Pakistan Journal of Criminology
Vol. 16, No. 01, January—March 2024 (265-283)

Civil Defence Policy and Practice: Implications for Community Resilience and Crime Prevention

Yernar Akimbayev[1], Murat Kuanyshbayev[2],
Arman Abdykalykov[3], Elvira Mukhamedina[4]
& Sultan Arifdjanov[5]

Abstract

Civil defence systems hold great relevance for criminologists seeking to understand how societies prepare for, cope with, and recover from disasters. This article provides a criminological analysis of civil defence in Kazakhstan, examining the legal frameworks, organizational structures, and systemic factors that shape this country's approach. Utilizing methods such as system analysis, a critical examination is undertaken of Kazakhstan's civil defence policies and practices. The rationality, efficiency, and interagency coordination of civil defence are assessed. Comparisons are drawn with civil defence systems in other nations to derive insights into best practices for strengthening public safety and social cohesion in times of crisis. Recommendations are provided for leveraging criminological training and research to identify gaps, reduce systemic flaws, and enhance service provision around disaster management in Kazakhstan. This criminological analysis aims to spur innovative approaches that strengthen civil defence and its intersections with law and justice.

Keywords: Potential of the State, Legislation, Criminal Justice, Protection of the Population, Emergency Situations.

Introduction

The issue of studying the functioning of the civil defence of the Republic of Kazakhstan is quite complex, it requires different approaches and methods of response from both the state and the population. The purpose of this work is to analyse and highlight the main areas of security of the population, territory, and economic facilities in emergency situations of peacetime and wartime, since this is

[1] Department of Civil Protection, National University of Defence of the First President of the Republic of Kazakhstan – Elbasy, Astana, Republic of Kazakhstan. yernarakimbayev@outlook.com
[2] Department of Civil Protection, National University of Defence of the First President of the Republic of Kazakhstan – Elbasy, Astana, Republic of Kazakhstan
[3] Department of Maintenance of Service and Combat Activities of the National Guard, National University of Defence of the First President of the Republic of Kazakhstan – Elbasy, Astana, Republic of Kazakhstan
[4] Department of Social Sciences and Humanities and Language Disciplines, Turan-Astana University, Astana, Republic of Kazakhstan
[5] Ministry for Emergency Situations of the Republic of Kazakhstan, Astana, Republic of Kazakhstan

one of the important functions of each state in the field of its security and normal life, in particular the Republic of Kazakhstan.

Civil defence is a system of preparedness and measures aimed at protecting people, property values and cultural heritage from the dangers arising from armed conflicts and their consequences, as well as from natural and man-made emergencies (Koropatnik et al., 2020). The civil defence system of the Republic of Kazakhstan is an integral part of the national civil defence system, designed to implement comprehensive nationwide measures, such as protecting the people and territory of the Republic of Kazakhstan in peacetime and wartime from the impact of offensive (destructive) elements of the armed forces, modern weapons, emergency situations of natural and man-made nature (Akimzhanov et al., 2014). It is aimed at implementing a set of measures taken by the state in peacetime and during a military conflict to protect against aggressive (destructive) factors and the consequences of emergency circumstances caused by natural and man-made disasters (Kusainov et al., 2021).

The capacity to effectively prepare and respond to disasters, emergencies, and threats to public safety is critical for all societies. Criminologists have long recognized the importance of integrated civil defence and emergency management systems for upholding community resilience, social cohesion, and public order in times of crisis (Rima et al., 2021; Rudyi, 2023). When civil defence systems function well, they can mitigate harm, facilitate recovery, and prevent criminal activity that may emerge during disasters. However, flaws in civil defence planning and administration can undermine crisis response and exacerbate harms to communities (Shopina et al., 2019). This criminological analysis examines the civil defence policies and practices of Kazakhstan, identifying strengths, weaknesses, and areas for improvement. Kazakhstan faces major emergency threats ranging from earthquakes to industrial accidents that necessitate robust civil defence capacities (Lakbayev et al., 2020). Yet systemic deficits in the country's approach remain, highlighting a need for reform. Methodologically, techniques common in criminology like system analysis are employed to evaluate the rationality and efficiency of Kazakhstan's civil defence administration. Comparisons with other nation's systems further inform an assessment aimed at strengthening public safety and justice.

Z.N. Amanzholova (2023) highlights a significant divergence between the Russian and Kazakh versions of legislation pertaining to the validation of states of emergency and social emergency systems. This discrepancy has led to inaccuracies in defining social relationships and the incorrect application of legal norms. The study demonstrates differences in the legal definitions of "emergency situation" and "emergency state" in the Russian law and their translation into

Kazakh. Drawing on legislative acts from neighboring countries, the author proposes a definition that aligns with the concept of a "state of emergency" in current Kazakh legislation and suggests amending the relevant laws in both Kazakh and Russian. Furthermore, Kazakhstan has enacted Law No. 188-V, which governs civil defense activities, particularly in the prevention of various natural disasters and catastrophic events due to the country's susceptibility to such incidents (2014). This law underscores the importance of preparedness in the face of potential man-made, natural, and military emergencies. It also addresses evolving global challenges, including changes in geopolitics, environmental concerns, and energy resource usage (Koshkinbaeva et al., 2019). S. Sharipkhanov and K. Akshulakov concur, emphasizing the need for an effective civil protection system in Kazakhstan, which is crucial for reducing the likelihood of emergency situations and aligning with contemporary demands through continuous personnel training and public education efforts (2022).

S.S. Kudryavtsev et al. emphasize the prioritization of labor protection and industrial safety within the current regulatory framework concerning emergency situations, civil defense, and safety (2021). These issues are extensively regulated through a comprehensive system of preventive measures aimed at accident prevention and workers' well-being (Blikhar et al., 2021). Kazakhstan aligns with global trends by implementing international regulatory laws and adapting its own practices to international standards, recognizing the need for risk assessment systems to manage safety at industrial enterprises. Furthermore, R.D. Osipov and M.A. Bakhtiyar highlight the importance of geographic information systems in quick emergency response, specifically within the Ministry for Emergency Situations of the Republic of Kazakhstan (2023). They advocate for the development of Quantum GIS geoinformation software, emphasizing its relevance in the modern era of digitalization. Additionally, the authors emphasize the significance of systematic analysis in understanding and addressing the challenges faced by researchers and organizations in the field of civil defense.

The protection of the population and territory is a critical function of the state, essential for national security both in times of peace and during military conflicts (Haliantych et al., 2021). Civil defence assumes utmost importance due to the potential threats to the country's economic assets and crucial state facilities, especially those considered hazardous. G.I. Koltsov et al. discuss the planning and provision of personal protective equipment to the population in Kazakhstan, outlining an operational algorithm for the organization of the territorial subsystem within the state civil defence system (2022). Researches above highlight the need for a well-structured state system tailored to the characteristics of military threats, emphasizing the increased requirements for managing administrative divisions in

today's context of localized wars and armed conflicts. The use of hierarchical analysis methodology offers a qualitative and effective means to reform and enhance the response system across different levels of authority within the civil defence management system of Kazakhstan's regions. The developed methodology for choosing a rational structure of the civil defence management system of the Republic of Kazakhstan in the region based on the method of hierarchical analysis will qualitatively and effectively reform and improve the response system of authorities at various levels. To study the conceptual apparatus defined by the topic of the scientific article, the formal-logical method, the synthesis method, as well as the method of hierarchical analysis were used.

The current state of the regulatory framework for civil defence

In 1931, French physician Georges Saint-Paul, in collaboration with several countries, established the "Association of Geneva Safety Zones" in Paris with the goal of creating regional safety zones worldwide through bilateral and multilateral agreements. This alliance later evolved into the International Civil Defence Organization (ICDO), which attained international organization status in 1972 (Beasley et al., 2012). This recognition followed the Assembly of Delegations during the Second International Conference on Radiological Protection, where representatives of ICDO member states ratified the organization's Charter, effectively turning it into an international convention. Presently, the ICDO boasts 58 member countries, including the Republic of Kazakhstan. In October 1997, Kazakhstan officially joined the ICDO through Law No. 182-I. The organization primarily focuses on coordinating national authorities' efforts in disaster prevention and response, encompassing both natural and man-made disasters. In the Soviet Union, civil defence had its origins in local air defense, which involved defensive measures led by local authorities under military guidance to protect the population and national economy from aerial attacks and mitigate their consequences (Law of the Republic of Kazakhstan No. 182-I et al., 1997).

Today, the Civil Defence of the Republic of Kazakhstan is part of the Civil Defence System, which is designed to carry out nationwide combined measures to protect the population and territory from the impact of modern means of destruction and emergency situations of natural and man-made disasters, both in peacetime and during a military conflict. The civil defence system consists of central and local governments and organizations. The head of the Civil Defence Department is the Prime Minister of the Republic of Kazakhstan, and the heads of civil defence departments of various levels are its first administrators. The strategic function of interdepartmental coordination in the field of civil defence is

performed by the Committee for Emergency Situations of the Ministry of Internal Affairs.

All measures for the organization and conduct of civil defence are carried out on the basis of regional divisions, civil defence services of law enforcement districts (cities), and regional and departmental civil defence organizations. Law of the Republic of Kazakhstan, No. 188-V "On Civil Defence" states that "the establishment and implementation of civil defence is one of the decisive functions of the state and an integral part of defence actions" (2014). Civil defence is a national system of administrative organization and a set of nationwide actions carried out in order to protect the population, economic facilities and the country's borders from damaging (destructive) factors of modern weapons and the consequences of natural and man-made emergencies (hereinafter referred to as emergency situations), as in peaceful, and during a military conflict (Donahue et al., 2013).

Protective structures encompass specialized engineering constructs designed to shield the populace from the perils of nuclear, chemical, and bacteriological weaponry, as well as ancillary calamities (Dzhansarayeva et al., 2015). Shelters serve as bastions safeguarding individuals from toxins, bacteria, chemical agents, high-temperature combustion byproducts, and conflagrations. Radiation protection shelters are devised to shield against shockwaves, radiation exposure, radioactive contamination, and chemical splashes arising from nuclear detonations during crises (Kubás et al., 2022). Evacuation involves the methodical removal of inhabitants and assets from crisis zones susceptible to the deployment of weapons of mass destruction, executed under the auspices of local authorities following directives from the Government of the Republic of Kazakhstan. Personal protective equipment assumes a crucial role, fortifying civil defense personnel and residents against a spectrum of hazards, encompassing rocket fuels, radioactive and bacterial substances, and skin and clothing contamination. The legal framework outlined in the Republic of Kazakhstan's Law Provisions No. 188-V "On Civil Defence" outlines a comprehensive array of civil defense measures encompassing natural disasters, seismic events, geological emergencies, and WMD threats. It accentuates the paramount importance of educating both specialists and the general populace in civil defense protocols to avert dire consequences during emergencies. In the current socio-economic milieu, the state's civil protection system assumes a pivotal role in national security by amalgamating resources and capabilities to shield against crises and military conflicts, prioritizing adaptability and flexibility for effective response in peacetime and wartime scenarios (Ladychenko et al., 2022).

The success of the Civil Defence's objectives in safeguarding the Republic of Kazakhstan depends directly on the effectiveness of the state's administrative control. In both peacetime and wartime, the management system for protecting the population and territory plays a crucial role as a subsystem. This system encompasses organizational and technical elements across all levels of government, including governing bodies and specialized resources, aimed at planning and executing targeted measures to ensure the protection of the population and territories. During local wars or armed conflicts, where hostilities are confined to specific regions without nationwide martial law, there are new demands on the management system for protecting the population and territories at the regional or national level (Vynnyk and Hazdayka-Vasylyshyn, 2023). Therefore, it's essential to consider the administrative-territorial divisions of the state as the focal point of management in such scenarios (The World Bank, 2019).

In the Republic of Kazakhstan, main condition for the normal functioning of the country's population is to ensure the safety of people and their lives from various kinds of threats of a natural, man-made, criminal and other nature that can cause an emergency. The implementation of the national set of measures to protect the population, objects, and borders of the Republic of Kazakhstan from the dangers arising from emergencies, military conflicts or as a result of these conflicts led to the creation of the Unified State System of Civil Protection. Organizationally, the Unified State Civil Defence System of the Republic of Kazakhstan includes troops and means, stocks of financial and material resources, communication, warning, and information support systems. The day-to-day management of the system is entrusted to the Committee for Emergency Situations of the Ministry of Internal Affairs of the Republic of Kazakhstan (Law of the Republic of Kazakhstan No. 188-V, 2014).

The legal framework distinguishes three regimes based on the situation: routine activities, advance preparation, and emergency regime. While routine activities occur in the absence of threats, the other two involve limited decision-making time, a significant influx of information for processing, and stringent management judgment requirements. These conditions necessitate the resolution of challenges related to handling vast and diverse information about current or anticipated situations, involving analytical tasks that include comprehensive data analysis, trend identification, and the detection of hidden patterns. Within the state civil defense system, daily management bodies at various levels are tasked with promptly responding to threats and emergencies, processing information, coordinating emergency response teams, and facilitating interagency cooperation, with the Crisis Management Center (CMC) serving as the central coordinating body (NATO, 2022).

In state institutions, the changes introduced in 2014 increased the number of functions and tasks assigned to the CCC (Kussainov & Akilzhanova, 2022). An analysis of the practical activities of the Central Control Center shows the presence of various inconsistencies that negatively affect the operational efficiency of the work of regulatory bodies. For example, the irrational organizational structure of the duty shift bodies, as a result of functioning in conditions of uncertainty and lack of time, faced with the need to process a large array of heterogeneous information about the current and predicted situation in the area of emergency (ES) and solve complex information and analytical tasks, leads to excessive fatigue of the staff on duty, resulting in a decrease in the effectiveness of decisions made. In this regard, it is necessary to resolve the issue of developing an organizational structure for functioning and maintaining an operational level that would respond to changing conditions.

To address this issue, a system analysis was carried out and a conceptual model of the decision-making system of the duty shift bodies was developed (Figure 1). This model allows combining the operators in the conceptual model into groups that perform the functions performed by individual operators, performed by the personnel of the duty shift bodies, to form its basic structure. To evaluate the resulting basic structure, a structural-topological analysis was carried out. The obtained structural characteristics make it possible, from the point of view of a systematic approach, to assess the quality of the structure and its elements at an early stage of its creation. When studying the structure of the system, the most interesting are those structural characteristics that have a significant impact on the performance and quality of the system (David, 2002).

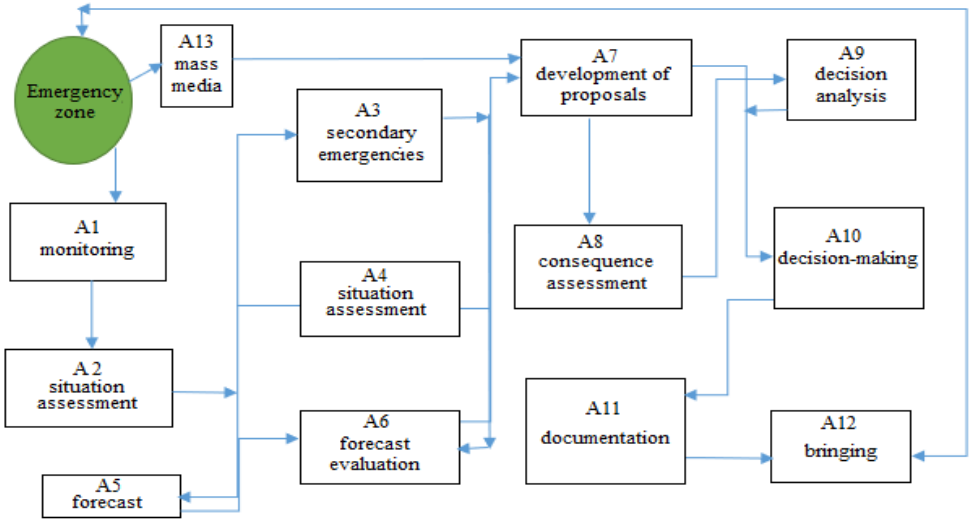

Figure 1
Conceptual model for the development of management decisions of the ODS during the liquidation of emergency situations

The organizational structure includes the following departments:

1. Analytical unit: the unit that collects and processes data.
2. Forecasting group – predicts information about the possible development of the situation.
3. Development and decision-making group – one of its functions includes setting goals, developing alternatives, analysing possible outcomes and formulating optimal solutions.
4. Communication group – one of its main functions is to formalize the formulation of decisions for the project executors.

The main topological characteristics of the duty group organs are given in Table 1.

Table 1
Structural and topological characteristics of the organizational structure of the operational duty shift

No.	**Name of indicator**	**Meaning**	**Characteristic**
1	Connectivity	0.5	It characterizes the relative difference between the number of available connections and the minimum number of connections required to maintain the connectivity of the graph. The higher the index value, the greater the number of connections between the elements of the system, which means the more reliable the system and the more efficient the transfer of information.
2	Diameter	9	Characterizes the maximum number of links that separate the input and output elements of the structure. With an increase in the index, the average

			time delay of information exchange between nodes increases, increasing the accuracy of circulating information.
3	Compactness	1.56	It characterizes the proximity of 2 indicators of the structure.
4	Degree of centralization	0.46	It characterizes the uneven loading of structure indicators
5	Structural redundancy	6	Reflects the excess of the total number of connections over the minimum required.
6	Structure complexity	6	Characterizes the structure of communication channels and the scheme of interaction between the components of the control system

From the results of the topology analysis given in Table 1, it is worth concluding that the indicators of the structural characteristics of the developed basic organizational structure are in the middle range, the efficiency of information flows and the allowable inertia of the structure are sufficient. This characteristic defines the workload of an operator and is defined as the sum of the input and output links for each element, with a higher rank of an element meaning a higher importance of that element in the structure. Within the framework of the duty service, this unit is responsible for obtaining and analysing information, predicting situations and making early decisions. As a result of increasing the reliability of elements, the introduction of structural and temporal redundancy, the use of compatibility and recoverability, it is possible to guarantee the so-called fault tolerance of the system, which means that the system will function normally even if several of its elements fail (Scolobig et al., 2015).

The management system serves as the essential foundation for the emergency management process, encompassing various phases outlined earlier. This organizational and technical framework for safeguarding the population and territory comprises functional management entities, control centres, and tools at all administrative levels (David, 2015). In the face of internal economic challenges, the established management system must ensure cost-effective resource utilization for addressing emergency situation consequences during both peacetime and wartime, enhance organizational efficiency, and strategically allocate resources in line with the principle of reasonable sufficiency. Regional population and territory

protection management systems operate across both national and territorial government levels, reflecting their complex structure within the category of large systems (Yara et al., 2021; 2023). Given this complexity, it is challenging to identify a single mathematical framework that comprehensively describes their operation. Consequently, civil defense professionals must employ methods that consider diverse factors, data categories, and expert experience in determining the optimal structure for complex control systems (Lutsenko, 2017). After evaluating various methods, the study employs the hierarchical analysis method to address the issue of selecting a rational management system for protecting the region's population and territory effectively.

The Hierarchy Analysis Method (HAI) is employed to tackle complex multidimensional problems with multiple criteria, particularly when there is no clear quantitative assessment, and various semantic factors need consideration. HAI breaks down the problem into multiple steps, comparing relatively simple and influential factors one-on-one to make informed decisions. It quantifies the relative importance of alternatives for all criteria, resulting in a vector of priorities that forms the basis for decision-making (Hochrainer-Stigler & Loran, 2018). In the study's context, the method was used to compare two conditional administrative systems with varying degrees of centralization, encompassing 14 provinces, two republic-dependent cities, and 160 districts. This comparison necessitated quantitative performance indicators, preference models, and performance criteria selection. Key indicators, such as population losses (H) and material damage (M), represent the effectiveness of the civil defense system and serve as parameters at the second level of the hierarchy, crucial for choosing alternative civil defense control systems based on minimizing these losses and damages (Xu et al., 2019).

The next step in solving the problem is the choice of indicators that have the greatest impact on the achievement of management goals and characterize the state of the system and the resources consumed in the management process. All indicators are divided into indicators of the external level, system-wide indicators and private indicators. At this stage, system-wide indicators were used. This is due to the fact that they can be placed in the same hierarchy, which greatly simplifies the calculation process. Of the total set of indicators, the following five were used (Forsythe, 2021):

5. Wait time, which is the time from the receipt of a hazard alert or higher-level control until the system is in the planned operating state.

6. The stability of the control system is the ability of the system to generate control actions under conditions of internal and external disturbances.

7. Command processing time – the time between making a decision and receiving instructions from subordinates.

8. Vulnerability of the system, the ability of the system to be damaged by enemy equipment.

9. The cost of creating a system.

These indicators constitute the third level of the hierarchy. However, selecting indicators doesn't always guarantee precise results, and the final choice may not be definitive. To address this, a questionnaire is created following the method's procedure to allow experts to conduct pairwise comparisons of indicators, parameters, and alternatives. Over 10 experts participated in the survey, ensuring a representative sample. The experts' responses are formulated on a scale of relative importance, with each linguistic expression assigned a weighting factor for convenient analysis. It's crucial to increase the number of well-defined indicators, make them easily distinguishable, and expand the range of alternatives (Khanal, 2018). The task of selecting and justifying rational control systems for safeguarding local populations and territories in local military operations and armed conflicts is significant and warrants further research and development.

Approaches to the functioning of civil defence in Kazakhstan

As a new one in the functioning of the civil defence of Kazakhstan, the work of scientists E. M. Kuttybaev et al. can be identified, since the authors propose their own version of the procedure for planning the provision of the population with personal protective equipment in the Republic of Kazakhstan, as well as a modernized algorithm for operational recommendations on the organization of the territorial subsystem of the governing body of the state system of civil defence, accumulation, storage, and use personal protective equipment from warehouses for the purpose of radiation, chemical protection of the population and the required level of biological protection (Kuttybaev et al., 2022). This study is valuable for the science of civil defence, since in the context of global digitalization, it is necessary to constantly improve the established response schemes in emergency situations.

This study highlights the critical need for training responsible individuals in emergency response, as emphasized by Zh.Ye. Zhaguparov and S.B. Arifdzhanov (2020). They propose a key direction for the future development of civil defense, emphasizing the shift towards protecting the population not only from wartime threats but also from natural and man-made emergencies during peacetime. The researchers advocate for the formulation of a "Concept for the development of a comprehensive civil defense strategy" based on global experiences, integrating it into the State civil protection system of Kazakhstan. This approach aligns with

international practices where long-term plans are crucial for setting national goals in sustainable development (Kostruba and Vasylyeva, 2020). The Concept's main objectives include providing legal support, addressing regional disparities, and offering state support to problem areas. This perspective is in harmony with the understanding that civil defense encompasses measures to safeguard people, property, and cultural heritage from armed conflict and its aftermath, as well as from natural and man-made emergencies, making it an integral part of the national civil defense system aimed at protecting the Republic of Kazakhstan's population and territory during both peacetime and wartime against various threats.

In confirmation of the above thoughts about the modernization of the functioning of civil defence, it is worth noting the scientists C.F. Parker et al., who, in their work, outlined the main methods for improving civil defence, taking into account new threats and challenges (2019). The researchers concluded that both structure and culture matter in how civil protection and crisis management officials evaluate performance. Reflecting on their findings, the authors argue that their survey results show that if crisis management is to work well and be perceived as effective by people working with civil protection, it is clear that organizational cultural factors are vital: levels of trust must be high, loyalty valued, and professionalism should be valued. With regard to organizational structural factors, emphasis is placed on the importance of hierarchy and rule-driven structure (Kostruba and Hyliaka, 2020).

Czech scientist D. Chlíbková's research underscores the evolution of civil protection education, shifting from its historical focus on wartime preparedness to addressing the consequences of contemporary natural and man-made disasters (2011). Her work also introduces innovative approaches to civil protection education, emphasizing hands-on learning through outdoor physical training tailored for emergency and survival scenarios. This outdoor training benefits individuals by enhancing their ability to cope with survival challenges, adverse environmental conditions, and harsh weather, ultimately improving physical fitness, endurance, and mental resilience (Pētersone et al., 2021; Spytska, 2023). While physical readiness is crucial for survival and handling extreme situations, Chlíbková acknowledges the importance of recognizing that emergencies induce stress and may lead to unpredictable behavior, emphasizing the need for psychological preparedness alongside physical training in educational settings (United Nations, 2015).

The study can draw comparisons between its findings and the emergency response experience in the United States. In the U.S., there is a notable trend toward greater utilization of civil defense resources in peacetime, including addressing the aftermath of terrorist attacks, natural disasters, significant industrial

accidents, and technical disasters involving hazardous chemicals (Pylyp, 2023). The primary component of the U.S. national civil defense system is the Federal Emergency Management Agency (FEMA), operating under the Department of Homeland Security (DHS) (Widmalm et al., 2019). FEMA's key priorities encompass the development of guidance documents and contingency plans, managing rescue and cleanup operations, coordinating standards and technical equipment for emergency services, organizing civil defense education and training, ensuring the functionality of the national communication and warning system, and preparing state and local institutions for emergency response. FEMA's organizational structure includes departments dedicated to administration, emergency operations, education, fire training, national infrastructure, preparedness, government support, logistics, and insurance, among other functions (Vyshnevska et al., 2022).

The Civil Defence Radiation Monitoring and Dosimetry Service, under the operational control of the Federal Agency, consists of airborne radiation surveillance and an extensive network of fixed ground posts located throughout the United States and equipped with the necessary dosimetry equipment. In the event of an emergency, additional posts will be deployed (Widmalm et al., 2019). The Joint Field Headquarters (JFH), led by a senior federal representative appointed by the Secretary of Homeland Security, is formed to coordinate the response to a specific emergency in the affected area. The composition of the JFH depends on the type and size of the emergency and typically includes a management team consisting of state, metropolitan, and federal government representatives; a group of headquarters experts to coordinate key activities (medical communications and intelligence support, law enforcement, transportation), as well as departments (operations, planning, logistics, administration and finance) (Freedom House, 2019). The responsibility for organizing civil defence operations in the state rests with local governments. Each has a governor-led advisory committee, a functioning command structure, communications and public address systems, National Guard units, police, fire, law enforcement, emergency services, medical facilities, volunteer organizations, and specialized rescue units. The necessary conditions have been created, evacuation and dispersal plans have been prepared, inventories of protective equipment have been carried out, civil defence personnel and the population have been trained, and information and explanation of duties and the procedure for their implementation have begun (Gabriel, 2010).

A comparison between the U.S. civil defence system and that of Kazakhstan reveals that the U.S. system places significant emphasis on maintaining continuous readiness of local governments and civil defence organizations, which

play a pivotal role in responding to emergencies. In addition, the U.S. system involves constant monitoring of the situation, forecasting potential accidents, catastrophes, and natural disasters, preparing planning documents, educating the population, conducting exercises and training, mobilizing local resources, and ensuring effective organization and financing of civil defence efforts. This approach highlights that the proposed framework for decision-makers' response to emergencies within civil defence, as presented in the scientific work, can contribute to more efficient and rapid disaster response and recovery.

Conclusions

The challenge of protecting and managing the population and territory during local military operations and armed conflicts is a multifaceted issue that requires further comprehensive exploration and refinement. To address this, the leadership of Kazakhstan's Civil Defence must continually enhance their methods and approaches, seeking ways to improve the efficiency of managing civil defence resources and the response of authorized personnel. The current geopolitical landscape has identified regional wars and armed conflicts as the primary sources of military threats in Kazakhstan, which could potentially escalate into larger-scale non-nuclear conflicts. It suggests incorporating criminology expertise into civil defence practices to strengthen public safety and justice. This involves involving criminologists in hazard assessments, integrating criminological theory into disaster planning and response training, and addressing crime-related risks in disaster aftermath. Collaborative efforts between civil defence and criminology experts can help Kazakhstan better prepare for and respond to crises, ensuring the well-being of its population in challenging circumstances. Given the increasing threats from climate change, conflict, and technological failures, this approach offers a path to strengthen civil defence through innovative partnerships and improved practices.

The nature of the threat to the security of Kazakhstan requires both the reform of the entire state system and the reform of the system for protecting residents and regions of the country. In the field of defence of the population of the country and regions, the formation of a civil defence system based on the integration of state emergency services and civil defence is of paramount importance. In the process of solving the set scientific problem, the most fully substantiated results were obtained, namely, based on the analysis of the main stages of the process of managing the protection of the population and territory and the application of the HAI, a methodology was developed for rational choice of the civil defence management system in the region in the context of the implementation of regional wars and armed conflicts. Practical proposals for

improving the efficiency of civil defence management in the context of regional wars and armed conflicts are also presented. Thus, the results obtained can be used to develop and justify the terms of reference for the creation of the structure of the duty agency as the main structural unit of the Central Control Center of the Ministry of Emergency Situations of the Republic of Kazakhstan, the quantitative assessment of the suitability of the formed organizational structure of the operational duty agency, taking into account the established restrictions, established requirements.

Acknowledgments

The work was carried out within the framework of grant funding under the project AR09260477.

References

Akimzhanov, T.K., Dilbarkhanova, Z.R., Begimbaev, S.A., Beysenbayeva, M.T., Ismailova, D.Sh., Madykhan, S.M., Omarova, A.B. & Tulekova, A.M. (2014). Liberalization of criminal policy of the Republic of Kazakhstan - One of the conditions to form the democratic, secular, legal and social state. *Life Science Journal*, 11(SPEC. ISSUE 10), 498–502.

Amanzholova, Z. N. (2023). Problems of the concept of "State of Emergency". *Bulletin of the Institute of Legislation and Legal Information of the Republic of Kazakhstan*, 1(72), 243-249.

Beasley, R. K., Kaarbo, J., Lantis, J. S. & Snarr, M. T. (2012). *Foreign policy in comparative perspective: Domestic and international influences on state behaviour*. Thousand Oaks: SAGE Publications.

Blikhar, V.S., Zharovska, I.M. & Ortynska, N.V. (2021). Surrogacy in Ukraine: Theoretical and applied problem: Literature review. *Reproductive Endocrinology*, (62), 22–28. Retrieved from https://doi.org/10.18370/2309-4117.2021.62.22-28

Chlíbková, D. (2011). Civil protection, survival and physical fitness. *Procedia – Social and Behavioural Sciences*, 15, 3753-3757.

David, A. (2002). From civil defence to civil protection – And back again. *Disaster Prevention and Management*, 11(3), 209-213.

David, E. A. 2015. Evaluation of civil protection programmes, with a case study from Mexico. *Disaster Prevention and Management*, 24(2), 263-283.

Donahue, A. K., Eckel, C. C. & Wilson, R. K. (2013). Ready or not? How citizens and public officials perceive risk and preparedness. *The American Review of Public Administration*, 44(4), 89-111.

Dzhansarayeva, R.Y., Dilbarkhanova, Z.R., Malikova, S.B, Atakhanova, G.M & Daubassova, S.S. (2015). Countermeasures to bioterrorism acts. *Biosciences Biotechnology Research Asia*, 12(2), 1849–1856. Retrieved from https://doi.org/10.13005/bbra/1850

Forsythe, D. P. (2021). US foreign policy civil defence: Situating Obama. *Civil Defense Quarterly*, 33(3), 767.

Freedom House. (2019). Kazakhstan/Nations in Transit 2014: Eurasia's Rupture with Democracy. Retrieved from https://freedomhouse.org/sites/default/files/2020-02/NIT2014%20booklet_WEBSITE.pdf

Gabriel, D. (2010). U.S. Economic, Political and Military Expansion in Asia-Pacific Region. Retrieved from https://www.globalresearch.ca/u-s-economic-political-and-military-expansion-in-the-asia-pacific-region/21307?pdf=21307

Haliantych, M.K., Kostruba, A.V. & Maydanyk, N.I. (2021). Legal aspects of the implementation of a pledge of a bill of lading as a security: National legal realities. *International Journal of Criminology and Sociology*, 10, 363-367.

Hochrainer-Stigler, S. & Loran, A. (2018). Evaluating partnerships to enhance disaster risk management using multi-criteria analysis: An application at the Pan-European level. *Environmental Management*, 61(1), 24-33.

Khanal A. (2018). Civil defence: An article. Retrieved from https://www.researchgate.net/publication/330322502_civil_defence_article_for_research_gate

Koltsov, G. I., Ermakov, S. I. & Abdrakhmanov, A. A. (2022). On the improvement of planning documents for providing the population with personal protective equipment in the Republic of Kazakhstan. *Science and Education in Civil Protection*, 2(46), 19-27.

Koropatnik, I., Karelin, V., Boikov, A., Shopina, I. & Khrystynchenko, N. (2020). Activities of the ministry of defense in ukraine and military administration during the special period. *Journal of Legal, Ethical and Regulatory Issues*, 23(1), 1–6.

Koshkinbaeva, A.S., Shaigaliyev, M.G., Buribayev, Y.A., Khamzina, Z.A. & Khamzina, S.S. (2019). International legal regulation of environmental safety: In focus – Kazakhstan. *Rivista di Studi sulla Sostenibilita*, (1), 121–142. https://doi.org/10.3280/RISS2019-001008

Kostruba, A.V. & Hyliaka, O.S. (2020). Designing of legal model of legal relations cessations. *Astra Salvensis*, 1, 69-86.

Kostruba, A.V. & Vasylyeva, V.A. (2020). International regulation of termination of rights in the field of civil and intersubjective state relations. *Astra Salvensis*, 1, 131-153.

Kubás, J., Bugánová, K., Polorecká, M., Petrlová, K. & Stolínová, A. (2022). Citizens' preparedness to deal with emergencies as an important component of civil protection. *International Journal of Environmental Research and Public Health*, 19(2), 830.

Kudryavtsev, S. S., Emelin, P. V., Emelina, N. K. & Kozhukhova, M. M. (2021). Ways to improve the legal framework regulating the activities of chemically hazardous facilities in the republic of Kazakhstan. *International Research Journal*, 9(111), 25-32.

Kusainov, A. B., Tleuova, Zh. O. & Narbayev, K. A. (2021). Determination of safe distances for gas filling stations. *Science and Education in Civil Protection*, 3(43), 36-49.

Kussainov, A. & Akilzhanova, D. (2022). Emergency risk analysis in central Asian countries. *Science and Education in Civil Protection*, 1(45), 29-34.

Kuttybaev, E. M., Bulegenov, E. P. & Timirgali, A. (2022). Some questions on the modernization of the civil protection warning system. *Science and Education in Civil Protection*, 2(46), 33-40

Ladychenko, V., Bryhinets, O., Uliutina, O., Pankova, L. & Gulac, O. (2022). Features of regulatory regulation of state financing of maintenance of jury trial in Ukraine. *Revista Juridica Portucalense*, 32, 300–319. Retrieved from https://doi.org/10.34625/issn.2183-2705(32)2022.ic-13

Lakbayev, K.S., Rysmagambetova, G.M., Umetov, A.U. & Sysoyev, A.K. (2020). The crimes in the field of high technology: Concept, problems and methods of counteraction in Kazakhstan. *International Journal of Electronic Security and Digital Forensics*, 12(4), 386-396.

Law of the Republic of Kazakhstan No. 182-I "On accession of the Republic of Kazakhstan to the Charter of the International Civil Defence Organization". (1997). Retrieved from https://adilet.zan.kz/rus/docs/Z970000182_

Law of the Republic of Kazakhstan No. 188-V "On Civil Defence". (2014). Retrieved from https://online.zakon.kz/Document/?doc_id=31534450

Lutsenko, O. (2017). Bringing civil servants to liability for disciplinary misconduct in judicial practice of Ukraine, Poland, Bulgaria and Czech Republic. *Journal of Advanced Research in Law and Economics*, 8(1), 103-112.

NATO. (2022). Resilience, civil preparedness and Article 3. Retrieved from https://www.nato.int/cps/en/natohq/topics_132722.htm

Osipov, R. D. & Bakhtiyar, M. A. (2023). The relevance of the use of geographic information systems in the work of the Ministry for Emergency Situations of the Republic of Kazakhstan. *Science and Education in Civil Protection*, 1(49), 21-27.

Parker, C. F, Persson, T. & Widmalm, S. (2019). The effectiveness of national and EU-level civil protection systems: Evidence from 17 member states. *Journal of European Public Policy*, 26(9), 1312-1334.

Pētersone, M., Ketners, K., Krieviņš, D., Erins, I., Rakauskiene, O.G. & Eriņa, I. (2021). Network for Disease-Specific Networking Strategy to Increasing of Public Value: Latvia's Approach. *Lecture Notes in Networks and Systems*, 267, 363–370. Retrieved from https://doi.org/10.1007/978-3-030-80876-1_46

Pylyp, V. (2023). Ukrainian civil society institutions in countering terrorism: International legal standards. *Social and Legal Studios*, 6(3), 127-134. Retrieved from https://doi.org/10.32518/sals3.2023.127

Rima, D., Malikova, S., Aratuly, K., Bazilova, A. & Beaver, K.M. (2021). Examining the Association between Stuttering and Psychopathic Personality Traits, Nonviolent Crime, and Violent Crime. *Journal of Aggression, Maltreatment and Trauma*, 30(2), 193–206. Retrieved from https://doi.org/10.1080/10926771.2020.1806975

Rudyi, N. (2023). Ruscism as a variant of the fascist form of state-legal regime. *Social and Legal Studios*, 6(2), 55-60. Retrieved from https://doi.org/10.32518/sals2.2023.55

Scolobig, A., Prior, T., Schröter, D., Jörin, J. & Patt, A. (2015). Towards people-centred approaches for effective disaster risk management: Balancing rhetoric with reality. *International Journal of Disaster Risk Reduction*, 12, 202-212.

Sharipkhanov, S. & Akshulakov, K. (2022). Increasing the delivery efficiency of civil protection forces and means by railway transport through the development of a mobile complex for loading and unloading equipment from rollingstock. *Science and Education in Civil Protection*, 1(45), 10-18.

Shopina, I.N., Muliavka, D.G., Hrechaniuk, S.K. & Fedchyshyna, V.V. (2019). Improvement of social control as a direction of crime prevention. *Russian Journal of Criminology*, 13(3), 447–454. https://doi.org/10.17150/2500-4255.2019.13(3).447-454

Spytska, L. (2023). Principles of delinquent behavior correction program creation for youth detention centers. *Human Research in Rehabilitation*, 13(2), 188–199. Retrieved from https://doi.org/10.21554/hrr.092301

The World Bank. (2019). Civil protection for inclusive recovery. Retrieved from https://www.gfdrr.org/en/events/WRC4/session2c

United Nations. (2015). Sendai Framework for Disaster Risk Reduction 2015-2030. Retrieved from https://www.undrr.org/quick/11409

Vynnyk, A.O. & Hazdayka-Vasylyshyn, I. (2023). Strengthening criminal liability for committing property and some other offences under martial law in Ukraine. *Social and Legal Studios*, 6(2), 9-16. Retrieved from https://doi.org/10.32518/sals2.2023.09

Vyshnevska, Y., Ladychenko, V., Uliutina, O., Kanaryk, J. & Movchun, S. (2022). Regulatory and legal provision of alternative sources of energy as a component of the energy sector of the economy. *Economics and Policy of Energy and the Environment*, 2022(1), 119–130. Retrieved from https://doi.org/10.3280/EFE2022-001007

Widmalm, S., Parker, C. F. & Persson, T. (2019). *Civil protection cooperation in the European Union*. Cham: Palgrave Macmillan.

Xu, D., Liu, Y., Deng, X., Qing, C., Zhuang, L., Yong, Z. & Huang, K. (2019). Earthquake disaster risk perception process model for rural households: A pilot study from Southwestern China. *International Journal of Environmental Research and Public Health*, 16(22), 4512.

Yara, O., Artemenko, O., Lytvyn, O., Ladychenko, V. & Gulac, O. (2021). Legal principles of activities of public administration entities, which carry out measures in the field of prevention and control of domestic violence. *Relacoes Internacionais no Mundo Atual*, 4(33), 51–71. https://doi.org/10.21902/Revrima.v4i33.5577

Yara, O., Hlushchenko, S., Koval, M., Berlach, H. & Lytvyn, N. (2023). Administrative and Legal Regulation of Local Taxes and Fees in Ukraine: The Current State of Affairs and the Influence of EU Member State Legislation. *European Taxation*, 63(5), 214–219.

Zhaguparov, Zh. Ye. & Arifdzhanov, S. B. (2020). The relevance of the development of the civil defence system in modern conditions. *Bulletin of the Kokshetau Technical Institute of the Ministry of Emergency Situations of the Republic of Kazakhstan*, 3(39), 37-41.