Improving the State system of strategic planning of national security in the context of informatization of society

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Abstract

The inefficiency of the national security system is one of the biggest threats to Ukraine's national security. The strategic planning in the field of security and defense has designed to identify the means, including the future structure of forces, that would allow the institutions of the defense and security sector to effectively deal with potential future threats. The purpose of this study is development of theoretical and practical measures to increase the effectiveness of
strategic management of national security processes on the basis of goal setting, forecasting and planning in the context of informatization of society. The relevance of this study is due to the need for legal regulation and improvement of the state system of strategic planning of national security of Ukraine. To achieve the goal of the study was used special scientific methods of legal knowledge. The results of the analysis showed that what in the basis ensuring national security must rely on the principle of systematization, which means that the security and defense sector of Ukraine is considered as a single object of forecasting and planning. This study substantiates the main directions systemic reform of the security and defense sector, which has been carried out in Ukraine to ensure the protection of the constitutional order, sovereignty, territorial integrity of the state in the face of armed aggression. The priorities should be implemented through key tasks, such as the establishment of a comprehensive strategic analysis of military threats to Ukraine's national security, coordination of intelligence activities, development of joint intelligence capabilities of the defense forces in order to obtain complete and reliable warning information for timely decision-making guaranteeing the military security of the state.

**Keywords:** National security; State system; Strategic planning; National security strategy; Threats to the public administration system; Informatization of society

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**Introduction**

The National security is a dynamic and multifaceted issue that requires serious solutions and flexible approaches to ensure the protection of the interests of the individual, society and the state from external and internal threats.

The experience shows that public administration tools based on the principles of rapid response to emerging threats and challenges are not effective in ensuring national security. It is necessary to form new systemic approaches to public administration in the field of national security, the use of modern methods of strategic planning to achieve a qualitative breakthrough in the development of economy, infrastructure, science and technology in the social sphere.

The issue of national security planning has become especially relevant in the modern conditions, when the tools of war have changed, it is necessary to take into account the
hybridity of wars and multilateralism. The modern information and economic technologies, network influence on the structures and institutions of civil society have already become new instrumental and operational means of war. Such influences (external and internal) are total in nature, which allows to achieve the planned and expected results of the war. Therefore, with the change in technologies, means and nature of influence and threats, it is necessary to change the established and usual approaches to the formation of the strategy of national security and defense of the state.

The main tasks of ensuring national security are not only to eliminate the most significant dangers and threats, but also to manage the risks associated with them for strategic purposes and in the long run. All this requires the formation of new mechanisms for implementing public policy on the principles and methods of strategic planning, the development of a program to assess the state of national security, as well as optimizing the activities of public authorities, public administration and state system to address the challenges of national security and socio-economic development.

All of the above requires the formation and implementation of a legal mechanism for further development and improvement of the state system of strategic planning of national security of Ukraine.

The aim of the study - development of theoretical and practical measures to increase the effectiveness of strategic management of national security processes on the basis of goal setting, forecasting and planning.

The object of study there is a process of formation state system of strategic planning of national security of Ukraine.

The subject of study - methodological, institutional, public administration, social compensation aspects of the state system of strategic planning and legal regulation in the field of national security of Ukraine.

This study highlights key issues in national security law. The main results and perspective directions of systemic reform of the security and defense sector, which has carried out in Ukraine to ensure the protection of the constitutional order, sovereignty, territorial integrity of the state in the face of armed aggression, have considered.

**Literature Review**

The issue of national security as multifaceted, considered by scientists and remains very relevant in the face of the latest challenges and threats.
Kokkoris (2021) identifies the limits of UK merger control set by national security concerns in the light of public interest considerations in the decision-making practice of the competent authorities. The emphasis has placed on the shortcomings of the existing legal framework to take into account the public interest in reviewing mergers and acquisitions in strategic industries or companies, precedents of national security violations, the role of the Secretariat in terms of both competition and national security.

Margulies, Max Z. & Leah E. Foodman (2021) review expanding mandatory selective registration of services in the United States, including women, as part of a public policy that enhances national security and reduces gender bias. The authors of the study consider such a reform of state institutions to be very important in defense policy, which will help political institutions to form relations between the public and the military.

Fox, Amos (2021) examines the types of strategic relationships through the prism of modern risks and the latest types of relationships to participate in proxy wars. The authors propose theoretical developments on the implementation of five models of proxy relations - coercive, transactional, cultural, exploitative and contractual. According to the researcher, the presented models will help politicians, strategists and practitioners to understand and navigate in the strategic work of today's proxy wars.

Nilsson (2021) offers a new perspective on the scale of war from the standpoint of the polarity of the system and the duration of the war. The empirical analysis and theoretical discussion, according to the researcher, are important for understanding the consequences of the fall of US hegemony. The author uses a hazard model to statistically test whether five different polarity indicators are related to the duration of the war. The study hypothesized that the increase in the number of poles in the state system is on average associated with prolonged wars.

Youde (2016) identifies biosafety as part of the United States' national strategy, which directly links the activities of states and non-governmental biosafety actors to broader national security strategies. The author believes that the National Biosafety Strategy goes beyond the oversight requirements of the International Health Regulations for the clear integration of biosafety into larger security and state operations.

The current global COVID-19 pandemic will exacerbate several challenges to national security and affect the ability of an individual country to meet these challenges. The researchers divide the effects of the pandemic on national security into two general categories: the geopolitics and the critical supply chain (Geipel, 2020; Bradley, 2021; Giri, 2021; Kovalenko, 2014). The consequences of the COVID-19 pandemic have created the latest threats to public and national security in the short, medium and long term, which requires special approaches and a scientific basis for multi-term national security planning (Brooks, 2020; Mavlutova et al., 2021; Kruczynski, 2021).
The State Departments of Defense, Security and Justice work to support mission readiness, ensure public safety, and support national efforts in a variety of areas. The researchers insist on the need to maintain a major response effort, ensure the security of the flow of goods and resources and consistent communication with the public (McGrath, 2020; Bliss et al., 2020; Holovaty, 2014).

The category "the national security" has officially defined by the Law of Ukraine "On National Security of Ukraine": protection of the state sovereignty, territorial integrity, democratic constitutional order and other national interests of Ukraine from real and potential threats (On the National Security Strategy of Ukraine, 2020). In the definitions of the categories: defense capabilities of the state, military, state and public security - special emphasis has placed on the protection of national interests and national values from certain types of threats. In this case, security is defined as the ability to counteract or protect. Capability - an aggregate parameter that characterizes the presence of a certain integrated potential (military, economic, social and moral-political), as well as the appropriate conditions for its implementation (Bondarenko et al., 2021; Perevozova et al., 2019).

Thus, the national security is the availability of appropriate capacity (set of potentials) and conditions for its implementation in order to protect against threats to national interests and national values, depending on their nature, scale and level, as well as countering threats.

The National security is the integration of elements of the political system in the form of the people, society and state:

a) the security of the people, nation, ie the population of the country, including both monoethnic and multinational people, when representatives of different nationalities act as fellow citizens;

b) the security of society, ie a set of people united by historically determined conditions of joint life;

c) the security of the state, ie the organizational and legal form of unification of peoples, nations, which is a means of conducting common affairs.

In these cases, such socio-political phenomena as "constitutional security", "regional security", "social security", "external security", "internal security", etc. arise, which, in addition to their existence, have contradictory interpretations in the scientific literature.

The state, in this case, has designed to resolve various conflicts.

The state policy in the field of national security should ensure a consistent transition from the security imperative, built on the principle of protection of the individual, society and state from external and internal threats, to a policy of ensuring their security based on sustainable
socio-economic development (Bondarenko, et al., 2021). At the heart of such a policy is a pragmatic strategy to prevent dangers and threats. The national security strategy aims to bridge the existing gaps from the less desirable current state to the more desirable future state of affairs or the state of the system. That is, there is a need to assess the current situation and determine the desired national security benchmarks. The state system of strategic planning of national security has entrusted with the concept of national security, which integrates into the state security and defense policy of the country.

To achieve the objectives of this study, the following hypotheses have proposed

H 1. The national security strategy provides for the development and application of ideas on the use of means, as well as the organization of institutions and instruments of national power (diplomatic, informational, military and economic) to achieve viable goals that protect or promote national interests and national values.

H 2. The national security strategy can be applied gradually, organizing or managing almost all aspects of state policy, or addressing issues specific to the situation.

Methodology

The basis of this study were 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 for ensuring the national security of Ukraine should be a systematic approach, when the object of study is a complex system, and the subject of research - the effectiveness of its operation.

The work used a comprehensive analysis of legal mechanisms, measures and results of national security, based on the principles of historicism, comprehensiveness, objectivity and obgruntivity, which contributed to obtaining various aspects of the national security system of Ukraine. The analysis was performed using general scientific and special scientific methods:

- the formal-logical method, methods of theoretical generalization and synthesis - in formulating definitions of such concepts as "national interests", "national values", "national security", "objects of national security", "subjects of support national security", "constitutional and legal mechanism for national security", "strategic planning of national security ", etc.;

- the systemic and structural-functional methods - in identifying the structure and nature of the system of national security, its constitutional directions and components;
- the historical and legal method - during the analysis of strategic planning of national security in the context of a specific historical situation, stages of development of the constitutional and legal security system of Ukraine, factors that influenced it at each stage;

- the comparative legal method - when comparing foreign experience, the ratio of components of national security in different countries.

A special-scientific method of legal knowledge is the formal-legal method - in the allocation of the normative component of the constitutional and legal framework for national security in Ukraine.

The study uses the main approaches of the theory of active systems - a section of the theory of management of socio-economic systems, which studies the properties of the mechanisms of their functioning due to the manifestations of activity of system participants (Burkov & Novikov, 1999).

The information base of the study consisted of: official data of the State Statistics Service of Ukraine, legislative acts of the Verkhovna Rada of Ukraine, resolutions of the Cabinet of Ministers of Ukraine, materials of official websites of ministries and departments, analytical reviews and scientific publications on national security.

**Results**

**Current state system of strategic planning of national security of Ukraine**

The national security strategy covers any strategic issue that falls within the scope of the National Security and Defense Council. On September 14, 2020, the President of Ukraine Volodymyr Zelensky signed the Decree of the President of Ukraine "On the National Security Strategy of Ukraine" (President.gov.ua, September, 14).

The National Security Strategy was developed on the basis of the new Law on National Security of Ukraine, which laid the foundation for structural reforms in this crucial area.

This document (hereinafter referred to as the Strategy) covers a wide range of national security issues: responding to climate change, demography and the COVID-19 pandemic, hybrid warfare, military and cybersecurity.

According to the approved Strategy, achieving peace in Ukraine is the basis for the development of both the state and the individual.

Of particular note are issues of life and health, honor and dignity, as well as immunity and security - as the highest social values that must be respected.

The priority national interests of Ukraine are:

upholding independence and state sovereignty;
restoration of peace, territorial integrity and state sovereignty in the temporarily occupied territories;

social development, especially the development of human capital;

protection of the rights, freedoms and legitimate interests of the citizens of Ukraine.

The Strategy stipulates that the interests of Ukraine's national security include the continuation of protection and deterrence measures, the active use of multilateral negotiation formats and the consolidation of international pressure on the Russian Federation.

The document sets out a specific goal of achieving full membership in the European Union and the North Atlantic Treaty Organization (NATO). The main threats to Ukraine's national security are cyber and information security, zero tolerance for corruption, recent changes related to the crisis in the world economy, the spread of COVID-19, as well as increasing threats arising from natural and man-made disasters.

The Strategy highlights the basic principles of the state policy of national security of Ukraine:

1) deterrence - the development of defense and security capabilities to prevent military aggression against Ukraine;

2) resilience - 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;

3) cooperation - the development of strategic relations with key foreign partners, especially with the EU and NATO and their member states, including the United States, along with pragmatic cooperation with other countries and international organizations, based on the national interests of Ukraine.

The main thing in the Strategy is to create a new system of guaranteeing national security and defense, able to ensure state sovereignty and territorial integrity of Ukraine from a set of possible threats, guarantee protection of rights, freedoms and legitimate interests of Ukrainian citizens and further social development, especially human capital. The conceptual scheme of the state system of strategic planning of national security of Ukraine is presented in Figure 1.

Conceptually, the national security usually entails a competitive search for an advantage over a foreign nation, group of nations, or non-state entity; favorable foreign policy situation; and / or a defensive position capable of successfully deterring hostile action.

Thus, the National Security characterizes the ability of society and the state to protect national interests and values, deter or eliminate internal and external threats to national sovereignty, territorial integrity, social order, economic development, and other important elements of spiritual and material life.
A systematic approach to national security

The basic principle of planning and forecasting the sphere of national security should be the principle of systematization, which means that the security and defense sector of Ukraine has considered as a single object of forecasting and planning.

Such a planned approach will help balance the requirements for the structure of security and defense sector bodies, their number, financial and logistical support, priority of development tasks, etc.

Ensuring security is a targeted process of the relevant subsystem, which aims to create, build, maintain and restore lost or spent and utilize excess capacity.

The sphere of national security is a complex system that includes a number of interconnected subsystems: ”man - civil society - state power - the international community.”

It has proposed to present national security as a multilevel active complex system (AS - active system) (Fig. 2).

According to this scheme, the national security is a three-tier hierarchical system.

The top level of the national security hierarchy is the Center, which is responsible for the strategic level of government.

The second level contains a set \( n \) of intermediate Centers \( C_{jn} \)- municipal government, regional (territorial) security (Zavhorodnii et al., 2021).

Third level - \( N \) controlled active elements \( \{AE_{ij}\}, i = 1, n, j = 1, n, \sum_{j=1}^{n} n_j = N \).
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Figure 2. Scheme of the structure of the national security system

We will assume that each AE has subordinated to one and only one center of the intermediate level, i.e., the structure of subordination in the considered system of national security has the form of a tree. The set of the center $C_{jn}$ of the intermediate level nj and its subordinates AE is called the $j$-th subsystem, the set of the center and intermediate centers is called the metasystem.

The system security assessment makes it possible to identify and quantify the real and potential threats of system destruction in order to take timely measures to prevent negative scenarios. Such an assessment can be obtained on the basis of appropriate parameters (Kachynskyi, 2013). The model of the trajectory of the national security system has presented in Figure 3.

Figure 3. The model of the trajectory of the national security system
To form an effective and efficient system of national security, it is necessary to understand the limits of a safe and dangerous state of a complex system.

To do this, it is advisable to divide the system state space into domains that describe the complete set of all system states:

\[ S = S_0 \cup S_1 \] (1)

where \( S_0 \) - the set of dangerous states of the system;
\( S_1 \) - the set of all safe states.

That is, it is necessary to build a set \( S_1 \), which means finding the boundary of such a set of states of the system, which contains all the information about the safe operation (existence) of the system. In this case, the safety indicator is a measure of the deviation of the current state of the system \( S \) from the limit \( S_0 \).

Assessing the state of national security is important for shaping the effectiveness of its public policy, development and management decisions. To understand the status of national security, it is necessary to carry out a continuous monitoring process. The introduction of monitoring the effectiveness of public policy is a powerful analytical procedure carried out in order to determine the deviations of the national security system from the declared strategic course of the state (Klochan et al., 2021; Hubanova et al., 2021).

The method of obtaining quantitative indicators of security of complex systems has based on determining the limit values of the relevant parameters, on the basis of which specific indicators have allocated, which serve to assess the state of national security (Methodical recommendations, 2013).

After describing the model of the national security system, according to the relevant parameters and systematization of management tasks, the rational behavior of the AE has determined. This takes into account the specific benefits of AE on many performance results (these benefits depend on the control mechanism used by the center) and available information on uncertain factors (the relationship between the actions of AE and the results of its activities) determine the benefits of AE on many of its strategies and / or certain estimates).

The national security system includes the activities of national security bodies and forces, the values of the homeostatic boundaries of which have adjusted with the help of monitoring results. Such security monitoring of complex systems requires monitoring of process dynamics rather than individual events. Monitoring the dynamics of the system provides an idea of the state of its security, which has characterized by the following indicators: stability, quality of transients, manageability, identity. A complex system of national security has influenced by external and internal perturbations.
The impact of changes in centralization (i.e., centralization or decentralization of the national security system) on the effectiveness of management has caused by factors that are inherent in multilevel systems (Burkov & Novikov, 1999):

The aggregation factor (A) - a change in awareness of participants in the national security system as a result of aggregation of information about the states and behavior of specific AEs, subsystems, etc., as the level of hierarchy.

The economic factor (E) - change in national security management resources (limitations of management mechanisms, sets of acceptable strategies, etc.) with the introduction of new participants (AE, intermediate governing bodies, etc.) with their own interests, i.e., participants, or bring new management resources, or consume part of the available resources.

The uncertainty factor (U) - a change in awareness of participants in the national security system about the significant internal and external parameters of their functioning (including in the change of uncertainty in subjective assessments of the situation) due to changes in the system, its structure (information and other links) participants in the national security system, etc.

The organizational factor (O) - a change in the attitude of power, i.e., the possibility of influencing the activities of elements of the national security system. In particular, the government as a system of incentives and fines allows to achieve the advantage of the collective interest over individual goals.

The information factor (I) - change in the information load on the participants of the national security system, limited their ability to transmit and process information.

The interdependence of factors has presented in the form of a matrix. The rows of the table contain the factors that cause the impact, the columns - the factors that are affected (Table 1).

Table 1. Interdependence between the factors of the national security system

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"+" - the i-th factor triggers the impact on the j-th; "X" - the i-th factor has no direct effect on the j-th; ":-" - the lack of relationship of factors.

Novikov (1999) investigated sufficient conditions for ideal aggregation in stimulus problems in three-level complex systems, which, in fact, is the system of national security. The author proves the arbitrary decentralization of anonymous resource allocation.
mechanisms, examination mechanisms, internal price mechanisms, as well as some insurance mechanisms.

Possible violations of the principle of single-headedness, i.e., consideration of the national security system, when the AE has subordinated simultaneously to several centers, requires further study from the standpoint of managing a complex system through a set of elements of distributed control.

In Ukraine, the main subject of national security is the security and defense sector, which combines state authorities, state armed formations and civil society structures interested in solving security and defense tasks. The components of the security and defense sector, including the State Border Guard Service of Ukraine, play a role in solving tasks related to ensuring Ukraine's military security and preparing it for armed defense. Given the external aggression of the Russian Federation against Ukraine, the growing influence of pro-Russian forces, the presence of separatist and extremist sentiments in the border regions of Ukraine and Russia, it is necessary to determine the sources, content and direction of threats to Ukraine's national security. The main directions of activity and further development of the State Border Guard Service of Ukraine are: optimization of the organizational structure, transition to a three-tier management system, reforming the state border protection bodies according to the administrative-territorial principle.

The capability-based planning model is being actively implemented in the system and defense sector (capabilities). Determining the capabilities of units and subdivisions of the State Border Guard Service of Ukraine, due to the specifics of the tasks performed, is a problematic issue and requires conceptual changes on the state system of strategic planning of national security of Ukraine and changes in operational planning methodology. The capabilities of formation (body) of the security and defense sector of Ukraine are available forces, means and infrastructure of the corresponding formation (body), which by their quantity and quality (properties, characteristics) are able to perform tasks of a certain nature and scope in specific conditions. The requirements to opportunities are conditions and limits of acquisition of the necessary level of ability of formation to carry out the tasks assigned to it. The capacity (operational, combat, special) is the ability of the formation (body) of the security and defense sector or a set of forces and means to perform certain tasks under certain conditions, resource provision and in accordance with established standards. The capacity implies the availability of potential and conditions for its implementation. The possibilities of formations as well as potential have created, increased, supported, utilized. The ability of the formation to perform certain tasks reaches or acquires a certain level. Its evaluation has carried out according to established criteria and is defined as the degree of conformity of capabilities to needs.

The capabilities are the resources, means, infrastructure, stocks, etc., provided with resources, staffed and prepared to perform certain tasks in specific conditions of the situation. The level of resource provision, the level of manpower, the level of training of personnel,
Improving the State system of strategic planning of national security in the context of armaments, military and special equipment, the management system to perform the assigned tasks will limit and determine the level of satisfaction of needs, i.e., compliance with capacity or capabilities to the required level of security. Therefore, the level of security can be determined from two positions:

- from the real ratio of the potentials of the opposing (competitive) parties with the addition of the potentials of the parties involved in one or another party to the conflict and taking into account the limitations in resources;
- On the basis of the forecast of the level of danger, the establishment of normative values of the required level of safety, also taking into account certain restrictions. The method of analogies (according to the experience of other countries), legislative and regulatory method (critical or optimal level is determined in accordance with the threshold level set in national legislation or relevant international organizations) and the method of expert assessment (Tama, 2016;) can be used.

The criteria for assessing the situation for a certain level of security have formed depending on the value of the ratio of real and desired potential (directly or indirectly), as well as the degree of risk of harm to national interests. Of particular importance are methods for determining the priority of the formation of components of integrated potential, especially in conditions of abrupt changes in the situation.

The strategic planning of national security

The national security strategy of the 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 (Ukraine's new National Security Strategy, 2020). The national security strategy is the basis for the formation of a set of strategic documents on planning in the areas of national security and defense, which will determine the ways and tools for its implementation. The main stages of the process of choosing strategies for the national security system have presented in Figure 4.

The sequence of defining the national security strategy includes the following stages:
1. The description of the model: definition of target functions and allowable sets, their properties, as well as the order of functioning and awareness of participants in the national security system.
2. Determination of rational behavior of AE within the framework of the considered model: the task of procedure (method) of elimination of uncertainty and rational choice of AE (definition of set of decisions of game - set of realized actions).
3. Determining the effectiveness of the mechanism of stimulation and formulation, in fact, the task of synthesis of the optimal mechanism of stimulation.
4. Solution of the synthesis problem: search for an analytical solution and/or development of algorithms for numerical solution of the problem and study of their properties: convergence, complexity, etc.
5. Finding the necessary and sufficient conditions for optimality.
6. Analysis of the optimal solution:
a) the properties of the optimal solution and the set of implemented actions, meaningful interpretations;
b) the impact of uncertainty on the effectiveness and properties of the optimal incentive mechanism;
c) the influence of model parameters and determination of rational behavior on the efficiency and properties of the optimal stimulation mechanism, including the analysis of the stability of the optimal solution.

7. Research of separate cases (at strengthening of assumptions and assumptions about parameters and properties of model) and possibilities of generalization (accordingly, at weakening).

8. Research of stability of decisions and adequacy of model of the modeled system.

9. Implementation of the model: adjustment, development of recommendations for practical use, creation of computing tools, automated decision support systems and simulation models.

Therefore, steps 1-3 include a description of the speaker and problem statement, steps 4-5 correspond to the analytical and / or numerical solution of the problem, steps 6-8 - study of the model and properties of the optimal solution, step 9 - implementation and practical use of research results.

Figure 4. The stages of the process of choosing a national security strategy
Legal bases of strategic planning of national security of Ukraine

The Constitution of Ukraine defines the basics of national security:

- Art. 92 of the Constitution: the foundations of national security have determined exclusively by the laws of Ukraine;
- Art. 106 of the Constitution: the President of Ukraine ensures national security and heads the National Security and Defense Council;
- Art. 107 of the Constitution: The National Security and Defense Council is the coordinating body for national security and defense of Ukraine under the President of Ukraine;
- Art. 116 of the Constitution: The Cabinet of Ministers of Ukraine takes measures to ensure the defense capability and national security of Ukraine.

Thus, the constitutional level of national security of Ukraine testifies to the involvement of legitimate branches of government in this crucial area of state activity.

The President of Ukraine, the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine, and the National Security and Defense Council of Ukraine exercise control over the implementation of state policy in the field of national security within the limits of their functional powers prescribed by the Constitution and laws of Ukraine.

The public administration of the security and defense sector includes the institutional level – the public policy has determined, the main tasks, important decisions are made, which have reflected in laws, doctrines and strategies.

The state national security policy accumulates the following components:

- national interests (territorial integrity and sovereignty of the state, stability and law and order in the state);
- nature and types of threats;
- neutralization of possible threats to national security.

In the National Security Strategy of Ukraine, approved by the Decree of the President of Ukraine dated 26.05.2015 № 287/2015, the inefficiency of the national security system has recognized as one of the greatest threats to the national security of Ukraine. This threat is due to the immaturity of the security and defense sector as a single functional association, managed from a single center. The problem highlights the lack of resource provision and inefficient use of resources in the security and defense sector, etc.

Among the priority tasks of the state in the field of national security are:

- the need to improve the state system of strategic planning;
- creation of a unified system of monitoring, analysis, forecasting and decision-making in the field of national security and defense.
The purpose of the national security strategy is:
- timely detection and prevention of threats to national security;
- determination of the order of actions in crisis situations within a single set of measures of political, military, economic, informational and other nature.

The adoption of appropriate comprehensive changes in the system of national security has also provided by the Decree of the President of Ukraine dated 5.01.2015 № 5 "On the Strategy of Sustainable Development of Ukraine - 2020”.

The most important measure of the state to reform the national security system is:
- updating doctrinal and conceptual approaches to national security;
- functional optimization of the security and defense sector;
- creation of an effective state system of crisis response.

The formation of a system of forecasting and planning in the field of national security requires the improvement of the regulatory framework and organizational support at both the national and departmental levels.

The legal regulation in the field of national security has carried out in accordance with the laws of Ukraine:
- On the national security of Ukraine;
- About the National Security and Defense Council of Ukraine;
- About the state forecasting and development of programs of economic and social development of Ukraine;
- About state target programs;
- resolutions of the Cabinet of Ministers of Ukraine.

The main legal act, according to which planning has carried out in the areas of national security and defense, including the preparation of draft relevant strategic documents, is the Law of Ukraine "On National Security of Ukraine" (On National Security of Ukraine, 2018) Law). Planning in the field of the national security - the function of public administration to determine priorities, tasks and measures to ensure national security of Ukraine, balanced development of components of the security and defense sector based on the assessment of the security environment and taking into account the financial and economic capabilities of the state. The main tasks, principles, content and procedure of planning in the field of defense and coordination of actions of public authorities in this area are legally regulated by the Law of Ukraine “On the Organization of Defense Planning” (On the Organization of Defense Planning, 2005). The updated law regulates the introduction of the program-target method in the practice of defense, including budget, planning using the method focused on capabilities. The defense planning is a component of the system of state strategic planning. The state's
defense capabilities have ensured by the defense forces, their capabilities, armaments and military equipment, infrastructure development, training of troops (forces), as well as the development of appropriate concepts, programs and plans taking into account real and potential threats in the military sphere and financial and economic capabilities (Vovk et al., 2020).

In practice, this process should include the following basic elements:

- periodic reviews of the national security and defense sector, which would identify and clarify national security goals, national security policy priorities and ways to implement them;
- organization of interaction between state bodies, scientific institutions and non-governmental organizations, as a result of which regular assessments of threats to national security will be carried out, decisions will be made to adjust measures, differentiate tasks of national security bodies, clarify their structure and responsibilities;
- transparent process of resource allocation and control over their use.

It is necessary to ensure the connection and mutual compliance of the National Security Strategy and the forecasts of economic and social development of Ukraine approved by the Cabinet of Ministers of Ukraine for the short and medium term, as well as to determine the procedure for control and establish responsibility for implementing such measures.

Given the fundamental national interests defined by the Constitution of Ukraine and the Law of Ukraine "On National Security of Ukraine", the priorities of national interests in the National Security Strategy are:

- the upholding independence and state sovereignty;
- the restoration of territorial integrity within the internationally recognized state border of Ukraine;
- the social development, first of all development of human capital;
- the protection of the rights, freedoms and legitimate interests of the citizens of Ukraine.

One of the main priorities is to strengthen the capabilities of the Armed Forces of Ukraine and other bodies of the security and defense sector. The implementation of the priorities set out in the National Security Strategy of Ukraine will be ensured, in particular, through the development of a special partnership with the North Atlantic Treaty Organization in order to gain Ukraine's full membership in NATO. Among the sectoral strategies, the key document in the field of defense is the Military Security Strategy of Ukraine. Unlike previous military doctrines, the Military Security Strategy of Ukraine proposes to introduce a comprehensive approach to Ukraine's defense, which is the most rational approach in the face of an existential military threat to national security, taking into account the imbalance of military potential of Ukraine and the Russian Federation. The Ukraine's comprehensive defense has
based on its inalienable sovereign right to self-defense in accordance with fundamental principles of international law.

The military security strategy of Ukraine has a logically constructed structure, which includes:
- the security environment (global, regional and national aspects) in the context of military security;
- the goals, priorities and tasks of state policy in the military sphere, spheres of defense and military construction;
- the socio-political, economic and other conditions for the implementation of state policy in the military sphere, the spheres of defense and military construction, as well as military-political and military-strategic restrictions;
- the ways to achieve the goals of state policy in the military, defense and military construction;
- the resource provision of defense needs;
- a perspective model of the organization of defense, the Armed Forces of Ukraine and other components of the defense forces in terms of certain tasks of state defense, strategy and criteria for achieving joint defense capabilities;
- probable scenarios for the use of security and defense forces to perform state defense tasks with the distribution of responsibilities of the components of the security and defense sector for the organization of Ukraine's defense, protection of its sovereignty, territorial integrity and inviolability;
- the risk management in the field of military security.

The Military Security Strategy of Ukraine is the basis for the development of the Strategic Defense Bulletin of Ukraine and other program documents for the development of the defense forces.

The preparation of long-term planning documents should be preceded by a comprehensive review of the security and defense sector. Based on the results of the review and taking into account the forecast financial indicators approved by the Cabinet of Ministers of Ukraine, the Strategic Bulletin of the Security and Defense Sector of Ukraine is being prepared. The bulletin has approved by the decision of the National Security and Defense Council of Ukraine and approved by the President of Ukraine based on the results of a comprehensive review. The procedure for conducting a comprehensive review and the basic requirements for it must be clearly regulated. So areas for improvement of the state system of strategic planning of national security of Ukraine are:

- the constitutional and legal support - with the leading participation of constitutional state bodies;
- the constitutional and legal mechanism for the role of state bodies and special services in the organization of the national security system, taking into account modern challenges and threats;
- the parliamentary and public control over their activities.

The state is the main subject of state national security policy. In world practice, the following models of strategic planning have distinguished:

- American (USA, Canada);
- European (Great Britain, France, Germany, Sweden, etc.);
- Asian (Japan, Republic of Korea, Singapore).

Chinese, Indian and Vietnamese models have singled out.

For example, the US National Security Strategy is an intelligent product that defines a set of interrelated ideas in the field of trend management, real and predictable, to protect the enduring interests of society and the state (Lake, 2018).

At the state level, the strategic planning in the United States is a tool for strategic goal-setting and coordination of all participants in strategic planning at the stages of preparation and implementation of certain political, military and other decisions. In this sense, strategic planning affects to a greater extent the power components, covering primarily the military and international spheres. Other aspects of the life of the state and society, affecting the development of the economy, social sphere, science and technology, were not covered in official conceptual and doctrinal documents of the United States (Krasnobaev et al., 2019; Kuznetsov et al., 2019, 2020).

The systemic approach was most clearly manifested in the version of the National Security Strategy of the United States 2017 (the National Security Strategy of the United States of America, 2017), which for the first time included among the national interests:

- the promoting American prosperity;
- the support for the domestic production sector;
- the maintaining a reliable defense-industrial base;
- the creation of stable supply chains;
- the modernization of the American economy, technological leadership and protection of intellectual property, restoration of American economic power and confidence in the US economic model;
- achieving energy dominance, the central position of the United States in the global energy system as a leading producer, consumer and innovator in the energy sector.

A similar approach to national security can be traced in the latest editions of the national security strategies of Switzerland (2016 and 2010) and Turkey (Lake, 2018).

Thus, the current trend in the development of political theory is to ensure national security, which aligns them with the issues of sustainable economic development and maintenance of social stability.
Conclusion

This study examines the main aspects improvement of the state system of strategic planning of national security of Ukraine. It has proved that the basis ensuring national security must rely on the principle of systematization, which means that the security and defense sector of Ukraine has considered as a single object of forecasting and planning. The studies have shown that the system of National security is a three-tier hierarchical system. The top level of the national security hierarchy is responsible for the strategic level of government. The second level contains a set of intermediate Centers Municipal government - regional (territorial level) security. The third level - controlled active elements. That is, the structure of subordination in the considered system of national security has the form of a tree.

The analysis found that on the process of implementation of state strategic planning documents has influenced by a set of factors: political, resource, information, organizational, etc. Therefore, the process of implementation of the National Security Strategy should be under constant control by the National Security and Defense Council of Ukraine, the Cabinet of Ministers of Ukraine, and other authorized state authorities. A significant obstacle is the insufficient level of coordination of the participation of the relevant branches of government in the development and implementation of strategic documents. Solving such problems requires, in particular, the development and amendment of the Law of Ukraine "On National Security of Ukraine" to improve strategic planning. It has proposed to introduce methodological seminars at the initial stages of work in the practice of developing strategic documents in the field of national security.

According to the results of the process of development of strategic documents in the field of national security of Ukraine, it has established that insufficient attention is paid to the analysis of the security situation in the relevant field, risk assessment, forecasting, threat identification and vulnerability detection. The strategic analysis in the field of national security, strategic security and defense management needs further development. The priorities should be implemented through the implementation of key tasks, such as the creation of a comprehensive strategic analysis of military threats to Ukraine's national security, coordination of intelligence activities, development of joint intelligence capabilities of the defense forces to obtain complete and reliable warning information for timely decisions guaranteeing the military security of the state. Another task is to ensure the formation and implementation of effective state policy in the military sphere, defense and military construction, implementation of common goals, priorities and objectives of the Strategy, Strategic Defense Bulletin of Ukraine, the programs and plans of the Cabinet of Ministers of Ukraine. In Ukraine, it is advisable to create a system of state strategic forecasting and planning, which will cover the entire sphere of state activity, will be based on the model of the future security environment and will meet the national interests of the state.

To solve this problem, the Cabinet of Ministers of Ukraine, the Office of the National Security and the Defense Council of Ukraine should pay more attention to the organization of broad interagency cooperation, which involves the active involvement of scientific
institutions, think tanks, civil society and events. democratic civilian control at all stages of strategic planning.

**Conflict of interest**
The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely witnessed by the authors.

**Funding**
The author(s) received no financial support for the research, authorship, and/or publication of this article.

**References**


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**Bibliographic information of this paper for citing:**


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