established the Civil Protection Mechanism (CPM) with the Monitoring and Information Centre (MIC). Since 2013, the European Emergency Response Capacity (EERC) has been formed, serving as a coordination platform and central point of contact in responding to emergencies and disasters. The EU Civil Protection Mechanism (CPM) consists of 32 countries, available 24/7, and any country within or outside the EU affected by a disaster it cannot handle alone can request assistance.

The operational headquarters of the CPM is the EERC³⁴⁵, The events on a global scale from 2000 to 2004 (such as the terrorist attack on September 11, 2001, and the Asian tsunami in 2004) led the EU to focus on enhancing coordination and crisis response. In October 2001, the Council of Europe established the Civil Protection Mechanism (CPM) with the Monitoring and Information Centre (MIC). Since 2013, the European Emergency Response Capacity (EERC) has been established, serving as a coordination platform and central point of contact in responding to emergencies and disasters. The EU Civil Protection Mechanism (CPM) consists of 32 countries, available 24/7, and any country within or outside the EU affected by a disaster it cannot handle alone can request assistance.

The operational headquarters of the CPM is the EERC, which has the capacity for simultaneous response to multiple emergencies in different time zones, real-time data collection and analysis, hazard monitoring, and preparation of equipment and personnel engagement plans. Additionally, the Center's task is to work with member states to gather and plan available resources and coordinate responses to disasters by matching offers of assistance with the needs of the affected country. Importantly, the Center plays a role in raising awareness about the types of situations requiring a response and assistance from the European Commission and other EU institutions.

Furthermore, the EU's ability to preventively respond to cross-border health and safety threats has been strengthened through the European Food Safety Agency and the European Cen-

³⁴⁵ European Commission, Report of the Commission to the European Parliament and the Council COM (2013) 658 final Annual Report on EU Humanitarian Aid and Civil Protection Policies and their Implementation in 2012, Bruxelles, 25. 9. 2013, http://ec.europa.eu/echo/about/annual_reports_en.htm

tre for Disease Prevention and Control. For better crisis coordination and multisectoral crisis management, the European Commission established the European Rapid Alert System, ARGUS, in 2005. Within the European Commission, there is also the Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO), which, since 2012, covers humanitarian aid and civil protection.

As a strategic and political dimension of crisis management, the Council of Europe established the EU Emergency and Crisis Coordination Arrangements (CCA) in 2006. Following the terrorist attack in Madrid in 2004, the Lisbon Treaty (Article 222 TFEU) introduced the so-called "solidarity clause," obligating the EU and its member states to act jointly in case of a terrorist attack or disaster affecting a member state. Rules and procedures for implementing this clause were adopted in July 2014. The EU's newest instrument is the Council Decision of 2016, enabling urgent humanitarian assistance within the EU territory (including water, food, shelter, and medical aid) in emergency and exceptional circumstances with severe humanitarian consequences.

Due to the deteriorating security situation in Europe and its surroundings (Russia and Ukraine, ISIL), the Crisis Response System (CRS) was initiated. The European Commission, with its high representatives, adopted a Common Framework for Countering Hybrid Threats and Increasing the Resilience of the EU, its Member States, and partner countries, on April 6, 2016, by enhancing cooperation with NATO in countering these threats.³⁴⁶ Hybrid threats are understood very broadly, as a mixture of open and covert, various actions, from cyber attacks to disruptions of critical public services such as electricity supply, to undermining trust in institutional systems. In cases where hybrid threats relate to national security and defense, the responsibility for responding to them lies with the member states.

However, the nature of threats is often common to multiple states, so the response to them is more effective at the EU level. Therefore, the Common Protocol suggests that the EU be used as a platform to encourage national efforts and establish common standards to enhance the resilience of member states in preven-

³⁴⁶ European Commission - Fact Sheet FAQ: Joint Framework on countering hybrid threats, Brussels, 6 April 2016, http://europa.eu/rapid/press-release_MEMO-16-1250_en.htm, 07. 6. 2017.

tion, response, and recovery from crises. The decision on closer cooperation between the EU and NATO was signed in July 2016 on the sidelines of the NATO Summit in Warsaw. The declaration welcomed progress in EU-NATO relations, primarily through the implementation and operationalization of parallel procedures and the so-called Playbook for interaction in combating hybrid threats. The focus is on strengthening better coordination, situational awareness, strategic communication, crisis response, and resilience. The implementation report of the Declaration is on a biennial basis, starting from June 2017.³⁴⁷

Montenegro has advanced towards improving its disaster risk reduction system by integrating these goals into national policies and affirming them through bilateral, regional, and wider international cooperation. In the case of Bosnia and Herzegovina, the Ministry of Security, through the Sector for Protection and Rescue, treats disaster risk management as a significant issue in national policies. Croatia's legal framework is more focused on crisis management than on preparation and mitigation; appropriate risk assessments, hazards, and vulnerabilities are also necessary. Bulgaria's risk management is guided by well-established foundations such as the Disaster Protection Act, but it also follows principles and guidelines that point to a different orientation towards a comprehensive approach system that values prevention, preparedness, and recovery activities equally.

Bulgaria also possesses a National Disaster Protection Program and a National Disaster Risk Reduction Strategy. North Macedonia has laws on protection and rescue, a national strategy for protection and rescue, and a national plan for protection and rescue from natural disasters. Further activities regarding the functioning of the regulatory framework governing disaster risk management are based on the need for enacting missing laws and regulations to complete the legal framework for protection and rescue. In Greece, the National Platform for Disaster Risk Reduction has established a network of government agencies and other relevant stakeholders to reduce disaster risk, with risk reduction policy coordinated by the General Secretariat for Civil Protection and the Ministry of Public Order and Citizen Protection.³⁴⁸

³⁴⁷ European Parliament, Countering hybrid threats: EU-NATO cooperation, Briefing, March 2017, [http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599315/EPRS_BRI\(2017\)599315_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599315/EPRS_BRI(2017)599315_EN.pdf)

³⁴⁸ Cvetković, V., & Todorović, S. (2021). *Ibidem*, pp.15-16.

5.2. Crisis and disaster management systems in European countries

In the field of civil protection and crisis management, each member state has its own model. Analysis of crisis management systems in European countries³⁴⁹ The analysis conducted in the ANVIL project has shown that each of the 22 countries has different legal solutions, institutional structures, and approaches to crisis management. This encompasses operational processes as well as relationships between stakeholders in crisis preparedness and response. Findings in three studied qualitative measures—efficiency, effectiveness, and legitimacy—suggest changes and a gradual convergence of different models into a unified model, on one hand, and the persistence of local patterns of crisis management, on the other hand.

The analysis of civil security systems in Europe (ANVIL project) covered 22 countries: Austria, Croatia, Czech Republic, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Sweden, Switzerland, and the United Kingdom. The main characteristics and key indicators of crisis management were compared³⁵⁰ the listed countries aim to determine essential similarities and differences, and evaluate their legitimacy, effectiveness, and efficiency. European integration and increasing interdependence among international actors in crisis management have stimulated new research questions. T'Hart and Sandelius³⁵¹ have raised questions about the significance of risk management discourse, crisis management, and crisis policy, aiming to demonstrate the importance of knowledge and public policy agendas in strengthening crisis management system capacities. Their thesis is that success-

³⁴⁹ANVIL Deliverable 4. 2: Final Analytical Report Critical Findings and Research Outlooks; http://anvil-project.net/wp-content/uploads/2014/02/Deliverable_4.2.pdf: The project "Analysis of Crisis Management Systems in European Countries" is funded by the European Commission under the FP7 program, grant number 28467.

³⁵⁰ See more: civil protection, as parallelly mentioned, (note by the author Tanskić J.).

³⁵¹ T Hart, P., Sundelius, B. (2013). Crisis management revisited: A new agenda for research, training and capacity building within Europe, *Cooperation and Conflict*, 48 (3): 444-461.

ful crisis management in Europe crucially depends on education grounded in research and experience-based training, linking and enhancing transnational networks for rapid response, as well as a greater leadership role for the European Union.

By mapping and comparing particularly cultural and legal determinants in the ANVIL project, it was concluded that culture and tradition have a significant impact on crisis management, and that "changes are underway, but locally tinted."³⁵² Systems are approaching each other, but there are resistances to adaptation and unification present, and local traditions persist.³⁵³ Expert discourse is also not uniform, so depending on the country and region, terms such as "societal security" (predominantly in Scandinavian countries), "civil security" (Germany), or "homeland security" (characteristic mainly of the USA) are mentioned. The institutional frameworks of crisis management are complex and have strong legitimacy. The degrees of centralization vary.

Comparing Germany, the USA, Russia, and China, it can be concluded that each state has established and regulated a normative legal basis upon which disaster risk management systems are built. In Russia, there is a simple division of disasters into those related to interstate conflicts and those originating from sources such as nature and human factors. Laws focusing on terms like "defense," "resources," etc., have been enacted based on such a simple division, with not a large number of laws and sub-legal acts regulating the area of disaster risk and response. On the other hand, China has enacted a large number of laws and other regulations governing this area, which are often changed and updated. From such extensive regulation arises the problem of insufficiently defined division of responsibilities. Considering China's population size and the fact that it is prone to serious disasters (earthquakes, typhoons, floods, droughts, etc.), and that the consequences are serious, overly extensive regulation and unclear responsibili-

³⁵² See more: <http://anvil-project.net/results/>

³⁵³ Bossong, R., Hegemann, H. (2014). ANVIL Deliverable 4. 2: Final Analytical Report Critical Findings and Research Outlooks; Institute for Peace Research and Security Policy at the University of Hamburg, *Безбедност* 3: 206-218. See more at: http://anvil-project.net/wp-content/uploads/2014/02/Deliverable_4.2.pdf

ties may pose a problem in practical action when a disaster occurs.³⁵⁴

Within the framework of the German normative legal framework, an example of preventive action can be seen - a focus on adapting to climate change, which can be considered a cause of certain disasters, as well as an example of action in line with the identified flood risk. In German legislation, significant importance is given to infrastructure and its protection, as well as the financial aspect in disaster scenarios. Germany, as a developed country, thinks beyond its borders and response scope, establishing a system to enable mutual assistance and participation of other countries in joint activities. Within such initiatives, issues related to business operations, risk transfer, financial insurance, and the like are also considered.

What is characteristic of the USA is noticeable progress in regulating disaster response - from complete neglect of preventive action and focusing solely on armed threats to action based on experience and lessons learned. Examples are acts adopted after disasters that had serious consequences for the USA. These acts brought changes in response methods, especially in the way assistance is provided from the highest to the local level.³⁵⁵

Risk mitigation in each studied country involves thorough planning of the risk itself, its possible outcomes, and all activities that follow when a disaster occurs. The focus is on mitigating the consequences primarily on the population and then on the economy. Regarding the population, interesting examples are given in the work on how countries prepare the population for response through various training and exercises - for instance, the USA and Germany conduct training on response, first aid, evacuation, etc., while Russia organizes competitions between cities in preparedness, and so on. Additionally, the use of technology to increase readiness for response is noticeable in each country. Smart devices, mobile applications, weather alarms, etc., are utilized in various ways for the purpose of educating the population, gathering information, and conducting surveillance.³⁵⁶

³⁵⁴ Cvetković, V.M., & Andrić, K. (2023). Comparative Analysis of Disaster Risk Management Systems in Germany, USA, Russia and China. Preprints. <https://doi.org/10.20944/preprints202302.0267.v1>, pp. 22-25.

³⁵⁵ *Ibidem*.

³⁵⁶ *Ibidem*.

When considering disaster response, the principle of subsidiarity is prevalent in the subject countries. Each country starts from the lowest local, provincial, and other lower levels. When the demands that a disaster poses on the local level become too great, resources from higher levels are then utilized. In Germany, the USA, Russia, and China, respect for one of the priorities of the Hyogo Framework for Action can be noticed - the effort to prioritize disaster risk reduction at both the national and local levels. Each country has established a body (council, ministry, agency, office) at the highest level, mainly responsible for coordinating activities during disaster response.

In the USA, such a body is also involved in research, education, training, response, assistance provision, and other activities, while in Russia, the Ministry oversees all civilian services in case of disasters. Adequately assessing the risk and determining the potential damage it can bring is crucial for recovery after a disaster. The recovery framework in the USA is based on such assessments, which include planning after the disaster. Financial resources are crucial for recovery. Reserves and funds must be well planned, as was the case shown in the example of Germany. In contrast, the example of Russia illustrates that reserves planned for the next year had to be drawn upon immediately because the damages incurred in the event of a disaster exceeded all planned financial resources. Noticeably, each country has disaster insurance. In some countries, this is regulated and recognized as a solution, as is the case in the USA and Germany, while for China, it is believed that such a solution would yield results but has not yet been implemented.³⁵⁷

Comparing Germany, the USA, China, and Russia, conclusions can be drawn about the successful functioning of systems crucial for protecting the values of each state. For a system like the one activated before, during, and after disasters to function, it must be developed on a suitable basis adapted to the real situation and practical action. Its elements must be interconnected, and the flow and exchange of information must be regulated and functional. Additionally, a clear division of responsibilities and authorities is important when a quick and timely response is required, and it must primarily be regulated by legal norms. Also, such a system cannot be monolithic and immutable. As the assessed risks on

³⁵⁷ *Ibidem.*

which it is established change, it must change as well. The system must be comprehensive, taking into account not only the entire state with its government representatives and institutions but also the individual and their potential contribution to emergency response. Established systems cannot be ideal; losses must occur, but it is important that they develop in a way that can preserve the vital interests of states - human lives - and enable quick recovery for the entire society based on good planning of all relevant resources.³⁵⁸

Despite the wave of neoliberalization that has affected almost all areas of public policy, the prevailing view is that delegating crisis management to the private sector, at least for now, is questionable. Reasons include legal constraints, the nature of the crisis, and a strong tradition of government involvement in these matters. Countries with weaker capacities are more interested in entrusting crisis management to profit-oriented organizations, especially for modern forms such as cybersecurity. It has been concluded that the role of the private sector is limited.

Collaboration with volunteer organizations is strong but diverse. Some countries, such as Hungary and Austria, consider strong cooperation with civil society organizations as their comparative advantage. Support from citizens for crisis management systems is significant. Perception of threats and the level of concern vary. Newer EU member states and Italy have a higher level of citizen concern about crises, while the Netherlands and Scandinavian countries have the lowest. The level of awareness of preparedness and crisis response in the EU, according to Eurobarometer data, is 27, which is quite low. This could result from low awareness, a reactive approach to crises, lack of interest, predominantly passive information gathering, but also trust in their own capacities to respond to crises.³⁵⁹ The systems are assessed as effective, but their efficiency is questionable: the costs are unknown.³⁶⁰ The role of regional organizations is limited. The framework for foreign aid is developed but not ready for use. The EU's role in crisis management is recognized, fundamentally accepted, but with low visibility.³⁶¹

³⁵⁸ *Ibidem.*

³⁵⁹ *Ibidem.*

³⁶⁰ See more at: <http://anvil-project.net/results/>.

³⁶¹ *Ibidem.*

Considering the importance of measures taken to reduce the risk of disasters, the international community has invested tremendous efforts in raising awareness about the significance of implementing provisions from international conventions into national strategic documents. At the international level, there is a large number of international conventions regulating the area of disaster risk reduction that need to be implemented into national policies.³⁶² However, despite all the international conventions and support from the international community, a large number of countries do not possess national strategies for disaster protection and rescue operations.

Serbia and Montenegro have a national strategy for protection and rescue operations in disasters, while Croatia (having a national platform for disaster risk reduction) and Bosnia and Herzegovina do not. Therefore, these countries are compelled to collaborate to harmonize standards in the field of disaster management systems, thus facilitating and making more effective activities for the protection and rescue of the population, material and cultural assets, and the environment in disasters. Recommendations from the Yokohama Strategy for a Safer World, the Kobe Conferences, the Global Platform for Disaster Risk Reduction Conference, as well as conclusions from the Geneva Conference, point to this.

Analyses show that the strategies of the mentioned countries differ in the following aspects: the structure of their strategies varies significantly, considering the methods of implementing provisions from the Hyogo Protocol, as well as other segments related to regulating disaster risk reduction; the strategy of Montenegro defines certain terms such as "disaster" and "disaster" in the introduction, while Serbia's strategy does not mention categorical apparatus; the objectives to be achieved vary significantly, given the level of development attained in the protection and rescue system in disasters; Montenegro's strategy does not explicitly mention vision and mission, while they are mentioned in Serbia's strategy; Serbia's strategy identifies shortcomings in the existing protection

³⁶² Cvetković, V., & Ivanov, A. (2014). Comparative analysis of national strategies for protection and rescue in emergencies in Serbia and Montenegro with emphasis on Croatia. International conference: Macedonia and the Balkans, a hundred years after the world war I – security and euroatlantic integrations (3-5 June 2014). Skopje: University St. Kliment Ohridski – Bitola, Faculty of Security, 200-216; Ivanov, A, Babanoski, K., Cvetković, V.M. (2023). Disaster Risk Reduction System in the Republic of North Macedonia, Bezbednost.

and rescue system, while they are not explicitly mentioned in Montenegro's strategy but can only be inferred through various analyses; the strategies differ in the method of analyzing the situation and identified causes in the field of disasters.³⁶³ On the other hand, the following similarities have been identified: common threats from emergencies have been identified; natural disasters pose the greatest threat to the considered countries, and accordingly, strategic solutions must take that fact into account; technological disasters less frequently affect the considered countries but have more serious consequences per individual event; provisions taken from international conventions are fully integrated into national strategies for protection and rescue in disasters; the general objectives of the strategies are identical; some structural forms are identical; the terminology used is identical; both strategies refer to the same international documents in the field of disaster risk reduction.³⁶⁴

³⁶³ *Ibidem.*

³⁶⁴ *Ibidem.*

6. METHODOLOGICAL FRAMEWORK OF RESEARCH

According to the design, subject matter, objectives to be achieved, and procedures to be used, this research is multidimensional, multimethod, predominantly qualitative in nature. It is based on a qualitative approach, specifically examining the concept of crisis management policy (hereinafter crisis and disaster management) in 23 cities in Serbia.

In addition to advancing knowledge in the complex field of policy management in crisis and disasters at the local level, this research aims to create recommendations related to necessary methodological and organizational transformations in the work of local government and decision-makers, legal regulations and protocols, security strategies and emergency response procedures, decision-making, coordination, cooperation, communication, public engagement, education, and information.

6.1. Subject, objectives, and tasks of the research

The subject of this research is the examination of crisis management policy in local self-governments in Serbia, viewed through the analysis of results, efficiency, and experiences of implementing the concept of crisis management policy in Serbia. The concept of crisis management in this research is broadly related to the concept of managing disasters, as one of the responsibilities of local self-governments (specifically cities) and challenges in its implementation. These challenges are situated within the "hard" (policy) framework and relate to the legal, institutional, operational, strategic, and financial functioning of crisis management at the local self-government level, i.e., cities. Special emphasis is placed on the degree of implementation of existing regulations, strategic planning, operational and tactical capacities of the system at the local level to respond to challenges related to crisis management. Another type of challenge relates to the "soft" approach (management in crisis and disasters in terms of "politics"): namely, the capacities and experiences of decision-makers in crisis management at the

strategic and operational levels. Processes of prioritization in crisis and disaster management in planning public policies at the local level have been analyzed, as well as organizational constraints for recognizing and preparing for crises in local self-governments, especially cities. The role of leadership in this process, the importance of coordination, cooperation, partnership, and education in network management in crisis and disasters have been particularly explored. Finally, conclusions have been drawn based on all indicators regarding institutional memory and learning from crises. The research context is situated within the system of local self-government reform, concerning crisis management as one of the reformed public policies.

The concept of crises and emergencies in Serbia is legally set up so that they are primarily addressed at the place where they occurred, i.e., at the level of local self-government. If an disaster exceeds the capacities of local self-government, responsibilities are transferred to the district, and then to the central level of authority. In recent years, since 2005 chronologically speaking, local self-government units have been exposed to numerous challenges—from technical accidents, forest fires, to floods of serious proportions and landslides. The World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR) developed a potential risk profile for earthquakes and floods for 32 countries in Europe and Central Asia in 2017, including Serbia.³⁶⁵

In developing the profiles, climate change and socio-economic development models (demographic growth, urbanization, etc.) were taken into account and placed in the context of existing global flood and earthquake models. For each country separately, the profile reveals the risk potential in terms of affected population and GDP loss. In the case of earthquakes, the number of possible casualties and capital losses is considered. The years taken as boundary points are 2015 and 2080. Additionally, the so-called "return period" for more extreme events with less frequency but greater impact is estimated. This is the first step in dialogue with governments to consider additional policies, measures, and activities to increase the resilience of the mentioned states in preventing and responding to crises.

³⁶⁵ World Bank Group: Tracking Earthquake and Flood Risks across Europe and Central Asia to Enhance Disaster Resilience, <http://www.worldbank.org/en/news/feature/2017/01/20/tracking-earthquake-and-flood-risks-across-europe-and-central-asia-to-enhance-disaster-resilience>

Results for Southeastern Europe show a higher risk of earthquakes, with Serbia being more exposed to the risk of floods. Risk profile results for Serbia indicate the likelihood that if Serbia were hit by a 100-year flood in 2015, the GDP loss would be \$4 billion. However, if in 2080 it experiences the same type of disaster, it would have a reduced GDP of \$7-20 billion. Similarly, with earthquakes: the likelihood of GDP loss from a 250-year earthquake in 2015 is estimated at around \$10 billion. The same event in 2080 would cost Serbia between \$25-60 billion. A risk profile of floods and earthquakes for Serbia by districts, shown in Figure 1, indicates that Vojvodina, Zlatibor, Nisava, Zajecar, and Pcinja districts are at higher risk of floods, while Belgrade, South Banat, Kolubara, Srem, Podunavlje, Branicevo, Sumadija, Moravica, Pomoravlje, Rasina, Raska, Toplica, Jablanica, and Pirot districts are at higher risk of earthquakes.³⁶⁶

As evident from the above, the reasons for analyzing the implementation of the crisis management policy concept in Serbia are manifoldly justified. The entire system³⁶⁷ The protection and rescue, i.e., emergency response, face significant challenges. Previous experiences have shown that there are no privileged local self-government units that are inherently safer than others.

In this regard, it will be necessary to address several research questions: Are the legal and sub-legal frameworks established as a whole? Are the levels of authority clearly defined? To what extent and in what manner are local self-government units and decision-makers fully aware of the responsibilities arising from the Law on Emergencies? To what extent and in what manner are these laws implemented at the local level, specifically in cities? How effectively are the responsibilities prescribed by current

³⁶⁶ *Ibidem*, according to: D. Guha-Sapir, R. Below, and Ph. Hoyois (2015). EM-DAT: International Disaster Database (Iniversitfl Catholique de Louvain, Brussels, Belgium), www.emdat.be; the National Data Ceter/World Data Service (NGDC/WDS), Significant Earthquake Database (National Geophysical Data Cete, NOAA), RiskAssessment Country and Province Profiling, "final report to GFDRR, 2014. Damage estimates for all historical eventse have been inflated to 2015.

³⁶⁷ The system is (1) a complex whole of mutually interconnected elements; (2) forming a distinct entity with its environment; (3) and is usually a part of a higher-order system, so it can be viewed as a subsystem or element of a broader system; (4) with a hierarchical character closely tied to its integrity. According to: Petrović, B. (1998). *Theory of Systems*. Belgrade: Faculty of Organizational Sciences, University of Belgrade: 2–10.

regulations implemented at the strategic, tactical, and operational levels at the city level in Serbia? How familiar are decision-makers and public administration at the local level with modern crisis and crisis management concepts? Has crisis strategic planning at the local level been implemented, and how aligned is it with regional and national plans? How is the financial framework for crisis and disaster management established at the local level? Are cities as local self-government units in a more favorable position than municipalities? Are decision-makers at the local level prepared for their roles in crisis situations? Are decision-makers and public administration at the local level ready for learning, and are they capable of learning from crisis-induced challenges? Has a system of accountability in crisis and disaster management at the local level been established? How does crisis communication function? To what extent do local authorities inform and educate citizens about crisis management? Is there cooperation among all relevant stakeholders in a crisis: different levels of government, organizations, citizens? Is the system for handling emergencies centralized, decentralized, or deconcentrated, and to what extent?

Answers to these questions have enabled a comprehensive analysis and assessment of crisis management policy at the local level in Serbia, evaluation of its quality and implementation in relation to modern crisis management concepts, critical examination of its shortcomings, and provision of recommendations for overcoming limitations and qualitative improvement.

Continuing the initiated reform, Serbia is introducing the doctrine of good governance into local administrations. A challenge lies in measuring the degree of good governance in local self-governments. There are various methodologies that have developed indicators in key areas and principles of good governance. Accountability is certainly one of the most complex principles, and conditionally speaking, it can be viewed as the principle that every resource is used optimally without abuse. Establishing and implementing mechanisms for determining the accountability of public officials and functionaries is also one of the dimensions of measuring the degree of good governance, along with a responsible approach to protecting the interests and rights of citizens. Good governance enables citizens to assess the work of their local self-government through conducting surveys on user satisfaction with public services. Predictability involves standardizing procedures and services. Public administration systems that are inefficient, in-

effective, and inaccessible to users in normal circumstances can struggle or achieve results in crisis situations, but with enormous efforts. Therefore, it is important to assess to what extent crisis and disaster management as a reformed public policy at the local level in Serbia is implemented according to the principles of good governance. There are common problematic points in public administration reforms in the EU and Serbia: unclear levels of authority - their overlaps; hidden deconcentration in original competencies as well as the issue of measurement and manner of decentralization.

The reform of crisis and disaster management as public policy in Serbia has two aspects. The first relates to the application of modern crisis management concepts: proactive, preventive, focused on creating resilient communities. The second aspect of the reform relates to the previously mentioned question: to what extent is crisis management at the basic – local level applied according to the principles and spirit of new administrative doctrines, especially the principle of good governance? Does public administration reform follow the crisis and disaster management reform at the local level? The research focus was on cities, but in some parts expanded to compare the assessment of capacities and preparedness levels between cities and municipalities in Serbia, especially concerning the normative, institutional, strategic, operational, and financial framework of crisis management. Consequently, the list of research questions has spontaneously expanded with one more: have Serbian cities implemented their responsibilities in crisis and disaster management to a greater extent, meaning are they more prepared for emergencies and more responsible than smaller and usually poorer municipalities?

The answer is important due to the dilemma of whether cities should have greater powers in crisis and disaster management policies, as they are economically, financially, demographically, and politically stronger than municipalities. The assertion that municipalities, especially small and poor ones, do not adequately implement their responsibilities due to a lack of capacity compared to cities, which do so, is taken as a kind of political axiom. At the same time, it is implicitly assumed that cities, as economic, political, and financial centers, are more prepared for a crisis. These often unchecked claims are arguments for proponents of the political model of local self-government, or the so-called asymmetric decentralization.

Additional questions that have emerged are: is there multi-speed decentralization in crisis and disaster management policies in Serbia?; efficiency versus democracy in crisis and disaster management policies at the local level?; are there reasons for a special status for cities in crisis and disaster management?

When it comes to the theoretical design of the research subject, this work will rely on three concepts. The first concerns the research conducted by Carol Lalonde in an attempt to obtain an integrated answer: how is it possible to ensure the long-term embedding of learning that takes place within organizations during a crisis and thereby improve organizational resilience in crisis conditions?³⁶⁸ A meta-analysis of literature in the field of crisis management has been conducted. It has been concluded that, regardless of the diversity of areas and disciplines covering it, the field of crisis and disaster management faces a limitation related to two main research streams: dealing with crisis planning and analyzing unforeseen situations. Since these two approaches have never been fully synthesized by researchers, a model of organizational learning in crisis management has not been developed, leading to the formation of a learning model in crisis management. This learning model would strengthen organizational capacities to overcome crises.

In the integrated research model, five key dimensions were used: questions of planning and the use of formal rules and routines; strategies developed for coordinating actions (emergency planning, intervention in acute phases, alliances, coalitions); involvement of local, national, and international decision-makers (leaders); civil behavior, both of those directly affected by the crisis and those providing assistance, volunteers, and others; expansion of groups/tasks and professional and organizational socialization among actors.³⁶⁹

The second concept was used by Eric K. Stern in his doctoral dissertation titled "Crisis Decision Making: A Cognitive-Institutional Approach," which emerged as part of the Crisis Management research program in the Baltic Sea and Europe (CM Eu-

³⁶⁸ Lalonde, C. (2007). *Crisis Management and Organizational Development: Towards the Conception of a Learning Model in Crisis Management*, Proceedings of OLKC 2007-„Learning Fusion“, University Laval, Quebec: 507-517.

³⁶⁹ *Ibidem*: 511.

rope).³⁷⁰ He considered the crisis matrix through five dimensions of complexity: political, institutional, temporal, informational, and problem complexity. Political complexity relates to the threat of one or more key values. In practice, "or more" is more of a rule than an exception. Conflict arising from the complexity of endangered and defended values among political actors is often a source of stress. In a crisis, multiple stakeholders, both public and private, are engaged, each with their own interests, which may not be the same.

Institutional complexity is closely related to this: the existence of a large number of actors, with horizontal and vertical dimensions. The horizontal dimension pertains to actors at the same level of authority who may have a role in crisis management. The vertical dimension of institutional complexity concerns the potential involvement of actors across different levels of authority. Different actors have varying responsibilities, backgrounds, geographical origins, and levels of preparedness, all influencing their perception of the crisis. Temporal complexity has two dimensions: diachronic and synchronic. From a diachronic perspective, all issues have a backstory of sorts. Previous experience will influence crisis perception, psycho-organizational predispositions, and hence preparedness. Understanding the historical context of the crisis is imperative. The synchronic dimension of temporal complexity means that crisis perception and behavior are not only threatened by past events but also by current ones. The current political context influences what will be treated as a priority at a given moment, especially if there are multiple crises simultaneously. Informational complexity may indicate both a lack of and overload of information, especially under time pressure. Problem complexity is the final dimension and pertains to the need for simultaneous or sequential resolution of a cluster of acute problems within one crisis, each of which may represent a mini-crisis in itself.³⁷¹

The third concept relies on the research project "Analysis of Civil Security Systems in Europe – ANVIL"³⁷². The project was

³⁷⁰ Stern, E. K. (2003). *Crisis Decisionmaking: A Cognitive Institutional Approach*. Doctoral Dissertation. Swedish National Defence College. Stockholm: Elanders Gotab.

³⁷¹ *Ibidem*: 14-19.

³⁷² See more at: http://www.societalsecurity.eu/uploads/Articles/2014_ANVIL%20White%20Paper_UIPaper%202.pdf: Rhinard, Mark et al. 2014. Civil Security and the European Union: A survey of

funded by the European Union, with the University of Utrecht as the lead partner. It lasted for two years and was completed in February 2014. Several partners participated in the project, including the Faculty of Security at the University of Belgrade, Department of Crisis Management. The vulnerability and interdependence of contemporary society require, more than ever, cooperation among various partners: states, regional organizations, civil society organizations, and the private sector. For this to be possible, it is necessary for all stakeholders to be as well acquainted as possible. States have different legal frameworks, perceptions of threats, and priority policies. The project's goal was to compare different civil security systems across Europe, specifically in 22 countries, including Serbia, and eight sub-regional organizations in Europe. The cultural, institutional, legal, and operational dimensions of civil security systems were mapped and compared, using pre-developed definitions of effectiveness and efficiency.

The empirical part of this research analyzed the concept of crisis management policy in 23 cities: Belgrade, Valjevo, Vranje, Zajecar, Zrenjanin, Jagodina, Kragujevac, Kraljevo, Krusevac, Leskovac, Loznica, Nis, Novi Pazar, Novi Sad, Pancevo, Pozarevac, Smederevo, Sombor, Sremska Mitrovica, Subotica, Uzice, Cacak, and Sabac. The degree of implementation of the strategic, legislative, and institutional framework, as well as the capacities of local authorities to apply the concept of crisis management, were analyzed through four analytical dimensions. Additionally, the preparedness of municipalities and cities for crises was compared.

The analyzed analytical dimensions relate to: cultural-historical aspects of crisis management in Serbia (administrative framework, legislative framework, state and societal culture); policy dimension (strategic level, operational level of crisis management); partnership and cooperation (relations between the state, local authorities, and citizens in crisis management policy, formal obligations of citizens, citizens' expectations of the state in times of crisis, citizen participation in times of crisis, the role of civil society organizations and citizens, regional and international cooperation); information and education (crisis communication, methods of crisis information dissemination, communication channels, re-

European civil security systems and the role of the EU in building shared crisis management capacities. UI Papers #2, April 2014. The Swedish Institute of International Affairs.

sponsibility for crisis communication, monitoring and evaluation of crisis management, development of a security culture, education of local self-government on crisis management, citizen education and activation, databases, websites with updated crisis-related data).

In terms of time, the research covered the period from 2014 to 2017. This is important for comparing the situation in cities before, during, and after emergencies during 2014. Placing the temporal determinants of the research in the specified period is an attempt to answer the question of whether the indicators of the examined analytical dimensions changed after 2014 and in what way, that is, whether and in which dimensions the local self-government system is capable of change and learning from crises.

Research objectives

The scientific aim of this research is to contribute to the identification, description, and explanation of determinants of the crisis management policy concept, within the context of public policy-making by local authorities in crisis conditions.

The objective of this research is primarily the description and explanation of the existing state and interrelation of the examined phenomena (cultural and historical aspects, crisis management as public policy, partnerships and cooperation, education, and information) in crisis management policy across 23 cities in Serbia from 2014 to 2017.

Based on the results obtained from empirical research, certain conclusions and suggestions were drawn regarding the quality, efficiency, transparency, and possible shortcomings in the application of the crisis management policy concept in Serbian cities. Concrete recommendations and proposals for qualitative improvement of the concept in segments where deficiencies or inadequacies were identified are also provided.

The practical aim of this research is to improve crisis management policy at both the local and national levels, as well as to enhance the capacities of public local administrations and other institutions and organizations in the local community. The results of this research would assist decision-makers and citizens in providing more comprehensive, efficient, high-quality, and reliable responses to the challenges of crisis management policy, while adhering to the principles of preventive and proactive action, coordi-

nation, cooperation, partnership, and accountability, and also identifying new research questions.

6.2. Hypothetical research framework

Given that this research aims to create opportunities for generating hypotheses for future research, its hypothetical basis is defined through the following basic hypothesis: efficient implementation of the crisis and disaster management policy concept in cities in Serbia requires continuous strategic, tactical, and operational transformation of the public administration and public leadership systems, aimed at strengthening the capacity of local self-government for prevention, preparedness, response, and recovery from crises.

Specific hypotheses: the jurisdictions of different administrative levels in the crisis management policy in Serbia are not fully and sufficiently precisely regulated by legislative and sub-legislative acts; the responsibilities of local self-government in operational and tactical terms are not adequately implemented. Strategically planned risk assessments, as envisaged by law, are not sufficiently and timely adopted or applied in cities, resulting in predominantly reactive crisis management style; volunteer activities and engagement in disasters are not appropriately supported by legislative and sub-legislative acts or by appropriate standard operating procedures; actors at the local self-government level have not undergone sufficient training and education in crisis management.

6.3. Scientific and social justification of research

An overview of the last 25 years indicates that Serbia, along with its institutions, is constantly exposed to crises spanning socio-economic, financial, political, and security realms. Despite Serbia being referenced in global scientific literature regarding security, geopolitics, international relations, and crisis studies, it seems that others have engaged more with our situation from a scientific perspective than our own researchers. This research attempts to advance the scientific knowledge base in Serbia on this topic. Addi-

tionally, from a scientific standpoint, this work tends to describe and explain the causes of the inadequately established crisis management system at the local level.

Regarding the social justification of the research, based on the results obtained from empirical research, certain conclusions and proposals have been drawn regarding the quality, efficiency, transparency, and shortcomings of implementing the crisis management policy concept in Serbian cities. Concrete recommendations and proposals for qualitative enhancement of the concept are provided in those segments where deficiencies or incompleteness have been identified. The social justification of the research primarily lies in enhancing the capacities of local self-governments for better preparedness, facing, and overcoming crises, strengthening the culture of security, and developing "resilient local communities".³⁷³

6.4. Sources and types of data

Complementarity as a guiding principle of the research implied collecting data from various sources. Data related to the legal, strategic, and institutional framework of crisis and disaster management policy in Serbia are contained in legal and sublegal acts, national, and local strategies. National Strategy for Protection and Rescue in Emergencies, Security Strategy, Public Health Strategy, Fire Protection Strategy are basic strategic documents. Laws such as the Law on Disasters, Defense Law, Reconstruction Law after Natural and Other Disasters, Local Self-Government Law, Law on Local Self-Government Financing, and other laws and sublegal acts represent primary sources regarding the types and levels of administrative structure, levels of competence, degree of responsibility, as well as the formally established relationships among various entities for different phases of crisis and disaster management in Serbia. Norms, rules, procedures, formal-political constellations, and power distribution within the organizational environment complex are obtained from the analysis of both legal and sublegal acts.

Previously conducted research methodologically and theoretically relevant to the topic underpins scientific knowledge relat-

³⁷³ WHO: Health 2020.

ed to various aspects of crisis and disaster management: planning, decision-making under stress, gender perception of crisis, crisis overcoming and termination, responsibility games, cognitive-institutional approach to crisis learning, decentralized, networked crisis response, biopolitics, expert roles in crisis decision-making, group decision-making dynamics in crises, development of organizational resilience to crises. Literature meta-analyses on crisis management are also very useful. Case studies related to disasters in cities are useful for studying preparedness, crisis response, responsibility, and crisis termination. The authors of the mentioned research utilized a systemic, political-symbolic, multidisciplinary, multidimensional approach.

Additional research was conducted for the purposes of the dissertation, aimed at determining the level of preparedness of cities for crisis and disaster management; institutional capacities and the degree of implementation of operational and strategic management levels in crisis and disasters at the local level. Four studies were conducted with three target groups: 1) representatives of the Ministry of Interior - heads of the Sector for Disasters in Serbian cities; 2) mayors; and 3) employees of local self-governments (LSGs) responsible for crisis management tasks. After collecting data from all three target groups, a comparison of results was conducted.

Regarding the first target group - heads of the Sector for Disasters in cities - a longitudinal study was conducted, based on research conducted by the Standing Conference of Towns and Municipalities (SCTM) "Analysis of Competencies and Capacities of Local Self-Governments in Emergency Management" (Kesetović, March 2014), just before the catastrophic floods. This research served as an empirical basis for setting hypotheses for the dissertation and aimed to assess the capacities of LSGs for disaster management. For the purposes of analysis, an original questionnaire was constructed, which was later repeated in July 2017, for the dissertation on the same target group. The questionnaire was based on the competencies of LSGs in the field of disasters provided by the Law on Disasters, the method and degree of financing, and coordination of subjects in managing disasters.

The second target group of respondents - mayors - was asked to complete a questionnaire of 8 questions relating to 4 dimensions of crisis management. The questionnaire was designed in the form of a Likert scale of attitudes. 17 out of 23 mayors re-

sponded to the questionnaire during the period from July to September 2017.

The third target group consisted of employees of LSGs responsible for disasters. The basis was research conducted by SCTM during 2016 and early 2017, entitled "Analyses of Preparedness and Organization of Local Self-Government Units in Risk Management and Disasters"³⁷⁴. The analysis examined 4 dimensions: normative-legal regulation, cooperation and communication of actors at various levels, including international cooperation; organization and functioning of local emergency headquarters and the establishment of civil protection and relations with civil society. A total of 92 LSGs, including 16 cities, responded to the SCTM analysis. Additional research for the dissertation supplemented the sample to 105 LSGs. An analysis of differences between the preparedness and organization of municipalities and cities in risk and disaster management was conducted. The aim was to determine whether there are statistically significant differences in the perception of respondents and the level of readiness to perform duties in the field of disasters between cities and municipalities. In November 2017, additional research related to the examination of the institutional framework for crisis and disaster management was conducted with representatives of cities responsible for crisis and disaster management, through questionnaires and semi-structured interviews.

Statistical reports and analytical databases related to crisis and disaster management at the local level contain data regarding the structure of employees in agencies and organizations responsible for crisis and disaster management, activities undertaken within crisis and disaster management, socio-economic, demographic, and geographic indicators, financial, organizational, human, and technical resources, number of training courses, types and level of educational programs and training for employees in public administration and agencies, as well as for citizens.

Data relating to partnership and cooperation among various actors in crisis and disaster management are found in reports of local safety councils, regulations, statutes, and local strategic plans, media content from local and national media, statements of citizens regarding the extent of expectations from the state and local self-government regarding the protection of their interests dur-

³⁷⁴ Kesetović, February 2017

ing a crisis, assessment of satisfaction with the quality and effective response of local authorities to a crisis by the media, citizens, civil society organizations, and other stakeholders, as well as by public administration employees and decision-makers.

The degree of power distance and the degree of individualism, as two dimensions of social culture, can be found on the website (Geert Hofstede's website on national culture).

6.5. Methods of data collection and analysis

The complexity of the investigated phenomena (the concept of crisis and disaster management policy in Serbian cities), hypothetical framework, research objectives, and types and sources of data determine a multimethod approach for collecting experiential evidence and for its analysis.

The primary method to be used for theoretically grounding the research problem will be literature review. For this research, a large number of theoretical works and results of empirical research from the global scientific production in the fields of security sciences, political sciences, law, sociology, psychology, as well as organizational theories, management, and public administration, have been analyzed.

To identify and obtain data related to the process of reform changes and legal implementation of crisis and disaster management in Serbia, the method of legal document analysis was used. This involves *sui generis* legal provisions, which require complex analysis of subordinate acts.

To describe the characteristics of crisis and disaster management policy at the local level, data from statistical reports and analytical databases were used, employing the method of secondary data analysis.

The method of recognition and acquisition of data related to partnerships and cooperation among the state, local self-government, citizens, and other stakeholders in crisis and disaster management policy is based on a qualitative approach. In this regard, content analysis was used to collect data from media content, as well as from document content when data were obtained from protocols on intersectoral cooperation, statutes of Safety Councils, or minutes from meetings of these bodies, conclusions from meetings and conferences, NGOs, etc.

For obtaining data related to personal, individual expressions, perceptions, or subjective evaluations of certain qualifying determinants of the concept of crisis and disaster management policy, questionnaire methods were used. Data relating to the assessment of the quality of the concept and cooperation within it by social actors were collected using focus group method, semi-structured interviews, or questionnaires. The questionnaire was also used as a method for obtaining data from statements of individuals with personal experience in implementing the concept.

To acquire data on the assessment of the efficiency and effectiveness of the protection and rescue system following the catastrophic May floods in 2014, for improving the legislative and institutional framework for crisis and disaster management, recommendations from the conference "Routine in Emergency: Local Self-Governments in Disasters - Reform of Existing Practices" held on September 19, 2014, in Belgrade, organized by SKGO, were used.

When it comes to the role of the civil sector in emergencies, reports from the Special Working Group for the Analysis of Legal Regulations in the Field of Voluntary Engagement of Citizens in Disasters were used, as well as analyses from the Office for Cooperation with Civil Society of the Republic of Serbia. Additionally, representatives of SKGO contributed to defining conclusions in the final discussion session "Empowering Local Actors for Resilient Recovery" at the conference "Promotion of Resilience through Post-Crisis Recovery" held in Brussels from June 6th to 8th, 2017, organized by UNDP. This contribution was used as a data source for the dimension of cooperation and engagement of the civil sector.

To obtain data related to citizens' expectations towards the state regarding the protection of their interests during crises, public opinion research was used. Public opinion research will also be used to answer the question of which crises citizens perceive as real in Serbia. Reference data relating to the practical, everyday work of public administration and decision-makers in local self-government can be recognized and obtained through observation by the researcher, provided that consent is obtained from the competent city authorities and as long as it does not disrupt the performance of their regular tasks. The comparative method should enable the acquisition of data that ensure theoretical, analytical, and synthetic comparison of philosophical, strategic, tactical, and

operational characteristics of the concept of crisis and disaster management policy in Serbian cities.

6.6. Overview of Key Indicators

Identified indicators for the mentioned four dimensions of research: cultural-historical aspects of crisis and disaster management in Serbia, policy dimension, partnership and cooperation, information and education.

Indicators of the cultural-historical aspect of crisis management in Serbia:

- **Administrative Framework:** The administrative framework encompasses various levels of governance and administrative structures, including the central level, regional level, and local level. At the central level, the structure and governance system, such as parliamentary or presidential forms of government, and the type of state, unitary or federal, are examined. The regional level involves the organization and governance structure of regions, districts, or provinces, along with the method of selecting regional authorities. Similarly, the local level entails the structure and organization of local self-government units, such as cities and municipalities, including the method of selection and the number of units. Responsibilities are also analyzed, including the distribution of responsibilities among different administrative levels in crisis management policies, and the mechanisms for regulation and coordination between administrative levels.

- **Constitutional and Legislative Framework:** This framework encompasses the constitutional and legislative aspects of crisis management policy. It includes legislative reforms, major changes, or reforms in the legal framework regulating crisis management, the existence of a single law or fragmented regulations governing crisis management, and the degree to which crisis management is regulated by laws versus subordinate legislation. Implementation issues, such as the degree to which crisis management is regulated at the local level, are also explored.

- **State and Societal Culture:** This dimension explores the societal and cultural factors influencing crisis management. It includes the examination of power distance, individualism, and de-

cision-makers' capacities at the local level in managing crises and emergencies.

- **Socio-economic Framework in Cities:** This dimension focuses on the socio-economic characteristics of cities, such as their level of development, budget allocation for emergencies, population size, density, distribution, employment, social welfare, and life expectancy.

- **Strategic Framework:** This dimension examines the strategic planning and implementation of crisis management policies, including strategic planning mechanisms, implementation effectiveness, and intersectoral collaboration at the local level.

- **Operational Framework:** This dimension focuses on the operational aspects of crisis management, including agency structure and responsibilities, coordination and collaboration among agencies and stakeholders, and jurisdiction and accountability related to crisis management policies.

- **Partnership and Cooperation Dimension:** This dimension examines the relationships and partnerships between different actors involved in crisis management, including state-citizen relationships, volunteer involvement, and regional/international cooperation.

- **Information and Education Dimension:** This dimension focuses on information dissemination and education related to crisis management, including training programs, crisis communication, citizen preparedness, and the availability of crisis-related information.

7. THE CULTURAL AND HISTORICAL DIMENSION OF CRISIS AND EMERGENCY MANAGEMENT POLICIES IN SERBIA

As a modern state, Serbia has gone through various phases in its history while seeking an optimal administrative-territorial organization. In 1878, the Principality of Serbia had around 2,000 municipalities. Since then, the system has evolved and consolidated. Simultaneously, the crisis management system also developed, changing its names according to how it was defined. Civil protection was established in 1948 by the Decree on the Organization of the Anti-Aircraft Defense Service³⁷⁵ and was part of the Federal Secretariat of Internal Affairs. With the reorganization in 1955, it was renamed Civil Protection and developed as an integral part of the National Defense and Social Self-Protection system (referred to as ODP and SSP).

The current system of local self-government is based on the structure established by the "General Law on the Organization of Municipalities and Districts in the People's Republic of Serbia of September 1, 1955."³⁷⁶ This law abolished districts and counties, shifting the focus of so-called communal, self-governing, and local authority from the county to the municipality. This led to the consolidation of municipalities, leaving 190, including the municipal boroughs of Belgrade. At the same time, to delineate levels of authority and specify the functions of municipalities and counties, the "Law on the Competencies of Municipal and County People's Committees and Their Organs" was enacted³⁷⁷ with a specific "register" of tasks and competencies. The responsibilities of municipal people's committees and their bodies included areas such as: economy; finance; agriculture; forestry; trade; tourism and hospi-

³⁷⁵ Regulation on the Organization of Anti-Aircraft Protection Service, "Official Gazette of the Federal People's Republic of Yugoslavia," No. 110 dated December 22, 1948.

³⁷⁶ General Law on the Organization of Municipalities and Districts in the People's Republic of Serbia, "Official Gazette of the Federal People's Republic of Yugoslavia," No. 26/55.

³⁷⁷ Law on the Competencies of Municipal and District People's Committees and Their Bodies from 1955, "Official Gazette of the Federal People's Republic of Yugoslavia," No. 34/55.

tality; crafts; transportation and communications; cooperatives; communal services and construction; public health; social welfare; labor relations; education and culture; internal affairs; national defense; general administration; and the management of public property. The law was accompanied by bylaws, including the "Decree on the Transfer of Duties from Military Sections to the Administrative Bodies of Municipal People's Committees Responsible for National Defense" from 1960. This decree was repealed by the Law on Amendments to the Law on National Defense in 1965.³⁷⁸

Based on the Constitution of the People's Republic of Serbia from 1963,³⁷⁹ the people's committees of municipalities were transformed into municipal assemblies. The municipal assembly became a representative body consisting of delegates responsible for passing regulations, the social plan, and the municipal budget. The municipal assembly determined policies and made decisions on economic, social, and political issues, forming councils and other bodies for general administration, internal affairs, social planning and finance, public health and social welfare, education and culture, construction, communal and housing services, trade, and hospitality to meet these needs. Municipalities that could not finance the execution of their tasks and the work of public services with their own resources were provided with additional funds from republican revenues to finance social and other municipal services.³⁸⁰

The municipal assembly was composed of the municipal council and the council of working communities. The county was established to perform tasks of common interest for multiple municipalities. It was responsible for planning and implementing municipal activities in economic and social development and ensuring balanced development of the county as a whole. Additionally, it oversaw the development of secondary and higher education, established work organizations of general interest, addressed issues significant to the county as a whole, ensured public order and peace, and carried out inspection tasks. Counties were abolished

³⁷⁸ Milosavljević, B. (2009). *Sistem lokalne samouprave u Srbiji*. II izdanje. SKGO. Beograd: Dosije studio.

³⁷⁹ Constitution of the People's Republic of Serbia, "Official Gazette of the People's Republic of Serbia" No. 14/1963.

³⁸⁰ *Ibidem*, article of the law 100.

by the Constitutional Law of 1966.³⁸¹ At the same time, the Constitutional Law on the Exercise of Rights and Duties in the City of Belgrade was enacted³⁸² a certain degree of centralization was implemented in the city of Belgrade. Belgrade exercised oversight regarding the legality of the work of the municipalities within its territory. Conversely, municipalities delegated several of their tasks to the City. The boundaries of the municipalities were not determined by their statutes but by a decision of the Belgrade City Assembly. This marked the end of the division of the city into narrower and wider areas.

According to the Constitution of the Socialist Federal Republic of Yugoslavia from 1974, the municipality was defined as "the basic self-managing and socio-political community, based on the authority and self-management of the working class and all working people. In the municipality, working people and citizens create and ensure the conditions for their life and work, direct social development, realize and harmonize their interests, meet common needs, exercise authority, and manage other social affairs. The functions of authority and management of social affairs are realized in the municipality."³⁸³ So far, this was likely the peak of decentralization in Serbia. The responsibilities of the municipality were to "create and develop material and other conditions for life and work and for self-managed satisfaction of material, social, cultural, and other common needs of workers and citizens; to direct and coordinate economic and social development and regulate relations of immediate interest to workers and citizens in the municipality. The municipality is responsible for performing tasks of common and general social interest and, for this purpose, establishes self-management bodies and authorities for the performance of these tasks.

The municipality is obliged to regulate the use of land and property for general use, relations in the housing and communal sector, and the protection and improvement of the environment. Furthermore, it must ensure the realization and protection of free-

³⁸¹ Constitutional Law on the Abolition of Districts in the Socialist Republic of Serbia ("Official Gazette"), 53/1966.

³⁸² Constitution of the Socialist Federal Republic of Yugoslavia from 1974, Article 116. ("Official Gazette of the SFRY" Year XXX, No. 9 - February 21, 1974): Article 116.

³⁸³ Constitutional Law on the Exercise of Rights and Duties in the City of Belgrade ("Official Gazette of the SFRY" No. 53/1966).

doms, rights, and duties of individuals and citizens; the realization of equality among peoples and nationalities; protect legality and the security of people and property; regulate and organize national defense, social self-protection, and social control."³⁸⁴ The Constitution of the Republic of Serbia from 1974 further specifies that the municipality "regulates and organizes national defense in accordance with the system of national defense; directs territorial defense and civil protection; directs and supervises the preparation of citizens, organizations of associated labor, and other self-managing organizations and communities for defense; organizes and ensures the execution of other tasks of national defense; organizes and ensures social self-protection and social control and performs other rights and duties established by the constitution, provincial constitution, and municipality statute."³⁸⁵

Civil protection in the SFRY was defined as a strategic component of the system of national defense and social self-protection, whose primary task was the protection and rescue of the population, material, cultural, and other goods from war destruction, natural disasters, and major accidents. It encompassed personal and mutual protection, protective and rescue measures, and civil protection units and staff. It was organized and prepared on the broadest societal basis, from residential and business buildings, public facilities, populated areas, local communities, economic entities, to public enterprises. The civil protection system was established on a bottom-up principle. All local communities, municipalities, republics, economic entities, and public enterprises implemented preventive and operational civil protection measures, organized, equipped, and trained staff and units. They also developed civil protection response plans in peacetime and in the event of war, as an integral part of national defense and social self-protection. Their task was also to mitigate the consequences in the most severe forms of war destruction, natural disasters, and major accidents. Financing was decentralized: each entity allocated funds for these needs.

There was a specific legal obligation for participation in civil protection, applicable to all citizens aged 16 to 60 (males) and 16 to 55 (females), with the possibility of voluntary involvement. Civil

³⁸⁴ *Ibidem*, article of the law 117.

³⁸⁵ Constitution of the Socialist Republic of Serbia from 1974. See more: http://www.rs/Storage/Global/Documents/Publikacije/Ustavni_sud_Republike_Srbije_1963-2008.pdf,

protection staff were expert-operational bodies for managing civil protection, addressing the consequences of war actions, natural disasters, and major accidents and could be established for: a building block, local community, economic entity, municipality, city, or republic. The civil protection commissioner was responsible for implementing and monitoring protective and rescue measures and was appointed at the level of each entity mentioned: buildings, local communities, economic entities, etc. Tasks were received from the superior staff.³⁸⁶ This was the peak of decentralized crisis management: functional, structural, and financial. Like any system in that period, it was ideologically colored, but regardless of that, the fact remains that it was largely comprehensive and integrated.

The 1990s were a period of the disintegration of the Socialist Federal Republic of Yugoslavia, accompanied by civil war, sanctions, and NATO bombing in 1999. Strong centralization characterized the entire period, which is still significantly felt today. The Constitution of the Republic of Serbia from 1990³⁸⁷ establishes the original competencies of the municipality but without guarantees of autonomy. The Law on Territorial Organization of the Republic of Serbia and Local Self-Government³⁸⁸ The municipality's responsibilities are enumerated in 10 points using the method of enumeration, thus departing from the multi-decadal method of the general clause.³⁸⁹ In the Constitution of the Socialist Republic of Yugoslavia from 1992, municipalities are not mentioned, but the process of centralization continues with the state being named as the owner of the property previously used by local self-governments. At the same time, through amendments to the Defense Law of the Republic of Serbia, preparations for war are made and the system of territorial defense and civil protection is centralized.³⁹⁰ In the existing system, cities and municipalities are losing their original competencies. The new law regulates the relationship between the Re-

³⁸⁶ Ratković, B., Petrović, P. (1981). Vojni leksikon. Beograd: Vojnoizdavački zavod.

³⁸⁷ Constitution of the Republic of Serbia, "Official Gazette of the RS" No. 1/90.

³⁸⁸ Law on the Territorial Organization of the Republic of Serbia and Local Self-Government, "Official Gazette of the RS" No. 79/92.

³⁸⁹ Milosavljević, B., „Dva veka lokalne samouprave u Srbiji-Razvoj zakonodavstva (1804-2014)“. SKGO. Beograd,. Margo-art.: 442-444.

³⁹⁰ Law on Defense, "Official Gazette of the RS" No. 45/91, 58/91-corrected, 53/93, 67/93, and 48/94.

public, citizens, and companies as the main subjects in defense, territorial defense, and civil protection matters. Cities, municipalities, and the City of Belgrade are mentioned solely in the context of their responsibilities and tasks they perform in peacetime, which they continue to carry out in the event of war and immediate war danger. The responsibilities of the Republic are to organize and implement territorial defense and civil protection through republican bodies. The Ministry of Defense conducts mobilization of state organs, units, and civil protection staff formed by the Republic and ensures the execution of mobilization in enterprises. Additionally, the Ministry of Defense assesses threats and possibilities for protection and rescue, providing elements of the threat assessment to ministries, municipalities, companies, and services dealing with protection and rescue.³⁹¹ Territorial defense, as a dedicated part of the armed forces, was organized at the level of the Republic, autonomous provinces, and municipalities.

The participation of territorial defense in protection and rescue, when urgent intervention is necessary and civil protection units are unable to mitigate the danger, could be ordered by the commander of the territorial defense of the Republic of Serbia.³⁹² Civil protection, as part of the defense system, was organized, prepared, and implemented as a system for the protection and rescue of people, material, and cultural assets from wartime destruction, elemental, technological, and other major threats in peacetime and wartime.³⁹³ The Ministry of Defense was responsible for organizing, preparing, implementing, equipping, and training units and staff, as well as financing civil protection. It was also tasked with forming republican, district, and city civil protection units. Following the law, the main subjects involved in defense actions were citizens and companies.

The government was responsible for operational management of protection and rescue actions. The republican civil protection staff was decentralized into organizational units formed for the territory of one or more municipalities, districts, and the city of Belgrade. The possibility of establishing municipal staff, i.e., staff for inhabited places, was also left open. Local self-government, as the bearer of original or transferred powers, completely disap-

³⁹¹ *Ibidem*, article of the law 9.

³⁹² *Ibidem*, article of the law 44.

³⁹³ *Ibidem*, article of the law 68.

peared from the crisis management system of the 1990s, as well as from most other public policies. It was assigned a passive, wait-and-see role, the consequences of which are still felt today.

Civil protection staff had an operational role: coordinating, preparing, and functioning civil protection, participating in the development of civil protection plans and actions, and managing protection and rescue actions. Municipal staff were responsible for mobilizing citizens and material resources, implementing evacuations, and blackout measures. District and city staff were tasked with mobilizing and deploying forces when two or more municipalities were simultaneously threatened, while the Republican staff responded in the case of simultaneous threats to a larger number of municipalities for which two or more district staff were formed. The minister issued regulations on the organization, formation of units, staff, and civil protection commissioners. However, this ambitiously designed, highly centralized system of micro and macro crisis management did not thrive in practice during the turbulent 1990s. The protection and rescue system collapsed.

The inherited characteristics of public administration from the 1990s include "strong centralization in decision-making, administrative culture oriented towards routine, weak mechanisms for intersectoral coordination, lack of capacity for strategies and development policies, widespread problems of motivation, and far-reaching politicization."³⁹⁴

7.1. Administrative and Territorial Framework of Crisis and Emergency Management Policy in Serbia

The Republic of Serbia is administratively and territorially divided into provinces, regions, administrative districts, the City of Belgrade, cities, and municipalities. The territorial organization of the Republic of Serbia consists of five regions (the Belgrade Region, the Vojvodina Region, the Šumadija and Western Serbia Region, the Southern and Eastern Serbia Region, and the Kosovo and Metohija Region). These include the City of Belgrade as a distinct territorial unit, 30 administrative districts, 24 cities, 30 city mu-

³⁹⁴ Kešetovic, Ž. (2013). Analysis of Civil Security Systems in Europe: Country Study: Serbia.

municipalities, 150 municipalities, 6,158 settlements, and 193 urban settlements. The Republic of Serbia includes the Autonomous Province of Vojvodina and the Autonomous Province of Kosovo and Metohija as forms of territorial autonomy.³⁹⁵

7.1.1 Central level of governance and administrative structure

Serbia is a parliamentary republic with a multi-party system. The National Assembly³⁹⁶ The National Assembly is the highest representative body and the holder of constituent and legislative authority. As the holder of constituent and legislative authority, the Assembly adopts and amends the Constitution; decides on changes to the boundaries of the Republic of Serbia; calls republican referendums; confirms international treaties when their confirmation is mandated by law; decides on war and peace and declares states of war and emergency; supervises the work of security services; adopts laws and other general acts within its jurisdiction; gives prior consent to the statute of autonomous provinces; adopts defense strategy; adopts development plans and spatial plans; adopts the budget and final account of the Republic of Serbia upon the proposal of the Government and grants amnesties for criminal offenses.

The Assembly has electoral, oversight, and representative functions. In fulfilling its electoral function, the National Assembly elects the Government; elects judges of the Constitutional Court and decides on their dismissal and termination of mandates; elects the President of the Supreme Court of Cassation, presidents of courts, the Republic Public Prosecutor, and public prosecutors and decides on the termination of their functions; elects judges and deputy public prosecutors; elects and dismisses the Governor of the National Bank of Serbia and the Board of Governors; elects and dismisses the Protector of Citizens and other officials as prescribed by law. The oversight function entails the National Assembly overseeing the work of the Government and deciding on the termination of the mandate of the Government and ministers; security services; the Governor of the National Bank of Serbia; the Protector of Citizens, and other bodies and organizations in accordance

³⁹⁵ See more: <http://www.srbija.gov.rs/pages/article.php?id=45625>.

³⁹⁶ See more at: <http://www.parlament.gov.rs/narodna-skupstina-/uloga-inacin-rada/nadleznost.2533.html>.

with the law. Members of Parliament, in performing their representative function, consider citizens' petitions and proposals and hold meetings with citizens. The National Assembly cannot be dissolved during a state of war or emergency. If dissolved, it carries out only current or urgent tasks as determined by law. In the event of a declaration of war or a state of emergency, its full jurisdiction is restored, lasting until the end of the same. The parliament is unicameral and consists of 250 deputies elected by direct elections, by secret ballot. The party with the majority of deputies (or coalition) appoints the Government as the executive body.

The Government consists of the President, one or more Deputy Presidents, and Ministers.³⁹⁷ The Government is accountable to the National Assembly for the Republic of Serbia's policies, the execution of laws and other general acts, and the functioning of state administrative bodies. The President of the Republic proposes a candidate for Prime Minister to the National Assembly. The candidate for Prime Minister presents the Government's program to the National Assembly and proposes its composition. Voting on the Government's program, the election of the Prime Minister, and members occur simultaneously. The Government is elected if the majority of the total number of members of parliament vote in favor of its election.

The Prime Minister leads and directs the Government, ensures the unity of its political actions, coordinates the work of its members, and represents the Government. The Prime Minister makes decisions and resolutions. Decisions are made by a majority vote of all Government members. Ministers are accountable to the Prime Minister, the Government, and the National Assembly for their work and the state of affairs within their ministry's jurisdiction. The Government establishes permanent working bodies (committees and commissions) and ad hoc working bodies (councils, working groups, expert groups, etc.).³⁹⁸ The state administration is independent, bound by the Constitution and the law, and

³⁹⁷ For more information, refer to the Constitution of the Republic of Serbia, "Official Gazette of RS" No. 98/2006: Articles 124-134.
<http://www.srbija.gov.rs>.

³⁹⁸ For more information, refer to the "Rules of Procedure of the Government," "Official Gazette of RS" No. 61 of July 18, 2006 - consolidated text, 69 of July 18, 2008, 88 of October 28, 2009, 33 of May 18, 2010, 69 of September 24, 2010, 20 of March 25, 2011, 37 of May 31, 2011, 30 of April 2, 2013.
http://www.srbija.gov.rs/vesti/dokumenti_sekcija.php?id=2432.

accountable to the Government for its work. State bodies include ministries and other bodies of state administration. A ministry may have one or more bodies within its structure, which can be directorates, inspectorates, or departments. Certain tasks within the jurisdiction of the Republic of Serbia can be entrusted by law to autonomous provinces, units of local self-government, enterprises, institutions, organizations, and individuals.

The President of the Republic expresses the state unity of the Republic of Serbia by representing it domestically and internationally, proclaims laws by decree, proposes candidates for Prime Minister to the National Assembly, proposes holders of functions to the National Assembly, appoints and recalls ambassadors of the Republic of Serbia based on the Government's proposal, receives letters of credence and letters of recall from foreign diplomatic representatives, grants pardons and awards, commands the Army, and appoints, promotes, and dismisses officers of the Serbian Army.³⁹⁹ The President is elected by popular vote and cannot be elected more than twice.

The President's term lasts for five years and begins to run from the day of taking the oath before the National Assembly. If the President's term expires during a state of war or emergency, it is extended so that it lasts until three months after the cessation of the state of war or emergency. The President does not have executive, judicial, or legislative authority, but due to the President's legitimacy, the power of legislative veto, and some other provisions, there is no consensus on whether the Serbian political system is semi-presidential.⁴⁰⁰ Serbia is a unitary centralized state with majority democracy (dominance of one party, strong presidential or prime ministerial position) with some elements of consociational democracy as a corrective factor.⁴⁰¹

7.1.2 Regional level of governance and administrative structure:

³⁹⁹ For more information, refer to the Constitution of the Republic of Serbia, "Official Gazette of RS" No. 98/2006: Articles 112-121. <http://www.predsednik.rs>.

⁴⁰⁰ Pejčković, M. (2010). Položaj šefa države u političkom sistemu Srbije, *Srpska politička misao*, 28 (2): 101-119.

⁴⁰¹ Kesetovic, Z. (2013). *Country Study: Serbia*, (2013). The research leading to these results has received funding from the European Union's Seventh Framework Programme FP7/2007-2013 under grant agreement n°284678. <http://anvil-project.net/results/>.

regions, provinces, districts

Region (latin: regio: area, province, territory, district, region) is a broad term that denotes various determinants: economic, social, geographical, cultural, military-political, administrative, etc. Regionalization is the process of creating regions, as well as a way of conducting state development policy that takes into account the needs of individual areas and ensures their balanced development. Regions, as forms of territorial decentralization, can take the form of regional self-government, as the highest level of local self-government, or traditionally understood territorial autonomy. The third form is within the concept of "Europe of the Regions," where the concept of region is expanded to different levels of administrative, socioeconomic, and territorial organization, which may include federal units in some countries.⁴⁰²

This concept entails a three-tier structure of decision-making: the European level (supranational), national (state), and regional. Regions here imply the first-level of authority below the national level. To enable statistical comparability of regions, the Nomenclature of Territorial Units for Statistics (NUTS) was introduced. The economic-statistical region is determined in Regulation (EC) No 1059/2003, the so-called NUTS regions. NUTS represents a statistical classification of spatial units ranging from level 1 to level 3. Level 1 encompasses areas with 3-8 million inhabitants, level 2 areas with 800,000 to 3 million inhabitants, and level 3 areas with 150-800,000 inhabitants. This classification does not impose an obligation on states to create a higher level of local or regional self-government but categorizes existing local self-governments according to the mentioned divisions for the purpose of competing for funds from development funds.

Serbia has a politically clear European orientation and, in pursuit of EU accession, has developed a strategic, legal, and institutional framework to adapt to the NUTS regional system and promote balanced regional development. The Law on Regional Development is in place⁴⁰³ defined a "region" as a statistical functional territorial unit, consisting of one or more areas, established for the purpose of planning and implementing regional development

⁴⁰² Milosavljević, B. (2009). "*Sistem lokalne samouprave u Srbiji*". II dopunjeno i izmenjeno izdanje. Beograd: Stalna konferencija gradova i opština: 9-1.

⁴⁰³ For more information, refer to the Law on Regional Development, "Official Gazette of RS" No. 51/2009, 30/2010, and 89/2015 – other law.

policies, in accordance with the nomenclature of statistical territorial units at level 2. It is not an administrative territorial unit and does not have legal personality.⁴⁰⁴ The area has the status of NUTS level 3. The government, upon the proposal of the Republic Statistical Office (RSO), determines the units of local self-government and urban municipalities that constitute the area, taking into account geographic units, the network of economic courts, chambers of commerce, and telecommunications areas.⁴⁰⁵

For the purposes of regional development, five statistical regions have been determined: the Vojvodina region, the Belgrade region, the Šumadija and Western Serbia region, the Southern and Eastern Serbia region, and the Kosovo and Metohija region (which will not be addressed in this work due to its complexity). The Belgrade region consists of 17 urban municipalities. Vojvodina is the second region with 7 districts and 45 cities and municipalities. Šumadija and Western Serbia constitute the third region with 8 districts (Šumadija, Pomoravlje, Raška, Rasina, Moravica, Zlatibor, Kolubara, Mačva) and 51 local self-governments. Southern and Eastern Serbia are the fourth region with 9 districts (Podunavlje, Braničevo, Bor, Zaječar, Nišava, Pirot, Toplica, Jablanica, Pčinja) and 52 LSGs.

Regionalization in Serbia is a complex topic with divided opinions. One of the reasons is the specificity of the position of individual regions. Vojvodina is the only region that is an administrative territorial unit with legal personality and at the same time is a region according to the NUTS classification. The city of Belgrade also has the status of a territorial unit with legal personality. The regions of Šumadija and Western Serbia, and Eastern and Southern Serbia, do not have legal personality, are not administrative units, and their status is different. The borders and administrative functioning of the first two regions are, conditionally speaking, naturally and historically confirmed and unproblematic. When it comes to the regions of Southern Serbia, the border is drawn along Corridor 10, from Belgrade towards Niš and further towards the border with Macedonia, i.e., Preševo. This border is, in fact, infrastructural, cutting through ethnically, demographically, linguistically, and religiously homogeneous territories of Southern Serbia.

⁴⁰⁴ *Ibidem*, article of the law 4.

⁴⁰⁵ For more information, refer to the Regulation on the Nomenclature of Statistical Territorial Units, "Official Gazette of RS" No. 109/09 and 46/10.

Each region is left with one "hot" territory, with strong separatist tendencies and religious-ethnic conflicts, and intractable dilemmas, which further makes this topic controversial.

The Constitution of Serbia limits state power to the right of citizens to provincial autonomy and local self-government, which is subject only to the oversight of constitutionality and legality.⁴⁰⁶ The province has the status of a legal entity and is defined as an autonomous territorial community established by the Constitution, in which citizens exercise the right to provincial autonomy. The highest authority is the assembly, composed of deputies elected by direct secret ballot for a term of 4 years. The highest legal act of the autonomous province is the statute, adopted by the provincial assembly, with prior approval from the National Assembly. The territory of autonomous provinces and their borders can only be changed by referendum. The Republic of Serbia has the Autonomous Province of Vojvodina and the Autonomous Province of Kosovo and Metohija, whose "essential autonomy will be regulated by a special law adopted through the procedure provided for amending the Constitution."⁴⁰⁷

The autonomous province regulates matters in the areas of spatial planning and development; agriculture, water management, forestry, hunting, fishing, tourism, hospitality, spas and resorts, environmental protection, industry and crafts, road, river, and railway traffic and road management, organizing fairs and other economic events; education, sports, culture, healthcare, social protection, and public information at the provincial level.⁴⁰⁸ The autonomous province has its own revenues. The Provincial Assembly has 120 members, who are elected in direct elections by secret ballot. The election and termination of the mandate of deputies, proportional representation of national minorities, and the establishment of electoral units are regulated by provincial assembly decision.⁴⁰⁹

Districts are a form of decentralization of power, administrative-territorial units formed by the Government by regulation to carry out the tasks of state administration outside the seat of state

⁴⁰⁶ For more information, refer to the Constitution of the Republic of Serbia (2006), Article 12.

⁴⁰⁷ *Ibidem*, article of the law 182.

⁴⁰⁸ *Ibidem*, article of the law 183.

⁴⁰⁹ For more information, refer to the Statute of the Autonomous Province of Vojvodina, "Official Gazette of AP Vojvodina" No. 20/2014: Article 32.

administration bodies.⁴¹⁰ Regulation on administrative districts⁴¹¹
The names, seats, and areas of administrative districts are defined by the Regulation on administrative districts. An administrative district is a subordinate center of state administration that encompasses all district subordinate units of all state administration bodies formed for its territory.⁴¹²

The following districts for the territory of the Autonomous Province of Vojvodina are listed by the Regulation:

- North Bačka Administrative District, covering the municipalities of Bačka Topola, Mali Iđoš, and the city of Subotica, headquartered in Subotica;
- West Bačka Administrative District, covering the municipalities of Apatin, Kula, Odžaci, and the city of Sombor, headquartered in Sombor;
- South Bačka Administrative District, covering the municipalities of Bač, Bačka Palanka, Bački Petrovac, Beočin, Bečej, Vrbas, Žabalj, Srbobran, Sremski Karlovci, Temerin, Titel, and the city of Novi Sad, headquartered in Novi Sad;
- Central Banat Administrative District, covering the municipalities of Žitište, Nova Crnja, Novi Bečej, Sečanj, and the city of Zrenjanin, headquartered in Zrenjanin;
- North Banat Administrative District, covering the municipalities of Ada, Kanjiža, Novi Kneževac, Senta, and Čoka, and the city of Kikinda, headquartered in Kikinda;
- South Banat Administrative District, covering the municipalities of Alibunar, Bela Crkva, Vršac, Kovin, Kovacica, Opovo, Plandište, and the cities of Vršac and Pančevo, headquartered in Pančevo;
- Srem Administrative District, covering the municipalities of Inđija, Irig, Pećinci, Ruma, Stara Pazova, Šid, and the city of Sremska Mitrovica, headquartered in Sremska Mitrovica.

For the territory of Serbia excluding provinces, the following districts are listed:

⁴¹⁰ For more information, refer to the Law on State Administration, "Official Gazette of RS" No. 79/2005, 101/2007, 95/2010, and 99/2014.

⁴¹¹ For more information, refer to the Regulation on Administrative Districts, "Official Gazette of RS" No. 15/2006.

⁴¹² *Ibidem*, article of the law 2.

- Mačva Administrative District, covering the municipalities of Bogatić, Vladimirci, Koceljewa, Krupanj, Ljubovija, Mali Zvornik, and the cities of Loznica and Šabac, with headquarters in Šabac;
- Kolubara Administrative District, covering the municipalities of Lajkovac, Ljig, Mionica, Osečina, Ub, and the city of Valjevo, with headquarters in Valjevo;
- Podunavlje Administrative District, covering the municipalities of Velika Plana, Smederevska Palanka, and the city of Smederevo, with headquarters in Smederevo;
- Braničevo Administrative District, covering the municipalities of Veliko Gradište, Golubac, Žabari, Žagubica, Kučevo, Malo Crniće, Petrovac, and the city of Požarevac, with headquarters in Požarevac;
- Šumadija Administrative District, covering the municipalities of Aranđelovac, Batočina, Knić, Lapovo, Rača, Topola, and the city of Kragujevac, with headquarters in Kragujevac;
- Pomoravlje Administrative District, covering the municipalities of Despotovac, Paraćin, Rekovac, Svilajnac, Čuprija, and the city of Jagodina, with headquarters in Jagodina;
- Bor Administrative District, covering the municipalities of Bor, Kladovo, Majdanpek, and Negotin, with headquarters in Bor;
- Zaječar Administrative District, covering the municipalities of Boljevac, Knjaževac, Sokobanja, and the city of Zaječar, with headquarters in Zaječar;
- Zlatibor Administrative District, covering the municipalities of Arilje, Bajina Bašta, Kosjerić, Nova Varoš, Požega, Priboj, Prijepolje, Sjenica, Čajetina, and the city of Užice, with headquarters in Užice;
- Moravica Administrative District, covering the municipalities of Gornji Milanovac, Ivanjica, Lučani, and the city of Čačak, with headquarters in Čačak;
- Raška Administrative District, covering the municipalities of Vrnjačka Banja, Raška, Tutin, and the cities of Kraljevo and Novi Pazar, with headquarters in Kraljevo;
- Raška Administrative District, covering the municipalities of Aleksandrovac, Brus, Varvarin, Trstenik, Čičevac, and the city of Kruševac, with headquarters in Kruševac;

- Nišava Administrative District, covering the municipalities of Aleksinac, Gadžin Han, Doljevac, Merošina, Ražanj, Svilajnac, and the city of Niš, with headquarters in Niš;
- Toplica Administrative District, covering the municipalities of Blace, Žitorađa, Kuršumlija, and Prokuplje, with headquarters in Prokuplje;
- Pirot Administrative District, covering the municipalities of Babušnica, Bela Palanka, Dimitrovgrad, and the city of Pirot, with headquarters in Pirot;
- Jablanica Administrative District, covering the municipalities of Bojnik, Vlasotince, Lebane, Medveđa, Crna Trava, and the city of Leskovac, with headquarters in Leskovac;
- Pčinja Administrative District, covering the municipalities of Bosilegrad, Bujanovac, Vladicin Han, Preševo, Surdulica, Trgovište, and the city of Vranje, with headquarters in Vranje.

For the Province of Kosovo and Metohija, the following are listed:

- Kosovo Administrative District, covering the territory of the municipalities of Glogovac, Kacanik, Kosovo Polje, Lipljan, Obilic, Podujevo, Urosevac, Stimlje, Strpce, and the city of Pristina, headquartered in Pristina;
- Pec Administrative District, covering the territory of the municipalities of Decani, Djakovica, Istok, Klina, and Pec, headquartered in Pec;
- Prizren Administrative District, covering the territory of the municipalities of Gora, Orahovac, Suva Reka, and Prizren, headquartered in Prizren;
- Kosovska Mitrovica Administrative District, covering the territory of the municipalities of Vucitrn, Zubin Potok, Zvecan, Leposavic, and Kosovska Mitrovica, headquartered in Kosovska Mitrovica;
- Kosovo-Pomoravlje Administrative District, covering the territory of the municipalities of Vitina, Gnjilane, Novo Brdo, and Kosovska Kamenica, headquartered in Gnjilane.

The administrative district is headed by a chief appointed by the Government for a term of 5 years upon the proposal of the Minister for Public Administration and Local Self-Government, in accordance with the Law on Civil Servants. Among other duties, the chief collaborates with municipalities and cities to improve the functioning of the district branches of state administrative bodies. The city of Belgrade does not have a formed district because it

hosts the headquarters of state bodies. It is a separate entity, and its status is defined by the Law on the Capital City.⁴¹³

7.1.3 Local governance levels and administrative structure and competencies

Local self-government is defined by the Law on Local Self-Government as "the right of citizens to manage public affairs of immediate, common, and general interest for the local population, directly and through freely elected representatives in units of local self-government, as well as the right and ability of local self-government bodies to regulate and manage public affairs within the bounds of the law, which fall under their jurisdiction and are of interest to the local population."⁴¹⁴ It is realized in units of local self-government: municipalities, cities, and the City of Belgrade, which have the status of legal entities and possess their own property.

The municipality is the basic territorial unit in which local self-government is realized, whose territory represents a natural and geographic whole, an economically connected space, with developed and built communication between inhabited places, with its seat as a gravitational center. The condition is to have at least 10,000 inhabitants, but under certain conditions, they can have fewer.⁴¹⁵ Today, the average local self-government unit in Serbia has around 50,000 inhabitants, which is considered high by European standards.⁴¹⁶ A city is a unit of local self-government that represents the geographical, economic, administrative, and cultural center of a broader area and has more than 100,000 inhabitants. The population requirement can be lower if there are economic, geographical, or historical reasons. Serbia has 28 cities: Belgrade, Novi Sad, Kragujevac, Niš, Subotica, Sombor, Zrenjanin, Pančevo, Kikinda, Vršac, Sremska Mitrovica, Loznica, Šabac, Valjevo, Vršac, Smederevo, Požarevac, Jagodina, Zaječar, Užice, Kraljevo, Čačak, Novi Pazar, Kruševac, Pirot, Leskovac, Vranje, Pristina. The city

⁴¹³ For more information, refer to the Law on the Capital City, "Official Gazette of RS" No. 129/2007, 83/2014 – other law, and 101/2016 – other law.

⁴¹⁴ For more information, refer to the Law on Local Self-Government, "Official Gazette of RS" No. 129/2007, 83/2014 – other law, Article 2.

⁴¹⁵ Ibidem.

⁴¹⁶ Begović, B., Vacić, Z., Mijatović, B., Simić, A. (2000). Upravljanje lokalnom zajednicom-putevi ka modernoj lokalnoj samoupravi, Beograd: CLDS: 42-43.

statute may provide for the establishment of two or more urban municipalities. Urban municipalities are present in Belgrade, Niš, Vranje, Užice, Novi Sad, and Požarevac.

The status of the city of Belgrade is determined by the Law on the Capital City.⁴¹⁷ The city of Belgrade has 17 urban municipalities (Barajevo, Voždovac, Vračar, Grocka, Zvezdara, Zemun, Lazarevac, Mladenovac, Novi Beograd, Obrenovac, Palilula, Rakovica, Savski Venac, Sopot, Stari Grad, Surčin, Čukarica). The city and urban municipalities have the status of a legal entity. The city's responsibilities are specified in the City Statute.⁴¹⁸

The highest legal act of the local self-government unit (LSU) is the statute, and the highest body is the assembly. The assembly consists of councilors elected by direct secret ballot. Councilors have the right to mandate protection, including judicial protection. The number of councilors is determined by the statute, with a minimum of 19 and a maximum of 75 for a municipality, and a maximum of 90 for a city. The Belgrade City Assembly has 110 councilors. The LSU assembly decides if the majority of councilors are present. Decisions are made by a majority vote of present councilors, except in the case of adopting the statute, budget, and urban plans, which require a majority vote of the total number of councilors. The assembly is convened by the president of the assembly as needed, at least once every three months. Assembly sessions are public, except in cases of security reasons or other situations specified by law. The president of the assembly is elected from among the councilors by secret ballot, with a majority vote of the total number of councilors, for a term of four years.

The executive bodies of the LSU are the president/mayor and the (municipal/city) council. The president/mayor of the LSU is elected from among the councilors by secret ballot for four years. The candidate for the president of the LSU is proposed by the president of the assembly and elected by the LSU assembly. The president/mayor represents and acts on behalf of the LSU; proposes methods for resolving issues decided by the assembly; is responsible for budget execution; directs and coordinates the work of the municipal administration; issues individual acts; and performs

⁴¹⁷ For more information, refer to the Law on the Capital City, "Official Gazette of RS" No. 129/2007, 83/2014 – other laws, and 101/2016 – other law.

⁴¹⁸ Consult the Statute of the City of Belgrade, "Official Gazette of the City of Belgrade" No. 39/2008; Decision on Amendments to the Statute of the City of Belgrade, "Official Gazette of the City of Belgrade" (No. 6/10 and 23/13).

other duties specified by the statute and other municipal acts. The president of the municipality/city is the position of the commander of the municipal/city headquarters for disasters, and the deputy is the deputy president/mayor or a member of the municipal/city council. The council is elected for a term of four years by secret ballot, with a majority vote of the total number of councilors. The deputy president/mayor is a member of the council by function. The number of council members is determined by the statute and cannot exceed 11. The City of Belgrade may have 13 members of the city council.

The municipal/city council proposes the statute, budget, and other decisions and acts adopted by the assembly; directly executes assembly decisions; decides on temporary financing in case of budget non-adoption before the start of the fiscal year; supervises the work of the municipal administration; resolves second-instance administrative proceedings within the municipality's jurisdiction; executes delegated competencies; and appoints and dismisses heads of administration and heads of administrations for specific areas. The president/mayor is responsible for the legality of the council's work and is obliged to suspend the implementation of a council decision if it is deemed inconsistent with the law. The council can decide if the majority of its members are present. Decisions are made by a majority vote of present members unless otherwise specified by law or the statute for specific issues.

Local Government Administration

The administration of the local self-government unit (LSU) is organized as a unified body and is managed by the chief executive. Municipalities/cities with over 50,000 inhabitants can establish specialized administrations for particular areas. The administration may have internal organizational units. The municipal/city administration prepares drafts of regulations and other acts adopted by the municipality/city assembly, the president/mayor, and the council; executes decisions of the assembly, the president/mayor, and the council; adjudicates in administrative proceedings at the first instance regarding the rights and obligations of citizens, companies, institutions, and other organizations in administrative matters within the LSU's jurisdiction; performs administrative supervision over the implementation of regulations and other general acts of the LSU assembly; executes dele-

gated tasks and performs professional and other duties specified by the assembly, the president/mayor, and the council. The chief executive of the administration is appointed by the council, based on a public call, for a term of five years, and is accountable to the assembly and the council for their work and the work of the administration. The statute may provide for the appointment of assistant presidents/mayors for specific areas (economic development, primary healthcare, environmental protection, urban planning, agriculture, etc.) in the municipal administration. They are appointed and dismissed by the president/mayor.

A municipality can have up to three assistant presidents, and a city can have up to five assistant mayors. Assistants initiate proposals, suggest projects, and provide opinions on matters relevant to development in the areas for which they are appointed. The organization of the administration is determined by the assembly upon the proposal of the council. The internal organization and systematization of the municipal/city administration are determined by the chief executive with the consent of the council.

The municipal council resolves conflicts of jurisdiction between the municipal administration and other companies, organizations, and institutions, as well as between municipal administrations for specific areas. Conflicts of jurisdiction between internal organizational units are resolved by the chief executive of the municipal/city administration or the chief of the administration for specific areas.⁴¹⁹ The bodies and services of the local self-government unit (LSU) are obliged to inform the public about their work, provide citizens with necessary data, explanations, and information in exercising their rights and obligations, and enable everyone to submit complaints about their work.

Local communities, as a form of local self-government, are organized in villages and urban settlements (quarters, neighborhoods, districts, etc.).⁴²⁰ A local community is established by a decision of the LSU assembly, with a majority vote of the total number of councilors, after obtaining the opinion of the citizens. The local community has the status of a legal entity and can be entrusted with the performance of tasks within the jurisdiction of the municipal/city administration.

⁴¹⁹ The Law on Local Self-Government (2014): Article 62.

⁴²⁰ *Ibidem*: Articles 72-77.

Local self-government in Serbia is monotypic: both cities and municipalities generally have the same levels of jurisdiction over public policies in areas regulated by the Law on Local Self-Government (2014). The exception is the City of Belgrade, which has certain additional competencies. Local self-government, as an original jurisdiction, includes tasks such as the maintenance and development of communal activities, road networks (local, uncategorized, and regional roads), environmental protection, maintenance of residential buildings and ensuring their safety, land use planning programs, planning and implementation of local economic development programs, promotion of cooperatives, organization and provision of line navigation within the municipality, establishment of reserves, determination of their scope and structure.

The local self-government unit establishes, monitors, and ensures the functioning of institutions and organizations in the field of primary and preschool education, culture, primary healthcare and public health, social protection, physical culture, sports, child protection, and tourism, as well as the protection of cultural heritage. It also takes care of the protection, use, and regulation of agricultural land, determines erosion-prone areas, regulates and determines the manner of use and management of resources, public wells, and fountains, and determines water management conditions. The municipality/city is responsible for the realization, protection, and advancement of human rights and individual and collective rights of members of national minorities and ethnic groups, determining the language and script of national minorities used officially within its territory, regulating the organization and functioning of peace councils.

The municipality/city takes care of local public information, manages the municipality's property, provides legal protection of its rights and interests as well as legal assistance to citizens, organizes bodies, organizations, and services for the needs of the municipality, organizes inspection services and conducts inspection supervision within its own jurisdiction, prescribes offenses for violations of municipal regulations, regulates and ensures the use of the municipality's coat of arms, name, and other symbols. Finally, the municipality/city organizes protection from natural disasters and other major calamities, fire protection, and creates conditions for

their prevention or mitigation.⁴²¹ In addition to its original competencies, local self-government also implements delegated competencies (by the Republic or autonomous province).

In addition to the competencies assigned to municipalities and cities by the Constitution and the Law, the City of Belgrade also carries out inspection supervision in the field of water management, issues approvals, and provides conditions for the installation of navigational facilities; it constructs, reconstructs, maintains, and manages state municipal and uncategorized roads (except highways); establishes and performs tasks of communal police and takes care of fire protection.⁴²² Decision on Changing the Statute of the City of Belgrade⁴²³ a quite general definition is that the city organizes protection against natural and other major disasters and creates conditions for their prevention, removal, or mitigation of their consequences.⁴²⁴

The amendment also states: 'The City of Belgrade adopts a plan and program for the development of the protection and rescue system for the territory of the city, makes decisions on the organization and functioning of civil protection in the territory of the city, and ensures the implementation of that decision, in accordance with the law; establishes the city's disasters headquarters; performs other protection and rescue tasks in accordance with the law and other regulations, except for the tasks performed by the city municipality in accordance with this statute.' In the same article, after point 24, a new point is added which reads: '24a: the city develops its defense plan which is an integral part of the Defense Plan of the Republic of Serbia and performs other tasks in accordance with the law and other regulations in this area.'

7.2. Responsibilities of various administrative levels in crisis and disaster management policies in Serbia (central, regional, local)

⁴²¹ The Law on Local Self-Government (2014): Article 20.

⁴²² The Law on the Capital City (2016): Article 8.

⁴²³ Decision on Amendments to the Statute of the City of Belgrade, "Official Gazette of the City of Belgrade" (No. 23/13): Article 25, point 24.

⁴²⁴ Statute of the City of Belgrade, "Official Gazette of the City of Belgrade" (No. 39/08): Article 25.

Each listed administrative level of government has certain responsibilities both in preparing for and responding to a crisis in accordance with the legal framework.⁴²⁵ The difference lies in the roles of different levels within crisis management policy. The central level of government in Serbia primarily has a strategic role: oversight, control, monitoring, planning, and correcting the entire system. Districts, as administrative-territorial units, act as mediators between the local and central, or provincial, levels. The local level of government is predominantly operational, designed to address crises where they occur: in the local community.

7.2.1. Competencies and structure of the central level in crisis and disaster management policy in Serbia

In the disaster risk reduction and disaster management system, the Government ensures the construction, development, and planned integration of system components and tasks into a unified whole. It directs and coordinates the work of state administration bodies in implementing disaster risk reduction and disaster management measures and activities, issues acts in accordance with the law, and takes other measures within its competence in this area.

The Ministry responsible for disaster risk reduction and disaster management: develops and proposes the Strategy; develops and proposes the Action Plan for the implementation of the Strategy; coordinates the development of the Disaster Risk Assessment of the Republic of Serbia and the Protection and Rescue Plan of the Republic of Serbia; develops and proposes the National Disaster Risk Reduction Plan; establishes and maintains the Disaster Risk Register in the Republic of Serbia; approves risk assessments, protection and rescue plans, and accident protection plans; organizes, plans, and conducts training for forces and entities of the disaster risk reduction and disaster management system; in cooperation with the Ministry of Defense and the Ministry of Telecommunications, takes measures to organize and secure telecommunication and information systems for the purpose of management and coordination in emergencies, data and information transmission, and their protection; consolidates and maintains a

⁴²⁵ Kešetović, Ž. (2013). *Ibidem*.

unified information database on human and material-technical resources of the disaster risk reduction and disaster management system entities and forces; forms, trains, equips, mobilizes, and engages specialized civil protection units for the territory of the Republic of Serbia; initiates scientific research in this area; directly participates in programs, projects, and other activities to improve the disaster risk reduction and disaster management system; orders partial mobilization of civil protection units at the republic level; directly collaborates, exchanges information and data with similar services from other countries and international organizations; establishes international cooperation in this area; coordinates the reception and provision of international assistance; plans and implements sustainable financing for material-technical equipment, procurement, donations, and projects to ensure the functioning and improvement of the disaster risk reduction and disaster management system; oversees the organization and functioning of civil protection measures; implements measures for the protection and rescue of people and property endangered by disasters; collects and processes data and information on disasters, exchanges information and data with the competent services of other countries or international organizations about hazards, cross-border incidents, disasters, and other emergencies; organizes and performs early warning, notification, and alerting in case of a disaster; organizes and manages the unified public alert system in the Republic of Serbia; approves project documentation for the public alert system; performs planning, organizing, training, use, and control of disaster risk reduction and disaster management system forces; organizes and conducts, marking, locating, excavation, identification, removal, transportation, storage, and destruction of explosive remnants of war (ERW); ensures the participation of the police and other organizational units in implementing measures and activities provided by this law; prepares and implements security protection of areas, infrastructure, and objects significant for undertaking measures and performing protection and rescue tasks; performs other duties as prescribed by law.⁴²⁶

State administration bodies, within their established scope of work, in the field of disaster risk reduction and disaster man-

⁴²⁶ Cvetković, V., & Čaušić, L. (2022). Zbirka propisa iz oblasti vanrednih situacija. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijam, str. 137-138.

agement: ensure the consistent alignment of all general and planning acts they adopt or prepare with the policy in this area; timely report to the Ministry on observed occurrences and problems relevant to this area, as well as on data significant for the assessment of existing risks, the emergence of new risks and threats, and other relevant facts; plan, organize, and ensure the functioning of their activities in emergencies; participate in the development of the Strategy, the National Disaster Risk Reduction Plan, the Protection and Rescue Plan of the Republic of Serbia, and other planning and program documents; participate in the development of the Disaster Risk Assessment of the Republic of Serbia within their scope of work and submit it to the Ministry, except for the Ministry of Defense; perform other duties established by law.

The autonomous province, within its scope of work in the field of disaster risk reduction and disaster management: ensures the consistent alignment of all general and planning acts it adopts or prepares with the policy in this area; adopts an act on the organization and functioning of civil protection in the territory of the autonomous province and ensures its implementation; plans and allocates budgetary funds intended for disaster risk reduction and disaster management; forms the provincial disaster management headquarters; establishes a situational center in accordance with the act on the organization and functioning of civil protection, depending on technical and material capabilities; adopts an annual work plan and an annual report on the work of the provincial disaster management headquarters; develops and adopts a risk assessment, the provincial disaster risk reduction plan, and the protection and rescue plan; identifies entities of special importance for protection and rescue in the autonomous province, upon the proposal of the disaster management headquarters; provides telecommunication and information support for protection and rescue purposes, as well as integration into the telecommunication and information system of the 112 Service and connects with it; timely reports to the Ministry and other competent state bodies on observed occurrences and problems relevant to risk reduction, on data significant for the assessment of existing risks, the emergence of new risks and threats, and other relevant facts for this area; performs other duties established by law.⁴²⁷

⁴²⁷ Ibidem, pp. 138.

The management of disaster protection and rescue measures falls under the jurisdiction of the Emergency Management Sector of the Republic of Serbia. It was formed in 2009 by merging the Protection and Rescue Sector and the Directorate for Disaster Management of the Ministry of Defense into a single service. Through the Emergency Management Sector, the Ministry of Internal Affairs organizes and conducts activities aimed at protecting the lives, health, and property of citizens, maintaining essential living conditions, and preparing to overcome situations arising from disasters and other major accidents, technical-technological incidents, and other hazardous conditions resulting from natural and man-made disasters.⁴²⁸

The Law on Disaster Risk Reduction and Emergency Management⁴²⁹ (The Official Gazette of the Republic of Serbia, 87/2018, Article 1) regulates: disaster risk reduction; prevention and strengthening of the resilience and preparedness of individuals and communities to respond to the consequences of disasters; protection and rescue of people, material, cultural, and other goods; the rights and obligations of citizens, associations, legal entities, local self-government units, autonomous provinces, and the Republic of Serbia; disaster management; the functioning of civil protection; early warning, notification, and alerting; international cooperation; inspection supervision, and other issues significant for the organization and functioning of the disaster risk reduction and management system.

Disaster risk reduction and management are based on the following principles:⁴³⁰

- 1) Principle of Priority: disaster risk reduction and disaster management are national and local priorities;
- 2) Principle of Integrated Action and Intersectoral Cooperation: risk assessments and preventive measures and activities undertaken to prevent and reduce disaster risks are integrated into sectoral development plans and programs in all areas of state administration;
- 3) Principle of the Primary Role of Local Communities: local self-government units have the primary role in disaster risk

⁴²⁸ Cvetković, V. (2022). Taktika zaštite i spasavanja u katastrofama. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama, str. 118.

⁴²⁹ The Official Gazette of the Republic of Serbia, 87/2018, Article 1.

⁴³⁰ The Official Gazette of the Republic of Serbia, 87/2018, Articles 3-9.

management, supported by all relevant state and provincial institutions;

- 4) Principle of Gradual Use of Forces and Resources: in protection and rescue operations, local self-government forces and resources are used first. When these are insufficient, the competent authority ensures the use of other forces and resources from the Republic of Serbia, including the police and the Serbian Armed Forces if necessary.
- 5) Principle of Equality and Human Rights Protection: entities in the disaster risk reduction and disaster management system ensure gender equality and take care that no decision, measure, or action leads to a disadvantaged position for women, ensuring their equal participation in the disaster risk reduction and disaster management system;
- 6) Principle of Participation and Solidarity: Affected citizens have the right to participate in designing and implementing disaster risk reduction activities, propose and undertake specific measures, tasks, and activities in protection and rescue, and express their needs for assistance.
- 7) Principle of Public Information: competent authorities timely and fully inform the public about disaster risks, relevant data, and protective measures against their consequences, as well as other measures undertaken for disaster risk management.

In 2018, the Emergency Management Sector was reorganized. It includes the following organizational units: units at the headquarters, Emergency Management Directorates in Belgrade, Novi Sad, Niš, and Kragujevac, and Emergency Management Departments in Bor, Valjevo, Vranje, Zaječar, Zrenjanin, Jagodina, Kikinda, Kraljevo, Kruševac, Leskovac, Novi Pazar, Pančevo, Pirot, Požarevac, Prijepolje, Prokuplje, Smederevo, Sombor, Sremska Mitrovica, Subotica, Užice, Čačak, and Šabac. For carrying out tasks at the headquarters of the Emergency Management Sector, the following organizational units were established: the Legal Affairs and International Cooperation Department, the Economic and Material-Technical Support Department, the Preventive Protection Directorate, the Fire and Rescue Units and Civil Protection Directorate, and the Risk Management Directorate.⁴³¹

Prevention Protection Department includes: department for preventive protection during construction of complex objects; de-

⁴³¹ Cvetković, V. (2022). Ibidem, str. 199-121.

partment for inspection supervision; department for traffic and transportation of explosive materials and controlled goods;

Fire and Rescue Units and Civil Protection Department includes: department for fire and rescue units; department for coordination of work of fire and rescue units and forces of the protection and rescue system; department for civil protection units; department for unexploded ordnance (UXO);

Risk Management Department includes: National 112 Center; department for planning and risk assessment; department for coordination and management in emergencies.

The Emergency Management Department in Belgrade includes: department for preventive protection during construction of objects; department for inspection supervision; department for general legal and administrative affairs; department for risk management; department for civil protection; 112 operational center; fire and rescue brigade.

The Emergency Management Department in Kragujevac includes: department for implementation of preventive measures during the use of objects; department for implementation of preventive measures during construction of objects; department for risk management; department for civil protection; 112 operational center; fire and rescue brigade.

The Emergency Management Departments in Novi Sad and Niš include: department for preventive protection during construction of objects; department for inspection supervision; department for risk management; department for civil protection; 112 operational center; fire and rescue brigade.

The Emergency Management Departments in Bor, Vranje, Zaječar, Zrenjanin, Jagodina, Kikinda, Kruševac, Leskovac, Pančevo, Prokuplje, Smederevo, Užice, Čačak, and Šabac include: section for preventive protection; section for civil protection and risk management; 112 operational center; fire and rescue battalion.

The Emergency Management Departments in Valjevo, Kraljevo, Novi Pazar, Pirot, Požarevac, Prijepolje, Sombor, Sremska Mitrovica, and Subotica include: section for preventive protection; section for civil protection and risk management; fire and rescue battalion.

The organizational units at the headquarters are structured in a way that they are operationally connected to corresponding organizational units and tasks of branch Emergency Management Departments and Emergency Management Departments or they

perform tasks within their jurisdiction throughout the area where the Ministry of Internal Affairs is competent. The Emergency Management Sector is led by the Sector Chief, who is also the Assistant Minister.⁴³²

7.2.2. Competencies and Structure of the Regional Level in Crisis and Emergency Management Policy in Serbia

The province, through its respective bodies, is responsible for making decisions regarding the organization and operation of civil protection within its territory, ensuring that it functions in alignment with the unified protection and rescue system of the Republic of Serbia. Additionally, the province formulates and adopts a development plan and program for the protection and rescue system, plans and determines funding sources, establishes the Provincial Emergency Headquarters (hereafter: Provincial Headquarters), and approves the annual work plan and report of the Provincial Headquarters.

The province is also tasked with securing resources (professional, technical, and material), which includes the authority to designate qualified legal entities important for protection and rescue operations. It ensures telecommunications and information support for protection and rescue needs, and integrates with the telecommunications and information system of the Observation, Notification, and Alert Service. Furthermore, the province develops and adopts a Risk Assessment and Protection and Rescue Plan for disasters.

7.2.3. Competencies and Structure of the Local Level in Crisis and Emergency Management Policy in Serbia

In matters of protection and rescue, local self-government units are obligated to establish and ensure the implementation of civil protection within their territory, in accordance with the unified protection and rescue system. Within their jurisdiction in disaster risk reduction and disaster management, local self-government units must adopt a regulation on the organization and

⁴³² Milašinović, M. (2019). Uticaj međunarodne saradnje na sistem smanjenja rizika od elementarnih i drugih nepogoda u Republici Srbiji, str. 115-116.

functioning of civil protection within the territory, based on the proposal of the relevant headquarters, and ensure its implementation; develop and adopt a risk assessment, a local disaster risk reduction plan, a protection and rescue plan, and an external protection plan against major accidents if a higher-tier SEVESO complex is located in their territory; establish a disaster management headquarters; identify entities of special importance for the protection and rescue of the local self-government unit based on the proposal of the relevant headquarters; plan and allocate budget funds for disaster risk reduction and disaster management; form civil protection units; establish a situation center according to the regulation on the organization and functioning of civil protection, depending on technical and material capabilities; develop a coverage study of the public alert system for their territory (acoustic study) and ensure the maintenance, procurement, and installation of acoustic sources (sirens) and other equipment within the unified public alert system of the Republic of Serbia; cooperate with neighboring local self-government units in implementing measures and activities significant for disaster risk reduction and disaster management; undertake urgent and preventive measures to reduce disaster risks; adopt the annual work plan and report of the disaster management headquarters; and perform other tasks established by law.

Local self-government units can independently develop risk assessments, protection and rescue plans, and external protection plans against major accidents if they employ at least one full-time licensed person. All rights and obligations provided by this law for local self-government units also apply to the city municipalities of Belgrade. Local self-government units establish forms of mutual cooperation and association to provide assistance, exchange experiences, and jointly plan and undertake measures and activities within their competencies defined by this law. They also cooperate with regions and municipalities in neighboring countries, in accordance with the law. Competent services and other state and provincial bodies are required to provide professional and other assistance and support to local self-government units in performing tasks established by this law, within their competencies and capabilities.⁴³³

⁴³³ Cvetković and Čaušić, *ibidem*, pp. 139.

Effective reduction of natural disaster risks can only be achieved through the implementation of integrated education about natural disasters within the family, school, and local community. One study focused on examining the state and influencing factors of students' education about natural disasters within the family. The results indicate that 70.7% of students reported being educated within the family; 57.4% expressed a desire to be educated about natural disasters; 18% preferred to receive this education within the family; and 51.9% preferred to receive it at school. Inferential statistical analyses reveal that education within the family is significantly influenced by gender, age, parents' education level, grade level, and school performance.⁴³⁴

As preventive measures, cities and municipalities are obligated to develop and adopt a Disaster Risk Assessment and an Emergency Protection and Rescue Plan; monitor hazards, inform the population about these hazards, and undertake other preventive measures to reduce the risk of natural disasters and other emergencies; procure and maintain alert systems within the public alert system of the Republic of Serbia, and participate in creating the coverage study for their own territory; organize, develop, and manage individual and collective protection; and form, organize, and equip general-purpose civil protection units.

The role of the family is crucial for the improvement and sustainability of education about natural disasters. According to Drabek, the family has long been considered the fundamental unit in disaster studies.⁴³⁵ It serves as an environment where most individuals spend a significant portion of their formative years. In other words, it's a time when individuals grow, develop psychologically, and adopt various values, behaviors, and modes of conduct. Research indicates that the family, as the basic social unit, can enhance the survival of its members and is recognized as a key critical element in understanding and predicting human behavior in the event of disasters.⁴³⁶ Paterson emphasizes that the family, as a social mechanism, promotes resilience and increases survival ca-

⁴³⁴ Cvetković, V. M., & Filipović, M. (2018). Ispitivanje uloge porodice u edukaciji dece o prirodnim katastrofama. *Nauka, bezbednost, policija*, 23(1), 71-85.

⁴³⁵ T. Drabek; W. Key, *Conquering disaster: Family recovery and long-term consequences*: Irvington Publishers. 1984.

⁴³⁶ B. White, *Disaster preparedness in the United States*. Humboldt state university, 2007.

pacities.⁴³⁷ Certainly, it should be noted that the level of preparedness of families for natural disasters is not the same in environments where there is a permanent risk of flooding (cities and settlements in river basin valleys), where rivers frequently overflow, sometimes several times a year, and in families in hilly or mountainous areas where, due to the terrain configuration, they can never be flooded.

The roots of the family's primary role in reducing the risk of natural disasters stem from the fundamental functions of the modern family, including reproductive, economic, sexual, and emotional functions, as well as the functions of providing protection, entertainment, education, and upbringing.⁴³⁸ The role of the family is highly significant when it comes to the educational and upbringing functions, considering that children heavily shape their worldview, adopt behavior patterns, and lifestyles from their parents. Parents bear legal, social, and moral responsibilities. Within the family as a "domestic social structure," parents establish behavioral guidelines and encourage actions, some of which are directly related to disasters, especially those taken before the disaster occurs. However, the influence of parents is also substantial on actions taken during disasters and those that serve as resources for mitigating traumatic consequences and injuries after the disaster.⁴³⁹

7.2.4. The type of responsibility for preparation and response to crises and emergencies

An disaster is declared immediately upon learning of an imminent danger, and it is lifted when the danger ceases, or when there is no longer a need to implement protective and rescue measures. An disaster can be declared for a municipality, city, or the city of Belgrade, as well as for a part or the entire territory of

⁴³⁷ J. Patterson, Integrating family resilience and family stress theory. *Journal of marriage and family*, vol. 64, 2/2002, pp. 349-360.

⁴³⁸ J. Vukoje, Osnovne funkcije savremene porodice. *Svarog*, vol. 1, br. 4/2012, pp. 137-144.

⁴³⁹ A. Bokszczanin, Parental support, family conflict, and overprotectiveness: Predicting PTSD symptom levels of adolescents 28 months after a natural disaster. *Anxiety, Stress, & Coping*, vol. 21, br. 4/2008, pp. 325-335; Cvetković, V. M., & Filipović, M. (2018). Ispitivanje uloge porodice u edukaciji dece o prirodnim katastrofama. *Nauka, bezbednost, policija*, 23(1), 71-85.

the Republic of Serbia. The decision to declare an disaster, upon the proposal of the competent disasters staff, is made by the president of the municipality for the territory of the municipality, or by the mayor for the territory of the city, including the city of Belgrade. For the territory of an autonomous province, the decision is made by the executive body of the autonomous province, upon the proposal of the provincial disasters staff. The decision to declare an disaster for the territory of the Republic of Serbia or a part thereof is made by the Government, upon the proposal of the Republic disasters staff. The decision to lift the disaster, upon the proposal of the competent disasters staff, is made by the body that made the decision to declare the disaster.⁴⁴⁰

For the coordination and management of protection and rescue in disasters, operational-expert bodies are formed at all three levels: the republic, provincial, and local. These bodies consist of disasters staff, comprising a commander, chief, and members, with deputy commanders in city and municipal staffs.

For the territory of the Republic of Serbia, the Republic Disasters Staff is formed by the Government. The Commander of the Republic Disasters Staff is appointed by the Government from among its members. The Chief of the Republic Disasters Staff is the head of the competent service, appointed and dismissed by the Government, along with members from the ranks of state officials, experts from ministries, the Serbian Armed Forces, Red Cross of Serbia, Serbian Mountain Rescue Service, directors of public enterprises in the field of transportation, forestry, and water management, and heads of other relevant bodies, organizations, and institutions.

The Provincial Disasters Staff is formed by the executive body of the autonomous province. The Commander of the Provincial Disasters Staff is chosen by the executive body of the autonomous province from among its members. The Chief of the Provincial Disasters Staff is the head of the sub-regional organizational unit of the competent service within the autonomous province, appointed and dismissed by the executive body of the autonomous province. Members of the Provincial Disasters Staff are appointed and dismissed by the Government of the Autonomous Province of Vojvodina from among officials of provincial administrative bodies, directors of provincial public services, the provincial Red Cross

⁴⁴⁰ Cvetković and Čaušić, *Ibidem*.

organization, representatives of companies and institutions, distinguished experts, and other individuals involved in protection and rescue activities.

For the territory of an administrative district, the District Disasters Staff is formed, which is established by the Republic Disasters Staff. The Commander of the District Disasters Staff is, by position, the head of the administrative district. The Chief of the District Disasters Staff is the head of the sub-regional organizational unit of the Disasters Sector, appointed and dismissed by the Republic Disasters Staff. Members of the district disasters staff are appointed and dismissed by the Republic Disasters Staff from among officials and organizations, experts from various fields related to protection and rescue, based on proposals from the Ministry.

At the local level, city and municipal disasters staffs are formed by the municipal assembly. The Commander of the City Disasters Staff is the mayor, and of the municipal staff is the president of the municipality, by position. The deputy commander of the city or municipal disasters staff is the deputy mayor or the vice president of the municipality or a member of the city or municipal council. The Chief of the City or Municipal Disasters Staff is a representative of the sub-regional organizational unit of the Disasters Sector. Members of the city or municipal disasters staff are usually appointed from directors of public communal enterprises and institutions related to protection and rescue, heads of local government bodies, secretaries of district, city, and municipal Red Cross organizations, experts in various fields of protection and rescue, or other individuals. The appointment and dismissal of the chief, deputy, and members of the disasters staff of local government units are made by the city or municipal assembly, upon the proposal of the mayor or the president of the municipality.

Disaster management headquarters represent the core organizational structure responsible for considering, planning, adopting, and implementing all measures of protection and rescue in disasters. Within these headquarters, the heads of all relevant services, in collaboration with appropriate experts, make conclusions and decisions that are manifested in concrete operational-tactical and technical measures at the disaster site. The duty of such headquarters lies in examining and identifying trends in the further development of the disaster, assessing the scale of its impact and consequences, calculating the time and resources re-

quired to mitigate the aftermath of the disaster, informing the management team about current changes and new disaster zones, adjusting their priorities accordingly, providing lists of action zones for relevant services and their priorities, monitoring the progress of work in these zones at all protection sites, and similar tasks.⁴⁴¹

To monitor risk reduction activities and coordinate disaster management, various command centers are established, namely: 1) for the territory of the Republic of Serbia – the Republican Disaster Management Headquarters formed by the Government; 2) for the territory of autonomous provinces – provincial disaster management headquarters formed by the executive body of the autonomous province; 3) for the territory of administrative districts – district disaster management headquarters formed by the Republican Disaster Management Headquarters; 4) for the territory of a city – city disaster management headquarters formed by the competent city authority; 5) for the territory of municipalities – municipal disaster management headquarters formed by the competent municipal authority. These disaster management headquarters establish expert-operational teams as their auxiliary professional bodies. They issue orders, conclusions, and recommendations, possess their own seal and registry. For the needs of the Republican Disaster Management Headquarters, district disaster management headquarters, and the Belgrade city disaster management headquarters, administrative and expert tasks are performed by the Competent Service (Official Gazette of the Republic of Serbia, 87/2018).

The commander of the disaster management headquarters is: 1) the minister in charge of internal affairs, for the Republican headquarters; 2) the president of the provincial government, for the provincial headquarters; 3) the head of the administrative district, for the district headquarters; 4) the mayor, for the city headquarters; 5) the president of the municipality, for the municipal headquarters. The head of the Republican headquarters is the head of the Competent Service. The heads of the headquarters are representatives of the Competent Service (Official Gazette of the Republic of Serbia, 87/2018, Article 42).

⁴⁴¹ Cvetković, V. (2022). Taktika zaštite i spasavanja u katastrofama. Beograd: Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama.

The disaster management headquarters carry out the following tasks (Official Gazette of the Republic of Serbia, 87/2018, Article 43): 1) they lead and coordinate the work of risk reduction system entities and manage the implementation of established tasks; 2) they lead and coordinate the implementation of measures and tasks of civil protection; 3) they consider risk assessments, protection and rescue plans, and other planning documents, providing recommendations for their improvement; 4) they monitor the state and organization of the risk reduction system and propose measures for its improvement; 5) they order the use of resources of the risk reduction system and management, assistance resources, and other means used in disasters; 6) they ensure regular information and notification of the population about risks and dangers and the measures taken; 7) they assess the vulnerability to disaster and submit proposals for declaring and lifting the state of emergency; 8) they order the readiness of entities and forces of the risk reduction system and management in disasters; 9) they cooperate with other disaster management headquarters; 10) they engage entities of special importance; 11) they participate in organizing and implementing measures and tasks of reconstruction, taking into account the reduction of risks from future disasters; 12) they prepare a proposal for an annual work plan and an annual report on their work, submitting them to the competent authority for adoption; 13) they form expert-operational teams for the execution of specific tasks in the field of protection and rescue. Members of the disaster management headquarters are obliged to respond to and participate in training.

The Republican Headquarters for Disasters also performs the following tasks: 1) it orders headquarters to take measures and activities to reduce disaster risks and manages measures for protection and rescue in disasters; 2) it orders the engagement and use of resources of the risk reduction system and management measures for protection and rescue in disasters and resources from the territory of unaffected units of local self-government in the area of affected units of local self-government; 3) through district headquarters, it directly coordinates the engagement of system forces and resources in disasters when a larger number of units of local self-government are simultaneously threatened within the administrative district; 4) it engages entities of special importance for protection and rescue for the Republic of Serbia; 5) it proposes to the Government to make decisions on seeking, accepting, or

providing assistance; 6) it proposes to the Government to order a general mobilization of units, other civil protection forces, and material resources; 7) it dissolves the disaster headquarters of units of local self-government if they do not perform protection and rescue tasks in accordance with this law, do not make timely and appropriate decisions based on which necessary measures for reducing risks and managing emergencies are implemented and undertaken; 8) it prepares proposals for an annual work plan and an annual report on its work and submits them to the Government for adoption; 9) it performs other tasks in accordance with the law.⁴⁴²

The institutional framework for crisis response is established on a bottom-up principle, due to the nature of crises and emergencies originating at the local level. Emergency situations are first declared at the local level, and if they exceed the capacity of the city/municipality, they escalate to the district level. If even that is insufficient, or if a larger part of the country is affected, the response escalates to the republican or provincial level. Moreover, if the disaster is of such scope or severity, the republican level can immediately declare a state of emergency for the entire country and, without waiting for jurisdiction transfer, assume command and responsibility for crisis management.

Accordingly, besides the aforementioned tasks, municipal or city emergency headquarters collaborate with neighboring units of local self-government; they appoint civil protection commissioners and deputy commissioners in populated areas; they consider and propose decisions on the organization of protection and rescue within the unit of local self-government or city. City emergency headquarters, in addition to all the above, coordinate actions and operations for protection and rescue within the city and order municipal emergency headquarters to take measures and activities for protection and rescue.

The district emergency headquarters, besides the aforementioned tasks, coordinate actions and operations for protection and rescue within the administrative district; they lead specialized civil protection units formed and engaged within the district; they engage district subordinate units of state administration bodies in the district, the professional service of the administrative district, authorized and capable legal entities of significance for the Republic for performing civil protection tasks, and cooperate with the

⁴⁴² The Official Gazette of the Republic of Serbia, 87/2018, Article 47.

subordinate organizational unit of the competent service in the administrative district.

The provincial headquarters order municipal emergency headquarters to take measures and activities, engage forces, and use resources for protection and rescue from unaffected municipalities in the territory of affected municipalities for protection and rescue. Through municipal emergency headquarters, they directly coordinate the engagement of forces and resources when a larger number of municipalities in the territory of the autonomous province are simultaneously threatened. The provincial headquarters and municipal emergency headquarters are obliged to regularly report to the Republican Headquarters for Disasters and the competent service on the state, implementation of measures, and execution of tasks for protection and rescue.⁴⁴³

The Republican Headquarters for Disasters coordinates the work of all entities of the protection and rescue system regarding organization, planning, preparation, and implementation of measures and activities related to disaster risk reduction and protection and rescue. This includes the exchange of information, knowledge, and technologies, and orders emergency headquarters to take measures and activities for protection and rescue. Additionally, it reviews and provides opinions on the Draft National Strategy for Protection and Rescue in Disasters, coordinates the implementation of activities and measures envisaged by the National Strategy, and reports to the Government on their implementation.

Furthermore, the Republican Headquarters reviews and provides opinions on the Draft Long-Term Development Plan of the Protection and Rescue System, as well as monitors and coordinates the implementation of activities and measures, reporting to the Government accordingly. It also reviews and provides opinions on the Draft Risk Assessment of the Republic of Serbia from natural disasters and other accidents, and the Draft National Plan for Protection and Rescue in Disasters of the Republic of Serbia, subsequently monitoring and coordinating their implementation, reporting to the Government.

Within the jurisdiction of the Republican Headquarters is the order for engagement and use of forces and resources for protection and rescue from the territory of unaffected units of local

⁴⁴³ *Ibidem.*

self-government to the area of other units of local self-government. Through district headquarters, it undertakes the assumption and direct coordination of engagement of forces and resources in disasters when a larger number of cities and municipalities in the territory of the administrative district are simultaneously threatened. It proposes to the Government the general mobilization of units and other civil protection forces and engages, if necessary, authorized and capable legal entities. Additionally, it proposes to the Government decisions on seeking, accepting, or providing assistance to neighboring and other countries.

Apart from submitting to the Government for adoption the proposal for the annual work plan and the annual report, the Republican Headquarters adopts the annual work plans and annual reports of the district headquarters for disasters.

7.2.5. Ways of regulation, mechanisms, and procedures between administrative levels

In orchestrating the strategic echelons of crisis management, the Government oversees and orchestrates the implementation of measures outlined in the National Strategy for Protection and Rescue in Disasters, facilitated through the Republic Disasters Headquarters. Moreover, it furnishes comprehensive reports to the National Assembly delineating the nature, causality, and magnitude of emergencies and extraordinary circumstances. These reports also encapsulate the measures undertaken, the efficacy of the protection and rescue system, and prognostications regarding further situational evolution.

The Ministry of Internal Affairs assumes the mantle of coordinating with all constituents of the protection and rescue apparatus concerning organization, strategizing, readiness, and execution of preventative initiatives and risk amelioration protocols. It also assumes responsibility for erecting and managing telecommunication and information systems critical for orchestrating and coordinating protection and rescue endeavors, as well as safeguarding the transmission of data and information. Should the exigencies of protection and rescue outreach the capacities of the extant system, the Ministry of Defense, upon solicitation, deploys organizational units, commands, and formations of the Serbian Armed Forces to augment protection and rescue endeavors. In such instances, the command and coordination of these military

units adhere to directives issued by their competent superiors, in alignment with the directives of the disasters headquarters, which spearheads and synchronizes protection and rescue efforts.

Furthermore, the Ministry of Internal Affairs plays a pivotal role in endorsing protection and rescue plans, as well as risk assessments, and corroborating the congruity of these plans at the grassroots level with the overarching National Plan for Protection and Rescue in Disasters of the Republic of Serbia. Additionally, it exercises oversight over the enforcement of pertinent legislation on disasters. Ministries, governmental bodies, and specialized entities of the Republic of Serbia are duty-bound to furnish pertinent data to the competent authority, essential for the delineation, organization, and execution of protection and rescue measures and obligations.

The Risk Management Administration assumes responsibility for orchestrating and fostering collaboration with state entities, specialized bodies, local governance units, as well as authorized and proficient legal entities. The overarching objective is to optimize operational efficiency by judiciously harnessing resources and capabilities in proactively devising preventative measures, conducting comprehensive analyses and prognostications, executing protective measures during imminent perils, responding to natural disasters and other calamities, and mitigating and rectifying ensuing ramifications.⁴⁴⁴

Within the Sector for Disasters, a significant portion of coordination, supervision, and control is delegated to the Civil Protection Administration. Specifically, this entails verifying the alignment of Emergency Protection and Rescue Plans of autonomous provinces, administrative districts, and local self-government units with the Republic of Serbia's overarching Protection and Rescue Plan. Moreover, the Administration serves as the primary coordinating mechanism for collaboration and alignment of actions during emergencies with relevant ministries, state administrative bodies, the Serbian Armed Forces, police, scientific institutions, the Republic Hydro-Meteorological Institute (RHMZ), the Republic Seismological Institute, the Red Cross of Serbia, the Mountain Rescue Service, local self-government bodies, sports

⁴⁴⁴ See more: <http://prezentacije.mup.gov.rs/svs/UpravaUR.html>

clubs, and other non-governmental organizations pivotal to protection and rescue efforts, alongside other legal entities.

In its oversight and control function, the Civil Protection Administration conducts administrative and inspection supervision in the areas of planning, organization, and execution of protection, rescue, and civil protection tasks, while also overseeing the operations of the Public Shelter Enterprise and the Demining Center. Republic, territorial autonomy, and local self-government bodies engage in mutual cooperation, with Republic and territorial autonomy bodies exercising oversight over the legality of local self-government bodies' actions and acts. To facilitate oversight, the competent local self-government body must promptly provide requested data, lists, and documents, for which the president/mayor is held accountable.

Territorial autonomy directly collaborates with the competent service, other state bodies, local self-government units, business entities, and other legal entities and may also engage in cooperation with regions and municipalities of neighboring countries. Additionally, territorial autonomy is obligated to align its protection and rescue plans with the Republic of Serbia's Protection and Rescue Plan in Disasters.

Local self-government units in Serbia collaborate and may form associations to achieve common goals and needs. Regarding protection and rescue matters, cities and municipalities align their emergency protection and rescue plans with neighboring local self-government units.⁴⁴⁵

7.3. Constitutional and legislative framework of crisis and disaster management policy in Serbia

The constitutional and legislative framework of crisis management policy consists of the Constitution, laws, strategic documents, and sublegal acts. Certainly, crisis management policy is primarily defined through the Constitution of the Republic of Serbia ("Official Gazette of RS" No. 98/2006). In the Republic of Serbia, the area of crises and emergencies caused by natural or tech-

⁴⁴⁵ *Ibidem*, article of the law 15.

nical-technological hazards is directly or indirectly regulated by numerous laws and sublegal acts:

The Law on Disaster Risk Reduction and Emergency Management ("Official Gazette of the Republic of Serbia" No. 87/2018) regulates the reduction of disaster risk, prevention, and strengthening of individual and community resilience and readiness to respond to the consequences of disasters, protection and rescue of people, material, cultural, and other goods, rights and obligations of citizens, associations, legal entities, bodies of local self-government units, autonomous provinces, and the Republic of Serbia, disaster management, functioning of civil protection, early warning, notification and alerting, international cooperation, inspection supervision, and other issues of importance for organizing and functioning the system of disaster risk reduction and disaster management.

The Law on Fire Protection ("Official Gazette of the Republic of Serbia" No. 111/09) regulates the fire protection system, rights and obligations of state authorities, authorities of autonomous provinces and local self-government units, companies, other legal and natural persons, organization of fire services, supervision over the implementation of this law, and other issues of importance for the fire protection system. The provisions of this law are also applied to explosion protection.

The Law on Environmental Protection ("Official Gazette of the Republic of Serbia" No. 36/2009) regulates the integral system of environmental protection ensuring the realization of human rights to life and development in a healthy environment and a balanced relationship between economic development and the environment in the Republic of Serbia.

The Law on Protection of Population from Infectious Diseases ("Official Gazette of the Republic of Serbia" No. 136/2020) regulates the protection of the population from infectious diseases and special health issues, determines infectious diseases that endanger the health of the population of the Republic of Serbia and whose prevention and control are of general interest to the Republic of Serbia, implementation of epidemiological surveillance and measures, the manner of their implementation and provision of funds for their implementation, supervision over the implementation of this law, as well as other issues of importance for the protection of the population from infectious diseases.

The Law on Transport of Dangerous Goods ("Official Gazette of the Republic of Serbia" No. 10/2019) regulates the conditions for the domestic and international transport of dangerous goods in road, rail, and inland waterway transport on the territory of the Republic of Serbia, requirements for packaging, mobile equipment under pressure, i.e., tank, or vehicle intended for the transport of dangerous goods, conditions for appointing bodies examining and controlling packaging, mobile equipment under pressure, i.e., tank, or vehicle for the transport of dangerous goods, conditions for authorizing bodies examining and controlling a ship for the transport of dangerous goods, competencies of state authorities and organizations in the transport of dangerous goods, conditions and obligations to be fulfilled by participants in the transport of dangerous goods, supervision, and other issues related to the transport of dangerous goods.

The Law on Waters ("Official Gazette of the Republic of Serbia" No. 30/2010, 93/2012, 101/2016, 95/2018, 95-2018 - other law) regulates the legal status of water, integrated water management, management of water facilities and water land, sources and financing of water activities, supervision over the implementation of this law, as well as other issues significant for water management.

The Law on Explosive Materials, Flammable Liquids, and Gases ("Official Gazette of the SFRY," 44/1977, 45/1985, and 18/1989, and "Official Gazette of the Republic of Serbia," 53/1993, 67/1993, 48/1994, 101/2005 - other law, and 54/2015 – other law) aims to protect human life and health, material goods, and the environment. Production, trade, and transport of explosive materials, flammable liquids, and gases are conducted under conditions and in a manner determined by federal law, this law, and other regulations adopted based on the law.

The Law on Flammable and Combustible Liquids and Flammable Gases ("Official Gazette of the Republic of Serbia" No. 54/2015) regulates safety conditions regarding the application of fire and explosion protection measures during the establishment, construction, reconstruction, expansion, and remediation (hereinafter: construction and remediation) and during the use of facilities and objects for production, processing, refining, pouring, storage, holding, and trade of flammable and combustible liquids and flammable gases, aiming to prevent the occurrence and spread of

fires and explosions, as well as firefighting, and supervision over these measures.

The Law on Investigation of Accidents in Air, Rail, and Water Traffic ("Official Gazette of the Republic of Serbia" No. 66/2015, 83/2018) regulates the investigation of accidents and serious incidents in air traffic, serious accidents, other accidents and incidents in rail traffic, very serious maritime accidents, serious maritime accidents, maritime accidents, maritime incidents, serious navigational accidents, and navigational accidents in water traffic, competence and authority of authorities for conducting investigations and the investigation process, as well as supervision over the implementation of this law.

The Law on Public Health ("Official Gazette of the Republic of Serbia" No. 15/2016) regulates the realization of public interest by creating conditions for preserving and improving the health of the population through comprehensive societal activities aimed at preserving the physical and mental health of the population, preserving living and working environments, preventing the occurrence and impact of risk factors for health disorders, diseases, and injuries, methods and procedures, as well as conditions for the organization and implementation of public health.

The Law on Reconstruction after Natural Disasters ("Official Gazette of the Republic of Serbia" No. 112/15) regulates the procedure for reconstruction and provision of assistance to citizens and economic entities who suffered material damage due to natural and other disasters.

The Law on Meteorological and Hydrological Protection ("Official Gazette of the Republic of Serbia" No. 88/2010) regulates meteorological and hydrological activities, organization, and method of performing meteorological and hydrological activities of interest to the Republic of Serbia and other meteorological and hydrological activities, the early warning system for meteorological and hydrological disasters, the fund of meteorological and hydrological data and information, protection of the hydrometeorological information system, international cooperation, as well as other issues of importance for meteorological and hydrological activities.

The Law on Occupational Safety and Health ("Official Gazette of the Republic of Serbia" No. 101/2005, 91/2015, and 113/2017) regulates the implementation and improvement of occupational safety and health for persons participating in work processes, as well as persons present in the working environment,

aiming to prevent occupational injuries, occupational diseases, and work-related diseases. For the performance of certain tasks of state administration in the field of occupational safety and health, this law establishes the Administration for Occupational Safety and Health as an administrative body within the Ministry of Labor, Employment, and Social Policy, and determines its jurisdiction. The Law on Radiation and Nuclear Safety and Security (Official Gazette of the Republic of Serbia, 95/2018 and 10/2019) regulates measures for radiation and nuclear safety and security, conditions for conducting activities with radiation sources, procedures in situations of planned, existing, and emergency exposure to ionizing radiation, aimed at protecting individuals, the population, and the environment from the harmful effects of ionizing radiation, now and in the future. This law establishes the Directorate for Radiation and Nuclear Safety and Security of Serbia (hereinafter referred to as the Directorate) for the purpose of conducting regulatory control of activities regulated by this law.

The Law on the Ratification of the Convention on the Transboundary Effects of Industrial Accidents (Official Gazette of the Republic of Serbia - International Treaties, 42/2009) confirms the Convention on the Transboundary Effects of Industrial Accidents, drafted on March 17, 1992, in Helsinki, in the original languages of English, French, and Russian.

The Law on Volunteer Firefighting (Official Gazette of the Republic of Serbia, 87/2018) regulates the organization of volunteer firefighting, establishment, operation, and bodies of volunteer firefighting associations, rights and obligations of volunteer firefighting associations, association of volunteer firefighting associations, organization of volunteer firefighting alliances, and other issues of importance for the work and organization of volunteer firefighting in the Republic of Serbia.

The Law on Critical Infrastructure (Official Gazette of the Republic of Serbia, 87/2018) regulates national and European critical infrastructure, identification and determination of the critical infrastructure of the Republic of Serbia, protection of critical infrastructure, competence and responsibility of authorities and organizations in the field of critical infrastructure (hereinafter referred to as competent authorities and organizations), information, reporting, provision of decision support, data protection, management, and supervision in the field of critical infrastructure.

The Law on Forests (Official Gazette of the Republic of Serbia, No. 30 of May 7, 2010, 93 of September 28, 2012, 89 of October 27, 2015, 95 of December 8, 2018) regulates the conservation, protection, planning, cultivation, and use of forests, disposal of forests and forest land, supervision over the implementation of this law, as well as other issues significant for forests and forest land.

The Law on the Ratification of the Memorandum of Understanding on the Institutional Framework of the Initiative for Prevention and Preparedness in Case of Disasters for the Southeast Europe Region (Official Gazette of the Republic of Serbia - International Treaties, 5/2010) confirms the Memorandum of Understanding on the Institutional Framework of the Initiative for Prevention and Preparedness in Case of Disasters for the Southeast Europe Region, drafted on September 24, 2007, in Zagreb, in the original English language. The complexity of the problem of disaster risk reduction and effective response necessitates the adoption of numerous subordinate acts of lower legal force than the law, which differ in title, issuers, and legal nature.

In the field of disasters, the Ministry of Internal Affairs of the Republic of Serbia, as well as other competent state authorities, adopt numerous subordinate acts. All these acts are adopted on the basis of current legal solutions in the field of disasters to develop and supplement existing legal solutions. In addition to numerous laws, the area of emergencies is regulated by numerous subordinate acts, the most important of which are as follows:

Regulation on the Content, Method of Preparation, and Obligations of Subjects Regarding the Preparation of Risk Assessments of Disasters and Plans for Protection and Rescue (Official Gazette of the Republic of Serbia, 102/2020) regulates the content, method of preparation, and obligations of subjects regarding the preparation of risk assessments of disasters and plans for protection and rescue. Subjects referred to in paragraph 1 of this article under this regulation are state administration bodies, bodies of autonomous provinces, bodies of local self-government units, subjects of special importance for protection and rescue, business entities, and other legal entities. Risk assessments of disasters and plans for protection and rescue are prepared and adopted, in accordance with the law, by the Republic of Serbia, autonomous provinces, units of local self-government, subjects of special im-

portance for protection and rescue, business entities, and other legal entities. The plan is prepared based on the assessment.

Regulation on the Composition, Method, and Organization of Work of Emergency Situation Staffs (Official Gazette of the Republic of Serbia, 27/2020) regulates the composition, method, and organization of work of disaster staffs.

Regulation on the Content and Method of Preparation of Disaster Risk Reduction Plans (Official Gazette of the Republic of Serbia, 21/2020) provides further regulation of the content and method of preparation of disaster risk reduction plans.

The Regulation on Mandatory Equipment and Gear for Personal, Mutual, and Collective Protection from Natural Disasters and Other Accidents (Official Gazette of the Republic of Serbia, No. 3/2011 and No. 37/2015) determines the type and minimum amount of equipment and gear for implementing personal, mutual, and collective protection from natural disasters, technological accidents, incidents, and catastrophes, consequences of terrorism, military actions, and other major accidents, which state organs, organs of autonomous provinces, organs of local self-government units, business entities, other legal entities, citizens, and owners of residential buildings are obliged to procure and maintain, as well as deadlines for the procurement of such equipment.

The Regulation on the Implementation of Evacuation (Official Gazette of the Republic of Serbia, No. 111/09) regulates the implementation of evacuation and the amount of compensation for evacuation.

The Regulation on the Establishment of a General Flood Defense Plan (Official Gazette of the Republic of Serbia, No. 18/2019) establishes the General Flood Defense Plan, which is printed alongside this regulation and constitutes its integral part.

The Regulation on Civil Protection Units, Purpose, Tasks, Mobilization, and Use (Official Gazette of the Republic of Serbia, No. 84/2020) regulates civil protection units, their purpose, tasks, mobilization, and use.

The Regulation on the Obligations of Subjects of the Disaster Risk Reduction and Emergency Management System in the Procedure of Drafting the Disaster Risk Register, Method of Drafting the Disaster Risk Register, and Data Entry (Official Gazette of the Republic of Serbia, No. 122/2020) prescribes the obligations of subjects of the disaster risk reduction and disaster management

system in the procedure of drafting the disaster risk register, the method of drafting the disaster risk register, and data entry.

The Rulebook on the Professional Examination for the Preparation of Disaster Risk Assessments and Protection and Rescue Plans (Official Gazette of the Republic of Serbia, No. 20/2019) regulates the program and method of taking the professional examination, the amount of compensation for the work of the examination commission, the appearance, and issuance of a license for the preparation of disaster risk assessments and protection and rescue plans.

The Rulebook on the Organization and Use of Specialized Civil Protection Units (Official Gazette of the RS, No. 26/2011) determines the organization and use of specialized civil protection units.

The Regulation on the Type and Quantity of Hazardous Substances for the Preparation of an Accident Protection Plan (Official Gazette of the Republic of Serbia, No. 34/2019) prescribes the type and quantity of hazardous substances based on which an accident protection plan is prepared and measures are taken to prevent accidents and limit their impact on human life and health, economy, ecology, social stability, and the environment.

The Regulation on the Preparation and Content of Accident Protection Plans (Official Gazette of the Republic of Serbia, No. 41/2019) provides detailed regulations on the preparation and content of accident protection plans for business entities and other legal entities.

The Regulation on Fire Protection Organization According to the Category of Fire Hazard (Official Gazette of the Republic of Serbia, No. 6/2021) prescribes the technical equipment of the fire protection unit and the number of members of the fire protection unit that the subject of the first category of fire hazard is obliged to provide, as well as the number of persons professionally qualified to implement and organize preventive measures and continuous duty in the subjects of the first and second categories of fire hazard.

The Rulebook on Special Training and Passing of the Professional Examination in the Field of Fire Protection (Official Gazette of the Republic of Serbia, No. 92/2010, No. 11/2011, No. 16/2018, No. 25/2018 – correction).

The Regulation on the Conditions that Legal Entities Registered for Special Training for Persons Working in Fire Protection

Must Fulfill (Official Gazette of the Republic of Serbia, No. 92/2010, No. 86/2011) prescribes the conditions that legal entities must fulfill to conduct special training in the field of fire protection, i.e., special training for the professional qualification of persons working in fire protection.

The Regulation on the Method of Preparation and Content of Fire Protection Plans for Autonomous Provinces, Local Self-Government Units, and Subjects Classified into the First and Second Categories (Official Gazette of the Republic of Serbia, No. 73/2010) establishes the method of preparation and content of fire protection plans for autonomous provinces, local self-government units, and subjects classified into the first and second categories of fire hazard.

The Regulation on Training, Curriculum, and Programs, as well as Norms for Teaching Aids and Equipment for the Training of Civil Protection Members (Official Gazette of the Republic of Serbia, 8/2013), governs the methods of training, curriculum, training programs, and norms for teaching aids and equipment for the training of civil protection members.

The Regulation on Uniforms and Insignia of Civil Protection, Function and Specialty Insignia, and Personal Cards of Civil Protection Members (Official Gazette of the Republic of Serbia, 32/2020, 83/2020) prescribes: the components, appearance, and color of civil protection uniforms; procedures for issuance, replacement, and return of uniforms; times and methods of wearing uniforms; deadlines for uniform use; marking of uniforms, general and specific insignia, function indicators, duties, specialties; appearance and content of personal cards of civil protection members.

The Regulation on Technical Norms for Fire Protection of High-rise Buildings (Official Gazette of the Republic of Serbia, 80/2015, 67/2017, 103/2018) establishes specific technical requirements for fire protection that building products within the structure of exterior walls must meet during design, construction, reconstruction, extension, adaptation, use, and maintenance of residential buildings, commercial buildings, buildings for public use, industrial buildings, and warehouses, as well as during work on external walls to enhance energy efficiency to prevent fire occurrence on external building walls and its spread.

The Regulation on Criteria for the Selection of Candidates for Basic Training Courses for Members of Firefighting and Rescue

Units (Official Gazette of the Republic of Serbia, 68/2017, 98/2017, 67/2018) regulates the criteria for the selection of candidates for basic training courses for members of firefighting and rescue units of the Ministry of Internal Affairs.

The Regulation on Technical Norms for Fire Safety and Explosion of Installations and Facilities for Flammable and Combustible Liquids and on Storage and Handling of Flammable and Combustible Liquids (Official Gazette of the Republic of Serbia, 114/2017) establishes specific technical safety norms for fire safety and explosion of installations and facilities for flammable and combustible liquids, for safe installation, construction, extension, reconstruction, and remediation of installations and facilities for flammable and combustible liquids, for safe storage and handling of flammable and combustible liquids, with a flashpoint equal to or greater than 100°C.

The Regulation on Technical Norms for Fire Protection of Industrial Facilities (Official Gazette of the Republic of Serbia, 1/2018) more closely regulates specific technical norms for fire protection for the construction, extension, and reconstruction of industrial facilities. In addition to the provisions of this regulation, other regulations and standards prescribing fire protection requirements for objects, parts of objects, equipment, installations, and devices apply to objects referred to in paragraph 1 of this Article.

The Regulation on the Implementation of Professional Training and Examination of Members of Volunteer Fire Units (Official Gazette of the Republic of Serbia, 83/2020) prescribes the method of conducting professional training and examinations of members of volunteer fire units.

The Regulation on Technical Norms for Hydrant Network Installations for Fire Fighting (Official Gazette of the Republic of Serbia, 3/2018) prescribes technical norms for the design, construction, use, monitoring, and maintenance of hydrant network installations for fire fighting with water. This regulation specifies mandatory calculation elements and requirements for sources, capacity, water quantity, total water quantity, and water pressure in the external hydrant network installation for fire fighting in residential areas as well as in the external and internal hydrant network installation for fire fighting in buildings. When specific requirements for the installation of a hydrant network for fire fighting are established by special regulations, the provisions of

those regulations shall apply, while in all other respects, the requirements specified in this regulation shall apply. The provisions of this regulation do not apply to stable fire suppression systems.

The Regulation on Technical Norms for Fire Safety and Explosion of Retail Premises for Liquid Petroleum Gas Cylinders (Official Gazette of the Republic of Serbia, 75/2019) is enacted based on Article 34 of the Law on Flammable and Combustible Liquids and Flammable Gases (Official Gazette of the Republic of Serbia, 54/15), by the Minister of Internal Affairs to prescribe technical norms for fire safety and explosion of retail premises for liquid petroleum gas cylinders.

The Regulation on the Procedure for Maintaining the Register of Business Entities and Legal Entities Handling Hazardous Substances (Official Gazette of the Republic of Serbia, 34/2019) is established based on Article 67, paragraph 3 of the Law on Disaster Risk Reduction and Emergency Management (Official Gazette of the Republic of Serbia, No. 87/18), by the Minister of Internal Affairs to regulate the procedure for maintaining the register of business entities and legal entities handling hazardous substances.

The Regulation on the Procedure for Issuing Approval for the Transport of Weapons and Military Equipment that are not Dangerous Goods (Official Gazette of the Republic of Serbia, 52/2019) is enacted based on Article 74, paragraph 3 of the Law on Production and Trafficking of Weapons and Military Equipment (Official Gazette of the Republic of Serbia, No. 36/18), by the Minister of Internal Affairs to specify the procedure for issuing approval for the transport of weapons and military equipment that are not dangerous goods.

The Regulation on the Content, Establishment, and Maintenance of the Disaster Risk Register (Official Gazette of the Republic of Serbia, 78/2019) prescribes the content, method of establishment, and maintenance of the disaster risk register.

The Regulation on the Material, Technical, and Personnel Equipment Conditions for Obtaining Authorization for the Preparation of Disaster Risk Assessment and Protection and Rescue Plans (Official Gazette of the Republic of Serbia, 9/2019, 116/2020) sets out the organizational and technical conditions that business entities, or other legal entities, must meet to obtain authorization for the preparation of disaster risk assessments and protection and rescue plans.

The Regulation on Professional Firefighting Units of Local Self-Government (Official Gazette of the Republic of Serbia, 18/2012) determines the minimum number of firefighters, as well as the technical equipment and training of professional firefighting units established by local self-government units.

The Regulation on the Detailed Conditions that Legal Entities Must Meet to Perform Fire Protection Organization Activities in Subjects of First, Second, and Third Categories of Fire Risk (Official Gazette of the Republic of Serbia, 67/2021) specifies the detailed conditions that legal entities must meet to perform fire protection organization activities in subjects of the first, second, and third categories of fire risk, as well as the conditions and procedure for issuing and revoking authorization for performing these activities by a business entity or other legal entity by the Ministry of Internal Affairs.

The Regulation on Technical Norms for Fire Protection of Residential and Commercial Buildings and Public Facilities (Official Gazette of the Republic of Serbia, 22/2019) elaborates on specific technical norms for fire safety concerning the construction, extension, and reconstruction of residential and commercial buildings and public facilities.

The Regulation on Technical Norms for Fire Protection of Hospitality Facilities (Official Gazette of the Republic of Serbia, 20/2019) provides detailed technical norms for fire safety regarding the construction, extension, and reconstruction of hospitality facilities.

The Regulation on Fire Protection Measures during Welding, Cutting, and Brazing Operations (Official Gazette of the Socialist Republic of Serbia, 50/1979) specifies protective measures against fire and explosions during welding, cutting, and brazing operations.

7.3.1. Legal reforms involve significant changes to the legal framework governing crisis and disaster management

From the late 1990s until 2009, the Republic of Serbia lacked a unified legislative, strategic, and institutional framework for responding to emergencies. Responsibilities for emergency response were divided among various ministries: the Ministry of Internal Affairs (MUP), the Ministry of Defense, the Ministry of Agriculture, Forestry, and Water Management, the Ministry of Health,

and the Ministry of Environment and Spatial Planning. In March 2009, the Government of the Republic of Serbia adopted Conclusion No. 05 No. 02-1312/2009, establishing a Working Group composed of representatives from these ministries. The Working Group was tasked with analyzing the existing situation in the field of emergencies, proposing harmonization of existing legal norms, and drafting new regulations aimed at unifying responsibilities in this area. The Law on Emergencies was adopted in 2009 and came into force in 2010. Within the Ministry of Internal Affairs, the Sector for Emergencies was formed by integrating the Emergency Management Administration of the Ministry of Defense, the Sector for Protection and Rescue of the MUP, the Sector for Hail Protection of the Republic Hydrometeorological Service (RHMZ), and by incorporating some employees from the Ministry of Environment and Spatial Planning.

Drawing from the Constitution of the Republic of Serbia, which addresses citizen safety in specific provisions, the Law on Emergency Situations was established in 2009 and revised in 2011 and 2012. The rapid increase in the frequency and severity of disasters, along with a focus on proactive measures, led to the introduction of the new Law on Disaster Risk Reduction and Emergency Management in late 2018. This updated legislation comprehensively outlines preventive strategies for reducing disaster risks and improving the efficiency of disaster response and recovery. In line with key documents from global disaster risk reduction conferences (Hyogo and Sendai Frameworks), the new law integrates international standards to enhance disaster prevention, bolster the resilience of individuals and communities, and improve preparedness for disaster situation.⁴⁴⁶

From 2018 disaster risk management in the Republic of Serbia is regulated directly or indirectly by numerous laws. The overarching and most significant act is certainly the Law on Disaster Risk Reduction and Emergency Management (Official Gazette of the Republic of Serbia, 87/18). This law addresses disaster risk reduction, prevention, and the enhancement of resilience and readiness of individuals and communities to respond to disaster consequences. It also covers the protection and rescue of people, material, cultural, and other assets, as well as the rights and obligations of citizens, associations, legal entities, local self-

⁴⁴⁶ Cvetković, 2019, pp. 79

government units, autonomous provinces, and the Republic of Serbia. Additionally, it regulates emergency management, the functioning of civil protection, early warning, information dissemination, alert systems, international cooperation, inspection oversight, and other essential issues for the organization and operation of the disaster risk reduction and emergency management system.

As research has shown, until 2014, these responsibilities were largely not implemented and the system as a whole was inadequately established. The catastrophic floods of 2014 tested the system and revealed its shortcomings to a large extent. Following the floods in May and July 2014, the Law on Elimination of Consequences of Floods in the Republic of Serbia (*lex specialis*) was enacted by the President of the Republic, establishing the Office for Assistance and Reconstruction of Flooded Areas, which was further regulated by a Government Regulation in 2015.⁴⁴⁷ In 2015, it transforms into the Office for Management of Public Investments, as specified by the Law on Reconstruction after Natural and Other Disasters (2015).

Following a series of floods in 2014 (which occurred in April, May, September, October, and November), amendments and additions to the Law on Disasters were undertaken. The shortcomings identified during the crisis of 2014 contributed to the development of a new Law on Disaster Risk Reduction and Emergency Management. Among the primary deficiencies of the existing law were insufficiently specified levels of authority, lack of sublegal acts for emergency response (especially those related to coordination), absence of financial sustainability, and insufficient financial resources in state and local budgets, etc. A public consultation was organized from March 11th to 31st, 2015. After the conclusion of the public consultation, in October 2015, the Draft Law undergoes significant changes regarding the idea of merging the Sector for Disasters and the Office for Management of Public Investments into the Directorate for Disasters. Following these laws, the Law on Disaster Risk Reduction and Emergency Management is enacted.

7.3.2. The degree of normative regulation of crisis and disaster management at the local level

⁴⁴⁷ Government of the Republic of Serbia Regulation, "Official Gazette of RS," No. 95/15.

In performing the responsibilities of disaster management for local self-government units, the following acts are mandatory: decision on the formation of the staff; rules of procedure for the staff; annual work report; annual work plan; decision on the organization and functioning of general-purpose civil protection; decision on the formation of general-purpose civil protection units; appointment decree for civil protection commissioners; assignments of staff members; mayor's/municipal president's resolution on the formation of teams for Risk Assessment and Emergency Plans; risk assessment; emergency protection and rescue plans; flood defense operational plan for secondary watercourses.

Risk assessment identifies potential sources of endangerment, examines possible consequences, needs, and possibilities for implementing protection and rescue measures and tasks. It is carried out according to established methodology and includes specific characteristics of the territory, critical infrastructure, critical locations, and areas vulnerable to natural disasters and other accidents, with potential cross-border effects; vulnerability of the territory and analysis of possible consequences of natural disasters and other accidents, as well as assessment of resources, capabilities, and needs for the protection of people, material goods, and the environment. Emergency protection and rescue plans plan preventive and operational measures, resources, and means of the protection and rescue system entities, their organized and coordinated engagement and actions in disasters.

A 2017 study showed that all cities have decisions on the formation of disaster staff and procedures. Annual work reports exist in about 83% of cities, and annual work plans in about 89%. Decisions on the organization and functioning of general-purpose civil protection have been made in 95% of cities, while decisions on the formation of general-purpose civil protection units exist in 2/3 of cities. Appointment decrees for civil protection commissioners are present in almost 95% of cities, and assignments of staff members for disasters are present in about 88% of cities. Flood defense operational plans for secondary watercourses exist in 90% of cities, and resolutions of mayors on the formation of teams for the preparation of risk assessments and protection and rescue plans are present in 72% of cities.

What is particularly concerning are the extremely low percentages of adopted risk assessments (36%) and even fewer protection and rescue plans (16%). Risk assessments and protection and

rescue plans are fundamental, preventive documents in crisis and disaster management at the local level. Risk assessment in cities, according to the 2014 analysis, has only been conducted in Smederevo and Leskovac. According to data from 2014 obtained from the heads of the Disasters Sector in surveyed cities within the Ministry of the Interior (Kešetović, 2014), the preparation of risk assessments was planned for the same year in Subotica, Šabac, and Čačak. However, data from 2017 indicate that risk assessments have still not been conducted in these cities. The report from Šabac states that it has not been conducted recently, so there is a possibility that it was done as planned. In Čačak, it is stated to be nearing completion, while in Subotica, it is in the process of adaptation to the new methodology, as well as in Niš, Novi Sad, Smederevo, and Užice. This assessment has been conducted only in Belgrade and Sremska Mitrovica, while reports from other cities indicate that it is ongoing.

By applying the chi-square test, statistically significant differences in the documents adopted between cities and municipalities were found only in the annual work report, and that in favor of municipalities ($x = 6.190$; $p < 0.05$). Except for this document, which was adopted to a greater extent in municipalities than in cities, the percentage of municipalities and cities that adopted these documents did not differ significantly. As seen from Table 3, the percentage of cities that conducted risk assessments and formed protection and rescue plans is indeed very small and concerning. Furthermore, the Ministry of the Interior's approval for the Risk Assessment was obtained in 23.5% of cases and for Protection and Rescue Plans in 34.8% of cases.

Asked to assess the extent to which they are familiar with the obligations of local self-government arising from the Law, 10% of respondents from the target group of local self-governments (persons responsible for disaster management tasks in local self-government) estimate that they are fairly familiar, while the remaining 90% are completely familiar. There were no respondents who were insufficiently or not at all familiar. The obtained results indicate statistically significant differences between cities and municipalities, with respondents from cities assessing their familiarity with the legal framework significantly higher compared to those from municipalities.

Respondents from local self-governments (LSGs) also provided an assessment of the current Law. Thus, 30% of them evalu-

ated it as fully adequate in regulating the field of disasters, while the remaining 70% of respondents assessed that the current Law is inadequate. By applying the chi-square test, it was found that respondents whose LSGs have city and municipality status do not achieve significantly different results on this question ($\chi = 0.080$; $p > 0.05$). Respondents who assess it as fully adequate state that the Law defines the responsibilities, roles, and tasks of all participants, while some of them mention that the Law has not been fully implemented, which prevents an insight and assessment of its true quality. Interestingly, in one case, the lack of legal instruments for accountability was assessed as a positive aspect of the Law.

On the other hand, respondents from LSGs who rated it as inadequate mention the lack of alignment with other laws, too many transferred responsibilities to LSGs, unclear role of general-purpose civil protection units, undefined rights and obligations of civil protection members, lack of instructions for the application of legal and sub-legal acts, impracticability in the field of civil protection, etc. These observations point to a series of substantial problems in implementing the Law on Disasters and the functioning of the protection and rescue system.

After expressing their views on the Law, respondents from LSGs were asked to list the forms of assistance they need to improve/prepare local regulations adequately. In this regard, they were offered four options: legislative framework (decisions, regulations, instructions, etc.), institutional framework (establishment of services, departments, special organizations, civil protection, etc.), educational framework (new professional staff, courses, licenses, education, workshops, round tables, public hearings, etc.), and functional framework (misunderstanding of competencies, inability to adopt or enact an act, insufficient expertise or equipment, etc.). Additionally, as a fifth option, they could themselves suggest a possible form of assistance. Table 8 shows the percentages of respondents who believe that assistance is needed in the specified area. In addition to that, respondents also mention increased support from the sector in the prevention aspect or in drafting acts, as well as better communication, as additional forms of assistance.

The results of the chi-square test indicate significant differences in the assessment of the need for assistance in the legislative ($\chi = 3.786$; $p = 0.05$) and educational frameworks ($\chi = 4.560$; $p < 0.05$). The higher need for assistance in regulating the legislative framework in cities can be interpreted as a result of their more

complex position (the existence of urban, suburban, and rural zones; city municipalities, population size, etc.). On the other hand, municipalities are very interested in education, considering it the only way to meet the increasing demands in public administration reforms, including crisis management.

When asked whether they have received any support in the process of developing protection and rescue plans and risk assessments so far, only 21.7% of respondents answered affirmatively, 30.4% said they haven't, while the rest did not respond. The difference in this assessment between cities and municipalities is not statistically significant ($x = 0.121$; $p > 0.05$), meaning a small number of representatives from both cities and municipalities estimate that they have received support in this process. When asked to specify the nature of the support, only two respondents reported support in the institutional framework domain, from the Sector for Disasters, three in the educational framework domain within the organization of the National Training Center and Safe Serbia, and two in the functional framework domain. Respondents did not offer additional responses to this question.

When asked to evaluate the support received so far, 26.1% of respondents assess this support as insufficient, 17.4% as relatively sufficient, while only one respondent (4.3%) assesses the support as entirely sufficient. More than half of the respondents did not answer this question. However, comparing the responses of those from cities and municipalities, no statistically significant difference is observed.

7.4. State and social culture

For the dimension of Serbia's social culture, a study developed by Geert Hofstede was utilized, covering 76 countries. According to Hofstede, culture is defined as "the collective programming of the mind that distinguishes the members of one group or category of people from another."⁴⁴⁸ He developed the so-called 6D model, i.e., 6 dimensions of the national culture value system, measured on a scale ranging from 0 to 100. These dimensions have evolved over time by national societies as effective responses to

⁴⁴⁸ See more: <https://www.hofstede-insights.com/models/national-culture/>, скинуто са интернета 4. 11. 2017.

various problems they encountered. The measured dimensions include: power distance index; individualism versus collectivism; masculinity versus femininity of societies; uncertainty avoidance index; long-term versus short-term orientation; and indulgence versus restraint. In Serbia, society and the state tend toward the model of a feminine society (relationship-oriented rather than achievement-oriented), less competitive and more consensus-driven. A high score (92) on the dimension of uncertainty avoidance indicates a tendency toward rigid rules, beliefs, and behaviors, intolerance toward unconventional ideas and behaviors, resistance to innovation, and an emotional need for rules, even when they are not functional.

7.4.1. Degree of power distance

The degree of power distance measures how a society treats inequalities, that is, to what extent less powerful members of society expect an even distribution of power and are resigned to inequalities. Societies with a large power distance accept the existing hierarchy, considering that everyone has their place in the system and do not demand justifications for existing social inequalities. Societies with a low power distance strive for equality in the distribution of power and demand justifications for existing inequalities.

Serbia is positioned highly on this dimension (scoring 86), meaning it is a country with a large power distance: centralization is popular, the existing hierarchical order in the organization reflects inequalities perceived as natural and expected. Subordinates expect orders, and the ideal boss is a benevolent autocrat.

7.4.2. Degree of individualism/collectivism

This dimension reflects a society's attitude towards how individuals perceive themselves: as individuals or as part of a community. The high end of this dimension is individualism, which is described as a tendency towards a society where individuals are expected to take care of themselves and their immediate family. In contrast, collectivism represents a tendency towards a society with strong ties within the family or a specific group in exchange for loyalty.

Serbia is considered a collectivist society, with a low score of 25. Characteristics of Serbian society include long-term, close-knit

relationships and dedication to the reference group (family, extended family, or extended relationships). Loyalty is highly valued over other values, rules, and regulations. The group is responsible for its members, organizational management involves managing the group, as well as decisions (regarding hiring, promotion, etc.). Workplace relationships are viewed from a moral aspect: as family ties, and offense leads to loss of reputation and shame.

7.5. Discussion

Each provision must be precisely formulated to avoid ambiguity. For the effective functioning of crisis management systems, detailed sub-legal acts are necessary at all levels of jurisdiction. Additionally, the functionality and efficacy of individual laws need to be tested in practice. Despite being enacted with the best intentions, the Law on Disasters failed to meet expectations, particularly evident during the events of 2014. One reason for this is the lack of sub-legal acts both at the central and local levels. The absence of a Regulation on criteria and methods for determining the health suitability of citizens for involvement in civil protection bodies is just one example. Another critical aspect is the Regulation on technical norms for shelter maintenance, equipment, and construction, which lacks alignment with EU standards and utilizes outdated criteria.

The most pressing issue lies in the absence of a Regulation governing the organization and functioning of observation, early warning, information dissemination, and alert systems, as this segment was identified as one of the most problematic during the 2014 floods. The disorganization of these systems practically suspends the principle of transparency, consequently undermining the implementation of preventive protection and accountability principles. Regarding the responsibilities of local self-government units, particularly municipalities, in adopting sub-legal acts, the situation is even more concerning. Of the required documents, municipalities have only adopted Rules of Procedure for Disasters Staff. While a high percentage have made decisions on the organization and functioning of general-purpose civil protection, decisions regarding the formation of general-purpose civil protection units are lacking in many municipalities. This indicates a significant gap in preparedness and response capabilities. Consequently,

vulnerability assessment and protection and rescue planning remain insufficient, posing a genuine cause for concern.

The assessment of the adequacy of the Law varies depending on the target group. Approximately 70% of respondents from cities evaluated the current Law as inadequate, with no statistically significant differences between the views of city and municipality representatives. Reasons cited by city representatives relate to vertical normative inconsistency (top-down approach); lack of guidelines for implementing legal and sub-legal acts; complex methodologies for assessment and planning; poor, impracticable, unclear, and imprecise legal provisions for the formation of general-purpose civil protection units: rights and obligations of civil protection members; unclear organizational structure and role of general-purpose civil protection; inadequate alignment of municipal civil protection units' role with the Law on Waters and sub-legal acts. Additionally, there is mention of the lack of accountability in the current legal framework; incomplete decentralization (transfer of responsibilities without fiscal decentralization); unregulated alert system and ambiguity regarding whether municipalities must have a situation center or establish one only during emergencies, etc.

Taking the above into consideration, I conclude that the first specific hypothesis, stating: "The responsibilities of different administrative levels in crisis management policy in Serbia are not fully or sufficiently regulated by legal and sub-legal acts," is confirmed. About 55% of respondents from cities expressed the need for support in the legislative framework (interpretation of legal regulations and drafting of sub-legal acts), which is significantly higher than municipality representatives (around 30%), indicating the more complex position cities have in comparison to municipalities (size, diversity, number of settlements, population, administrative structure, number of entities, potential risks, etc.). After the adoption of the new Law, more attention should be devoted to supporting cities and municipalities in drafting their sub-legal acts, provided that the state promptly adopts acts for which it is responsible.

8. DIMENSIONS OF CRISIS AND EMERGENCY MANAGEMENT AS PUBLIC POLICIES

Crisis management as public policy is predominantly situated within the security system, particularly in the so-called civil sector - disaster management. Public policy is regarded as a process of identifying and defining problems, considering, selecting, and implementing specific solutions involving all relevant stakeholders. Additionally, crisis management as public policy is applied in all areas of public interest, including health, education, environmental protection, social policy, justice, defense, and others, with responsibilities for implementation possibly allocated to central, regional, and local levels, or a combination thereof.

The socio-economic context of cities is crucial for this dimension of crisis and disaster management governance due to variations in the conditions under which crisis and disaster management are conducted. The dimension of crisis and disaster management as a public policy has been examined concerning its strategic, institutional, operational, and financial framework. Collaboration among actors at the administrative level in normal and emergency circumstances, coordination, monitoring, and evaluation of crisis and disaster management at the city level are also part of the examined dimension.

8.1. Socio-economic context of crisis and disaster management in cities of Serbia

Geographic, demographic, and socio-economic factors of cities are crucial because they provide the framework in which crisis management unfolds. The estimated population size, land area, population density, number of settlements, number of unemployed individuals registered with the national employment service, number of recipients of social welfare benefits, and expected duration of life expectancy are indicators used to describe the socio-economic context. They are important because they form the basis

for planning and implementing responsibilities in the field of crisis management and disasters.⁴⁴⁹

As can be seen from the graph (3), approximately 39% of Serbia's total population lives in 1/5 of the total number of local self-governments (LSGs) spread across 23 cities. Cities vary significantly in terms of population size, land area, population density, and the number of settlements. Due to its size and characteristics, Belgrade deserves special attention. Not only does it have the largest population and land area, but it is also the most economically powerful. With its 17 urban municipalities, Belgrade constitutes a diverse entity. The total area of Belgrade's 17 urban municipalities is 322,268 km² (of which the urban area covers 35,996 hectares). The largest municipality in terms of area is Palilula (44,661 ha), while the smallest is the central municipality of Vračar (292 ha), with a ratio of approximately 1:153. Belgrade is the most populous city in Serbia, with 1,659,440 inhabitants according to the latest census. The highest population resides in Novi Beograd (212,104 inhabitants), while the lowest is in Sopot (20,199 inhabitants), with a ratio of 1:10. Belgrade also has the highest population density in Serbia, with 521 inhabitants per km² (compared to the national average of 91 inhabitants/km²), approximately 5.7 times higher than the average. The highest population density is on Vračar (1911 inhabitants/km²), while the lowest is in Barajevo (127 inhabitants/km²), with a ratio of 1:15.

Therefore, crisis and disaster management applied to Belgrade can hardly be viewed as a singular, centrally functional public policy at the city level, given the significant disparities among its urban municipalities. Consequently, the conditions, requirements, and circumstances under which crisis and disaster management are implemented vary. Further comparison of the aforementioned indicators reveals significant differences among other cities as well. Besides Belgrade, which occupies 3.65% of the total land area, the largest areas are occupied by Kraljevo (1.73%), Zrenjanin (1.49%), Pirot (1.39%), and Sombor (1.37%). The smallest areas are occupied by Jagodina (0.53%) and Smederevo (0.55%).

When it comes to the number of inhabitants, except for Belgrade, the most populous cities are Novi Sad (350,930); Niš

⁴⁴⁹ Source: Municipalities and Regions in the Republic of Serbia 2016, Statistical Office of the Republic of Serbia, corrected edition, Belgrade, March 2017. Statistical Office of the Republic of Serbia.

(257,883); and Kragujevac (178,610), while the least populated are Pirot (55,885); Zaječar (56,714); and Kikinda (56,760). The ratio between Belgrade as the most populous and Pirot is almost 30:1. Following Belgrade, the most densely populated are Novi Sad (502) and Niš (433). The average population density for Serbia is 91 inhabitants/km². Cities with below-average population density include Pirot (45); Zaječar (53); Sombor (68); Kikinda (72); Kraljevo (80); and Zrenjanin (90). Comparing the average population density of cities and municipalities to Serbia, it is found that the population density in cities is twice the average (186 inhabitants/km²), while in municipalities, it is 73.1 inhabitants/km².

The number of settlements is also important, as the existence of human settlements is a significant factor in defining the type of crisis situation and crisis management. There are a total of 6,158 settlements in Serbia. Of these, urban settlements are the most numerous. Belgrade has the most settlements (157), followed by Leskovac (144); Vranje (105 settlements and 2 urban municipalities); and Kruševac (101). The fewest settlements are found in Kikinda and Pančevo (10 each); Sombor and Novi Sad (16 each); and Subotica (19).

To estimate the percentage of vulnerable categories, unemployed and recipients of social financial assistance (hereinafter: SFA) were considered as vulnerable categories (poor or at risk of poverty). In Serbia, approximately 1.5% of the population are recipients of social financial assistance. Official statistics from the Republic Institute for Social Protection record the beneficiaries of SFA. Belgrade has 8,557 SFA beneficiaries, which is a lower number than the number of SFA users. On average, each SFA beneficiary has a family of 2-3 members, so this number is higher, but these data were not available for Belgrade. This indicator is also relative, as it largely depends on the restrictive practices of the Centers for Social Work in implementing the right to social financial assistance. Compared to Serbia, the fewest SFA users are in Čačak (0.5%), Užice (0.6%), and Pančevo (0.8%). If this indicator is taken as a measure of poverty, the most vulnerable are the inhabitants of Pirot (7.2%), Niš (4.9%), and Sombor (4.8%).

For the category of unemployed, the share of unemployed population registered with the National Employment Service (hereinafter: NES) was compared to the total population. When it comes to this indicator, there are certain limitations. First, it is necessary to clarify that it is not the unemployment rate calculated according to

the methodology of the NES: the number of able-bodied individuals registered with the NES in relation to the total number of able-bodied individuals. The methodology used by the NES relates to the working-age population. However, for this research, working ability is not relevant, but rather the fact that the unemployed are generally a vulnerable category in crisis management, so it is important how many of them are in relation to the total population. Another limitation concerns the fact that this is a relevant source but an insufficiently reliable indicator. The indicator only shows the unemployed who are registered in NES records. Some unemployed individuals are removed from the records due to delays, many seek employment through private providers in the labor market, many work unregistered ("off the books"), and a certain number are inactive and unregistered. Therefore, it can be concluded that the numbers are higher than those shown.

The average share of unemployed population in Serbia in 2015 was 9.91%. As seen from the graph, 12 cities have a higher percentage of unemployed than the Serbian average. Kikinda, Šabac, Čačak, and Kraljevo are close to the average. This percentage is highest in Novi Pazar (17.75%); Loznica (15.51%); Jagodina (14.74%); Leskovac (13.75%); and Pirot (12.89%). The fewest registered unemployed were in Belgrade (6.3%); Subotica (6.39%); Užice (6.43%); and Zrenjanin (6.51%). This is somewhat surprising, considering that these are the most developed JLS: cities mostly of the first category of development, with a level of development above the republic average (Belgrade, Valjevo, Kragujevac, Niš, Novi Sad, Subotica, Užice, Čačak) and the second category of development - from 80-100% development compared to the republic average (Vranje, Zaječar, Zrenjanin, Jagodina, Kikinda).⁴⁵⁰

The data show that out of the total urban population in Serbia, 39.1% resides in Belgrade, while the remaining cities account for 60.9%. However, Belgrade's budget constitutes 51.02% of the total budget of all cities (the budgets of all other cities being 48.92%). Simplified, if budgetary funds were to follow citizens, Belgrade's budget should correspond to the proportion of the number of urban residents (which is not the case) and should be around 40%. This simple calculation indicates that Belgrade has about 10%

⁴⁵⁰ Regulation on the Establishment of a Unified List of Development of Regions and Units of Local Self-Government for the Year 2014, "Official Gazette of RS" No. 104/2014.

higher budget per capita compared to other cities. The remaining cities, with 60.9% of the total urban population, receive 48.92% of the budget. This is important due to the availability of rights and services, which are unevenly distributed, and one of the main reasons is the uneven allocation of resources.

Life expectancy at birth is one of the basic European health indicators - the so-called ECHI (European Core Health Indicators), representing the number of years an individual of a certain age can expect to live given the current mortality rate. It monitors the health status of the population, cumulative health risk factors, and the effects of interventions. It indicates inequalities in the quality of life among populations both between countries and regionally. It is very important as an indicator of the quality of life of different population groups and is essential for social inclusion. It is important to monitor it at birth and in age categories of 45 and 65 years, as this provides important data related to the health status and quality of life of children, working-age, and older populations. Gender perspective is crucial here as well but is also important from the crisis management aspect.

The presentation of the expected lifespan of men and women in Serbia shows that men's life expectancy is significantly shorter than that of women. The average for Serbia is 72.62 years for men and 77.67 years for women. Loznica is the only city where men have an average life expectancy (72.6). The longest life expectancy is expected for men from Niš (74.1); Užice (73.95), Kragujevac, and Belgrade. The shortest life expectancy is expected for men from Vojvodina cities: Subotica, Kikinda, and Zrenjanin). Women in Serbia are significantly more long-lived than men. According to this indicator, the longest-lived women are from Pirot (79.2); Užice (78.8), and Novi Sad (78.6), while the shortest life expectancy is expected for women from Subotica, Kikinda, and Leskovac (around 76.5).

8.2. Strategic framework for crisis and disaster management in cities in Serbia

The most important national strategic documents in the field of crisis management are: the National Security Strategy of the Re-

public of Serbia ("Official Gazette of RS" No. 88/2009); the Defense Strategy of the Republic of Serbia ("Official Gazette of RS" No. 88/09); the National Strategy for Protection and Rescue in Disasters ("Official Gazette of RS" No. 86/2011); the Fire Protection Strategy ("Official Gazette of RS", No. 21/12); the National Program for Disaster Risk Management, Action Plan for the Implementation of the National Program for Disaster Risk Management (2016-2020), and the Community Policing Strategy, "Official Gazette of RS" 43/13.

The National Strategy for Protection and Rescue in Disasters (2011) identified 4 groups of deficiencies in the existing protection and rescue system: institutional-organizational; material-technical; deficiencies in cooperation, coordination, and availability of information; lack of human resources and education. Institutional-organizational deficiencies in the existing system relate, among other things, to the lack of conditions for consistent implementation of regulations; non-implementation of preventive measures; uneven distribution of service capacities in the territory of Serbia; the absence of a 112 system, etc. Insufficient cooperation and coordination at both horizontal and vertical levels, as well as the need for improvement in international cooperation, were highlighted as a separate group of problems. The last place is reserved for deficiencies related to the unpreparedness and low capacity level of local self-government and underdeveloped prevention culture. The strategy has set 5 strategic areas with defined goals. The first area aims to prioritize the reduction of disaster risks at the national and local levels, with a strong institutional basis for implementation. The second area focuses on strengthening the risk analysis system: improving risk identification, assessment, and monitoring, and early warning. The third strategic area relates to building a culture of safety and resilience at all levels. The following areas include reducing risk factors through the development of methods and improvement of conditions for risk assessments, and finally, preparing for emergency and efficient response in disasters at all levels.

By adopting the Community Policing Strategy (2013) and the Action Plan (2015-16)⁴⁵¹, among other things, goals were set to strengthen trust, cooperation, and partnership between citizens, communities, and the police, as well as to establish effective secu-

⁴⁵¹ Strategy of Community Policing, "Official Gazette of RS" 43/13.

rity prevention. These documents have served as a strategic basis for the adoption of local strategic documents for community safety, with a special focus on prevention, often proposed by local inter-sectoral bodies for community safety: councils or committees.

8.2.1. The development of the strategic and institutional framework for security and crisis management at the local level in Serbia

The process of planning public policies related to security culture and the establishment of local safety bodies began with the development of the community policing concept, supported by the OSCE Mission in 2002. Following this, the international community continued to actively support the development of community policing concepts at the local level, the establishment and operation of safety councils, and security planning at the local level.⁴⁵² The Safety Council was developed as a "partnership model for cooperation and joint action between local self-government, police, authorities, institutions, associations, minority communities, and citizens to enhance security in local communities."⁴⁵³ Their establishment is one of the priorities in developing the community policing concept in the Republic of Serbia. The role of the security council is seen in identifying issues, especially those concerning vulnerable groups related to security and quality of life; promoting the importance of security and particularly developing a preventive approach; analyzing the situation and proposing concrete measures and activities to address the identified community problems; creating and implementing projects with community partners or with other municipalities and informing the public about the role and work of the council. Prevention and partnership are the basic principles of the security council's functioning. The security council is envisaged as a working body of the assembly or council. The legal basis for the establishment of the security council is found in the provisions of the Law on Local Self-Government

⁴⁵² OSCE, *Reforma policije*, br. 4. maj 2005., str. 5-10. <http://www.osce.org/sr/serbia/18254?download=true>, скинуто са интернета 5. 11. 2017.

⁴⁵³ Evison, F., and group of authors (2015). "Handbook for the Operation of Safety Councils in Cities and Municipalities," Belgrade, OSCE Mission to Serbia.

("Official Gazette of RS" No. 129/07 and 83/14 and 101/2016, etc.) primarily in the provisions of Article 13, paragraph 5; Article 32, paragraph 1, point 6; and Article 44, paragraph 1, point 5; as well as in the Law on Police ("Official Gazette of RS" 6/2016), Article 27. At the local level, the basis is found in the statutes of municipalities and cities, the statutes of municipal and city assemblies, and the rules of procedure of the city/municipal assembly.

The composition of the security council should be tailored to the specificities of each community, but mandatory representatives of the regular composition are decision-makers in local self-government (mayor/president of the municipality, president of the assembly, head of administration, etc.); police (head of administration, station commander, etc.); judges and public prosecutors; director of the Social Welfare Center, representatives of educational and health institutions, media, economy, minorities, religious institutions, and civil society organizations.

8.2.2. Local strategic security documents

Local security plans/strategies are not mandatory for local self-governments, so practices vary greatly. They have often developed, sometimes in parallel, thanks to donor support. Local self-governments have adopted donor practice examples and applied them to their own cases. As a form of support in strategic planning, these projects have, individually, created guidelines, manuals, guides, or roadmaps for strategic security planning at the local level. The number of adopted community security plans is not precisely determined since they have been adopted at different intervals, under different names. Some have expired, and some are in the drafting phase. Novi Pazar has adopted a security strategy with an action plan (2016-20), while Niš, in addition to the Security Strategy (2010), also has a Youth Security Strategy (2013). There is no exact data on the number of adopted local security plans.

When it comes to local security plans, there is no single framework for their adoption; mechanisms and institutional frameworks vary from self-government to self-government. The mechanism for their standardization largely consists of activities of the Standing Conference of Towns and Municipalities, the union of all towns and municipalities in Serbia. Since 2014, the SCTM has had a series of activities aimed at strengthening the capacities of local self-governments to build security partnerships in the com-

munity. The advantages of this approach are that the SCTM, in a planned, cross-sectoral, and unified manner, participatively and based on examples of practice exchange, involves all its members, informs them, and strengthens their capacities in all areas relevant to local self-governments.

In that sense, in collaboration with the Ministry of the Interior, the SCTM published the Handbook for the Action of Security Councils in Cities and Municipalities in October 2015. Due to the diverse practices in the field, the Handbook covers topics such as the establishment, roles, and activities of local security councils; the importance of planning and mechanisms for developing security plans. What is crucial is that models of acts that local self-governments need to adopt are offered: Decisions on the establishment of a local security council; resolutions on the appointment of council members; Rules of Procedure of the security council. Models of matrices for analyzing the security situation in the community, as well as for strategic, action, and communication plans to improve community security, have been developed. Models of meeting agendas, meeting minutes, and press releases are also proposed. This achieves standardization of the decision-making process, the structure of planning documents, as well as monitoring and reporting methods.

8.2.3. The number and type of intersectoral bodies at the local level for security

Given that they are not legally mandatory and there is no jurisdiction related to monitoring and coordinating local security councils, there is no continuous and systematic monitoring and evaluation, i.e., reporting and data on the number, work, and impact on security that the councils have in their communities. Answers can be found in sporadic research supported by various projects. The first local security council was established in 2002. By early 2011, there were about 100 local security bodies established in Serbia.⁴⁵⁴

⁴⁵⁴ Bjeloš, M., Brozović, Z., Đorđević, S. (2011). Priručnik za rad lokalnih saveta za bezbednost.

The report from the Belgrade Centre for Security Policy in 2014 mentions a total of 76 advisory bodies at the local level responsible for security, estimated to be 7% fewer than in 2007.⁴⁵⁵

A study conducted by the Standing Conference of Towns and Municipalities (SCTM) during 2016 and 2017 addressed issues of territorial distribution, establishment, composition, and working methods of local security councils. The aim was to gain a better insight into the work of security councils so that support to them could be tailored to real needs in the future. Questionnaires were sent to all local self-governments, and 80 participated in the research, with 17 cities included in the dissertation research (Belgrade, Vranje, Kikinda, Kragujevac, Kraljevo, Kruševac, Leskovac, Loznica, Niš, Novi Pazar, Novi Sad, Pirot, Smederevo, Sombor, Subotica, Užice, and Šabac). It was found that out of 80 local self-governments, 74 had established security councils, 4 were planning to establish them by the end of the current year, and 3 had no plans to establish them. Among the surveyed cities, only Kruševac and Belgrade did not have councils.

In terms of territorial representation, the highest number of councils was established in Vojvodina, followed by southern and eastern Serbia, then Šumadija and western Serbia, and the least in Belgrade (five out of a total of 17 city municipalities). Also, in terms of the population size, the highest number of councils were established in small municipalities (up to 30,000 inhabitants), totaling 43. In medium-sized local self-governments (30-100,000 inhabitants), 18 councils were established, while municipalities with over 100,000 inhabitants had 13 councils. Regarding the size of the councils, the majority had between 11-15 members (30 councils), while 26 councils had between 6-10 members.

When it comes to composition, it was noted that few councils fully implemented the recommendations of the SCTM and OSCE from the Handbook (2015), and few local self-governments had all the recommended actors in their composition. The most common representatives were from the police, typically station commanders or chiefs. They were followed by representatives from local self-government, the judiciary, health, and social institutions. Civil society organizations, representatives of minority groups,

⁴⁵⁵ Dorđević, S., Radovanović, G. (2014). Report "Partnership for Safe Communities in Serbia," Belgrade Centre for Security Policy, supported by the OSCE Mission to Serbia.

business, and the media were least represented, as can be seen in Graph 17. Representatives from defense, fire and rescue units, youth offices, public utility companies, retired professionals, etc., were sporadically represented.

Regarding public reporting on their work, 56 local self-governments stated that there are activities for informing and reporting to citizens, while in 7 cities and municipalities, there is no awareness that the public should be informed about their work. One council informs the Assembly about its activities but not the public.

8.2.4. Change of power at the local level as a factor of stability in policies for managing crises and emergencies

According to the SCTM research, the most common founders of local security councils are the assemblies of local self-governments (46 LSCs), followed by mayors/presidents of municipalities (15 LSCs) and municipal councils (12 LSCs), as shown in Graph 18. Experience in working with local self-governments shows that the practice in local self-governments is to replace all bodies of the previous founder after a change of power and the establishment of a new structure, including professionals (chiefs, directors of public institutions and enterprises, etc.). This often happens even when there is no change in the party option, but only personnel changes are involved.

Institutional stability is problematic for working and advisory bodies at the local level due to changes in power or political priorities, and security councils are no exception. An example is the Security Council of Kragujevac, which was a model of good practice until 2012 but has not convened once since then. Sustainability and continuity are also affected by the frequency of council meetings. When it comes to the frequency of meetings, the data is not encouraging: 21 councils stated that they meet as needed, and 8 have never met. Twenty councils meet once or twice a year, while only two councils meet on a monthly basis (Novi Pazar and Vladicin Han).

8.2.5. The development of decision-makers' capacities at the local level in the field of crisis and disaster management is crucial

After conducting research with professionals in crisis and disaster management - chiefs of Disasters Departments (Ministry of Interior) on the topic of analyzing the capacities of cities for disaster management, as well as research conducted with employees of Local Self-Governments (LSGs) in defense jobs and Civil Protection on the level of preparedness of LSGs for emergencies, a third survey was conducted with mayors. Mayors (or in some cases their deputies) of Belgrade, Čačak, Kikinda, Kragujevac, Kraljevo, Kruševac, Leskovac, Loznica, Niš, Novi Pazar, Pančevo, Sombor, Sremska Mitrovica, Zrenjanin, Vranje, Užice, and Šabac responded to questionnaires consisting of 8 questions from all 4 examined dimensions from July to September 2017. A Likert scale of attitudes was used, with provided answers (strongly agree; agree; undecided; disagree; strongly disagree). The goal was to compare the perception of decision-makers at the local level with the actual situation and the perception of representatives of the Ministry of Interior and local officials responsible for defense and disasters.

In further analysis, responses to the statement "The legal solution by which the mayor is the commander of the emergency headquarters is good and should not be changed" revealed unanimous agreement among all surveyed mayors, with complete concurrence. Notably, Loznica and Belgrade also express full agreement, whereas Kragujevac remains undecided. Regarding the assertion "The city administration is fully prepared to respond to disasters with all sectors," five mayors, representing 29.4% of the respondents - Šabac, Sremska Mitrovica, Sombor, Kruševac, and Čačak, responded with "strongly agree," signifying complete alignment with the statement. The remaining mayors indicated agreement without dissenting or undecided responses.

These findings suggest a high level of confidence among mayors in the current legal framework appointing them as emergency headquarters commanders. However, opinions vary slightly on the readiness of city administrations to respond comprehensively to emergencies. While a significant portion expresses complete confidence, others demonstrate a degree of agreement without strong endorsement. This nuanced perspective underscores the importance of continued evaluation and refinement in emergency preparedness strategies at the local level, ensuring robust and effective responses to unforeseen challenges.

When assessing the assertion "The competencies of local self-government in managing emergencies in Serbia are fully and

sufficiently regulated by laws and sub-laws," mayors provide more diverse responses, as shown in Graph 2. There is no significant correlation between the responses given by mayors to this question and the assessments of respondents from local self-government units (LSGs) regarding the completeness and adequacy of the Law ($r = 0.323$; $p > 0.05$). Only 30% of the LSG respondents rated this Law as adequate, while the remaining 70% cited inconsistencies with other laws, an excessive transfer of competencies to LSGs, unclear roles of general-purpose civil protection units, ambiguously defined rights and obligations of civil protection general-purpose unit members, lack of instructions for implementing legal and sub-legal acts, impracticality in the field of civil protection, and so on. On the other hand, 82.4% of mayors agree with the statement that the competencies of local self-government in managing emergencies in Serbia are fully and sufficiently regulated by laws and sub-laws, except for Belgrade and Kruševac, which disagreed, and Leskovac, which was undecided.

When assessing the assertion "The competencies that a city has in managing emergencies are sufficiently implemented (formation of operational-expert teams, appointment of civil protection trustees and their deputies, establishment of equipped and trained civil protection units, situational center, alerting means, etc.)," 35.3% of respondents fully agree (Čačak, Kikinda, Kragujevac, Pančevo, Sremska Mitrovica, Šabac); 58.8% agree, while one (5.9%)—the mayor of Leskovac—remains undecided.

Regarding the assertion "The strategic risk assessment plans provided by the law have been sufficiently and timely adopted and implemented in cities, and the crisis management style is predominantly proactive," one respondent fully agrees, while 64.7% provided an answer of "agree," and three respondents were undecided. There were no mayors who disagreed with this assertion. However, according to the report from representatives of the Ministry of the Interior, the risk assessment was conducted only in Belgrade and Sremska Mitrovica, while others claimed that it is ongoing.

Diverse responses were obtained regarding the assertion "Actors in local self-government (public administration, public services and decision-makers, citizens) are sufficiently trained and educated on crisis management," where only three mayors (Šabac, Zrenjanin, and Pančevo) fully agree that the actors are sufficiently educated. The representative of Belgrade is the most critical and

the only one who disagrees, while the mayors of Kikinda, Leskovac, Loznica, Novi Pazar, and Užice are undecided. Others either agree or fully agree. The responses of the respondents are presented in Graph 23. An interesting fact is that more than half of the respondents from local self-government units (57.9%) stated that employees and officials in the city administration are not sufficiently informed about prevention and crisis management. The greatest improvement can be achieved through an educational framework.

Regarding the assertion "Activities and voluntary engagement of citizens in emergencies are appropriately regulated by laws and sub-laws and by appropriate standard procedures," only 11.8% of respondents fully agree (Šabac, Sombor); 58.8% agree, 17.6% are undecided (Leskovac, Pančevo, Vranje), and 11.8% (Kruševac, Belgrade) disagree.

Although not fully in agreement regarding the legal framework and procedures, 82.4% of mayors fully agree with the importance of civil society organizations, citizen associations, and volunteers in emergencies, while the rest agree. However, no significant correlation was found between the assessment of the importance of citizen involvement by mayors and the assessment by local self-government units (LSGs) of citizen awareness ($r = -.310$; $p > 0.05$), even though all mayors fully or partially agree with the importance of citizen involvement and awareness. Surprisingly, 85% of LSG respondents believe that citizen awareness is not at a sufficiently high level.

Adding to this data the assessment of the Ministry of the Interior's respondents, which shows that there are six cities where there is no education for the population, while in others, education relies solely on preschool and school institutions and public information means, the LSG's assessment of insufficient education is not surprising. An interesting fact is that only 27.8% of respondents from municipal LSGs, regardless of their assessed importance in emergencies, reported that civil society organizations were involved in drafting the Risk Assessment, Protection and Rescue Plan, and Long-Term Improvement and Development Plan.

8.3. Operational Framework for Crisis and Emergency Management at the Local Level

The evaluation of the operational framework for crisis and disaster management at the local level was based on the responsibilities outlined in Article 15 of the Law pertaining to local self-governments (LSGs). The variables examined included the frequency of regular meetings held by emergency headquarters, the establishment of expert-operational teams, the appointment of civil protection commissioners and their deputies, the setup of situational centers and civil protection units, the condition and capacity of shelter facilities, the organization of simulation exercises, the status of early warning systems, the evaluation of telecommunication systems, information and communication technology, and acoustic studies, as well as the state of personal and collective protection and damage assessment commissions.

Data from 2014 provided by the Ministry of Internal Affairs revealed that regular meetings of emergency headquarters were typically held once every three to four months across most cities, with the frequency ranging from two meetings annually in Subotica to 12 meetings per year (i.e., monthly) in Smederevo. Subsequent analyses conducted three years later did not indicate significant variations in meeting frequency. In approximately 70% of cases, cities held quarterly regular meetings, supplemented by emergency sessions as required. Leskovac had the fewest meetings, with just 1-2 gatherings annually, while Pancevo held 6-8 meetings per year. Notably, Nis conducted as many as 14 meetings in 2016.

The formation of expert-operational teams was absent only in Kragujevac, with the number of teams established in other cities ranging from three in Loznica, Novi Sad, Uzice, and Sabac to 23 in Sombor. Despite the average number of such teams per city increasing from around 5 in 2014 ($M = 4.86$) to nearly 7 in 2017 ($M = 6.86$), statistical analysis using a t-test for dependent samples did not reveal a significant difference.

According to available data from 2014, all examined local self-governments except for Cacak had designated legal entities. Measurements from 2017 indicate a positive change, with all cities now having designated legal entities. The number of designated legal entities ranged from at least 11 in Jagodina to a maximum of 73 in Sombor, while Belgrade had 66 designated legal entities. A

comparison of the number of designated legal entities from 2014 and 2017 reveals a statistically significant difference (Table 11), with the number of entities increasing from an average of 25 in 2014 ($M = 24.86$) to 31 in 2017 ($M = 31.32$).

Until the analysis conducted in 2014, only 12 cities had appointed civil protection commissioners and their deputies, with Belgrade having appointments in suburban municipalities. The situation changed significantly by 2017, as only Novi Sad did not appoint them, while all other cities fulfilled this duty. Additionally, data from Smederevo indicate that commissioners were appointed, although some changes are necessary.

Regarding civil protection units, only 7 cities had them formed until the 2014 analysis (Vranje, Jagodina, Kruševac, Niš, Novi Sad, Požarevac, and Sombor), while by 2017, this number increased to 11, with Čačak, Sremska Mitrovica, Kragujevac, and Kraljevo joining, and temporary compositions formed in Užice. Even in cities where units were formed, they were generally under-equipped and under-trained, as was the case three years prior. Exceptions include Kraljevo, Sombor, and Sremska Mitrovica, while Užice and Čačak had partially trained units. Equipment procurement is ongoing in Kragujevac, with training planned for autumn 2017.

Before the 2014 analysis, only three cities—Belgrade, Kragujevac, and Kruševac—utilized the possibility of forming situational centers, with Užice forming them as needed. Data from 2017 show that situational centers were established in only three cities: Kragujevac, Kruševac, and Sombor. From the previous analysis, we see that in 2014, a situational center was not established in Sombor but in some municipalities within the district, which has now changed. There is no available data on the situational centers in Belgrade, so the current situation is unknown. Data indicate that the process of forming them is underway in Pančevo and Čačak, as well as in Niš, where space arrangements are currently the focus. In Užice, situational centers are formed as needed, while they have not been established in other cities.

Apart from a number of purpose-built facilities, there are primarily accommodations in tourist, educational, and school facilities of various capacities. Complete answers regarding facility capacities were not obtained, but from Table 1, we see that they range from 40 in Užice (less than in 2014 when that number was 100) to 2,300,000 in Belgrade, which is in line with the size of the

city and its population. No statistically significant difference in the number of capacities between 2014 and 2017 was found (Table 12).

The practice of testing disaster management systems through occasional simulation exercises remains relatively rare and uneven, as revealed in the 2014 analysis, with such exercises not being held at all in almost half of the cities (45.5%). Although this number has decreased to less than half compared to 2014, the difference is not statistically significant (Table 13). The highest frequency of simulation exercises continues to be in Leskovac (2 to 3 times per year), followed by Kragujevac (2 times per year) and Pančevo (1 to 2 times per year).

When it comes to the civil defense alert systems, the situation has shown some improvement compared to the state reported in 2014. At that time, among all the reports analyzed, only the one from Subotica indicated a satisfactory condition of the civil defense alert system. However, the analysis conducted in 2017 suggests that progress has been made in certain cities such as Belgrade and Valjevo, where the modernization of these systems is currently underway. Meanwhile, reports from Zrenjanin, Pančevo, Loznica, Sombor, and Užice portray the situation as satisfactory. In Jagodina, Kragujevac, and Kruševac, the sirens are reported to be in a functional state, while in Novi Pazar, authorities mention that the system is maintained but inadequately so. On the contrary, in all other cities, the sirens are in a deteriorated state, with many being outdated and half of them being non-functional. Evaluators highlight one of the major issues as the insufficient coverage of cities, a problem notably observed in cities like Niš and Leskovac.

Furthermore, acoustic studies conducted in local self-governments are outdated, some dating back several decades, and hence do not meet the evolving needs of communities that have grown and expanded over time. The analysis from 2014 mentioned plans for new acoustic studies in Sremska Mitrovica and Čačak. However, a review conducted three years later reveals that while progress is underway in Sremska Mitrovica, Čačak has completed its study and is currently in the process of equipment modernization. Despite explicit demands for new studies in cities like Pančevo, Zrenjanin, or Kragujevac, these endeavors have yet to be realized.

In contrast to three years ago when assessments of telecommunication systems and information-communication technologies supporting disaster management systems were significantly out-

dated and thus unsatisfactory, it appears that the situation has improved. Most cities now assess the situation as good or satisfactory. While Novi Pazar reports solid conditions, Novi Sad, Smederevo, Valjevo, and Niš still face challenges, with their systems being outdated and unsatisfactory. Therefore, changes are deemed necessary in these cities.

Three years after the previous analysis, the state of personal and collective protection in Belgrade has transitioned from being "absolutely worrying" to satisfactory. Similarly, the assessed state in 2014 did not show significant differences in other local self-governments, which reported incomplete and outdated means of personal and collective protection, indicating a generally poor condition. Užice was an exception, with a "partially equipped" status. However, the recent report from this city indicates an unsatisfactory state. The analysis from this year suggests a slightly improved situation, with slightly more than half of the reports assessing this state as good and satisfactory. Inspections are being conducted in Smederevo, Pančevo, Novi Pazar, and Niš, while Valjevo reports satisfactory equipment but inadequate citizen readiness. Similar situations are observed in Jagodina, where preparations are defined and organized, but training has yet to be conducted. Despite the progress, the shift from catastrophically poor conditions three years ago to satisfactory conditions in about half of the cities this year is deemed insufficient, especially considering that a significant number of cities still assess their situation as unsatisfactory and poor.

According to the 2014 report, permanent damage assessment commissions were formed in 15 local self-governments. However, in Zrenjanin, Kraljevo, Leskovac, Niš, and Sombor, they are formed as needed. Subotica did not form this commission, and there was no data available for Belgrade. In 2017, the number of permanent commissions remains unchanged compared to three years ago, while in other cities, these commissions are formed as needed.

8.4. The institutional framework for managing crises and emergencies at the local level

When it comes to implementing responsibilities in the field of disasters, it is necessary for these responsibilities to be recognized in the systematization and job descriptions within the city administration. As part of the public administration reform, the Standing Conference of Towns and Municipalities, in consultation with the Ministry of Public Administration and Local Self-Government (hereinafter: MPALSG), prepared a model Regulation on the Organization and Systematization of Jobs in the City Administration, City Legal Services, Professional Services, and Special City Organizations during 2016.⁴⁵⁶ With this model, the area of disasters is not singled out as a separate organizational unit or group of tasks but rather placed within the Department for Inspection Affairs.

It specifies that this department is responsible for supervision in areas such as urban planning, environmental protection, communal services, sports, roads, traffic, education, etc. A significant aspect related to collaboration with other bodies and organizations for mutual information exchange, data sharing, provision of assistance, and joint measures and actions is also included in the job description of the Department for Inspection Affairs. The same applies to tasks in the field of disasters: conducting risk assessments, preparing protection and rescue plans, implementing protection and rescue measures, mitigation and elimination of consequences, organizing civil protection, establishing an integrated system of protection and rescue, damage assessment, preparing defense plans, performing technical and administrative tasks for the needs of the City Disasters Staff and civil protection units, preparing defense plans, and realizing defense interests in conditions of war and disasters in the territory of the City, etc. As can be seen, the Department for Inspection Affairs bears the significant burden of two entirely different areas.

From the conducted research in November 2017, on the network of commissioners of the Standing Conference of Towns and Municipalities for disasters in cities, it can be seen that a number of cities have not adopted the mentioned model but have established an organizational unit for defense and disasters. The

⁴⁵⁶ For more information: <http://www.skgo.org/reports/1882/Modeli-Pravilnika-o-organizaciji-i-sistematizaciji-radnih-mesta--i-nacrt-kadrovskog-plana-u-gradskoj-i-op%C5%A1tinskoj-upravi,-stru%C4%8Dnim-slu%C5%BEbama-i-posebnim-organizacijama>, преузето са интернета 13. 11. 2017.

names of the organizational models vary. In Belgrade, disaster tasks are handled by the Chief of the Department for Defense and Disasters. The department was assigned from November 1, 2014, to December 31, 2016, to the Mayor's Office, and from January 1, 2017, it has been under the Secretariat for Defense, Disasters, Communication, and Coordination with Citizens of the City Administration of Belgrade.

In the territory of the City of Belgrade, in local self-government bodies with the rank of "department," which is the highest organizational unit dealing with defense and disasters, there are a total of 6 staff members, but currently, only one position is filled: the head of the department. In other legal entities whose founder is the City of Belgrade and city municipalities, only authorized persons for the mentioned tasks are appointed. Kragujevac, Kraljevo, Kruševac, and Novi Pazar have Departments for Disasters. In Valjevo and Zrenjanin, there are Sections for Defense and ES. Čačak and Smederevo have a Group for Security and Defense.

In Pirot, ES tasks are performed by a member of the city council, who is also the coordinator of the disasters staff and responsible for local communities. Novi Sad has assigned ES tasks to an employee of the Department for Communal-Technical and Investment Affairs and IT tasks. Šabac, Sombor, and Užice have accepted the model of the Standing Conference of Towns and Municipalities and placed the tasks within the Departments for Inspection Affairs and Municipal Police, while Loznica has a mixed model: the Department for Inspection Affairs, Municipal Police, and Disasters. All interviewees have job descriptions related to disasters and related areas (migrants, security, fire protection, etc.) and mostly perform tasks from existing descriptions. The only exception is for Novi Sad, where the interviewed employee performs ES tasks but with a full description of another position. Generally, appointments to positions are made by the decision of the head of the city administration. The exceptions are Novi Sad, where the legal basis for dealing with ES is the order of the chief of the city administration, and Šabac - the decision to establish certain commissions.

8.5. Financing management in crisis and disasters at the local level

At the central level, allocations for disaster management can be tracked through a portion of the program budget allocated to the Ministry of the Interior, Sector for Disasters. Program budgeting was introduced in Serbia as a requirement in 2015 for all three levels of government. Instead of a line-item budget, which indicates how funds will be spent based on economic classifications (salaries, transportation costs, etc.), program budgeting focuses on outcomes defined by strategic plans in specific areas. The program budget is planned for one year with projections for three years. However, the budget allocated for disaster management at the central level is not transparent enough to determine the percentage of funds allocated for these purposes relative to the total budget.

For local self-government units, the Ministry of Finance, in collaboration with the Standing Conference of Towns and Municipalities, prepares a proposal for the structure of the local program budget each year. The Ministry of Finance argues that if allocations are below 1%, the area is considered irrelevant for monitoring, so it is not mandatory to include it in the budget structure. However, it has been shown that allocations for this area are uneven and below 1%. Despite the Ministry's methodology, a separate budget line for disasters was introduced in the 2018 budget under Program 15 - General Services of Local Self-Government - Program Activity 0014 - Emergency Management. This position did not exist before, so each local self-government unit handled it differently. As a result, allocations are largely non-transparent, and they cannot be tracked through selected outcome indicators as in all other areas where the local level has jurisdiction.

When asked why a budget line for disasters was not introduced and why more funds were not allocated for these purposes, the explanation was that investments in prevention are optional, and the only mandatory investments are reactive: for remediation and security purposes. Money is allocated when something happens, which is never known in advance. It has been shown that the notion of solely reactive allocations for disasters persistently pre-

vails in practice.⁴⁵⁷ The first analysis of the capacities of Serbian cities in the field of disasters, targeting the heads of the Sector for Disasters (Keshetović, 2014), showed that allocations are largely non-transparent: they are presented in different ways in budgets - either in percentages or in absolute values, making comparisons impossible. This methodological shortcoming was also evident in a study conducted in 2017 with employees in cities working on disaster management. In 2014, in Vranje, Jagodina, Leskovac, Požarevac, Smederevo, and Šabac, there were no budget allocations for disasters; they were done as needed, from budget reserves. For the cities of Zaječar, Novi Pazar, and Subotica, budget allocations in 2014 were described as "minimal". In terms of percentages, for disaster management needs in 2014, Čačak allocated 0.003% of the budget, Užice 0.15%; Zrenjanin 0.22%; Sremska Mitrovica 0.21%; Kruševac 0.48%; Loznica 1.31%; Kraljevo 1.5%; and Valjevo 2%. In absolute terms, the highest allocation was made by Novi Sad - 37 million dinars; followed by Kragujevac with 29.5 million dinars; Niš with 12.5 million dinars; Pančevo and Sombor with 1.5 million dinars.

The second study, with the same target group and instrument, was conducted in July 2017. Comparisons were made with the results from 2014 regarding financing for disaster management at the city level. Due to different data presentation methods in budgets (in percentages and/or absolute amounts), it is not possible to provide total/comprehensive data or conduct appropriate comparisons. In Belgrade, as the largest city, a budget for 2014 was not adopted due to the introduction of temporary administration, and there are no data for 2017. A certain number of cities speak of unplanned budget allocations, allocating funds as needed, while the report from Niš states that the allocations are insufficient. If we look at the percentages for those cities that provided them, the situation is not significantly different from 2014. The highest allocations were in Kraljevo, but it was assessed as insufficient (less than 1%), while the lowest was in Vranje (0.1%). Comparing the situation in 2014 when Kraljevo was among the cities with the highest allocations (1.5%), together with Valjevo (2%), the data from this year, where values mostly range from 0.1 to 0.5%, are not promising.

⁴⁵⁷ Radović, V. Jovanović L. (2011). Analiza uticaja vanrednih situacija na ekonomski razvoj lokalne samouprave u Srbiji, *Ecologica*, 18 (62): 117-121.

The data on the percentage of budget allocations correspond to those provided by representatives of local self-government units from cities, who also state that allocations range from 0.1 to 1% and are not statistically significantly different from the budgets allocated for disasters in municipalities.

Another study⁴⁵⁸ was conducted with employees in cities and municipalities working on disaster management tasks. The question pertained to the existence of budget allocations for disasters in the previous year, i.e., 2015. About 2% of respondents did not respond, 74.3% gave an affirmative answer, and 23.8% gave a negative one. The next question related to the nominal amount of allocations for disasters from the budget for 2015. The sample was supplemented for the purposes of the dissertation in 2017, and an additional analysis of differences between cities and municipalities in readiness for disaster management was conducted. In 2017, for the question related to stating the nominal amount and percentage of funds allocated from the local budget in the previous fiscal year, approximately 70% of respondents from cities stated the amount of funds allocated, while only half stated the percentage. The amount of allocated funds in cities ranged from 500,000 dinars to 168,920,940 dinars ($M = 22,517,246.22$; $SD = 40,959,620.62$), while the percentage range varied from 0.1 in Sremska Mitrovica, Zrenjanin, and Užice, to 1 in Šabac. The percentage of allocated funds in cities and municipalities was not statistically significantly different, although average values indicated higher allocations in municipalities. However, when interpreting the results, it is necessary to take into account that a large number of respondents (half of the representatives of local self-government units from cities and more than half of the representatives of municipalities) did not respond, so the reported results do not fully represent the true picture. Additionally, the statistical significance of the test is close to the marginal level of significance, so these differences could po

When it comes to the purpose of the allocated budget funds, the responses were as follows: procurement of equipment for civil protection purposes – 63.2%; financing of hail protection systems – 70%; maintenance of public alert systems – 50%; urban works – riverbed and critical infrastructure management – 70%; production of promotional materials – 10%; project development – 25%.

⁴⁵⁸ Kesetović, 2016

In addition to the provided options, respondents also mentioned that the funds were used for equipment procurement, fuel for fire-fighting vehicles, and other material and technical resources, as well as maintenance of open channels. Significant differences in investment allocation between municipalities were found in the areas of equipment procurement for civil protection purposes ($x = 6.141$; $p < 0.05$), financing of hail protection systems ($x = 5.941$; $p < 0.05$), and urban protective works ($x = 3.781$; $p = 0.05$), with representatives of cities reporting higher allocations in each area.

As a means of supporting the development of programs, projects, and activities in the field of risk reduction, management, and response to emergencies, the Disasters Budget Fund was established by the Law on Disasters (2009) and founded by Government Decision (2010). The fund was intended for development, and applicants could compete for it at the central, regional, and local levels (state, autonomous provinces, municipalities with their bodies and institutions), as well as businesses and citizens. However, with the amendments to the Disasters Law in 2012, budget appropriations for the fund were abolished, effectively causing it to cease to exist.

8.6. Functioning and Cooperation of Various Sectors of Local Self-Government in Normal Circumstances

To ensure that the functioning of various sectors within local self-governance during a crisis is coordinated and effective, it is essential that they collaborate, communicate, and coordinate their work in common activities, if any, during normal circumstances. The research evaluated the activity of local self-government in improving the quality of urban plans, specifically emergency response plans, and actions of public communal enterprises. It also examined whether public communal enterprises have risk assessment and emergency response plans and which actors within local self-government are recognized as important in prevention and response to emergencies, and if they have vulnerability assessments and emergency response plans.

Regarding prevention in crisis management and the functioning of different sectors of local self-government in normal circumstances, respondents from local self-governments that had

conducted Vulnerability Assessments and Protection and Rescue Plans were asked if their local self-government had taken any steps to improve the quality of urban plans or emergency response plans and actions of public communal enterprises during an emergency. A positive response was given by 43.8% of respondents, which was not significantly different from the responses of respondents whose local self-governments had the status of municipalities.

In response to whether public communal enterprises have Vulnerability Assessments and Protection and Rescue Plans, only one-third of respondents provided an answer. Respondents from only two cities (Pancevo and Uzice) stated that all enterprises have these plans, while others listed specific enterprises that do or stated that such assessments and plans either do not exist, are in the process of being developed, or were not mentioned.

As for actors recognized besides public communal enterprises as relevant for prevention, response, and handling of emergencies, respondents listed hospitals and other healthcare facilities, veterinary stations, the Red Cross, the Traffic Institute, social welfare centers, TV stations, fire brigades, citizen associations, legally authorized entities significant for protection, public and private enterprises, academic institutions, etc. When asked if vulnerability assessments and protection and rescue plans exist for these actors, only 8.7% of respondents claimed they do for some of them, 26% stated they do not, while others did not provide an answer.

8.7. Coordination and cooperation among agencies/actors at the local level responsible for crisis management

In response to the question of whether their Headquarters or administration had established communication with all relevant institutions in the city regarding the area of disasters, 90% of respondents from cities answered affirmatively, which is not significantly different from the responses of representatives of municipalities with city status ($\chi = 0.292$; $p > 0.05$). Existing communication involved the selection of staff members, adoption and harmonization of acts, decision-making, mutual coordination to implement the activities of the headquarters, implementation of conclusions, orders, and recommendations, taking preventive measures

during emergencies, informing the public, providing support, training, meetings, workshops, and providing material resources. According to their assessment, the results of this communication are relatively good (70%) or very good (30%). The obtained assessments are not statistically significantly different from the assessments of representatives from municipalities.

In the longitudinal study of the target group MUP - Sector for Disasters in cities from 2014 to 2017, it is not possible to compare the perception of coordination and cooperation among actors at the local level. In the reports from 2014, information on coordination is generally lacking, except for Novi Sad, where it is stated that coordination is not at a satisfactory level, as well as in Jagodina and Vranje, where it is satisfactory, and in Kraljevo, it is "ok." In the reports from 2017, coordination was assessed as satisfactory, at a high level, excellent, and very good in most cities, while in some, a lack of funds is highlighted as a problem that hinders cooperation, as stated in the reports from Zajecar, Kraljevo, and Nis. Only in the report from Pančevo is the intertwining of responsibilities and the lack of procedure mentioned as a problem.

On the other hand, almost all respondents from local self-governments (95%) state that they have cooperated with national institutions for prevention and disaster management, with the majority of them highlighting the Ministry of Interior Affairs (MUP) as one of the institutions they have cooperated with the most. Asked to assess the extent to which they have collaborated with neighboring municipalities so far, 42.1% of respondents from cities evaluate that they have collaborated to a large extent, significantly, 36.8% of them assess this collaboration as insignificant, to a lesser extent, while as many as 21.1% state that they have not cooperated at all. There was no statistically significant difference between the responses of representatives from cities and municipalities ($t=0.394$; $p>0.05$). Those who mention that cooperation existed highlight that it was reflected in the exchange of experiences, sending humanitarian aid, sending volunteers, providing logistical support, communication regarding legal obligations, engaging experts in the damage assessment commission, etc.

Regarding the assessment of cooperation with neighboring municipalities in the field of prevention and disaster management, only 10% of respondents from cities state that they have cooperated to a large extent, significantly, 45% of them state that they have cooperated to a small extent, while as much as 45% state that there

has been no cooperation at all. Applying the t-test for independent samples did not yield statistically significant differences between municipalities and cities ($t = 0.994$; $p > 0.05$).

In addition to the provided areas, respondents also mention collaboration through the exchange of experiences and specific situations where collaboration existed. The percentage of positive responses for the listed collaboration areas is not significantly different among respondents from local self-governments with municipality status. The proposed areas of collaboration involve exchanging experiences and information, amending and supplementing legal regulations, conducting joint assessments, addressing preventive response to similar types of risks, investing jointly in protection systems, conducting joint exercises and training, as well as collaborating on joint projects.

When asked if they collaborated with national institutions responsible for disaster prevention and management, only one respondent from a local self-government with city status answered negatively, while 95% of them provided an affirmative response. There was no statistically significant difference in the existence of collaboration with national institutions ($\chi^2 = .865$; $p > 0.05$), nor in the realms where collaboration existed, between cities and municipalities. Table 16 shows the percentage of positive responses for each of the specified realms in which collaboration occurred. The majority of respondents indicated that they collaborated with the Ministry of Internal Affairs (MUP), the Sector for Disasters, followed by the City Civil Protection Headquarters (SKGO), the Institute of Public Health, the Ministry of Agriculture, the Red Cross, the Serbian Armed Forces, Serbia Waters, Serbia Forests, and the Electric Power Industry of Serbia (EPS).

Ninety percent of respondents from cities reported collaboration with the District Disasters Headquarters. Table 17 provides a breakdown of positive responses in percentages for each of these frameworks. In addition to the specified frameworks, collaboration involved exchanging data and information, holding joint meetings with the city headquarters, and coordination during emergencies. There were no statistically significant differences in the assessment of collaboration with the District Headquarters compared to municipalities.

The reason for the lack of collaboration with the District Headquarters, according to the response from Kraljevo, relates to the

redundancy of the District Headquarters and, in their opinion, the absence of its purpose.

8.8. Supervision, inspection, and evaluation of public policies fall under the jurisdiction of municipalities, along with crisis management

The Law on Inspection Supervision⁴⁵⁹ uniquely regulates the area of supervision, inspection, and evaluation of public policies within the jurisdiction of municipalities. The law has introduced innovations in the work of inspections: emphasis has been placed on preventive measures, updated standards for better coordination and uniformity of inspection supervision. All inspections are grouped into common organizational units, which should contribute to the efficiency and better utilization of inspection service resources. The existing model of the Regulation on Systematization has placed defense and emergency tasks under the Department of Inspection Supervision. This can be a double-edged sword. On one hand, a crisis can occur in any sector of local government, so this organizational approach can be considered preventive and therefore justified. However, there are no studies to prove this thesis. On the other hand, if a crisis does occur (such as poisoning in schools due to faulty food, contaminated drinking water in water supply systems, "toxic" buildings, etc.) and the same entities responsible for supervision and control are also those who should react in a crisis, then the question arises to what extent inspection services have fulfilled their responsibilities.

The Ministry of Internal Affairs oversees the implementation of the Law through inspection supervision. Inspectors have the authority to "propose the initiation of proceedings to establish disciplinary, misdemeanor, criminal, or other liability against responsible subjects of the protection and rescue system, in accordance with the law." From the inspection plan for the entire Serbia for 2017 conducted by the Ministry of Interior - Sector for Disasters, through the Administration for Preventive Protection and its subordinate organizational units, which control the implementation of measures for fire protection, the legal basis for the men-

⁴⁵⁹ Law on Inspection Oversight ("Official Gazette of RS", No. 36/15).

tioned activities is not in the Law on Disasters, but primarily in the Law on Fire Protection. The inspection plan for 2017, under the jurisdiction of the Administration for Civil Protection and the Risk Management Administration of the Sector for Disasters, cites the Law on Disasters as the legal basis, but the subject of supervision includes shelters, personal, mutual, and collective protection equipment against natural disasters and other accidents, and the existence of accident protection plans of individual legal entities (airports, factories, warehouses, etc.).

The supervision over the performance of duties in the field of disasters by local self-government units is not visible in the system. Responsibility is indirect, determined "after submitting a proposal to initiate proceedings to establish responsibility." Procedures and mechanisms for determining compliance with legally prescribed responsibilities of local self-government units do not exist. It is not known that any local self-government unit has been subject to inspection supervision in this manner and whether anyone has been held accountable for the failure to fulfill the obligations that local self-government units have in the field of disasters. This is important, especially when comparing economic damages and loss of human lives. Personal, legal, and criminal responsibility is not practiced; presumed responsibility is primarily of a political nature.

8.9. Monitoring and evaluation of crisis and disaster management at the local level

Monitoring and evaluation of public policies are largely weak points at both the local and other levels of government. One way to monitor and evaluate crisis and disaster management policies at the local level is through internal and external evaluations.

In the 2017 study (representatives of the Ministry of Internal Affairs), there is a perception in three cities that there are no problems in the functioning of disaster management, namely Zrenjanin, Jagodina, and Požarevac, while according to the 2014 report, there were no problems in Jagodina and Užice. However, this is still a very small number of cities whose representatives responsible for disasters perceive that they function smoothly. Consistently, as three years ago, the main problems still revolve around

personnel and material-technical issues, present in more than half of the cities, followed by financial issues, as well as organizational and strategic problems, reflected in the importance of raising awareness of the importance of prevention, as indicated by data from Sremska Mitrovica. Leskovac is cited to have frequent personnel changes, insufficient experience and training, and unstable sources of funding for equipment.

Asked to assess how prepared their local government is for risk and disaster management, 5% of respondents from local self-governments evaluated it as insufficiently prepared, 80% as average prepared, and 15% as fully prepared. None of the respondents rated their local self-government as completely unprepared for emergencies. By applying the t-test for independent samples, it was found that, although the overall preparedness in cities is perceived as better, there is no statistically significant difference between the assessed conditions in cities and municipalities.

All respondents from cities answered affirmatively to the question of whether they are familiar with the responsibilities of the Disasters Headquarters, as well as whether there is an Disasters Headquarters in their local self-government. However, no statistically significant difference between cities and municipalities was obtained in familiarity with the responsibilities (chi-square=1.810; $p>0.05$), nor in the existence of Headquarters in their local self-governments (chi-square=.491; $p>0.05$). The opinion that the Headquarters is fully prepared for adequate response in an disaster is held by 55% of respondents from cities, while 45% believe it is partially prepared. Applying the t-test for independent samples did not yield a statistically significant difference among respondents from cities and municipalities in assessing the preparedness of the Headquarters ($t=0.506$; $p>0.05$).

Respondents were asked to identify, in their opinion, the main problems and obstacles to increasing the capacity of their local self-government for risk and disaster management. The largest number of them cited lack of finances as one of the biggest problems for risk management, followed by personnel issues, in terms of lack of personnel who are experienced enough to perform these tasks, insufficient training and expertise of existing staff, lack of adequate equipment, legal regulations (insufficiently precise legal solutions, data inconsistency, devaluation of existing regulations with the announcement of new ones), and besides these most common ones, respondents also mentioned lack of coordination

between system subjects and insufficiently developed awareness among citizens. Upon reviewing the capacity analysis conducted nationwide this year (Kesetović, 2017), it is noted that there are no differences at the Serbia level, meaning that the same problems are cited in both cities and municipalities, and the size of the place is not a relevant factor, indicating universal problems.

8.10. Databases on resources in crisis and disaster management at the local level

Risk management in crises and emergencies is highly complex and requires the use of all available national and international databases. Besides databases that primarily cover all disasters, there are also databases specific to certain hazards. Decision-makers in the disaster management process must be familiar with all existing information systems and databases to make timely and efficient decisions before, during, and after the manifest consequences of disasters. The advantages of using information systems depend on the quality of the system itself but generally relate to faster processing of relevant information, enabling quality support to decision-makers. In order to better integrate various information services and databases, it is necessary to create a platform that would consolidate all existing services and databases so that users can find all relevant information in one place. Additionally, it is necessary to conduct training for the staff of intervention and rescue services and decision-makers on existing services and databases so that they can efficiently utilize all the benefits of such systems.⁴⁶⁰

The Ministry of Internal Affairs maintains records of human and material resources for the needs of protection and rescue. The Risk Management Administration of the Disasters Sector exchanges data of significance for protection and rescue with organizational units of the Disasters Sector. When it comes to databases of resources at the local level, there are no specific databases intended for crisis and disaster management. These databases encompass human, technical, and material resources possessed by local self-

⁴⁶⁰ Cvetković, V. (2018). Baze podataka o rizicima i informacioni servisi podrške odlučivanju u vanrednim situacijama. Šesto savetovanje upravljanje rizicima, Požarevac, 25-34.

governments in all essential sectors, as well as at the level of the local community (economy, administration, civil defense, citizens, etc.). The essence is for each local self-government to have an organized inventory of everything it possesses, regularly updated databases that are easy to use and transparent. This issue is not just of an informatics-technical nature but also about timely, preventive data exchange, coordination, and cooperation at the local self-government level. There are no studies or data on the existence of interconnected, updated, transparent, and accessible databases that would be multifunctional (e.g., total number of sanitation vehicles at the city level, total number of trucks, excavators, etc.).

Difficulties in the disaster management process are conditioned by the action of numerous factors such as the complexity and rapid spread of hazardous events, lack of timely and accurate information, complexity of making key decisions, inability to grasp the entire situation in a short period, complexity of managing necessary resources, etc. For these reasons, efficient response to disasters is conditioned by the availability of various data supported in numerous international and national databases that can be used in real-time. Additionally, decision-makers are compelled to use various information systems and tools that enable faster and accurate calculations to make appropriate decisions in specific situations. Guided by this, the authors of the paper, using the content analysis method and literature review, identify, analyze, and comprehensively systematize and describe the significant characteristics of such databases and information systems.⁴⁶¹

The modern development of information and communication technologies (ICT) has resulted in the possibility of accessing information from any location at any time, while users are faced with a large volume of information across various locations. To overcome this challenge, the idea of information logistics has been developed. The main goal is to ensure efficient and effective delivery of necessary information in the appropriate format and quality, as well as to the right place and at the right time to key stakeholders. To achieve this goal, principles from various research areas such as material logistics and lean management have been adopted and adapted. Numerous crisis situations have shown that the lack

⁴⁶¹ Cvetković, V., Planić, J., Ivković, T., Radojković, S., Stefanović, M., Miljković, N. (2022). Informaciono-logistički sistemi i baze podataka od značaja za integrisano upravljanje u katastrofama.

of accurate information to the right stakeholders, at the right time, and in the right format significantly increases the chances of undesirable consequences. Information logistics has proven to be an intellectual and professional domain for addressing the timely provision of accurate information.⁴⁶²

8.11. Discussion

The assessment of vulnerability has been determined in about 36% of cities, and protection and rescue plans in 16.7% (data from 2017), which is very concerning. These documents represent the basis for preventive action: planning measures, activities, and necessary resources, organizing and coordinating crisis and disaster management at the local level, which is a condition for implementing responsibilities as envisaged by the Law in financial, operational, and institutional terms.

Allocations from the central budget for crisis and disaster management are not transparent enough. Allocations for the needs of crisis and disaster management at the local level from city budgets are minimal and insufficiently transparent. The program budget that local self-governments (LSGs) are obliged to use since 2015 and which includes a position for emergencies is applied in about 65% of LSGs. Tracking allocations is difficult, the methodology is inconsistent (percentage/nominal amounts). Information provided by employees of the Ministry of Internal Affairs and LSG employees on allocations from LSGs for crisis and disaster management is inconsistent.

Persons responsible for emergencies in cities often lack information on financing crisis and disaster management, as seen from the analysis of responses. Regarding the question related to stating the nominal amount and percentage of funds allocated from the local budget in the previous fiscal year, about 70% of respondents from cities stated the amount of funds allocated, while only half stated the percentage in relation to the total city budget. The amount allocated for crisis and disaster management at the city level has not increased since 2014. Data from the target group of the Ministry of Internal Affairs indicate that allocations in 2014

⁴⁶² *Ibidem.*

ranged from non-existent, with funds being allocated from budget reserves as needed, up to a maximum of 2% in Valjevo. The same target group for 2017 estimates that allocations are insufficient, ranging from 0.1 (Vranje) to "less than 1%" (Kraljevo). Representatives of LSGs provide similar responses: amounts for 2017 range from 0.1 to 1% of the total city budget. According to the methodology of the Ministry of Finance, any allocation from the budget below 1% can be considered negligible and not relevant for monitoring at the macro and micro fiscal levels.

What is encouraging is that there are job descriptions, systematized positions, and to some extent organizational units at the city level for tasks related to emergencies and defense. This is very important as it represents a precondition for systematic and consistent implementation of responsibilities in the mentioned area. Considering that public administration reform is underway and involves reducing the number of employees, a hiring freeze, and merging responsibilities and tasks, recognizing tasks in the area of crisis and disaster management at the level of LSGs is significant. The practice is diverse and mostly lacks personnel. Belgrade, Kragujevac, Kraljevo, Kruševac, and Novi Pazar have Departments for Emergencies. Valjevo and Zrenjanin have Sections for Defense and Disasters. Čačak and Smederevo have a Group for Security and Defense. Šabac, Sombor, Užice, and Loznica have placed tasks in Departments for Inspection Affairs and Communal Police, while Pirot and Novi Sad have individual solutions. Employees in these positions have job descriptions related to emergencies and related areas (migrants, security, fire protection, etc.) and mostly perform tasks from existing descriptions, with the exception of Novi Sad. They are mostly appointed to positions by the decision of the city administration chief.

Research has been conducted to determine the level of readiness for emergencies, i.e., in fulfilling the rights and duties of cities and municipalities in matters of protection and rescue. The responsibilities that are fully met include holding regular meetings of emergency headquarters and appointing qualified legal entities of importance for protection and rescue. Regular meetings of emergency headquarters are held quarterly in the majority of cases (around 70% of cities), as well as emergency meetings as needed. The range varies from 1-2 meetings annually (Leskovac), through 6-8 times (Pančevo), to 14 meetings during 2016 (Niš). The number of designated qualified legal entities has statistically signifi-

cantly increased, from an average of 25 (in 2014) to an average of 31 (in 2017). All cities have designated qualified legal entities, ranging from 11 (Jagodina) to 73 (Sombor). The situation is significantly better when it comes to appointing commissioners and deputy commissioners for civil protection, who have not been appointed only in Novi Sad, while all other cities have fulfilled this duty. In Smederevo, a replacement of existing commissioners is considered necessary. Expert-operational teams (EOTs) have not been formed only in Kragujevac. Although the number of EOTs per city has increased from an average of 5 in 2014 to almost 7 in 2017, this is not a statistically significant difference. The number of permanent damage assessment commissions has not changed since 2014 (they exist in 15 cities, while others form them as needed).

The situation is different regarding the formation, training, and equipping of civil protection units. In 2014, Civil Protection units were formed in 7 cities, and in 2017, there were 11 (Vranje, Jagodina, Kruševac, Niš, Novi Sad, Požarevac, Sombor, Čačak, Sremska Mitrovica, Kragujevac, and Kraljevo, while in Užice they were formed as temporary formations). Equipped and trained civil protection units exist in Kraljevo, Sombor, and Sremska Mitrovica, while in Užice and Čačak they are partially trained, and in Kragujevac training and equipping is ongoing. The number of situation centers is the same as in 2014: three (Kragujevac, Kruševac, Sombor). Belgrade had a situation center in 2014, but there is no data on it now, while formation is ongoing in three cities. Užice forms it as needed. When it comes to the condition and capacities of facilities for accommodation, complete answers about capacities have not been obtained. In some cities, they have decreased compared to 2014 (Užice), and many have not responded to this question. Simulated exercises are not held in 45.5% of cities, which is better than in 2014, but generally unsatisfactory.

The population alert system is in good condition in 5 cities; 3 cities state that sirens are functioning; Belgrade is modernizing the system, while in other cities, the system is poor, outdated, partially dysfunctional, and does not cover the necessary territory. The same applies to acoustic studies, where equipment modernization is being implemented in only 2 cities, planned since 2014 (Sremska Mitrovica and Čačak). Telecommunication systems and information and communication technologies are assessed as good or satisfactory in the majority of cities in 2017, except in Novi Sad, Smederevo, Valjevo, and Niš, where they are assessed as poor and

outdated. The state of personal and collective protection was extremely poor in 2014, except in Užice ("partially equipped"). In 2017, around half of the cities declared the situation as satisfactory. The shift from "catastrophically poor" three years ago to satisfactory in about half of the cities this year is certainly not sufficient, given that a large number of cities still assess this situation as unsatisfactory and poor.

It can be concluded that cities have formalized their responsibilities in areas that do not require significant investments and resources: holding staff meetings, determining legal entities, appointing civil protection commissioners and their deputies. When it comes to forming expert-operational teams and permanent damage assessment commissions, they have either remained at the same level or progressed, but statistically insignificantly. In segments requiring serious political, professional, and public dedication and significant allocations: forming, training, and equipping General Civil Protection, situational centers, acoustic studies, alarm systems, personal and collective protection status, simulation exercises – generally, the situation is unsatisfactory. Compared to 2014, progress has been made, but insufficient, considering that these are among the wealthiest and largest units of local self-government in Serbia.

Considering that cities have not adopted essential documents they are obliged to (risk assessments and protection and rescue plans); that allocations for crisis management are symbolic and insufficient to fulfill the legal obligations of local self-governments (LSGs) operationally, recommended and applied reactively/financing for security needs by both the state and LSGs, summarizing the results of the operational capacities of cities for crisis and disaster management, it can be concluded that the responsibilities of local self-government in operational and tactical terms are not sufficiently implemented. Law-mandated strategic risk assessment plans have not been sufficiently and timely adopted or implemented in cities, confirming that the crisis management style is predominantly reactive, thus fully confirming the second hypothesis of the research.

9. DIMENSION OF PARTNERSHIP AND COOPERATION IN THE PROCESS OF CRISIS AND EMERGENCY MANAGEMENT IN THE CITIES OF SERBIA

There is a high level of disinterest among citizens to engage in decision-making processes at the local community level. Reasons for this include the long-standing neglect of public involvement in decision-making and a lack of awareness among citizens about the need for participation. The model of authoritarian governance is difficult to overcome. The administration tends to stick to models of public consultation rather than being willing to share the burden of decision-making with the public. Some legal solutions further complicate public involvement in decision-making. The civil sector is underdeveloped, fragmented, and preoccupied with its internal issues. The level of public awareness is insufficiently developed. (City of Nis Security Strategy).⁴⁶³

This quote from the City of Nis Security Strategy reflects the challenges in the dimension of partnership and cooperation in crisis and disaster management when it comes to the relationships between the state, local government, and citizens. This chapter will explore the levels and types of expectations of local self-governments (LSGs) towards citizens, as well as citizens' expectations towards the state when it comes to protecting their interests during a crisis; types of crises and how citizens perceive them as real in Serbia, as well as risks identified in national/local strategic documents. The degree of development and regulatory framework of volunteer work in Serbia has been analyzed, as well as the types of situations in crisis and disaster management involving volunteers and the readiness of citizens to volunteer during a crisis in the local community. Collaboration with neighboring municipalities, regional and international cooperation in the field of crisis management at the local level in Serbia, as well as projects related

⁴⁶³ Strategy for the Security of the City of Niš, (2010). <http://www.ni.rs/wp-content/uploads/strategijabez.pdf>

to crisis management in local self-governments in Serbia, are separately addressed.

9.1. The relationships between the state, local self-government, and citizens in crisis management policy in Serbia

When asked if they involved citizens or the wider community in prevention activities, 85% of respondents from cities responded positively, with yes, most commonly in activities during emergencies and disaster relief efforts (84.2%), followed by meetings with citizens and Local Community Councils (further: LCC) - 73.7%; through educational workshops (21.1%); work on Risk Assessments and Plans for Protection and Rescue (15.8%); civil protection training and exercises (10.5%), and least commonly through public forums, organized in only one city. There is no significant difference in citizen involvement between cities and municipalities ($x = 0.892$; $p > 0.05$).

According to respondents, civil society organizations were most extensively involved in the development of Risk Assessments, Protection and Rescue Plans, and Long-Term Improvement and Development Plans (27.8%), while only two respondents reported the involvement of the Commission/Council for Gender Equality and individuals responsible for gender equality issues, and only one of them mentioned a women's association. Comparative involvement of the listed organizations and bodies in cities and municipalities is shown in Graph 26, with a statistically significant difference found only in the involvement of Civil Society Organizations ($x = 5.037$; $p < 0.05$), and that in favor of cities. This can be interpreted by the fact that Civil Society Organizations are more organized and numerous in cities compared to municipalities.

When asked to assess the potential contribution of the listed institutions, approximately 54% of respondents from cities and 43% from municipalities answered positively. Similarly, approximately 21-23% of both groups partially acknowledged their potential contribution. Representatives from municipalities were more likely to negate the potential contribution of the listed organizations and bodies compared to representatives from cities, which can be interpreted by the fact that Civil Society Organizations are

generally more present and developed in cities, hence more active and their contribution more visible.

9.1.1. The level of expectations of local self-government towards citizens

Among local self-governments that have not developed Risk Assessment, Protection and Rescue Plans, and Long-term Improvement and Development Plans, the highest percentage of respondents believe that civil society organizations could contribute, followed by the Commission/Council for Gender Equality and individuals responsible for gender equality, while only 4 respondents believe that women's associations could contribute. There are no significant differences between cities and municipalities for any of the options.

When asked how much the needs of vulnerable groups (people with disabilities, Roma, etc.) were taken into account in protection and rescue plans, just over half of the respondents answered (56.5%), of which 58.8% believe that they were fully taken into account, while 23.1% believe that they were partially taken into account or not taken into account at all.

9.1.2. The level and type of expectations of citizens towards the state when it comes to protecting their interests during a crisis

After the floods of 2014, within the project "Empowered to React: I Know, I Can, I am Able!" an exploratory research was conducted, involving 28 women in three focus group discussions held in Belgrade and Kovačica.⁴⁶⁴ Women came from places affected by floods, such as Obrenovac, but also from urban areas (Belgrade municipalities of Stari Grad, Zvezdara, Savski Venac, as well as from settlements Debeljača and Crepaja). Topics included the experiences of women and vulnerable groups (LGBT, persons with disabilities, Roma, etc.) in disaster and crisis situations.

The general conclusion of the participants was that institutions were uncoordinated, unprepared, and did not know what to

⁴⁶⁴ Subotić, G., Korićanac, I. (2015). "Gender, Crisis, and Crisis Management: Results of Focus Group Research and a Guide for Women in Crisis Interventions," UNDP, Office for Assistance and Reconstruction of Flooded Areas, Belgrade, 2015.

do in case of floods. The treatment in collective centers was worst towards Roma, especially children, and then towards women. Hygiene, intolerance, and impatience of people in collective centers were highlighted as the biggest problems during accommodation. Women were afraid to seek psychological support excessively, lest they be labeled as "crazy" by male family members, although they needed it.

Regarding media coverage, dominant media reported stereotypically (resourceful women - "an old lady who was on a tree for several days" and brave, self-sacrificing men). The respondents assessed that social networks contributed to presenting the real picture on the ground. Humanitarian aid tailored to the needs of specific target groups was mentioned as lacking (hygiene kits for women, for example). Most participants did not know or hear about the Law on Disasters, nor were they informed about announcements from municipal emergency headquarters. An analysis by the Provincial Ombudsman (2015) showed that disasters were not adequately considered at the local community level but predominantly at the central level. Additionally, there were expressed needs for a gender perspective in prevention, during immediate danger, accommodation in collective centers, information, access to resources, and public services.⁴⁶⁵

9.1.3. Types of disasters and crises and how citizens experience them as real in Serbia

For the needs of the Ministry of Interior Affairs (MUP), during November 2011, CESID and OSCE conducted a public opinion survey "Attitudes of Serbian Citizens towards Police Work" on a sample of 1480 citizens of Serbia. At that time, the main problems cited were corruption, drug trafficking, and drug abuse. The results corresponded to trends in the previous five years. Additionally, the perception of citizens regarding security issues at the central and local levels was compared. At the level of the city/municipality, the greatest differences compared to the state are represented by petty crime, juvenile delinquency, peer and domestic violence, and traffic accidents.

⁴⁶⁵ Provincial Ombudsman: "Gender Equality and Disaster Risk Reduction," Novi Sad (2015).

Gender perspective in the perception of crises is very important. Gender perception of security problems in this research has shown that women and men in Serbia prioritize different risks. While the most prevalent problems for men are car theft, hooligan violence, and corruption, for women these are family, sexual, peer violence, and homicides, which presents security problems according to gender structure. In the same study, when asked about the extent to which local government bodies and citizens influence security issues, 44% responded that they have little or no influence.

Research conducted through focus groups in 6 local self-governments in 2014 in Vojvodina also showed that men and women perceive crises differently.⁴⁶⁶ Men, mainly representatives of local self-governments, primarily associate emergencies with impassable roads and "uncleared terrain," focusing on response and remediation in disasters and the removal of physical barriers. Women perceive crises from the perspective of service unavailability (health, social, transportation, etc.), resources (food, water, medicine, electricity, fuel, etc.), with a focus on evacuation, accommodation, and care for the affected, access to resources, and information. This can be related to the perception of defended values. A centralized approach to emergency response has been seen by women as foreign and unacceptable. Gender perspective in this research is also evident in the perception of potential security risks. Women more often recognize risks such as poorly maintained infrastructure (unmaintained roads and bridges, flooded sidewalks, blocked channels, unlit streets), as well as risks such as poverty, environmental risks (Pančevo), wars, and political instability. It is considered that excluding women from the process of developing protection and rescue plans and risk assessment would lead to the risk of some areas remaining invisible and inadequately covered. Another aspect of this research related to the type of crises perceived as real.

The most common associations with emergencies were floods, landslides, snowfall, and wartime conditions. Memories of the 1999 bombing were still very present in the minds of the respondents.⁴⁶⁷

⁴⁶⁶ Provincial Protector of Citizens - Ombudsman (2015). "Gender Equality and Disaster Risk Reduction," according to: Baćanović, V. "Inclusion of Women in Risk Assessment and Protection and Rescue Plans in Local Self-Governments in Vojvodina": 43-54.

⁴⁶⁷ Ibidem.

During 2015, the city of Leskovac conducted a public opinion survey in collaboration with its Safety Council to identify security problems, threats, and citizen perceptions of safety.⁴⁶⁸ Based on the questionnaire, 2019 residents were surveyed in 2019 (1.41% of the total population). The three major security issues identified were robberies, burglaries, and robberies (47.91%); violence related to alcoholism and drug addiction (40.52%); and the state of traffic infrastructure (29.76%). A whopping 43% of respondents believe that violence has increased in the past year. The three main causes cited for the increase in violence were poverty and unemployment (83%), followed by a collapsed societal value system (59%), and the perception that state and local authorities are not doing their job (35.79%). The security of the Roma population is the most threatened, followed by non-Roma youth in the vicinity of Roma settlements, children and youth, the elderly, and persons with disabilities. A high percentage of respondents (42%) expressed willingness to get involved in solving a security problem in the city.

9.2. Risks identified in national/local strategic documents

In the National Security Strategy of the Republic of Serbia (2009), the main challenges, risks, and threats can be roughly divided into three groups. The first group relates to factors contributing to endangering the territorial integrity and sovereignty of the state and are largely of a political nature: the danger of armed aggression; separatist tendencies; the unlawfully declared independence of Kosovo; proliferation of weapons of mass destruction; national and religious extremism; unresolved status and difficult situation of refugees, displaced persons, and internally displaced persons; destructive actions of certain religious sects and cults; intelligence activities; unfinished process of delineation between the states of the former SFRY; organized crime. The second group of risks relates to socio-economic factors: corruption; problems of

⁴⁶⁸ Council for the Safety of the City of Leskovac: "Results of the Survey on the State of Security in the Territory of the City of Leskovac" <http://www.gradleskovac.org/index.php/savet-za-bezbednost>, скинуто са интернета 19. 11. 2017.

economic development; uneven economic and demographic development; high-tech crime and endangerment of information and telecommunication systems; and uncontrolled exploitation of natural resources and environmental degradation. The third group represents risks that are more directly associated with emergencies: global warming; consequences of natural disasters and technical and technological accidents, as well as environmental and health risks due to radiological, chemical, and biological contamination. Next come health risks: infectious diseases of humans and animals, and drug addiction. Interestingly, risks such as the abuse of new technologies and scientific achievements in the fields of informatics, medicine, and meteorology are mentioned "with greater or lesser probability of manifestation and recognition."

In the National Defense Strategy of the Republic of Serbia (2009), the risks and threats are: aggression; armed rebellion; unlawfully declared independence of Kosovo; terrorism; separatist tendencies; national and religious extremism; organized crime; natural disasters and chemical, biological, nuclear, technical, and technological accidents; cyber threats; transitional problems; intelligence activities and abuse of scientific achievements.

The risks identified in the National Strategy for Protection and Rescue in Disasters (2011) include floods, droughts, extremely high temperatures, earthquakes, landslides, storms, as well as technological and climatic changes. Local strategies map the risks experienced by citizens, professionals, and authorities as threats to their quality of life and reflect the specificities of their communities. These commonly include drug addiction, various types of violence (domestic, school, peer, hooliganism), petty crime, traffic accidents, prostitution, vandalism, thefts and robberies, health risks, religious fanaticism and extremism (Novi Pazar), begging, vagrancy, and gambling (Niš).

9.3. Volunteer work in Serbia, the level of development, and legal regulation

After the catastrophic floods in 2014, when a large number of volunteers participated in rescue efforts, there was a need for a deeper analysis, including the types and forms of voluntary engagement, an analysis of existing regulations in this area, and the

preparation of proposals to improve the legislative framework. Therefore, the Ministry of Youth and Sports and the Ministry of Labor, Employment, Veterans, and Social Affairs formed a Special Working Group to analyze the situation and prepare proposals to improve citizens' voluntary engagement in disasters (hereinafter: the Special Working Group), which compiled a Report on the work.⁴⁶⁹

Voluntary engagement is defined by the Law on Volunteering ("Official Gazette of RS" 36/2010) as organized voluntary provision of services or performance of activities of general interest, for the common good or for the benefit of another person, without payment of financial compensation or seeking other material benefit. Long-term volunteering lasts longer than 10 hours per week, for at least three months without interruption. Activities such as working for the Red Cross of Serbia and performing "ad hoc" activities of general interest, for the common good or for the benefit of a third party that do not last longer than 10 hours per week, for a maximum of 30 days without interruption or with interruptions, during the calendar year, are not considered volunteering.⁴⁷⁰

After the catastrophic floods in 2014, when a large number of volunteers participated in rescue efforts, there was a need for a deeper analysis that encompassed the types and forms of voluntary engagement, analysis of existing regulations in this area, and preparation of proposals for improving the legislative framework. Therefore, the Ministry of Youth and Sports and the Ministry of Labor, Employment, Veterans' and Social Affairs formed a Special Working Group for the analysis of the state and preparation of proposals for the improvement of voluntary engagement of citizens in emergencies (hereinafter: Special Working Group), which wrote the Report on Work.

There is no way to determine the exact number of volunteers in Serbia, especially since 2010, when organizations of civil society were no longer obliged to report the number of members by law. It is estimated that there are around 100,000 volunteers, of which it is reliably known that the Red Cross has 60,000 volunteers. However, the definition mentioned above calls into question the analy-

⁴⁶⁹ Report on the Work of the Special Working Group for the Analysis of the Situation and Preparation of Proposals for the Improvement of Citizen Engagement in Emergency Situations, Ministry of Defense, Ministry of Interior, (August 2014).

⁴⁷⁰ The Law on Volunteering (2010): Articles 2 and 3.

sis of the state of volunteer engagement during floods and especially during the remediation of consequences. Namely, a large number of volunteers were precisely volunteers of the Red Cross, who according to the valid Law are not volunteers. The second most represented category is those who worked on the removal of consequences, individually, "ad hoc", not longer than three months. When these two categories are subtracted, it can be concluded that in Serbia volunteers were not significantly engaged during and after emergencies, which does not correspond to the truth.

Not only the number is disputed, but also the concept and legal framework that defines it. Other laws in which the term "volunteer" was mentioned in various contexts are: Law on Social Protection; Law on Health Protection; Law on the Foundations of the Education System; Law on the Organization of Courts; Law on the Judicial Academy; Law on Pension and Disability Insurance; Law on Compulsory Social Insurance; Law on Labor Relations in State Bodies; and Law on Income Tax. The provisions are often contradictory, and practice has shown that forms of voluntary engagement during and after emergencies do not largely correspond to the legal framework. Questions have arisen about who pays health insurance and assesses health fitness for participation of volunteers in civil protection, possible injuries, protective equipment, meals, etc. Also, children under the age of 15 participated in one-time actions after the cessation of emergencies: cleaning schoolyards, parks, playgrounds, which is also not provided for by law. Work actions carried out after the floods are also outside the existing normative framework, so the question of their normalization has arisen.

9.3.1. Types of situations in crisis and disaster management involving volunteers

Activities involving volunteers during and after emergencies are categorized based on the location of the incident. Activities in affected areas involve a higher degree of immediate risk for participants and include evacuation, rescue operations, strengthening defensive barriers, clearing terrain, etc. Activities of volunteers outside affected areas involve gathering humanitarian and other aid, sorting, distributing, providing socio-psychological and medical assistance, distributing food and clothing, keeping records, provid-

ing accommodation and information to affected populations, staffing reception centers, etc. Citizens volunteered in various ways to assist those affected by the floods in 2014. Table 19 lists all the practical forms and methods of voluntary engagement during and after the floods as identified by the Special Working Group.

9.3.2. The readiness level for citizen volunteer participation during crisis and disasters in the local community

The frequency, number, types, and forms of voluntary engagement in crisis situations are not systematically and continuously monitored but rather sporadically and summarily, mostly through the media ("10,000 volunteers in defense of Šabac"; "Volunteers assisting workers in snowbound and cut-off Bosilegrad"; "100 volunteers rushing to aid the Ministry of Interior in assisting the snowbound in Bačka Topola and Mali Iđoš"; "13 volunteers from Brus visiting the elderly in the mountains during winter," etc.). The headlines are often bombastic, highlighting the sacrifice and heroism of volunteers. There is a lack of analytical approach to engagement, organization, additional motivation, and ways to increase the level of readiness and volunteer participation.

Analyzing newspaper headlines gives the impression that Serbian citizens are willing to volunteer during emergencies. However, the practice in 2014 showed that the most significant responses were one-time, with a clear call for help, and as more time passed, voluntary engagement declined. This was particularly evident in the work in reception centers. The stress and fatigue of volunteers accumulate, and as time passes, the response of new volunteers decreases, so active volunteers increasingly suffer from burnout syndrome. Volunteer engagement also decreases during the recovery period from the crisis, especially on an individual level, as demonstrated in Obrenovac (foreign volunteers remained active for the longest during the recovery from the floods in 2014, as did Red Cross volunteers).

A particular problem is the coordination and subordination of volunteer activities, especially during crisis response. This was evident in Šabac in 2014 when a large number of volunteers gathered on embankments suddenly, without equipment, leadership, organization, and coordination. Such a situation can be potentially risky for both volunteers and the outcome of the crisis.

9.4. Collaboration with neighboring municipalities in managing crisis and disasters.

When asked to assess the extent to which they have cooperated with neighboring municipalities so far, 42.1% of respondents from cities reported significant cooperation, 36.8% assessed this cooperation as minor, while as many as 21.1% stated that they had not cooperated at all. There was no statistically significant difference between the responses of representatives of local self-government units with city status and those with municipality status ($t = 0.394$; $p > 0.05$). Those who indicated that there was cooperation highlighted that it involved the exchange of experiences, sending humanitarian aid, sending volunteers, providing logistical support, communication regarding issues related to legal obligations, engaging experts in damage assessment commissions, and similar activities.

Regarding the assessment of cooperation with neighboring municipalities in the field of prevention and disaster management, only 10% of respondents from cities reported significant cooperation, 45% reported minor cooperation, while as many as 45% stated that there was no cooperation at all. The application of the t-test for independent samples did not show statistically significant differences between municipalities and cities ($t = -0.994$; $p > 0.05$), with comparative results.

To improve the development of local self-government, its protection, and the realization of common interests, local self-governments (LSGs) can establish their own associations, which have the status of associations. The Standing Conference of Towns and Municipalities (SCTM) is the national association of all local self-governments in Serbia, established in 1953. The SCTM, together with the Office of the Government of the Republic of Serbia (KUIO), responsible for prevention, risk management, disasters, and recovery after natural disasters, as well as the relevant ministry (MDULS), supports the need for towns and municipalities to unite concerning common risks—by river basins—with the aim that by the end of 2018, the majority of towns and municipalities will join the Protocol on Cooperation of Towns and Municipalities within their basin. By the end of 2017, two cooperation protocols had been signed: one for the Western Morava basin (17 municipalities) and one for the Kolubara basin (8 municipalities).

At their initial meetings, representatives of the towns and municipalities in these two basins appointed lead coordinators—secretaries who are also advisors in the SCTM Network for Risk Management and Disasters. These advisors, with the technical support of the Network's coordinators, form the Expert Council, which can have up to 10 members, considering the total number of basins in the Republic of Serbia (Western Morava, Kolubara, Great Morava, South Morava, Drina, Sava, Lower Danube and Timok, Upper Danube - left tributaries, Upper Danube - right tributaries, and Belgrade - Central Danube). The role of the Council is to, upon invitation by the SCTM, the relevant office, or ministry, represent the positions of SCTM Network members to domestic and international partners and institutions on the topics of prevention, disaster management, civil protection, and rapid recovery after natural disasters and other emergencies. The Council regularly reports on its work to the Secretary-General and the Presidency of the SCTM, as well as to the membership.

9.5. Projects related to crisis and disaster management in local self-governments in Serbia

The Ministry of Internal Affairs - Sector for Disasters continuously invests efforts in strengthening capacities and technical and material equipment to adequately respond to emergency events and situations in the Republic of Serbia, in accordance with the Ministry's available budget and allocated financial resources. Capacity building is realized through budget funds (via Capital Projects and the Ministry of Internal Affairs' Procurement Plans), as well as through donor funds from various international financing sources.

In cooperation with the Organization for Security and Cooperation in Europe (OSCE), successful implementation of the project "Consolidation of the Democratization Process in the Security Sector in the Republic of Serbia" has been achieved. This project includes around 30 different educational trainings, exercises, and workshops such as command simulation exercises for members of district and local disaster management headquarters, training for city and municipal disaster management commanders, their deputies, and staff members, as well as numerous workshops

and round tables that have contributed to the overall strengthening of the system.

Additionally, in cooperation with the OSCE Mission to Serbia, a Family Handbook on Behavior in Disasters was designed and published, intended for the entire population of the Republic of Serbia. The handbook is prepared in both Cyrillic and Latin scripts, translated into English and Russian, minority languages (Albanian, Romani, Hungarian, Slovak), and an adapted version for the visually impaired (prepared in Braille and audio format). The handbook serves as educational material aimed at providing citizens with basic information useful for behavior before, during, and after an emergency event or situation. It warns about dangers and provides responses that can be invaluable during disasters.⁴⁷¹

Since 2016, the Sector for Disasters has participated as a strategic partner in the Caritas Serbia Program for Reducing the Risk of Natural Disasters, alongside the Public Investment Management Office, the Ministry of Education, Science, and Technological Development, as well as local self-government units. The program aimed to educate children, who are the most vulnerable category in case of an emergency event or situation. Educational materials, including posters distributed in primary schools, coloring books, picture books, and video clips on behavior during disasters, were prepared through this program. These materials cover fires, floods, earthquakes, and storms, which are the most frequent disasters in Serbia and the region. Additionally, an educational game called "Don't Risk It, Man" was designed.

The Sector for Disasters is currently participating in 8 projects funded by European Union funds, with the implementation of 5 more projects expected to begin soon. The implementation of these projects has significantly improved the equipment of the Sector for Disasters and its readiness to respond to disasters. Collaboration with neighboring countries has been achieved through cross-border cooperation projects.⁴⁷²

Between 2016 and 2018, the project titled "Joint Interventions in Disasters in the Border Region of Serbia - Bulgaria 247" was successfully implemented as part of the Interreg IPA Cross-border Cooperation Program Bulgaria - Serbia 2014 - 2020. The

⁴⁷¹ Draft National Strategy for Disaster Risk Reduction and Emergency Management, 2023. Annex - Project Activities.

⁴⁷² *Ibidem*.

project was conducted by the Ministry of Internal Affairs of the Republic of Serbia - Sector for Disasters and the Ministry of Internal Affairs of the Republic of Bulgaria - General Directorate for Fire Safety and Civil Protection. During the same period, another project titled "Improvement of Risk Management Capacity for Major Forest Fires in the Border Area 189" was also successfully implemented under the Interreg IPA Cross-border Cooperation Program Bulgaria - Serbia 2014-2020. This project was also conducted by the Ministry of Internal Affairs of the Republic of Serbia - Sector for Disasters and the Ministry of Internal Affairs of the Republic of Bulgaria - General Directorate for Fire Safety and Civil Protection. Throughout the implementation of these projects, joint emergency response plans and standard operating procedures (SOPs) were developed.⁴⁷³

Table 4. Overview of Donor Support for Projects Supporting Local Self-Governments in Crisis Management 2000-2020.

Donor	Cities/Municipalities	Time	Project	Results
Government of Great Britain, OSCE Mission	Medveđa, Preševo, Bujanovac	2004-2007.	"Safe Communities in Southern Serbia"	Established safety councils, adopted plans
Swiss Agency for Development and Cooperation (SDC)	Požega	2000-2007.	Support Program for Municipalities (MSP) "Municipal Development Program 2007-2025", including safety	
British Department for International Development (DFID)	City Municipality of Zvezdara, Belgrade; Novi Bečej, Kragujevac, Vrnjačka Banja	2003-2004.	"Security, Safety, and Access to Justice Program in the Balkans"	Developed pilot projects in municipalities on community policing
Kingdom of Norway Police	Bačka Palanka, Novi Sad	2001-2005.	"JuNo1" "JuNo2"	Regional Police Support Center in Novi Sad
Red Cross of Serbia	62 Local Self-Governments	2004-	Local Community Development for Disaster Response	Simulation exercises for disasters, joint action

⁴⁷³ *Ibidem.*

				plans
Canadian International Development Agency (CIDA)	Smederevo, Kruševac	2004.		Establishment of safety councils
UN-Habitat, Republic of Italy	Niš, Kragujevac, Pančevo, Valjevo, Kraljevo, Čačak	2007.	"Safer Cities"	6 urban safety strategies
USAID	80 local self-governments	2006-2011.	"Program for Planning and Responding to Disasters"	Certified local self-governments for disaster management
Open Society Fund	Kikinda, Bečej, Senta	2010-2011.	"Creating and Developing Local Policies-European Dimension"	Support in creating safety plans
IPA CBC Serbia and Montenegro	Prijepolje, Nova Varoš, Priboj, Nikšić, Berane, Pljevlja	2012-2014,	Program for Enhancing Cross-Border Flood Protection and Rescue	Training, equipment
Government of Japan	Trstenik, Vrnjačka Banja, Paraćin	2015.	"Enhanced Resilience for Emergency Response"	Construction of dams, rainwater drainage collectors
Kingdom of Sweden, Swedish Association of Local and Regional Authorities (SIDA)	Osečina, supported basins	2016-2020.	Subcomponent Local Support Program: "Prevention and Management of Disasters at the Local Level"	
Donor	Cities/Municipalities	Time	Project	Results

A survey was conducted among employees involved in disaster management in local self-governments (LSGs) to determine their awareness of the funds/international funding available to LSGs for supporting the improvement of the prevention and response system in disasters. A comparison was made between representatives of cities and municipalities. It was found that a significantly higher number of representatives from LSGs with city status were aware of the funds/international funding available to them compared to those from municipalities ($x = 4.604$; $p < 0.05$). However, this does not indicate a high level of awareness overall, as only half of the respondents from cities were informed, and only 8 out of a total of 23 respondents indicated that they had applied for some of these funds. Participation was noted in applications to the EU – IPA Cross-border Cooperation Funds, the UNDP office, the Regional Environmental Center for Central and Eastern Europe

(REC), the Republic Commission for Renewal and Reconstruction, the Embassy of Japan, and the World Bank.

9.6. The degree and type of regional/international cooperation in the field of crisis and disaster management at the local level in Serbia varies

In April 2015, Serbia signed an agreement for Serbia's membership in the European Union Civil Protection Mechanism. Upon ratification, Serbia will become the 33rd member country in Europe, alongside EU countries, including the Former Yugoslav Republic of Macedonia, Iceland, Norway, and Montenegro.

At the national, regional, and local levels, there is a right to a certain degree of international cooperation, as defined by laws. The Ministry of Internal Affairs has the responsibility to engage in international cooperation in the field of protection and rescue and disaster risk reduction. Within the Sector for Disasters, the Administration for Civil Protection participates in international cooperation and Eurointegration programs, particularly in the application, harmonization, and analysis of the implementation of international standards for civil protection systems. Training is also a subject of international cooperation: at National and Regional Training Centers for Protection and Rescue, foreign nationals can receive training in accordance with regulations, subject to appropriate compensation established by bilateral or multilateral agreements.

The Autonomous Province of Vojvodina has the right to cooperate and conclude agreements with corresponding territories, in accordance with the law. Additionally, AP Vojvodina can become a member of European and global regional associations.⁴⁷⁴

A specific type of international cooperation at the central level is the credit extended to Serbia by the World Bank in early May 2017, under the name "Loan for Development Policies in the Field of Disaster Risk Management," worth 66 million euros. The credit can be used for emergency needs and reconstruction in case of emergencies and is the first such loan approved for a European country. It represents a sort of insurance for the state budget in case funding is needed for the recovery from emergencies and climate change impacts. However, opinions among domestic econo-

⁴⁷⁴ Statute of the Autonomous Province of Vojvodina (2014): Art. 16.

mists regarding this vary. Some argue that the state should establish its own Emergency Fund, denominated in dinars rather than euros, considering that the annual interest for the loan, if not withdrawn, amounts to around half a million euros. Others believe that this is an acceptable cost for insurance, which can potentially save the state budget in case of the need for recovery and covering damages resulting from emergencies.⁴⁷⁵

Local self-government units, in carrying out their responsibilities in the field of crisis management, can engage in cooperation with regions and municipalities of neighboring countries, in accordance with the Law on Disasters and other relevant laws.⁴⁷⁶ Also, they can collaborate with local self-governments of other countries, non-governmental, humanitarian, and other organizations in the interest of the residents within their area.⁴⁷⁷ Serbia participates in cross-border cooperation programs (IPA CBC) with neighboring countries as part of European pre-accession assistance (IPA). Table No. displays current projects funded by European pre-accession assistance in collaboration with municipalities and cities from neighboring countries, focusing on crisis and disaster management. It is evident that since 2014, there has been increased government interest in prioritizing crisis and disaster management as an area of cooperation among municipalities and cities in international collaboration.

In a 2017 study, 40% of respondents from local self-governments (LSGs) reported collaboration with cross-border municipalities, while 60% did not collaborate. The chi-square value indicates that the differences in assessment between municipalities and cities are not significant (chi-square=3.113; $p>0.05$). Table 23 shows the percentage of positive responses regarding the areas in which this collaboration manifested for each of the listed domains. Additionally, the provided responses relate to joint applications for EU-funded projects.

⁴⁷⁵ See further: http://www.danas.rs/ekonomija.4.html?news_id=345151&title=Pla%C4%87amo+provizije+i+ako+ne+koristimo+kredit.

⁴⁷⁶ Law on Disaster Risk Reduction and Emergency Management ("Official Gazette of the Republic of Serbia", No. 87/2018)

⁴⁷⁷ Ibidem.

Table 5. Areas in Which Collaboration with Cross-Border Municipalities is Perceived

Areas	Percentage
Planning and development of joint projects aimed at financing prevention and disaster management systems	20.0
Planning and development of joint projects aimed at financing the elimination of disaster consequences	15.0
Joint training, seminars, and exercises	15.0

The following are responses from respondents from cities regarding whether they believe there is a need for this cooperation if it has not already occurred. Although 60% of respondents indicated that they had not cooperated, only 47.8% of them responded to this question.

Proposed areas of cooperation involve the exchange of experiences and information, complementing and amending legal regulations, conducting joint assessments, addressing preventive responses to the same types of risks that pose a danger, joint investments in protection systems, joint exercises and training, as well as collaboration on joint projects.

The following are responses from respondents from cities regarding whether they believe there is a need for this cooperation if it has not already occurred. Although 60% of respondents indicated that they had not cooperated, only 47.8% of them responded to this question. Proposed areas of cooperation involve the exchange of experiences and information, complementing and amending legal regulations, conducting joint assessments, addressing preventive responses to the same types of risks that pose a danger, joint investments in protection systems, joint exercises and training, as well as collaboration on joint projects.

9.7. Discussion

Developing partnerships and citizen involvement in crisis and disaster management, as well as strengthening volunteerism, have been announced as one of the priorities in the EU by 2025. In a study conducted in 2017 among employees of local self-

governments (LSGs), 85% of respondents confirmed that they involved citizens or the broader community in prevention activities in crisis and disasters. However, the highest percentage of involvement was not related to prevention: around 84% were activities related to response in disasters and the mitigation of their consequences.

Citizens were minimally involved through educational workshops (21.1%), Risk Assessments and Plans for Protection and Rescue (15.8%), civil protection training and exercises (10.5%), and least through forums, organized only in one city. This suggests that LSG employees, on one hand, do not understand the purpose of prevention, and on the other hand, that LSGs are not sufficiently engaged in prevention activities, thus not involving citizens in preventive activities. Citizens volunteer in various phases of crisis and disaster management. There has been no register of the number of volunteers or a way to accurately determine the number since 2010. Numerous laws in various areas (healthcare, social protection, education, justice, pension and disability insurance, employment relationships in state authorities, income tax, etc.) use the term "volunteer," creating contextual confusion with provisions that are often contradictory.

Volunteerism in Serbia is regulated by the Volunteering Act (2010), which defines what is and what is not volunteering. Practice has shown that forms of voluntary engagement during and after emergencies do not largely correspond to the legal framework. According to the Volunteering Act, activities of the Red Cross of Serbia and the performance of "ad hoc" activities of general interest, for the public good or the good of a third party that do not last longer than 10 hours per week, a maximum of 30 days without interruption or with interruptions during the calendar year do not fall into the category of volunteer work. Such a negative determination of voluntary engagement excludes tens of thousands of people who are most active: Red Cross volunteers and people who were engaged during and after crisis situations, especially during the problematic year of 2014.

Categories not recognized in the system are children under 15, and in terms of forms of engagement, these are work actions. There is also a question of volunteer insurance; health assessments, protective equipment, meal allowances, payment of travel expenses, organization of volunteer work, as well as additional motivation, especially for youth (enrollment in a diploma as an extra-

curricular activity, obtaining discounted tickets for international travel, etc.). There is a lack of an analytical approach to monitoring and developing volunteerism, and coordination and subordination of these activities during response and mitigation of the consequences of emergencies are particularly problematic.

Immediately after the May floods, numerous youth organizations initiated with the Ministry of Youth and Sports that the topic of better legal regulation of volunteerism be placed on the political agenda and that amendments and supplements to the Volunteering Act be made. A Working Group was formed, an analysis was done, but no amendments and supplements to the legal framework were made. The conclusion is that activities and engagement of volunteers in disasters are not adequately accompanied by legal and sub-legal acts or appropriate standard operational procedures, thus confirming the third hypothesis of the research. In order to establish an efficient system of citizen participation in crisis situations, it is necessary to harmonize and improve the legal framework, align it with EU practices, and enable more effective and efficient voluntary citizen engagement.

10. DIMENSION OF INFORMATION AND EDUCATION ABOUT CRISES AND EMERGENCIES IN THE CITIES OF SERBIA

Training and testing the operational readiness of disaster management headquarters and services, as well as specialized units of civil protection, fall under the jurisdiction of the Ministry of the Interior (MUP), which, in accordance with training programs and plans, provides expert assistance and instructions for the work of emergency response bodies in autonomous provinces, local self-government units, companies, and other legal entities. The Ministry establishes National and Regional Training Centers for Protection and Rescue in the Republic of Serbia, with the aim of standardizing and enhancing training in the field of protection and rescue to a higher level. The National Training Center for Disasters includes departments for specialized training and improvement of civil protection units.

It serves as a training base for: national, provincial, district, city, and municipal emergency response headquarters; employees of the Disasters Sector; specialized civil protection units; organs of companies and other legal entities important for protection and rescue; as well as citizens. The Civil Protection Administration conducts training for specialized civil protection units for the territory of the Republic of Serbia, administrative districts, and in companies and other legal entities forming specialized civil protection units. In this section, we will analyze the training of mayors in crisis and disaster management, crisis communication at the local level, and information and education as part of preventive activities in crisis and disaster management at the local level.

10.1. Training for mayors in managing crises and emergencies

Data obtained from the analysis conducted in 2014 indicates that only the mayor of Sombor underwent training in managing emergencies, while in the other 22 cities, either the heads of the emergency headquarters did not undergo training, or those who did complete it ceased to hold the position of mayor due to newly

emerged political changes. In the repeated analysis from this year (2017), it was found that mayors from 11 cities had undergone training, while in two cities (Kraljevo and Požarevac), deputy mayors had undergone training.

10.2. Disaster and crisis communication at the local level

A public opinion survey on crisis communication was conducted with the affected population during the floods in Obrenovac (May 2014) and the winter storm in Majdanpek (December 2014), both of which resulted in multi-day power outages.⁴⁷⁸ The research conducted for the purpose of the doctoral dissertation (Cebalović, 2016) included two groups of 150 respondents each from Obrenovac and Majdanpek who had direct experience with the mentioned crises. The dimensions of citizen awareness and their perceptions of communication with those responsible for informing them, as well as the methods of crisis communication, were investigated. The difference lies in the context of the crisis situation: Obrenovac was in a state of emergency of international significance and was a topic of information nationwide and beyond. In Majdanpek and eastern Serbia, a state of national emergency was not declared; instead, it was addressed as a local crisis, albeit with significant media attention.

When asked whether they had information about the reasons for the power outage, residents of Obrenovac logically connected it with the floods, while residents of Majdanpek (76%) did not have that information. Moreover, the power outage due to the blizzard lasted from December 1st to December 5th, and the Electric Power Industry of Serbia (EPS) issued its first public statement on December 9th, 2014. The most common communication channel was mobile phones (62%), while 12% of respondents claimed that nothing functioned. The research conclusions indicate that in both cases, public information channels were inadequate.

As a source of crisis information, 87% of Obrenovac residents cited oral information from other citizens, with 93% of them considering the information accurate. In the case of Majdanpek, 65% received information from other people, but 84.7% of them

⁴⁷⁸ Cebalović, M. (2016). „Krizne komunikacije u ratnim uslovima – Studija slučaja Elektroprivrede Srbije“. Doktorska disertacija. Niš: Filozofski fakultet Univerziteta u Nišu.

felt they received no information at all. The conclusion is that both crises were dominated by so-called rumor communication.

In the first phase of the crisis characterized by informing, when asked how they were informed in the early days of the crisis, 57% of respondents answered "not at all, I had no electricity," implying that due to information isolation, they were brought to a state of uncertainty, thus becoming dependent on rumors and unverified information. When asked whether they received information directly from local government representatives about events in the city, 11.33% answered: "Yes, and it was mostly accurate and reliable"; 36.67% answered: "Yes, but not enough, and it was not accurate information"; and 52% answered: "No one informed us about anything; we were left to rumors."

Regarding the carriers of timely and reliable information, they were poorly recognized by the affected population at the beginning and during the crisis - only 13.4% (of which 10.5% recognized local self-government and institutions as carriers of information), while 83% of respondents relied on rumors. As the crisis progressed, there was a decrease in public channel awareness (only 8.3% of respondents were informed this way). Due to the inability to recharge mobile phone batteries, informal channels decreased, and 80.7% of respondents felt they were in an "information black-out" during the crisis days.

Regarding experiences with power outages during the 1999 bombings, the conclusion drawn is that there is no collectively learned lesson from local government, state, or the population, regarding both crisis communication and supplies (gas cylinders, reserves, transistor radios, etc.).

10.3. Informing and education as part of preventive activities in crisis management at the local level

More than half, specifically 57.9% of respondents from cities, negatively answered the question whether they consider the awareness of employees and officials in their city administration about prevention and disaster management to be at a sufficiently high level. On the positive side, 42.1% of respondents from cities provided affirmative responses. The majority of respondents who answered negatively believe that this improvement could be achieved primarily through an educational framework, which is al-

so the case with municipalities, where more than 50% of representatives consider an educational framework to be the most useful for raising awareness. Table 24 shows the percentage of positive responses for each of the frameworks provided by respondents from cities. Interestingly, unlike respondents from municipalities, those from cities did not offer additional guidelines for improving the awareness of employees and officials.

Table 6. Frameworks for raising awareness among employees and officials in city administration.

Areas	Percentage
Legislative framework	27.7
Institutional framework	21.7
Educational framework	51.8
Functional framework	22.9

As for the education of the population in 2014, cities did not report on planned and systematic education initiatives, except for those in the form of brochures and other promotional materials, or education of primary school students in schools. From this analysis, it is evident that even in 13 cities, no education of the population was conducted. Reports from this year indicate that this number of cities where no form of education exists has decreased to 6 (Zaječar, Kruševac, Novi Sad, Smederevo, Sremska Mitrovica, and Novi Pazar, where, as stated, there is an initiative to start within the educational system). Education is being conducted in 11 cities, while in the report from Valjevo, alongside the information that it is being implemented, it is noted that it is not sufficient. In other cities, this education, as before, mostly consists of education in preschool and school institutions and through public information channels, which still is not sufficient. In order to improve the overall situation and prepare for emergencies, it is necessary to organize special education on emergency procedures for all residents.

The survey revealed that a significant 85% of respondents expressed negative views regarding the awareness of citizens and disaster management. Interestingly, these results did not significantly vary across different municipalities (chi-square=1.441; $p > 0.05$). A majority of respondents from urban areas (80%) be-

lieve that awareness could be enhanced through educational initiatives such as workshops, forums, and public discussions. Furthermore, just under half of the respondents from cities (45%) see the institutional framework as valuable for improving citizen awareness.

Some of the proposed measures include incorporating relevant subjects into elementary school curricula and raising awareness among citizens about the significance of civil protection by governmental bodies. Regarding priorities in raising awareness about prevention, risks, and protection during emergencies, a notable 47.4% of respondents prioritize the role of political leadership in local self-governments. This is followed closely by representatives of local media, employees within local self-governments, management of public enterprises and institutions, schoolchildren and youth, and citizens.

10.4. Discussion

Awareness among actors in all phases of crisis and disaster management is extremely important, whether it involves decision-makers, employees in local self-governments, emergency professionals, or citizens. The views of employees in local self-governments in defense and emergency positions indicate that nearly 58% of employees and officials in their municipalities are not adequately informed about prevention and management in emergencies. Additional education is seen as a way to improve awareness among politicians on this topic, according to about 50% of respondents from local self-governments. However, as of 2017, representatives from only 13 cities had undergone training in crisis and disaster management. While this situation is somewhat improved compared to 2014 when only the mayor of Sombor had received such training, it is still not satisfactory.

Crisis communication among citizens mostly takes the form of rumors (about 83%). Those who provide timely and reliable information at the beginning and during the crisis are poorly recognized by the affected population, with less than 14% acknowledging them (of which only 10.5% recognize emergency services and institutions as information providers). As the crisis progresses, the level of information provided through public channels declines

(only 8.3% of respondents were informed this way), leading approximately 80% of respondents to feel they were in an "informational blackout" during the crisis.

The conclusion is that there is no collective memory or learned lessons regarding crisis communication and crisis management from the experiences of power outages during the bombing in 1999. The way to improve the situation is through educating the population. However, education is not being conducted sufficiently. Compared to 2014 when no education was conducted in 13 cities, this number decreased to 6 in 2017. The education that is being conducted mostly focuses on preschools, schools, and information provided by the media. The overall conclusion is that the system of training and education has not sufficiently developed at the local level. Actors at the local level have not undergone adequate training and education in crisis management, thus confirming the fourth hypothesis of the research.

11. Conclusion

The main objectives of this study were to critically analyze the existing concept of crisis and disaster management in Serbian cities, through the analysis of the existing state and interrelationships of examined phenomena (cultural-historical aspects, crisis management as public policy, partnerships, cooperation, education, and information) in the policy of crisis management. The research was multidimensional and multimethodological. The list of research questions was expanded during the study to include two additional questions. The first question related to the dilemma of whether local self-governments, especially Serbian cities, have fulfilled their responsibilities in crisis and disaster management in accordance with the principles of good governance. The second question concerned the manner and extent of decentralization of crisis and disaster management in relation to the existing monotypic type of local self-government. Data collected were analyzed using qualitative and quantitative approaches, through interviews, questionnaires, document analysis, and field observation. A literature review briefly outlined the historical context of crisis management development, crisis as a political construct, and crisis management policy. The review also addressed organizational crisis, resilient communities, with a brief overview of the institutional framework of crisis management in the European Union and the practices of European countries, including Serbia.

Specific research hypotheses anticipated and demonstrated deficiencies in the legal, operational, institutional, and strategic frameworks in crisis management policies, with a particular focus on the lack of prevention, indicating that the style of crisis management at the local level is predominantly reactive. It was also shown that voluntary citizen engagement in emergencies is not adequately normatively regulated or operationally standardized. Lastly, it was demonstrated that actors at the local self-government level have not undergone sufficient training and education in crisis management. The findings of the research align with the key deficiencies identified in the National Strategy for Protection and Rescue in Disasters (2011), which relate to institutional-organizational, material-technical, cooperation, coordination, and information availability deficiencies, as well as the lack of

human resources and education. Seven years after the adoption of the Strategy and nine years after the adoption of the Law and the establishment of a unified system of crisis and disaster management, it can be said that the listed clusters of problems are still present at the local level. Public policies in Serbia since 2000 largely operate on the principles and rules of new public management, which represent a restrictive factor in implementing crisis management policies in some segments (relocating institutions from less populated, border areas to regional centers (schools, healthcare institutions, courts - so-called institutional optimization; lowest price in public procurement as the decisive criterion - e.g., pumps that failed shortly after installation during the 2014 crisis, etc.). Following the example and practice of the EU, since 2015, Serbia has continued with the reform of local self-government in line with the principles of good governance. Good governance is responsible, open, user-oriented, inclusive, and sensitive to the needs of the local community.

The general results of the study emphasize the political and public policy framework for the creation and implementation of crisis management as one of the public policies under the jurisdiction of local self-governments, with a focus on cities. Crisis management in Serbia generally exhibits characteristics of bureaucratic politics: there are numerous actors, none of whom have a significant influence, decisions are compromises, and their implementation is not efficient.

The results of this research demonstrate that in crisis management in Serbia, the influence of bureaucratic politics on political decision-making at the level of bureaucratism is significant: there is a big difference between policy creation and implementation, compromises are difficult to achieve, and it is dysfunctional. Before the establishment of a unified system for disasters in 2009, the crisis policy network was fragmented among different policy players/sectors: defense, internal affairs, health, environment, agriculture, forestry, and water management, which, with the adoption of the Law (2009), formed a unified Sector for Emergencies with consolidated competencies within the Ministry of Internal Affairs. After the May floods, another policy player was included in the crisis policy network: the newly established Office for Assistance and Reconstruction of Flooded Areas, which in 2015 grew into the Office for Public Investment Management. The evaluation of the existing legal solution and outcomes in the crisis of 2014 con-

tributed to the approach of first amending and then drafting a new Law, which was not adopted by the beginning of 2018. The Draft Law text was not available until the beginning of the public consultation for experts and the general public. The period from 2014 to 2018 is characterized by bureaucratic inefficiency: much time and resources were lost in achieving consensus on the concept of a new legal solution for crisis and disaster management.

One of the main reasons for the failure to establish the system was the lack of secondary legislation and guidelines for their implementation. By the end of 2017, three secondary acts under the central authority's jurisdiction, which greatly influence the nature of crisis and disaster management—whether preventive and proactive—had not been adopted. Considering these acts regulate segments of crisis and disaster management systems related to the population (equipment and construction of shelters, citizen participation in civil protection units, and the establishment and functioning of observation, early warning, notification, and alert systems), it can be said that crisis and disaster management at the central level does not follow the principles of good governance in terms of accountability and user orientation.

The normative and functional incompleteness and partial non-establishment of the crisis and disaster management system at the central level have also resulted in the system not being significantly established at the local level. Crisis management at the local level is carried out uniformly: all local self-governments have the same type and scope of authority. Differences between cities and municipalities in terms of the level of established authority in normative, institutional, functional, operational, and financial frameworks generally do not exist, except in individual cases, favoring municipalities, which requires further research. Problems are universal, regardless of whether it is a city or a municipality (Kešetović, 2017). The philosophy of financing crisis and disaster management at the local level is almost exclusively reactive. Budget allocations are symbolic, below 1%, with municipalities allocating more than cities.

It is evident that cities differ significantly among themselves in terms of demographic, geographic, health, and socio-economic characteristics, and consequently, the conditions, requirements, and circumstances under which crisis and disaster management is conducted also differ. However, cities are at an advantage over municipalities, among other things, in terms of accessibility to

public services for their residents, the existence of institutional capacities, level of development, concentration of economic and political power. Based on Giddens' systemic-strategic approach, it would be logical for cities to have developed strategic, technical and structural, evaluation and diagnostic, communication, psychological, and cultural capacities in crisis management, especially compared to municipalities (which proved to be incorrect). If they seriously apply one strategy from each cluster, they are considered prepared for a crisis. The analysis showed that cities in Serbia are crisis-prone systems, as they do not belong to any of the mentioned clusters of crisis and disaster management, except partially to the technical-structural one (existence of organizational structure and budget positions for emergencies).

Timely detection and preparedness for a crisis largely depend on the perception and experience of decision-makers, cultural patterns, and the way political elites set priorities. The results of this research support the thesis that the concepts of organizational structure and organizational culture are useful for understanding organizational crisis management and crisis management policy in all phases (Deverell, 2010). In this sense, Serbia is a country with a high degree of power distance and is a collectivist society (G. Hofstede): centralization is popular, subordinates expect orders from an ideal boss who is a benevolent autocrat, and rules and regulations are less important than individual loyalty to the group. The perception of crisis preparedness largely depends on an individual's position within the system. Surveyed mayors rated the level of preparedness and implementation of authorities in cities for emergencies, as well as the level of preparedness of city administration, extremely positively. Employees in local self-governments also rated the level of preparedness relatively high: none of the respondents assessed their local self-government as completely unprepared for emergencies.

Data from the Sector for Disasters presents a different, less positive picture. Strategic documents for community safety are not mandatory and do not exist in large numbers, while mandatory preventive documents: risk assessments and protection and rescue plans have been adopted in a worryingly low percentage. Cities' operational responsibilities are partially fulfilled, with an emphasis on formality: establishment of headquarters and accompanying documents. Responsibilities that mean functional establishment of authority and require full political, organizational, and financial

commitment and integration of the security concept into the organizational system have not been established. This primarily refers to the functioning and equipping of general-purpose civil protection units, alerting funds, situational centers, education, etc. Oversight of the exercise of emergency authority by local self-governments is not visible in the system. Responsibility practically does not exist, nor do procedures and mechanisms for determining the fulfillment of legally prescribed obligations.

Personal responsibility, legal and criminal, is not practiced; presumed responsibility is primarily political in nature. Cooperation between different levels of government is rated as good, as is coordination. Cooperation with neighboring municipalities during crises is not pronounced (less than half of the surveyed local self-governments indicated that they cooperate), while preventive inter-municipal cooperation is almost symbolic. Cross-border cooperation exists but has significant room for improvement. Awareness of the existence of international funds for project financing is insufficient. Regarding project financing, city representatives are better informed than municipal representatives, but the interest in proposing and implementing projects is generally low. Employees in local self-governments are not additionally motivated to develop projects, as this typically means doing additional work for the same pay. Projects are primarily developed by Local Economic Development Offices (LED Offices) as development organizational units and are implemented by various parts of the local self-government in the area to which the project pertains. Additional motivation for employees in local self-governments to develop and implement projects in the field of crisis and disaster management is necessary.

On the other hand, cooperation and communication between actors at the local level are reduced to formal meetings without substantial insight into the actors' capacities and their risk assessments, and without developed informal contacts among people before a crisis. Databases of resources for crisis and disaster management do not exist as such. Based on conversations with actors at the central level, it is assumed that each institution and subject of protection and rescue at the local level knows what they possess and has some sort of resource database (not necessarily electronic). It is recommended to pay greater attention to establishing standardized, accessible, electronic databases of resources for crisis and disaster management at the local level.

Citizens are not sufficiently involved in planning and formulating crisis and disaster management policies, and the needs of vulnerable groups and the gender perspective are not adequately considered, despite mayors' unanimous opinion that the role of civil society organizations, volunteers, and citizens is very important in emergencies. The comparative perception of decision-makers/mayors, employees in local administrations, and members of the Ministry of Interior's Disasters Sector regarding the examined analytical dimensions indicates a consensus that is only vaguely connected to the needs of the given situation. Thus, the crisis management process at the city level is characterized by bureaucratic-political incompetence. Local self-governments often act as "lightning rods" in the strategy of delegating blame to lower levels of government and prominent representatives, which is one possible explanation for the often drastic differences in opinions between mayors and respondents from local self-governments and the Ministry of Interior on certain issues. Giving socially and politically desirable instead of realistic answers may be a sign of politicians' lack of information, but also a maneuver to avoid the possible role of a scapegoat in the evaluation of a future crisis. Therefore, the perception of performance by mayors and city administration employees serves more for impression management than for insight aimed at improving actual operational performance.

A critical review of crisis events is essential for system improvement. System improvement through learning from crises generally occurs in leaps, from crisis to crisis. For rigid bureaucratic systems to change their routines, the compulsion of an extraordinary event is needed, and the time for changes is limited, usually during or immediately after a crisis. If the "unfreezing" process passes, the likelihood of systemic changes occurring is low. This is precisely what happened with crisis and disaster management at the local level in Serbia. The evaluation of crisis events was conducted in 2014. Local self-governments entered election processes after 2016, when political priorities at the local level were redefined compared to those set immediately after the floods in 2014 and 2016. The promises made, especially those related to prevention in crisis and disaster management and the institutional, operational, and functional full establishment of local self-government capacities for disaster management, were neglected—the "unfreezing" period had passed. Another crucial point is perception. When a crisis does occur, all activities and changes focus on that type of

event: after floods, actors predominantly deal with flood response (uniting local self-governments into river basins). Cities in Serbia have partially adopted the behavioral dimension of learning from crises: the institutional structure of city administrations has been partially adapted through job descriptions and the systematization of positions for crisis management.

Functional, financial, strategic, and operational frameworks are not fully established. The cognitive dimension of organizational learning, which consists of mental maps, memories, systems of norms and values, and relates to increasing insight and changing knowledge levels to apply learned lessons in the future, is not sufficiently expressed in cities. This was evident in the perception of crisis preparedness among mayors and representatives of local self-governments (LSGs). Organizational memory, as an integral part of the cognitive dimension of learning within LSGs in a crisis, and its explicit forms such as regulations, manuals, instructions, public policy strategic documents, and databases, is not sufficiently established. The implicit form of organizational memory management in crisis and disasters in cities (norms, beliefs, rituals) has been neglected. Additionally, it has been found that there is no collectively learned lesson by local self-government, the state, or the population related to crisis communication.

The cognitive dimension of learning involves handling information (acquisition, creation, and sharing) as a prerequisite for learning, and the content and exchange of communications, availability of information, and coordination are also weak points in crisis and disaster management in cities. The LSG system has not learned lessons from previous crises. A crisis contains a developmental element, being a transitional state. If the system does not learn lessons from the transitional state—crisis, does not integrate them into institutional memory, and does not move to a qualitatively higher level, it may indicate a lack of development capacity. On the other hand, the absence of responsibility in crisis and disaster management has further impacted the lack of prevention. Another dilemma is whether the absence of responsibility is a double-edged sword for political decision-makers, given that there are no clear legal and procedural mechanisms for evaluating crisis events, leaving them entirely to political blame games. These assumptions are topics for new research.

Regarding whether public administration reform follows the reform of crisis management at the local level, research has

concluded that the principles and modern concept of crisis and disaster management and good governance as a new administrative doctrine are compatible: they require accountability; reducing uncertainty in the local community through strategic planning; responsible budgeting; information accessibility; predictability—the principle of legitimate expectations; citizen involvement in the formulation, implementation, and evaluation of crisis and disaster management as public policy with an emphasis on gender perspective, as well as considering the needs of vulnerable groups. After the research was conducted, the conclusion is that the principles of good governance are not significantly applied in crisis management as public policy at the local level, focusing on Serbian cities.

Crisis management at the local level in Serbia is reactive and has not shown the capacity to learn from crises. The policy network is weak, as crisis and disaster management is not on the list of political priorities at the central, and consequently, not at the local level. This is concluded based on policy game outcomes: the existing legal framework is incomplete, and the new law has not yet been passed, although its development started in 2014. Budget allocations are symbolic and insufficient. What is good and encouraging is the establishment of an institutional framework within local self-government for crisis and disaster management, despite the reduction in the number of employees and the increase in LSG responsibilities. Crisis and disaster management tasks have become organizationally visible within the system through job classification and descriptions. Also, the program budget includes activities for disasters, which is a prerequisite for larger allocations for crisis and disaster management, especially concerning prevention. Therefore, it is important to adopt planning documents, which are one of the conditions for budgeting.

Comparing cities and municipalities, the level of their preparedness for emergencies, it was concluded that there are generally no statistically significant differences proving that cities as economic, demographic, political, and administrative centers are more prepared for crises than municipalities, which is the reason for their greater autonomy in crisis and disaster management. Differences exist in some dimensions, but in favor of municipalities, such as reporting and financing. This does not mean that municipalities are better, but that cities have not fully taken on the responsibility and exercised powers in crisis and disaster management in line with the advantages they have. Organizational limita-

tions for crisis management relate to a lack of staff, uneducated staff, financial and technical constraints.

The failure to recognize the importance of prevention in crisis and disaster management by policymakers has been identified as one of the most significant organizational constraints. For the modern concept of crisis and disaster management to take root at the local self-government (LSG) level, employees see the solution in educating, primarily, the policymakers. Cities and municipalities require different forms of assistance in implementing the modern concept of crisis and disaster management and in establishing the responsibilities they have in the field of disasters. Cities need help in the legislative framework, while municipalities need assistance in the educational framework.

All of this suggests that the effective implementation of the crisis management policy concept in cities in Serbia requires continuous strategic, tactical, and operational transformation of the public administration and public management system to strengthen the capacity of local self-governments for prevention, preparedness, response, and recovery from crises, thereby confirming the general hypothesis of the research.

This research has its limitations, primarily due to the broadly set research framework. There is a need for further investigation into the modern concept of crisis management as a reformed public policy at the local level. The presented results can be supplemented and further developed by testing hypotheses and deepening research questions. The next step could be the standardization of questionnaires, the so-called local crisis management index, which would address determining the level of crisis preparedness of local communities. An unresolved issue remains whether cities and municipalities should have the same level of authority in managing crises and disasters. Additionally, further research is needed on how local self-governments respond to organizational crises in relation to the political, institutional, temporal, informational, and complexity dimensions of crises (Stern, 2003).

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13. Appendices

Appendix 1: Questionnaire for Representatives of the Ministry of the Interior / Sector for Disasters

- I. Type, Structure, Number, and Responsibilities of Emergency Response Agencies at the Local Level as Provided by the Disasters Law and Their Interrelations
- II. Degree of Fulfillment of Responsibilities by the Cities in Accordance with the Disasters Management Law:
 1. Has an Disasters Headquarters been constituted?
 2. How frequently does it meet?
 3. How does it operate?
 4. Has the mayor completed training in disaster management?
 5. Are specific, qualified legal entities designated for protection and rescue?
 6. Are simulation exercises conducted? If so, how many?
 7. How many authorized and qualified businesses and other legal entities are there for implementing protection and rescue measures within the Municipality/City?
 8. Have operational expert teams been formed? Which ones?
 9. Have civil protection commissioners and their deputies been appointed in the populated areas of the Municipality?
 10. Have General Purpose Civil Protection Units been formed?
 11. What is their organizational structure and number?
 12. How are they equipped?
 13. Have the members undergone training?
 14. Has a Situation Center been established?
 - How is it equipped?
 - How does it operate?
 15. Collaboration with the regional organizational unit of the Sector for Disasters (SES)?
 16. Collaboration with neighboring local self-government units?
 17. Collaboration with the district?

18. How many facilities are available for accommodating the population in case of an emergency?
19. What is their accommodation capacity?
 - What is their condition?
20. What is the condition of the alert systems?
21. What is the status of telecommunication and information support for protection and rescue needs?
22. What is the state of personal and collective protection?
23. Has there been any public education on disasters?
24. Has a Risk Assessment for the Municipality's territory been adopted? If not, when is it expected to be adopted?
25. Has a Commission for Damage Assessment from Natural Disasters been formed?
26. How does the compensation for damage caused by natural disasters and other accidents function?
27. Identify the most significant problems in disaster management operations:
 - Personnel
 - Material-technical
 - Organizational
 - Others

III. Financing Emergency Management

- What percentage of the budget of the mentioned cities is allocated for responsibilities defined by the Disasters Law?

IV. Coordination of Entities Responsible for Emergency Management

- Degree of coordination among agencies/actors at the local level responsible for disaster management and the most significant issues in coordination.

Appendix 2: Questionnaire for Representatives of Local Self-Government (LSG) in Cities Responsible for Disasters

Degree of Preparedness

1. In your opinion, how prepared is your Local Self-Government Unit (LSGU) for risk management and disasters? Please circle one of the following ratings:
 -

- 1. Completely unprepared
 - 2. Insufficiently prepared
 - 3. Average preparedness
 - 4. Fully prepared
2. What, in your opinion, are the main problems and obstacles to increasing the capacity of your LSGU for risk management and disasters? Please list up to five problems in order of importance (starting from the most important):

Legal Framework

3. How familiar are you with the obligations of the local self-government arising from the Law? Please circle one of the following ratings:
- 1. Not familiar at all
 - 2. Insufficiently familiar
 - 3. Fairly familiar
 - 4. Completely familiar
4. Please indicate which of the listed documents have been adopted in your LSGU (for each document, indicate whether it has been adopted or not, by circling the corresponding number)

Document Name

- 1: Yes
- 2: No

4.1 Decision on the establishment of the headquarters

- 1
- 2

4.2 Rules of procedure of the headquarters

- 1
- 2

4.3 Annual report

- 1
- 2

4.4 Annual work plan

- 1
- 2

4.5 Decision on the organization and functioning of civil protection of general purpose

- 1
- 2

4.6 Decision on the establishment of civil protection units for general purpose

- 1
- 2

4.7 Conclusion on the appointment of civil protection commissioners

- 1
- 2

4.8 Duties of headquarters members

- 1
- 2

4.9 Decision of the mayor/president of the municipality on the establishment of teams for the preparation of Risk Assessment and Plans for Protection and Rescue

- 1
- 2

4.10 Risk Assessment (1-3 current level of completion; Specify whether consent of the Sector of the Ministry of the Interior has been obtained)

- 1
- 2

4.11 Plans for Protection and Rescue (1-3 current level of completion; Specify whether consent of the Sector of the Ministry of the Interior has been obtained)

- 1
- 2

4.12 Operational flood defense plan for second-order watercourses

- 1
- 2

5. If the following documents have been adopted in your LSGU, please indicate whether consent of the Ministry of the Interior Sector has been obtained?

Document Name

- 1: Yes

- 2: No

5.1 Risk Assessment (1-3 current level of completion;)

- 1
- 2

5.2 Plans for Protection and Rescue (1-3 current level of completion)

- 1
- 2

6. How do you assess the current Law on Disasters (choose one of the provided answers and elaborate):

- 1. It adequately regulates the area of disasters (please provide reasons)
- 2. It is incomplete/inadequate in some aspects (please provide reasons)

7. Please list the forms of assistance you need to improve/prepared local regulations in an appropriate manner (you can circle multiple answers and add if you have any other form of assistance in mind)

Legislative Framework (Decisions, Regulations, Guidelines, etc.)

1. Legislative Framework (Decisions, Regulations, Guidelines, etc.)

Institutional Framework (Formation of Services, Departments, Special Organizations, Civil Protection, etc.)

2. Institutional Framework (Formation of Services, Departments, Special Organizations, Civil Protection, etc.)

Educational Framework (New Professional Staff, Courses, Licenses, Trainings, Workshops, Round Tables, Public Hearings, etc.)

3. Educational Framework (New Professional Staff, Courses, Licenses, Trainings, Workshops, Round Tables, Public Hearings, etc.)

Functional Framework (Misunderstanding of Authorities, Inability to Adopt or Enact a Certain Act, Insufficient Expertise or Equipment, etc.)

4. Functional Framework (Misunderstanding of Authorities, Inability to Adopt or Enact a Certain Act, Insufficient Expertise or Equipment, etc.)

Something Else, Please Specify:

5. Something Else, Please Specify:

Financial Framework

8. Does your city/municipality allocate funds from the Budget for the needs of risk management and reduction?
1. Yes
 2. No

9. If the answer is Yes, please specify the amount and percentage of funds allocated from the local Budget in the last fiscal year:

Amount: _____ RSD Percentage: _____ %.

10. Please specify the purpose of the allocated budgetary funds (circle all applicable answers):

1. Procurement of equipment for civil protection needs
2. Financing of hail protection systems
3. Maintenance of public alert systems
4. Urban planning works - watercourse regulation and critical infrastructure development
5. Development of promotional materials
6. Project development
7. Something else, please specify:

11. Are you familiar with the funds/international funds available to LSGUs to support the improvement of prevention and response systems in disasters?

1. Yes
2. No

12. If yes, has your LSGU applied for funds?

1. Yes
2. No

13. If the answer is affirmative, please specify for which funds and where the application was submitted:

Risk Assessment and Protection and Rescue Plan

14. If you have a Risk Assessment and Protection and Rescue Plan, has your local self-government taken any steps to improve the quality of urban plans or reaction plans and actions of public utility companies during emergencies?

1. Yes (skip to the next question)
2. No (go to question 22)

15. Please also indicate for each public utility company whether there are Risk Assessments and Protection and Rescue Plans (if any).
16. Besides public utility companies, are there any other actors recognized in your LSGU as relevant for prevention, response, and action in disasters?
 1. Yes, (specify which)
 2. No (go to question 18)
17. If the answer is positive, are there Risk Assessments and Protection and Rescue Plans for other listed actors?
 1. Yes, for all listed
 2. Yes, for some listed
 3. No
18. Have you received any support in the process of developing protection and rescue plans or risk assessments so far?
 1. Yes
 2. No
19. If the answer is yes, please specify the nature of that support (you can circle multiple answers and add any other form of support if necessary):
 1. Institutional framework (mention the institutions providing support)
 2. Educational framework (mention necessary trainings and instructions - when, to whom, what was held)
 3. Functional framework (mention support in terms of obtained information and its processing, as well as necessary tools/software for document preparation)
 4. Something else, please specify:
20. How would you rate the support received so far?
 1. Completely insufficient
 2. Insufficient
 3. Relatively sufficient
 4. Completely sufficient

Disasters Headquarters

21. Are you familiar with the responsibilities of the Disasters Headquarters?
 1. Yes
 2. No

22. Does your local self-government have an Disasters Headquarters?
 1. Yes
 2. No
23. If the answer is yes, do you consider the Headquarters adequately prepared to respond in an disaster?
 1. Yes, completely
 2. Yes, partially
 3. No
24. Has your Headquarters or administration communicated with all relevant institutions in your municipality/city (City Council, Assembly, departments within administrations, public utility companies, institutions...) in terms of aligning acts related to disasters (preventive measures, measures during, and after disasters, or consequences of natural disasters)?
 1. Yes
 2. No
25. If the answer to the previous question is Yes, please specify the nature of this communication:
26. In your opinion, what are the achieved results?
 1. Very weak
 2. Weak
 3. Relatively good
 4. Very good

Cooperation and communication

27. To what extent have you collaborated with neighboring municipalities during emergencies?
 1. To a large extent, significantly
 2. To a small extent, insignificantly
 3. Not collaborated at all
28. If there has been collaboration, please specify how it was manifested.
29. To what extent have you collaborated with neighboring municipalities in the field of prevention and management of emergencies?
 1. To a large extent, significantly
 2. To a small extent, insignificantly
 3. Not collaborated at all

30. If there has been collaboration, please specify the nature of that collaboration (multiple answers possible):
- Planning and development of joint projects aimed at financing prevention and disaster management systems
 - Planning and development of joint projects aimed at financing disaster response efforts
 - Joint training, drills, and exercises
 - Something else
31. Have you collaborated with cross-border municipalities in the field of prevention and disaster management?
1. Yes
 2. No
32. If there has been collaboration with cross-border municipalities, please specify the nature of that collaboration (multiple answers possible):
- Planning and development of joint projects aimed at financing prevention and disaster management systems
 - Planning and development of joint projects aimed at financing disaster response efforts
 - Joint training, drills, and exercises
 - Something else
33. If there has been no collaboration with cross-border municipalities, do you think there is a need for such collaboration? (one answer)
1. Yes, I believe it is necessary
 2. Yes, it would be good to have
 3. No, it's difficult to achieve
 4. No, it's not needed
34. If you believe cross-border cooperation in the field of prevention and disaster management is necessary, please provide suggestions for cooperation if you have any.
35. Have you collaborated with national institutions/agencies responsible for prevention and disaster management and/or for the civil protection and rescue system?
1. Yes
 2. No
36. If you have collaborated, please specify the nature of that collaboration (you can select multiple answers if applicable, and add any other form of collaboration if necessary):

- Legislative framework (participation in proposing legislative solutions and subsidiary acts: decisions, regulations, instructions, plans, assessments, etc.)
 - Institutional framework (strengthening capacities of existing structures in terms of working in commissions, expert-operational teams, working groups, etc.)
 - Educational framework (training, workshops, seminars, public discussions, etc.):
 - Functional framework (establishment and adequate functioning of the civil protection and rescue system, joint planning, response, and recovery efforts)
 - Something else
37. Which national institutions/agencies have you collaborated with? Please specify:
38. Have you collaborated in any way with the District Emergency Headquarters?
1. Yes
 2. No
39. If the answer is YES, please specify the forms of collaboration you have achieved (you can select multiple answers if applicable, and add any other form of collaboration if necessary):
- Legislative framework (activities related to drafting assessments, plans, headquarters acts, regulations, instructions, etc.):
 - Institutional framework (formation of civil protection units, working bodies, commissions, expert-operational teams, etc.):
 - Educational framework (training, workshops, seminars, public discussions, etc.):
 - Functional framework (establishment and adequate functioning of the emergency system, joint planning, response, and recovery):
 - Something else:
40. If you have not collaborated with the District Emergency Headquarters, please provide reasons why such collaboration has been lacking so far.
41. Have you involved and/or consulted citizens or the broader community in prevention and disaster management processes in any way so far?
42. If the answer is YES, please specify the methods of involvement you have applied:

1. Meetings with citizens and Local Community Councils
 2. Public forums
 3. Educational workshops
 4. Civil protection training
 5. Civil protection exercises
 6. Work on Risk Assessments and Protection and Rescue Plans
 7. Activities during emergencies and disaster recovery:
 - A) Information and alerting
 - B) Evacuation
 - C) Critical infrastructure works
 - D) Terrain sanitation
 - E) Care
 - F) Humanitarian aid
 - G) Facility rehabilitation
43. Do you believe that the awareness of prevention and disaster management among employees and officials in your city/municipality administration is at a sufficiently high level?
1. Yes
 2. No
44. If the answer is NO, please list the ways you would improve the awareness of employees and officials in your city/municipality administration (you can select multiple answers if necessary and/or add any other ways):
1. Legislative framework (e.g., drafting new laws and amending existing acts)
 2. Institutional framework (including new institutions in the existing system, forming new departments or institutions, etc.)
 3. Educational framework (training, workshops, seminars, public discussions, etc.)
 4. Functional framework (involvement in decision-making, implementation, or supervision processes, etc.)
 5. Something else:
45. Do you believe that the awareness of citizens in your city/municipality regarding prevention and disaster management is at a sufficiently high level?
1. Yes
 2. No

46. If the answer is NO, please specify how you would improve the awareness of the local community (multiple answers possible):
1. Institutional framework (involving civil society organizations in processes, forming new departments or institutions, etc.)
 2. Educational framework (workshops, forums, public discussions, etc.)
 3. Something else:
47. In your opinion, which actors in your Local Community should be given priority when raising awareness about prevention, hazards, and protection in disasters? Please rank the listed actors from 1 (highest priority) to 6 (lowest priority): a. Local Community political leadership b. Local Community employees c. Management of public companies and institutions d. Local media representatives e. School children and youth f. Citizens
48. If your municipality/city/urban municipality has prepared a Risk Assessment, Protection and Rescue Plan, and Long-Term Improvement and Development Plan, please indicate among the listed actors those involved in the process of drafting these documents:
1. Gender Equality Commission/Council
 2. Person responsible for gender equality issues
 3. Civil society organizations
 4. Women's associations
49. If your municipality/city/urban municipality has not prepared a Risk Assessment, Protection and Rescue Plan, and Long-Term Improvement and Development Plan, are there local actors who could contribute to identifying the different needs and positions of women and men in emergencies? Please select those you believe would make such a contribution:
1. Gender Equality Commission/Council
 2. Person responsible for gender equality issues
 3. Civil society organizations
 4. Women's associations
50. To what extent have the needs of vulnerable groups (people with special needs, disabilities, Roma...) been taken into account in protection and rescue plans and other aspects of prevention and disaster management?

1. Completely taken into account
2. Partially taken into account (specify where and how)
3. Not taken into account

Appendix 3: Mayor Questionnaire: Mayor's Attitudes Scale on Crisis and Emergency Management

The legal provision designating the mayor as the commander of the emergency headquarters is good and does not need to be changed.

- Range: 1 (Fully Agree) - 5 (Strongly Disagree)

The city administration, along with all sectors, is fully prepared to respond to emergencies.

- Range: 1 (Fully Agree) - 5 (Strongly Disagree)

The responsibilities of local self-government in disaster management in Serbia are fully and sufficiently regulated by legal and sub-legal acts.

- Range: 1 (Fully Agree) - 5 (Strongly Disagree)

The responsibilities that the city has in disaster management are adequately implemented (operational expert teams formed, civil protection commissioners and their deputies appointed, civil protection units formed, equipped and trained, situation center established, alerting means provided, etc.).

- Range: 1 (Fully Agree) - 5 (Strongly Disagree)

Strategic risk assessment plans prescribed by law have been sufficiently and timely adopted and applied in cities, thus the crisis management style is predominantly proactive.

- Range: 1 (Fully Agree) - 5 (Strongly Disagree)

Actors in local self-government (public administration, public services, decision-makers, citizens) are sufficiently trained and educated on crisis management.

- Range: 1 (Fully Agree) - 5 (Strongly Disagree)

Activities and voluntary engagement of citizens in emergencies are regulated in an appropriate manner by legal and sub-legal acts and appropriate standard procedures.

- Range: 1 (Fully Agree) - 5 (Strongly Disagree)

Civil society organizations and citizen associations, volunteers are very important in emergencies.

- Range: 1 (Fully Agree) - 5 (Strongly Disagree)

Biography of authors

Dr. Jasmina Tanasić

Jasmina Tanasic, born in 1964, holds a degree in social policy/social work. She completed her high school education in Obrenovac in 1983 and graduated from the College of Social Work in Belgrade in 1990. In 2005, she obtained her bachelor's degree from the Faculty of Political Sciences in Belgrade with a remarkable GPA of 8.66. Following this, she pursued a specialization in rehabilitation and sociotherapy, focusing on the topic "Prevention of morbidity absenteeism in the economy," at the same faculty in 2006. Subsequently, in 2008, she defended her master's thesis titled "The problem of absenteeism and human resource management" at the Faculty of Security, University of Belgrade, thereby earning the title of Manager in the field of human and social resources - Master.

From 1994 to 2007, Jasmina worked as a dedicated social worker in primary health care settings. Since 2007, she has been a valuable asset to the Standing Conference of Towns and Municipalities (SCTM), the association representing all local self-governments in Serbia. Within SCTM, she serves as the head of the Department of Social Activities, overseeing critical areas such as education, social and health care, employment, culture, sports, and youth initiatives. Additionally, she holds the position of secretary of the Committee for Health and Social Policy at SCTM and acts as the coordinator of the Health Network. Jasmina actively advocates for the interests of local self-government entities before central authorities and other relevant stakeholders, demonstrating her commitment to advancing community welfare.

Her professional portfolio includes significant contributions to various international projects and collaborations with renowned organizations, notably UN agencies and civil society groups. With her expertise and dedication, Jasmina has played pivotal roles in the development and implementation of numerous legislative and strategic initiatives across sectors such as employment, social pro-

tection, health, education, sports, and social inclusion. Notably, she served as the vice-chair of the working group of the Government of the Republic of Serbia for the drafting of the NAP UN Resolution 1325 "Women, Peace, and Security" from 2016 to 2017. Furthermore, Jasmina actively participates in the Interministerial Ministerial Group for the reforms of employment policy and social policy, contributing to Serbia's negotiations for EU membership in negotiation chapter 19.

Her commitment to academic and professional excellence is evident through her active participation in international and domestic scientific conferences, where she shares her insights and experiences with fellow professionals. Jasmina Tanasic's multifaceted contributions and unwavering dedication underscore her as a respected leader and advocate for social welfare and community development in Serbia.

Prof. Dr. Vladimir M. Cvetković

Vladimir M. Cvetković was born on February 8, 1987 in Kragujevac. He received his doctorate at the Faculty of Security of the University of Belgrade, defending his thesis in 2016 entitled „*Citizens' Preparedness to respond to a Natural Disaster caused by a Flood in the Republic of Serbia*“, which earned him the academic title of Ph.D. - Security Sciences. In 2012, he defended his master's thesis at the Criminalistics and Police Academy in Belgrade, „*Management in Disasters caused by the Misuse of Weapons of Mass Destruction*“, with which he obtained the title of Master Criminologist, and he graduated from the Academy in 2010 as the best student of his generation with an average grade of 10.00. with which he earned the title of graduate criminologist. He graduated from the High School of Internal Affairs (police officer) in Sremska Kamenica in 2006, as the best student of his generation and holder of Vuk's diploma, and from the elementary school "Sveti Sava" in Batočina in 2002 as holder of Vuk's diploma.

Employment and Teaching Experience

Since 2017, he has been employed at the Faculty of Security of the University of Belgrade as an assistant professor at the Department of Management Studies in Disasters and Environmental

Security, where he is engaged as a teacher in the following subjects: Risk Management in Disasters, Protection and Rescue System, Risk Assessment Methodology and creation of protection and rescue plans against natural and other disasters, Management of protection and rescue activities in disasters and System of prevention and reduction of risks from natural and other disasters.

In the period from 2013 to 2017, he was employed at the Criminalistics and Police Academy, now the University, as an associate in the title of assistant for the following subjects: Safety in disasters, Risk management in disasters, Prevention and suppression of fires, accidents and explosions, and Information systems in disasters. At the same institution and subjects, in the period from 2011 to 2013, he was employed as a teaching assistant. During 2006, he was employed in the Ministry of Internal Affairs of the Republic of Serbia as a police officer.

Scientific Research Work

He has carried out numerous scientific researches and published more than 250 scientific papers in national and international journals and anthologies, including 14 scientific monographs, 8 papers in journals on the SCI/SSCI list and a doctoral dissertation in the period from 2011 to 2020. His narrower research interests include security, disasters, risk management and civil protection. He uses English and German language. He reviewed more than 50 scientific papers in domestic journals (NBP, Bezbednost, Serbian Science Today, etc.) and in international journals (Geomatics, Natural Hazards and Risk, International Journal of Architectural Heritage, etc.). He participated in numerous national and international scientific conferences in the country and abroad, as well as in international and national projects listed below.

- ❖ International research project "Horizon 2020 project DAREnet - Danube river region Resilience Exchange network targeting the Call topic: SEC-21-GM-2016/2017: Pan European Networks of practitioners and other actors in the field of security".
- ❖ The scientific research project "National security of the Republic of Serbia and security integration", which in the period

2014-2015 implemented by the Criminalistics and Police Academy in Belgrade and headed by prof. Dr. Mladen Bajagić.

❖ The scientific research project "Management of the police organization in the prevention and suppression of security threats in the Republic of Serbia", implemented during the period 2015-2018, by the Criminalistics and Police Academy in Belgrade and headed by prof. Dr. Dane Subošić.

❖ Scientific research project "Development of institutional capacities, standards and procedures for combating organized crime and terrorism in conditions of international integration" (number 179045), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia and implemented by the Criminalistics and Police Academy in Belgrade in the period 2011- in 2016.

Professional Engagements

❖ Chief and responsible editor of the international magazine *International Journal of Disaster Risk Management*.

❖ President and founder of the Scientific-Professional Society for Risk Management in Disasters, as an organization that is particularly important for the protection and rescue system of the Republic of Serbia.

❖ The organizer of the seminar "Student safety in school facilities", catalog number 9 from the Catalog of professional development programs for teachers, educators and professional associates of ZUOV (Institution for Improvement of Education and Upbringing) for the school years 2014/2015, 2015/2016 and 2016/2017.

❖ Manager and implementer of basic security training in the area of disasters on Stara Planina in 2019.

❖ Manager and implementer of the Second, basic safety training in the field of protection and rescue in disasters in Ovčar Banja in 2019.

❖ Participated in the realization of special forms of teaching (training) (2011–2017), such as: basic police training for students of the first year of basic academic and professional studies (handling and manipulation of police officers' firearms); basic police and security training for disasters for students of the second year of basic academic and professional studies; summer, field training at the Training Center "Mitrovo Polje" of

the Ministry of Internal Affairs of the Republic of Serbia in Goča for students of the third year of basic academic and second year professional studies of the Criminal Police Academy, now the University.

❖ Secretary of the Department of Security Sciences at the Criminal Police Academy, now the University, in the period from 2011 to 2015.

Awards and Acknowledgements

❖ Winner of the "Danubius Young Scientist Award 2017" award for the best young scientist in Serbia, awarded by the Austrian Ministry of Science, Research and Economics (BMFWW) and the Institute for the Danube Region and Central Europe (IDM) for outstanding achievements in science.

❖ He is the winner of the scholarship for talents of the Ministry of Education of the Republic of Serbia – Grant by the Fund for Young talents of the Republic of Serbia for the undergraduate students of final years (2009/10).

❖ He received an OSCE scholarship for doctoral studies at the Faculty of Security in 2015.

❖ He is the winner of the scholarship "Eurobank EFG tuition fees for the best students of Serbia" within the project "Let's invest in European values", due to special emphasis in the field of criminological and police-security studies in 2009.

❖ He received several commendations for the best student of the first, second and third years at the Criminalistics and Police Academy in Belgrade in 2007, 2008 and 2009.

❖ He is the winner of the Silver Badge for the first student in the rank of graduated students (average 10.00) at the Criminalistics and Police Academy in Belgrade in 2010.

❖ During his primary school education, he was awarded six special diplomas for outstanding results achieved in competitions in physics, history, Serbian and German languages, biology and technical education, as well as Vuk's diploma.

Trainings and Certificates

❖ Completed the basic specialist course for inspectors in the field of civil protection and risk management in 2014.

- ❖ In 2012, he completed the four-month basic course for a firefighter-rescuer in the Disasters Administration for the city of Belgrade, after which he earned the title of firefighter-rescuer.
- ❖ Passed the professional fire protection exam in 2012.
- ❖ Passed the professional risk assessment exam in the protection of persons, property and business in 2018.
- ❖ Passed the expert exam of disaster risk assessment and preparation of protection and rescue plans in disasters in 2018.
- ❖ Regional Workshop on Human Resources Development in Podgorica, Montenegro from 30 October to 3 November 2017, organized by International Atomic Energy Agency and Ministry of Sustainable Development and Tourism of Montenegro.
- ❖ Training on project design, proposal development and project management for EU Horizon 2020 Programme, European training Academy in cooperation with UNDP in Belgrade, from 4 to 12 October, 2017.
- ❖ Certificate, DCAF's Border Security Programme certifies that Mr. Vladimir Cvetkovic has successfully participated in the seventh Future Leaders Training which took place in Andermatt, Switzerland, Geneva Centre for The Democratic Control of Armed Forces (DCAF), 2011.
- ❖ Certificate of Participation, Weapons of Mass Destruction Crime Scene Operations Course, United States of America, Department of Defense International Counterproliferation Program, 2011.
- ❖ Stručna praksa u Sektoru za vanredne situacije 2011. godine.
- ❖ Certificate, Sixth Regional Course in International Humanitarian Law, BU Faculty of Political Sciences, 2009.
- ❖ Certificate of appreciation in recognition of the valuable contribution as a Participant of the NATO SPS Leadership Roundtable on Information-Related Hybrid Threats in South – East Europe, 6-12 October 2019, Republic of North Macedonia.
- ❖ Certificate that has successfully completed training on project design, proposal development and project management for EU Horizon 2020 programme, EUTA and UNDP.
- ❖ Certificate that has successfully completed IAEA Regional Workshop on Human Resource Development, 30 October – 3 November 2017, organized by International Atomic Energy

Agency (IAEA) and Ministry of Sustainable Development and Tourism of Montenegro.

❖ Certificate of completion on-line e-learning course on: Overview of Nuclear Security Threats and Risks; Nuclear Security Threats and Risks (4 modules); Introduction to and Overview of IAEA Nuclear Security Series Publications; Nuclear Security Disciplines course on Physical Protection of Nuclear Material and Nuclear Facilities.

❖ Chosen as a demonstrator in the Traffic Safety course in 2009 during his studies at the Criminalistics and Police Academy in Belgrade.

Published papers and books

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Excerpts from Reviews: "The Efficiency of Disaster and Crisis Management Policy at the Local Level: Lessons from Serbia"

Monograph, *The Efficiency of Disaster and Crisis Management Policy at the Local Level: Lessons from Serbia*, emerges as a seminal work in the domain of disaster and crisis management. This comprehensive and meticulously researched text spans thirteen well-structured chapters, enriched with valuable appendices, tables, and figures that deepen the reader's comprehension. The authors adeptly navigate the complexities of local-level policy implementation, using Serbia as a pivotal case study to extract insights with global relevance.

The monograph opens with a robust exploration of the theoretical frameworks that underpin disaster and crisis management. Tanasić and Cvetković skillfully interweave various theoretical perspectives, providing a solid foundation for the analysis that follows. This theoretical underpinning is crucial as it underscores the multifaceted nature of disaster management, encompassing emergency response, preparedness, mitigation, and recovery. The authors' ability to present these concepts in a coherent and accessible manner sets the stage for a deeper understanding of the practical challenges and strategies in disaster management.

A significant strength of the monograph lies in its detailed examination of the specific challenges faced by local authorities in Serbia. Through rich case studies and empirical data, Tanasić and Cvetković illustrate the myriad obstacles that local governments encounter. These include resource limitations, bureaucratic inertia, and the complexities of inter-agency coordination, all of which can hinder the efficient implementation of disaster management strategies. The authors' nuanced approach highlights the importance of context-specific solutions, acknowledging that what works in one locality may not be applicable in another due to varying political, economic, social, and environmental conditions.

The authors' commitment to rigorous analysis is evident throughout the monograph. Employing a mixed-methods approach, they combine quantitative data with qualitative insights from interviews and field observations. This methodological rigor ensures that their findings are robust and grounded in real-world experiences. Each chapter concludes with practical recommendations designed to enhance the efficiency and effectiveness of local-level disaster management policies. These recommendations are not only pertinent to policymakers in Serbia but also offer valuable lessons for practitioners and scholars worldwide.

A particularly compelling aspect of the monograph is its emphasis on community involvement in disaster management. Tanasić and Cvetković argue persuasively that building resilient communities necessitates the active participation of local populations. This involves raising awareness about disaster risks, educating citizens, and empowering them to take an active role in preparedness and response efforts. By fostering a culture of resilience, local authorities can better mitigate the impacts of crises and enhance community recovery post-disaster.

In addition to its in-depth analysis, the monograph offers a forward-looking perspective. Tanasić and Cvetković do not merely document existing challenges; they also anticipate future trends and emerging threats. In an era marked by increasing natural disasters and the escalating impacts of climate change, their insights into adaptive strategies and long-term planning are especially pertinent. The authors advocate for the integration of climate change considerations into disaster management policies, emphasizing the need for a proactive rather than reactive approach.

The monograph also delves into the critical role of governance in disaster management. Tanasić and Cvetković examine how governance structures, decision-making processes, and institutional capacities influence the effectiveness of disaster management policies. They highlight the importance of transparent, accountable, and participatory governance in building trust and cooperation among stakeholders. By enhancing governance mechanisms, local authorities can improve their responsiveness and adaptability in the face of disasters.

Moreover, the authors provide a thorough analysis of the financial aspects of disaster management. They explore various funding mechanisms and financial instruments that can support local-level initiatives. The monograph discusses the challenges of securing adequate funding and the potential of innovative financing solutions, such as disaster risk insurance and public-private partnerships. By addressing these financial dimensions, Tanasić and Cvetković offer a comprehensive view of the resources needed to implement effective disaster management strategies.

Tanasić and Cvetković also underscore the importance of inter-agency and inter-sectoral collaboration. They argue that effective disaster management requires coordination among various governmental and non-governmental entities, including emergency services, public health agencies, infrastructure providers, and community organizations. The monograph presents case studies that illustrate successful collaboration models and identifies best practices for fostering cooperation among diverse stakeholders.

In their discussion of technology and innovation, the authors highlight the potential of modern technologies to enhance disaster management. They explore how tools such as geographic information systems (GIS), remote sensing, and early warning systems can improve situational awareness, risk assessment, and response capabilities. By leveraging these technologies, local authorities can enhance their ability to anticipate, prepare for, and respond to disasters.

The monograph also addresses the human dimension of disaster management. Tanasić and Cvetković emphasize the importance of human resources, including the training and capacity-building of disaster management professionals. They discuss the need for continuous professional development and the establishment of specialized training programs to equip personnel with the skills and knowledge required to manage complex disaster scenarios effectively.

In conclusion, *The Efficiency of Disaster and Crisis Management Policy at the Local Level: Lessons from Serbia* is an invaluable resource for anyone interested in disaster and crisis management. Tanasić and Cvetković offer a thorough, well-researched, and prac-

tical guide to enhancing the resilience of local communities. Their monograph not only sheds light on the specific challenges faced by Serbia but also provides broader lessons that can inform disaster management practices globally. This work is essential reading for policymakers, scholars, and practitioners dedicated to improving disaster preparedness and response efforts. By emphasizing the importance of local-level initiatives, community involvement, and adaptive strategies, Tanasić and Cvetković contribute significantly to the ongoing discourse on building resilient societies in the face of ever-evolving challenges.

The authors' dedication to uncovering strategies for enhancing policy efficiency is evident throughout the text. Their monograph stands as a testament to the critical role of local-level initiatives in building resilient communities and mitigating the impact of crises. By offering a blend of theoretical insights and practical recommendations, Tanasić and Cvetković provide a roadmap for improving disaster management systems. Their work underscores the importance of proactive planning, community engagement, and adaptive governance in the face of increasing natural disasters and climate change.

Overall, *The Efficiency of Disaster and Crisis Management Policy at the Local Level: Lessons from Serbia* is a commendable contribution to the field. It offers both theoretical frameworks and actionable recommendations for improving disaster preparedness and response efforts. The depth of research, coupled with practical insights, makes this monograph an indispensable resource for policymakers, scholars, and practitioners alike. Tanasić and Cvetković's commitment to rigorous analysis and their dedication to uncovering strategies for enhancing policy efficiency are evident throughout the text. Their work not only sheds light on the unique challenges faced by Serbia but also provides invaluable lessons applicable to disaster management contexts worldwide. This monograph is a must-read for anyone interested in understanding and strengthening disaster management systems.

Reviewers

BASIC DATA AND HISTORICAL DEVELOPMENT

On June 15, 2018, the founding assembly was held and at the proposal of the founder, prof. dr. Vladimir M. Cvetković, professors from the Faculty of Security, the Criminology and Police University, the Faculty of Geography and Forestry unanimously adopted the statute and formed the scientific-professional Society for Disaster Risk Management. In order to improve the scientific activity within the Society, 21.12.2020. year, the Statute was adopted and the International Institute for Disaster Research was established. The Scientific-Professional Society for Risk Management in Emergency Situations (NSDR-URVS) is a non-governmental, non-profit association, established for an indefinite period, for the purpose of improving the existing fund of theoretical knowledge in the field of risk management in emergency situations, conducting quantitative and qualitative research, organizing national and international conferences, launching and managing journals, conducting trainings and risk assessments, as well as other academic activities in the aforementioned field.

CONTACT INFORMATION

Scientific-professional society for disaster risk management
 Belgrade, Dimitrija Tucovića 121 ID number: 28259727
 PIB: 100885182 President – prof. Dr. Vladimir M. Cvetkovic
 Secretary – Sofija Radajković

Website - www.upravjanje-rizicima.com



SCIENTIFIC-PROFESSIONAL SOCIETY FOR DISASTER RISK MANAGEMENT




 +381 61 572 31 20

 Belgrade, Dimitrija Tucovića 121

 www.upravjanje-rizicima.com
upravjanje.rizicima@eunet.rs

MEMBERS AND ASSOCIATES

It has more than 1,000 members made up of professors from state and private Universities and Colleges in Serbia; scientific researchers, practitioners (members of the police, fire and rescue units, emergency medical services, the army, NGO organizations in the field of security, etc.), students and young people who are directly or indirectly engaged in research and specific activities in the field of emergency situations. Within NSDR-URVS, a general-purpose civil protection unit was formed with the aim of providing assistance to vulnerable citizens in emergency situations.




OBJECTIVES

Objectives of NSDR-URVS: a) conducting research in the field of disaster studies; b) establishment and management of an international journal – International Journal of Disaster Risk Management; v) preparation, application and implementation of national and international projects on various aspects of risk management in emergency situations; g) promoting, designing, implementing and improving preventive measures against disasters; d) designing and implementing campaigns, programs, plans to strengthen citizens' awareness of the necessity of improving their preparedness for disasters; f) organizing national and international scientific conferences on risk management in emergency situations; e) implementation of expert risk assessments and preparation of protection and rescue plans in emergency situations; h) organizing and implementing various types of training, courses, seminars and other training for citizens, students and employees in interested institutions; z) performing other tasks in accordance with the law and its Statute.

HELD TRAININGS, COURSES AND LECTURES

In the organization of the Scientific-Professional Society for Risk Management in Emergency Situations, a large number of trainings and other activities aimed at education in the field of emergency situations were realized: the first, second, third, fourth and fifth basic safety training in the field emergency situations.



SCIENTIFIC RESEARCH AND PUBLISHING ACTIVITY

Over 15 textbooks, monographs and collections of works were published within the Scientific and publishing activities of the Society. Associates of the society have written more than 10 projects in the field of emergency situations and more than 150 scientific papers.



INTERNATIONAL JOURNAL (IJDRM) AND INSTITUTE (IDR)

At the founding assembly held on 21.12.2020. year, the Statute was adopted and the International Institute for Disaster Research was established as an organizational unit of the Society. In 2019, the first international journal in the field of risk management in emergency situations was founded in Serbia - Journal of Disaster Risk Management.



Become a member by filling out the application form on the website and sending it via email to NSDR-URVS uzvajerizicima@gmail.com







The journal cover all aspects of disaster risk management from a global and national perspectives



Editor-in-Chief
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- Public commitment and institutional frameworks, including organizational, policy, legislation, and community action
- Disaster prevention, mitigation, response, recovery planning, policies, and implementation
- Promotes the interchange of ideas between practitioners, policy-makers, and academics

Contact Information

- ☎ +381 61 572 31 20
- 📍 Dimitrija Tucovića 121, Beograd
- ✉ disaster.risk.management.serbia@gmail.com

Keywords

Disasters, disaster risk management, natural disaster, technological disaster, emergency situations, crisis management, theory and practice, mitigation, preparedness, hazards, policy, natural, complex, emergencies, political, aid, relief, developing, humanitarian, field, reports, refugee, journal, research, analysis, review.

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search and practice concerning natural disasters, anthropogenic disasters, complex political emergencies and crises around the world. The journal crosses and affects interdisciplinary boundaries to promote communication, collaboration and teamwork between professions and disciplines to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development. The journal encourages the interchange of ideas and experience, to decrease the risk of disasters and build community resilience within the context of sustainable development and planetary boundaries.

Journal will cover all aspects of disaster risk management from a global perspective, including but not limited to:

- Disaster and crisis management theory and practice,
- Risk awareness and assessment,
- Hazard and vulnerability analysis,
- Knowledge development including education, training, research and information on disasters,
- Public commitment and institutional frameworks, including organizational, policy, legislation and community action,
- Disaster prevention, mitigation, response, recovery planning, policies, and implementation,
- Promotes the interchange of ideas between practitioners, policymakers and academics.

Keywords

Disasters, disaster risk management, natural disaster, technological disaster, disasters, crisis management, theory and practice, mitigation, preparedness, hazards, policy, natural, complex, emergencies, political, aid, relief, developing, humanitarian, field, reports, refugee, journal, research, analysis, review.

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Authors are kindly invited to submit their formatted full papers. All paper submissions will be blind peer reviewed and evaluated based on originality, Research content, correctness, relevance to conference and readability. Please read complete submission and formatting guidelines before submitting your paper. You can submit your paper through the following link (<http://vanrednesituacije.com/ojs/index.php/Vol1/about/submissions>) or to send via disaster.risk.management.serbia@gmail.com if you have a problem with the online platform.

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