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RESULTS OF FACTOR RANKING AFFECTING THE INTELLIGENCE SUPPORT OF THE FORMATIONS OF THE NATIONAL GUARD OF UKRAINE

The factors influencing the intelligence support of the formations of the National Guard of Ukraine and their interaction within the Defense and Security Forces of Ukraine and modern trends in the implementation of information technologies, have been systematized. A three-level classification of factors is proposed: macrofactors, mesofactors, and microfactors. Each group comprises a list of influential factors identified using expert evaluation method and ranked using a priori ranking method and Excel software. The weighted sum method of expert assessments was employed to ascertain the influence of 30 factors on the intelligence support of the formations of the National Guard of Ukraine.

Keywords: *intelligence support, factor ranking, expert evaluation method, a priori ranking method, macrofactors, mesofactors, microfactors, situational awareness, artificial intelligence, influence.*

Statement of the problem. The National Guard of Ukraine (NGU) plays a key role in the national security and defense system of Ukraine. Its activities are based on the principles of the rule of law, legality, the protection of human rights and freedoms, political neutrality, and openness to democratic civilian oversight.

The main challenge for the NGU lies in its dual purpose, which necessitates the execution of a broad spectrum of tasks, encompassing both military and law enforcement functions. Military duties include participation in repelling armed aggression, defending the state, carrying out territorial defense tasks, and engaging in combat operations. Law enforcement functions encompass the protection of the constitutional order, maintenance of public order and safety (particularly during mass events), guarding critical state facilities and infrastructure, participation in counterterrorism operations, combating organized crime and illegal armed formations, as well as contributing to the enforcement of the legal regime of martial law.

This dual functionality imposes unique and complex requirements on the intelligence support (IS) system of the NGU. Unlike purely military or purely police structures, NGU intelligence must be capable of collecting, analyzing, and delivering information relevant to fundamentally different operational scenarios. The intelligence needs for planning and conducting combat operations against an organized military enemy (e.g., identifying positions, armament, intentions of enemy units) differ significantly from those required for maintaining public order during peaceful assemblies (e.g., crowd monitoring, identification of organizers and potential provocateurs, assessment of public sentiment) or for combating criminal groups. This dichotomy creates a considerable burden on intelligence agencies (IAs) requiring operational flexibility, multi-domain training of personnel, adaptive work methodologies, and the ability to efficiently allocate limited resources among various operational priorities. Furthermore, the legal frameworks and methods applicable to intelligence operations in wartime differ significantly from those used in law enforcement contexts– particularly when such operations involve the state's own citizens.

The experience gained from deploying intelligence forces and assets during the full-scale invasion by the russian federation underscores the necessity of changing approaches to the functioning of intelligence (military) bodies (I(M)Bs), the scope (number) of tasks assigned to them, and optimizing their organizational and staffing structure in accordance with these tasks. This will enhance the capabilities of IAs and IS as a whole. The main objectives of such changes are:

providing consumers with intelligence information (II), optimizing the execution of intelligence tasks, reducing personnel losses, increasing the level of intelligence capabilities of IAs, and achieving continuity in performing intelligence tasks.

A critical step in enhancing the effectiveness of IS for NGU formations is identifying the factors that influence this support. In many cases, the number of these factors can be substantial. For the sake of assessing their significance, it is necessary to group them. This issue must be addressed during the process of developing a method for assessing the IS capabilities of NGU formations while performing state security tasks.

Analysis of recent research and publications. The issue of assessing and ranking factors influencing the functioning of military systems has been addressed by researchers in scientific works [2–11].

The paper [2] presents the results of ranking factors that affect the composition of a troop grouping during its formation for repelling aggression, obtained using the expert evaluation method. The proposed factors were categorized into groups: military-political, strategic (operational-strategic), technical, etc. Study [3] identified groups of factors, along with an assessment of their significance, that influence the composition and strength of NGU groupings created for public safety tasks, defining them for each specific task type (social, natural, man-caused). The authors of the work [4] analyzed and determined a set of factors affecting the degree of protection of critical state facilities and ranked them by impact. These factors were divided into macrofactors, mesofactors, and microfactors.

Article [5] reveals the influence of various factors that may complicate the operational situation due to interethnic tensions in Crimea. Work [6] identifies a set of factors that influence the choice of model for the use of border guard forces and resources as part of the defence forces during the repulsion of an armed invasion, as well as their systematisation, analysis and ranking.

According to the analysis of available sources of information on the research problem and taking into account personal experience, the authors of article [7] substantiate the key factors negatively affecting the effectiveness of operational and service activities aimed at countering enemy sabotage and reconnaissance groups along state border sections with an aggravated military-political situation. Article [8] provides recommendations for the systematization of factors that influence the effectiveness of intelligence support for operational troop groupings during operations, based on the analysis of experience gained in the russian-ukrainian war. It also proposes approaches to collecting intelligence information from open sources in the interests of providing intelligence support to troop groupings in operations.

The study [9] investigates the most common factors contributing to the development of addictive behavior in biological, sociological, and psychological contexts. It describes typical mechanisms observed in individuals prone to chemical forms of addiction, outlines the basic stages of addiction formation among military personnel, and highlights the negative consequences of psychoactive substance use and its impact on the surrounding environment. Researchers in [10] identify operational environment factors that will affect the functioning of the National Guard of Ukraine formations during their participation in the response to a man-made disaster at a hydraulic facility.

The author [11] analyzes admission campaigns to higher education institutions in Ukraine and the possible reasons for these trends, as well as identified factors influencing candidates' choices to pursue military education.

Most publications focus on identifying factors relevant to military issues. However, the problem of determining and ranking factors that influence the intelligence support (IS) of NGU formations has remained underexplored. These factors are crucial for solving a wide range of intelligence tasks during the execution of state security tasks.

The purpose of the article is to identify and classify the factors that influence the effectiveness of intelligence support for the formations of the National Guard of Ukraine, based on an analysis of the experience gained during the russian-ukrainian war.

Summary of the main material. In a broad sense, a factor is defined as an agent, condition, circumstance, or variable that is presumed to influence the effectiveness of intelligence support for formations of the National Guard of Ukraine. The identification of such factors is typically accomplished through the utilisation of the expert evaluation method.

To clarify the core concept used in this study. In article [8], the authors define intelligence support as a set of measures and actions for obtaining,

processing, and delivering intelligence information (II) to troop groupings of the Defense Forces of Ukraine during the preparation and conduct of military (combat) operations in fulfilling state defense tasks.

Intelligence support for the National Guard of Ukraine is the process of gathering, analyzing, and disseminating intelligence information to consumers, which is carried out by specially authorised bodies and units of the NGU, and receiving such information from other bodies of the Ukrainian intelligence community for the preparation and conduct of independent and joint operations (combat operations) during special periods and special operations in peacetime.

Drawing on operational experience from organizing and implementing intelligence support (IS) for the Armed Forces of Ukraine during the full-scale invasion by the russian federation, the following factors influencing IS have been identified:

– active use of electronic warfare by the enemy;

– creation by the adversary of a vast number of fake accounts on social media platforms;

– active counterintelligence efforts by the enemy, including the spread of disinformation;

– terrain and weather conditions;

– the density of engineered barriers established along the line of contact;

– the adversary's possession of unmanned aerial vehicle equipped with thermal imaging cameras and analytical software;

– high density of the enemy's integrated surveillance systems.

The analysis of accumulated experience enables an expansion of the list of factors and the identification of their interrelationships within a changing external environment. These factors are shaped by the content of the process itself, its interaction with both external and internal environments, and by the extent to which the characteristics of these environments influence its development and outcomes. In particular, the changes in the external environment caused by the war have provided the basis for identifying additional factors, which are examined in detail in this study to gain a deeper understanding of how crisis conditions affect the dynamics of the process.

Using the expert evaluation method – which is based on collecting and processing data obtained through surveys of specialists in the relevant field – a set of factors influencing the effectiveness of intelligence support (IS) for NGU formations was identified; however, the degree of their impact was not determined.

One method enabling the selection of significant factors is the a priori ranking method (APR). The method is based on ranking factors in descending order of their contribution to the final result. The contribution is assessed by the rank assigned to a specific factor during the ranking of all factors, taking into account their presumed influence on the optimization parameter [3].

The procedure for ranking factors using the APR, as presented in [3], is as follows.

1. A survey form (questionnaire) that lists the factors influencing the intelligence support (IS) of NGU formations is created.

2. Experts individually evaluate the proposed factors using ranks, which results in the factors being arranged in descending order of their influence on the research object.

3. The evaluation results are processed in the following sequence:

– calculate the sum of ranks Δ_k of all experts m for each factor k:

$$\Delta_k = \sum_1^m a_{km};$$

– calculate the average sum of ranks $\bar{\Delta}$:

$$\bar{\Delta} = \frac{\sum_1^k \Delta_k}{k};$$

– calculate the deviation of each factor's rank sum Δ_K^I from the average sum of ranks and the squared deviation $(\Delta_K^I)^2$:

$$\Delta_K^I = \Delta_k - \bar{\Delta};$$

– assess the degree of expert opinion consistency using Kendall's coefficient of concordance W:

$$W = \frac{12 * S}{m^2 * (k^2 - k)},$$

$$S = \sum_1^k (\Delta_i)^2,$$

where k is the number of factors; m is the number of experts; S is the sum of squared deviations for all factors [3].

The coefficient of concordance can vary from 0 to 1. If it differs significantly from zero (W≥0.5), then it's considered that there is certain consistency among the expert opinions. Consequently, the

obtained results can be reasonably accounted for when identifying the most influential factors and excluding those with an insignificant impact. The weight of the factor indicator q_k is determined by the formula:

$$q_k = \frac{2(k - M + 1)}{k(k+1)},$$

where k is the number of factors; M is the factor's rank [3].

To visually illustrate the level of significance, an a priori rank diagram can also be constructed (Figure 1). When plotting the diagram, factors are placed on the abscissa axis in ascending order of their rank sums, while the ordinate axis reflects the rank sums [3].

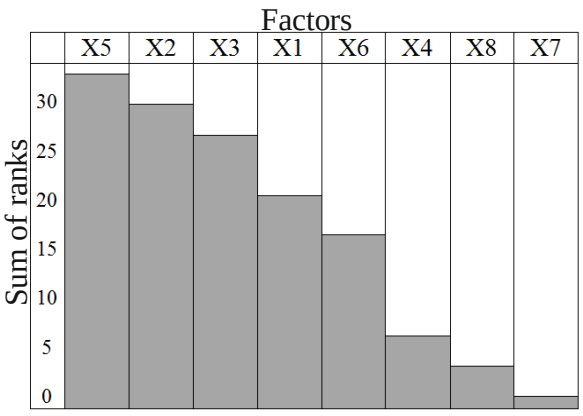

Figure 1 – A priori ranking diagram

The rank diagram helps identify the most influential factors and disregard those with insignificant impact. If the distribution of factor influence is uniform or non-uniformly but monotonically decreasing (Fig. 2*a*), it means that all factors must be considered in the future organization of NGU intelligence support. In the case of a rapid exponential decrease in factor influence (Fig. 2*b*), some factors can be disregarded (excluded). For this, the expert method determines a threshold *П*, below which all factors with an influence magnitude less than the established threshold are not considered. Alternatively, this threshold can divide them into two groups: essential factors that must be used when preparing a decision, and additional factors whose inclusion will enhance the decision's justification [3].

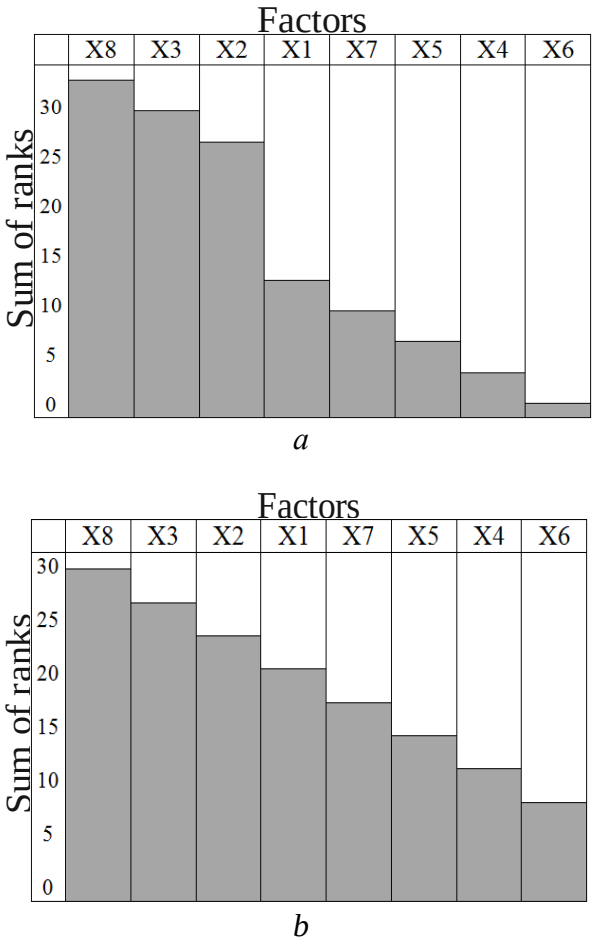

Figure 2 – Rank diagram

The present procedure was applied with the objective of achieving the aims of this publication. The evaluation of the factors involved was conducted by lecturers and researchers from the following institutions: the National Academy of the NGU, the Military Academy (Odesa), the National Defense University of Ukraine, and the Kyiv Institute of the NGU. In addition, the evaluation involved heads and officers of the (I(M)Bs) MD and NGU formations. The experts in question possessed approximately equal experience and knowledge in the field under investigation.

Classification makes it possible to determine the impact of each factor separately, thereby eliminating the need to consider them all together. The general principle of classification is to group factors according to their sphere of influence [4].

This classification is based on the levels at which the factors influencing the effectiveness of NGU formations' IS occur:

– *macrofactors* – factors originating from the national and international environment, at the state level;

– *mesofactors* – factors related to the interaction of the NGU with its operational environment and other structures;

– *microfactors* – factors that are internal to the intelligence bodies and formations of the NGU.

According to the above classification, the following macrofactors can be identified:

1) the geopolitical and security situation around Ukraine (armed conflicts and escalations between neighboring states; regional instability including military threats and hybrid warfare);

2) regulatory and legal framework (laws defining powers and limitations, and the determination of the NGU legal status as an intelligence entity, which influences operational methods);

3) national economic conditions and resource allocation among Ukraine's security and defense forces (the overall funding of the security sector directly impacts the resources available for the NGU development;

4) technological development and availability of technology (national capacity and access to imports affect the technical equipment of intelligence agencies);

5) international cooperation and partnership (access to information, training, and technology from partners);

6) national information environment and societal factors (disinformation, trust in the NGU, polarization affect OSINT, HUMINT and work during mass events);

7) political stability in the country (influences decision-making processes and the effectiveness of strategic planning);

8) social tension and internal security (level of protest movements, separatism, radicalism);

9) information and psychological operations (IPO) of the enemy (influence on decision-making of external partners and morale of our citizens);

10) demographic situation (human resources for analytical and technical work).

Mesofactors include:

1) establishing coordination and information exchange among the Security and Defense Forces of Ukraine (SDFU), including the degree of coordination with the Armed Forces of Ukraine (AFU), Security Service of Ukraine (SSU), National Police of Ukraine (NPU), State Border Guard Service (SBGS), Main Directorate of Intelligence of the Ministry of Defense of Ukraine (MID), and others, which determines the number of sources providing information and affects its completeness and relevance;

2) structure of management and tasking process [structure and composition of the J2 (G2) and correctness of tasking from the highest IMB, corps command to units];

3) experience of the command staff of intelligence reconnaissance units, including professional experience (both positive and negative) in various positions at different levels that are directly related to intelligence or command, as well as the competence and leadership qualities of intelligence reconnaissance commanders;

4) resource allocation within the NGU structure (priority of intelligence funding compared to other NGU needs);

5) use of OSINT (active use of open sources and information from citizens, which influences the possibility of obtaining intelligence and the effectiveness of intelligence activities);

6) availability and use of information-analytical software, means for real-time data processing [the ability of the system to process and analyze large data streams without delays and to predict the development of events using software, artificial intelligence (AI) for prompt decision-making];

7) needs and requirements of consumers regarding the volume, content and quality of II [needs and requirements of commanders (commanders) to the required quality of II, its volume and content, level of detail of information about intelligence objects];

8) types of enemy combat activity and counterintelligence operations (intensity of the enemy's combat actions and efforts to disrupt NGU intelligence activities);

9) use of situational awareness systems with continuous information exchange with adjacent security and defense structures (SDS);

10) availability of reserves.

Microfactors include:

1) selection, training and specialization of the IA personnel (preparedness of personnel, interchangeability, professional development);

2) experience in processing and delivering intelligence to consumers (ability to process, analyze, verify, and prepare intelligence materials, data, and reports);

3) logistical and technical support, availability and condition of intelligence equipment (provision of essential equipment and its readiness);

4) organizational and staffing structure of the IA (optimization of the IA structure that meets

current requirements and methods of conducting intelligence);

5) moral and psychological state, motivation (impact on the effectiveness);

6) staff turnover (constant movement of personnel from one unit to another, or between positions within a unit, due to organizational and staffing changes);

7) operational security (OPSEC) and counterintelligence measures (protection of sources, methods, information from leakage and penetration by the enemy; reliability and security of communications for the transmission of II, data and reports);

8) adaptability and ability to respond quickly to changes (the ability to respond promptly to changes in the situation, the enemy's methods and the conduct of hostilities, the accumulation of experience, and the introduction of innovative technologies);

9) availability of time for preparation and conduct of intelligence operations (the availability of time determines the deliberateness of decisions, the detail of planning and the effectiveness of the distribution of IA by tasks, and the availability of a reserve);

10) reception of reinforcements lacking the necessary military occupational specialties (MOS): This refers to the failure to obtain reserved personnel who possessed relevant MOS during prior service (e.g., intelligence scout, BMP mechanic-driver, BTR driver, gunner, BRM-1K mechanic-driver, radar operator).

The next stage of the study involves ranking the factors to assess their significance, using the Excel environment and the sequence outlined in this article. The results of ranking macrofactors (Figure 3), mesofactors (Figure 4), and microfactors (Figure 5) are presented using a priori rank diagrams.

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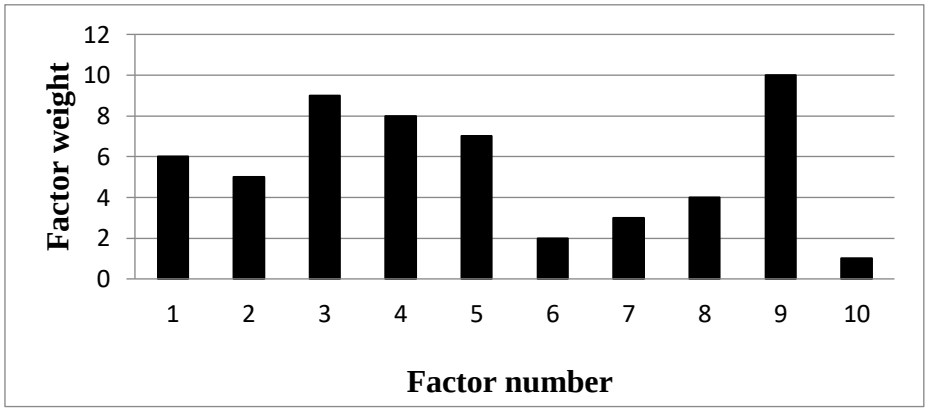

Figure 3 – Results of macrofactor ranking

The application of scientific methods for the purpose of factor ranking has demonstrated that the macro factors exhibiting the greatest significance are as follows: 9 – enemy IPOs; 3 – national economic conditions and resource allocation; 4 – technological development and availability of technology. Conversely, the least significant factors among those listed are: 6 – national information environment and societal factors; 7 – political stability in the country; 10 – demographic situation.

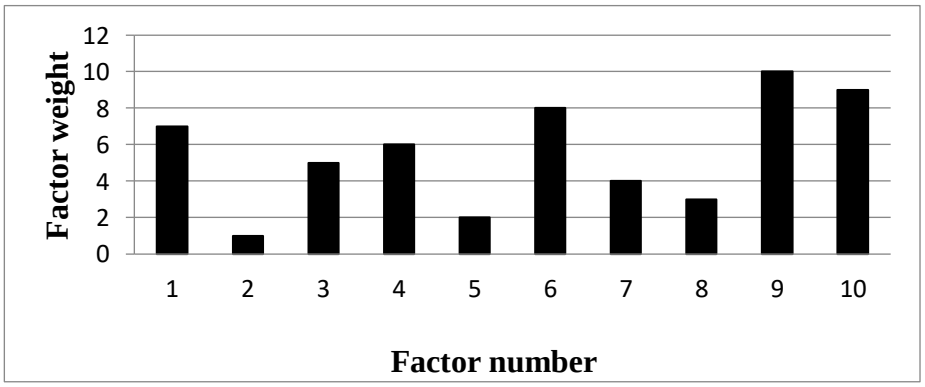

Figure 4 – Results of mesofactor ranking

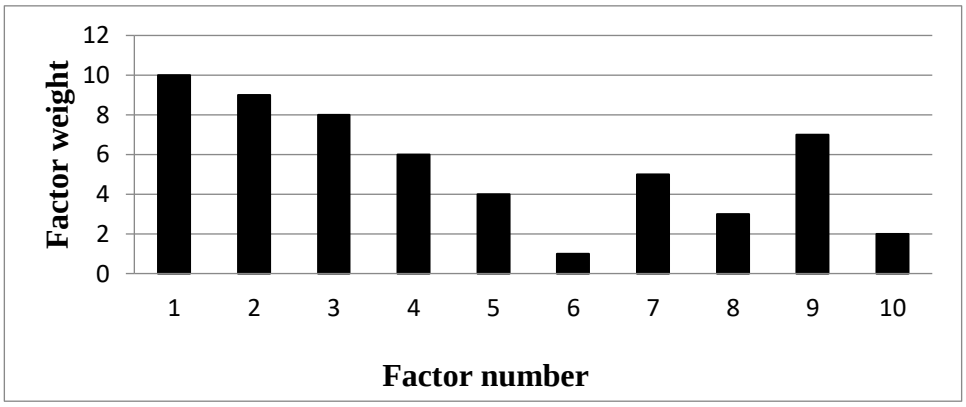

Figure 5 – Results of microfactor ranking

The mesofactors with the greatest significance are: 9 – use of situational awareness systems with information exchange; 10 – availability of a reserve; 6 – availability and use of information-analytical support. The least significant among those listed are: 2 – management structure and the tasking process; 5 – use of OSINT.

The microfactors with the highest significance are: 1 – selection, training, and specialization of intelligence personnel; 2 – experience in processing and delivering intelligence information to the consumer; 3 – material and technical support of intelligence bodies. The factors with the least significance are: 6 – staff turnover; 8 – adaptability and ability to react quickly to changes.

Utilizing the experience gained in organizing and implementing intelligence support and applying the expert assessment method, the subjects and objects of influence, along with the magnitude of influence of each factor on the IS of NGU formations, were determined (Table 1). The level of influence (low – from 0 to 0.33; medium – from 0.34 to 0.66; high – from 0.67 to 1) for the factors was established using the weighted sum of expert evaluations. The weight of the experts was determined by their experience in the field of IS.

Table 1 – Level of influence on intelligence support of the National Guard of Ukraine

Level	Factor	Subject of influence	Object of Influence	Level of influence on NGU IS
Macrolevel	International situation around Ukraine	Foreign states, international organizations	Situational awareness, planning of NGU actions	High (0.9)
	Regulatory and legal framework	Legislative and executive bodies of Ukraine	NGU powers, methods, and scope of tasks	High (0.8)
	National economic conditions and resource allocation	Cabinet of Ministers, Ministry of Finance, NSDC	Material and technical support for NGU intelligence	Medium (0,6)
	Technological development and availability of technologies	Government, IT companies, partners	Technical capabilities of NGU intelligence (SIGINT, GEOINT, etc.)	High (0,75)
	International cooperation and partnership	NATO, EU, USA, other partners	Access to technologies, information, training	Medium (0,65)
	National information environment and societal factors	Public, media, social networks	Work with OSINT, HUMINT, operational situation	Medium (0,55)
	Political stability in the country	Authorities, political elites	Quality of governance, strategic planning	Medium (0,5)
	Social tension and internal security	Population, radical groups, provocateurs	Scope and priority of intelligence tasks	Medium (0,58)

Continuation of Table 1

Level	Factor	Subject of influence	Object of Influence	Level of influence on NGU IS
Macrolevel	Enemy information and psychological operations	Russia, enemy structures	Moral and psychological state, errors in analysis	High (0.7)
	Demographic situation	Government, society	Availability of personnel for analytical and technical work	Medium (0.45)
Mesolevel	Establishing coordination and information sharing among the Security and Defense Forces of Ukraine	AFU, SSU, NPU, SBGS, DIU, headquarters	Scope, accuracy, completeness of intelligence information	High (0.85)
	Structure of management and tasking process	NGU Command, AFU General Staff, J2/G2	Clarity of tasks, coordination of intelligence activities	High (0.8)
	Experience of intelligence command staff	Intelligence chiefs, unit commanders	Quality of management, professionalism of intelligence	High (075)
	Resource allocation within the NGU structure	NGU Command, Ministry of Defense of Ukraine (MoD), NSDC	Technical equipment, human resources	Medium (0.6)
	Use of OSINT	Analysts, operators, public	Expansion of data sources, situational awareness	Medium (0.55)
	Availability and use of information and analytical support	Technical units, IT contractors, analysts	Speed and accuracy of data processing	High (078)
	Needs and requirements of intelligence information consumers	Commanders, operational headquarters, NGU leadership	Content, depth, timeliness of information	Medium (0.65)
	Types of enemy combat activity and its counterintelligence activities	Enemy (rf, sabotage and reconnaissance group, IPO), enemy intelligence	Methods and risks of NGU intelligence operations	High (0.82)
	Use of situational awareness systems with information exchange	NGU, AFU, SSU, information centers	Real-time picture of the operational environment	High (0.77)
	Availability of reserves	NGU command, personnel services	Ability to sustain continuous intelligence operations	Medium (0.58)
Microlevel	Selection, training and specialisation of intelligence personnel	Training institutions (centers), NGU Command	Competence, professionalism, and readiness of personnel	High (0.85)
	Experience in processing and delivering intelligence information to the consumer	Analytical units, intelligence command	Accuracy, effectiveness of processing and transmission of intelligence data	High (0.8)
	Material and technical support of intelligence agencies	NGU command, MoD Ukraine, supply structures	Capability to accomplish tasks using modern equipment	High (0.75)
	Organizational and staffing structure of intelligence agencies	General Staff, Main Directorate of the NGU, NGU Command	Optimal structure, conformity to combat conditions	Medium (0.6)
	Moral and psychological state, motivation	Unit commanders, personnel services, military environment	Resistance to stress, morale, performance	Medium (0.58)
	Staff turnover	Personnel services, NGU command	Team stability, retention of experience, work efficiency	Medium (0.5)
	Operational security (OPSEC) and counterintelligence measures	Security services, command, communications units	Protection of sources and methods, secure information transmission	High (0.82)

End of Table 1

Level	Factor	Subject of influence	Object of Influence	Level of influence on NGU IS
Microlevel	Adaptability and ability to respond to changes	Intelligence commanders, analysts, IT units	Flexibility, innovation, decision-making effectiveness	High (0.78)
	Availability of time for intelligence preparation and execution	Commanders, staff officers	Reasonableness of planning, accuracy of actions	Medium (0.6)
	Receipt of reserves lacking the necessary MOS	Personnel agencies, reservists, Territorial Recruitment Centers (TCCs)	Personnel quality, unit functionality	Medium (0.52)

Taking into account the experience of intelligence organization and support, 20 of the most influential factors were consolidated and ranked using Excel software and the APR method. These factors included:

– international situation around Ukraine;
– regulatory framework;
– national economic conditions and resource allocation;
– technological development and availability of technology;
– international cooperation and partnership;
– enemy information and psychological operations;
– establishing interaction and information exchange among the Security and Defense Forces of Ukraine;
– availability of reserves;
– experience of the command staff, the I(M)Bs and intelligence agencies;
– resource allocation within the NGU structure;
– availability and use of information and analytical support;
– needs and requirements of intelligence information consumers;
– types of enemy combat activity and its counterintelligence activities;
– use of situational awareness systems with information exchange;
– selection, training and specialisation of intelligence personnel;
– experience in processing and delivering intelligence information to the consumer;
– material and technical support of intelligence agencies;
– organizational and staffing structure of intelligence agencies;
– operational security (OPSEC) and counterintelligence measures;
– availability of time for intelligence preparation and execution.

The APR method results of the most influential factors (based on expert evaluation) (Figure 6) and the determination of weight coefficients (Table 2) are presented below.

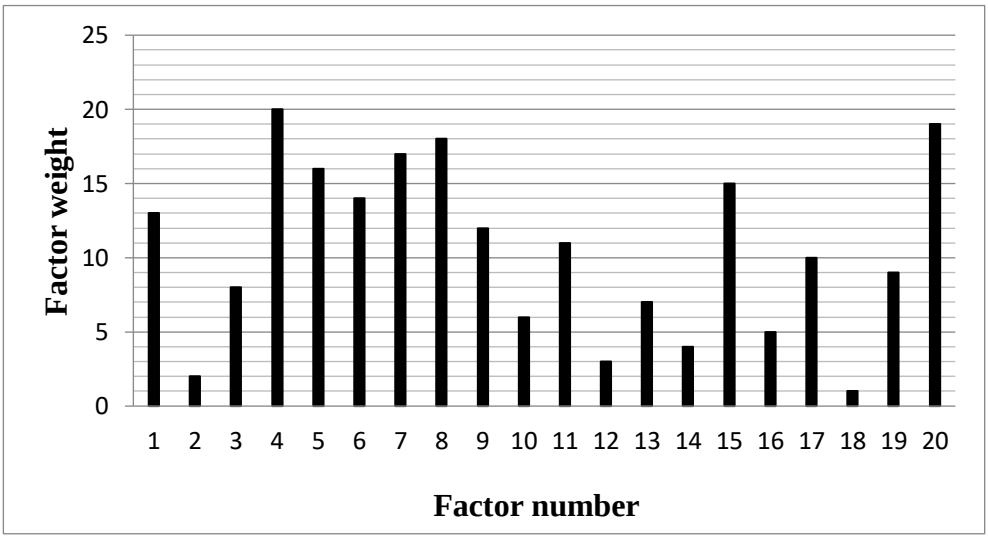

Figure 6 – Results of the ranking of the most influential factors

Table 2 – Results of Ranking the Most Influential Factors

Factor	Conditional expert identifiers			Sum of ranks	Average rank sum	Rank sum deviation	Squared deviation	Rank	Indicator weight	Coefficient of concordance
	1	n	8							
	Ranking evaluations a_{km}			Δ_k	$\bar{\Delta}$	Δ'_k	$(\Delta'k)^2$	M	q_k	W
1	2	3	4	5	6	7	8	9	10	11
1. International situation around Ukraine	13	13	13	108	84	24	576	8	0.06	
2. Regulatory framework	2	3	2	18	84	–66	4356	19	0.01	
3. National economic conditions and resource allocation	8	2	8	56	84	–28	784	13	0.04	
4. Technological development and availability of technology	20	20	20	156	84	72	5184	1	0.1	
5. International cooperation and partnership	16	16	16	122	84	38	1444	5	0.08	
6. Enemy information and psychological operations	14	15	14	109	84	25	625	7	0.07	
7. Establishing interaction and information exchange among the Security and Defense Forces of Ukraine	17	18	17	132	84	48	2304	4	0.08	
8. Availability of reserves	19	17	18	142	84	58	3364	3	0.09	
9. Experience of the command staff, the I(M)Bs and intelligence agencies	12	9	12	105	84	21	441	9	0.06	
10. Resource allocation within the NGU structure	6	7	6	50	84	–34	1156	15	0.03	
11. Availability and use of information and analytical support	11	11	11	89	84	5	25	10	0.05	
12. Needs and requirements of intelligence information consumers	3	4	3	25	84	–59	3481	18	0.02	

End of Table 2

1	2	3	4	5	6	7	8	9	10	11
13. Types of enemy combat activity and its counterintelligence activities	7	8	7	53	84	–31	961	14	0.03	
14. Use of situational awareness systems with information exchange	4	5	4	27	84	–57	3249	17	0.02	
15. Selection, training and specialisation of intelligence personnel	15	14	15	121	84	37	1369	6	0.07	
16. Experience in processing and delivering intelligence information to the consumer	5	6	5	45	84	–39	1521	16	0.02	
17. Material and technical support of intelligence agencies	9	10	9	82	84	–2	4	11	0.05	
18. Organizational and staffing structure of intelligence agencies	1	1	1	16	84	–68	4624	20	0.01	
19. Operational security (OPSEC) and counterintelligence measures	10	12	10	81	84	–3	9	12	0.04	
20. Availability of time for intelligence preparation and execution	18	19	19	143	84	59	3481	2	0.09	
Total	210	210	210	1680			38958	210	1	0.9

The ranking of these factors (Figure 6) revealed that the most significant are: 4 – technological development and availability of technology; 20 – availability of time for intelligence preparation and execution; 8 – availability of a reserve. The least significant are: 18 – organizational and staffing structure of intelligence agencies; 2 – regulatory and legal framework; 12 – needs and requirements of intelligence information consumers**.**

Taking into account the above, IS can be characterized as a complex, weakly structured system that reflects the number, interaction, and interconnections of heterogeneous factors. The large number of IS factors and their interrelations create a significant volume of information, which makes it difficult for a human to fully process and make rational, informed decisions. To assist qualified analysts, various software tools have been introduced to reduce the time required for processing II, minimize the likelihood of duplication, and avoid redundant data transmission ("spamming").

Advanced countries such as China, the United Kingdom, and the United States are actively advancing the implementation of artificial intelligence (AI). Ukraine – and particularly the National Guard of Ukraine (NGU), as a component of the Security and Defence Forces – must not remain on the sidelines. For the further development of intelligence support within the NGU, the following definition of AI is proposed. Artificial intelligence in the intelligence support of the formations of the National Guard of Ukraine is defined as a set of intelligent digital technologies capable of automatically processing large volumes of information, detecting threats, forecasting the development of the operational environment, and making decisions with minimal human intervention. These systems operate continuously, possess self-learning capabilities, and improve during task execution, ensuring high adaptability to

changes in the combat environment. In the context of hybrid warfare, the implementation of AI in NGU intelligence units significantly enhances the effectiveness of collecting, processing, and utilizing intelligence information.

Conclusions

This study identified three groups of factors affecting the intelligence support of the National Guard of Ukraine and evaluated their significance using the a priori ranking method. A systematic approach was proposed for distinguishing the most influential factors.

The conducted analysis and ranking indicate that mesolevel factors exert the greatest influence on the intelligence support of the National Guard of Ukraine units. The most significant among them are technological development and accessibility, the availability of time for intelligence preparation and execution, the presence of reserves, and the use of situational awareness systems with information exchange.

Considering the specific features of the National Guard of Ukraine, a proposed definition of NGU intelligence support definition of artificial intelligence (AI) in NGU intelligence support has been developed. Based on the experience of employing intelligence forces and assets during the full-scale armed aggression, as well as on the practices of leading countries, a definition of artificial intelligence in the intelligence support of the National Guard of Ukraine formations is presented, aimed at further developing NGU intelligence support.

The results of this study can be used by officers of military intelligence management bodies of the National Guard of Ukraine in organizing intelligence support for National Guard of Ukraine formations.

The direction of further research is the development of a model for the intelligence support system of the National Guard of Ukraine.

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РЕЗУЛЬТАТИ РАНЖИРУВАННЯ ФАКТОРІВ, ЩО ВПЛИВАЮТЬ НА РОЗВІДУВАЛЬНЕ ЗАБЕЗПЕЧЕННЯ ФОРМУВАНЬ НАЦІОНАЛЬНОЇ ГВАРДІЇ УКРАЇНИ

Проведено систематизування факторів, що впливають на розвідувальне забезпечення формувань Національної гвардії України й взаємодію в межах Сил оборони та безпеки України, а також сучасні тенденції у сфері впровадження інформаційних технологій. Запропоновано трирівневу класифікацію факторів: макрофактори, мезофактори та мікрофактори. До кожної групи віднесено перелік впливових факторів, які визначено за допомогою методу експертних оцінок, встановлено місце серед них з використанням методу апріорного ранжирування. Методом зваженої суми оцінок експертів визначено вплив 30 факторів на розвідувальне забезпечення формувань Національної гвардії України. На основі експертного оцінювання було виділено 20 найзначущіших факторів, серед яких найвищу вагу отримали: технологічний розвиток і доступність технологій; наявність часу на підготовку до ведення розвідки та наявність резерву. Найменше значення мають організаційно-штатна структура органів розвідки, нормативно-правова база та потреби споживачів розвідувальної інформації.

Зазначено, що розвідувальне забезпечення формувань Національної гвардії України функціонує як складна слабо структурована система, в якій людський ресурс обмежений у здатності обробляти великі обсяги даних для прийняття оперативних рішень. У зв'язку з цим обґрунтовано доцільність упровадження штучного інтелекту у розвідувальну діяльність.

Запропоновано визначення розвідувального забезпечення Національної гвардії України та штучного інтелекту у контексті розвідувального забезпечення Національної гвардії України як комплексу

інтелектуальних цифрових технологій, здатних до автоматичного аналізу даних, виявлення загроз і прогнозування обстановки з мінімальним впливом людського фактора. Результати дослідження можуть бути використані посадовими особами органів (військового) управління розвідкою під час планування та організації розвідувального забезпечення.

Подальшим напрямом наукових пошуків запропоновано розроблення моделі системи розвідувального забезпечення Національної гвардії України.

Ключові слова: *розвідувальне забезпечення, ранжирування факторів, метод експертного оцінювання, метод апріорного ранжирування, макрофактори, мезофактори, мікрофактори, ситуаційна обізнаність, штучний інтелект, вплив.*

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