INFORMATION AND ANALYTICAL SUPPORT THREAT MONITORING AND MEANS OF OVERCOMING CHALLENGES TO NATIONAL SECURITY: INTERNATIONAL LEGAL ASPECT

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Abstract. The purpose of the study is to develop scientifically based recommendations for implementation internationally – legal security mechanisms monitoring threats and finding ways to overcome challenges to national security. National resilience is an indicator of the reliability of the national security and defense system, mutual coherence of its components, which confirms their capabilities and resource potential to fulfill obligations and perform their main functions in conditions of instability of the internal and external environment. National resilience includes military capabilities and civil readiness, reflects society's ability to resist and quickly recover from the specified threats and their consequences. This study proved that the foreign policy of the aggressor state should be considered one of the main factors affecting the choice of priority directions for the development of the security and defense forces of Ukraine. Legal mechanisms include further improvement and harmonization of the regulatory framework, formation of relevant legal norms, state policy in the field of national security and international cooperation. Organizational measures are directed to expansion and further development of a single network of situational centers to increase the efficiency of information and analytical support for management decision-making. The core of the integrated system of monitoring threats to national security highlighted an information and analytical system based on Big Data. The unity of the network of situational centers will contribute to increasing the reliability and effectiveness of condition monitoring of national security from more than 20 directions, in order to effectively coordinate the activities of state bodies.

1. Introduction

The hybrid aggression of the Russian Federation challenged the world order. However, such actions of an aggressor became a powerful impetus for the review by individual countries and international organizations of conceptual approaches to ensuring national and social stability in order to adapt to new conditions. Since the war with the Russian Federation on the territory of Ukraine has been going on for more than seven years, the development of the capabilities of the Armed Forces of Ukraine and other components of the security and defense sector is extremely important. As the events of the last decade have shown, the ineffectiveness of the national security system is one of the biggest threats to Ukraine's national security. The reasons for this were, and still remain unsolved, the following, among others:

- lack of unity of the security and defense sector as a functional association managed by a single center;
- inefficiency and insufficient use of resources;
- imbalanced functioning of the components of the security and defense sector.

Among the national priorities for eliminating this threat, in particular, are:

- the need to improve the architecture of effective management and coordination of the security and defense sector;
- creation of a unified system of monitoring, analysis, forecasting and decision-making in the field of security.

Issues of timely identification and prevention of threats to national security, determination of the course of action in crisis situations in the coherence and holistic nature of measures of a political, military, economic, informational and other nature are updated (Alhogail and Abdulrahman 2014, Bondarenko et al. 2021).

In order to win the confrontation with the enemy, the issue of constant monitoring of the security environment becomes especially relevant. After all, the results of such monitoring are the basis for making relevant and timely management decisions regarding the implementation of the concept of national sustainability (Bondarenko et al. 2021) and preventive measures regarding threats to national security (Cristea 2020, Gutorova et al. 2019).

The capabilities of the Armed Forces of Ukraine and other constituent parts of the security and defense sector are criteria or requirements for their forces and means necessary to ensure the fulfillment of the tasks assigned to them. The assessment components have been defined as: individual capabilities, groups of capabilities,

groups of functional capabilities and capabilities of all Defense Forces. The issue of choosing priority directions for the development of Ukraine's defense capability became particularly relevant at the end of 2020, given:

- implementation of the principles of national security policy and planning of defense spheres;
- the need to choose the process of European integration;
- completion of the formation of the security and defense sector.

Therefore, ensuring the ability of the nation and society to resist various threats is becoming increasingly important (Kuznetsovet al. 2019, Sunet al. 2019, Popov et al. 2021, Samusevych et al. 2021). The need to respond to mixed threats, to rapid and sudden changes in the security environment raises questions about the formation of national resilience. This includes, among other things, the introduction of new mechanisms that will allow the existing system of national security to adapt to new conditions, quickly and effectively respond to risks, identify them and confront threats. The main condition for the effective implementation of the task of protecting national interests from real and potential threats is the acceleration of the reform of the national defense and security structures of Ukraine, increasing the efficiency of the activities of all national security entities without exception.

Analysis of the situation regarding national security in Ukraine shows that its threats tend to grow. The key risks and threats have concentrated in the economic, socio-political, international, military, information and environmental spheres. Most of them are progressive in nature.

The main issue of national security is monitoring and assessing the level of threats to national interests and forecasting the development of events related to the realization or protection of national interests. The purpose of the study is to develop scientifically based recommendations for implementing internationally-legal security mechanisms monitoring threats and finding ways to overcome challenges to national security.

Such a system of monitoring threats to national security and defense becomes an important constituent element of the system mechanism of forming the capabilities of the security and defense forces, implementing and ensuring the national stability of Ukraine. The concept of national stability is significantly different from the technical and physical stability of the system. The main characteristic here is not the equilibrium state of the system and the ability to return to it in the event of disturbing influences, or the preservation of the given trajectory of movement in the event of opposing forces, but the ability to effectively use and autonomously change the resources of its development, to continuously increase the indicators of positive changes, without increasing or minimizing the costs of basic, non-renewable resources.

2. Literature review

The world is becoming increasingly technological, open, changing. The digitization of all spheres of life, the rapid growth of IT creates, in addition to new opportunities, the latest security problems around the world (Yarovenko 2020, Zinovieva et al. 2021). The rapid development of the global big data industry, technological evolution and new technologies of data storage, computing and analytics, machine learning and deep data analysis have already become a challenge for the security environment, causing the latest challenges for national security (Xu et al. 2021, Babenko et al. 2019). Big data is acquiring the status of a national strategic resource and has already become the main factor of production (Sun et al. 2019, Yin et al. 2017). Big data security issues are on the rise, and the number of big data security incidents occurring around the world is steadily increasing (Yin et al. 2017).

Researchers justify the need to use Big Data technology in the process of making strategic decisions (Hubanova et al. 2021, Ivashchenko et al. 2021).

As practice shows, analysis in the field of national security is based on data from the security and defense sector. Such data related to events that have already occurred, which become focal points for predicting future events and developing probable development scenarios and choosing adequate response measures. At the same time, borrowing external data opens up greater opportunities for advancing along the chain of analytical research: from the assessment of past events to reliable forecasting of future challenges and threats to national security (Kachynskyi 2019, Klochan et al. 2020).

Based on this, the issue of global data security management is hot on the agenda. The security services of countries are constantly searching for solutions for further modernization of data security management systems, elimination of information security problems (Kuznetsov et al. 2021, Marhasova et al. 2020).

Improving the cyber security of the state requires timely amendments to the legislation in order to introduce the practice of Big Bounty – disclosure of cyber vulnerabilities of state authorities. Thus, starting in 2022, in Ukraine, the positions of cyber security officers will be introduced in state authorities and critical infrastructure facilities, subordinate to the State Service for Special Communications and Information Protection (The National Security and Defense Council 2022).

Kachynskyi (2019) argues that it is possible to forecast and make decisions in the field of national security only on the basis of relevant indicators and indices.

When monitoring national security with the help of indicators, indices and their threshold values, it is important to monitor the dynamics of processes taking place in various spheres of national security, and not to evaluate individual events situationally. This approach makes it possible to consider the management of the national security system using threshold values and indicators as a regulatory activity (Bielova et al. 2017).

Researchers indicate that the situation in the field of national security of countries has changed significantly as a result of COVID-19 pandemic (ATA 2021, Dovhan et al. 2021).

The world is becoming increasingly mobile, and events are interconnected, creating the most acute threats to the national interests of countries. These are: environmental and climatic changes, humanitarian problems, social and political instability, geopolitical rivalry, etc. For example, despite the pandemic, China is challenging the United States in many areas, especially economic, military, and technological, which is prompting a change in global norms. Russia is increasingly demonstrating the language of force. Iran will remain a high-threat region with significant adverse impacts. North Korea continues to be a disruptive player both in the region and on world stage. The key adversaries and competitors are strengthening and training their military, cyber and other capabilities, raising risks globally, weakening conventional deterrence, and intensifying long-standing threats from weapons of mass destruction (A New International Law of Security and Protection).

The effects of the COVID-19 pandemic are increasing the strain on governments and societies, fuelling humanitarian and economic crises, political unrest and geopolitical competition, with China and Russia seeking advantage through avenues such as 'vaccine diplomacy'. These latest types of threats have not escaped any country.

The consequences of the pandemic measures were constant calls to cut budgets for the military sphere, counter-terrorist operations. However, the pandemic has not led to a decrease in the number or intensity of conflicts. Therefore, additional funding is needed for a reliable system of monitoring threats to national security, verification and compliance with control over weapons, etc.

Disruptions to essential health services such as vaccination, aid delivery, and maternal and child health programs will all increase the likelihood of additional emergencies, especially among vulnerable populations in low-income countries. For example, the pandemic disrupted HIV/AIDS treatment and prevention efforts in sub-Saharan Africa, as well as measles and polio vaccination campaigns in dozens of countries. The world's population will remain vulnerable to new outbreaks of infectious diseases as risk factors persist, such as rapid and unplanned urbanization, protracted conflicts and humanitarian crises, invasion of previously uninhabited lands, expansion of international travel and trade, and public distrust of government and health care providers.

The fight against international corruption has reached global proportions, which is considered at the level of government-wide initiatives, which significantly strengthens cross-border diplomatic and law enforcement cooperation to prosecute corruption (Edelman et al. 2022, Gutorova et al. 2019, Heide and Villeneuve 2021).

Understanding the main threats to national security largely depends on geopolitical situations. So, for example, Hong Kong considers secession, sabotage, terrorism and collusion with foreign powers as new crimes in the field of national security, as well as treason, secession, sedition, subversion and theft of state secrets (Hong Kong to draw up own 'national security' law 2022). The Chinese authorities are considering the possibility of passing local laws on national security, within the limits of the state Constitution. In addition, state secrets, patriotism of officials of political forces and state power deserve special attention in matters of ensuring national security.

In their research, Dovhan et al. (2021) consider the Counterintelligence Strategy a conceptual document in the sphere of state security of Ukraine. According to the researchers, it is from such a position that it is most likely to identify and assess threats to Ukraine's security. That is, a clear definition of the current and projected counterintelligence environment, assessment of deviations from the normal state is the basis of continuous monitoring of real and potential threats in the process of implementing the foreign policy course of the state. Sources of such threats are individual states and their special services, terrorist organizations, transnational organized crime, etc. Heide and Villeneuve (2021) determine three options for determining the secrecy of national security: the logic of the crisis, which requires the suspension of normal democratic processes (threat); the need to ensure and improve management (performance framework); and delegation and protection of decision-makers (elite governance structure).

There is a ripe problem regarding the implementation of financial stimulation tools of state bodies performing IT system administration tasks. Active work is underway to strengthen the responsibility of officials for non-fulfillment of cyber protection conditions in state authorities and critical information infrastructure facilities (The National Security and Defense Council 2022).

A special attention in ensuring national security has paid to the legislation on special diplomatic appointments (An Important Development in the Law of Diplomatic Appointments 2022).

Transformational changes in international cooperation require countries to build a more flexible international policy to maintain the balance of their international relations with superpowers (The National Security Policy and Plan 2019–2022).

Threats to national security are global problems of energy, natural resources and the environment, natural disasters, the search for new sources of energy, which can lead to international conflicts. Constant monitoring of the existing and potential threats to national security is currently gaining special importance.

Therefore, the tasks for the security and defense sector are:

- to create an effective management system of the security and defense sector as a whole (holistic) functional system with an effective monitoring system of real and potential threats to the national security of the state;
- to combine the operational capabilities of the components of the security and defense sector to eliminate identified threats to national security;
- to constantly maintain the designated security and defense forces in readiness to perform assigned tasks;
- to improve the planning system in the security and defense sector on the basis of continuous improvement of information support and effectiveness of management decisions;
- ensure rational use of state resources.

Reforms in Ukraine are aimed at:

- formation of an integrated security and defense sector managed from a single center;

- development of the security and defense sector on the basis of a unified planning system within the framework of achieving the joint capabilities of all components;
- creation of defense forces capable of adequately responding to the complex nature of current threats to the national security of Ukraine, taking into account the presence of simultaneous action of danger factors, different in content and sphere of influence.

The annual national programs of the Ukraine-NATO Commission (NUC) remain the mechanism by which Ukraine promotes reforms related to its aspirations for NATO membership (No. 189/2021).

In order to implement reforms in Ukraine, active interaction between the authorities and civil society is being introduced. Interaction is ensured by the Council of Public Supervision of the Implementation of the Annual National Program under the auspices of the Ukraine-NATO Commission (NATO-Ukraine 2022). The council was created and functions in Ukraine as a coordination platform, which includes representatives of the expert environment, public figures, scientists, etc. The purpose of the Council is to constantly monitor regulatory and legal actions, provide expert assessment and advocacy during the implementation of reforms and measures of the Annual National Program to bring Ukraine closer to receiving the Action Plan for NATO membership.

The Public Oversight Council of the Ukraine-NATO program has determined the following points for correcting actions and priority proposals:

- Reform of the Security Service of Ukraine: stripping the SBU of uncharacteristic functions, strengthening the counterintelligence direction and ensuring parliamentary and public control over the activities of special services. That is, the Security Service of Ukraine should be transformed into a small mobile technological structure with an exhaustive list of tasks: counter-intelligence, fight against terrorism and protection of state secrets.
- Reforms to ensure smooth operation of anti-corruption bodies. For the effectiveness of such work, it is necessary to ensure the institutional independence of NABU and the Specialized Anti-Corruption Prosecutor's Office.
- Reforms of the judicial system and the Constitutional Court. An important aspect in this direction is the renewal of the composition of the High Council of Justice, the restoration of the military justice system, the restoration of the work of the High Qualification Commission of Judges of Ukraine in a new composition.
- Reforms in defense procurement. This direction is very important for bringing the system of state secrets to NATO standards, ensuring the transparency of defense purchases, and managing defense resources according to the system of PPBIE (planning, programming, budgeting, implementation and evaluation).
- Taking urgent measures regarding energy. Here, the issues of creating an additional operational supply of fuel and lubricants, consultations with the NATO Energy Security Center of Excellence, and the creation of energy resources reserves for the 2022–2023 heating season are updated.

Availability of monitoring, publicity of the dialogue between the opposition authorities and civil society, objectively informing the public about the circumstances and the role of responsible persons in the decision-making process necessary to ensure compliance with NATO standards are one of the main principles of the Public Oversight Council.

3. Data and methdology

They became the basis of this study's philosophical and worldview, general scientific principles and approaches and special scientific methods of legal knowledge, which were used to solve the tasks.

The methodological basis of monitoring threats to national security should be a systemic approach, when the object of research is a complex system, and the subject of research is the effectiveness of its functioning.

The work used a comprehensive analysis of legal mechanisms, measures and results of ensuring national security, based on the principles of systematicity, comprehensiveness, objectivity and generality brokenness, which contributed to obtaining multifaceted characteristics of the national security and defense system of Ukraine.

A special scientific method of legal knowledge is the formal legal method – when distinguishing the normative component of the constitutional and legal foundations of ensuring national security in Ukraine, international legal aspects of ensuring national security.

The structural and functional political analysis made it possible to clarify the roles and functions of the structural units that ensure national security. On the basis of the structural-functional method, the activity of ensuring national security by the executive bodies of the state power of Ukraine was considered the compliance of normative legal acts with which the modern system of legal support of national security of the state is associated with real social relations in this sphere and international standards is determined.The institutional method made it possible to analyze the activities of state authorities that make up the system of ensuring national security of Ukraine.

Comparative legal method, research of the international experience of legal provision is the basis of national state security.

The informational and factual base of the study was formed by the laws of Ukraine, decrees of the President of Ukraine, the regulatory and legal base of relevant ministries and departments; results of scientific research.

4. Results

4.1. Legal basis of national security

The legal basis of Ukraine's national security is the Constitution, laws of Ukraine, international treaties, the binding consent given by the Verkhovna Rada of Ukraine, as well as other normative legal acts. In accordance with Article 107 of the Constitution of Ukraine, the President of Ukraine develops and approves the National Security Strategy of Ukraine and the Military Doctrine of Ukraine, doctrines, concepts, strategies and programs that determine the target guidelines and guiding principles of military construction, as well as the directions of activities of state authorities in a specific field with the aim of timely detection, prevention and neutralization of real and potential threats to the national interests of Ukraine.

The National Security Strategy of Ukraine and the Military Doctrine of Ukraine are mandatory documents and the basis for the development of specific programs based on the components of the state national security policy.

On September 14, 2020, the President of Ukraine Volodymyr Zelenskyi signed the Decree "On the decision of the National Security and Defense Council of Ukraine "On the National Security Strategy of Ukraine"" No. 392/2020, which implemented the decision of the National Security and Defense Ministry of Ukraine dated September 14, 2020 "On the National Security Strategy of Ukraine" and the corresponding Strategy was approved.

The national security strategy of a modern state is a national plan for the coordinated use of all instruments of state power, both military and non-military, to achieve goals that protect and promote national interests. The National Security Strategy of Ukraine was developed on the basis of the Law "On National Security of Ukraine", which laid the foundation for structural reforms in this extremely important area of state building.

The national security strategy is based on three main principles of state policy in the field of national security:

- deterrence – development of defense and security capabilities to prevent armed aggression against Ukraine;
- stability – the ability of society and the state to quickly adapt to changes in the security environment and maintain sustainable functioning, in particular by minimizing external and internal vulnerabilities;
- interaction – development of strategic relations with key foreign partners, primarily with the European Union and NATO and their member states, the USA, pragmatic cooperation with other states and international organizations based on the national interests of Ukraine.

In March 2021, the Military Security Strategy of Ukraine was approved.

The military security strategy envisages establishing the concept of comprehensive defense and involving in its implementation not only the Armed Forces, but all components of the security and defense sector and civil society. This document takes into account the risks of a military threat from Russia and the imbalance of the military potentials of Ukraine and the Russian Federation.

Comprehensive defense of Ukraine involves the use of all forms and methods of armed struggle against the aggressor, in particular, asymmetric and other actions for the defense of the state in compliance with the principles and norms of international law.

The strategic defense bulletin was developed on the basis of the National Security Strategy of Ukraine and the Military Security Strategy of Ukraine.

The new philosophy of the Strategic Defense Bulletin of Ukraine aims to achieve the specific capabilities of the defense forces, taking into account the results of the defense review. The prospective model of the Armed Forces of Ukraine and other components of the defense forces, the requirements for the prospective structure, composition, basic capabilities and other key quantitative and qualitative indicators of the defense forces, which are based on the Mission and Vision of the defense forces of the year 2030, have been determined. This is a pre-program document and basis for further detailing of quantitative and qualitative indicators in state target defense programs and development projects of the defense forces. The strategic defense bulletin stipulates that, based on the results of the implementation of the tasks of the military policy of Ukraine, the defense forces will:

- meet the requirements of conducting comprehensive defense of Ukraine and are built on national and Euro-Atlantic values;
- mutually compatible with the relevant structures of NATO member states, as well as capable of ensuring the defense of the territory of Ukraine within internationally recognized borders;
- conduct cyber warfare, counter measures in the information sphere using the full potential of the state and civil society;
- use all possible forms and methods of armed struggle in compliance with the principles and norms of international law to repel armed aggression.

Active work is underway to develop strategic planning documents with real programs for the development of the Armed Forces of Ukraine, programs for rearmament and reorganization of their structure, and the Annual National Program under the auspices of the Ukraine-NATO Commission.

In July 2020, the law on defense procurement was adopted, which should create a new system of relations in the field of the defense-industrial complex and military-technical cooperation.

In July 2020, the Ministry of Strategic Industries of Ukraine was established, which became the main government body in the defense-industrial sphere.

The concept of the development of the security and defense sector of Ukraine defines a system of views on the development of the security and defense capabilities of Ukraine in the medium term. This system of views is formed on the basis of an assessment of the security environment and financial and economic capabilities of the state, which were carried out as part of a comprehensive review of the security and defense sector of Ukraine.

The concept indicates ways of forming national security and defense capabilities that will enable:

- to restore the territorial integrity of Ukraine within the internationally recognized state border;
- guarantee the peaceful future of Ukraine as a sovereign and independent, democratic, social, legal state;
- ensure the creation of a national system of response to crisis situations, timely detection, prevention and neutralization of external and internal threats to national security;
- to guarantee personal safety, constitutional rights, human and citizen freedoms;
- ensure cyber security and prompt response to crisis and emergency situations.

The foreign policy of the aggressor state should be considered one of the main factors affecting the choice of priority directions for the development of the security and defense forces of Ukraine. The aggressive foreign policy of the Russian Federation was stubbornly ignored throughout Ukraine's independence, which had negative consequences. Thus, in 2014, Ukraine proved to be completely unprepared for the open aggression of its neighbor, which boldly declared friendship and peaceful coexistence, which led to the death of more than ten thousand Ukrainian citizens during the military confrontation.

When choosing priority directions for the development of the capabilities of the Armed Forces of Ukraine, the capabilities of the enemy should also be taken into account. In conditions of limited resources, one should carefully study the enemy, look for his weaknesses and prioritize those areas of development in which the enemy feels insecure. This has confirmed by Ukraine's adequate response to repeated provocations by the aggressor, stress testing for the security and defense forces of Ukraine and the entire international community, which have periodically created on the state borders of Ukraine (concentration of troops and forces of the aggressor, movement of military equipment, etc.).

Even during the Soviet Union's heyday, Moscow clearly lost to the United States of America in technological development. Especially today, when many sanctions against the Russian Federation, its defense, space and other strategic industries suffer from a lack of modern components that it cannot produce on its own. Taking this into account, it is worth joining forces with allied states, developing technologies and implementing them in the Armed Forces of Ukraine to gain an advantage over the enemy.

Therefore, the determinants of the choice of defense development priorities are military threats to Ukraine. These include:

- armed aggression and violation of the territorial integrity of Ukraine (temporary occupation by the Russian Federation of the Autonomous Republic of Crimea, the city of Sevastopol and military aggression of the Russian Federation in certain areas of the Donetsk and Luhansk regions);
- increasing the military power of the Russian Federation in the immediate vicinity of the state border of Ukraine, including the potential deployment of tactical nuclear weapons on the territory of the Autonomous Republic of Crimea;

- the militarization of the territory temporarily occupied by the Russian Federation through the formation of new military units and units, as well as the supply of fighters, military equipment and logistical support;
- the presence of a military contingent of the Russian Federation in the Transnistrian region of the Republic of Moldova, which can be used to destabilize the situation in the southern regions of Ukraine;
- intensification by the special services of the Russian Federation of intelligence and subversive activities in Ukraine with the aim of destabilizing the internal socio-political situation in Ukraine, as well as with the aim of supporting illegal armed formations in the eastern regions of Ukraine and creating conditions for expanding the scale of armed aggression;
- territorial claims of the Russian Federation to Ukraine and encroachment on its sovereignty and territorial integrity.

All these threats must be taken into account when choosing the main directions of development of the defense forces.

However, no matter how the enemy behaves and no matter what capabilities it has, Ukraine will never be able to adequately respond to challenges and risks to military security, under the negative influence of internal economic and socio-political factors.

Today, they include:

- economic crisis;
- violation of the integrity of the national economy as a result of the temporary occupation by the Russian Federation of the Autonomous Republic of Crimea and certain areas of the Donetsk and Luhansk regions;
- due to this – the limitation of the state's financial capabilities;
- imbalance and incompleteness of systemic reforms in the field of national security and defense;
- insufficient resource provision of the defense forces and inefficient use of available resources;
- low efficiency of the system of state management of the subjects of ensuring the national security of Ukraine in the military sphere, imperfection of mechanisms for planning the development of such subjects, and others.

These problems in the economic and socio-political spheres of the country do not only point to the priority areas of capacity development, but also show which areas need to be revived. The low effectiveness of the system of state management of the subjects of national security is primarily related to the aforementioned ignoring the foreign policy of an aggressive neighbor, who, under the guise of a friend, has been preparing for an invasion for decades to satisfy its imperial ambitions. As stated in the National Security Strategy of Ukraine, approved by the Decree of the President of Ukraine No. 392/2020, "Ukraine will continue legal work in international courts to bring the Russian Federation (hereinafter – the Russian Federation) to international legal responsibility" (paragraph 43 of the Strategy). In this connection, among other things, there is the question of bringing individuals who committed war crimes on the

territory of the ARC and the city of Sevastopol and certain districts of Donetsk and Luhansk regions to individual criminal responsibility, in particular, for committing war crimes.

The use of force by the Russian Federation against Ukraine, which has been taking place since 2014 (occupation of the Crimean Peninsula, the city of Sevastopol, the leadership of militants, the supply of weapons and 'volunteers' to certain areas of the Donetsk and Luhansk regions, combat operations of units of the Russian army against the Armed Forces of Ukraine, etc.), undoubtedly violate the norms of international law, and they should be considered exclusively as armed aggression in the context of the 1974 Resolution "Definition of Aggression" adopted at the 29th session of the UN General Assembly and the 2010 amendments to the Rome Statute of the International Criminal Court of 1998 (further – the Rome Statute of the ICC) – the use of armed force by a state against the sovereignty, territorial integrity or political independence of another state. The Russian Federation committed practically all types of aggression provided for by these acts, waging an aggressive war against the state of Ukraine.

In this context, more attention on the part of the state authorities of Ukraine should be paid to the analysis of issues of implementation of the norms of international humanitarian law and international criminal law into the current legislation of Ukraine. At the same time, in the process of implementing the norms of international humanitarian law and international criminal law into the current national criminal and criminal procedural legislation, it should be taken into account that one of the important requirements of the implementation of international legal norms is the use of constructions peculiar to the national legal system, which do not contradict its other provisions and are understandable for domestic law "On Amendments to Certain Legislative Acts of Ukraine Regarding the Implementation of International Criminal and Humanitarian Law", which was adopted by the Parliament in the second reading and as a whole on 05/20/2021 and 06/07/2021 was sent to the President to be signed, but has not yet been signed by him. Building full-fledged relationships of the Constitutional Court of Ukraine with bodies of constitutional jurisdiction of foreign states, international organizations, funds and programs, membership in the international constitutional communityand joining the system of international criminal justice is possible only through Ukraine's ratification of the Rome Statute of the International Criminal Court. After all, building relationships with Rome Statute of the International Criminal Court under the scheme of temporary benefit of one or another appeal to the Court and simultaneous avoidance of a full-fledged association with this respectable institution, paves a dangerous foundation of double standards of criminal prosecution for international crimes, including war crimes.

4.2. International legal foundations: national resilience in the security and defense system

Today's security environment is extremely unpredictable. Threats can come from both state and non-state entities. Terrorism, cyber-attacks, hybrid wars blur the boundaries of the traditional understanding of armed conflict. In addition, natural

disasters and epidemics pose threats to the security environment. The challenges posed by the need to confront and adapt to such a diversity of threats are radically changing the security environment and the requirements for an appropriate response. In addition, with the wide spread of new technologies, societies are becoming more open and interconnected in the economic, financial, and informational spheres. Such interconnectedness provides extraordinary opportunities for development, while at the same time making them more vulnerable. A high level of resilience is a key aspect of ensuring a sufficient degree of deterrence and defense. Resilience is a society's ability to resist and quickly recover from these threats and their consequences and includes military capabilities and civilian preparedness.

At the NATO Warsaw Summit, a joint communiqué stated that NATO will continue to increase resilience and establish and develop individual and collective capabilities to counter all forms of armed aggression. The civil preparedness is a central cluster of the Alliance's resilience and critical to ensuring collective security. To enhance civilian resilience, NATO supports all allies in strengthening civilian resilience by conducting assessments and providing necessary advice and support. The main directions in which civil preparedness is being strengthened to comply with NATO's basic requirements for civil preparedness are:

- ensuring the performance of state functions;
- provision of necessary support and services to the civilian population;
- ensuring the security of critical civil infrastructure;
- ensuring support for NATO military operations from the civilian sector.

The Alliance's security and defense capabilities, inter alia, depend on civilian and commercial infrastructure such as ports, airports, and energy systems to enable rapid and effective deployment, redeployment, and sustainment of military units and groups. These objects are vulnerable to various internal and external threats. The civil preparedness means that states will be able to perform their basic functions during emergency situations and cataclysms, both in peacetime and during a military crisis. In addition, it assumes that the civilian sector of the Alliance countries will be able to provide the necessary support to NATO's military operations.

NATO defines basic requirements for civil preparedness in seven strategic areas:

- ensuring the implementation of state powers;
- sustainability of energy infrastructure;
- ability to effectively respond to uncontrolled population movement;
- sustainable food and water supply system;
- the ability to respond to cases of mass injury and death;
- stability of mass communication systems;
- sustainability of transport infrastructure.

Today, ensuring the stability of NATO must be considered as a separate direction of the Alliance's activities. Russia's occupation of Crimea and the events in eastern Ukraine intensified NATO's actions to review approaches to ensuring the national stability of the Alliance's member countries. Thus, already in September 2014, during the Wales Summit, the North Atlantic Council approved the "NATO

Readiness Action Plan" as a response to changes in the global security environment. The document envisages an immediate increase in military presence and activity to ensure security and deterrence on the eastern flank of the Alliance, as well as the implementation of changes in NATO in the long term to create opportunities for more rapid response to emergency situations, wherever they arise.

The content of national stability of NATO countries consists in the following areas of activity:

- establishment of effective interaction between all subjects (state and non-state);
- strengthening of the capabilities of authorized state bodies to identify threats;
- increasing the level of awareness of subjects regarding the spectrum and nature of actual and potential threats;
- a certain redistribution of responsibility in the security sphere (non-state actors, local communities, citizens assume greater responsibility for their own security, and the state creates favorable conditions for this and strengthens coordination and control functions);
- ensuring the continuity of the state administration process and providing critical services to the population;
- ensuring a high level of readiness of all subjects for a wide range of threats and dangers;
- establishment of sustainable two-way communication channels of authorized state and local bodies with the population;
- adequate strengthening of the capabilities of all subjects to counteract any threats at all stages (ensuring readiness, response, recovery).

Therefore, one of the main factors determining the stability of the Alliance is the readiness of the civil sector as a critically important tool for ensuring collective defense. Provision of the armed forces necessary for the maintenance of collective defense or for their use outside the territory of the Alliance depends significantly on the civilian infrastructure. In particular, 90% of the Alliance's supplies and logistics are provided by private companies.

Such a comprehensive approach provides an opportunity for the public and private sectors, local communities and civil society to form a common view and understanding of the existing and potential risks, to contribute to ensuring readiness for action in crisis situations of both individual citizens and various response systems, to develop coordinated response plans, to act jointly and harmoniously. Thus, the integration of sustainability into the deterrence strategy is achieved.

An integral part of efforts to strengthen resilience in NATO countries is work to improve readiness in all other areas of public life, including the health care system. In order to deter, counter and recover from the consequences of the existing threats to the civilian sector, appropriate clear plans are developed that define actions and appropriate training.

So, if until recently for NATO the concept of stability was related, first of all, to the principles of military cooperation and deterrence, today the approaches have changed. NATO is currently striving to increase the stability of the member countries

of the Alliance in both the military and civilian spheres, considering the latter as one of the main factors that ensures the effectiveness and combat capability of the military component of the defense bloc.

The President of Ukraine, by Decree No. 479 dated 09/27/2021, implemented the decision of the National Security and Defense Council of Ukraine dated August 20, 2021 "On the introduction of the national stability system", which approved the Concept of ensuring national stability.

The creation of a national system of sustainability is aimed at ensuring the ability of the state and society:

- to timely identify threats, identify vulnerabilities and assess risks to the national security of Ukraine, prevent or minimize their negative effects;
- to effectively respond and quickly and fully recover from the realization of threats or the occurrence of crisis and emergency situations of all kinds, including but not limited to hybrid threats.

The main criterion of stability is the readiness and ability of the subjects of the stability system to resist threats. The subjects of the sustainability system are: state authorities, local self-government bodies, and citizens of Ukraine. The system of sustainability is integrated, which should be systematically implemented in all spheres of public administration. In view of the stated goals of the formation of the national stability system, the agenda includes the creation of permanent, uninterrupted monitoring of threats to national security, which will become the basis of systemic response and effective countermeasures. At the same time, it is necessary to take into account:

- current risks and threats;
- existing protocols for responding to destabilizing factors;
- national and international legal framework;
- a process approach to the implementation of change management;
- procedures for the interaction of the subjects of the sustainability system;
- defense, mobilization, production, resource, logistics capabilities;
- the level of national self-awareness;
- level of readiness of citizens to participate in national resistance.

Effective monitoring will become the basis for the effectiveness of the national stability system. The result of the implementation of the sustainability system will be the ability of the entities of the sustainability system to function under the influence of destabilizing factors.

4.3. Situation centers in the information and analytical monitoring national security and defense

According to the decision of the National Security and Defense Council of Ukraine "Regarding the improvement of the network of situational centers and the digital transformation of the sphere of national security and defense", implemented

by the decree of the President of Ukraine No. 260 of June 18, 2021, in terms of the implementation of the SOTA IAS software into a single network situational centers of the state.

A decision was made to expand and further develop a single network of situational centers to increase the effectiveness of information and analytical support for management decision-making.

The situational center is a modern form of organization of analytical activity, based on the synthesis of information and communication technologies, means of accumulating and presenting information. Such situational centers should ensure interaction, coordination and control over the activities of executive authorities, law enforcement agencies and military formations in the spheres of national security and defense in peacetime, as well as in a special period, including in conditions of martial law, in conditions of a state of emergency and during crisis situations that threaten the national security of Ukraine.

In the Apparatus of the National Security and Defense Council of Ukraine, a modern information and analytical system of the Main Situation Center of the country, 'SOTA', was developed and put into operation. The system works with Big Data, provides storage, combination and analysis of data from various sources to increase reliability, effective condition monitoringof national security from more than 20 directions, in order to effectively coordinate the activities of state bodies.

The following are the main areas of national security:

- social, domestic and foreign policy security;
- events in the area of operation of the joint forces;
- the spread of the disease of COVID-19 in the world and in Ukraine;
- spatial and functional transformation;
- self-government in the context of decentralization, local budgets and community capacity;
- subsoil use;
- economic security, financial markets;
- threats in domestic and foreign markets, etc.

All information collected from external sources and processed in the system is synchronized with geospatial data. IAS 'SOTA' is a complex multi-layered information and analytical system of the highest level of information protection, has a flexible, open architecture that allows creating new functional modules in accordance with the tasks that arise in the implementation of state policy in the field of national security.

The system has three circuits of information processing: public, for official use and secret. The security of data processing at IAS 'SOTA' was confirmed by the Certificate of Conformity to the Comprehensive Information Protection System, issued as a result of the state examination.

Software analytical modules of IAS 'SOTA' allow to provide unbiased objective content analysis of data and synchronization of data from various sources. It is a risk analysis and management tool in the field of national security and defense of Ukraine.

The network should include:
- the main situational center of Ukraine;
- government situation center;
- situational centers of security and defense sector bodies;
- situational centers of central executive authorities.

The government situation center, situation centers of security and defense sector bodies, situation centers of central executive bodies, the Council of Ministers, regional and city state administrations, reserve and mobile situation centers are equipped with unified software and hardware for information and analytical support for management decision-making, which has comprise:
- data storage and database management system;
- tools for analyzing and visualizing data from various sources, as well as building predictive models based on them;
- module of geoinformation systems and technologies for creating and working with geospatial data sets;
- secure video conferencing to ensure synchronous exchange of audiovisual information in real time;
- electronic communication networks to ensure the exchange of information, including the transfer of data and audiovisual information with various degrees of access restriction between communication nodes, situational centers and other subjects of information exchange;
- technical support of the software and hardware complex to ensure inter-operability, stable and uninterrupted functioning, testing, configuration and performance tracking in accordance with the specified regulations.

In addition, according to the decision, the Cabinet of Ministers, the NSDC apparatus, the Security Service of Ukraine and the Foreign Serviceintelligence should ensure the further development of the network of situational centers, using the information and analytical system of the Main Situational Center of Ukraine, and the possibility of deploying reserve situational centers in spare (urban, non-urban) control points, as well as mobile situational centers to ensure the stability and survivability of the state management system in a special period, in particular in the conditions of martial law, in the conditions of a state of emergency and during the emergence of crisis situations that threaten the national security of Ukraine. The NSDC apparatus must take measures to ensure the connection of all situational centers, which will be part of a single network, to the information and analytical system of the Main Situational Center of Ukraine. In turn, the administration of the State Service for Special Communication and Information Protection should take measures to ensure the acquisition and deployment of technical means of the government situation center as part of the expansion of the network of secure video conferencing of the subsystem of the special switch of Ukraine and their further operation, as well as provide all situation centers , which are part of a single network, access to the resource of the National Telecommunications Network.

Based on this, the bodies of the security and defense sector, the central bodies of the executive power, regional and city state administrations must ensure, in the established order, the operational transmission in an automated mode to the information and analytical system of the Main Situation Center of Ukraine of the information necessary for its functioning.

A situational center is being created in the system of the Ministry of Defense, and its functioning will be ensured. For this purpose, a working group was formed to create and ensure the functioning of the situational center in the system of the Ministry of Defense. The main tasks of the working group on the creation of a situational center are the preparation of proposals and informational materials. The group must assess and define a list of threats that should be responded to with the deployment of the situation center. An assessment of the possibilities of joint response with the Armed Forces of Ukraine to the defined list of threats will also be carried out. The reserve situation center will also be able to deploy on mobile vehicles. Continuous monitoring is extremely important for making effective management decisions, timely rapid response to changes in the situation, and obtaining complete and reliable information about events. The institutionality of the created monitoring system is very important in the organizational provision of integrated interaction of situational centers, which will contribute to the effectiveness and coherence of the functioning of all participants in the constant monitoring of threats to national security.

5. Conclusion

The main aspects in this study inspected the implementation of internationally-legal security mechanisms monitoring threats and finding ways to overcome challenges to national security. Against the backdrop of global instability as a result of COVID-19 pandemic, more threats to the stability and national security are emerging: political turmoil in the struggle for power, the devastating effects of environmental degradation and climate change, the growing number of empowered non-state actors, and rapidly developing technologies. As research has shown, the challenges to national security are the development of new technologies, the growing openness of society and interconnectedness in the economic, financial, and informational spheres. Such interconnectedness provides extraordinary opportunities for development, while at the same time making them more vulnerable. It has been proven that the problems of ensuring the country's national security are related to the ability of the means used by a specific country to overcome various threats, the creation of a system of adequate response to challenges and threats to national security. Studies have shown that monitoring and assessing the level of threats to national security and forecasting the development of events are related to the realization or protection of national interests. The conducted analysis established that the basis for choosing priority directions for the development of the capabilities of the Armed Forces of Ukraine and other components of the defense forces are: foreign

policy and capabilities of the aggressor state; current military threats to Ukraine; internal economic and socio-political factors that negatively affect Ukraine's ability to adequately respond to challenges and risks to military security.

A high level of national resilience is a key aspect of ensuring a sufficient degree of deterrence and defense. National resilience includes military capabilities and civil preparedness, reflects society's ability to resist and quickly recover from the specified threats and their consequences.

In Ukraine, a single network of situation centers is being formed to create a single system of monitoring threats to national security, which should include: the main situational center of Ukraine; government situation center; situational centers of security and defense sector bodies; situational centers of central executive authorities. In the system of the Ministry of Defense of Ukraine, a situation center is being created for constant monitoring of threats of a military nature. It is believed that situational centers represent one of the most effective forms of implementation of the management decision-making support system in the system of national security and defense - by creating a special information and technological space that includes monitoring, forecasting, decision-making and control over their implementation.

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