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Political and legal analysis of the mechanisms of providing Ukraine with resources of strategic importance in the context of increasing the national defence potential

Analiza polityczno-prawna mechanizmów zaopatrywanie Ukrainy w zasoby o znaczeniu strategicznym w kontekście zwiększania potencjału obronnego państwa

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Abstract. This study addresses the critical issue of enhancing Ukraine's defence capabilities through the efficient management of strategic resources amidst ongoing Russian aggression. The research aims to develop substantiated recommendations for optimizing the legal and political mechanisms that govern the provision of strategic resources to Ukraine. The study employs a formal legal method to analyze key national and international legal frameworks, including the Law of Ukraine "On the National Material Reserve" and the Code of Ukraine "On Subsoil," focusing on their efficacy in wartime conditions. Also, political analysis, comparative analysis, legislative review and document analysis were used. The research highlights the gaps in existing legislation, particularly in adapting to the needs of martial law and the complexities of interagency coordination. The findings reveal that while Ukraine has established an extensive legal framework for managing strategic resources, significant issues persist in areas such as transparency, interagency cooperation, and bureaucratization. The study advocates for legislative amendments to better suit wartime needs, the implementation of a unified monitoring system, and enhanced international cooperation, particularly with bodies like the UN and World Bank. The conclusions emphasize the importance of Ukraine's participation in international transparency initiatives and the need to align national legislation with EU standards. Overall, the thesis of this work is the development of substantiated recommendations for optimizing Ukraine's strategic resource management in the context of war, while the research niche focuses on the analysis of political and legal mechanisms that influence the state's defence capabilities.

Keywords: extraction stimulation; production stimulation; tax preferences; investment preferences; national guarantees

Abstrakt. Niniejsze badanie podejmuje kluczową kwestię wzmocnienia zdolności obronnych Ukrainy poprzez efektywne zarządzanie zasobami strategicznymi w obliczu trwającej rosyjskiej agresji. Celem badania jest opracowanie uzasadnionych rekomendacji dotyczących optymalizacji mechanizmów prawnych i politycznych, które regulują dostarczanie zasobów strategicznych Ukrainie. Badanie wykorzystuje formalną metodę prawną do analizy kluczowych krajowych i międzynarodowych ram prawnych, w tym Ustawy Ukrainy „O państwowych rezerwach materiałowych” i Kodeksu Ukrainy „O podłożu”, skupiając się na ich skuteczności w warunkach wojennych. Wykorzystano również analizę polityczną, analizę porównawczą, przegląd legislacyjny i analizę dokumentów. Badanie podkreśla luki w istniejących przepisach, w szczególności w zakresie dostosowywania się do potrzeb stanu wojennego i złożoności koordynacji międzyagencyjnej. Wyniki ujawniają, że podczas gdy Ukraina ustanowiła rozbudowane ramy prawne do zarządzania zasobami strategicznymi, nadal istnieją istotne problemy w takich obszarach, jak przejrzystość, współpraca międzyagencyjna i biurokratyzacja. Badanie opowiada się za zmianami w ustawodawstwie, aby lepiej dostosować się do potrzeb wojennych, wdrożeniem ujednoczonego systemu monitorowania i zacieśnieniem współpracy międzynarodowej, w szczególności z organami takimi jak ONZ i Bank Światowy. Wnioski podkreślają znaczenie udziału Ukrainy w międzynarodowych inicjatywach przejrzystości i potrzebę dostosowania ustawodawstwa krajowego do standardów UE. Zasadniczą tezą tej pracy jest opracowanie uzasadnionych rekomendacji dotyczących optymalizacji zarządzania zasobami strategicznymi Ukrainy w kontekście wojny, natomiast nisza badawcza koncentruje się na analizie mechanizmów politycznych i prawnych, które wpływają na zdolności obronne państwa.

Słowa kluczowe: stymulacja ekstrakcji; stymulacja produkcji; preferencje podatkowe; preferencje inwestycyjne; gwarancje państwowe

Introduction

In the context of the full-scale war with the Russian Federation, the provision of strategic resources to Ukraine is critical for enhancing its defence potential. Effective supply and distribution mechanisms are essential for resisting the aggressor and protecting territorial integrity (Orłowska, 2023). However, existing political and legal instruments require careful analysis and adaptation to wartime challenges, in line with international law norms. The research problem of this study is the inefficiency

and inflexibility of Ukraine's present political and legal systems for delivering strategic resources during wartime. Despite existing international accords and national legislation, considerable legal gaps and implementation challenges prevent timely responses to military demands (Zheng, 2023). The paper proposes that a complete political and legal analysis, with an emphasis on aligning Ukraine's resource delivery systems with international law, may provide practical recommendations to increase their efficiency and flexibility during times of war. The literature review indicates significant interest in the role of strategic resources in military conflicts, but existing studies do not fully explore the political and legal mechanisms for Ukraine's resource provision during wartime, considering international law.

The problem of providing Ukraine with resources of strategic importance in the context of enhancing the defence potential of the National remains insufficiently studied from the point of view of international law. D.Y. Blinov (2024), V. Shemet et al. (2023), T. Doronina and T. Pobocho (2023) studied various aspects of this issue, including the role of international cooperation in the defence industries, the importance of providing Ukraine with critical raw materials, the importance of human capital and energy policy, and the impact of military conflicts on stockpile management and infrastructure. They noted that in the context of armed confrontations, it is critical to ensure the reliable functioning of strategic resource management systems, their timely replenishment and protection from destruction or capture by the enemy. Various researchers have drawn attention to the links between food insecurity and violent conflict. For example, P. Žuk and P. Žuk (2022), T. Van de Graaf and B.K. Sovacool (2020), A.F. Jola-Sanchez and J.C. Serpa (2021) noted that food shortages and hunger can act as catalysts for social tensions and armed confrontations. At the same time, E. Boratyńska-Karpij and P. Engel (2023), T. Listou (2021) note that military conflicts often lead to the destruction of agricultural infrastructure, displacement of the population, and disruption of food supply channels, which exacerbates the problem of food insecurity. Researchers R.T. Baker (2020), B. Kemmerling et al. (2022) emphasized the need to take these interrelationships into account when formulating strategic resource provision policies and developing measures to improve the national defence capabilities.

Despite considerable scientific interest in strategic resource supply during military conflicts, existing studies lack exhaustive analysis of the political and legal mechanisms for supplying Ukraine with critical resources in wartime, considering international law. Thus, a comprehensive study is urgently needed to systematize and critically assess the legal instruments for supplying Ukraine with critical raw materials and other strategic resources amidst Russia's ongoing aggression. The purpose of the present study is to develop substantiated recommendations for improving the system of providing Ukraine with resources of strategic importance for strengthening the National defence capabilities in times of war on the basis of

a comprehensive political and legal analysis with due regard for international law. To achieve this goal, the following tasks should be solved:

1. To analyse the legal framework for providing Ukraine with strategic resources at the national and international levels.
2. To study the political aspects of the mechanisms of strategic resources supply and their impact on the defence potential of the national.
3. To develop recommendations for improving the political and legal mechanisms for providing Ukraine with resources of strategic importance, considering international law.

Materials and Methods

The formal legal method made it possible to analyse the content and legal force of certain legal acts regulating the provision of strategic resources, in particular, Law of Ukraine No. 51/97-VR “On the National Material Reserve” (1997), Code of Ukraine “On Subsoil” (1994), international treaties and agreements in the relevant area. Based on this method, the article reveals the specifics of legal regulation of the distribution and use of strategic resources, and identifies gaps and conflicts in legislation. The research used political analysis to evaluate the political factors that determine the delivery of strategic resources and its impact on national military capabilities. This inquiry focusses on inefficiencies and flexibility in existing wartime resource allocation methods.

The research was based on national and international legal acts regulating the provision of strategic resources, official data and reports of public authorities, statistical materials, and scientific publications of Ukrainian and foreign experts on the relevant issues, applying legislative review and document analysis. Among them, the Law of Ukraine No. 51/97-VR (1997) is of fundamental importance, laying down the legal framework for the management of strategic stocks of energy, food, medicine, and other critical resources. The Law of Ukraine “On National Security of Ukraine” (2018) also plays an important role, defining the principles of national policy in the field of strategic resources in the context of protecting national interests. Certain aspects of strategic resource management are reflected in the Code of Ukraine “On Subsoil” (1994), which regulates the use of strategically important minerals, Law of Ukraine No. 2665-III “On Oil and Gas” (2001), which defines the principles of the oil and gas industry, which is key to energy supply, and Law of Ukraine No. 2019-VIII “On Electricity Market” (2017), which aims to ensure reliable electricity supply, which is critical for the functioning of the economy and the defence sector.

The study compared Ukraine’s strategic resource management to international norms and practices, using examples from the United States and other international agreements such as the Extractive Industries Transparency Initiative. This research

emphasised the critical need to reform Ukraine's legal and political systems for managing strategic resources during times of conflict, particularly to improve flexibility and responsiveness to military demands. Ukraine may develop its defence capabilities and guarantee a more efficient and transparent allocation of essential resources by aligning national law with international norms and enhancing collaboration with foreign partners.

Results

Analysis of the legal framework for providing Ukraine with strategic resources

An analysis of the Ukrainian legal framework reveals the existence of several legislative acts aimed at regulating the issues of providing Ukraine with strategic resources. In particular, the Law of Ukraine No. 51/97-VR (1997) plays a fundamental role in this context, laying down the legal basis for the formation, placement, storage, use, replenishment, and refreshment of the national material reserve, which includes strategic stocks of energy, food, medicines, and other critical resources. For example, Law of Ukraine No. 2469-VIII (2018) in Article 1 defines the concept of "national interests of Ukraine", which include "vital interests of a person, society, and the state, the realization of which ensures the national sovereignty of Ukraine, its progressive democratic development, as well as safe living conditions and welfare of its citizens". Article 3 of the Law of Ukraine No. 2469-VIII (2018) defines "sustainable development of the national economy, civil society and the state to ensure the growth of the standard of living and quality of life of the population", as well as "Ukraine's integration into the European political, economic, security, legal space, and membership in the European Union and the North Atlantic Treaty Organization" as fundamental national interests of Ukraine.

Providing Ukraine with the strategic resources necessary to strengthen the country's defence potential is directly related to the realization of national interests in sustainable economic development and integration into the European security space (Karamyshev et al., 2024; Lim & Nam, 2023). After all, integration into European political and security structures requires maintaining Ukraine's defence capability at an appropriate level, which is impossible without reliable resource provision. At the same time, Law of Ukraine No. 2469-VIII (2018) stipulates that the national policy in the areas of national security and defence is aimed, in particular, at ensuring military, economic and other components of Ukraine's national security (Article 3). The powers of national bodies in this area include "determining the principles of military and military-technical policy in the field of defence" (Article 15), which also includes providing Ukraine with the necessary resources. At the same time, Law of Ukraine No. 2469-VIII (2018) does not detail specific mechanisms for providing Ukraine with resources of strategic importance. These mechanisms should be

developed and implemented by the state, including taking into account the norms of international law, in particular, in the framework of cooperation with other national and international security organizations (Horbach-Kudria & Kostyliiev, 2024).

The current legislation, in particular, the Law of Ukraine No. 51/97-VR (1997), although it provides for some decision-making procedures on the use of the national reserve resources, does not contain special provisions that would ensure the efficiency and flexibility of such procedures in wartime. The absence of such “accelerated” mechanisms for redistributing strategic resources in accordance with the urgent needs of defence can lead to excessive delays in the provision of resources to the troops and complicate the manoeuvring of resources between the military and civilian spheres, which is especially critical in a rapidly changing security situation. In addition, despite the fact that certain provisions are enshrined in the legislation to stimulate the development of Ukrainian production and extraction of strategic resources, their practical implementation remains insufficient. In particular, Article 10 of the Law of Ukraine No. 51/97-VR (1997) provides for the possibility of granting certain preferences to enterprises that supply material assets to the national reserve: “For the purpose of economic incentives for the supply and storage of material assets of the national reserve and the supply of material assets for operational needs, capital construction of the national reserve system, executors may, in conformity with the law, be granted income tax exemptions, targeted subsidies and grants, loans on favourable terms, foreign currency, customs and other privileges”.

Ukraine is a party to the Comprehensive Nuclear-Test-Ban Treaty (1996) and the Treaty on the Non-Proliferation of Nuclear Weapons (1968), which establish an international legal framework for the control of nuclear materials and technologies as a specific type of strategic resource. Ukraine has also joined the Extractive Industries Transparency Initiative (2023), which aims to increase transparency and accountability in the management of natural resources such as oil, gas, and minerals. In particular, Ukraine’s participation in the Comprehensive Nuclear-Test-Ban Treaty (1996) and the Treaty on the Non-Proliferation of Nuclear Weapons (1968) imposes international legal obligations on the state to control nuclear materials and technologies, which can be considered as a specific type of strategic resources. Although Ukraine has renounced nuclear weapons, the peaceful use of nuclear energy, namely, in the context of NPP operation, remains an important aspect of energy security and management of the state’s strategic resources. Ukraine’s compliance with the international non-proliferation and nuclear material control regimes is an important prerequisite for international cooperation in the peaceful use of nuclear energy and access to relevant resources and technologies (Portovaras et al., 2024). In turn, Ukraine’s accession to the EITI reflects the state’s recognition of the importance of compliance with international standards of transparency and accountability in the management of strategic resources, in particular, in the oil and gas industry and mining. Implementation of the EITI standards into national

legislation and management practices in these sectors contributes to increasing efficiency and reducing corruption risks in these strategically important sectors of the economy, which directly affects the state's resource security, especially in the context of military challenges and threats.

An important aspect of ensuring compliance of Ukraine's international treaties and agreements in the field of strategic resources supply is their consistency with *jus cogens* norms – peremptory norms of general international law that have the highest legal force and do not allow for deviations. According to Article 53 of the Vienna Convention on the Law of Treaties (1969), “a peremptory norm of general international law is a norm accepted and recognized by the international community of states as a whole as a norm from which no deviation is permitted”. Such norms include, in particular, the prohibition of aggression, genocide, slavery, racial discrimination, crimes against humanity, and the right of peoples to self-determination. Violation of these norms in the context of supplying strategic resources may occur, for example, in cases of such supplies to support aggression or occupation, facilitate the commission of war crimes or crimes against humanity, violation of the arms embargo (Kisiliuk et al., 2024). For example, the illegal export of oil and oil products from Iraq during the period of UN sanctions in 1990 allowed Saddam Hussein's regime to accumulate significant funds to finance its military machine in the face of international isolation. To ensure compliance with *jus cogens* norms in the conclusion and implementation of international treaties and agreements in the field of strategic resources supply, Ukraine should take the following measures (Tladi, 2021):

- to conduct a thorough legal examination of relevant contracts and agreements to ensure their compliance with mandatory rules of general international law;
- to include in such treaties and agreements provisions on the obligation of the parties to comply with *jus cogens* norms, in particular, the prohibition of aggression, non-interference in internal affairs, peaceful settlement of disputes;
- to provide for effective mechanisms in contracts and agreements to control and monitor the targeted use of the supplied resources in order to prevent their use for purposes incompatible with *jus cogens*;
- to ensure proper investigation and prosecution of those responsible for violations of the relevant treaty provisions and mandatory norms of international law in this area;
- to initiate the conclusion of new multilateral international treaties (in particular, at the UN level) that would provide for clear and effective international legal mechanisms to control international supplies and the use of strategic resources, especially in armed conflicts.

The implementation of these measures will significantly strengthen the international legal framework for Ukraine's cooperation with foreign partners in the supply of strategic resources and help prevent the use of such resources for purposes incompatible with the fundamental principles and norms of international law.

Ways to optimize the political and legal mechanisms for providing strategic resources

The analysis of the political and legal mechanisms for providing Ukraine with strategic resources in the context of the ongoing war with Russia has revealed several gaps and shortcomings that impede the effective functioning of these mechanisms and negatively affect the defence capability of the state. In particular, the study revealed insufficient flexibility and efficiency of the procedures for allocating strategic resources under martial law, lack of clear mechanisms for interaction between different actors in this area, as well as imperfect control over the targeted use of relevant resources. To address these problems, it is advisable to introduce comprehensive amendments to the current legislation in order to adapt it to the conditions of martial law. In particular, the Law of Ukraine No. 51/97-VR (1997) and the Law of Ukraine No. 2469-VIII (2018) should provide for clear mechanisms for the prompt involvement of state reserve resources for defence purposes, as well as detailed procedures for quick decision-making on the redistribution of strategic resources.

Ukraine should actively use existing international legal instruments to protect its legitimate rights and interests. In particular, Ukraine should continue to defend its position within the framework of the World Trade Organization's dispute settlement mechanisms, in particular, in trade disputes with Russia regarding restrictions on the transit of Ukrainian goods through the territory of the Russian Federation. Also, Ukraine should consistently document the facts of Russia's violations of its sovereign rights to explore and develop hydrocarbon and other mineral deposits within the exclusive economic zone and continental shelf in the Black and Azov Seas and file relevant claims with international courts (Table 1).

Table 1. Key areas and measures to optimize political and legal mechanisms for providing Ukraine with strategic resources in times of war

The direction of optimization	Key events
Adapting national legislation to the conditions of war	Amendments to the Law of Ukraine No. 51/97-VR “On the State Material Reserve” (1997) and other relevant acts
	Introduce mechanisms for promptly attracting state reserve resources for defence needs
Stimulating domestic extraction and production of strategic resources	Introduction of special tax and investment regimes for relevant enterprises
	Providing preferences to national producers of high-tech dual-use products
Development of international cooperation	Intensification of cooperation with the EU under the EU-Ukraine Association Agreement
	Deepening cooperation with NATO, obtaining MAP
	Conclusion of long-term contracts for the supply of weapons and resources within the framework of military-technical assistance from partners
Compliance with the norms and principles of international law	Respect for the sovereignty and territorial integrity of states
	Non-use of force or threat of force
	Non-interference in the internal affairs of other countries
	Fulfilling international obligations in good faith
Use of international legal instruments to protect the rights and interests of Ukraine	Defending Ukraine’s position within the World Trade Organization dispute settlement mechanisms
	Documenting Russia’s violations of Ukraine’s rights to explore and develop hydrocarbon and other mineral deposits
	Filing claims with international courts

Source: Own study

In summary, optimizing the political and legal mechanisms for providing Ukraine with strategic resources in the context of the ongoing war with Russia is a complex task that requires concerted efforts of all branches of government, consolidation of society, and active involvement of international support. Implementation of these steps at the national and international levels will significantly increase the state’s resilience to military, economic and political challenges posed by Russian aggression and bring Ukraine’s victory in this just war for freedom and independence closer.

Implementation of effective mechanisms for allocating and controlling the use of resources

In Ukraine, the legal regulation of access to information on the management of strategic resources in wartime needs to be improved in line with international best practices. It would be advisable to amend the Law of Ukraine No. 2939-VI “On Access to Public Information” (2011) to provide for:

A clear list of exceptions to restricted information, the disclosure of which could cause significant damage to national security, defence capability, and strategic interests of the state in wartime. In particular, this may concern information on the nomenclature, volume, location of strategic stockpiles, planning of their use.

Empowering the state body responsible for accounting for strategic resources to independently decide on the possibility of disclosing or restricting access to relevant information based on an analysis of risks and threats.

The ability not to disclose the very existence of information that is subject to exemptions for reasons of national security.

The right of citizens and organizations to appeal against the refusal to provide information in court.

The obligation of information holders to publish generalized data on the management of strategic resources that does not contain restricted information. For example, the total volume of procurement and spending of strategic resources, problems identified and measures taken.

These legislative changes will help to increase transparency and accountability of state bodies in the management of strategic resources, while protecting sensitive information from a potential adversary in times of war (Table 2).

Table 2. Possible structure of access to the unified system of monitoring and accounting of strategic resources

Subject of access	Access level
Top military and political leadership of the state	Full access to all system data
Relevant ministries and agencies	Full access to data within one’s area of expertise
Other government agencies and institutions	Limited access based on the “need to know” principle
Specialized committees of the Verkhovna Rada of Ukraine	Access to generalized information within the framework of parliamentary oversight
Civil society organizations and independent experts	Access to generalized information that does not contain sensitive data

Source: Own study

Thus, the creation of a unified system for monitoring and accounting of strategic resources should consider the need to ensure a balance between the efficiency of managing the state's resource potential and the requirements of national security in times of war.

To strengthen control over the targeted use of strategic resources, SNS has implemented a comprehensive monitoring and audit system. In particular, regular accounting and inventory of stocks is carried out, and spot checks are carried out to ensure compliance with the established procedures for the storage, transportation, and use of material assets. An important element of the control system is also regular audits of the effectiveness of SNS resource management conducted by the HHS Office of the Inspector General. The US experience in managing strategic stockpiles of medical resources may be useful for Ukraine in the context of developing a system for the distribution and control of the use of strategic resources in wartime. Therefore, it is advisable to:

Establish an interagency commission on strategic resource allocation, which should include representatives of key ministries and agencies (Ministry of Defence, Ministry of Economy, Ministry of Internal Affairs, State Emergency Service) and relevant parliamentary committees (Zhang & Yang, 2024).

Develop clear criteria and procedures for the allocation of strategic resources, considering the needs of the defence and security sector and economic feasibility. Priority should be given to meeting the critical needs of the Armed Forces, defence industry enterprises and critical infrastructure (Hmyria et al., 2024).

Implementation of these recommendations will require appropriate amendments to legislation, in particular, to the Law of Ukraine No. 2469-VIII (2018), Law of Ukraine No. 51/97-VR (1997) and Law of Ukraine No. 922-VIII "On Public Procurement" (2015), as well as the development of new by-laws on the procedure for the distribution, use, and control of strategic resources of the state in wartime (Table 3).

Table 3. Possible structure of the system for monitoring and auditing the use of strategic resources

Subject of control	Functions and powers
State Audit Service of Ukraine	Conducting scheduled and unscheduled inspections of the use of budget funds and state property in the defence and security sector
Accounting Chamber of Ukraine	Conducting external financial audit and control over the receipt and use of funds from the State Budget of Ukraine, including for defence and security needs
Departmental internal audit units	Conducting internal audits and reviews of the use of resources in relevant ministries and agencies
Independent audit companies	Contractual engagement of external independent auditors to conduct an external audit of the use of strategic resources in certain areas
Temporary investigative commissions of the Verkhovna Rada of Ukraine	Conducting parliamentary investigations into the inefficient or misuse of strategic resources

Source: Own study

In summary, effective international cooperation in controlling the distribution and use of strategic resources plays a key role in strengthening Ukraine's resource security and improving the efficiency of strategic asset management in the context of ongoing Russian aggression. Ukraine's active participation in the implementation of international standards of transparency, combating corruption and illegal trade in resources will not only help improve the domestic governance system, but also strengthen the reputation of the country in the international arena. At the same time, when developing international cooperation in this area, Ukraine should proceed from its own national interests, carefully weigh the potential risks and benefits, and ensure proper protection of sensitive information in the context of Russia's hybrid warfare.

Discussion

This study allows for a deeper understanding of the key challenges and areas for improving the strategic asset management system in the context of ongoing Russian aggression. The results obtained develop existing scientific knowledge and offer innovative approaches that are crucial for strengthening Ukraine's defence capability and resilience against existential threats.

A comparative analysis with other works reveals common points and differences. The findings align with J.G. Lee and M.J. Park (2020) on the importance of targeted government policy to support the defence industry, focusing on economic efficiency and international competitiveness. However, this study considers these instruments in a broader context, focusing on urgent tasks of mobilizing the defence-industrial potential and reorienting regulatory policy to meet immediate security needs. The study by P. Scharre and A. Riikonen (2020) highlights the impact of advanced technologies on future wars and defence capabilities. This resonates with our findings on the growing role of technology in Ukraine's defence, emphasizing the need to develop critical technology production and international cooperation. However, while Scharre and Riikonen focus on long-term technological transformation, this study addresses the urgent adaptation of Ukraine's defence technology in the current conflict.

J. Reis et al. (2022) emphasize the benefits of an open innovation model in the defence sector, which aligns with this study's emphasis on public-private partnerships and leveraging the non-state sector's innovative potential. Both agree on the importance of collaboration and synergy between state, business, and science, but differ in context – Reis et al. focus on innovation in peacetime, while this study focuses on resource mobilization during active conflict. W. Greenwalt and D. Patt (2021) recommend revising defence procurement for efficiency and responsiveness, aligning with this study's call for simplified regulatory regimes and flexible resource

redistribution. Similarly, G.A. Zsidisin et al. (2020) emphasize adaptability and resilience in defence logistics, reflecting this study's conclusions on the importance of supply chain continuity in wartime. A. Gilad et al. (2021) highlight the importance of superiority in cyberspace and effective intelligence activities, aligning with this study's emphasis on the critical role of information in the Russian-Ukrainian war. While Gilad et al. focus on technological and operational aspects, this study also stresses improving the legal framework for intelligence activities.

These comparisons highlight the multifaceted nature of research competence in future primary school teachers and the importance of integrating various motivational and practical strategies to enhance their engagement in research activities. Future research should explore the implementation of these recommendations to further develop the research competence of future primary school teachers, ultimately benefiting the educational landscape.

Conclusions

The study of Ukraine's legal framework for strategic resources revealed an extensive system regulating formation, storage, use, and replenishment. However, it identified gaps in legislation, particularly its adaptation to martial law, mechanisms for involving state reserve resources for defence, and interagency cooperation. The political aspects of strategic resource supply mechanisms significantly impact the state's defence potential. The effectiveness of these mechanisms depends on the coordination of various branches, political will, and public trust in responsible institutions. However, the study highlighted issues such as insufficient interagency coordination, lack of transparency, and bureaucratization in decision-making processes. The research findings led to practical recommendations for improving Ukraine's political and legal mechanisms for strategic resources, considering international law norms. Recommendations include amending legislation to adapt to wartime conditions, introducing a unified monitoring system, ensuring a clear division of powers, and enhancing control over resource use. Internationally, the study advocates for Ukraine's increased participation in the Extractive Industries Transparency Initiative, cooperation with the UN and World Bank, and harmonizing national legislation with EU directives on non-financial information disclosure.

The study emphasized the relevance of political and legal provision of Ukraine's strategic resources, suggesting further research on optimizing the State material reserve system, innovative management approaches using advanced information technologies, and developing international cooperation in resource security. In summary, optimizing the political and legal mechanisms for strategic resources should be a key priority in Ukraine's state policy amidst ongoing Russian aggression. Implementing these recommendations will strengthen Ukraine's defence capability,

resilience to hybrid threats, and contribute to victory in the war for freedom and independence.

BIBLIOGRAPHY

- [1] Baker, R.T., 2020. Logistics and military power: Tooth, tail, and territory in conventional military conflict. Washington: George Washington University.
- [2] Blinov, D.Y., 2024. Development of Ukraine's international cooperation in the field of defence industries. Kyiv: National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute".
- [3] Comprehensive Nuclear-Test-Ban Treaty. 1996. <https://2009-2017.state.gov/t/avc/trty/16411.htm>.
- [4] Doronina, T. and Pobocha, T., 2023. Human capital as a strategic resource in higher education: Investment policy of educational institutions. *Bulletin of Science and Education*, 7 (13), 487–498, [https://doi.org/10.52058/2786-6165-2023-7\(13\)-487-498](https://doi.org/10.52058/2786-6165-2023-7(13)-487-498).
- [5] Extractive Industries Transparency Initiative. 2023. EITI Standard 2023. https://eiti.org/sites/default/files/2024-04/2023%20EITI%20Standard_Parts1-2-3.pdf.
- [6] Gilad, A., Pecht, E. and Tishler, A., 2021. Intelligence, cyberspace, and national security. *Defence and Peace Economics*, 32 (1), 18–45, <https://doi.org/10.1080/10242694.2020.1778966>.
- [7] Greenwalt, W. and Patt, D., 2021. Competing in time: Ensuring capability advantage and mission success through adaptable resource allocation. Washington: Hudson Institute.
- [8] Hmyria, V., Nikitchenko, V., Shynkarenko, O., Aleskerova, Y. and Kostyuk, O., 2024. Development of the defence industry of Ukraine to ensure national security. *Financial and Credit Activity Problems of Theory and Practice*, 3 (56), 321–333, <https://doi.org/10.55643/fcaytp.3.56.2024.4366>.
- [9] Horbach-Kudria, I. and Kostylyev, O., 2024. Disarmament of civilians after war: International standards and national legislation. *Scientific Journal of the National Academy of Internal Affairs*, 29 (2), 32–43, <https://doi.org/10.56215/naia-herald/2.2024.32>.
- [10] Jola-Sanchez, A.F. and Serpa, J.C., 2021. Inventory in times of war. *Management Science*, 67 (10), 6457–6479, <https://doi.org/10.1287/mnsc.2020.3801>.
- [11] Karamyshev, D., Suvorov, V., Yuliya, Y., Sobol, R. and Myrna, M., 2024. Multi-level public administration in the context of hybrid threats. *Social and Legal Studies*, 7 (2), 44–54, <https://doi.org/10.32518/sals2.2024.44>.
- [12] Kemmerling, B., Schetter, C., Wirkus, L. 2022. The logics of war and food (in) security. *Global Food Security*, 33, 100634. DOI: 10.1016/j.gfs.2022.100634.
- [13] Kisiliuk, E., Leonenko, I., Khutorianskyi, O., Svoboda, I. and Banchuk-Petrosova, O., 2024. Regulation of resource management for territorial defense in the context of domestic and international crime: International legal experience. *Pakistan Journal of Criminology*, 16 (3), 1333–1348, <https://doi.org/10.62271/pjc.16.3.1333.1348>.
- [14] Law of Ukraine 2019-VIII "On Electricity Market" 2017. <https://zakon.rada.gov.ua/laws/show/en/2019-19#Text>
- [15] Law of Ukraine 2469-VIII "On National Security of Ukraine" 2018. <https://zakon.rada.gov.ua/laws/show/2469-19#Text>
- [16] Law of Ukraine 2665-III "On Oil and Gas" 2001. <https://zakon.rada.gov.ua/laws/show/en/2665-14#Text>
- [17] Law of Ukraine 2939-VI "On Access to Public Information" 2011. <https://zakon.rada.gov.ua/laws/show/en/2939-17#Text>

- [18] Law of Ukraine 51/97-VR “On the State Material Reserve” 1997. <https://zakon.rada.gov.ua/laws/show/51/97-%D0%B2%D1%80#Text>
- [19] Law of Ukraine 922-VIII “On Public Procurement” 2015. <https://zakon.rada.gov.ua/laws/show/en/922-19#Text>
- [20] Lee, J.G. and Park, M.J., 2020. Evaluation of technological competence and operations efficiency in the defence industry: The strategic planning of South Korea. *Evaluation and Programme Planning*, 79, 101775, <https://doi.org/10.1016/j.evalprogplan.2019.101775>.
- [21] Lim, K. and Nam, G., 2023. A study on how to improve the accountability of national defense financial information for government sustainability. *Sustainability*, 15 (11), 8749. <https://doi.org/10.3390/su15118749>.
- [22] Listou, T., 2021. The infrastructures of war and peace. *Journal of Humanitarian Logistics and Supply Chain Management*, 11 (4), 661–679, <https://doi.org/10.1108/JHLSCM-06-2021-0054>.
- [23] Orłowska, M., 2023. Logistics support of military units as a determinant of local development. *Systemy Logistyczne Wojsk*, 58 (1), 63–80, <https://doi.org/10.37055/sl/176016>.
- [24] Portovaras, T., Kyrychenko, V., Tsepikalo, T., Sokulskyi, O. and Krysovaty, I., 2024. The role of modern information technologies in financial analysis and market forecasting. *Economic Affairs*, 69 (01), 735–742, <https://doi.org/10.46852/0424-2513.2.2024.33>.
- [25] Reis, J., Melão, N., Costa, J. and Pernica, B., 2022. Defence industries and open innovation: Ways to increase the military capabilities of the Portuguese ground forces. *Defence Studies*, 22 (3), 354–377, <https://doi.org/10.1080/14702436.2022.2033117>.
- [26] Scharre, P. and Riikonen, A., 2020. *Defence technology strategy*. Washington: New America.
- [27] Shemet, V., Gulai, O. and Furs, T., 2023. Critical raw materials as a strategic resource of Ukraine. In: *Materials of the III International Scientific Conference “Actual Problems of Chemistry, Materials Science and Ecology”*, 115–116. Lutsk: Lutsk National Technical University.
- [28] Tladi, D., 2021. *Peremptory norms of General International Law (Jus Cogens): Disquisitions and disputes*. Leiden: Brill, <https://doi.org/10.1163/9789004464124>.
- [29] Treaty on the Non-Proliferation of Nuclear Weapons. 1968. <https://treaties.unoda.org/t/npt>
- [30] Van de Graaf, T. and Sovacool, B.K., 2020. *Global energy politics*. Hoboken: John Wiley & Sons.
- [31] Vienna Convention on the Law of Treaties. 1969. https://legal.un.org/ilc/texts/instruments/english/conventions/1_1_1969.pdf
- [32] Zhang, Y. and Yang, J., 2024. Capability-based defense resource allocation method[J]. *Systems Engineering and Electronics*, 46 (2), 599–604, <https://www.sys-ele.com/EN/Y2024/V46/I2/599>.
- [33] Zheng, J., 2023. The evolution of Ukraine-China trade relations in the context of the Russo-Ukrainian War. *Systemy Logistyczne Wojsk*, 59 (2), 55–72, <https://doi.org/10.37055/sl/186381>.
- [34] Zsidisin, G.A., Bresler, A., Hazen, B., Snider, K.F. and Wilkerson, T.H., 2020. Research in defence logistics: Where are we and where are we going? *Journal of Defence Analytics and Logistics*, 4 (1), 3–17, <https://doi.org/10.1108/JDAL-07-2019-0012>.
- [35] Žuk, P. and Žuk, P., 2022. National energy security or acceleration of transition? Energy policy after the war in Ukraine. *Joule*, 6 (4), 709–712, <https://doi.org/10.1016/j.joule.2022.03.009>.

