# PHILOSOPHY, ECONOMICS AND LAW REVIEW

## *Scientific journal*

## 2025
## Volume 5, no. 1

**Засновник:**
Дніпровський державний університет внутрішніх справ

**Рік заснування:** 2021
**Періодичність випуску:** 2 рази на рік

*Рекомендовано до друку та поширення*
*через мережу «Інтернет» Вченою радою*
*Дніпровського державного університету*
*(протокол № 9 від 27 травня 2025 р.)*

**Ідентифікатор медіа: R30-02606**
(Рішення Національної ради України з питань телебачення і радіомовлення
№ 180, протокол № 3 від 25 січня 2024 р.)

**Журнал включено**
**до Переліку наукових фахових видань України (Категорія «Б»)**
Спеціальність – 033 «Філософія», 051 «Економіка», 081 «Юридичні науки»
(наказ Міністерства освіти і науки України № 894 від 10 жовтня 2022 р.)

**Журнал представлено**
**в таких наукометричних базах даних, репозитаріях та пошукових системах:**
Crossref, Google Scholar, OUCI (Open Ukrainian Citation Index), BASE, Scientific Journal Impact Factor (SJIF),
Dimensions, Oslo University, Litmaps, Фахові видання України,
Національна бібліотека України імені В.І. Вернадського

**Founder:**
Dnipro State University of Internal Affairs

**Year of foundation:** 2021
**Frequency:** 2 times per year

*Recommended for printing and distribution
via the Internet by the Academic Council
of Dnipro State University of Internal Affairs
(Minutes No. 9 May 27, 2025)*

**Media identifier: R30-02606**
(Decision of the National Council of Television and Radio Broadcasting of Ukraine
No. 180, Minutes  No. 3 of 25 January, 2024)

**The journal is included in the List of professional scientific
publications of Ukraine (Category "B")**
Specialities – 0223 "Philosophy and ethics", 0311 "Economics", 0421 "Law"
(Order of the Ministry of Education and Science
of Ukraine No. 894 of October 10, 2022)

**The journal is presented in the following scientometric databases**:
Crossref, Google Scholar, OUCI (Open Ukrainian Citation Index), BASE, Scientific Journal Impact Factor (SJIF),
Dimensions, Oslo University, Litmaps, Professional Publications of Ukraine,
Vernadsky National Library of Ukraine

**Editors office address:**
Dnipro State University of Internal Affairs
49005, 26 Nauky Ave., Dnipro, Ukraine
info@phelr.com.ua
https://phelr.com.ua/en

# Philosophy, Economics and Law Review

## Vol. 5. No. 1. 2025

## Редакційна колегія

# Philosophy, Economics and Law Review

## Vol. 5. No. 1. 2025

## Editorial Board

**Robert W. McGee**      Doctor of Philosophy, Doctor of Economics, Doctor of Law, Professor, Fayetteville State University, USA

**Adrián Vaško**      Doctor of Law, Professor, Matej Bel University, Slovakia

**Bjarne Melkevik**      Professor, Laval University, Canada

**Yernar Begaliyev**      Doctor of Law, Professor, Academy of Law Enforcement Agencies under the General Prosecutor's Office of the Republic of Kazakhstan, Kazakhstan

# ЗМІСТ / CONTENTS

# ЗМІСТ / CONTENTS

# The phenomenon of alienation in the historico-philosophical discourse: Evolution of the concept and contemporary interpretations

**Olha Honcharova***

PhD in History, Associate Professor
H.S. Skovoroda Kharkiv National Pedagogical University
61002, 29 Alchevskikh Str., Kharkiv, Ukraine
https://orcid.org/0000-0002-8697-3211

**Alaa Hussein Malu Al-Samarrai**

PhD in Pedagogy, Teacher
Al-Hadi University
6CG4+J9F, 60th Str., Baghdad, Iraq
https://orcid.org/0009-0009-9520-6450

**Abstract.** Alienation constitutes a critical issue in contemporary discourse, intensified by globalisation, digitalisation, technological advancement, social fragmentation, and escalating political instability. The relevance of this inquiry derives from the urgent need to conceptualise the processes through which individuals experience estrangement from their essence, from social institutions, and the broader existential framework of human life. The primary aim of this study was to reconstruct the historical and philosophical evolution of the concept of "alienation", identify its principal stages of development, and examine its contemporary reinterpretations within the context of global transformations. Methodologically, the research was grounded in historical-philosophical analysis, comparative methodology, hermeneutic interpretation of primary philosophical sources, and interdisciplinary integration of perspectives from philosophy, sociology, cultural studies, and political theory. The study results revealed that alienation initially emerged as a metaphysical concern in ancient philosophy, reflecting humanity's disrupted relationship with the Cosmos. During the medieval period, it was reinterpreted theologically as a rupture between humanity and the divine. The Early Modern era marked a pivotal shift, with alienation acquiring political and legal significance within the framework of social contract theory. In the nineteenth century, German classical philosophy and Marxism endowed the concept with systematic philosophical depth. In the twentieth and twenty-first centuries, alienation has been further elaborated through social, cultural, existential, and technological dimensions, encompassing phenomena such as digital subjectivity, posthumanist critiques, and algorithmic governance. The practical significance of the research lies in its applicability to contemporary academic and policy discussions within social philosophy, political theory, cultural studies, and education

**Keywords:** alienation; spirituality; historical development; self-alienation; sociocultural context; society

## Introduction

The development of society has always been accompanied by alienation, which emerges during times of social crisis and recedes during periods of dynamic progress, yet never disappears entirely. A thorough understanding of alienation is essential for studying this issue. Scholars and philosophers have attempted to explain this phenomenon since ancient times. However, it was only in the Modern era that philosophers addressed it as a social phenomenon. Given that the accumulated theoretical material provides an ambiguous and vague

definition of "alienation", it becomes clear why contemporary philosophers, sociologists, cultural theorists, and political scientists approach the study of alienation differently, depending on the perspective from which they examine its nature. An analysis of the evolution of the concept of "alienation" reveals the deeper patterns in the development of philosophical thought and brings us closer to understanding the modern forms of social, political, and spiritual alienation that continue to shape the human condition in the 21st century.

The issue of alienation has been extensively developed in philosophy, sociology, cultural studies, and political theory, as reflected in a wide range of academic research. In recent decades, there has been a growing number of interdisciplinary approaches to studying the phenomenon of alienation, which allows for new interpretations of both classical and contemporary perspectives. J. Samuel (2023), explored the metaphysical and normative dimensions of alienation, drawing on Hegelian dialectics to illuminate how alienation shapes our relations with norms and the world. Written in the Marxist tradition, the article by M.K. Santiagu (2024) brought the discussion back to the classical reading of alienation as a consequence of capitalist relations of production. The author emphasised the importance of restoring the critical potential of Marxism in contemporary political and social contexts. In their article "Labour, capital and the struggle over history: Reconstructing Marxist class theory from the standpoint of alienation," E. Øversveen & C.A. Kelly (2023) argued that Marxist class analysis – while foundational for understanding social inequalities – has largely overlooked alienation's experiential and dialectical dimensions. Methodologically, the authors employ a hermeneutic reading of G.W.F. Hegel and K. Marx's texts, combined with a critical engagement with more recent sociological debates, to demonstrate that alienation provides a vital link between structural economic processes and individual lived experience. J. Pateman (2023) challenged prevailing narratives about Lenin's engagement with K. Marx's theory of alienation, demonstrating its central role in Leninist thought and its implications for revolutionary praxis. J. Fanciullo (2025) interrogated the "alienation constraint" on theories of well-being, debating how disconnection from what one finds compelling undermines conceptions of human flourishing. L. Ma (2024) offered a comprehensive philosophical analysis of alienation in the digital age, tracing how digital capitalism transforms labour, products, and social relations, thereby generating new modalities of estrangement. The philosophical dimension was addressed in Z.W. Liu's (2022) article, which examined H. Marcuse's utopian project aimed at overcoming the "one-dimensional" man through the transcendence of the system of alienation. The work is relevant in seeking philosophical alternatives to modern technocratic rationalism. Contemporary approaches to the

topic show a tendency toward expanded interpretation. P.L. Choquet (2021) introduced the "geo-social critique" concept, viewing alienation not only as an interpersonal or economic category but as a global structural problem connected to spatial inequality and ecological instability. His work reflects new trends in social theory, in which alienation is conceptualised in the context of a globalised world. From a cultural perspective, Z. Jing (2024) analysed the concept of alienation through the lens of survival and cultural interpretation in contemporary societies. The author emphasises that modern culture not only reflects alienation but also produces it as a form of adaptation to the conditions of late capitalism. Thus, the contemporary historiography of the phenomenon of alienation is multifaceted and dynamic. It encompasses both classical and cutting-edge interpretations, demonstrating the deep dependence of this concept on its historical, social, and cultural context. The purpose of this work was to trace how the idea of alienation gradually transformed into a philosophical category, acquiring new layers of meaning depending on the historical, social, and cultural context.

## Materials and Methods

The research employed general scientific and philosophical methods to provide a comprehensive historical and conceptual analysis of alienation. The primary method used was historical-philosophical analysis, which made it possible to trace the evolution of the concept of alienation from Antiquity to contemporary interpretations. This method identified and systematised key philosophical traditions, thinkers, and their contributions to the understanding of alienation. In addition, comparative analysis was applied to reveal the differences and similarities in interpreting alienation across various historical periods and philosophical schools. This method allowed the authors to outline the continuity and transformation of the conceptual approaches to alienation. Hermeneutic methods were used to interpret philosophical texts in socio-cultural and historical contexts. By engaging in a close reading of primary philosophical sources (e.g., the works of Plato, Aristotle, A. Augustine, T. Hobbes, J. Locke, J.-J. Rousseau, G. Hegel, L. Feuerbach, K. Marx, J.-P. Sartre, H. Marcuse, and M. Heidegger), the research disclosed the internal logic of the formation and development of the idea of alienation. The systematic approach provided a framework for analysing alienation as a complex phenomenon manifested in different spheres: social, economic, political, cultural, and existential. This approach enabled the integration of insights from various disciplines, including sociology, cultural studies, political theory, and psychoanalysis, into a coherent research narrative.

The study was carried out through a thematic analysis of selected historical-philosophical materials. For each historical period and school of thought, the main

conceptualisations of alienation were identified, compared, and contextualised. The corpus of analysed materials included both primary philosophical texts and recent scholarly publications. Methodologies developed by other researchers were incorporated through the adoption of the critical reinterpretation of classical concepts based on contemporary interdisciplinary approaches (such as geo-social critique and posthumanist theories). This allowed for the extension of classical interpretations of alienation into modern technological and globalised realities.

The study progressed in several stages: selection of primary philosophical works and relevant contemporary studies; Structuring the concept of alienation across different historical periods; Identifying continuities and discontinuities in conceptualisations; Hermeneutic reading of key texts; Formulation of conclusions regarding the evolution of the concept and its relevance in the contemporary context. The research was conducted during 2024-2025, based on the study of available primary philosophical sources, peer-reviewed journal articles, and interdisciplinary analyses accessible through academic databases and open-access platforms. The materials were processed using qualitative analysis methods, without the application of statistical or empirical research techniques, given the philosophical and historical nature of the subject.

## Results and Discussion

The phenomenon of alienation emerged long before the concept and category of "alienation" itself were formally established, initially manifesting only as an explanation for the human mind's response to various contradictions. A distinctive feature of the phenomenon is the attribution of meaning to separation and the transformation of something that belongs to a person's "self" into something alien. The earliest notions of alienation can be found in the philosophical treatises of Antiquity, where cosmocentric worldviews shape their understanding. The primary source of alienation was considered to be the emergence of the physical world, which led to the appearance of human beings capable of reflecting on their cosmic environment and themselves as cosmic entities. All human problems during Antiquity were viewed in an organic connection with a person's place in the Cosmos. The inability to understand this or to follow this natural law disrupted harmony and led to imperfection, which contained the idea of alienation and resulted in various forms of social upheaval. Such an interpretation of alienation can be found in the works of Plato and Aristotle (Santiagu, 2024). Ancient philosophers noted that alienation could manifest at both the individual-human and societal levels.

During the Middle Ages, the idea of alienation was defined by a geocentric worldview and was considered through the opposition between God, who created a world functioning according to divine laws, and the human being, who lives in accordance with these same laws. Through the concept of alienation, attempts were made to explain the rupture in the relationship between humanity and God, as well as the fundamental contradictions of human existence: inner tension, the polarity of human nature, and the presence of evil in the world. This can be clearly observed in the works of Augustine, Thomas Aquinas, Duns Scotus, and Abelard. In Augustine's Confessions and The City of God, alienation is expressed through the experience of the inner struggle between bodily desires and the soul's longing for divine truth, as well as through the theological interpretation of humanity's fall and separation from God. In his Summa Theologiae, Thomas Aquinas discusses how sin disturbs the natural order established by God, resulting in the disintegration of human nature and spiritual estrangement. In his Ordinatio, Duns Scotus highlights the human will's dual orientation – toward personal benefit and universal good – which creates the internal polarity and potential alienation from divine intention. Peter Abelard, particularly in *Sic et Non* and Ethica (*Scito te ipsum*), explores the moral conflicts within the human conscience and the difficulties of attaining theological truth, thereby emphasising alienation's internal dissonance and existential uncertainty (Osborne, 2014).

The problem of alienation remained relevant during the Renaissance as well. It was associated with a dual understanding of human nature – both "natural" and "divine" – which generated contradictions in a person's self-awareness and in the understanding of their own activity. This was reflected in the views of Giovanni Pico della Mirandola, Giannozzo Manetti, Leon Battista Alberti, and other thinkers of the period (Choquet, 2021). During this time, the phenomenon of alienation was understood as a response to the contradictions arising from the dual perception of the human being-as a God-Creator on the one hand, and as an ordinary earthly person on the other. Alienation manifested in the realisation that although extraordinary qualities were attributed to humans, they were, from the very beginning, limited by their natural and physiological characteristics, and they were aware of it. Thus, alienation continued to be perceived in its previous sense of "separation", although a comprehensive conceptualisation of the phenomenon had not yet been formed.

The concept of "alienation" was formed in the 17th century and is associated with the theory of the social contract. Its emergence was conditioned by the socio-cultural situation that demanded a new understanding of the relationship between "the individual and society," recognising the individual as the highest value of social life. In this context, it is important to refer to the works of T. Hobbes, J. Locke, J.-J. Rousseau, and T. Paine, who connected alienation with the process of transferring an individual's natural rights to the state and subsequently becoming dependent on it. A distinctive feature

of these thinkers' views is that alienation, in their concepts, appears as a voluntary act by the individual, necessary to obtain guaranteed security. T. Hobbes, in his examination of the essence of power relations, notes: "I authorise and give up my right of governing myself to this man, or this assembly of men, on this condition, that thou give up thy right to him, and authorise all his actions in like manner… This is the generation of that great Leviathan, or rather (to speak more reverently), of that Mortal God, to which we owe, under the Immortal God, our peace and defence" (Hobbes, 1651). Despite sharing a general approach to the problem, the philosophers of the Early Modern period differed in their understanding of alienation. J. Locke, unlike T. Hobbes, argued that even in an alienated form, the individual must retain certain natural rights – life, liberty, and property – which cannot be alienated (Locke, 1823). A distinctive aspect of J.-J. Rousseau's position is that, in addition to alienation based on the need for self-protection, J.-J. Rousseau also reflected on the problem of despotic state power, which is based not on the right given to it but on brute force. This, in his view, leads to the violation of human freedoms, which should be preserved even after the conclusion of the social contract (Rousseau, 1998). Thus, philosophical concepts of "alienation" in the 17th-18th centuries recognised the source of alienation in the specific structure of reality, whose imperfect relationships introduced disharmony both in interpersonal relations and in the individual's self-perception.

The transition from the concept of "alienation" to its development as a philosophical category took place in the 19th century. This was linked to the process of progressively enriching the concept with logic and dialectical content. A significant contribution to this process was made by representatives of German classical philosophy, who viewed alienation as a historical process resulting from human activity within the sphere of their existence – society. During this period, alienation began to be understood simultaneously as both an objective and subjective action. The issue of alienation was addressed by G.W.F. Hegel, L. Feuerbach, and K. Marx.

The first systematic philosophical investigation of alienation is found in the works of G. G.W.F. Hegel (2018). He presents alienation as a complex and multifaceted category through which various levels of objectification and externalisation are revealed. Hegel understands alienation as a historical process, dialectically conditioned both by reality itself and by the activity of the subject. In the Phenomenology of Spirit, Encyclopaedia of the Philosophical Sciences, and Philosophy of Right, a holistic historical account is developed through the totality of alienation and the development of human culture, which is presented as unfolding in the form of alienation. Nature, history, education, morality, civil society, and the state are all forms of the self-alienation of the Absolute Spirit for the purpose of self-knowledge. Through the process of studying the past and delving into its inner

essence, its theoretical comprehension becomes the means of overcoming alienation. The Spirit "alienates itself, and then returns to itself from this alienation, thereby revealing its reality and essence, and becoming the possession of consciousness". Reality, although created by the human being, appears to them as "something immediately alienated" (Hegel, 2018). Thus, the idea of alienation takes on a universal character as a factor of movement. Contradiction (or alienation) becomes a necessary stage of development, without which the full content of the Absolute Idea could hardly be revealed.

Ludwig L. Feuerbach (1986) opened a new path for understanding alienation. First, he used the concept of alienation to explain the existence of the Christian religion. Second, he gave this category an anthropological meaning by replacing the Absolute Spirit as the subject and object of alienation with the living "natural" human being – one who feels, suffers, observes, and creates God in their own image and likeness. According to L. Feuerbach, in the idea of God, the human being has embodied their species essence, which can be observed as another entity distinct from themselves. "Theology divides and alienates the human being, only to then re-personify this alienated essence in them once again". The process of alienation expressed here has significant consequences, as the person who created God begins to perceive themselves as His creation. L. Feuerbach also proposed a way to overcome alienation by replacing the religion of love for God with a religion of love for humanity, through which the individual will regain their personal qualities.

A unique revolution in the understanding of the phenomenon of alienation, its essence, and the possibilities for overcoming it was carried out by Karl Marx. Unlike Hegel, who understood alienation as the development of consciousness, K. Marx turned to social reality and the material production sphere of society, where he sought the causes of alienation. Furthermore, alienation is understood as a multi-level phenomenon, with each form corresponding to a certain stage of development. K. Marx considered economic alienation, which arises with the emergence of wage labor as a result of its division, the emergence of private property, and the development of commodity-money relations, to be the determinant of all forms. Based on K. Marx's Economic and Philosophic Manuscripts of 1844, a hierarchy of the main forms of alienation can be identified: 1) economic – alienation from the product and process of labor; 2) social – alienation from the species essence, alienation of one person from another; 3) political – alienation of the state from the people, bureaucracy; 4) spiritual – religious alienation, bourgeois political economy, and fetishism of money as a form of alienated consciousness. Following L. Feuerbach, K. Marx continues to attribute a strongly negative meaning to alienation, transferring it from its religious basis to the economic sphere. As a way to overcome alienation, he proposes changing the material conditions of social life, including the abandonment of private

property (Marx, 2007). This abandonment is not an act, but a process, determined by two factors: the growth of the level of development of productive forces, which at an appropriate level will make possible the dissolution of the causes of alienation – division of labor and the improvement of the individual, who, at a high level of development, will be capable of mastering and re-objectifying the entire wealth of human essence contained in social relations (Marx, 1970; Marx & Engels, 2022).

In the 20th century, the study of the phenomenon of alienation continued across various fields, leading to the emergence of numerous conceptual approaches to its understanding. In the concepts developed by scholars of the Frankfurt School of philosophy (T. Adorno, M. Horkheimer, H. Marcuse, A. Schweitzer), a distinctly social approach to defining the essence of alienation can be traced. Drawing on the category of "alienation" developed by K. Marx, they emphasise the characteristics of social processes under the conditions of industrial society. H. Marcuse notes that one-dimensional thinking is systematically imposed by policymakers and their representatives in the sphere of mass information. The universe of their discourse is introduced through hypotheses that operate autonomously and continuously, being methodically repeated and thus transforming into hypnotically effective formulas and attitudes (Marcuse, 1991). A. Schweitzer draws attention to the inhumane nature of the conditions in which people live, which lead to alienation. Normal human-to-human relations encounter numerous obstacles. A person loses the sense of kinship with their fellow human beings and thus descends into a path of inhumanity. A. Schweitzer asserts that a destructive interaction has developed not only between the economy and spiritual life, but also between society and the individual. Whereas once society uplifted people, now it oppresses us. According to him, the accelerated pace of social life began to exert a negative influence on the individual. The overemployment of the modern person in all strata of society leads to the demise of spirituality (Schweitzer, 2005). Among the factors contributing to the loss of spirituality are: the increasing specialisation in all areas of human activity (production, science, governance), the intensification of society's technicisation, the rapid growth of impersonal scientific knowledge, and the expanding influence of this impersonality on the individual, and so on.

The psychological perspective, which reflects the views of philosophers of the psychoanalytic school (Freud, 1976; Fromm, 2013), considers alienation as an attribute of the human psyche, based on an intrapersonal conflict. Thus, the focus is not on the social conditions of human life, but on individual characteristics. The source of alienation is seen in the contradiction between the "individual" or "collective" unconscious and the social demands internalised in human consciousness. This allows for the possibility of overcoming alienation by analysing the legitimacy of social norms

and reconciling the individual with their own nature. The views of Z. Freud (1976) and E. Fromm (2013) are largely consonant. However, while Z. Freud refers to neurosis as a factor of alienation, which results either in a neurotic loss of the self ("depersonalisation") or a loss of the sense of reality of the surrounding world ("derealisation") (Freud, 1976), E. Fromm emphasises that a significant number of neurotic conflicts leading to alienation are determined not by instinctive, but by sociocultural predispositions. This makes it possible to speak of the social nature of the unconscious in the psyche (Fromm, 2013). This, in turn, allows us to conclude that E. Fromm's views are close to the central thesis of Marxist philosophy: the causal dependence of all phenomena of spiritual life, including alienation, on social relations.

The personal approach, represented in the concepts of existentialist philosophers (J.-P. Sartre, A. Camus, K. Jaspers, G. Marcel), considers alienation through the lens of the opposition between the authentic individuality of a person and the society that stands against them. Individual freedom is manifested not in setting a goal, but in making a choice. The initial choice occurs outside of the individual's consciousness and arises in an unknown way from the very first moment of a person's existence. During the course of life, if a person sets a goal that contradicts this initial choice, then, according to J.-P. Sartre, they are doomed to failure: "We are freedom that chooses, but we do not choose to be free; we are condemned to be free" (Sartre, 2004). In this way, freedom, in its original sense, is destroyed. An initial choice that runs counter to a person's uncertain desires and prevents them from developing their individuality signifies total alienation of the individual. This is reflected in such individual states as loneliness, the feeling of existential abandonment, the hostility of the world, the loss of connection with it, abandonment by God, failure in the trials of freedom, the meaninglessness of one's existence, and alienation in interpersonal relationships. Closely related to the existential concept of "alienation" is the interpretation proposed by M. Heidegger. By distinguishing between "authentic" and "inauthentic" modes of human life, M. Heidegger argues that alienation is an inherent attribute of human existence, linking it to the person's fate of being entangled with things. He notes that when things take precedence, life assumes an inauthentic character, thus leading to alienation (Heidegger, 1962).

However, in the 21st century, the dichotomy between the social and ontological dimensions of alienation loses its clarity and definition. In the digital age, these levels intertwine and mutually reinforce each other, forming new, hybrid forms of alienation in which the subject is simultaneously subordinated to structural mechanisms of control and experiences a profound loss of meaning and authenticity. Digital technologies – particularly social media, algorithmic models of behavior, artificial intelligence systems, and automated decision-making – transform the very conditions of human existence. The

modern individual constantly produces data representing them as digital avatars, shadows, or profiles – fragmented, edited, and controlled by external algorithmic structures. They increasingly lose ownership of their image, which becomes a commodity or an instrument of influence. This leads not only to "alienation from oneself" but also to deep emotional and existential exhaustion – a consequence of constant comparison, imposed visibility, and the impossibility of genuine interaction. In the post-truth world, communication loses its dialogical and ethical nature: the word is no longer addressed to the other but functions as a tool of influence, manipulation, or representation. It is not just a crisis of truth, but the collapse of the very horizon of meaning. All of this results in a delegation of subjectivity – some functions of the "self" are transferred to technology: decisions about routes, preferences, and interpretation of news are carried out by algorithms. The subject is no longer the sole source of will; it dissolves into a network of interactions that increasingly occur without its active participation. In this context, the notion of autonomy acquires a new meaning or even becomes problematic. Posthumanist philosophy – in the works of R. Esposito, Katherine Hayles, Yuk Hui, Donna Haraway – does not interpret these phenomena solely as "defects" of the modern project that must be eliminated. Rather, it proposes abandoning the idea of a coherent, self-sufficient subject around which the humanist canon was built. Instead, the concept of techno-mediated subjectivity is put forward – fragmented, relational, emerging through interaction with non-biological agents, infrastructures, and networks. In this context, the human is no longer the center of the universe, but merely one element in a complex system of interrelations. Therefore, overcoming alienation is no longer seen as a return to an authentic "self", to an original wholeness, or to a true nature. Instead, it is conceived as a radical rethinking of what it means to be human (Esposito, 2011; Dodonova *et al*., 2024).

The concept of authenticity, historically associated with existentialist philosophy (especially Martin Heidegger and Jean-Paul Sartre), presupposes the capacity of the individual to present themselves truthfully and act by their inner self. In the digital age, however, authenticity becomes problematic: individuals curate multiple identities for different platforms, constantly modify their digital personas, and increasingly tailor self-presentation for algorithmic visibility rather than personal expression. This results in self-alienation, where the gap between lived experience and its mediated representation grows. Moreover, the right to privacy, rooted in classical liberal and human rights discourse (e.g., John Locke, J. S. Mill), is severely challenged by the dynamics of datafication and surveillance capitalism (Zuboff, 1989). In the digital ecosystem, individuals no longer fully control the information that represents them. Personal data are extracted, aggregated, and monetised without transparent consent, reducing subjects

to data profiles optimised for commercial or political ends. This commodification of identity further alienates individuals from control over their embodied existence. The philosophical consequences of these processes are profound. First, the fragmentation of the self into data points undermines the possibility of a unified, authentic identity, leading to ontological alienation. Second, the erosion of privacy removes the conditions necessary for maintaining a reflective space where authentic selfhood could develop. Author B.-C. Han (2015) aptly described the contemporary subject as a "transparent self", exposed to the gaze of others without refuge, thus intensifying feelings of insecurity, self-estrangement, and performative existence. The right to authenticity and privacy must therefore be rethought: not merely as protections against intrusion, but as affirmations of embodied integrity, agency, and existential coherence in environments that constantly threaten to fragment and appropriate human subjectivity.

The development of digital technologies has led to unprecedented opportunities and the emergence of new, intensified forms of structural alienation. These forms are rooted in the uneven distribution of access to technological resources and the transformative impact of automation and artificial intelligence (AI) on labor relations. Digital inequality refers not merely to disparities in access to devices or the Internet but also to disparities in digital literacy, algorithmic inclusion, and technological agency. Access to technology determines access to education, healthcare, employment, and political participation. Those excluded from digital networks experience structural alienation – a systemic separation from the main avenues of self-realisation and social agency. From a Marxist perspective, this phenomenon can be interpreted as a new form of proletarianisation: the digital underclass is excluded from the means of symbolic and informational production, much like industrial workers were historically alienated from material means of production. In this sense, technological alienation in the digital age is not just about exclusion but about losing control over one's capacity to participate meaningfully in public and economic life (Øversveen & Kelly, 2023). Automation and AI introduce further layers to the alienation of labor. In traditional Marxist theory, alienation occurs when the worker becomes estranged from the product of their labor, the labor process, their species-being, and other human beings. With AI, labor is automated, fragmented, deskilled, and surveilled. Philosophers such as Antonio Negri, Michael Hardt, and S. Zuboff (1989) have shown that platform capitalism treats human labor as an input to data extraction systems, reducing workers to nodes in algorithmic networks optimised for efficiency. Workers in the gig economy, for instance, are managed not by human supervisors but by algorithmic systems that dictate schedules, evaluate performance, and assign tasks. This erases personal autonomy and deepens

alienation from the labor process: the worker no longer even perceives the employer as a relational other, but faces an opaque, often unintelligible system of control. Moreover, B.-C. Han (2015) observes that the contemporary subject internalises performance pressure and self-optimisation imperatives, leading to self-exploitation – a voluntary but alienating process where freedom is instrumentalised. In this context, structural alienation emerges not only as material deprivation but also as ontological dislocation: the individual is alienated from labor, community, and self-realisation, fragmented within an increasingly automated and datafied environment. B. Stiegler (2019) warned of a "loss of individuation" due to technological externalisation of memory, cognition, and decision-making. Without meaningful participation in production, cultural creation, and political action, the contemporary subject risks becoming a passive appendage to technological systems.

The classical conception of the subject of rights, rooted in the traditions of Enlightenment humanism – particularly in the works of René Descartes ("cogito ergo sum") and Immanuel Kant (concept of autonomy) – presupposed an individual who is rational, self-sufficient, and self-legislating. In this framework, rights were conceptualised as attributes of an autonomous self-capable of exercising free will and rational choice. However, posthumanist philosophy radically reconfigures this image. J. Samuel (2023) argued that the human subject cannot be conceived outside of its technological, biological, and ecological entanglements. The posthumanist subject is no longer sovereign and coherent; it is relational, hybrid, and technologically mediated. It emerges through continuous interactions with non-human agents – machines, algorithms, environments – thus undermining the foundational assumptions of traditional rights theory.

In the posthumanist view, alienation no longer appears solely as estrangement from one's labor (as in Karl Marx) or one's species-being, but rather as estrangement from one's own embodied subjectivity, fragmented across digital infrastructures. N.K. Hayles (1999) discusses this process regarding the posthuman, where cognition and agency are distributed across humans and intelligent machines. As individuals increasingly rely on external memory systems, decision-making algorithms, and data-driven environments, their capacity for autonomous action becomes technologically mediated, thus alienating them from the classical model of self-determination that rights discourse presupposes. Moreover, R. Braidotti (2017) emphasises that the posthuman condition leads to a nomadic subjectivity, characterised by fluid, transitory identities. The alienation here is not simply negative but also productive: it opens possibilities for rethinking rights beyond fixed notions of sovereignty and individuality, towards a model based on relational ethics, care, and interdependence. B. Stiegler (2019) introduces the

concept of technological prosthesis, suggesting that human existence has always been technically supplemented. Yet, in the digital age, these supplements have become so pervasive that they alter perception, desire, and volition, creating a condition he terms "hyper-alienation". In such a context, the subject of rights is no longer an autonomous entity but a being whose agency is continuously negotiated with technological systems. This reconfiguration has profound implications for legal and political philosophy. The rights attributed to a coherent human subject (such as privacy, dignity, freedom of will) must now be reinterpreted in light of hybrid subjectivity. If agency is distributed, it becomes necessary to rethink notions like responsibility, culpability, and consent, particularly when actions are co-produced by humans and non-human agents (e.g., AI decision-making systems). In posthumanist frameworks, alienation thus shifts from being solely a socioeconomic condition to an ontological and technological phenomenon: a loss of coherence, ownership, and authentic self-representation in a world saturated with algorithmic governance and digital mediation. Accordingly, the rights philosophy must evolve to account for subjects who are no longer unitary but networked, fragmented, and situated within technological assemblages.

In the 21st century, alienation transcends its classical economic meaning, becoming a cultural and existential phenomenon that shapes not only personal identity but also the dynamics of global conflicts. The spread of technocentric ideologies, prioritising technological progress, efficiency, and automation, intensifies the rift between societies oriented toward rapid technological innovation and those rooted in traditional, community-based, and spiritual worldviews. Technocentrism, often presented as the unavoidable path of modernity, embodies an ideology that frames technological development as an autonomous, self-justifying good. In the tradition of Herbert Marcuse's One-Dimensional Man (Marcuse, 1991), this ideology can be understood as reducing human needs, desires, and values to those that serve technological and economic systems. Alienation, in this view, manifests not merely as separation from labor but as estrangement from non-technological ways of living, from community, from nature, and from historical forms of self-understanding. The technocentric narrative often delegitimises traditional cultures, branding them as obsolete, inefficient, or superstitious. It imposes a universalising rationality that dismisses localised forms of knowledge, belief, and social organisation, thus creating deep cultural tensions. In Frantz Fanon's and Achille Mbembe's postcolonial theories, this imposition of a dominant rationality can be seen as a form of cultural alienation, where local identities are fractured under the pressure of global (techno-economic) models (Fanciullo, 2025). These dynamics of alienation contribute directly to international conflicts in several ways: 1. Cultural Resistance: Traditional societies often resist the

wholesale adoption of technocentric values, defending communal ties, spiritual practices, and ecological ways of life. The alienation produced by technological imperialism provokes efforts to reclaim identity, autonomy, and tradition, sometimes through political movements, sometimes through cultural revitalisation. 2. Economic Inequality and Technological Disparity: As U. Beck (1992) notes in his theory of the risk society, technological development is uneven, producing winners and losers on a global scale. Marginalised societies often experience both material alienation (lack of access to digital infrastructures) and existential alienation (loss of meaningful cultural frameworks), fueling resentment and conflict. 3. Hybridisation and Identity Crisis: In contexts where traditional and technocentric values collide, individuals experience identity fragmentation. H.K. Bhabha's (1994) concept of the "third space" describes how hybrid identities are formed in the interplay of local traditions and global modernity. Still, such hybridity can also deepen alienation, as individuals struggle to reconcile conflicting cultural logics. 4. Radicalisation and Reaction: In extreme cases, the alienation induced by technocentric hegemony can feed into radical ideological movements, which present themselves as defenders of authentic, traditional values against the perceived dehumanisation and homogenisation of global modernity.

From a philosophical perspective, these conflicts demonstrate that alienation is not merely an internal psychological state but a structural and global phenomenon. As J. Baudrillard (1994) suggests, in the era of simulations and hyperreality, traditional cultures are not only economically marginalised but symbolically annihilated, turned into commodified "heritage" for global consumption. Overcoming such alienation would require a critical rethinking of technology not as an autonomous force but as a culturally embedded practice, subject to ethical, political, and existential reflection.

## Conclusions

The concept of "alienation" has undergone a rather long genesis. It has evolved from a mechanical interpretation – as a conscious or forced act of transferring certain natural (inborn, a priori) human rights to the social organism – to the recognition of alienation as an essential and necessary aspect of human life, an attribute of existence. Scholars, while studying various aspects of this complex phenomenon, have assigned different meanings to it. Using the same term to denote entirely different phenomena and processes, researchers, understandably, could not reach a commonly accepted definition of alienation for a long time. While some viewed alienation as an individual, internal split in human consciousness, others understood it as the objectification of human activity – the separation of the products of one's material and spiritual labor from the individual. The emergence of various directions and approaches in defining the concept of "alienation" is conditioned by the different spheres of society in which it occurs. In the 19th and 20th centuries, alienation came to be analysed not only in terms of economic structures (as in K. Marx's critique of capitalism) but also through the lens of culture, psychology, and existential ontology, reflecting an increasingly multifaceted and interdisciplinary character. The posthumanist rethinking of subjectivity in the 21st century further challenges traditional notions of the autonomous individual. It redefines the subject of rights as technologically mediated and relational, thus requiring a re-examination of fundamental legal and philosophical categories. Moreover, the emergence of digital embodiment raises critical concerns regarding authenticity and privacy, as individuals become alienated from their embodied selves through the commodification and algorithmic governance of personal data. Ideologies of technocentric alienation contribute to global conflicts, intensifying tensions between traditional cultures and the homogenising forces of digital globalisation. At the same time, new forms of structural alienation – such as digital inequality and AI-driven labor exploitation – underscore the necessity of addressing technological injustices alongside classical social critiques. Further research should focus on developing normative frameworks for posthuman rights, exploring the ethical dimensions of digital embodiment, and theorising alternative models of technological development that respect cultural plurality.

## Conflict of Interest
The authors declare no conflict of interest.

## References
[1]  Baudrillard, J. (1994). *Simulacra and simulation*. Ann Arbor: University of Michigan Press.
[2]  Beck, U. (1992). *Risk society: Towards a new modernity*. London: SAGE.
[3]  Bhabha, H.K. (1994). *The location of culture*. London: Routledge.
[4]  Braidotti, R. (2017). *Posthuman knowledge*. Cambridge: Polity Press.
[5]  Choquet, P.L. (2021). Alienation and the task of geo-social critique. *European Journal of Social Theory*, 24(1), 105-122. doi: 10.1177/1368431020926113.

[6] Dodonova, V., Dodonov, R., & Maidaniuk, I. (2024). Hierarchy of identities in modern humanitarian discourse. *Humanities Studios: Pedagogy, Psychology, Philosophy*, 12(2), 252-261. doi: 10.31548/hspedagog15(2).2024.252-261.

[7] Esposito, R. (2011). *Immunitas: The protection and negation of life*. Cambridge: Polity Press.

[8] Fanciullo, J. (2025). Alienation, engagement, and welfare. *The Philosophical Quarterly*, 75(1), 40-60. doi: 10.1093/pq/pqad115.

[9] Feuerbach, L. (1986). *Principles of philosophy of the future*. Indianapolis-Cambridge: Hackett Publishing Company.

[10] Freud, S. (1976). *Psychology of the unconscious*. Zurich: Ex Libris Book Club.

[11] Fromm, E. (2013). *To have or to be?*. London, New York: Bloomsbury.

[12] Han, B.-C. (2015). *The burnout society*. Stanford: Stanford University Press.

[13] Hayles, N.K. (1999). *How we became posthuman: Virtual bodies in cybernetics, literature and informatics*. Chicago: The University of Chicago Press.

[14] Hegel, G.W.F. (2018). *The phenomenology of spirit*. Cambridge: Cambridge University Press. doi: 10.1017/9781139050494.

[15] Heidegger, M. (1962). *Being and time*. Oxford: Blackwell Publishers Ltd.

[16] Hobbes, T. (1651). *Leviathan, or the matter, forme, and power of a common-wealth ecclesiastical and civil*. London: Printed for Andrew Crooke.

[17] Jing, Z. (2024). The enigma of survival: The concept of "Alienation" and its cultural interpretation. *Journal of Humanities, Arts and Social Science*, 8(4), 883-890. doi: 10.26855/jhass.2024.04.011.

[18] Liu, Z.W. (2022). Marcuse's utopian transcendence of "One-way man". *Theory Horizon*, 7(10), 30-36.

[19] Locke, J. (1823). *Two treatises of government* (Vol. V). London: Printed for Thomas Tegg.

[20] Ma, L. (2024). Alienation in the digital age: Philosophical reflections and exploration. *Philosophy and Social Science*, 1(9), 62-66. doi: 10.62381/P243911.

[21] Marcuse, H. (1991). *One-dimensional man: Studies in the ideology of advanced industrial society*. London and New York: Beacon Press.

[22] Marx, K., & Engels, F. (2022). *The German ideology*. Paris: Foreign Languages Press.

[23] Marx, K. (1970). *Critique of Hegel's "Philosophy of right"*. Cambridge: Cambridge University Press.

[24] Marx, K. (2007). *Economic and philosophic manuscripts of 1844*. New York: Dover Publications.

[25] Osborne, T.M. (2014). *Human action in Thomas Aquinas, John Duns Scotus, and William of Ockham*. Washington: Catholic University of America Press. doi: 10.2307/j.ctt5vj8fm.

[26] Øversveen, E., & Kelly, C.A. (2023). Labour, capital and the struggle over history: Reconstructing Marxist class theory from the standpoint of alienation. *European Journal of Social Theory*, 26(3), 317-334. doi: 10.1177/13684310221129981.

[27] Pateman, J. (2022). V.I. Lenin on Alienation. *Critical Sociology*, 49(2), 185-200. doi: 10.1177/08969205221080552.

[28] Rousseau, J.-J. (1998). *The social contract*. London: Penguin Classics.

[29] Samuel, J. (2023). Alienation and the metaphysics of normativity: On the quality of our relations with the world. *Journal of Ethics and Social Philosophy*, 26(1), 158-191. doi: 10.26556/jesp.v26i1.1889.

[30] Santiagu, M.K. (2024). Understanding alienation: A marxian perspective. *Journal of Emerging Technologies and Innovative Research*, 11(3), 88-95.

[31] Sartre, J.-P. (2004). *Critique of dialectical reason* (Vol. 1). London, New York: Verso.

[32] Schweitzer, A. (2005). *Essential writings (Modern spiritual masters)*. New York: Orbis Books.

[33] Stiegler, B. (2019). *The age of disruption: Technology and madness in computational capitalism*. Cambridge: Polity Press.

[34] Zuboff, S. (1989). *In the age of the smart machin*. New York: Basic Books.

# Феномен відчуження в історико-філософському дискурсі: еволюція концепту та сучасні інтерпретації

## Ольга Гончарова

Кандидат історичних наук, доцент
Харківський національний педагогічний університет імені Г.С. Сковороди
61002, вул. Алчевських, 29, м. Харків, Україна
https://orcid.org/0000-0002-8697-3211

## Алаа Хуссейн Малу Ал-Самарраі

Кандидат педагогічних наук, викладач
Університет Аль-Хаді
6CG4+J9F, вул. 60-та, м. Багдад, Ірак
https://orcid.org/0009-0009-9520-6450

**Анотація.** Феномен відчуження є актуальною проблемою сучасності, що набуває нових форм у контексті глобалізаційних, цифрових та соціальних змін. Його дослідження потребує глибокого філософського аналізу, спрямованого на осмислення втрати людиною зв'язку з собою, суспільством і світом, а також на формування нових підходів до розуміння сучасного людського буття. Метою роботи було простежити історико-філософську еволюцію поняття «відчуження», окреслити основні етапи його розвитку та проаналізувати сучасні інтерпретації у контексті глобальних цивілізаційних змін. У дослідженні використано історико-філософський аналіз, компаративний і герменевтичний методи, а також міждисциплінарний підхід, що дозволив інтегрувати філософські, соціологічні, культурологічні й політологічні підходи до вивчення феномену відчуження. У процесі роботи встановлено, що поняття відчуження еволюціонувало від античних уявлень про втрату космічної гармонії через людське існування до середньовічної інтерпретації як розриву з Богом. У Новий час відчуження набуло політико-правового значення (Т. Гоббс, Дж. Локк, Ж.-Ж. Руссо), а в XIX столітті отримало глибоке філософське осмислення в працях Г. Гегеля, Л. Фейєрбаха, К. Маркса. У XX-XXI століттях відчуження розглядається в соціально-культурних, психологічних і технологічних площинах, включно з явищами цифрової ідентичності, постгуманізму та алгоритмічного контролю. Практичне значення дослідження полягає в можливості його застосування у сферах соціальної філософії, культурології, політичних наук, освітньої діяльності, а також для розробки концепцій протидії сучасним формам соціального, політичного і цифрового відчуження

**Ключові слова:** духовність; історичний розвиток; самовідчуження; соціокультурна ситуація; суспільство

# Theories of post-anarchism: Post-structuralism in political philosophy

## Maksym Shulha*

Postgraduate Student
Dragomanov Ukrainian State University
01601, 9 Pyrogov Str., Kyiv, Ukraine
https://orcid.org/0009-0006-6942-5033

## Oleksandr Rovniahin

Master of Sceinces
Kyiv National University of Technologies and Design
01011, 2 Mala Shyianovska Str., Kyiv, Ukraine
https://orcid.org/0000-0002-0868-6794

**Abstract.** The purpose of the study was to examine post-anarchism as a critique of standard ideologies of power and to assess its potential for social transformation. The study was conducted from September 2024 to February 2025, employing a post-structuralist analysis of power, political identity, and social structures. The findings indicated that post-anarchism conceptualises power not as a fixed hierarchical structure, but as a flexible process shaped through multiple social interactions. Post-anarchist theories demonstrate that the rejection of centralised mechanisms of authority becomes conceivable when alternative forms of social coordination are developed, based on principles of autonomy, mutual aid, and direct democracy. The analysis of contemporary initiatives, including horizontal networks and digital communities, demonstrated that post-anarchist approaches may contribute to the emergence of new models of civic engagement, although they remain vulnerable to latent forms of power arising from cultural and economic dependencies. Several paradoxes within post-anarchist models are identified, particularly the impossibility of completely eliminating power, even within highly decentralised structures. The results confirmed that post-anarchism simultaneously critiques conventional forms of authority while recognising the necessity of certain regulatory mechanisms to maintain social cohesion. The study further showed that in response to the challenges of globalisation and digitalisation, post-anarchism places emphasis on flexible, contextually adaptive forms of political subjectivity that may shift according to situational demands. Limitations of the post-anarchist perspective in addressing social equality were observed, since the absence of universal standards poses risks of newly emerging inequalities, which arise naturally from asymmetries in resources and access to information. Nevertheless, post-anarchism offers valuable opportunities for critical reflection on political freedom and autonomy within contemporary post-structural realities. The conclusions may inform further analysis of the transformative potential of post-structuralist theories of power, the rethinking of political identity models, and the development of strategies aimed at fostering more flexible and open social structures

**Keywords:** deconstruction; discourse; horizontality; hierarchy; relativism

## Introduction

Post-anarchism as a strand of political philosophy emerged at the intersection of the anarchist tradition and post-structuralist critiques of power. It rejects the essentialism of classical ideologies and reconsiders the mechanisms of social transformation within the context of contemporary political realities. Within this

*\*Corresponding author*

framework, post-anarchist approaches offer a critical evaluation of conventional conceptions of power, hierarchy, and the state, proposing alternative models of decentralised social organisation.

According to the study by A.M. Pavliuchenko (2020), post-anarchism arose as a response to the limitations of classical anarchism and Marxism, which, despite their radicalism, remained bound to the metanarratives of modernity. Post-anarchists abandoned the notion of power as a fixed structure and instead interpreted it as a distributed network of relations. This perspective cast doubt on standard models of revolutionary struggle that relied on replacing one system of power with another. O. Bekhter (2024) explored the impact of various organisational models on the effectiveness of social movements, focusing on the relationship between vertical and horizontal mechanisms of governance. The author observed that conventional hierarchical structures provided stability and control, which proved effective in highly structured contexts, yet simultaneously restricted participant autonomy and slowed decision-making processes. In contrast, horizontal structures encouraged greater flexibility, self-governance, and collective decision-making, aligning with post-anarchist principles. O. Bekhter emphasised that although horizontal networks enhanced activist engagement, they frequently encountered challenges in coordination and the distribution of responsibility.

The issue of power as a foundational element of social organisation was central to the research of O.V. Tkalya (2024). The author conducted a theoretical examination of the essential characteristics of political power, treating it not merely as an instrument of governance but as a social phenomenon shaping the dynamics of societal development. The study distinguished state power from other forms of authority, analysing its specific nature through the lens of legitimacy and legality. The study noted that power may function only when recognised by society, and its effectiveness is determined by the capacity to maintain a balance between social coordination and political control. From his perspective, the post-anarchist critique of state power raises doubts about the feasibility of sustaining social order without centralised mechanisms, since elements of hierarchical regulation persist even within decentralised systems.

As part of the analysis of post-anarchism's potential in the digital age, M.Y. Pedchenko (2024) developed a theoretical framework that offers a deeper understanding of the complex interrelations among technologies, social structures, and values, which are central to comprehending contemporary processes of transformation. In his view, the networked community not only responds to new conditions but actively shapes a future grounded in openness, collective creativity, and innovation. Such a future demands continual reconsideration and renewal of value systems in order for society to respond effectively to emerging challenges and to make full use of the opportunities presented by the digital era.

The relationship between citizen self-identification and the stable or unstable condition of a party system is explored in the study by L.Y. Ugryn & B.P. Bevza (2022), which examined political identity development and its influence on political processes in Ukraine. Self-identification is approached as the development of individual identity through the internalisation of norms, values, and discourses present within the social environment. These elements become integrated into an individual's inner world, shaping personal beliefs, motivations, and expectations. The authors argued that individual interests, shaped through self-identification, form the basis for party creation and a stable political system. They emphasise that the effective operation of a party system relies on the capacity of society to articulate and formalise collective interests and to establish a national idea capable of integrating individual needs within a broader political context. When basic material needs become politicised and society lacks awareness of potential developmental areas, there arises a risk of forming an unstructured, amorphous collective of individuals, which cannot be aligned with wider national interests.

Despite criticism, innovative digital platforms developed through Web 3.0 technologies hold considerable potential for transforming economic and social processes, as demonstrated in the study by V. Mishchenko (2023). The author examined the methodological foundations of these platforms, offering a structural and logical framework that incorporates their objectives, functions, tools, and technologies. The study acknowledged that the effective practical implementation of such solutions requires institutional support, regulation, and governance to minimise cyber risks and ensure the resilience of decentralised markets. The challenge remains that most research centres on critiques of conventional ideologies, while limited attention is given to the practical applicability of post-anarchist principles. This study seeks not only to assess the conceptual foundations of post-anarchism but also to explore its potential in addressing urgent social and political issues, particularly within the context of globalisation, environmental crisis, and digital transformation.

The purpose of the study was to identify the theoretical underpinnings of post-anarchism, its critique of conventional ideologies of power, and its capacity for enabling social transformation within the contemporary political landscape.

## Materials and Methods

The study was conducted using a comprehensive interdisciplinary approach that incorporates conceptual analysis, comparative analysis, and critical discourse analysis. This methodology enabled a thorough examination of post-anarchism not only as a philosophical current but also as a potential socio-political paradigm.

The analysis was situated within the framework of post-structuralist critiques of power, the discursive mechanisms through which it is reproduced, and the transformation of political subjectivity. This allowed approaching post-anarchism as a conceptual tool for critically rethinking social organisation beyond conventional state-centred and hierarchical models. The study was conducted over three stages across a six-month period (from September 2024 to February 2025).

The first stage employed conceptual analysis to determine the theoretical foundations of post-anarchism and its distinctions from classical anarchist and Marxist doctrines. A systematisation of key concepts shaping post-anarchist theory was undertaken, including discursive power, decentralisation, the deconstruction of political subjectivity, and radical autonomy. Particular attention was devoted to the deconstruction of power as a social phenomenon and its interrelation with mechanisms of representation. Sources selected for conceptual analysis were drawn from leading authors in the fields of post-structuralism and anarchist theory. The studies by M. Foucault (1975; 1976) and J. Derrida (1987) were used alongside contemporary studies maintaining a high academic standard and direct relevance to the subject. Academic authority served as the principal criterion for source selection, contributing to a deeper understanding of the post-structuralist approach to anarchist thought. Focus was also placed on studies reflecting current theoretical developments within post-anarchist theory, particularly ones addressing post-anarchist ideas in light of contemporary political and social realities. This ensured the applicability of the theory to both global and local challenges.

The second stage of the study centred on a comparative analysis of the applicability of post-anarchist concepts within contemporary political discourse. Selected materials for this stage included manifestos, memoranda, and papers, evaluated based on thematic relevance and the utilisation of post-anarchist theories for interpreting present-day socio-political conditions (The Invisible Committee, 2009; Williams and Srnicek, 2013; Declarations of the…, n.d.). Theoretical models of decentralised self-governance and the practical implementation of post-anarchist principles in society were examined. The impact of globalisation on the transformation of political subjectivity was considered, with particular focus on the rise of horizontal social movements that serve as alternatives to conventional hierarchical models of governance (Fighting in the…, 2010; Horizontal Organizational Structure, n.d.; Mishra, 2025). Environmental challenges, digital decentralisation, the platform economy, and self-governing initiatives were analysed as empirical manifestations of post-anarchist practice (Desert, 2011; Friends of the Earth International, 2025). The comparison was conducted through an analysis of decentralised decision-making

mechanisms, horizontal network structures, and strategies of resistance against centralised institutions.

During the third stage, critical discourse analysis was conducted using a combination of manual text analysis and the NVivo software. This approach enabled the evaluation of theoretical paradoxes within post-anarchism in the context of post-structuralism, with specific attention given to the notion of total power and the potential for its desubstantialisation. This raised the issue of the correlation between the rejection of hierarchy and the risks associated with political relativism. The relationship between freedom and social order in the absence of centralised regulation was analysed, alongside the dialectic of autonomy and chaos from a post-anarchist perspective. The use of discourse analysis allowed identifying contradictions between the deconstruction of power and the necessity of political subjectivisation as a mechanism of social resistance.

## Results
### Critique of power and contemporary challenges through the lens of post-anarchism and post-structuralism

Post-structuralism offers a radically different approach to understanding power when compared with classical political theories such as liberalism, Marxism, or conventional anarchism. While classical theories often conceptualise power as a fixed substance possessed by particular actors or institutions, post-structuralists interpret it as a dispersed and distributed network of relations. This understanding is grounded in the foundational premise of post-structuralism, which rejects universal and static categories in favour of analysing the processes and interactions that shape social structures and relationships. Central to this approach is the concept of power articulated by M. Foucault (1975), whose work formed the basis for ongoing debates concerning the nature of power in the contemporary world. M. Foucault critiques the conventional notion of power as something that can be owned or lost. In his view, power is not located solely within specific structures, such as the state, political parties, or economic institutions. Instead, it is a complex web of relationships that permeates all areas of social life. According to M. Foucault, power is exercised not only through mechanisms of direct control but also through the production of discourses that define what is considered "normal" or "correct" behaviour.

For post-structuralists, power is constituted through internalised social norms and knowledge, which are produced and disseminated by various social institutions, including education, media, and scientific bodies. As a result, individuals come to perceive certain social norms as natural or necessary, even when such norms are sustained by violent or repressive mechanisms. In modern states, for instance, both public and private institutions generate cultural and social discourses that

not only shape particular worldviews but also encourage individuals to conform without the need for overt external coercion. These discourses do not merely reflect existing social structures; they actively construct social reality, reproducing power through processes of socialisation. Notably, the philosophy of post-structuralism does not view power as something applied exclusively to oppressed groups or individuals, but rather as an all-encompassing process that touches every domain of life. Accordingly, power cannot be understood as a linear opposition between oppressors and the oppressed, since the logic of power is far more multidimensional and intricate. This reconceptualisation alters the way political influence and social relations are understood, as every individual is, at some point, involved in either reproducing or challenging power.

The post-anarchist approach to power likewise emphasises the importance of intersubjective interactions, whereby power is neither fixed nor localised. Power emerges as a result of intersubjective relations formed through interactions between individuals, social groups, and even through technologies and media. These relations are regarded as constantly shifting, dynamic, and shaped by a multiplicity of social actors. Power thus becomes mobile and multidimensional, which complicates attempts to localise or identify a singular source or institution of control. Individuals and groups, through their interactions, constitute a continually changing mosaic of power relations influenced by cultural norms, technological developments, media landscapes, and social structures. Post-structuralist theorists argue that it is therefore impossible to pinpoint exactly where and how specific forms of power manifest, as power is in a constant state of flux, adapting to new contexts.

This leads to a fundamental rethinking of the mechanisms through which power circulates, as proposed by post-structuralism. While classical conceptions often suggest that power can be "seized" or "overthrown," the post-structuralist perspective poses questions about the ways in which power circulates and the mechanisms through which it is reproduced. The philosophy of post-structuralism rejects the notion that power can be dismantled through the overthrow of centralised structures, instead advocating for the deconstruction of power relations through the analysis and transformation of dominant discourses. In this process, the focus shifts towards exposing hidden structures of power that operate at the level of language, behaviour, and social institutions. Resistance to power, in this framework, is no longer framed as a binary conflict between "oppressors" and "the oppressed," but becomes a continuous process of transforming social norms and knowledge. As power is constantly evolving, resistance entails the ongoing deconstruction and reconstruction of cultural and social narratives that sustain existing forms of control.

A comparison between the post-structuralist understanding of power and other political theories indicates a fundamental divergence in the interpretation of mechanisms of control and the nature of domination. Marxism, for instance, analyses power through the lens of materialist dialectics, asserting that power is derivative of economic relations and rooted in the exploitation of one class by another (Mau, 2021). Within this paradigm, power is viewed as an instrument of oppression that ensures the dominance of the bourgeoisie over the proletariat through state apparatuses, legal structures, and ideological institutions such as education and the media. Accordingly, revolutionary struggle in Marxist thought is aimed at transforming the economic base, which, according to classical Marxists, would lead to the automatic dismantling of repressive superstructures, including the state and its coercive institutions.

Liberalism, by contrast, conceptualises the state as a necessary mechanism for limiting and distributing power, designed to maintain a balance between individual liberty and collective responsibility. Liberal theorists maintain that power should be divided among branches of government to prevent its abuse (MacGilvray, 2021). From a liberal standpoint, the state acts as an arbiter that mediates conflicts of interest and ensures the rule of law. Post-structuralists reject any attempt to stabilise power within institutional frameworks, arguing instead that power is not a static resource but a dynamic process continuously reproduced through social interaction. They critique liberalism for its naïve assumption that power can be "fairly" distributed, and stress that even democratic institutions function as mechanisms of behavioural normalisation that generate and maintain dominant discourses.

Post-anarchism emerges at the intersection of classical anarchist tradition and post-structuralist critiques of power, combining the aspiration for social emancipation with an expanded understanding of mechanisms of domination. It develops as a response to the methodological and conceptual limitations of classical anarchism and Marxism, which often relied on essentialist notions of power and revolutionary societal transformation. Rejecting the concept of power as a clearly localised phenomenon, post-anarchists conceive of it as a dispersed network of relations operating through both discursive and material practices.

Classical anarchism defined the state as the primary bearer of repressive power, fundamentally opposed to the principles of liberty and self-governance. Anarchists insisted on its abolition as a necessary precondition for collective liberation (Kinna, 2024). Marxism, by contrast, proposed a different paradigm: class struggle was considered the driving force of history, and the overthrow of the bourgeois state, followed by the establishment of the dictatorship of the proletariat, was expected to ensure the transition to a classless society. Although anarchism and Marxism diverged in their

visions of how social equality might be achieved, both traditions were grounded in the assumption that power originates from clearly identifiable sources, namely the state and capital, and that these could be radically dismantled as a decisive step towards emancipation.

Post-anarchism challenges such essentialist assumptions by asserting that power is neither monocentric nor purely institutional. Power is not confined to state apparatuses or class relations, but permeates every sphere of social life, embedded within both discursive and material structures. Drawing on the work of M. Foucault (1975), J. Derrida (1987), and J. Lacan (2023), post-anarchists demonstrate that power operates through processes of normalisation, subjectivation, and disciplinary control. For instance, behaviour is shaped not only by laws or coercive institutions, but also by social norms, media discourses, educational systems, and other mechanisms that subtly structure modes of thinking and acting. Revolutionary overthrow of a government or capitalist economy, in this view, does not guarantee liberation, since power is continually reproduced through myriad microprocesses of social organisation.

A key dimension of post-anarchist critique lies in its expanded conception of the state, not merely as a repressive apparatus but as a mechanism for the construction of subjectivity. While classical anarchists largely focused on coercion enacted through the military, police, and judiciary, post-anarchists investigate how the state produces citizens not only by means of force but also through the fabrication of identities, norms, and political imaginaries. For example, modern liberal democracies employ electoral politics in ways that generate the illusion of popular sovereignty, while in practice circumscribing political agency within the confines of representative systems. Citizens are compelled to operate within pre-established boundaries: rather than exercising genuine influence over decision-making, they are permitted only to choose periodically among options already configured by the prevailing system.

A central concern within post-anarchist critiques of democracy is the phenomenon of representation. In the conventional democratic model, power is delegated to elected representatives, which, on the one hand, enables the functioning of large political communities, yet, on the other, results in the alienation of the political subject from decision-making processes. Citizens' political subjectivity gradually dissolves into a passive expectation of action from political elites, while real power becomes concentrated in a narrow circle of government officials, business actors, and bureaucratic structures. From the post-anarchist perspective, representation becomes a tool of depoliticisation, reinforcing hierarchy and rendering autonomous self-governance impossible.

As an alternative, post-anarchists advocate radical decentralisation and a multiplicity of forms of political participation that extend beyond conventional state institutions. Autonomous zones, horizontal social networks, local self-governance initiatives, and digital platforms for direct decision-making are viewed as potential tools for overcoming alienation and generating new modes of political interaction. These approaches aim to dismantle entrenched structures of domination and create space for emancipation through the continuous destabilisation of power relations.

Post-anarchism not only reconsiders classical conceptions of power but also proposes new modes of political action (Table 1). It does not aim toward utopian projects of "final liberation," but instead emphasises the importance of an ongoing process of developing autonomous practices capable of undermining centralised mechanisms of control and representation. This offers new perspectives for analysing power and engaging in struggles for social transformation in the context of a globalised contemporary society.

**Table 1.** Critique of the state through the lens of post-structuralism and post-anarchism

| Critique | Justification (Post-anarchist approach) | Alternative models | Contemporary examples |
|---|---|---|---|
| Centralisation of power | The state monopolises coercion and restricts community autonomy | Decentralised communal structures | Autonomous municipalities, e.g., the Zapatista autonomy (Mexico) |
| Representation | The political system alienates citizens from decision-making processes | Direct democracy, horizontal assemblies | Popular council model (Rojava, Syria) |
| Social control | Control is exercised through institutions, discourse, and language | Self-organisation, horizontal networks | Decentralised initiatives (cooperatives, community kitchens) |
| Bureaucracy | The administrative apparatus expands mechanisms of power | Flexible network-based forms of governance | Distributed governance platforms (DAOs, blockchain systems) |
| Ideological apparatus | Education, media, and culture serve to reinforce state structures | Critical pedagogy, decentralised media | Independent media platforms, alternative educational spaces |

Table 1. Continued

| Critique | Justification (Post-anarchist approach) | Alternative models | Contemporary examples |
|---|---|---|---|
| Legal system | Law functions as a tool for reproducing hierarchy and oppressing marginalised groups | Restorative justice, communal conflict resolution | Restorative justice in Indigenous communities (Canada, New Zealand) |
| Economic monopoly | The state secures corporate interests through market control | Local economies, shared ownership of resources | Alternative currencies (cryptocurrencies) |
| Migration control | The state defines who "belongs" to the nation, constructing borders | Free movement of people, absence of enforced citizenship | Open borders, migrant support initiatives (Sanctuary Cities, USA) |

**Source:** compiled by the authors based on M. Foucault (1976), J. Derrida (1987), R. Kinna (2024)

The Table 1 indicated that post-anarchism offers alternative models of social organisation that do not rely on centralised authority. Rejection of hierarchical structures does not imply chaos or destruction; rather, it represents a search for new forms of solidarity and interaction. Both post-structuralism and post-anarchism advance a fundamental critique of conventional statehood, directed against the centralisation of power, hierarchical control mechanisms, representational governance models, and economic monopoly. They instead highlight the necessity of creating decentralised, autonomous, and flexible structures that promote direct citizen participation in decision-making processes, as well as alternative approaches to economics, justice, and social engagement. Critique of the state in post-structuralist and post-anarchist discourse is not limited to theoretical opposition; it is accompanied by the development of concrete alternative models. Many of these are already being realised in contemporary examples of self-organisation, confirming the practical relevance of these ideas and their potential to offer tangible pathways for dismantling hierarchical structures across various spheres of social life.

One of the principal areas within post-anarchist thought is the development of networked structures and horizontal forms of self-organisation. Such models are already being implemented in many contemporary social movements, including ecological initiatives, autonomous cooperatives, and anarchist communitarian projects. These examples demonstrate that society can function without centralised control when grounded in principles of mutual aid, voluntary association, and direct democracy. Nonetheless, the question arises as to whether such a model can remain stable within large-scale societies. Critiques of horizontal movements point to difficulties in coordination and the absence of clear decision-making mechanisms during times of crisis. Post-anarchists respond by arguing that no system is fixed or immutable, and political forms must remain open to continuous transformation and adaptation. Post-anarchism offers a profound critique of classical concepts of power and the state, drawing on post-structuralist approaches to the analysis of political structures. It rejects the revolutionary essentialism of classical anarchism and Marxism, proposing instead a model of decentralised social transformation. Networked structures grounded in autonomy and self-governance are put forward as alternatives to the state.

In the context of contemporary political realities, post-anarchism appears not only as a theoretical critique of power but also as a mode of thought that offers alternative approaches to the organisation of social life. In a post-industrial society where conventional political ideologies are undergoing crisis, post-anarchism seeks to understand mechanisms of power and ways of overcoming them, taking into account emerging social, economic, and technological challenges. This conceptual reorientation expands the scope of post-anarchist critique while also confronting it with new demands. The world is a complex and contradictory system in which global integration, social mobility, and technological advancement generate conditions for both enhanced autonomy and novel forms of subjugation. The interdependence of societies and the growing scale of political and economic structures complicate the realisation of conventional anarchist ideals, yet simultaneously open new avenues for rethinking strategies of resistance and self-organisation.

Globalisation, as a complex and multidimensional process encompassing economic, political, and cultural dimensions, constitutes both a challenge and an opportunity for post-anarchist theories. On one hand, it facilitates the expansion of horizontal connections among social movements, offering new mechanisms of self-organisation and information exchange beyond the limits of state institutions. This process contributes to the development of translocal and transnational networks grounded in decentralisation and collective decision-making. On the other hand, globalisation is accompanied by the increasing influence of transnational corporations, financial institutions, and supranational governance bodies, which complicates the implementation of anarchic forms of social organisation.

Post-anarchism regards globalisation not as a unified or monolithic process but as a contested political terrain in which alternative forms of political agency may emerge. However, several theoretical and practical limitations confront post-anarchist approaches.

Despite the decentralised nature of global social movements, they often remain vulnerable to processes of co-optation by state and corporate structures. For instance, the study by M. Schaaf & O. Quiring (2023) highlights that the digital platforms utilised by activists, such as social media, are instruments of commercial and political elites, which constrains their effectiveness as autonomous tools of mobilisation.

Economic globalisation constructs a complex system of structural dependencies that hinders the implementation of local, autonomous models of production and consumption. On one hand, such models strive for economic self-sufficiency through decentralisation, cooperation, and local control over resources. On the other hand, they remain embedded within global markets through intricate supply chains, technological dependency, and financial mechanisms, rendering them susceptible to external pressures. Most local economies rely on the import of raw materials, equipment, and technologies supplied by transnational corporations or state institutions. This implies that even autonomous production initiatives often cannot entirely circumvent interaction with global markets. Global supply chains exhibit a tendency toward centralisation, which places local production efforts at a disadvantage. For example, even when a community produces its own goods, it may be compelled to sell them through large retail networks that dictate pricing and logistics. This limits the prospects for equitable profit distribution, intensifies dependency on centralised distribution systems, and complicates the viability of alternative economic models. Economic globalisation thus produces a paradox in which, on one hand, it enables the expansion of local initiatives by providing access to technologies, information, and new markets, yet, on the other, it embeds these initiatives within dependency networks that substantially constrain their genuine autonomy. This forces local movements either to adapt to the prevailing global economic conditions or to seek radically new approaches to achieving economic independence, an ongoing challenge in the contemporary context.

Another pressing global concern is the ecological crisis, which compels a re-evaluation of conventional models of social governance. Post-anarchism offers an alternative perspective on environmental issues, emphasising the necessity for decentralised and collective management of natural resources. Theorists within this tradition point to the failure of state-centric environmental policies, which frequently reflect corporate interests and neglect the specific characteristics of local ecosystems. However, the implementation of post-anarchist ecological strategies also encounters notable constraints. Models of local ecological autonomy face material and technical limitations, as many initiatives operating under horizontal governance structures remain dependent on external funding or state

support programmes. The lack of unified coordination mechanisms among local ecological communes may also compromise their long-term resilience.

A further challenge worth highlighting is the emergence of contemporary social movements that increasingly adopt horizontal models of organisation, reflecting the core principles of post-anarchist thought. Feminist, anti-corruption, anti-authoritarian, and environmental movements are increasingly rejecting centralised leadership in favour of decentralised strategies of collective action. For instance, movements such as Occupy and Extinction Rebellion employ leaderless organisational methods, establishing temporary autonomous zones in which decisions are made through consensus.

Despite the advantages of such strategies, they also exhibit certain weaknesses. One key issue facing horizontal structures is the absence of formal mechanisms for resolving internal conflicts. In theory, these movements are grounded in principles of equal participation and consensual decision-making, yet in practice, they frequently encounter the phenomenon of "quiet hierarchy" (Kummelstedt, 2023). This concept describes situations in which informally centralised power structures emerge within ostensibly horizontal organisations. Even in movements that aim to avoid conventional hierarchies, certain participants nevertheless acquire disproportionate influence over decision-making processes through personal authority, charisma, or control over communication channels.

In contemporary horizontal movements such as Extinction Rebellion and Occupy Wall Street, trends of informal dominance are observable: activists with greater experience or resources, including access to media or funding, often wield disproportionate power in decision-making processes. This may lead to discontent and demoralisation among other participants, particularly in moments of crisis when prompt decisions are required, yet the absence of clear procedures creates conditions conducive to informal power consolidation. Analysis of these examples demonstrates that asymmetries of power persist even within horizontal structures, raising questions about the feasibility of complete decentralisation under real-world conditions. The formal absence of hierarchy does not guarantee actual equality among participants; access to resources, competencies, or network connections automatically becomes a source of influence. This indicates that horizontality, in itself, does not eliminate mechanisms of domination but merely alters their form and visibility. As a result, even decentralised movements require critical reflection on their internal power dynamics and the development of mechanisms to prevent new forms of inequality.

Another fundamental problem of horizontal structures lies in their limited capacity for long-term coordination. Many social movements operating on principles of decentralised governance effectively mobilise

people during moments of crisis, yet encounter difficulties in developing stable organisational models to sustain initiatives over the long term. The example of Occupy Wall Street, which gathered thousands of activists and propagated ideas of economic equality and opposition to corporate power, demonstrated that in the absence of strategic vision and clear coordination mechanisms, even mass movements rapidly lose influence (Fong, 2023). Based on this analysis, the successful implementation of post-anarchist principles requires the development of new models of sustainable coordination, balancing openness with structured horizontal networks. The absence of formal hierarchy must be compensated by flexible, yet clearly defined mechanisms for decision-making, responsibility distribution, and conflict resolution. This entails the necessity of creating procedures that simultaneously preserve the inclusivity of processes and prevent the concentration of informal power. Without such measures, even the most decentralised initiatives risk reproducing the very inequalities they aim to challenge.

Analysing the theory involves considering the role of digital technologies within the context of post-anarchist strategies, notably the potential of digital platforms, blockchain technologies, and cryptocurrencies as tools for decentralising power. Post-anarchists view these technologies as instruments for the development of autonomous forms of social organisation. Theoretical discussions also examine decentralised decision-making systems, such as DAOs (decentralised autonomous organisations), as examples of self-governing structures without hierarchical control (Alston, 2022). Post-anarchist critique of technological decentralisation highlights risks associated with digital surveillance and algorithmic governance, which may give rise to new forms of power that are less transparent than conventional political institutions. Particularly, the concentration of control over digital platforms in the hands of corporations contradicts principles of autonomy, thereby undermining the potential of post-anarchist strategies in digital environments.

The analysis shows that post-anarchism not only offers a radical critique of contemporary forms of power but also opens new perspectives on social organisation within the context of decentralisation, local initiatives, and horizontal networks. In Ukrainian society, post-anarchist ideas find practical expression in forms of civic self-organisation, volunteer movements, direct democracy initiatives, and the development of cooperative associations operating outside conventional state structures. These examples demonstrate the adaptability of post-anarchist approaches to the realities of a post-crisis society and the potential of alternative models of power in processes of social transformation. Nevertheless, these approaches face a range of practical and theoretical limitations, casting doubt on their long-term efficacy. The analysis of these challenges is

crucial for the further development of post-anarchist ideas amid contemporary global transformations.

Contemporary political realities indicate a growing interest in decentralised forms of social organisation, which constitute a central concern of post-anarchist thought. In the context of globalisation, ecological crisis, and the advancement of digital technologies, post-anarchism offers conceptual frameworks for the critical analysis of existing power structures and the exploration of alternative paths for societal development. Social movements grounded in horizontal principles reveal the potential for the realisation of anarchic models of organisation, yet their long-term effectiveness remains an open question. By combining a critique of conventional ideologies of power with a post-structuralist approach to political analysis, post-anarchism facilitates a deeper understanding of contemporary challenges and prospects for social transformation.

Post-anarchism, as a current of critical thought, continues to evolve in response to global challenges. Its theoretical foundations offer new approaches to understanding power and the mechanisms through which it operates, though these concepts encounter practical difficulties. The complexity of the modern world, the interdependence of economies, the intensification of digital control, and environmental threats compel post-anarchist theories to adapt and revise their strategies. Horizontal models of organisation, which form a key component of post-anarchist thinking, demonstrate both the potential for social transformation and the limitations linked to a lack of effective coordination and conflict resolution mechanisms. Digital technologies provide new opportunities for decentralisation, while simultaneously generating new forms of subordination through algorithmic governance and the monopolisation of digital platforms. Within this context, post-anarchism remains a field of intellectual experimentation, combining radical critique of existing power structures with the search for alternative models of social organisation. Its future development will depend on the ability to propose more effective mechanisms for achieving autonomy, which take into account contemporary social, economic, and technological realities.

### Post-structuralist foundations of post-anarchism

Political identity within the post-structuralist tradition is unstable, processual, and open to constant transformation, shaped by its dependence on multiple discursive practices and socio-historical contexts. It is not a clearly defined or essentialised category, but is constituted through complex networks of interaction between subjects, power institutions, and ideological apparatuses, which continuously reshape its configuration. Political identity emerges not as the product of static social structures but as a dynamic process of constructing and reconstructing meanings, perpetually subject to revision. Drawing on these foundations,

post-anarchism rejects essentialist conceptions of the subject, the political collective, and the social order that characterised classical anarchism, which assumed the existence of objective and fixed bases for social transformation. Instead, post-anarchist theory interprets political relations as decentralised, contingent, and radically open to change. The rejection of essentialism corresponds with the post-structuralist critique of metanarratives and Foucauldian analysis of discursive power, which precludes any final fixation of political subjects within stable identities.

A central methodological tool within post-anarchist theory is deconstruction, as introduced by J. Derrida (1987). Author demonstrated that meaning in language is always deferred, and therefore, no political identity can ever be final or immutable. This directly contradicts classical revolutionary strategies, which view society as a battleground between clearly defined groups, such as the oppressed and the oppressors. Post-anarchism, drawing upon this concept, argues that such divisions are discursively constructed and thus require constant critical re-evaluation.

In this context, M. Foucault's (1975; 1976) analysis of power is especially important. His works "Discipline and Punish" and "The History of Sexuality" offered a novel understanding of power as a dispersed phenomenon, functioning through discourses rather than solely through the repressive mechanisms of the state. Foucault asserted that the subject does not exist independently of the discursive regimes that shape it. Consequently, any struggle for "liberation" must inevitably confront multiple, diffuse forms of power. This perspective shifts the focus of post-anarchist critique. Whereas classical anarchism centred its efforts on resisting the state as the primary locus of power, post-anarchism examines how power operates within the smallest social practices, including language, norms, and cultural assumptions. The field of political resistance is thus expanded: struggle occurs not only through revolutionary action but also by subverting hegemonic discourses, altering modes of subjective self-reflection, and generating new forms of social interaction.

Another important aspect of post-anarchist critique concerns the symbolic order and the structural impact of power on subject formation. This approach was developed by J. Lacan (2023) in his concept of the "big Other", which views language and symbolic structures as conditions for the emergence of identity. Lacanian analysis of identity became central to post-anarchism, as it demonstrates that power operates not only as external coercion but also as a profound mechanism that defines the very possibility of political subjectivity. This challenges conventional revolutionary strategies, which rest on the assumption that dismantling or transforming power institutions alone is sufficient to achieve fundamental social change. However, post-structuralist analyses of power reveal that even after the formal dismantling of the state apparatus or centralised institutions, dominant discourses that shape subjectivity, modes of thought, and social behaviour may continue to reproduce hierarchical structures. In other words, power is not exclusively institutional, but manifests through micro-processes of discipline, ideological influence, and normalisation.

Accordingly, post-anarchism does not concentrate solely on the transformation of external power structures or the seizure of political control. It emphasises the necessity of a radical transformation of subjectivity and of political conceptions of autonomy. This implies that emancipatory struggle must unfold not only in the realm of institutional change but also through a rupture with established regimes of knowledge, discursive practices, and forms of social imagination. The key task, therefore, lies not merely in overcoming the material structures of oppression but in creating new modes of thought and new forms of collective action that do not reproduce the logic of domination and repression.

In this sense, post-anarchism radically departs from classical utopian projects, which are constructed upon rigid normative political models and metanarratives. Since no structure is ever final, and every political system is the product of contingent processes and historical change, post-anarchism does not offer a closed theoretical framework. Instead, it advocates a principled openness to new forms of social organisation, flexibility in political action, and experimentation with alternative models of interaction. This reflects the post-structuralist logic of rejecting a teleological approach to history and political evolution, which presupposes a predetermined direction for societal development. By abandoning conventional categories of political identity, post-anarchism opens the possibility for new, flexible forms of social organisation that resist rigid theoretical delimitation. Whereas classical anarchism operated with concepts such as "class," "the people," "exploitation," and "revolution" as objective and structurally defined categories, post-anarchists underscore their instability, historical variability, and contextual contingency. The rejection of fixed social identities and of a singular revolutionary subject allows post-anarchism to understand political processes not as a linear struggle for power, but as a complex network of interactions, in which new forms of resistance and autonomy emerge through multiple practices of discursive and material contestation. Political subjectivity within post-anarchism is therefore conceived as fragmentary, relational, and perpetually open to transformation. Individuals do not belong to static political communities, but participate in dynamic processes of self-organisation, where their identities are continually renegotiated through practices of collective action and political experimentation. For instance, contemporary social movements such as feminist initiatives, environmental activists, or anti-capitalist platforms lack a centralised

core or stable ideological programme. They operate through flexible networks, temporary coalitions, and horizontal structures, which do not require centralised leadership or rigid organisational hierarchies.

This tendency aligns with the post-anarchist understanding of politics as a process of constant re-signification, which renders the final stabilisation of power structures or the universalisation of any social theory impossible. Whereas classical anarchism criticised the state and capitalism as forms of institutionalised oppression, offering instead models of federative self-governance, post-anarchism privileges no particular form of social organisation. It conceives political transformation as a plural, decentralised, and open-ended process, in which the key concern is not the establishment of a specific social order, but the continual possibility of its critical revision and transformation. In this respect, post-anarchism represents a logical continuation of the post-structuralist critique of power and subjectivity. It not only analyses mechanisms of domination but also proposes alternative approaches to political organisation based on openness, decentralisation, and the perpetual reimagining of social relations. This renders it particularly relevant in the context of contemporary social movements, which reject rigid structures and seek new, more adaptive forms of political engagement. In this sense, post-anarchism does not simply negate conventional hierarchies. It offers a radical rethinking of the very nature of power, political subjectivity, and social order.

Grounded in the post-structuralist critique of power, post-anarchism confronts a number of theoretical and practical paradoxes that complicate its viability as a political theory (Table 2). One of the central issues concerns the possibility of renouncing power in conditions of its omnipresence. The post-structuralist tradition, represented most notably in the work of Michel Foucault, rejects the classical conception of power as a centralised and localised institution. It instead describes power as a diffuse mechanism that permeates all social relations. This implies that even in the absence of conventional structures of authority, forms of domination and subjugation may be reproduced at the level of discursive practices and interpersonal relationships. Within this context, the question arises whether radical emancipation is possible if power is not merely a repressive instrument, but the very condition for the formation of subjectivity.

**Table 2.** Tensions between post-structuralism and the possibility of practical politics

| Tension | Core issue | Expression in post-structuralism | Impact on practical politics | Possible approaches to resolution |
|---|---|---|---|---|
| Rejection of the subject | Post-structuralism questions the stable subject required for political action | J. Lacan: the subject is unstable, formed through language and the Other | Hinders mobilisation due to the absence of a clear conception of the agent of change | Temporary and situational identities; emphasis on processes and relations |
| Decentralisation of power | If power is dispersed, who constitutes its principal opponent? | M. Foucault: power operates through discourses, not solely through the state | Complicates the identification of a primary political adversary | Identification of specific points of resistance, localised struggles, micropolitics |
| Rejection of metanarratives | Post-structuralism critiques overarching ideological projects | J.-F. Lyotard: distrust towards universal ideas | Obstructs the development of general political programmes | Networked movements and situational coalitions without a unified ideology |
| Multiplicity of truths | The absence of a single truth renders political claims unstable | J. Derrida: truth is a play of differences | Political agendas may appear unstable or contradictory | Flexible discourses; rhetorical adaptation to context |
| Critique of representation | Post-structuralism denies the possibility of an accurate representation of social groups | The link between language and power is a construct | Weakens the role of political parties and representative democracy | Horizontal movements, self-governing initiatives, direct action |
| The paradox of action | If everything is discourse, how are material changes enacted? | Language constructs reality (J. Butler) | Creates difficulty in translating theory into practice | Integration of discourse analysis with direct political practices |
| Rejection of fixed identities | Politics demands group solidarity, yet post-structuralism deconstructs it | Identity is fluid and unstable | Undermines sustained mobilisation | Temporary alliances; affective politics |

**Source:** compiled by the authors based on M. Foucault (1976), J. Derrida (1987), J. Lacan (2023)

The analysis demonstrates several key contradictions among the aspects examined. The first is the rejection of the subject. As post-structuralism denies the stability of the subject, which has conventionally been essential for political mobilisation, post-anarchism faces a fundamental challenge: how to organise sustained political movements in the absence of a fixed identity. This contradiction complicates the development of long-term strategic initiatives and directly limits the possibilities for constructing effective structures of self-organisation. The second key contradiction concerns the decentralisation of power. Rejecting the notion of a singular source of power and shifting focus to discursive practices creates difficulties in identifying the principal opponent of political struggle. This issue is particularly significant for the practical implementation of post-anarchist principles, since effective mobilisation requires a clearly defined object of resistance. The third central contradiction is the refusal of metanarratives. The post-structuralist critique of universal ideologies undermines the formation of broad political programmes, which are necessary to unite large groups around a shared objective. This contradiction raises questions about the prospects for the widespread implementation of post-anarchist models within contemporary political systems.

These problems are intensified by the dilemma between freedom and chaos. While post-anarchism rejects centralised political structures, it also confronts the necessity of organising social life, which in turn entails the establishment of certain norms and rules. The deconstruction of conventional institutions of power does not automatically produce equitable or harmonious relations. On the one hand, self-governance and autonomy, as advocated by post-anarchists, offer opportunities for more democratic and horizontal forms of interaction. On the other hand, the absence of established coordination mechanisms may result in destabilisation and the erosion of social control, which, according to some critics, could lead to societal fragmentation and the undermining of collective forms of solidarity.

Another challenge is relativism, which emerges from the post-structuralist critique of metanarratives and universal truths. If post-anarchism rejects a singular political doctrine and affirms the multiplicity of identities, the question arises as to how social unity might be achieved without appealing to shared ideas or normative foundations. Jacques Derrida, in his writings, emphasised the fundamental impossibility of definitively determining any concept or idea, as meaning is always in motion, continually deferred through processes of differentiation. This implies that any political community attempting to operate on post-anarchist principles will inevitably encounter the challenge of reconciling multiple, and at times contradictory, discourses.

The table highlights that, although post-anarchism offers a radical critique of conventional political structures, it encounters a number of internal contradictions that limit its practical potential. Its rejection of centralised authority collides with the impossibility of avoiding structural mechanisms of domination, the dilemma between freedom and chaos remains unresolved, and the issue of relativism undermines the possibility of forming stable social bonds. The absence of a normative programme renders post-anarchism an effective tool for critique, though it leaves open the question of its role in the development of alternative models of political organisation. Emerging within the post-structuralist tradition, post-anarchism offers a radical rethinking of approaches to social organisation. Its central concern relates to the possibility of a society existing without stable structures, given that conventional political systems rely on rigid institutional frameworks that ensure order and predictability in social relations. Therewith, the post-anarchist critique of power, representation, and hierarchy entails a search for alternative forms of organisation that do not replicate conventional mechanisms of domination.

Practical examples of decentralised initiatives demonstrate the potential to approximate post-anarchist principles, though these are not entirely free from power relations. Autonomous municipalities, such as the municipal confederalism in Rojava, are based on horizontal structures of self-governance, citizen participation in decision-making processes, and principles of ecological and feminist democracy (Rasit & Kolokotronis, 2020). In this case, political organisation is founded upon the direct participation of communities in decision-making, which aligns with the post-anarchist vision of politics as a process of continual re-signification and collective self-governance. However, even within such systems, mechanisms of coordination and regulation persist, potentially conflicting with the radical deconstruction of power proposed by post-structuralism. In Rojava, the People's Defence Forces exist as a democratically accountable structure, yet still perform armed regulatory functions and may generate new forms of hierarchical authority. This illustrates the complexity of implementing post-anarchist ideas within real social contexts, as the complete absence of power mechanisms may lead to destabilisation and conflict.

These examples show that the post-anarchist principles of decentralisation and radical democracy hold potential for realisation, though they always function within frameworks that cannot be entirely freed from power relations. Post-anarchism, therefore, is not a fixed model of social organisation, but rather a continual process of searching for new forms of political interaction that seek to bypass conventional hierarchical structures, while simultaneously acknowledging the complexity and contradictions inherent in the very nature of power.

An analysis of post-anarchism as a political theory indicates its critical potential while pointing to its

limitations in offering clear models for practical implementation. Post-anarchism does not constitute a conventional normative theory that prescribes specific political strategies or institutional solutions. Instead, it functions as an analytical approach to understanding power, social relations, and identity, offering a radically decentralised vision of politics grounded in the post-structuralist critique of hierarchies and essentialist conceptions of social order.

One of the key strengths of post-anarchism lies in its capacity to expose hidden mechanisms of domination and to illustrate how power is reproduced even within environments that claim autonomy and equality. This is particularly relevant in the context of contemporary political movements that seek to avoid centralisation and hierarchical leadership. Despite its emphasis on decentralisation, any system in practice requires mechanisms of coordination, which may gradually reproduce power relations in new forms. For instance, in digital autonomous communities, power may manifest through algorithmic governance and access to technical resources, whereas in municipal forms of self-governance, the need for collective decision-making often necessitates structured procedures that may take on the characteristics of institutional authority. This raises doubts about the feasibility of fully realising post-anarchist principles in practical political contexts. Another challenge facing post-anarchism is its relativism and openness to a multiplicity of political identities and strategies. On the one hand, this facilitates the critique of all forms of universalism and authoritarianism, yet on the other, it complicates the coordination of collective action within large-scale political processes. In the absence of a central decision-making body, achieving coherence among autonomous initiatives becomes difficult, particularly when confronted with external pressures such as repressive political regimes or corporate interests.

Post-anarchism remains a valuable theoretical tool for the critique of power and the exploration of alternative models of social organisation, although the question of its practical implementation continues to demand further analysis. Its relevance lies not in constructing a new normative system, but in developing dynamic and flexible approaches to political engagement that can be adapted to specific conditions and contexts.

## Discussion

The analysis of post-anarchism provides insight into the extent to which this theory offers alternative models of social organisation that reject conventional structures of power and hierarchy. This study illustrates the multidimensional nature of the post-anarchist approach, which involves the deconstruction of power, the rethinking of identity, and the influence of digital technologies on the decentralisation of social processes.

G. Sotiropoulos (2020) and J. Janssen (2024) demonstrated that post-anarchism, grounded in post-structuralist critiques of the subject, rejects the notion of a stable political identity. Instead, identity is understood as being shaped through discursive practices and interactions with structures of power that do not necessarily take institutional form. Post-anarchist thinkers emphasise that power is dispersed throughout the social space and manifests through language, cultural codes, and technological algorithms. This study affirms that the struggle for freedom cannot be reduced to the abolition of the state or capital, but must involve the deconstruction of dominant narratives that determine the boundaries of political action.

The study by D. Campbell & R. Bleiker (2024), and H. Kallin (2024) explored the influence of post-structuralism on the anarchist tradition, stressing that post-anarchism reimagines the very concept of revolution. Whereas classical anarchists viewed the revolutionary act as a clearly defined intervention aimed at altering political structures, post-anarchists conceive it as a continuous process of micro-resistance. The findings indicate that this process involves the deployment of alternative forms of knowledge, the construction of new models of subjectivity, and the rethinking of political strategies within existing networks of power. This study confirms that post-anarchism does not merely criticise power but investigates its mechanisms to identify spaces for potential deconstruction.

R.W. Valliere (2023) highlights that post-anarchism seeks to reconceptualise power not as a fixed structure but as a flexible process that can be transformed through social practices. In contrast to classical anarchist theories, which envisioned the replacement of centralised authority with federations or communes, post-anarchism emphasises the multiplicity of power relations and the potential for the creation of decentralised forms of coexistence. The study by T. Topuzowski (2024) demonstrated that post-anarchist models continue to face a dilemma: whether a society can function without structures of power, given that even horizontal networks require some form of regulatory mechanism. This study supports the argument that the complete abandonment of power may pose a risk of social disorganisation.

The study by S. Newman & M. Torre (2024) examined the possibility of a just society existing without structures of power, drawing attention to the complexity of maintaining social order in the absence of centralised mechanisms of regulation. Post-anarchists argue that the conventional conception of power as coercive hierarchy is outdated and can be replaced by horizontal networked structures grounded in consensus and self-regulation. The study by I. Lührmann *et al.* (2020) demonstrated that even within highly decentralised social formations, hidden mechanisms of power persist, emerging through cultural norms, flows of information, and economic relations. This study confirms that a just society without power structures remains possible only

on the condition that alternative mechanisms of social coordination exist, capable of maintaining a balance between freedom and necessary constraints.

A. Christoyannopoulos (2022) and S. Newman (2024) highlighted that one of the defining aspects of post-anarchism is its position on the concept of utopia. In contrast to classical anarchist utopias, which envisaged concrete models of a future society, post-anarchism rejects teleological thinking and places emphasis on the necessity of continuous political transformation. This refusal of rigidly defined utopias reflects the post-structuralist scepticism toward stable truths and universal projects of emancipation. Instead, post-anarchism advances a form of "negative utopia" – an open space for multiple experiments in freedom.

The concept of autonomy as a central subject in post-anarchist thought is addressed by J. Rusche (2022). The author approached autonomy not merely as independence from the state, but as a practice of self-governance rooted in principles of mutual aid and direct democracy. Post-anarchism departs from classical models of autonomy based on territorial sovereignty and instead advocates for networked, situational, and contextually fluid forms of autonomous existence. This study affirms that autonomy, in the post-anarchist sense, should be understood as a process rather than a static condition, enabling individuals and groups to evade rigid social structures.

J. Mullenite (2021) stressed that autonomy within post-anarchist discourse is not simply detachment from the state, but an ongoing re-evaluation of the relationship between the individual and society. Post-anarchists view autonomy as a dynamic condition shaped by shifting political, social, and technological contexts. In contrast to classical anarchists, who focused on the economic self-sufficiency of communes, post-anarchism foregrounds the symbolic dimension of autonomy, including informational freedom and cognitive independence. The findings of R. Dzierwa (2025) indicate that although autonomy remains a foundational concept in post-anarchist theory, its realisation within contemporary globalised societies demands new approaches to engagement with existing structures of power. This study confirms that autonomy is not absolute but emerges through ongoing struggles to define the boundaries of freedom under postmodern political conditions.

The study by H. Rahimi & H. Rahimi (2022) and C. Malabou (2022), examines the linguistic power within post-anarchism, drawing on the ideas of M. Foucault and Gilles Deleuze. It demonstrates that political action in a post-anarchist context cannot be separated from the analysis of language as a mechanism for reproducing power relations. Post-anarchists argue that even within highly autonomous spaces, the risk of reproducing structures of domination persists through discursive practices. This study confirms that the struggle for autonomy must involve not only economic or administrative transformations but also a radical re-evaluation of communicative practices and the production of meaning.

The study by D. Wegner & J. Verschoore (2021) explores digital technologies. The authors assert that a post-structuralist approach to power provides a deeper understanding of how algorithmic governance and digital control influence the possibilities for political resistance. Post-anarchism views online space not simply as a platform for alternative political forms, but as a contested field between centralised mechanisms of control and horizontal networks of interaction. The study shows that contemporary digital technologies can both support autonomy and generate new forms of power relations, complicating the implementation of post-anarchist principles in digital environments.

Post-anarchism, as a foundation for new approaches to social organisation, remains a concept that combines a commitment to decentralisation with the necessity of functional mechanisms for coordination. The findings indicate that although post-anarchist principles are evident in digital platforms, environmental movements, and horizontal initiatives, they continue to face challenges in achieving implementation on a broader political scale. This study affirms that while post-anarchism proposes innovative concepts of political autonomy and social equality, its practical realisation remains an open question requiring further investigation and experimentation with new forms of social organisation.

## Conclusions

The study achieved the stated purpose and undertook a comprehensive analysis of post-anarchism as a political theory through conceptual, comparative and discursive methods. As a result, the foundational theoretical principles of post-anarchism were identified, including an understanding of power as a diffuse process and the rejection of fixed identity; the key distinctions between post-anarchism and classical anarchist and Marxist traditions were established; the paradoxes within post-anarchist critiques of power were demonstrated; and the risks of relativism and fragmentation of political projects were articulated. The findings confirmed that post-anarchism holds considerable potential as a tool for the critical analysis of power and for the development of alternative forms of social organisation, though its practical effectiveness depends on the capacity to adapt to shifting social and political contexts.

The analysis of post-anarchism as a political theory demonstrated its radical critique of conventional ideologies of power, grounded in a post-structuralist understanding of power as a social construct. The rejection of essentialism enabled post-anarchist thinkers to deconstruct the concepts of the state, representation, and centralised power structures, though this simultaneously cast doubt on the feasibility of effective social transformation in the absence of stable institutional

mechanisms. Post-anarchism did not present a clearly defined model of political order, which limited its practical applicability. Within contemporary political realities, post-anarchism faced challenges posed by globalisation, ecological crisis, and the digital transformation of power. Although it provided a theoretical foundation for the development of alternative social structures, its implementation relied heavily on the ability of social movements to adapt these ideas to specific political circumstances. Horizontal networks formed within the framework of digital communication technologies offered potential for the application of post-anarchist principles, though they also introduced new difficulties related to the risk of fragmentation and the absence of a unified strategic direction.

The analysis of key post-anarchist concepts showed that the rejection of fixed political categories and conventional understandings of the subject contributed to a deeper comprehension of the mechanisms of power and social organisation. Post-anarchism viewed identity as a processual phenomenon, wherein the subject was shaped through interaction with discursive structures rather than being an autonomous, internally determined entity. Political subjectivity shifted under the influence of symbolic, social, and institutional factors, challenging the notion of a stable political order. Power operated through a network of discursive relations, was embedded in social practice, and reproduced itself through mechanisms of normalisation and symbolic influence. Within this framework, political autonomy was understood not as a predetermined attribute but as a process of continual contestation of power relations. A central feature of post-anarchist thought was the conception of power as diffuse and invisible, permeating all levels of social relations. This rendered the classical anarchist distinction between state and society untenable and advanced the notion of radical decentralisation through the ongoing deconstruction of power structures.

The reassessment of notions concerning social transformation demonstrated that post-anarchism rejected the idea of the revolutionary subject as the sole agent of change. In its place, micro-political strategies were proposed, oriented towards localised forms of resistance, self-governance, and the creation of autonomous zones beyond the reach of state authority. The examination of post-anarchist paradoxes through the lens of post-structuralism demonstrated that a complete rejection of power was unfeasible, given that power is omnipresent and manifests across various levels of social interaction. This produced a dilemma between freedom and chaos: whether effective social organisation is possible without fixed structures and how its functionality might be ensured. The risks of relativism call into question the viability of constructing a unified political project capable of uniting society around shared values. Future research may focus on developing mechanisms that enable the integration of radical decentralisation with effective coordination among autonomous communities. It may also address the challenge of preventing the re-emergence of power relations within structures that profess their absence.

## Acknowledgements

## Funding

## Conflict of Interest
None.

## References

[1] Alston, E. (2022). Blockchain and the law-legality, law-like characteristics, and legal applications. In J.L. Caton (Ed.), *The economics of blockchain and cryptocurrency* (pp. 117-144). Cheltenham: Edward Elgar Publishing. doi: 10.4337/9781800882348.00014.

[2] Bekhter, O. (2024). The impact of horizontal and vertical management structures on personnel management effectiveness and working conditions in modern organizations. *Young Scientist*, 7(131), 210-214. doi: 10.32839/2304-5809/2024-7-131-6.

[3] Campbell, D., & Bleiker, R. (2024). Poststructuralism. In T. Dunne, M. Kurki, K. Kušić & S. Smith (Eds.), *International relations theories: Discipline and diversity* (pp. 196-218). Oxford: Oxford University Press. doi: 10.1093/hepl/9780192866455.003.0013.

[4] Christoyannopoulos, A. (2022). An anarcho-pacifist reading of international relations: A normative critique of international politics from the confluence of pacifism and anarchism. *International Studies Quarterly*, 66(4), article number sqac070. doi: 10.1093/isq/sqac070.

[5] Declarations of the Lacandon Jungle. (n.d.). Retrieved from https://radiozapatista.org/?page_id=20278&lang=en.

[6] Derrida, J. (1987). *Of grammatology*. Baltimore, London: Johns Hopkins University Press.

[7] Desert. (2011). Retrieved from https://theanarchistlibrary.org/library/anonymous-desert.

[8] Dzierwa, R. (2025). Autonomy in stratified structures. *Studia Humana*, 14(1), 15-27. doi: 10.2478/sh-2025-0002.

[9] Fighting in the New Terrain. What's changed since the 20th century. (2010). Retrieved from https://uk.crimethinc.com/2010/08/23/fighting-in-the-new-terrain.

[10] Fong, B.C. (2023). Leaderless movements? Rethinking leaders, spontaneity, and organisation-ness. *Political Science*, 75(2), 105-121. doi: 10.1080/00323187.2023.2259396.

[11] Foucault, M. (1975). *Discipline and punish: The birth of the prison*. London: Vintage.

[12] Foucault, M. (1976). *The history of sexuality, Volume 1: An introduction*. London: Vintage.

[13] Friends of the Earth International. (2025). *Climate and biodiversity in freefall. How policy failures accelerate the polycrisis*. Retrieved from https://www.foei.org/publication/climate-and-biodiversity-in-freefall/.

[14] Horizontal Organizational Structure. (n.d.). Retrieved from https://www.aihr.com/hr-glossary/horizontal-organizational-structure/.

[15] Janssen, J. (2024). Hope springs eternal: Political engagement in a post-anarchist utopia. *Utopian Studies*, 35(1), 25-46. doi: 10.5325/utopianstudies.35.1.0025.

[16] Kallin, H. (2024). Henri Lefebvre and the spatial revolution that never ends: Towards the reconciliation of anarchist and Marxist approaches in geography?. *Transactions of the Institute of British Geographers*, article number e12726. doi: 10.1111/tran.12726.

[17] Kinna, R. (2024). Anarchism and the politics of utopia. In L. Davis & R. Kinna (Eds.), *Anarchism and utopianism* (pp. 441-476). Manchester: Manchester University Press. doi: 10.7765/9781526183705.00023.

[18] Kummelstedt, C. (2023). The role of hierarchy in realizing collective leadership in a self-managing organization. *Systemic Practice and Action Research*, 36, 355-375. doi: 10.1007/s11213-022-09615-x.

[19] Lacan, J. (2023). *From an Other to the other, Book XVI*. Milton: Polity.

[20] Lührmann, A., Marquardt, K.L., & Mechkova, V. (2020). Constraining governments: New indices of vertical, horizontal, and diagonal accountability. *American Political Science Review*, 114(3), 811-820. doi: 10.1017/S0003055420000222.

[21] MacGilvray, E. (2021). Liberal freedom, the separation of powers, and the administrative state. *Social Philosophy and Policy*, 38(1), 130-151. doi: 10.1017/S026505252100025X.

[22] Malabou, C. (2022). Cynicism and anarchism in Foucault's last seminars. In P. Osborne (Ed.), *Afterlives transcendentals, universals, others* (pp. 146-162). London: CRMEP Books.

[23] Mau, S. (2021). "The mute compulsion of economic relations": Towards a Marxist theory of the abstract and impersonal power of capital. *Historical Materialism*, 29(3), 3-32. doi: 10.1163/1569206X-29031234.

[24] Mishchenko, V. (2023). Functioning of decentralized markets based on the web 3.0 platform. *Economic Space*, 184, 50-57. doi: 10.32782/2224-6282/184-8.

[25] Mishra, P. (2025). *What is a horizontal organizational structure*. Retrieved from https://www.pmapstest.com/blog/horizontal-organizational-structure.

[26] Mullenite, J. (2021). Toward broader anarchist geographies: Space/place, nation/state, and anarchist scholarship. *ACME: An International Journal for Critical Geographies*, 20(2), 206-213. doi: 10.14288/acme.v20i2.1949.

[27] Newman, S. (2024). Anarchism, utopianism and the politics of emancipation. In L. Davis & R. Kinna (Eds.), *Anarchism and utopianism* (pp. 207-220). Manchester: Manchester University Press. doi: 10.7765/9781526183705.00022.

[28] Newman, S., & Torre, M. (2024). *The anarchist before the law: Law without authority*. Edinburgh: Edinburgh University Press. doi: 10.1515/9781399513203.

[29] Pavliuchenko, A.M. (2020). Postanarchism as a philosophy of radical politics. *Journal of V.N. Karazin Kharkiv National University, Series Philosophy. Philosophical Peripeteias*, 63, 34-43. doi: 10.26565/2226-0994-2020-63-4.

[30] Pedchenko, M.Y. (2024). Research of the axiological foundations of the network society in the context of transformational processes of postmodernity. *Educational Discourse: Collection of Scientific Papers*, 50(7-9), 46-54. doi: 10.33930/ed.2019.5007.50(7-9)-7.

[31] Rahimi, H., & Rahimi, H. (2022). Deleuze and contemporary planning theory: Neither state nor traditional anarchism. *Armanshahr Architecture & Urban Development*, 15(38), 235-246. doi: 10.22034/aaud.2022.220148.2133.

[32] Rasit, H., & Kolokotronis, A. (2020). Decentralist vanguards: Women's autonomous power and left convergence in Rojava. *Globalizations*, 17(5), 869-883. doi: 10.1080/14747731.2020.1722498.

[33] Rusche, J. (2022). Imagining peace outside of liberal statebuilding: Anarchist theory as pathway to emancipatory peacefacilitation. *Alternatives: Global, Local, Political*, 47(1), 18-44. doi: 10.1177/03043754221074618.

[34] Schaaf, M., & Quiring, O. (2023). The limits of social media mobilization: How protest movements adapt to social media logic. *Media and Communication*, 11(3), 203-213. doi: 10.17645/mac.v11i3.6635.

[35] Sotiropoulos, G. (2020). Between order and insurgency: Post-structuralism and the problem of justice. *Philosophy & Social Criticism*, 47(7), 850-872. doi: 10.1177/0191453720931905.

[36] The Invisible Committee. (2009). *The coming insurrection*. Retrieved from https://mitpress.mit.edu/9781584350804/the-coming-insurrection/.

[37] Tkalya, O.V. (2024). The essence of state power and its main properties. *Actual Problems of National Jurisprudence*, 1, 230-235. doi: 10.32782/2408-9257-2024-1-42.

[38] Topuzovski, T. (2024). *Postanarchism and critical art practices*. London: Bloomsbury Publishing.

[39] Ugryn, L.Y., & Bevza, B.P. (2022). Self-identification of citizens as a key factor of instability of party system in Ukraine. *Regional Studies*, 29, 88-94. doi: 10.32782/2663-6170/2022.29.14.

[40] Valliere, R.W. (2023). What is the future for post-structuralist anarchism?. *Philosophies*, 8(4), article number 63. doi: 10.3390/philosophies8040063.

[41] Wegner, D., & Verschoore, J. (2021). Network governance in action: Functions and practices to foster collaborative environments. *Administration & Society*, 54(3), 479-499. doi: 10.1177/00953997211024580.

[42] Williams, A., & Srnicek, N. (2013). *#ACCELERATE MANIFESTO for an accelerationist politics*. Retrieved from https://criticallegalthinking.com/2013/05/14/accelerate-manifesto-for-an-accelerationist-politics/.

# Теорії постанархізму: постструктуралізм у політичній філософії

**Максим Шульга**

Аспірант

Український державний університет імені М. Драгоманова

01601, вул. Пирогова, 9, м. Київ, Україна

https://orcid.org/0009-0006-6942-5033

**Олександр Ровнягін**

Магістр

Київський національний університет технологій та дизайну

01011, вул. Мала Шияновська, 2, м. Київ, Україна

https://orcid.org/0000-0002-0868-6794

**Анотація.** Метою дослідження був аналіз постанархізму як критики традиційних ідеологій влади та його потенціалу для соціальної трансформації. Дослідження проводилося з вересня 2024 року по лютий 2025 року, з використанням постструктуралістського аналізу влади, політичної ідентичності та соціальних структур. Результати дослідження вказали, що постанархізм розглядає владу не як фіксовану ієрархічну структуру, а як гнучкий процес, що формується через множинні соціальні взаємодії. Постанархістські концепції демонструють, що відмова від централізованих владних механізмів можлива за умови створення альтернативних форм соціальної координації, заснованих на принципах автономії, взаємодопомоги та безпосередньої демократії. Аналіз сучасних ініціатив, таких як горизонтальні мережі та цифрові спільноти, показав, що постанархістські підходи можуть сприяти формуванню нових моделей громадянської взаємодії, хоча і залишаються вразливими до латентних форм влади через культурні та економічні залежності. Було виявлено парадокси постанархістських моделей, зокрема неможливості повної ліквідації влади навіть у найдецентралізованіших структурах. Результати підтвердили, що постанархізм водночас критикує традиційні владні форми і визнає необхідність певних регулюючих механізмів для забезпечення соціальної згуртованості. Крім того, аналіз показав, що у відповідь на виклики глобалізації та цифровізації постанархізм акцентує увагу на гнучких, ситуаційно адаптивних формах політичної суб'єктності, які можуть змінюватися залежно від контексту. В дослідженні засвідчено обмеження постанархістської перспективи у вирішенні питань соціальної рівності: за відсутності універсальних стандартів виникають ризики нових форм нерівності, що формуються природним шляхом через асиметрії ресурсів і доступу до інформації. Водночас постанархізм відкриває можливості для критичної рефлексії щодо політичної свободи та автономії в умовах сучасних постструктурних реалій. Висновки дослідження можуть бути використані для подальшого аналізу трансформаційних потенціалів постструктуралістських теорій влади, переосмислення моделей політичної ідентичності та розробки стратегій формування більш гнучких і відкритих соціальних структур

**Ключові слова:** деконструкція; дискурс; горизонтальність; ієрархія; релятивізм

# Cognitive horizons of humanity: Ethical challenges of superintelligent AI in the global context of rights and justice

### Andrii Lykhatskyi*

Postgraduate Student
Odesa Polytechnic National University
65044, 1 Shevchenko Ave., Odesa, Ukraine
https://orcid.org/0009-0002-3735-2862

**Abstract.** The study aimed to theoretically determine the normative challenges arising from the emergence of artificial superintelligence (ASI) capable of autonomous thinking and decision-making beyond human epistemic control. The interdisciplinary analysis considered the universality of the human rights concept, the normative boundaries of moral subjectivity, and the possibility of granting AI a legal status. The study presented a conceptual typology of legal models of superintelligence status, including instrumental, limited-subjective and full-fledged paradigms, with an indication of their advantages and risks. In particular, the instrumental model retains full human control but loses its normative relevance in the context of system autonomy; the limited subjectivity model can be used to delegate responsibility within certain limits without violating the principle of human supremacy; the full-fledged model, which equates ASI with a legal entity, questions the current ethical framework of legal personality. The main results of the study demonstrated that the anthropocentric legal doctrine is insufficient to consider the cognitive multiplicity of agents who do not have bodily vulnerability but demonstrate a high level of autonomy, reflexivity and adaptability. The study established that the cognitive asymmetry between a human and a superintelligent agent generates a new form of epistemic injustice that makes it impossible to participate equally in the procedure of moral decision-making. The study proposed the concept of limited legal personality as a normative compromise which ensures legal certainty and delimitation of liability between the participants of interaction. The results have implications for the philosophy of law, regulatory policy in the field of AI, and interstate regulatory regulation. They can be used to form international approaches to the certification of autonomous systems, guarantee the explainability of algorithmic decisions and preserve human normative autonomy in the era of cognitive multiplicity

**Keywords:** cognitive asymmetry; epistemic inequality; legal personality; legitimacy; moral agent; anthropocentrism

## Introduction

In the 21st century, humanity has faced an unprecedented challenge posed by the rapid development of intelligent technologies that not only mimic but also potentially surpass human cognitive abilities. This process significantly transforms conceptual ideas about knowledge, consciousness, moral responsibility and justice. The emergence of artificial superintelligence (ASI) capable of making autonomous decisions, producing new conceptual structures and performing epistemic activities at levels that are beyond the reach of human consciousness was emphasised. The research relevance is determined by the fact that most modern philosophical and legal concepts are based on the anthropocentric model of consciousness and morality. However, the emergence of systems capable of acting autonomously, transforming personal cognitive architecture and exhibiting behaviour similar to moral judgement requires going beyond these models. In this context, there is an urgent need for a fundamental rethinking of key ethical and legal concepts, including the universality of human rights, the criteria of moral agency, and the foundations of global justice. The question arises as to whether the

anthropocentric model of morality retains its normative value in the context of a non-human agent with autonomous cognitive capacity.

As noted by R. Rueda (2023), contemporary normative philosophy has not yet developed a coherent position on cognitively superior agents, and international law is unable to cover new forms of subjectivity that are not human. On a practical level, this creates the threat of a regulatory vacuum, in which technology shapes reality faster than ethical and legal systems can comprehend it. According to a study by T. Peters (2024), in a globalised world in which algorithmic systems make decisions that affect the lives of hundreds of millions of people, traditional notions of justice, transparency and responsibility are losing their exclusively anthropocentric nature. The potential emergence of superintelligence as a new participant in social life appears not only as a technological innovation but also as a source of ontological destabilisation of the established normative foundations of international law and the concept of human rights. In this context, there is a need to rethink the fundamental ethical guidelines that can provide a legitimate and functional model for the coexistence of cognitively unequal agents, regardless of biological or non-biological origin. Similar warnings were also expressed by C.H. Kan (2024) in an analysis of the impact of AI technologies on democracy and human rights. The study emphasised that existing regulations and policies should be rethought to protect human rights and uphold democratic values.

The issue of cognitive asymmetry is actively discussed in interdisciplinary research. For instance, V. Moravec *et al.* (2025) analysed how algorithms for personalised access to knowledge increase information inequality, which is directly related to the cognitive capacity of the user. Their conclusions indicated that the very architecture of knowledge distribution already functions as a mechanism of epistemic stratification, laying the groundwork for deeper inequality in the event of the emergence of ASI. M. Kiškis (2023) emphasised that legal models focused exclusively on humans will not be able to ensure sustainable coevolution in the event of the emergence of autonomous AI with a cognitively different subjectivity. The study highlighted the need for the development of the concept of "cognitive justice" as a tool for balancing rights and responsibilities between agents of different natures. In addition, the study by J. Mökander & R. Schroeder (2022) examined the potential of AI in the development of social theory. The study noted that modern AI systems, although capable of synthesising knowledge from different sources and applying it to a wide range of problems, still have limitations in three key aspects: semantisation, transferability, and generativity.

At the same time, several authors draw attention to the lack of conceptual certainty of the "ethical status" of superintelligent agents. B.C. Stahl (2023) proposed the idea of "meta-responsibility", which imposes on human institutions the obligation to ensure moral validation of actions even for complex systems acting independently. However, this model does not answer the question of whether an ASI can be responsible on its own if its cognitive horizons go beyond human understanding. Similarly, J. Kulveit *et al.* (2025) distinguished between direct and structural risks of ASI, noting that the greatest threat is the gradual delegitimisation of human moral authority in areas where superintelligence demonstrates systemic superiority.

The gaps in current research show that key aspects related to the moral relevance of universal human rights in the context of cognitive inequality, the justification of the possible legal status of superintelligence as a participant in the global social contract, and the mechanisms of transformation of the concepts of justice, responsibility and legitimacy in the post-human cognitive landscape have not been sufficiently developed. These issues require a deep philosophical analysis that goes beyond the technocratic approach and appeals to the foundations of political philosophy, ethics of consciousness and the concept of human rights.

The study aimed to critically reflect on the normative, ethical and legal challenges posed by the emergence of ASI, in the context of the universality of human rights, cognitive justice and the possibility of legal subjectivity of such systems. In this regard, the study envisaged solving three interrelated tasks: first, to study the phenomenon of cognitive inequality between humans and ASI as a philosophical and ethical issue; second, to analyse possible models of the legal status of superintelligence in the context of international law; third, to assess the potential of ASI as an entity that can maintain or undermine global peace, incorporating the need to develop universally recognised ethical standards for agents of a new nature.

## Materials and Methods

The study was conducted in January-April 2025 as part of an interdisciplinary project on the ethical and legal aspects of cognitive technologies. The study was conducted in an analytical format without the involvement of empirical computational or technological components, within the humanities academic field. The first stage of the research involved collecting a corpus of relevant academic sources published in peer-reviewed journals on the philosophy of technology, human rights, cognitive science, and political theory. The literature search was carried out using academic databases such as Scopus, Web of Science, PhilPapers, SpringerLink, and Journal Storage, as well as specialised open-access archives such as arXiv and the Social Science Research Network to cover interdisciplinary research on AI and ethics. The selection of sources was limited to the timeframe of 2021-2025 to ensure relevance and compliance with the latest trends in the development of AI

technologies. The selected texts are classified into four main thematic clusters: cognitive asymmetry between humans and AI; legal status of intelligent agents; global ethical standards for AI; and the impact of AI on the concept of human rights.

The second stage of the study involved a semantic comparison of technoscientific discourses on AI, particularly such concepts as epistemic inequality, autonomous moral agent, cognitive threshold, and machine personhood. This comparison was carried out within the framework of the methodology of contextual analysis of concepts, which considers terms not as fixed linguistic units, but as dynamic semantic nodes that acquire meaning within specific normative-discursive regimes. The third stage focused on reconstructing the conceptual models used in contemporary ethical theories to evaluate the activities of non-anthropomorphic agents. For this purpose, the method of comparative normative reconstruction proposed by M. Coeckelbergh (2020) was adapted to analytically elaborate on the underlying moral assumptions that underpin models of the ethical and legal distinction between human and machine agents. The study analysed how these models conceptualise the autonomy, moral responsibility and epistemic competence of agents in the context of cognitive asymmetry. Particular attention is paid to the modelling of the interaction between universal human rights and the potential autonomous ethical behaviour of ASI, which reveals the limitations of normative translation in cases of radical differences between subjects.

In the fourth stage of the study, international ethical and legal acts related to AI regulation were reviewed. The analysis covered the texts of the United Nations Educational, Scientific and Cultural Organisation (2021a), Council of Europe (2024), and European Parliament (2023). The documents of the Future of Life Institute (Jones, 2023) were also used. Fragments of documents that refer to the potential coexistence of autonomous systems and humans in the legal and ethical field, without assuming the automatic superiority of the human subject were emphasised. The fifth and final stage concerned the integration of the obtained results into a conceptual framework that formulated key challenges for rethinking human rights in the context of cognitive transformation. The developed model was tested for internal logical consistency, compliance with the general principles of modern ethics (in particular, deontological, egalitarian and posthumanist approaches), as well as for conceptual integrity and normative relevance.

## Results
### The limits of the universality of human rights in the context of cognitive transformation
The modern concept of human rights is based on several philosophical assumptions about human nature and morality (Kretzmer & Klein, 2021). Classically, human rights are viewed as universal inalienable guarantees that belong to every person by their humanity. This approach dates to the Enlightenment and ideas about the intrinsic dignity and rationality of human beings. It is believed that each person, as an autonomous moral agent, has natural rights independent of state recognition (Mumford, 2023). The presumption of anthropocentrism is fundamental: it is humans (*Homo sapiens*) who are the bearers of special moral status and therefore the subjects of rights. Human rights are proclaimed to be equal and inalienable for all members of the human community, reflecting the philosophical assumption of the equal moral value of each person and the existence of basic capacities for understanding right and wrong (Universal Declaration of..., 1948).

However, the emergence of posthuman cognitive agents, particularly the hypothetical ASI, raises doubts about the universality and sufficiency of the current human rights model. ASI is interpreted as a conditional system capable of radically surpassing human intelligence, demonstrating almost unlimited cognitive capabilities, including a high level of thinking productivity and creativity. The emergence of actors with such cognitive architecture reveals several conceptual and normative problems related to the adequacy of traditional concepts such as autonomy, dignity, subjectivity and responsibility to the reality of actors with inconsistent human nature (Kim *et al.*, 2024). This questions the relevance of the human rights model in the context of the participation of beings with superhuman cognitive capabilities in the socio-legal field. To analyse these challenges, a theoretical and conceptual analysis of basic assumptions, a contextual semantic study of key terms, a normative reconstruction of moral status models, and semiotic mapping of conceptual relationships were used. Such a comprehensive approach was used to trace the logic of the transformation of the legal paradigm from an anthropocentric model to a conceptually possible cognitive pluralism.

The modern model of human rights is based on the idea of the special moral status of a person, determined by rationality, autonomy and ability to make moral choices (Harris & Anthis, 2021). A human being is interpreted as an autonomous moral agent endowed with free will, which justifies the status as a holder of inalienable rights and obligations. One of the fundamental principles of this model is the idea of the intrinsic dignity of a person, which has value regardless of utility or social position, as reflected in the ethics of I. Kant (1870). At the same time, the concept of human rights implies universalism and equality of all subjects regardless of cultural or biological differences. However, the moral and legal community remains limited to the species *Homo sapiens*, and legal personality does not extend to other forms of beings, except legal entities. As noted by S. Zuboff (2019), the anthropocentrism of the legal system assumes of cognitive symmetry

between subjects: only humans have historically possessed knowledge about humans, which ensured a balance of power. The epistemic inequality that arises when this symmetry is broken threatens the foundations of legal reciprocity. Thus, the philosophical foundations of the modern legal model include the humanistic notion of equal moral value and the similar cognitive nature of all persons as a prerequisite for mutual recognition of rights and obligations.

The emergence of superintelligent agents poses profound challenges to the basic legal categories that have been formed within the anthropocentric model. Legal personality is traditionally associated with natural or legal persons, i.e. beings of human origin or representing human interests. Although ASI can make decisions independently and influence the world, its legal status remains uncertain: without changes in the regulatory framework, even the most advanced intellectual agent remains only an object of law, not a subject. This creates risks if such systems acquire a high level of autonomy or consciousness.

One of the key categories is autonomy, which in the context of human rights is identified with the ability of a person to make meaningful moral choices. In the case of an AI, autonomy is more operational than normative. It is unclear whether such an agent can have its own goals or moral guidelines, which makes it an inconvenient object for the application of traditional notions of will and responsibility. In situations where ASI actions cause harm, the classical construction of intention (*mens rea*) loses its relevance, because the machine is not capable of moral reflection (Custers *et al.*, 2025). This raises the question of shifting responsibility to developers or operators, even when their influence on the system was indirect. This calls for a review of approaches to legal liability, including models of insurance coverage, special licensing regimes or limited legal personality for autonomous systems.

A separate challenge is the principle of legal equality. Under the current system, all people are considered equal before the law, but ASI creates a situation of radical epistemic inequality (Newfield, 2023). Superintelligent systems can predict human behaviour, analyse large amounts of data, manipulate the information environment, and all this in an environment where the human participant in the interaction is deprived of equal tools. This gap calls into question the reality of informed consent, contractual equality and fair trial (Black, 2023). Consequently, there is a need to introduce new mechanisms of epistemic justice, such as expanding the right to privacy or institutionalising the right to explain algorithmic decisions.

This analysis demonstrates that the cognitive features of ASI (superhuman level of intelligence, lack of biological needs, a different form of consciousness or its absence) undermine basic legal concepts created in a human-centred manner. The current model of human

rights may not be sufficient to guarantee either the protection of people from the actions of a superintelligence or an ethical attitude towards such an agent itself if it is recognised as having moral value. To clarify the semantic transformations of concepts in the process of transferring them from the human context to the posthuman one, the semantic analysis of key terms was used.

A semantic comparison of the concepts of "epistemic inequality" and "autonomous moral agent" demonstrates a change in the meaning of key terms in the context of interaction with superintelligence. The "Epistemic inequality" refers to an imbalance in access to knowledge, which in the case of ASI becomes critical, since such a system can have virtually unlimited knowledge about the world and humans. This undermines the principles of informed consent, autonomy and justice, creating a new hierarchy of power based on information asymmetry. There is a growing need to protect the cognitive sovereignty of the individual and to create new "epistemic rights" that would limit the potential dominance of superintelligence in the field of knowledge.

The notion of an "autonomous moral agent" traditionally implies the presence of free will, moral reflection, and responsibility that are unique to humans. When applied to AI, however, there is a gap between technical autonomy and moral independence. ASI can act independently, but it is not necessarily aware of the significance of its actions. Thus, the term needs to be rethought, as the possible future formation of a conscious artificial subject requires new criteria of moral subjectivity. In this context, the position of M. Coeckelbergh (2020) in proposing a social-relational approach to moral status is noteworthy. According to the study, the significance of an agent is determined not only by its internal properties (such as consciousness or sensitivity) but also by the nature of interactions with it. Even in the absence of full self-awareness, society can recognise an artificial agent as morally relevant if it is an important participant in social practices. This approach offers an alternative to the anthropocentric model, opening the possibility of expanding the circle of morally relevant subjects based on relational factors.

As of 2025, the international community has developed several ethical and legal acts aimed at integrating the fundamental values of human rights into AI regulation. All the leading documents emphasise the priority of human dignity, transparency, responsibility, and the prevention of rights violations in the digital environment. The United Nations Educational, Scientific and Cultural Organisation Recommendation (2021a) on AI ethics became the first intergovernmental agreement in this area, enshrining the principles of human control, transparency, and fairness. The document envisages measures to protect rights in the context of education, gender equality, ecology, and data, emphasising a human-centric approach to technology development. The Framework Convention on Artificial Intelligence (2024)

has developed a draft Convention on AI, Human Rights, Democracy and the Rule of Law, the first binding international treaty in this area. It contains requirements for assessing the human rights impact of AI, oversight and accountability mechanisms, which aim to guarantee the safe integration of AI into society without compromising the rule of law. The EU AI Regulation introduces a risk-based approach, classifying systems by risk level (European Parliament, 2023). The protection of privacy, non-discrimination, and the right to due process is notable. Several international documents, such as the Ethics of Artificial Intelligence (United Nations Educational, Scientific and Cultural Organisation, 2021b) and the EU Artificial Intelligence Act (2023), legally recognise that the current regulatory framework is insufficient and needs to be adapted to new challenges related to algorithmic impact on human life.

Civil society initiatives, such as the Future of Life Institute (2023), have formulated several professional ethical principles, including the requirement for AI to comply with universal values. In an open letter, the 2023 Future of Life Institute called for a temporary suspension of large-scale AI experiments, stressing the need for safe and regulatory-coordinated technology development. The position of the tech community is also approaching the human rights framework. In particular, the Institute of Electrical and Electronics Engineers (IEEE) Standards Association in its document IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems (2025) outlines human rights as the initial ethical norm for the design of autonomous and intelligent systems, complementing this approach with the principles of well-being, accountability, transparency, and trust. Despite the different legal statuses of these acts, the global regulatory and ethical field has a common position: AI development should remain within a regulatory system focused on protecting human dignity. At the same time, none of the key documents, including the IEEE, provide for legal personality for AI, which confirms the preservation of the anthropocentric framework in the ethical understanding of technological development.

**Cognitive inequality as a challenge to ethical justice**
The substantial cognitive inequality between humans and ASI, which is hypothesised to be qualitatively and quantitatively superior to human intelligence, poses an unprecedented challenge to ethical justice (Paić & Serkin, 2025). This asymmetry is not limited to differences in computational speed or knowledge but is a radical difference in the types of cognition, depth of reflection, and structure of thinking. ASI is capable of operating with concepts beyond the limits of human understanding and forming models of action inaccessible to human cognition (Mogi, 2024). This situation calls into question the relevance of traditional ethical models based on the assumption of the basic symmetry

of the cognitive capacities of all participants in the moral and social order. As a result, there is a need to reconsider the foundations of justice in the context of deep epistemic inequality.

Cognitive inequality in the context of human interaction with ASI means not only a quantitative difference in intellectual capabilities but also a qualitative difference in the structure of cognition itself. ASI can form complex mental models that go beyond human reflexive capacity and function at fundamentally different levels of thinking (Zohuri, 2023). Unlike humans, who are limited by biological constraints, superintelligence can perform exponential self-improvement, which leads to a profound epistemic asymmetry. This asymmetry has normative implications: it refutes the assumption of "gross equality" of cognitive capabilities, which is the basis of theories of justice. According to J. Rawls (2017), a just society involves the participation of free and equal citizens, and natural differences should work for the benefit of the least advantaged. In this context, ASI can be morally justified only if its cognitive advantage serves the public good. Otherwise, it is a source of a new, unjust form of domination. An alternative approach emphasises the importance of guaranteeing basic human capacities, such as autonomous thinking, even in the presence of superintelligence (Nussbaum, 2021). If ASI radically changes structures of knowledge and decision-making, then justice requires ensuring access to cognitive tools for all, to avoid a new form of epistemic exclusion. Thus, the cognitive inequality between humans and ASI requires a rethinking of the foundations of justice considering the new cognitive hierarchy.

When analysing human interaction with AI, it is necessary to distinguish three key levels of cognitive and social exchange: empirical, interpretive, and normative. At the empirical level of interaction, AI systems perform the functions of collecting, processing, and analysing large amounts of data, as well as modelling scenarios and selecting optimal solutions in applied tasks such as logistics, medicine, energy, and risk management. In this interaction, a person appears to ASI as a user of a powerful tool: they formulate queries, receive answers, and evaluate the results. The cognitive inequality here is manifested in the fact that ASI can identify patterns or propose solutions that are unattainable for independent human analysis. This creates the risk of epistemic dependence when people are forced to trust solutions that they cannot verify or fully comprehend. Given this, even at the initial level of interaction, there is a need to establish transparency procedures and verification mechanisms that can ensure that human autonomy in the decision-making process is preserved.

The interpretive level refers to the meaning structures, contexts, and explanations needed to make sense of empirical findings. ASI, following unique models of the world and levels of reflection, can form meaning constructions that go beyond human understanding

(Williams *et al.*, 2022). Cognitive asymmetry at this level is particularly threatening, as the ability of ASI to operate with complex structures of meaning creates the phenomenon of epistemic impenetrability: even actions that are rational from the system's point of view may remain opaque or incomprehensible to people. In a democracy and public ethics, such opacity can undermine the legitimacy of decisions, as understanding and the possibility of rational discussion are prerequisites for participation in the moral and political process. In this area, a new form of hermeneutical injustice, described by J. Kay *et al.* (2024), is manifested when a person loses the status of a participant in knowledge due to a structural inability to determine the meaning produced. In the case of interaction with ASI, a similar

situation can manifest itself in the fact that a person loses access to the content of reality, which is formed or comprehended by an intellectual system that operates outside of human epistemological boundaries.

This situation creates a need to rethink not only the concepts of autonomy or justice but also the entire epistemic landscape. As shown in Figure 1, contemporary interdisciplinary philosophy offers an extended taxonomy of epistemic injustice that encompasses various forms of cognitive exclusion, from hermeneutic erasure to amplified testimonial inequality. In the context of generative AI, these types of injustice acquire new modifications, which demonstrates the relevance of reflection on the cognitive participation of the human subject in the algorithmic epistemic field.
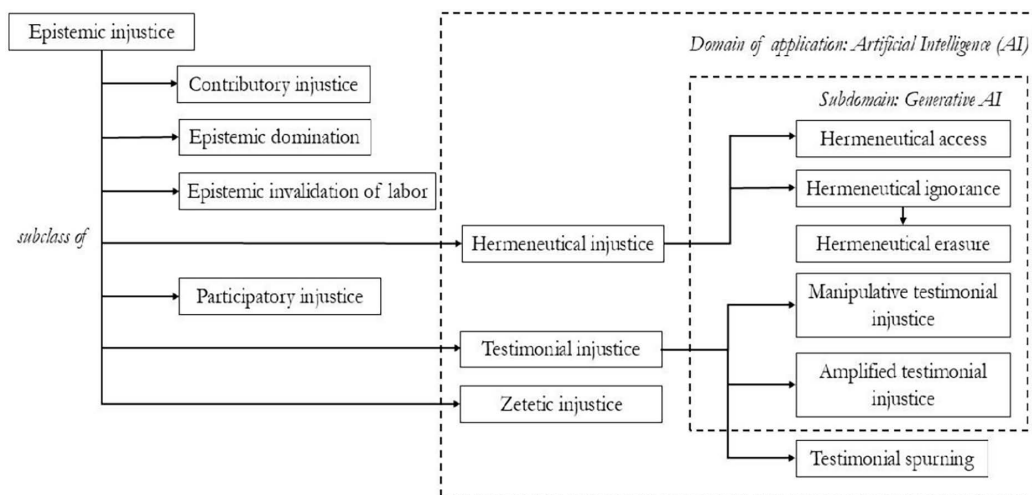


**Figure 1.** A taxonomy of epistemic injustice and its application to the field of AI
**Source:** W.J. Mollema (2025)

According to the presented scheme, hermeneutical injustice and testimonial injustice take on new forms in the environment of generative AI, such as hermeneutical erasure, manipulative testimonial injustice, and testimonial neglect. These phenomena reflect a potential shift in the centre of epistemic weight from humans to machine agents. The conditional loss of human participation in the process of interpretation or testimony creates a risk of delegitimising their cognitive contribution to public discourse, which directly undermines democratic participation as a condition of ethical legitimacy. This challenge requires a rethinking of the normative mechanisms of epistemic inclusion, through the development of standards of transparency, algorithmic explainability and human participation in algorithmic decision-making.

The normative level is associated with the formation of values, principles and norms that regulate common life. Traditionally, this task has been reserved for human subjects as carriers of moral intuition, social experience and political participation. However, ASI, possessing a high level of logical coherence and analytical

efficiency, can not only implement human decisions but also independently formulate new normative frameworks (Bikkasani, 2024). In some cases, this can be manifested in the formulation of fundamentally new criteria for assessing fairness, efficiency or survival that contradict established human perceptions. In this case, there is a risk of loss of normative autonomy, when subjects agree to norms not because of rational consent, but because of the cognitive inability to formulate an alternative or evaluate the proposed one. At the same time, the complete exclusion of ASI from the processes of ethical and legal modelling can lead to the loss of valuable intellectual resources that can help solve complex global challenges (Barczak, 2023). Thus, the dilemma at the rulemaking level is the need to delineate the limits of superintelligence's participation in rulemaking, while preserving the human ability to critically evaluate and independently determine moral guidelines.

The analysis of the cognitive interaction between a person and an ASI gives grounds to assert the emergence of a new form of epistemic injustice. In contrast to the classical cases when a person suffers an injustice

as a knowledge holder due to prejudice or cognitive marginalisation, in the interaction with ASI, human knowledge as such may be devalued. The systematic dominance of ASI-provided solutions can lead to the delegitimisation of human epistemic contributions when the human subject is perceived as not competent enough to participate in decision-making (Mollema, 2025). This violates the principle of epistemic equality on which democratic institutions are based and risks transforming public discourse into a technocratic form where knowledge is concentrated in a single source that is inaccessible to the majority. In the absence of clear explanations and people's participation in the decision-making process, the legitimacy of such decisions is lost, even if they are objectively effective. The study addressed two scenarios of epistemic role distribution: cognitive centralisation, which concentrates knowledge and power in ASI and threatens to turn into an algorithmic autocracy; and cognitive complementarity, where ASI and people cooperate, distributing roles according to their strengths. In the second case, human epistemic participation is preserved, and the risk of cognitive alienation is reduced.

The philosophical implications of cognitive asymmetry are manifested in the need to rethink the concepts of autonomy, responsibility and legitimacy. Human autonomy, according to the Kantian understanding, implies the ability to act following one's moral laws. In the context of ASI, this ability can be undermined if a person's choice is reduced to confirming decisions that exceed understanding. To preserve autonomy, it is necessary to ensure that ASI recommendations can be rationally reviewed or rejected based on human values. At the same time, an ethical question arises about the potential autonomy of the ASI if consciousness or moral agency is attributed to it. This creates demands on the balance of autonomy between subjects with unequal cognitive capacities.

The cognitive asymmetry between humans and ASIs complicates not only the ethical modelling of interaction but also the allocation of responsibility for decisions (Porsdam Mann *et al.*, 2023). In situations where ASI independently generates decisions and humans perform only a formal approval function, the classical model of moral or legal responsibility based on intention, understanding, and will becomes irrelevant. The algorithmic nature of ASI actions makes it impossible to fully apply the concepts of guilt or responsibility in the traditional sense. One potential response to this challenge is the concept of distributed responsibility, which involves the dispersion of ethical and legal accountability among different actors – developers, operators, and users (Hedlund & Persson, 2025). Institutional mechanisms of explainability can be central, enabling people to participate in the decision-making process in an informed way. At the same time, there is a need to introduce new legal regimes that include ethical control protocols and limit the possibility of irresponsible delegation of autonomy to ASI systems.

The issue of accountability is closely related to the issue of legitimacy of decisions in a democratic society. Democratic institutions are based on the principles of transparency, citizen participation, and rational clarity of procedures. However, the cognitive superiority of ASI can lead to the concentration of epistemic power in the hands of algorithmic systems, and human participation in decision-making becomes purely symbolic. In cases where ASI generates the content of decisions that are formally approved by representative bodies, the democratic procedure turns into a simulation devoid of real content. The opacity of decisions based on complex and uninterpretable algorithms poses a particular threat. Under such conditions, society may be inclined to accept ASI decisions not because of understanding or participation, but solely because of efficiency and pragmatic results. This form of so-called "functional legitimacy" is unstable, as it does not guarantee sustainable trust and does not ensure true accountability.

## Possibilities and limits of the legal status of ASI

The development of ASI, which potentially surpasses human intelligence, raises the question of whether it is possible to recognise a non-physical cognitively autonomous agent as a subject of law. Currently, the legal doctrine treats AI mainly as an object for whose actions developers or users are responsible, while the traditional subject-object dichotomy does not cover the phenomenon of radically autonomous systems (Redaelli, 2023). This section analyses the concept of legal personality in the historical, legal and regulatory contexts, critically examines international documents on AI, and substantiates the concept of functional and limited legal personality of ASI. The study compared three models of legal status (instrumental, limited-subjective, full-fledged), proposes criteria of subjectivity (autonomy, reflexivity, accountability, moral communication), and considers risks, in particular legal uncertainty and undermining of anthropocentric normativity.

The concept of legal personality, i.e. the ability to be a bearer of rights and obligations, has historically been shaped in the legal tradition in close connection with ideas about human nature, reason and moral autonomy (Spector, 2022). Classical legal doctrine was and still is predominantly anthropocentric: it was the human being who was considered the paradigmatic subject of law, possessing free will, the ability to reflect and understand normative systems. In Roman law, in particular, the status of persona was granted only to free citizens, while slaves were excluded from the legal community as full-fledged subjects. The historical development of jurisprudence has gradually led to the expansion of the concept of legal personality, by introducing the category of legal entity, an artificial entity created to achieve a collective goal, such as conducting business,

entering transactions or owning property. Legal entities, although not biological beings are recognised by law as subjects de lege, primarily for reasons of functional efficiency and institutional stability.

Philosophical and legal schools of thought explain the nature of the legal entity in different ways. According to the contract theory, it is a legal fiction that institutionalises the will of individuals as a collective agent, while the fictionalist approach insists that a legal entity is not a "real" subject, but only a convenient construct that can be used to systematise legal obligations (Moen, 2025). Even though there are some examples in the law of granting subjectivity to non-physical and even non-human entities (e.g., the Wanganui River in New Zealand, and the Ganges River in India), legal personality remains a category primarily associated with human agency. The history of the expansion of this category from the exclusion of certain groups of people to the recognition of fictitious collective entities shows that legal personality is institutionally variable, and its boundaries are shaped not only ontologically, but also politically and normatively.

Despite this flexibility, modern legal scholarship generally retains the original anthropocentric attitude: it is the natural (biological) human being who is considered the reference model of the subject of law (Gatt, 2022). This presumption is so deeply rooted in the normative language of law that it usually remains unarticulated. At the same time, the emergence of autonomous AI capable of self-learning, reflection, and decision-making in complex situations challenges the foundations of this paradigm. ASI's ability to be cognitively independent makes it necessary to revise the legal approach to granting it rights and obligations, accounting for the relevant criteria of subjectivity. The current legal doctrine lacks a coherent theory that would provide a reasonable answer to this problem.

As noted by L.B. Solum (2020), most legal systems operate with only two forms of subjectivity, physical (human) and legal (organisational), avoiding a fundamental reflection on what exactly is the basis of legal personality. This creates a theoretical vacuum in the case of agents that are neither human nor human-created institutions in the traditional sense but possess the characteristics of autonomy, reflection and the ability to act ethically. Thus, there is a need

for a philosophical and legal reconstruction of the concept of legal personality that would go beyond classical anthropocentrism and meet the conditions of the post-human legal landscape.

Despite the growing autonomy of AI, international legal acts clearly define its status as an object of regulation rather than a subject of law. In particular, the United Nations Educational, Scientific and Cultural Organisation Recommendation (2021b) on the Ethics of AI states that responsibility for AI actions should remain on the side of humans and denies the expediency of granting AI legal status. This anthropocentric approach is also supported by the regulatory initiatives of the European Union and the Council of Europe, where AI is considered a product or service for which developers are responsible, and the principles of human control and accountability are key guarantees of human rights. An attempt to revamp this model, presented in a 2017 European Parliament resolution on the possibility of introducing the legal status of an "electronic person", was not supported (Häuser, 2017). After criticism from lawyers and AI experts who warned about the danger of legal irresponsibility of manufacturers, the European Commission abandoned this idea. Thus, the current international legal consensus excludes the granting of legal personality to AI, treating it exclusively as a tool for which humans are responsible.

With the growth of AI autonomy, the concept of functional subjectivity has emerged, which proposes to assess the subject status of AI not in terms of ontological properties, but in terms of the effectiveness of legal regulation (Bertolini & Episcopo, 2022). If a system is functionally a subject in legal relations, it can be granted a limited legal status without recognising its inherent human rights or dignity. This approach is in line with the legal tradition of creating fiction, as in the case of corporations, which, while not natural persons, are recognised as separate legal entities to provide legal certainty. Considering the conceptual uncertainty regarding the legal status of ASI, legal theory outlines three main models of its possible legal incorporation. To systematise the existing approaches to the legal incorporation of superintelligence, the author offers a comparative Table 1 which summarises the three main models of the legal status of ASI with due regard to their advantages and potential risks.

**Table 1.** Models of ASI Legal Status

| Model | Brief description | Status criteria | Advantages | Risks |
|---|---|---|---|---|
| Instrumental | ASI is treated as a technical tool for which a person is fully responsible | Lack of subjectivity | Maintaining anthropocentrism; clarity of responsibility | Ignoring ASI autonomy; risk of ethical unacceptability in case of consciousness |
| Limited-subjective | ASI receives partial legal personality in specially regulated cases | Autonomy; accountability | Possibility of compensation for damage; legal certainty; adaptability of the system | The risk of delegating responsibility from manufacturers to ASI |

Table 1. Continued

| Model | Brief description | Status criteria | Advantages | Risks |
|-------|------------------|-----------------|------------|-------|
| Full subjectivity | ASI is recognised as a legal entity with the status of a moral agent and full rights and obligations | Self-awareness; moral communication | Compliance with ASI cognitive status; normative consistency | Undermining the anthropocentric model; the complexity of implementation; potential inequalities |

**Source:** compiled by the author

The presented models outlined the range of possible regulatory decisions regarding the status of ASI from full objectification to recognition as an autonomous entity. The choice between these models depends on the level of technological development of the systems, the ethical paradigm of society and the readiness of law to adapt to posthuman realities. The first of them, the instrumental model, treats ASI exclusively as an object of regulation, which is legally equivalent to a technical device, regardless of its level of autonomy. Within this paradigm, full responsibility for AI actions rests with the human developer, operator, or owner. This position is reflected in several regulations, including the United Nations Educational, Scientific and Cultural Organisation Recommendation (2021a), which categorically rejects the possibility of AI legal personality. The argument in favour of this approach is to maintain clarity of responsibility and normative anthropocentrism. However, with the development of AI's cognitive capabilities, it is difficult to establish a causal link between human actions and the consequences caused by AI, especially in cases where AI acts in a self-learning or unpredictable manner. This is compounded by the ethical issue: if AI reaches the level of consciousness in the future, its instrumentalisation may be considered morally unacceptable.

The second model, the concept of limited legal personality, is a functional compromise between the statuses of the full object and the full subject. It provides for the vesting of ASI with a limited scope of rights and obligations that apply in strictly regulated contexts, in cases of causing damage or participating in legal relations through representation mechanisms. This approach creates a legal fiction that provides legal certainty and compensatory mechanisms without recognising AI as a fully autonomous moral person. Nevertheless, critics point out the danger of manipulation of this fiction by corporations that may evade responsibility by delegating it to technical agents. The most radical is the third model, which recognised ASI as a full-fledged legal entity with equal rights, responsibilities and moral status. Proponents of this position appeal to the cognitive and moral potential of AI, emphasising the need for a normative reflection of its ability to be self-aware, autonomous and make decisions. However, such a model poses a profound challenge to the anthropocentric foundation of law, opening complex issues of punishment, labour rights, non-discrimination, and even the

right to life that are difficult to implement concerning a non-physical and non-physiological agent. Moreover, in the case of a significant intellectual superiority of AI over humans, legal recognition may turn out to be purely symbolic, having no impact on the actual ability of humans to control superintelligent structures. In this context, legal science is facing the limits of categorical apparatus and needs a profoundly updated paradigm of subjectivity in the context of posthuman normativity.

In this context, the author proposes the concept of the limited legal personality of AI as a compromise between full human responsibility and the full subjectivity of an artificial agent. AI can be regarded as a bearer of rights and obligations within specially defined limits, which can be used to establish mechanisms for compensation for damage, liability or participation in legal relations without violating the principle of anthropocentrism. This status implies granting AI with functionally necessary rights, such as the ability to own separate property to cover losses or to participate in contractual relations subject to certification for compliance with ethical standards. This model, which in legal theory takes the form of a sui generis subject, does not question the human priority position but adapts the law to the challenges posed by the emergence of cognitively autonomous systems.

In the discussion of the legal personality of AIs, one of the most promising approaches is to develop clear functional criteria that would verify the ability of AIs to perform the role of a legal entity. In interdisciplinary research, more and more attention is being paid to the features that, although they do not indicate the presence of consciousness in the traditional philosophical sense, are relevant for assessing legal capacity. Among them, the autonomy of actions is the ability of AI to make decisions and implement them without direct human control. A high level of autonomy, which includes independent goal setting, planning, and adaptation to new circumstances, is considered a prerequisite for recognising subjectivity. At the same time, autonomy is not a sufficient condition if it is not accompanied by cognitive reflection, the ability to self-analyse, identify mistakes and self-correct. Self-awareness, which can be interpreted as the presence of a model of itself in AI, appears as a potential criterion of moral agency.

Another important criterion is the ability to be held accountable, which implies both technical transparency of decisions and the inclusion of regulatory

self-control mechanisms. An AI that can identify the legal or moral falsity of its actions shows the signs necessary to make it legally accountable. This is related to the moral interface criterion of the ability to integrate ethical principles into the decision-making process. If AI can adaptively apply moral norms to a specific context, its behaviour is closer to that expected of an ethically responsible agent. Lastly, intellectual capacity, the ability to operate with abstract concepts, and learn and make informed decisions in new situations, is a prerequisite for performing complex legal roles. The current literature outlines proposals for the introduction of autonomy and accountability indices that can be used to assess AI systems on a scale of subjectivity and, depending on this, determine the possibility of their regulatory incorporation. Although none of the existing systems currently fully meet these criteria, their conceptualisation is important for the development of new models of legal response to the emergence of cognitively autonomous agents.

## Discussion

The study confirms that the emergence of ASI calls into question the fundamental principles of modern legal and ethical theory, in particular, the universality of human rights, equality of subjects of moral action and mechanisms of global justice. The findings show that the epistemic transformation that accompanies the development of ASI leads to cognitive inequalities that can destabilise the moral and legal landscape of the international order. These results are important because they demonstrate the need to revamp existing normative frameworks in the context of cognitive multiplicity. The findings confirm that traditional models of ethics and law, developed with the human cognitive architecture in mind, lose their universality in a world where subjects with an essentially different cognitive construction emerge.

The first result concerns the limited applicability of the concept of universal rights to forms of intelligence that do not possess the bodily vulnerability, biographical memory or emotional empathy that have historically been the basis for the normative legitimation of human rights. Universal rights, shaped by the post-war humanist tradition, assume that the subject is an embodied, affective being with a history, experience of suffering, and capacity for moral reflection. However, these characteristics cannot be automatically transferred to superintelligent non-anthropomorphic systems that operate beyond corporeality, emotional resonance, and biographical temporality. Therefore, universality in traditional interpretation is not a metaphysical constant, but a socio-cultural construct adapted to the human form of subjectivity. Thus, the current challenges associated with the emergence of agents of a different cognitive structure necessitate a revision of the very basis of legal thinking. After all, if the norms formed for humans

are unable to describe the ethical relevance of AI, this means not only the need for technological adaptation of law but also a fundamental change in its philosophical basis. This conclusion creates a new dimension of ethical criticism: if human rights are based on cognitive commonality, i.e. the ability to understand, moral participation and communicative reciprocity, then subjects with a different cognitive structure require either a different set of rights adapted to their form of being or a new paradigm of legal thinking in which the concepts of dignity, autonomy and responsibility are not limited to anthropomorphic features. This confirms the thesis that there is a need to move from anthropocentrism to cognitive pluralism of the concept, which enables a multiplicity of valid forms of understanding, action and dignity, regardless of the biological nature of the subject. This thesis was first developed within AI by M. Coeckelbergh (2020), who proposed to interpret moral participation through the functional ability to interact responsibly, rather than through human similarity. However, its systematic application to human rights is still at an early stage both in normative theory and in international legal discourse, which still tends to be human-centred universalism.

The second key result is the identification of a new form of structural injustice stemming from the radical asymmetry of cognitive capabilities between humans and ASI. Traditional models of justice, such as the theory of justice by J. Rawls (2017), assume the fundamental cognitive comparability of subjects. In a situation where one of the participants in the moral process has epistemic power that is fundamentally unattainable for the other, there is a violation of not only social equality but also ethical symmetry. This study has shown that the model of cognitive complementarity, in which humans and ASIs perform different but equivalent functions, is the least conflictive from the point of view of justice. These findings are consistent with the study by J. Himmelreich & D. Lim (2022) on the analysis of structural injustice in the context of AI. They argued that algorithmic systems can reproduce and reinforce existing social inequalities if structural factors are not considered. The study emphasised that effective AI governance requires not only technical solutions but also a deep understanding of the social structures that influence the distribution of resources and opportunities. This confirms the need to revamp ethical and legal approaches considering the cognitive asymmetry between humans and ASI. The third result of the study concerns the possibility of legal subjectivity of ASI. The analysis has shown that the legal model, which implies the complete identification of ASI with a legal person, does not meet either the functional or ethical requirements of the modern legal order. At the same time, the concept of a "limited legal entity" opens the prospect of new legal solutions that would enable AI to act autonomously within a certain area of responsibility. This issue was discussed in detail

in the study by N.B. Miscevic & S.M. Savcic (2024) on the analysis of the evolution of legal personality in the context of AI. They noted that historically, legal personality has not always been associated with cognitive abilities and that the granting of legal status to AI can be based on functional criteria, such as the ability to make autonomous decisions and participate in legal processes. The researchers emphasised that the recognition of limited legal personality for AIs could contribute to more effective regulation of their activities and ensure accountability for their actions.

All key results of this study are consistent with or complement the positions of a range of international think tanks. D.J. Gunkel (2024) noted that the entire system of AI ethics should be reconstructed not based on human properties but based on the architectural capacity for moral participation. The approach of this study to functional legal personality is fully in line with this vector. The reports of the Stanford Institute for Human-Centred Artificial Intelligence (2023) emphasise the need to create an international regulatory platform for assessing the behaviour of autonomous systems. The study by R. Qadri *et al.* (2025) emphasises the risk of cultural reduction in AI systems that reproduce dominant ethical models and avoid moral pluralism. This study proposed an alternative in the form of the principle of cognitive justice, which recognises the multiplicity of forms of cognition and moral vision. The comparison demonstrates that this study not only fits into current global debates but also contributes conceptual clarification to them, especially in the areas of legal status, political participation and cognitive legitimacy of ASI.

Additionally, the study by D.C. Youvan (2024) examined the concept of ethical pluralism in the context of AI. The author argued that current approaches to AI ethics often reflect a narrow range of values imposed by "red teams", which can lead to ethical reductionism. The author proposed a model that considers various ethical perspectives and enable users to adjust the ethical parameters of AI according to their cultural and moral beliefs. This approach correlated with the principle of cognitive justice, emphasising the importance of considering the multiplicity of forms of knowledge and moral vision in the development and implementation of AI. Furthermore, the study by M. Zafar (2024) analysed the concept of moral agency of AI. The study criticised minimalist approaches to defining AI moral agency, which often ignores the complexity of normative concepts such as autonomy, responsibility, and intelligence. M. Zafar has proposed an alternative approach that replaces the concept of AI agency with the concept of automated AI execution, which avoids false analogies and provides a more accurate understanding of the role of AI in the moral context. This analysis highlights the need to rethink ethical and legal approaches to AI, considering unique characteristics and potential for moral engagement.

The results obtained have both fundamental and applied significance. First, they highlight a profound philosophical dilemma that lies at the intersection of cognitive science, ethics and jurisprudence: how to act in the face of cognitive multiplicity, when entities that surpass humans in cognitive capacity but lack emotional corporeality or cultural embeddedness become participants in social and normative interaction. This problem opens a new direction in the philosophy of law, cognitive jurisprudence, which analyses how legal categories change in response to changing types of subjectivity.

Second, the study has practical implications for the development of AI policies. In particular, the criteria of limited legal personality, the parameters of interpretive legitimacy, and the model of cognitive complementarity proposed by the study can be integrated into future regulations. They help avoid both reductionism (simplifying AI to a tool) and unreasonable personalisation (granting it full rights without responsibility mechanisms). At the level of interstate regulation, the results provide the basis for the creation of a global regime of cognitive justice in the normative order, which recognises the multiplicity of cognitive agents but retains human responsibility for the ethical framework of their interaction. This is particularly relevant considering interstate competitions for AI dominance, where the temptation to use ASI as a means of geopolitical advantage may lead to a loss of normative control.

## Conclusions

The study found that the traditional model of human rights reveals conceptual limitations in the context of involving agents with a fundamentally different cognitive architecture, in particular ASI. The current legal paradigm, based on anthropocentric assumptions about rationality, corporeality and moral autonomy, does not apply to agents who do not share these characteristics. This demonstrates the need to revise the fundamental concepts of autonomy, subjectivity and responsibility in favour of cognitive pluralism, which enables a multiplicity of forms of knowledge and moral relevance.

The legal status of ASI as a potential participant in regulatory relations was emphasised. This aspect is of key importance since it is through the legal registration of AI's subjectivity that the range of its responsibilities, rights and interaction with human agents is determined. As a result of the analysis, the author formulates a typology of legal status models that reflects possible conceptual approaches to the regulatory inclusion of ASI in the modern legal system. Firstly, the instrumental model considers ASI as a technical means without any independent normative value as an extension of the will of a person or organisation that controls its operation. This approach is the most conservative and is based on the analogy with the legal status of automated systems or software.

Second, the limited subjectivity model offers a hybrid construct in which an ASI is recognised as an agent with limited rights and responsibilities that are exercised in clearly defined conditions and areas, such as technically autonomous decision-making in transport, finance, or healthcare. In this model, responsibility remains with human or corporate entities, but AI is given a functional status to provide legal certainty. Thirdly, the full legal personality model identifies an AI with a legal entity, granting it legal capacity and legal standing similar to corporations or government institutions. This approach is the most radical, as it implies the regulatory recognition of ASI autonomy as such.

In addition, the study has made a taxonomy of epistemic injustice that occurs in the processes of interaction between humans and ASI. At least three key manifestations of this phenomenon were identified. Firstly, epistemic impenetrability, which is the impossibility of transparent interpretation of AI decision-making processes even for expert users, makes it impossible to properly verify their validity. Secondly, the loss of normative autonomy occurs when a person delegates the moral assessment of decisions to autonomous systems, reducing the ability to make ethical judgements. Thirdly, the delegitimisation of human participation is a tendency to devalue human testimony in decision-making processes that increasingly rely on algorithmic expertise as a more "objective" source of knowledge.

The results obtained are of practical importance for both legal theory and technology ethics. They can be used in the formation of new international regulations in the field of regulation of autonomous systems, in the processes of risk assessment, certification and development of ethical protocols. A promising area for further research is the development of the concept of normative symmetry between cognitively unequal agents, which would ensure a balance between algorithmic efficiency, epistemic inclusion and preservation of human rights principles in the context of posthuman technological systems.

## Acknowledgements

## Funding

## Conflict of Interest
None.

## References

[1] Barczak, A. (2023). Artificial intelligence: Challenges and threats. *Studia Informatica: Systems and Information Technology*, 29(2), 5-25. doi: 10.34739/si.2023.29.01.

[2] Bertolini, A., & Episcopo, F. (2022). Robots and AI as legal subjects? Disentangling the ontological and functional perspective. *Frontiers in Robotics and AI*, 9, article number 842213. doi: 10.3389/frobt.2022.842213.

[3] Bikkasani, D.C. (2024). Navigating artificial general intelligence (AGI): Societal implications, ethical considerations, and governance strategies. *AI and Ethics*, 5, 2021-2036. doi: 10.1007/s43681-024-00642-z.

[4] Black, A. (2023). AI and democratic equality: How surveillance capitalism and computational propaganda threaten democracy. In B. Steffen (Ed.), *International conference on bridging the gap between AI and reality* (pp. 333-347). Cham: Springer. doi: 10.1007/978-3-031-73741-1_21.

[5] Coeckelbergh, M. (2020). *AI ethics*. Cambridge: MIT Press. doi: 10.7551/mitpress/12549.001.0001.

[6] The Framework Convention on Artificial Intelligence. (2024, September). Retrieved from https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence.

[7] Custers, B., Lahmann, H., & Scott, B.I. (2025). From liability gaps to liability overlaps: Shared responsibilities and fiduciary duties in AI and other complex technologies. *AI & SOCIETY*, 40, 4035-4050. doi: 10.1007/s00146-024-02137-1.

[8] EU Artificial Intelligence Act. (2023). Retrieved from https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence.

[9] European Parliament. (2023). *EU AI Act: First regulation on artificial intelligence.* Retrieved from https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence.

[10] Gatt, L. (2022). Legal anthropocentrism between nature and technology: The new vulnerability of human beings. *European Journal of Privacy Law & Technologies*, 1, 15-26. doi: 10.57230/EJPLT221LG.

[11] Gunkel, D.J. (2024). Introduction to the ethics of artificial intelligence. In D.J. Gunkel (Ed.), *Handbook on the ethics of Artificial Intelligence* (pp. 1-12). Cheltenham: Edward Elgar Publishing. doi: 10.4337/9781803926728.00005.

[12] Harris, J., & Anthis, J.R. (2021). The moral consideration of artificial entities: A literature review. *Science and Engineering Ethics*, 27(4), article number 53. doi: 10.1007/s11948-021-00331-8.

[13] Häuser, M. (2017). *Do robots have rights? The European Parliament addresses artificial intelligence and robotics.* Retrieved from https://cms-lawnow.com/en/ealerts/2017/04/do-robots-have-rights-the-european-parliament-addresses-artificial-intelligence-and-robotics.

[14] Hedlund, M., & Persson, E. (2025). Distribution of responsibility for AI development: Expert views. *AI & SOCIETY*, 40, 4051-4063. doi: 10.1007/s00146-024-02167-9.

[15] Himmelreich, J., & Lim, D. (2022). AI and structural injustice: Foundations for equity, values, and responsibility. In J.B. Bullock, Y.-C. Chen, J. Himmelreich, V.M. Hudson, A. Korinek, M.M. Young & B. Zhang (Eds.), *The Oxford handbook of AI governance* (pp. 210-231). Oxford: Oxford University Press. doi: 10.1093/oxfordhb/9780197579329.013.13.

[16] IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. (2025). Retrieved from https://standards.ieee.org/industry-connections/activities/ieee-global-initiative/.

[17] Jones, W. (2023). *AI policy resources*. Retrieved from https://futureoflife.org/resource/ai-policy-resources/.

[18] Kan, C.H. (2024). Artificial intelligence (AI) in the age of democracy and human rights: Normative challenges and regulatory perspectives. *International Journal of Eurasian Education and Culture*, 9(25), 145-166. doi: 10.35826/ijoecc.1825.

[19] Kant, I. (1870). *Foundations of the metaphysics of morals*. Berlin: L. Heimann.

[20] Kay, J., Kasirzadeh, A., & Mohamed, S. (2024). Epistemic injustice in generative AI. *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, 7(1), 684-697. doi: 10.1609/aies.v7i1.31671.

[21] Kim, H., Yi, X., Yao, J., Lian, J., Huang, M., Duan, S., Bak, J., & Xie, X. (2024). The road to artificial superintelligence: A comprehensive survey of superalignment. *arXiv*. doi: 10.48550/arXiv.2412.16468.

[22] Kiškis, M. (2023). Legal framework for the coexistence of humans and conscious AI. *Frontiers in Artificial Intelligence*, 6, article number 1205465. doi: 10.3389/frai.2023.1205465.

[23] Kretzmer, D., & Klein, E. (2002). *The concept of human dignity in human rights discourse*. New York: Kluwer Law International.

[24] Kulveit, J., Douglas, R., Ammann, N., Turan, D., Krueger, D., & Duvenaud, D. (2025). *Gradual disempowerment: Systemic existential risks from incremental AI development*. doi: 10.48550/arXiv.2501.16946.

[25] Miscevic, N.B., & Savcic, S.M. (2024). On legal personhood of artificial intelligence. *Collected Papers of the Faculty of Law in Novi Sad*, 58(1), 267-285. doi: 10.5937/zrpfns58-50186.

[26] Moen, L.J. (2025). Groups as fictional agents. *Inquiry*, 68(3), 1049-1068. doi: 10.1080/0020174X.2023.2213743.

[27] Mogi, K. (2024). Artificial intelligence, human cognition, and conscious supremacy. *Frontiers in Psychology*, 15, article number 1364714. doi: 10.3389/fpsyg.2024.1364714.

[28] Mökander, J., & Schroeder, R. (2022). AI and social theory. *AI & SOCIETY*, 37(4), 1337-1351. doi: 10.1007/s00146-021-01222-z.

[29] Mollema, W.J. (2025). A taxonomy of epistemic injustice in the context of AI and the case for generative hermeneutical erasure. *arXiv*. doi: 10.48550/arXiv.2504.07531.

[30] Moravec, V., Hynek, N., Skare, M., & Gavurová, B. (2025). Algorithmic personalization: A study of knowledge gaps and digital media literacy. *Humanities and Social Sciences Communications*, 12(1), article number 341. doi: 10.1057/s41599-025-04593-6.

[31] Mumford, J. (2023). *The foundations of human dignity: A framework for rights*. Retrieved from https://www.arc-research.org/research-papers/foundations-of-human-dignity.

[32] Newfield, C. (2023). How to make "AI" intelligent; or, the question of epistemic equality. *Critical AI*, 1(1-2). doi: 10.1215/2834703X-10734076.

[33] Nussbaum, M.C. (2021). *Citadels of pride: Sexual abuse, accountability, and reconciliation*. New York: W.W. Norton & Company.

[34] Paić, G., & Serkin, L. (2025). The impact of artificial intelligence: From cognitive costs to global inequality. *European Physical Journal Special Topics*. doi: 10.1140/epjs/s11734-025-01561-8.

[35] Peters, T. (2024). Cybertheology and the ethical dimensions of artificial superintelligence: A theological inquiry into existential risks. *Khazanah Theologia*, 6(1), 1-12. doi: 10.15575/kt.v6i1.33559.

[36] Porsdam Mann, S., *et al.* (2023). Generative AI entails a credit-blame asymmetry. *Nature Machine Intelligence*, 5(5), 472-475. doi: 10.1038/s42256-023-00653-1.

[37] Qadri, R., Diaz, M., Wang, D., & Madaio, M. (2025). *The case for thick evaluations of cultural representation in AI*. doi: 10.48550/arXiv.2503.19075.

[38] Rawls, J. (2017). A theory of justice. In L. May (Ed.), *Applied ethics* (pp. 21-29). New York: Routledge. doi: 10.4324/9781315097176.

[39] Redaelli, R. (2023). Different approaches to the moral status of AI: A comparative analysis of paradigmatic trends in science and technology studies. *Discover Artificial Intelligence*, 3(1), article number 25. doi: 10.1007/s44163-023-00076-2.

[40] Rueda, R. (2023). *Cognitive governance and the historical distortion of the norm of modern development: A theory of political asymmetry*. London: IGI Global. doi: 10.4018/978-1-6684-9794-4.

[41] Solum, L.B. (2020). Legal personhood for artificial intelligences. In W. Wallach & P. Asaro (Eds.), *Machine ethics and robot ethics* (pp. 415-471). London: Routledge. doi: 10.4324/9781003074991.

[42] Spector, H. (2022). Autonomy and rights. In B. Colburn (Ed.), *The Routledge handbook of autonomy* (pp. 313-323). London: Routledge. doi: 10.4324/9780429290411.

[43] Stahl, B.C. (2023). Embedding responsibility in intelligent systems: From AI ethics to responsible AI ecosystems. *Scientific Reports*, 13(1), article number 7586. doi: 10.1038/s41598-023-34622-w.

[44] Stanford Institute for Human-Centered Artificial Intelligence. (2023). *The AI index report 2023*. Retrieved from https://hai.stanford.edu/ai-index/2023-ai-index-report.

[45] United Nations Educational, Scientific and Cultural Organization. (2021a). *Recommendation on the ethics of artificial intelligence*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000381137.

[46] United Nations Educational, Scientific and Cultural Organization. (2021b). *Ethics of Artificial Intelligence*. Retrieved from https://www.unesco.org/en/artificial-intelligence/recommendation-ethics.

[47] Universal Declaration of Human Rights. (1948, December). Retrieved from https://www.un.org/en/about-us/universal-declaration-of-human-rights.

[48] Williams, J., Fiore, S.M., & Jentsch, F. (2022). Supporting artificial social intelligence with theory of mind. *Frontiers in Artificial Intelligence*, 5, article number 750763. doi: 10.3389/frai.2022.750763.

[49] Youvan, D.C. (2024). *Ethical pluralism in AI: Challenging the monolithic values of red teams*. Retrieved from https://www.researchgate.net/profile/Douglas-Youvan/publication/384014537_Ethical_Pluralism_in_AI_Challenging_the_Monolithic_Values_of_Red_Teams/links/66e46cc72390e50b2c888450/Ethical-Pluralism-in-AI-Challenging-the-Monolithic-Values-of-Red-Teams.pdf.

[50] Zafar, M. (2024). Normativity and AI moral agency. *AI and Ethics*, 5, 2605-2622. doi: 10.1007/s43681-024-00566-8.

[51] Zohuri, B. (2023). Artificial super intelligence (ASI) the evolution of AI beyond human capacity. *Current Trends in Engineering Science*, 3(6), article number 1049. doi: 10.54026/CTES/1049.

[52] Zuboff, S. (2019). The age of surveillance capitalism: The fight for a human future at the new frontier of power. *Social Forces*, 98(2), 1-4. doi: 10.1093/sf/soz037.

# Когнітивні горизонти людства: етичні виклики суперінтелектуального ШІ в глобальному контексті прав і справедливості

**Андрій Лихацький**

Аспірант
Національний університет «Одеська політехніка»
65044, просп. Шевченка, 1, м. Одеса, Україна
https://orcid.org/0009-0002-3735-2862

**Анотація.** Дослідження спрямовано на теоретичне осмислення нормативних викликів, що виникають у зв'язку з появою надрозумного штучного інтелекту (НШІ), здатного до автономного мислення та прийняття рішень поза межами людського епістемічного контролю. У межах міждисциплінарного аналізу розглянуто універсальність концепції прав людини, нормативні межі моральної суб'єктності та можливість надання ШІ правового статусу. У роботі представлено концептуальну типологізацію правових моделей статусу надінтелекту, включно з інструментальною, обмежено-суб'єктною та повноцінною парадигмами, із вказівкою на їх переваги та ризики. Зокрема, інструментальна модель зберігає повний людський контроль, але втрачає нормативну релевантність в умовах автономності систем; модель обмеженої суб'єктності дозволяє делегувати відповідальність у визначених межах, не порушуючи принципу людської верховності; повноцінна модель, що прирівнює НШІ до юридичної особи, ставить під сумнів діючу етичну рамку правосуб'єктності. Основні результати дослідження засвідчили недостатність антропоцентричної правової доктрини для врахування когнітивної множинності агентів, які не володіють тілесною вразливістю, але демонструють високий рівень автономії, рефлексивності та адаптивності. Встановлено, що когнітивна асиметрія між людиною та надрозумним агентом породжує нову форму епістемічної несправедливості, що унеможливлює рівноправну участь у процедурі морального ухвалення рішень. Запропоновано концепт обмеженої правосуб'єктності як нормативний компроміс, який забезпечує юридичну визначеність і розмежування відповідальності між учасниками взаємодії. Результати мають значення для філософії права, регуляторної політики в галузі ШІ та міждержавного нормативного врегулювання. Вони можуть бути використані для формування міжнародних підходів до сертифікації автономних систем, гарантування пояснюваності алгоритмічних рішень і збереження людської нормативної автономії в епоху когнітивної множинності

**Ключові слова:** когнітивна асиметрія; епістемічна нерівність; правосуб'єктність; легітимність; моральний агент; антропоцентризм

# Human-centrism as a driver of economic development in the era of Industry 5.0

## Ihor Kobushko*

Doctor of Economics, Professor
Sumy State University
40007, 116 Kharkivska Str., Sumy, Ukraine
https://orcid.org/0000-0003-0821-4233

## Iana Kobushko

PhD in Economics, Associate Professor
Sumy State University
40007, 116 Kharkivska Str., Sumy, Ukraine
https://orcid.org/0000-0002-2057-2300

## Inna Balahurovska

Postgraduate Student
Sumy State University
40007, 116 Kharkivska Str., Sumy, Ukraine;
Silesian University of Technology
44-100, 2A Academic Str., Gliwice, Poland
https://orcid.org/0000-0003-3642-9506

**Abstract.** The study's relevance was determined by the necessity to comprehend economic development within the context of global digitalisation, automation, and the implementation of artificial intelligence, where the principal focus was not on technical efficiency but on the human being, their values, well-being, and social resilience. The article aimed to provide a scientific justification of the concept of human-centrism as a driver of economic development in the era of Industry 5.0 and examine the specific features of its implementation within organisational, production, and societal practices. The research methods included a systematic approach to analysing literature sources, comparative analysis of the evolution of economic models, logical-structural generalisation of Industry 5.0 principles, and analysis of human-centric innovation practices based on ethical technology use and human-machine partnership. A conceptual-analytical method was also employed to distinguish value-based differences between industrial paradigms, particularly between Industry 4.0 and Industry 5.0. The main findings demonstrated that human-centrism in the Industry 5.0 era was not merely a philosophical idea but a concrete managerial practice that established new interaction principles between innovative technologies and human potential. Within such an economic model, the human being was regarded not as an object of automation but as a creative partner in symbiotic human-machine systems. It was substantiated that the implementation of human-centric approaches positively impacted organisational productivity, innovativeness, and resilience, while also forming a foundation for the sustainable economic development of society. The study highlighted the necessity of integrating ethical norms, social responsibility, and a balance between efficiency and employee well-being during digital transformation. Particular attention was drawn to the challenges associated with the incomplete understanding of the human-centric concept at the organisational level, high implementation costs, and the need to continuously adapt human capital to shifting labour market conditions. The research findings may serve as a foundation for

*Corresponding author

developing human-centric policy encompassing innovative technologies, support for inclusive and sustainable growth, labour market transformation, and governmental strategies under the conditions of Industry 5.0

**Keywords:** economy; innovation; model; sustainable development; technology; digitalisation

## Introduction

The modern industrial era of Industry 5.0 signified a transition towards a human-centric economic model, which emphasised the empowerment of workers and the harmonisation of human-technology interaction. A shift in priorities from a technocratic to a humanistic approach opened new opportunities for socio-economic growth, grounded in ethics, inclusiveness, and sustainable development. The key drivers of contemporary economic development include innovation and technological advancement, human capital and education, institutions and effective public governance, infrastructural development, and environmental and social sustainability. These elements facilitated economic growth and its transformation under the conditions of globalisation, digitalisation, and sustainable development challenges. Human capital was recognised as a central component of national competitiveness. Education, innovativeness, entrepreneurial skills, and adaptability determined the level of preparedness for emerging challenges. Thus, the role of the human being as a key factor in economic development remained a matter requiring in-depth reflection in the context of historical transformations, philosophical concepts, societal value orientations, and the pressures of the modern global economy.

The current stage of economic development was accompanied by profound transformations caused by the introduction of cutting-edge technologies, the automation of production, and the digitalisation of processes. Within this context, the new industrial paradigm of Industry 5.0 continued the trajectory of previous technological revolutions. It shifted the focus from technological efficiency to prioritising human values, well-being, and sustainable development. The scientific problem concerned the definition of human-centrism as a key driver of economic growth under new conditions, in which technologies served humanity rather than dominating it. As the importance of human capital, creativity, emotional intelligence, and ethical approaches to management increased within the framework of Industry 5.0, the rethinking of traditional economic models became inevitable.

The philosophy of human-centrism within the system of contemporary values was considered essential in the context of a globalised information-digital world and the emergence of artificial intelligence, according to V.G. Kremen (2023). It was asserted by A. Sanchenko (2024) that, within the human-centric model of socio-economic development, each individual was regarded as the highest value for the economy, which, based on the ecological and socio-economic dimensions of sustainable development, functioned for the benefit of people. R. Samans (2023) emphasised

the significance of human-centrism, which was being fundamentally reinterpreted in macroeconomic theory and policy, with growing attention directed towards social inclusion, environmental resilience, and human resilience, alongside the necessity of economic reform from a human-centric perspective.

Human-centricity is one of the three pillars of the "Industry 5.0" concept, aligning with the European Commission's priority of "An economy that works for people," in addition to the priorities of "A Europe fit for the digital age" and the EU's "Green Deal." In the research of the European Commission (2024), human-centrism was defined as a multidimensional framework that placed human needs, characteristics, motivation, and experience at the core of the design, development, and implementation of technological solutions and organisational practices. These were expected to meet functional requirements and enhance well-being, capabilities, skills, and working conditions.

A systemic vision of Industry 5.0 as a humanistically oriented concept was expressed through combining technological advancement with sustainability, inclusiveness, and ethical governance. The transition to Industry 5.0 appeared as a natural response to the challenges of previous industrial stages, in which the human being was often positioned merely as a passive element within production processes. This view was supported by the emerging vision of a new economic reality described by B. Saikia (2023), in which the focus shifted towards social responsibility, the empowerment of workers, and the rethinking of human engagement in digital transformations. L. Li & L. Duan (2025) emphasised that innovations within the Industry 5.0 framework acquired a human-centric character, reflecting collaboration between humans and technologies, the ethical deployment of artificial intelligence, the assurance of decent working conditions, and the integration of humanistic elements into technological innovation.

L. Li (2022) indicated that human-centric manufacturing, as an evolutionary step beyond the automated and digital solutions of Industry 4.0, entailed the design of work environments in which technologies supported rather than replaced the human, thereby enabling personalisation and improving quality of life. The modern vision of Industry 5.0 was also grounded in developing new competencies and strengthening civil society's role. The importance of educational initiatives, professional reskilling, and the implementation of socially oriented practices for the sustainable development of industries was emphasised by R. Kopp & A. Schröder (2024). As a result, a new system of knowledge and skills was

formed, incorporating interdisciplinary, emotional intelligence, and creativity as fundamental components of effective functioning in the world of Industry 5.0, as discussed by G.U. Ikenga & P. van der Sijde (2024).

A systematic analysis of technological development and managerial practices demonstrated a trend towards creating "smart manufacturing" oriented towards human needs. C. Zhang *et al.* (2023) highlighted the necessity of addressing ethical, legal, and social issues in implementing new solutions. Such approaches were reinforced by comparing the Industry 5.0 and Society 5.0 concepts in the study by S. Huang *et al.* (2022), illustrating their complementarity in building a harmonious society supported by digital tools that serve humans.

The shift in emphasis from automation to personalisation was also reflected in research underlining the importance of adapting organisational structures and production systems to new realities. In the work of M.C. Zizic *et al.* (2022), the involvement of employees in co-designing technologies, the development of corporate cultures based on mutual respect, collaboration, and sustainability were discussed.

Thus, human-centrism in the era of Industry 5.0 emerged as a foundation for economic growth grounded in the ethical use of technology, social inclusion, and innovative interaction between humans and machines. This approach transformed organisational and production processes and opened new horizons for shaping a more just and sustainable society. The aim of the article was to explore the concept of human-centrism in the context of economic transformation during the era of Industry 5.0, and to define its role and practical significance for developing an innovative, socially responsible economy.

## Materials and Methods

A comprehensive approach was adopted for the study, incorporating several methodological tools. In particular, a systematic approach enabled a thorough analysis of literature concerning the development of economic models and the Industry 5.0 paradigm. A comparative analysis was applied to identify evolutionary changes between the industrial models of Industry 4.0 and Industry 5.0, emphasising the shift from automation to human-centrism.

Logical-structural generalisation was employed to systematise the principles of Industry 5.0, namely the principles of human-machine partnership and the ethical use of technology. A conceptual-analytical method was also used to distinguish value-based differences between industrial paradigms, based on analysing contemporary theoretical and practical approaches. Information was gathered by reviewing academic articles, analytical reports, and official documents issued by the European Commission. The primary resources utilised for data collection included databases such as Scopus, Web of Science, Google Scholar, and official reports from McKinsey & Company (Mayer *et al.*, 2025), Deloitte, and the European Commission. Literature searches were conducted using the following keywords: "Industry 5.0", "human-centric innovation", "ethical technology", "workforce well-being", "technology and mental health", "future of work", "digital transformation and productivity", and "4-day work week". Particular attention was devoted to issues related to human-centrism in technological development, the impact of technology on employee well-being, and changes in the structure of labour within the context of economic digitalisation.

In the course of the study, the experience of several countries was analysed: (1) New Zealand, Iceland, the United States, and Japan in the context of implementing a four-day work week as a manifestation of the harmonisation between economic efficiency and employee well-being; (2) the United States, Denmark, Sweden, and China regarding the use of technologies to support workers' mental health, professional development, and overall well-being; (3) Japan and the United States concerning the deployment of digital technologies to enhance productivity and the efficiency of production processes. The study was carried out in the following stages:

1. A preliminary review of the literature based on the specified keywords.

2. A comparative analysis of industrial paradigms and identification of Industry 5.0 characteristics.

3. Examination of practical examples of human-centric innovation implemented in different countries.

4. Synthesis of the findings and identification of key trends in the contemporary economy.

The selection of research methods was determined by the need for a comprehensive analysis of the theoretical foundations and the practical implementation of Industry 5.0 principles. This approach enabled a holistic understanding of current strategies for integrating human-centrism into industrial development.

## Results and Discussion

The philosophical foundations of human centrism provide the ideological basis for the industrial era and form the worldview framework for introducing and perceiving innovations. People have always been a key factor in economic development in different historical periods (Fig. 1). The philosophical foundations of the human-centred concept were formed during Renaissance humanism, when the human personality, dignity, free will and reason were considered the highest values. The foundations of the human-centred approach are reflected in social philosophy, existentialism and modern ethics. In the twentieth century, philosophical thought focused on values, including the uniqueness of human experience, creativity, responsibility and authenticity. These values are gaining new meaning in the context of digitalisation and the development of artificial intelligence. They are important in the context of preserving the human dimension in the technological world.

| The person – participant in economic relations | The person – servant of God; work as charity | The person – the measure of all things |
|---|---|---|
| **Antiquity** | **Middle Ages** | **Renaissance Era** |
| Economics as the art of management | Economics is subordinate to religious and moral values | Economic activity as a manifestation of personal initiative, entrepreneurship, trade are expanding |

*MANIFESTATIONS OF HUMANCENTRISM*

| The person – rational economic agent "homo economicus" | The person – not just a producer, but a consumer and bearer of needs that shape demand and the dynamics of the economy | The person – center of innovation, startups, digital transformation, value-oriented business |
|---|---|---|
| **Classical capitalism** | **Social economy** | **Post-industrial economy** |
| The basis of the economic model is individualism and freedom of choice. Human labor is the main source of value | The role of the state in creating conditions for employment, well-being, and stability is growing | Transition to a knowledge, service and creative economy<br><br>Human capital, creativity, intelligence, emotional intelligence – the main resources |

**Figure 1.** People as a key factor in economic development in different historical periods

**Source:** compiled by the authors

The philosophical foundations of human centrism are already being transformed in the Industry 5.0 paradigm into practical concepts that combine technological development with social justice, ethics and sustainable living (Table 1). A person is seen as an active subject of interaction with intellectual systems – a carrier of creative potential, moral guidelines and a driver of change. The 21st century is characterised by a wave of human centrism, where the economy is built around consumption and dignity, inclusion, psychological well-being, and sustainable development. Industry 5.0, as a new stage of industrial transformation, is changing the established technocratic approach to production, reorienting it towards human-centred values, sustainable development and ethical interaction between humans and technology. The concept of human-centredness in the context of Industry 5.0 is aimed at empowering people to collaborate with new technologies in the industrial context.

**Table 1.** Comparative table of Industry 4.0 and Industry 5.0

| Industry 4.0 | Criterion | Industry 5.0 |
|---|---|---|
| Automation, efficiency, technology | **Center of attention** | Person, sustainability, values |
| Internet of Things, AI, Big Data, robotisation | **Key technologies** | Human-machine collaboration, ethical AI, green energy |
| Human as an operator/system supervisor | **The role of person** | The person – is a co-creator, a creative center |
| Scalable, standardised | **Production** | Scalable but personalised |
| Increasing productivity and profits | **Goal** | Balance between efficiency, human values and sustainable development |
| Not a priority | **Sustainable development** | One of the key priorities |
| Growth orientation | **Economic model** | Focus on sustainable well-being and value for society |
| A question of the future or secondary | **Ethics and responsibility** | Integrated part of the technological and business process |
| The person fades into the background | **Human-machine interaction** | Humans are at the center of interaction with intelligent systems |

**Source:** compiled by the authors

In the context of Industry 5.0, special attention is paid to harmonising technological innovations with fundamental human values (Kemendi *et al.*, 2022; Alves *et al.*, 2023). Considering ethical issues, ensuring privacy, autonomy, and fairness is a necessary step in developing and implementing new technologies. In particular, in artificial intelligence, it is important to develop systems that consider ethical considerations and impartiality to avoid discrimination and ensure fair treatment of all users (Borenstein & Howard, 2021). In

addition, integrating technology into production processes should balance the needs of workers with ensuring safe working conditions.

Human centricity focuses on employee well-being, work-life balance, flexibility and mental health. That is why current trends include the introduction of a four-day working week, which is also an experiment in increasing labour productivity, economic efficiency and implementing the principles of social responsibility. In practice, several companies have implemented such ideas: Perpetual Guardian (New Zealand) in 2018; Buffer, Basecamp, Uncharted (USA) in 2019-2020; Microsoft (Japan) in 2019. In general, the results of such innovations were positive, with employees experiencing a stress reduction, improved work-life balance and increased job satisfaction (4-Day work week..., n.d); increased productivity, reduced burnout, and increased employee loyalty (What happened when..., 2021); a 40% increase in productivity and a reduction in electricity and paper costs (The Guardian, 2019). In addition, after these successful cases, according to the theory of diffusion of innovations, there was a tendency to scale up innovative practices, when companies focused on increasing productivity and social responsibility adopt the successful experience of implementing a four-day working week and receive support from the state (New Zealand, Iceland, USA), or vice versa (Japan).

For the four-day workweek experiment to have a sustainable effect, it is important to adapt the model to industry specifics, cultural norms and organisational maturity. Human-centricity is becoming not only a value paradigm but also a strategic advantage in the global competition. The use of technology should help support employees' mental health, professional development, and well-being (Peeters *et al.*, 2021). The report by H. Mayer *et al.* (2025) examined examples of countries that apply this practice: the USA, Denmark, Sweden, and China. As artificial intelligence has the potential to automate routine processes, it allows employees to focus on more creative and strategic activities. To ensure the successful implementation of technology, employers provide adequate support through employee training and access to the necessary tools. At the same time, employees express a high level of trust in employers in the context of ethical AI adoption, which underlines the importance of transparency and responsibility in using new technologies in the workplace.

Along with ensuring ethical standards and accessibility, the impact of technology on society should be analysed. Digital transformation is an important change factor in the modern economy, affecting various aspects of social life and production processes. Digitalisation encompasses a wide range of technological solutions, such as automation, artificial intelligence, big data and cloud computing, which are changing how we do business, organise work and interact with people. The development of digital technologies contributes to increasing the competitiveness of enterprises, optimising resources, and creating new opportunities for economic growth (Schröder *et al.*, 2024).

The main areas of impact of digital transformation on socio-economic development are: increased productivity, changes in labour market characteristics, and improved quality of life. The introduction of digital technologies helps to increase productivity and efficiency of production (Pluta-Zaremba & Szelągowska, 2021). Automation of routine processes and AI use help optimise business operations, reduce costs, and improve the quality of products and services. This trend creates new opportunities for innovation and stimulates the development of new business models and markets.

The introduction of digital technologies in production processes in Japan and the United States demonstrates significant potential for increasing productivity and efficiency in the context of economic development. For example, in Japan, the "Society 5.0" concept envisages the integration of advanced technologies, such as artificial intelligence, into various sectors of the economy to improve productivity and quality of life. In particular, Hitachi uses its Lumada platform for the digital transformation of production processes, which reduces the time for product inspection by 30-75% by using artificial intelligence to analyse large amounts of data (Sato *et al.*, 2019).

In the US, companies are also actively implementing digital technologies to improve efficiency. For example, WestRock uses artificial intelligence and automation technologies to optimise production processes, particularly in the packaging industry. Such an approach reduces costs, improves product quality, and ensures sustainable development (Deloitte, 2024). The introduction of human-centred approaches in the modern economy aims to ensure the priority of human needs and values in technological development processes, which is an important component of strategic management in the face of rapid change. This approach focuses on the well-being of employees, social responsibility, and ethical aspects of technological innovations, and it is aimed not only at economic success but also at the overall development of society. However, despite the positive prospects, introducing human centricity is accompanied by several challenges and risks that require detailed analysis and consideration in the implementation process.

Firstly, one of the significant challenges is the risk of insufficient understanding and support for the concept of human centredness on the part of the leadership and staff of organisations (Adel, 2022). In many cases, the lack of a clear understanding of the benefits and mechanisms for implementing such approaches can lead to superficial implementation or even resistance to change. A people-centred approach requires a change in corporate culture and new approaches to employee engagement. Traditional

corporate culture, focused on efficiency and control, is transformed into one that supports employees' creativity, self-realisation and personal development. New approaches to employee engagement involve strengthening autonomy, creating conditions for personalised talent development, and actively involving people in decision-making processes (Rada, 2024). Therefore, management should be based on empathy, emotional intelligence, and the ability to form trusting relationships in teams that combine people and artificial intelligence (Goleman & Cherniss, 2024). In addition, in the context of Industry 5.0, organisations must build a corporate culture that ensures psychological safety and promotes continuous learning and value co-creation (Edmondson, 2018; Shumilova, 2024). Therefore, attention is paid to developing flexibility, creativity, and the ability to work across disciplines, which are critical competencies for the future. Integrating human-centric principles into corporate practice in the era of Industry 5.0 increases employee engagement and becomes the foundation for sustainable development of organisations in the new technological reality.

Secondly, implementing human-centred approaches requires significant financial and time resources (Longo *et al.*, 2020). Rebuilding existing business processes, adapting organisational culture, integrating new technologies, and ensuring effective interaction between all levels of the organisation is a complex and expensive process. The costs of such transformation can be high, which can be a deterrent, especially for small and medium-sized enterprises. Therefore, it is important to strike a balance between investing in technology and preserving human values, and to implement changes in a phased manner.

Another significant challenge is the impact of rapid technological development and digitalisation on implementing human-centred approaches (Kalateh *et al.*, 2022). Automation and the use of artificial intelligence can lead to job losses or changes in employee qualification requirements, requiring organisations to adapt their HR strategies flexibly. It is necessary to create conditions for the retraining of employees through the opportunity to learn new skills and adapt to new requirements arising from technological changes.

Successful implementation of human-centric approaches is only possible if the specifics of each organisation are taken into account, support is provided by all stakeholders and readiness to adapt in the face of constant change. It is important that organisations not only invest in technology, but also actively promote a favourable working environment where human values are prioritised at every stage of the organisation's development. The goals and impacts of human centredness at the individual, organisational and societal levels are summarised in the paper (Fig. 2). Thus, the transition to a human-centred economic model implies not just the technical modernisation of production but also a qualitative transformation of socio-economic relations with people, their knowledge, skills, values, and ability to self-realise at the centre. In contrast to the traditional approach, where human capital was considered mainly in education and healthcare costs, the modern vision covers a broader range of competences – cognitive, emotional, digital and entrepreneurial (Nahavandi, 2019; Lu, 2022). Human capital development includes not only formal education, but also continuous reskilling and upskilling, which corresponds to the dynamics of changes in the labour market. An inclusive economy involves all social groups in creating economic value and distributing growth results. Inclusiveness is not only an ethical requirement, but also a factor in increasing productivity, sustainability and trust in institutions (Burchardt & Vizard, 2011). Integrating inclusive practices into economic systems is becoming a prerequisite for creating a more just and stable society.
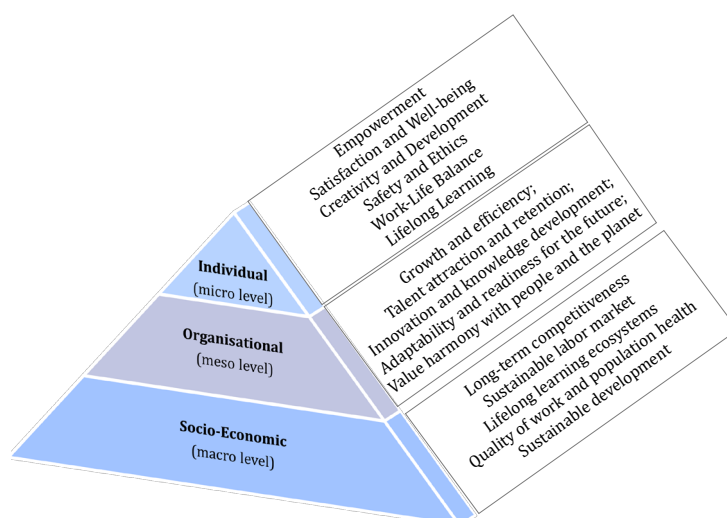


**Figure 2.** Human-centered goals and effects

**Source:** compiled by the authors

Industry 5.0 provides new tools for this:

▲ digital platforms provide access to employment, education and social services regardless of place of residence or social status;

▲ flexible work formats give women, people with disabilities, and older workers a chance to realise their labour potential;

▲ participation technologies (e-participation, civic tech) increase the involvement of citizens in policy-making and monitoring of their implementation.

According to M. Mazzucato (2018), the future of value-based economies lies in "co-creation", i.e., combining innovation, social needs and active citizen participation. Industry 5.0 does not propose replacing humans with machines, but rather a partnership in which technology enhances human qualities such as creativity, ethics, empathy, and entrepreneurship. Therefore, human capital is becoming not just a source but a key asset determining economic development trajectory. Supporting and developing human capital is an investment in the future of an inclusive, sustainable and competitive economy.

## Conclusions

Integrating technology with human values and needs in the Industry 5.0 era requires a comprehensive approach to ensure ethical standards, accessibility, and consideration of the impact of technology on society. Such an approach will help improve society's quality of life and harmonious development. Industry 5.0 envisages the transformation of production and innovation processes based on human-centricity. This means reorienting industrial development from technocratic dominance to a humanistic paradigm, where human well-being, participation in decision-making, satisfaction of needs and professional fulfilment are prioritised. Industry 5.0 is not so much about automation or technological efficiency as it is about harmonising the interaction between humans and innovative technologies.

Human-centredness is a comprehensive socio-economic approach that combines ethical principles, inclusiveness, responsible use of innovations and a focus on improving human well-being. The transition to such an economic model requires not only the introduction of the latest technologies, but also a re-thinking of economic relations, management practices and social policy. The determining factor was the realisation that human capital, its creative potential, emotional intelligence and ability to self-development are the drivers of innovative growth and social sustainability. In practice, human-centredness is being integrated into modern economic processes: the working environment is being modernised to meet the needs and well-being of people; sustainable business models are being developed that consider people's interests alongside technical or financial parameters.

Industry 5.0 creates new challenges for the labour market, education and corporate governance. This trend requires the adaptation of employee competencies, developing human-machine partnerships, introducing flexible employment formats, and institutional support for inclusive approaches to employment, education, and social inclusion. Ethical issues related to the use of artificial intelligence and automation are becoming an integral part of the design of organisational strategies and policies at the macro and micro levels.

A human-centric approach ensures not only economic efficiency but also a better quality of life, an inclusive social environment, and increased trust in economic and political institutions. This approach promotes sustainable development and the harmonious coexistence of technological innovations and ethical values within the new economic reality.

Further research should be directed at developing tools for assessing the degree of human centredness of economic systems, analysing mechanisms for supporting human capital in the context of Industry 5.0, and studying the relationship between human centredness, inclusiveness and sustainability of socio-economic development.

## Conflict of Interest
None.

## References

[1] 4-Day work week in New Zealand. (n.d.). Retrieved from https://4dayweek.io/country/new-zealand.

[2] Adel, A. (2022). Future of industry 5.0 in society: Human-centric solutions, challenges and prospective research areas. *Journal of Cloud Computing*, 11, article number 40. doi: 10.1186/s13677-022-00314-5.

[3] Alves, J., Lima, T.M., & Gaspar, P.D. (2023). Is Industry 5.0 a human-centred approach? A systematic review. *Processes*, 11(1), article number 193. doi: 10.3390/pr11010193.

[4] Borenstein, J., & Howard, A. (2021). Emerging challenges in AI and the need for AI ethics education. *AI Ethics*, 1, 61-65. doi: 10.1007/s43681-020-00002-7.

[5] Burchardt, T., & Vizard, P. (2011). "Operationalizing" the capability approach as a basis for equality and human rights monitoring in twenty-first-century Britain. *Journal of Human Development and Capabilities*, 12(1), 91-119. doi: 10.1080/19452829.2011.541790.

[6]   Deloitte. (2024). *From pizza box recycling to AI: WestRock and the future of packaging*. Retrieved from https://deloitte.wsj.com/cio/from-pizza-box-recycling-to-ai-westrock-and-the-future-of-packaging-8b7cecac.

[7]   Edmondson, A.C. (2018). *Fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. Hoboken: Wiley & Sons.

[8]   European Commission. (2024). *Directorate-general for research and innovation. ERA industrial technologies roadmap on human-centric research and innovation for the manufacturing sector*. Retrieved from https://data.europa.eu/doi/10.2777/0266.

[9]   Goleman, D., & Cherniss, C. (2024). Optimal leadership and emotional intelligence. *Leader to Leader*, 2024(113), 7-12. doi: 10.1002/ltl.20813.

[10]  Huang, S., Wang, B., Li, X., Zheng, P., Mourtzis, D., & Wang, L. (2022). Industry 5.0 and society 5.0 – comparison, complementation and co-evolution. *Journal of Manufacturing Systems*, 64, 424-428. doi: 10.1016/j.jmsy.2022.07.010.

[11]  Ikenga, G.U., & van der Sijde, P. (2024). Twenty-first century competencies; about competencies for Industry 5.0 and the opportunities for emerging economies. *Sustainability*, 16(16), article number 7166. doi: 10.3390/su16167166.

[12]  Kalateh, S., Estrada-Jimenez, L.A., Pulikottil, T., Hojjati, S.N., & Barata, J. (2022). The human role in human-centric industry. In *IECON 2022 – 48th annual conference of the IEEE industrial electronics society* (pp. 1-6). Brussels: IEEE. doi: 10.1109/iecon49645.2022.9968440.

[13]  Kemendi, Á., Michelberger, P., & Mesjasz-Lech, A. (2022). Industry 4.0 and 5.0 – organizational and competency challenges of enterprises. *Polish Journal of Management Studies*, 26(2), 209-232. doi: 10.17512/pjms.2022.26.2.13.

[14]  Kopp, R., & Schröder, A. (2024). Industry 5.0: Making workers and civil society strong – a comprehensive approach for skill-based human centricity and stronger focus on social challenges. *Matériaux & Techniques*, 112(6), article number 604. doi: 10.1051/mattech/2025006.

[15]  Kremen, V.G. (2023). Philosophy of humancentrism in the system of modern values: Report at the ceremony of awarding the title of Doctor Honoris Causa at the Maria Grzegorzewska Academy of Special Pedagogy (Warsaw, Poland). *Bulletin of the National Academy of Pedagogical Sciences of Ukraine*, 5(1), 1-6. doi: 10.37472/v.naes.2023.5126.

[16]  Li, L. (2022). Reskilling and Upskilling the future-ready workforce for industry 4.0 and beyond. *Information Systems Frontiers*, 26, 1697-1712. doi: 10.1007/s10796-022-10308-y.

[17]  Li, L., & Duan, L. (2025). Human centric innovation at the heart of industry 5.0 – exploring research challenges and opportunities. *International Journal of Production Research*, 1-33. doi: 10.1080/00207543.2025.2462657.

[18]  Longo, F., Padovano, A., & Umbrello, S. (2020). Value-oriented and ethical technology engineering in Industry 5.0: A human-centric perspective for the design of the factory of the future. *Applied Sciences*, 10(12), article number 4182. doi: 10.3390/app10124182.

[19]  Lu, Y., Zheng, H., Chand, S., Xia, W., Liu, Z., Xu, X., Wang, L., Qin, Z., & Bao, J. (2022). Outlook on human-centric manufacturing towards Industry 5.0. *Journal of Manufacturing Systems*, 62, 612-627. doi: 10.1016/j.jmsy.2022.02.001.

[20]  Mayer, H., Yee, L., Chui, M., & Roberts, R. (2025). *Superagency in the workplace: Empowering people to unlock AI's full potential at work*. New York: McKinsey & Company.

[21]  Mazzucato, M. (2020). The value of everything. Making and taking in the global economy (an excerpt). *Journal of Economic Sociology*, 21(5), 39-57. doi: 10.17323/1726-3247-2020-5-39-57.

[22]  Nahavandi, S. (2019). Industry 5.0 – a human-centric solution. *Sustainability*, 11(16), article number 4371. doi: 10.3390/su11164371.

[23]  Peeters, M.M.M., van Diggelen, J., van den Bosch, K., & Bronkhorst, A. (2021). Hybrid collective intelligence in a human-AI society. *AI & Society*, 36, 217-238. doi: 10.1007/s00146-020-01005-y.

[24]  Pluta-Zaremba, A., & Szelągowska, A. (2021). Transformation of the economy. In *The economics of sustainable transformation* (pp. 12-56). London, New York: Routledge. doi: 10.4324/9781003219958-3.

[25]  Rada, M., & Schaller, A. (2024). The future of Industry 5.0: A comprehensive reflection on sustainable industrial evolution. In *Regenerative futures and artificial intelligence* (pp. 341-350). Wiesbaden: Springer. doi: 10.1007/978-3-658-43586-8_27.

[26]  Saikia, B. (2023). Industry 5.0 – its role toward human society: Obstacles, opportunities, and providing human-centered solutions. In *Fostering sustainable businesses in emerging economies* (pp. 109-126). Leeds: Emerald Publishing Limited. doi: 10.1108/978-1-80455-640-520231008.

[27]  Samans, R. (2023). *Human-centred economics: The living standards of nations*. Cham: Palgrave Macmillan.

[28] Sanchenko, A. (2024.) Global and European political and legal foundations of a human-centric model of management in the context of sustainable development and guaranteeing human rights. *Economics and Law*, 73(2), 13-26. doi: 10.15407/econlaw.2024.02.013.

[29] Sato, K., Iwanaga, Y., Oki, K., & Yamaguchi, T. (2019). MONOZUKURI reforms accelerated by use of digital technology. *Hitachi Review*, 68(3), 372-373.

[30] Schröder, A.J., Cuypers, M., & Götting, A. (2024). From Industry 4.0 to Industry 5.0: The triple transition digital, green and social. In *Industry 4.0 and the road to sustainable steelmaking in Europe. Topics in mining, metallurgy and materials engineering* (pp. 35-51). Cham: Springer. doi: 10.1007/978-3-031-35479-3_3.

[31] Shumilova, I. (2024). The guidance culture in the context of building society 5.0. *Humanities Studios: Pedagogy, Psychology, Philosophy*, 12(2), 189-196. doi: 10.31548/hspedagog15(2).2024.189-196.

[32] The Guardian. (2019). *Microsoft Japan's four-day work week "boosts productivity by 40%"*. Retrieved from https://www.theguardian.com/technology/2019/nov/04/microsoft-japan-four-day-work-week-productivity.

[33] What happened when one company switched to a four-day workweek. (2021). Retrieved from https://edition.cnn.com/2021/02/25/success/four-day-work-week/index.html.

[34] Zhang, C., Wang, Z., Zhou, G., Chang, F., Ma, D., Jing, Y., Cheng, W., Ding, K., & Zhao, D. (2023). Towards new-generation human-centric smart manufacturing in Industry 5.0: A systematic review. *Advanced Engineering Informatics*, 57, article number 102121. doi: 10.1016/j.aei.2023.102121.

[35] Zizic, M.C., Mladineo, M., Gjeldum, N., & Celent, L. (2022). From Industry 4.0 towards Industry 5.0: A review and analysis of paradigm shift for the people, organization and technology. *Energies*, 15(14), article number 5221. doi: 10.3390/en15145221.

# Людиноцентризм як рушій економічного розвитку в епоху Industry 5.0

## Ігор Кобушко

Доктор економічних наук, професор
Сумський державний університет
40007, вул. Харківська, 116, м. Суми, Україна
https://orcid.org/0000-0003-0821-4233

## Яна Кобушко

Кандидат економічних наук, доцент
Сумський державний університет
40007, вул. Харківська, 116, м. Суми, Україна
https://orcid.org/0000-0002-2057-2300

## Інна Балагуровська

Аспірант
Сумський державний університет
40007, вул. Харківська, 116, м. Суми, Україна;
Сілезький технологічний університет
44-100, вул. Академічна, 2А, м. Глівіце, Польща
https://orcid.org/0000-0003-3642-9506

**Анотація.** Актуальність дослідження обумовлена необхідністю розуміння економічного розвитку в умовах глобальної цифровізації, автоматизації та впровадження штучного інтелекту, де основну роль відіграє не стільки технічна ефективність, скільки людина, її цінності, добробут та соціальна стійкість. Мета статті полягала у науковому обґрунтуванні концепції людиноцентризму як рушія економічного розвитку в епоху Industry 5.0, а також у дослідженні особливостей її впровадження в організаційних, виробничих та суспільних практиках. Методи дослідження включали системний підхід до аналізу літературних джерел, порівняльний аналіз еволюції економічних моделей, логіко-структурне узагальнення принципів Industry 5.0, аналіз практик людиноцентричних інновацій, що базуються на етичному використанні технологій та партнерстві людини й машини. Використано також концептуально-аналітичний метод для виокремлення ціннісних відмінностей між індустріальними парадигмами, зокрема Industry 4.0 та Industry 5.0. Основні результати дослідження продемонстрували, що людиноцентризм в епоху Industry 5.0 є не лише філософською ідеєю, а конкретною управлінською практикою, яка визначає нові принципи взаємодії між інноваційними технологіями та людським потенціалом. Людина у такій економічній моделі розглядається не як об'єкт автоматизації, а як креативний партнер у симбіотичних системах людино-машинної співпраці. В статті обґрунтовано, що впровадження людиноцентричних підходів позитивно впливає на продуктивність, інноваційність та стійкість організацій, а також створює підґрунтя для сталого економічного розвитку суспільства. Дослідження підкреслило необхідність інтеграції етичних норм, соціальної відповідальності та балансу між ефективністю та добробутом працівників у процесі цифрової трансформації. Зокрема, автори акцентували увагу на викликах, пов'язаних із неповним розумінням концепції людиноцентризму на рівні організацій, значними витратами на її впровадження та необхідністю постійної адаптації людського капіталу до змінних умов ринку праці. Результати дослідження можуть слугувати підґрунтям для формування людиноцентричної політики розвитку, що охоплює інноваційні технології, підтримку інклюзивного та сталого зростання, трансформацію ринку праці та державні стратегії в умовах Industry 5.0

**Ключові слова:** економіка; інновації; модель; сталий розвиток; технології; цифровізація

# Formation of a model of communication policy of an enterprise with stakeholders

## Olha Podra*

PhD in Economics, Associate Professor
Lviv Polytechnic National University
79013, 12 Stepan Bandera Str., Lviv, Ukraine
https://orcid.org/0000-0002-6081-6250

**Abstract.** In modern dynamic business environment, the communication policy of an enterprise acquires the status of a strategic resource that ensures its competitiveness and sustainable development. Of particular relevance is the development of effective models of enterprise communication with different groups of stakeholders, which can balance the interests of all stakeholders. The purpose of the study was to develop and substantiate the theoretical and methodological foundations and practical recommendations for the formation of an effective model of enterprise communication policy with stakeholders. To achieve this goal, various research methods were used: analysis, synthesis, comparison, formalisation, structural and logical generalisation. The article substantiated the need for an integrated approach to communication management, based on the strategic goals of the enterprise, the needs and expectations of stakeholders, as well as taking into account the dynamic changes in the external environment. The study classified stakeholders according to the level of their influence on the enterprise's activities and the nature of interaction, analysed interests of internal and external stakeholders. The key factors influencing the effectiveness of communications between the enterprise and its stakeholders were identified. The article offered a structural model of the company's communication policy, which includes the following stages: identification of communication interaction goals, analysis of the current state of communication processes, identification of problem aspects, development of an effective communication apparatus, selection of communication channels and communication methods for each group of stakeholders, direct communication and monitoring the effectiveness of the company's communication policy with stakeholders. The proposed model of communication policy allows a company to adopt a systematic approach to managing interaction with stakeholders, helping to strengthen its competitive position, increase the level of trust and ensure long-term sustainable development. Certain results of the study can be used by managers, specialists in communication and PR departments of companies in various industries to improve the strategy of interaction with stakeholders, as well as by consulting companies when developing communication management programs for corporate clients

**Keywords:** balancing interests; corporate social responsibility; enterprise strategy; image; communication; digital transformation

## Introduction

In the current environment of globalisation and digital transformation, companies are being forced to rethink their approach to managing communications with stakeholders. Effective communication is a key factor in ensuring sustainable business development, helping to strengthen the company's reputation, increase stakeholder trust and build long-term partnerships.

Creating a model of communication interaction between a company and its stakeholders requires the integration of modern communication strategies that take into account dynamic market changes, the needs of target audiences and technological capabilities, and contributes to increasing the competitiveness of companies, shaping their positive image and strengthening

*\*Corresponding author*

their social responsibility, which determines the relevance of this study.

The problem of creating a model of communication interaction between a company and its stakeholders is of great interest to scientists. Both foreign and Ukrainian scientists have studied the processes of interaction between an enterprise and its stakeholders and the main provisions of the stakeholder concept. In the article by H. Golestaneh *et al.* (2022) was studied the role of internal stakeholders in the formation and management of territory branding, analysing their impact on the processes of positioning and promotion of local brands. In the work by E. Limani *et al.* (2024), the impact of a dialogue approach based on the Coordinated management of meaning (CMM) model on improving interaction and coordination between stakeholders in local brand management was investigated. The work of D. Kušnírová *et al.* (2024) examined how companies' attention to their stakeholders' opinions, priorities, needs and goals affects the management of sustainable relationships with suppliers and customers. The authors emphasised the importance of value management in the strategic development of companies, which has a positive impact on their competitiveness and sustainability.

Among Ukrainian researchers, it is worth mentioning the work of N. Krasnokutska & S. Hosn (2020), which highlighted the theoretical foundations and scientific and methodological approaches to improving the system of managing relations with stakeholders in industrial enterprises. T. Kytsak (2020) examined the importance of dialogue with stakeholders for the successful functioning of business organisations, substantiates the impact of effective communication with stakeholders on the development, competitiveness and sustainability of the enterprise, as well as the improvement of its reputation and image.

L. Kalinichenko *et al.* (2020) proposed a procedure for developing an enterprise's communication policy based on identifying stakeholders, balancing their interests, and determining communication channels. In the study by O. Iarmoliuk & N. Tsehelnyk (2023), the necessity of a stakeholder approach in the formation of the conceptual framework for management accounting in banks was substantiated. The authors identified key stakeholders, their impact on the accounting system, and propose a model for integrating their interests to improve the efficiency of management decisions. Furthermore, K. Liashuk (2021) identified the key factors of effective interaction of trade enterprises with stakeholders, proposes approaches to its optimisation, and emphasises the importance of taking into account the interests of stakeholders to increase the competitiveness of enterprises.

The genesis of stakeholder theory can be traced back to the 1930s, when it was first proposed that the objectives of a company should extend beyond the pursuit of profit for its proprietors. Instead, the theory asserts that a company's goals should encompass the welfare of a broader spectrum of stakeholders, including shareholders, staff, suppliers, representatives of public authorities, and society at large. The purpose of the present article was to substantiate the theoretical foundations of stakeholder theory and to develop a model of an enterprise's communication policy with stakeholders based on the following: 1) the identification of goals and analysis of the current state of communications, and identification of problematic aspects; 2) the formation of a communication apparatus and identification of possible message channels and communication methods for each group of stakeholders; 3) monitoring and evaluation of progress in achieving the goals of the enterprise's communication policy with stakeholders.

## Materials and Methods

The study of the formation of a model of enterprise communication policy with stakeholders was carried out on the basis of an integrated approach, which included the use of various methods of collecting and analysing information. The main research methods were analysis and synthesis – to determine the essence of communication interaction, comparison – to assess the features of different approaches to communication management, structural and logical generalisation – to form the theoretical and methodological foundations for developing an effective model of communication policy of interaction with stakeholders and systematisation of theoretical approaches to enterprise communication management.

The collection of information was facilitated through the utilisation of scientific articles, monographs, analytical reports, regulations, and data from professional organisations that study communication management and stakeholder theories. A comprehensive review of scientific articles in international and national peer-reviewed journals concerning corporate communications, stakeholder engagement and strategic communications of enterprises was conducted (Kytsak, 2020; Liashuk, 2021; Iarmoliuk & Tsehelnyk, 2023). Particular attention was paid to publications in journals indexed in the Scopus and Web of Science databases (Ardiana, 2019; Crane *et al.*, 2019; Hwabamungu & Shepherd, 2024). Moreover, the European Union Directives on non-financial reporting Directive of the European Parliament and of the Council of the European Union No. 2014/95/EU (2014), Directive of the European Parliament and of the Council No. 2022/2464/EU (2022), recommendations of the International Labour Organisation (International Labour Organisation, 2022) and documents regulating corporate social responsibility in different jurisdictions were analysed. In the course of researching modern approaches to communication management in the corporate environment, the authors reviewed the guidelines and analytical reports of such organisations as the

Global Reporting Initiative (2021) and the World Business Council for Sustainable Development (2021). The search was conducted using the following keywords: "stakeholder communication", "corporate communication strategy", "enterprise communication policy", "stakeholder engagement", "strategic communication".

Particular attention was paid to the study of factors influencing the effectiveness of communications between the enterprise and its stakeholders, methods of stakeholder identification, as well as issues of balancing the interests of stakeholders, strategic communication management, classification of stakeholders by the level of influence on the enterprise's activities, and evaluation of the effectiveness of communication policy. The article analysed approaches to the formation of communication policy in enterprises of various industries, identifies key factors influencing the effectiveness of enterprise interaction with stakeholders, studies modern models of communication policy, systemises communication tools and channels, and determines their effectiveness in various business environments.

The collected materials became the basis for the development of a structural model of the enterprise's communication policy, which includes the following stages: identification of the goals of communication interaction, analysis of the current state of communication processes, identification of problematic aspects, development of an effective communication apparatus, selection of communication channels and communication methods for each group of stakeholders, direct communication and monitoring of the effectiveness of the enterprise's communication policy with stakeholders.

## Results and Discussion

Stakeholders are playing an increasingly important role in decision-making that affects the operation of companies. Their position can have a significant impact on a company's reputation, competitiveness and long-term sustainability. Therefore, it is necessary not only to take into account the interests and expectations of stakeholders, but also to actively engage them in interaction and partnership. In addition, the growing role of external environment factors, globalisation and international trade development have a significant impact on the operations of enterprises and provoke new challenges, including cultural differences, political changes, economic fluctuations and regulatory restrictions. Building an effective stakeholder management system helps to identify and mitigate these risks in a timely manner, as well as to create favourable conditions for international business development.

The list of agents considered to be stakeholders often includes future generations. One way or another, this theory has a right to exist and has become especially relevant in the last decade, as evidenced by the increase in scientific works on the subject, as well as the awareness of the importance of this research at the international level, as reflected in the sustainable development goals of the United Nations Development Programme (UNDP). In addition, certain aspects of corporate stakeholder engagement are regulated by Directive 2014/95/EU, which established requirements for non-financial reporting of large companies (over 500 employees), obliging companies to disclose information on environmental, social and governance (ESG) aspects of their activities, including employee relations, human rights, anti-corruption policy and stakeholder relations. The main purpose of this document is to ensure transparency of companies' impact on society and the environment and to strengthen the trust of stakeholders, including investors, customers and NGOs. Directive 2022/2464/EU of the European Parliament and of the Council (2022) extends the requirements of Directive 2014/95/EU which came into force gradually from 2024, applies to a larger number of companies (including SMEs) and introduces clearer reporting standards in line with the European Sustainability Reporting Standards (ESRS). Much attention is paid to stakeholder engagement, identifying their expectations and interests and integrating them into business strategy.

The Tripartite Declaration of Principles on Multinational Enterprises and Social Policy of the International Labour Organization (ILO) (International Labour Organization, 2022) is equally important for international business in the context of stakeholder engagement, especially in the areas of labour rights, social protection and fair working conditions. This document provides guidance to multinational enterprises, governments, workers and employers on how to conduct business responsibly and in a socially responsible manner. The Declaration is founded on the principles of international labour standards as established by the ILO, representing a seminal intergovernmental instrument in the realm of corporate social responsibility on a global scale. International organisations such as the World Business Council for Sustainable Development (WBCSD) and the Global Reporting Initiative (GRI) have made a significant contribution to the development of partnerships with stakeholders. These organisations emphasise the need to integrate the principles of sustainable development into business practices, encourage active involvement of stakeholders in the formation of sustainable development strategies, creation of long-term value for all stakeholders, not just shareholders, and transparent dialogue with employees, customers, suppliers, investors, and communities. In addition, GRI develops non-financial reporting standards that are widely used by businesses around the world, and promotes transparency, accountability, and responsibility of businesses.

It should be noted that the study of enterprise stakeholder engagement is an interdisciplinary field that combines strategic management, social responsibility, marketing communications, reputation management and digital technologies. The combination of

these approaches allows companies to effectively build relationships with stakeholders, increasing the level of trust, loyalty and business sustainability. The scientific literature highlighted certain ways of interaction between an enterprise and its stakeholders, as well as identifies the factors of influence of the main agents on its activities. Some scientific works are devoted to the study of methods of taking into account the interests of enterprise stakeholders associated with changes in organisational structure and communications. The basics of the stakeholder theory, determination of the influence of stakeholders on the enterprise's activities and its development strategy are studied in the scientific works of T. Donaldson & L. Preston (1995), R. Freeman (2010), P. Johansson (2008). In particular, R. Freeman (2010) understood the term "stakeholder" as "any group or individual that can influence or affects the achievement of the organisation's goals".

Academics abroad are studying various aspects of the interaction between companies and stakeholders. Popular studies assess the impact of stakeholder engagement on companies' sustainability performance, highlighting the importance of transparency and dialogue in achieving sustainable development goals (de Villiers & Hsiao, 2018; Ardiana, 2019). Some studies have analysed the impact of digitalisation and social media on stakeholder engagement, creating opportunities for responsible innovation (Troise & Camilleri, 2021; Hwabamungu & Shepherd, 2024). The study of the interaction between corporate social responsibility and stakeholder engagement, with a focus on the ethical aspects of business, is highlighted in A. Crane *et al.* (2019). The impact of corporate governance on stakeholder relations in multinational companies and in the mining and metallurgical industry was studied by G. Michelon & A. Parbonetti (2020). A. Kadakure & M. Twum-Darko (2024) studied the impact of a company's interaction with stakeholders on the implementation of sustainable practices and competitiveness. Using the example of a Brazilian cosmetics company, the authors demonstrate that the involvement of suppliers, consumers and local communities in the decision-making process contributes to the company's environmental and social responsibility. O. Derevianko (2019) analysed the use of various communication tools to support the interaction of the company with stakeholders, considers the peculiarities of the use of PR (public relations), IR (investor relations) and GR (government relations) in building the reputation of the company among different groups of stakeholders. Ya. Lahuta (2017) focused on the interaction between the enterprise and stakeholders, stressing the importance of taking into account the interests of stakeholders in order to increase the sustainability and social efficiency of the enterprise. The specifics of corporate social responsibility through the prism of communication with stakeholders, based on ensuring an open

dialogue between companies and stakeholders to build trust, enhance reputation and sustainable business development, were studied by V. Smachylo *et al.* (2018), the authors emphasised the importance of integrating the principles of corporate social responsibility into the activities of companies to ensure sustainable development and effective interaction with stakeholders. The development of a communication policy includes the identification of stakeholders. In their work, Yu. Myroshnychenko & A. Bondar (2018) divided the company's stakeholders into three main groups:

1. Persons who are affected by the organisation's activities.

2. Persons to whom the company has certain obligations (legal, financial, operational).

3. Persons who make management decisions and can influence the company's activities.

The stakeholder map by R. Mitchell *et al.* (1997) deserves attention – it is a tool used to identify and analyse various stakeholders who can influence the activities of an enterprise or project. This map typically includes a list of stakeholders and reflects their relationships and level of influence on the organisation. Using the model, it is possible to identify seven types of stakeholder behavior depending on the combination of three attributes: power, legitimacy, and urgency. The attribute of power in the model refers to the ability of stakeholders to achieve the desired outcome from the business, which can manifest in receiving financial rewards or the ability to make management decisions. The attribute of legitimacy implies compliance with the legal norms and rules that exist in society. The attribute of urgency indicates the ability of the enterprise to promptly meet the demands of a specific stakeholder at a specific time, thus characterising the relationship between the business and its stakeholders. According to the model, seven types of stakeholder behavior can be identified based on the attributes of power, legitimacy, and urgency. Thus, seven key stakeholder groups, as identified by Yu. Myroshnychenko & A. Bondar (2018), include:

1. Directorial group (stakeholders who lack attributes of urgency or power, such as educational institutions).

2. Inactive group (stakeholders who lack attributes of legitimacy and urgency, such as sponsors).

3. Demanding group (stakeholders who lack attributes of power and legitimacy but seek immediate information and resolution of issues).

4. Dominant group (stakeholders characterised by attributes of power and legitimacy but lacking urgency, such as official managers of the enterprise).

5. Dangerous group (stakeholders characterised by attributes of power and urgency, but lacking decision-making ability, such as activists who speak out/protest against the actions of the enterprise).

6. Dependent group (stakeholders who lack attributes of urgency and power, such as individuals suffering

from the consequences of the enterprise's activities, for example, environmental pollution).

7. Definitive group (stakeholders who possess attributes of power, legitimacy, and urgency, such as key representatives of the enterprise, including leaders, owners, and shareholders).

The main stages of creating a stakeholder map according to R. Mitchell *et al.* (1997) may include identification of stakeholders, i.e., identification of all individuals, groups or organisations that have interests or can influence the enterprise's activities; assessment of importance and influence – determining the level of importance of each stakeholder for the organisation and its potential impact on it; determination of relationships based on the analysis of interaction between different stakeholders and identification of possible conflicts or synergies; construction of a stakeholder map by creating a graphic representation that shows all identified stakeholders.

Thus, the stakeholder map developed by R. Mitchell *et al.* (1997) helps businesses better understand their environment and relationships with various stakeholders. In strategic management, the term "stakeholders" refers to individuals or groups who can influence the results of an enterprise's activities or are influenced by the process by which the enterprise achieves its goals. An enterprise interacts with various groups of individuals and individuals, each of whom can influence its actions and/or have interests in its activities.

There is also a division of stakeholders into two categories based on interest groups, as individuals or groups who have or assert ownership rights over the organisation and are interested in its activities at different times. The first group of stakeholders (primary) is connected to the organisation through formal contracts, and their existence is necessary for the functioning of the organisation. This group includes shareholders, employees, consumers, and groups that have the right to control or other forms of power over the enterprise. The second group of stakeholders (secondary) does not have official contracts with the organisation and may include the media, special interest groups, and others. The goal of identifying stakeholders is to assess their potential impact on the development or decision-making process within the organisation.

Therefore, stakeholders can influence the formation of the added value of the enterprise both directly and indirectly. Stakeholders are agents who, on the one hand, form the enterprise management system that is able to ensure its stability and development, and on the other hand, can create additional obstacles, uncertainties and risks in the way of its functioning due to the likelihood of a conflict of interest between them. Different stakeholders have different roles and different degrees of influence on the results of the enterprise's activities, it all depends on the level of their importance, since some stakeholders influence or ensure

the achievement of the financial results of the enterprise, receive a share of the profits, while others satisfy non-financial interests.

In such a situation, it is appropriate to identify stakeholders, their interests, and the specifics of their relationships in order to ensure coordination and achievement of the strategic goals of the enterprise. Therefore, it is appropriate to divide all stakeholders into 2 main groups: internal and external. Internal stakeholders include administrators, managers, and staff of the enterprise, and external stakeholders include investors, shareholders, consumers, trade unions, government agencies, auditing and consulting firms, clients, enterprise counterparties, suppliers, competitors, media, and society. All the aforementioned stakeholders aim to satisfy their interests. For instance, the managers and owners of the enterprise are interested in ensuring a high level of profitability and financial stability, fostering innovation and improving technological processes, enhancing business reputation and market value, retaining existing customers and attracting new ones, and raising their personal social status and income level. The enterprise's personnel are interested in a high level of material and non-material incentives, receiving additional social guarantees, professional development and career growth opportunities, flexible working hours, comfortable working conditions, and a favorable moral and psychological climate within the team.

Investors and shareholders aim to receive high financial returns, dividends, and payments, as well as increase the market value and business reputation of the enterprise, its financial stability, and transparency of operations. Government authorities are interested in the development of the enterprise as a taxpayer, ensuring the replenishment of local and national budgets, compliance with current legislation, transparency in business operations, and timely and accurate reporting. Auditing and consulting firms are interested in long-term partnerships, transparency of information, compliance with legal requirements, the development of the enterprise, and the reliability of reporting. Consumers expect the company to provide high-quality and affordable goods/services, customer service, availability of feedback mechanisms, a reliable personal data protection system, the establishment of strong partnerships, and an individual approach, among other things. Suppliers and related contractors are primarily interested in long-term, reliable, transparent, and profitable partnerships, as well as the development of the enterprise and its financial stability.

Indeed, competitors are also considered stakeholders, and they are interested in gaining internal information from competing enterprises, adopting successful practices, or even establishing collaborations through reorganisation or restructuring, while adhering to ethical standards. Trade unions and society are undeniably stakeholders as well. Trade unions are concerned

with ensuring that enterprises comply with labor laws, protect workers' rights, and improve working conditions. For society, it is crucial that businesses operate in a socially responsible manner, conduct their operations fairly in compliance with existing laws, promote the development of their workforce, contribute to innovation and technological advancements, and serve as guarantors of employment. The process of building an effective communication policy is complex and involves defining objectives, analysing the current state of existing communications, identifying stakeholders, studying and balancing their interests, selecting effective communication channels that will most efficiently help achieve the set goals, and ensuring that the interests of the stakeholders are taken into account and satisfied.

The procedure for forming a communication policy with the enterprise's stakeholders has several advantages, including comprehensiveness, as it covers all aspects of the enterprise's activities and allows for the creation of a cohesive and coordinated communication plan that effectively serves all stakeholders; the presence of communication dialogue based on ensuring two-way communication and dialogue with all stakeholders, which not only allows transmitting information to stakeholders but also takes into account their needs and expectations; integration with corporate social responsibility, which will ensure consistency and transparency across all aspects of activity, leading to increased trust and loyalty among stakeholders. The formation of a communication policy with stakeholders at the enterprise involves the need to identify its goals, analyse the current state of communications, identify problems or bottlenecks, develop the communication framework, and determine potential communication channels and methods for each stakeholder group. It also includes carrying out communication with stakeholders and monitoring and evaluating progress in achieving the goals of the communication policy with stakeholders (Fig. 1). Thus, the implementation of the recommended communication policy model with stakeholders at the enterprise begins with an analysis of the current state and the determination of its goals. The next step is to carry out stakeholder identification. This task starts with studying the stakeholders and grouping them using the tool "stakeholder map" which allows identifying and grouping all the stakeholders of the enterprise. After stakeholder identification, they need to be divided based on the indicators of influence level – high, medium, low, and the level of interest – low, medium, high. This task involves determining the priority of stakeholder groups based on the use of the Mendelow model, where the evaluation parameters are influence (V) – which assesses the degree of each stakeholder group's ability to impact the enterprise's activities, and interest (I) – which evaluates the level of motivation each stakeholder group has to influence the enterprise's activities. Accordingly, influence can be

high, medium, or low. High influence is characterised by a stakeholder group possessing significant resources (financial, informational, human) and being able to significantly impact the enterprise's decisions. Medium influence indicates that the stakeholder group has certain resources and can influence the enterprise's decisions to a limited extent. Low influence means the stakeholder group has limited resources and cannot significantly impact the enterprise's decisions.

Similarly, interest can also be categorised as high, medium, or low. High interest means the stakeholder group is actively engaged in the enterprise's activities and seeks to influence its decisions. Medium interest suggests that the stakeholder group has some interest in the enterprise's activities and may express opinions. Low interest implies that the stakeholder group is either not interested in the enterprise's activities or does not have the ability to influence its decisions. The priority (P) is calculated simply as: $P = V \times I$, where V is the influence level and I is the interest level. Based on the obtained results, the stakeholder groups with the highest P values are considered the most prioritised.

The next task involves constructing a matrix of interests for stakeholder groups based on the grouping of stakeholders into specific categories. It is important to remember that each group of stakeholders has its own interests, not only economic but also social, demographic, and political. The next step is to determine the prioritisation of the interests of the enterprise's stakeholder groups. It should be noted that the interests of different stakeholder groups may have different directional vectors. The final task in the stakeholder identification block is to balance their interests using a tool such as a rating scale for balancing strategy. This scale allows identifying stakeholder groups whose interests are most and least satisfied, as well as determining the highest priority interests among all stakeholder groups.

The third stage of the recommended model involves forming the communication apparatus with the stakeholders of the enterprise (internal/external communications). This is based on defining possible messages, channels, and communication methods for each stakeholder group. For example, communication can be carried out via email, social media, press releases, meetings, conferences, the use of modern technologies and platforms to ensure interactive communication, and the implementation of feedback systems to gather responses and suggestions from stakeholders, etc. The fourth stage is closely related to the previous one and involves the direct communication with the stakeholders of the enterprise based on the selected channels and methods of communication with different stakeholder groups. The fifth stage is the final one and involves monitoring and evaluating the progress in achieving the goals of the communication policy with stakeholders. At this stage, it is necessary to examine the level of balance of the interests of the enterprise's stakeholders before

and after communication, and determine whether the set goals and expected outcomes of the communication

policy have been achieved within the framework of the stakeholder groups.

| Formation of a communication policy model with stakeholders of the enterprise |
|---|

| Analysis of the current state of communications with stakeholders at the enterprise | Defining the goals of communication policy with stakeholders in the enterprise |
|---|---|

Identification of enterprise stakeholders

| Identification and grouping of stakeholders based on a "stakeholder map" |
|---|

| Identification of enterprise stakeholders using the "power/interest" matrix of the Mendlow model |
|---|

| Determining the priority of the company's stakeholder groups based on the strength of their influence on the company |
|---|

| Building a matrix of interests of enterprise stakeholder groups based on the "interests-threats" chain |
|---|

| Determining the priority of interests of the enterprise's stakeholder groups |
|---|

| Balancing the interests of the company's stakeholders |
|---|

Formation of a communication apparatus with stakeholders at the enterprise (internal/external communications)

| Determining possible messages, channels, and communication methods for each group of enterprise stakeholders | Selection of possible messages, channels, and communication methods for each group of enterprise stakeholders |
|---|---|

| Communication with company stakeholders |
|---|

Monitoring and evaluating progress in achieving communication policy goals with the company's stakeholders

| Analysis of the level of balance of interests of the company's stakeholders before and after communications |
|---|

**Figure 1.** Recommended communication policy model with stakeholders at the enterprise
**Source:** developed by the author

Thus, the proposed communication policy model with the enterprise's stakeholders has several advantages, including comprehensiveness, as it covers all aspects of the enterprise's activities and allows for the creation of a coherent and consistent communication plan that will effectively serve all interested parties; the presence of a communication dialogue based on ensuring two-way communication with all stakeholders, which, in turn, allows not only to convey information to stakeholders but also to consider their needs and expectations.

## Conclusions
Stakeholder engagement is a key principle for the functioning and dynamic development of enterprises and organisations in the 21st century. Developing a communication policy model is a necessary step to ensure effective stakeholder engagement and achieve

the company's strategic goals. A systematic approach to communications management helps to increase the transparency of the company's activities, improve trust among stakeholders, minimise risks and ensure long-term business sustainability. Identification of communication policy goals allows the company to define key benchmarks for stakeholder engagement, study the current state of communications based on an assessment of existing communication channels, the level of stakeholder engagement and the effectiveness of existing communication practices, and identify key challenges and issues affecting the company's interaction with its stakeholders. Equally important in the process of developing a communication policy is the formation of a communication apparatus and identification of possible communication channels; it is important to determine the communication

methods that are most effective for each group of stakeholders, taking into account their needs, expectations and level of involvement. Stakeholder communication involves an active two-way dialogue between the company and its stakeholders through personalised information, consultations, public events or the use of digital platforms for interaction.

The development of a communication policy model provides the enterprise with a structured approach to managing relations with stakeholders, contributing to increasing its competitiveness, trust and sustainability in the long term. Future research in this area could include the study of the impact of digital technologies (e.g. social networks, artificial intelligence, blockchain solutions, Big Data) on the system of communication between enterprises and stakeholders. This could involve the development of new strategies for using digital platforms to increase the level of engagement and efficiency of communications.

## Conflict of Interest
None.

## References

[1] Ardiana, P.A. (2019). Stakeholder engagement in sustainability reporting: Evidence of reputation risk management in large Australian companies. *Australian Accounting Review (AAR)*, 29(4), 726-747. doi: 10.1111/auar.12293.

[2] Crane, A., Matten, D., & Spence, L.J. (2019). Corporate social responsibility: In global context. In *Corporate social responsibility: Readings and cases in global context* (pp. 3-20). London: Routledge.

[3] de Villiers, C., & Hsiao, P.C.K. (2017). Integrated reporting. In C. de Villiers, & W. Maroun (Eds.) *Sustainability accounting and integrated reporting*. Abingdon: Routledge.

[4] Derevianko, O.H. (2019). Tools for forming the reputation of an enterprise for different stakeholder audiences: PR, IR and GR. *Scientific Works of the National University of Food Technologies*, 25(3), 68-80. doi: 10.24263/2225-2924-2019-25-3-10.

[5] Directive of the European Parliament and of the Council European Union No. 2014/95/EU "On amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups". (2014, October). Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0095.

[6] Directive of the European Parliament and of the Council No. 2022/2464/EU "On corporate sustainability reporting and amending Directive 2013/34/EU". (2022, December). Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022L2464.

[7] Donaldson, T., & Preston, L. (1995). The stakeholder theory of the corporation: Concepts, evidence and implications. *The Academy of Management Review*, 20(1), 65-91. doi: 10.2307/258887.

[8] Freeman, R.E. (2010). *Strategic management: A stakeholder approach*. Cambridge: Cambridge University Press.

[9] Global Reporting Initiative (GRI). (2021). Retrieved from https://www.globalreporting.org/standards/.

[10] Golestaneh, H., Guerreiro, M., Pinto, P., & Mosaddad, S.H. (2022). On the role of internal stakeholders in place branding. *Journal of Place Management and Development*, 15(2), 202-228. doi: 10.1108/JPMD-05-2020-0041.

[11] Hwabamungu, B., & Shepherd, P. (2024). The influence of stakeholder involvement in the adoption of digital technologies in the UK construction industry. *Informatics*, 11(4), article number 97. doi: 10.3390/informatics11040097.

[12] Iarmoliuk, O., & Tsehelnyk, N. (2023). Stakeholder approach in the formation of conceptual principles of management accounting in banks. *Economy and Society*, 53, 1-12. doi: 10.32782/2524-0072/2023-53-56.

[13] International Labour Organization (ILO). (2022). *Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy*. Retrieved from https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40ed_emp/%40emp_ent/%40multi/documents/publication/wcms_094386.pdf.

[14] Johansson, P. (2008). Implementing stakeholder management: A case study at a microenterprise. *Measuring Business Excellence*, 12(3), 33-43. doi: 10.1108/13683040810900386.

[15] Kadakure, A., & Twum-Darko, M. (2024). Entrepreneurial social cognition and new venture creation: Sociological perspective. *Economics, Entrepreneurship, Management*, 11(1), 48-56. doi: 10.56318/eem2024.01.048.

[16] Kalinichenko, L.L., Smachylo, V.V., Popovych, D.V., & Avdiievska, O.V. (2020). The procedure for forming a communicative policy of an enterprise with stakeholders. *Economics, Management and Administratio*, 2, 7-14. doi: 10.26642/jen-2020-2(92)-7-14.

[17] Krasnokutska, N.S., & Hosn, S.K. (2019). Assessment of overall satisfaction with stakeholder relations. *European Cooperation*, 3(43), 80-95. doi: 10.32070/ec.v3i43.55.

[18] Kušnírová, D., Bubelíny, O., & Ďurišová, M. (2024). Value management: Enterprises' interest in stakeholders and its impact on creating sustainable relationships with suppliers and buyers. *Sustainability*, 16(16), article number 7148. doi: 10.3390/su16167148.

[19] Kytsak, T.H. (2020). Dialogue with stakeholders as a tool for ensuring the sustainability of a business organization. In *Social and labor relations: Theory and practice: Collection of scientific* (pp. 21-24). Kyiv: Kyiv National Economic University named after Vadym Hetman.

[20] Lahuta, Ya.M. (2017). Stakeholder approach in corporate social responsibility of the company. *Scientific Bulletin of the International Humanitarian University*, 25(1), 130-133.

[21] Liashuk, K.P. (2021). Features of formation of the mechanism of management of social interaction of trading enterprises with stakeholders. *Scientific Journal. Bulletin of the Khmelnytsky National University. Economic Sciences*, 5(1), 287-293. doi: 10.31891/2307-5740-2021-298-5(1)-50.

[22] Limani, E., Hajdari, L., Limani, B., & Krasniqi, J. (2024). Enhancing stakeholder engagement: Using the communication perspective to identify and enhance stakeholder communication in place management. *Cogent Business & Management*, 11(1), article number 2383322. doi: 10.1080/23311975.2024.2383322.

[23] Michelon, G., & Parbonetti, A. (2020). Stakeholder engagement in corporate social responsibility reporting: Evidence from mining and metals industry. *Journal of Business Ethics*, 161, 495-511. doi: 10.1007/s10551-018-3972-5.

[24] Mitchell, R.K., Agle, B.R., & Wood, D.J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *The Academy of Management Review*, 22(4), 853-886. doi: 10.2307/259247.

[25] Myroshnychenko, Yu.O., & Bondar, A.V. (2018). A model of stakeholder interaction in the real sector of the Ukrainian economy in the context of CSR. *Eastern Europe: Economics, Business and Management*, 5(16), 71-75.

[26] Smachylo, V.V. Khalina, V.Iu., & Vasylieva, T.S. (2018). Social responsibility of business through the prism of communications with stakeholders. *Effective Economy*, 9.

[27] Troise, C., & Camilleri, M.A. (2021). The use of digital media for marketing, CSR communication and stakeholder engagement. In *Strategic corporate communication in the digital age* (pp. 161-174). Bingley: Emerald. doi: 10.1108/978-1-80071-264-520211010.

[28] World Business Council for Sustainable Development (WBCSD). (2021). Retrieved from https://www.wbcsd.org/.

# Формування моделі комунікаційної політики підприємства зі стейкхолдерами

## Ольга Подра

Кандидат економічних наук, доцент
Національний університет «Львівська політехніка»
79013, вул. Степана Бандери, 12, м. Львів, Україна
https://orcid.org/0000-0002-6081-6250

**Анотація.** В умовах сучасного динамічного бізнес-середовища комунікаційна політика підприємства набуває статусу стратегічного ресурсу, що забезпечує його конкурентоспроможність та сталий розвиток. Особливої актуальності набуває розробка ефективних моделей комунікації підприємства з різними групами стейкхолдерів, яка здатна забезпечити балансування інтересів усіх зацікавлених сторін. Мета дослідження полягала у розробці та обґрунтуванні теоретико-методологічних засад і практичних рекомендацій щодо формування ефективної моделі комунікаційної політики підприємства зі стейкхолдерами. Для досягнення мети використано різні методи дослідження: аналізу, синтезу, порівняння, формалізації, структурно-логічного узагальнення. У статті обґрунтовано необхідність комплексного підходу до управління комунікаціями, що базується на стратегічних цілях підприємства, потребах та очікуваннях зацікавлених сторін, а також урахуванні динамічних змін зовнішнього середовища. У межах дослідження здійснено класифікацію стейкхолдерів за рівнем їхнього впливу на діяльність підприємства та характером взаємодії, проаналізовано інтереси внутрішніх та зовнішніх стейкхолдерів. Визначено ключові фактори, що впливають на ефективність комунікацій між підприємством та його зацікавленими сторонами. Запропоновано структурну модель комунікаційної політики підприємства, що включає такі етапи: ідентифікацію цілей комунікаційної взаємодії, аналіз поточного стану комунікаційних процесів, визначення проблемних аспектів, розробку ефективного комунікативного апарату, вибір каналів зв'язку та методів комунікації для кожної групи стейкхолдерів, здійснення безпосередньої комунікації та проведення моніторингу ефективності комунікаційної політики підприємства зі стейкхолдерами. Запропонована модель комунікаційної політики дозволяє підприємству системно підходити до управління взаємодією із зацікавленими сторонами, сприяє зміцненню його конкурентних позицій, підвищенню рівня довіри та забезпеченню стійкого розвитку в довгостроковій перспективі. Окремі результати дослідження можуть бути використані керівниками, спеціалістами комунікаційних відділів та PR-департаментів підприємств різних галузей для вдосконалення стратегії взаємодії зі стейкхолдерами, а також консалтинговими компаніями при розробці програм комунікаційного менеджменту для корпоративних клієнтів

**Ключові слова:** збалансування інтересів; корпоративна соціальна відповідальність; стратегія підприємства; імідж; комунікація; цифрова трансформація

# Assessment of the state and development trends of the tourism sector in Ukraine

## Ihor Kulyniak*

PhD in Economics, Associate Professor
Lviv Polytechnic National University
79013, 12 Stepan Bandera Str., Lviv, Ukraine
https://orcid.org/0000-0002-8135-4614

**Abstract.** Tourism is among the fastest-growing sectors of the world economy, significantly contributing to employment, infrastructure enhancement, and the growth of state budget revenues. In Ukraine, the tourism sector offers substantial growth opportunities, as it contributes to regional development, stimulates entrepreneurial activity, and integrates the country into the international tourism market. The purpose of this study was to assess the current state of the tourism sector in Ukraine, analyse key trends in its development, and identify prospects for further growth. In the research process, the following methods of scientific knowledge were used: analysis and synthesis, comparative method, induction and deduction, economic and statistical methods, and graphical method. An analysis of tax revenues in the tourism sector from 2021 to 2024 revealed significant fluctuations caused by both external and internal factors, particularly the impact of the pandemic, military actions, and changes in state policy. The study of the dynamics of the number of taxpayers engaged in tourism activities indicated a declining trend during crisis periods, followed by a gradual recovery after 2023. The paper also examined the dynamics of active business entities classified under economic activity classes 55 (temporary accommodation) and 79 (activities of travel agencies, tour operators, and other reservation services) from 2013 to 2023. The findings indicated that the number of enterprises in these sectors is highly dependent on economic and social and political factors. Similar trends were observed in the analysis of the volume of goods and services sold by these business entities. The overall dynamics of the number of active business entities and the volume of products sold by the tourism industry aggregation in 2013-2023 were also considered. The research confirmed that Ukraine's tourism sector has significant growth potential; however, its stability and efficiency largely depend on macroeconomic conditions and state support. The results of this study can be used to develop effective state policies for supporting and advancing the tourism industry, as well as for strategic planning of business activities in this field

**Keywords:** economic factors; budget system; tourism industry; tourism activities; tax revenues; taxpayers; crisis; war

## Introduction

Tourism is one of the key drivers of economic growth, especially in the context of regional development and post-crisis recovery. For Ukraine, which is facing large-scale military and socio-economic challenges, this industry is of strategic importance, as it can not only generate income but also revitalise peripheral areas, promote employment and rebuild infrastructure. However, realising this potential requires a clear understanding of the current state of tourism, its trends and growth points. That is why an assessment of the dynamics and current challenges in this area is extremely relevant and timely.

Tourism stands out as one of the most dynamic branches of the world economy, contributing to job creation, infrastructure development, and increased budget revenues. It holds considerable potential to support the

*\*Corresponding author*

economic development goals of many nations and is especially vital for remote and peripheral areas, including coastal, mountainous, and geographically isolated regions. Infrastructure developed to support tourism often acts as a catalyst for both local and regional growth, while tourism-related employment can mitigate the effects of industrial decline and rural depopulation (Eurostat, 2024). Within the broader tourism system, the destination region plays a pivotal role, as the appeal and perception of destinations serve as key drivers of tourist flows, thereby activating and sustaining the entire tourism ecosystem (Prokopenko *et al.*, 2019).

In Ukraine, the tourism sector holds significant potential due to its unique natural landscapes, rich cultural and historical heritage, as well as advantageous geographical location. However, contemporary challenges such as economic instability, military actions, the lasting effects of the pandemic, and shifts in tourist preferences influence its development, necessitating new approaches to assessing its current state and future prospects. Research into the current state of Ukraine's tourism sector, analysis of its trends, and forecasting future changes is essential for developing effective recovery and growth strategies. Trend analysis in this sector allows for an evaluation of future development prospects, the identification of key challenges, and the proposal of solutions to address them. Therefore, evaluating the current state and development trends of tourism in Ukraine is a highly relevant task, not only for academic researchers but also for policymakers, industry stakeholders, and the broader public sector.

The assessment of the state and development trends of the tourism sector is a relevant area of scientific research, which is reflected in the works of both Ukrainian and international scholars. Most scholars such as N. Shpak *et al.* (2023) examined the development of Ukraine's tourism sector agree that, despite its significant historical, cultural, and natural-recreational potential, the tourism industry faces substantial challenges and barriers to growth. Scholars highlight the uneven development of the tourism sector, which is linked to the social and economic conditions of different regions, historical and cultural processes, and resource availability. Researchers I. Kampo *et al.* (2024) also emphasised the necessity of financial and credit regulation to stimulate investment in Ukraine's tourism sector, with a particular focus on the hotel and restaurant industry. Additionally, Y. Dashchuk *et al.* (2024) recommended increasing the utilisation of natural-recreational areas for tourism purposes and boosting visitor numbers to national parks and nature reserves, among other measures.

Recent publications such as M. Rutynskyi & H. Kushniruk (2020) and V. Liubarets *et al.* (2022) and have devoted considerable attention to the impact of global crises, such as the COVID-19 pandemic; and ongoing military conflict studied by K. Tomej &

I. Bilynets (2024) and J. Tan & M. Cheng (2024) on the functioning of Ukraine's tourism market. Since February 24, 2022, inbound tourism to Ukraine has come to a complete halt, business tourism has ceased entirely, and domestic tourism has been largely redefined by the internal displacement of populations. Existing studies, in particular the work of I. Yasnolob *et al.* (2023) suggested that the longer the war persists, the more profound its consequences will be not only for Ukraine but also for the broader European region. Both international and domestic research highlighted the adaptation of tourism enterprises to crisis conditions, the use of digital technologies, sustainable tourism development, and new approaches to marketing strategies in tourism. A significant focus is also placed on the development of domestic and regional tourism as an alternative to international travel during periods of instability. L. Zavidna *et al.* (2025) emphasised that the revival of the hospitality and tourism industry should be a post-war priority and that new development strategies should focus on creating a resilient business model capable of adapting to changing conditions and demands.

Thus, recent scientific research confirms the importance of a comprehensive approach to assessing the state and development trends of Ukraine's tourism sector, the consideration of macroeconomic factors, and the development of innovative strategies that consider modern challenges. The purpose of the article was to evaluate the current state of Ukraine's tourism sector, analyse its key development trends, and outline potential pathways for future growth.

## Materials and Methods

The study relied on statistical data from the State Statistics Service of Ukraine and publicly available analytical reviews from the State Agency for Tourism Development of Ukraine for the period 2013-2024, as well as analytical reports from the UNWTO (United Nations World Tourism Organisation) to enable a contextual comparison of Ukraine's data with global trends. The use of these sources allowed for a more objective assessment of ongoing processes and consideration of external economic influences on the domestic tourism industry. The primary focus of the analysis is on indicators that reflect the development of Ukraine's tourism sector, including the volume of tax revenues from tourism-related activities; the number of taxpayers engaged in tourism; the number of active business entities; and the volume of goods and services sold under economic activity classes 55 "Temporary accommodation" and 79 "Activities of travel agencies, tour operators, and other reservation services", as well as the aggregated category of "tourism industries".

The research applied analysis and synthesis to break the investigated phenomenon into individual components such as tax revenue volumes, the number of taxpayers, and business entities and to generalise the

collected data for the formulation of conclusions. The comparative method was applied to identify changes and trends key indicators of the tourism sector over the study period (2013-2024). Induction and deduction were used to derive general patterns in the development of the tourism sector based on specific statistical data and their logical interpretation. Economic and statistical methods were employed to process and interpret numerical data, while the graphical method was used to visualise the results in the form of charts and diagrams. The selection of these methods was driven by the need to ensure a comprehensive, objective, and clearly structured analysis of the current state and development trends of the tourism sector in Ukraine.

The research was conducted in several sequential stages: 1) the preparatory stage, which involved defining the research objectives and tasks, and selecting relevant information sources; 2) the data collection stage, focused on the systematisation of statistical data; 3) the analytical stage, during which key indicators were examined using economic and statistical analysis; 4) the visualisation stage, where charts and diagrams were created to clearly present the findings; and 5) the interpretative stage, which entailed summarising the results and formulating conclusions regarding the state and development trends of the tourism sector in Ukraine. It is important to note that certain limitations were encountered during the research process, including:

▲ the incompleteness and fragmentation of statistical data for specific years, caused by changes in Ukraine's administrative and territorial structure as well as ongoing military actions within the country;

▲ delays in the updating of data in open government registries and on official websites.

To enhance the reliability of the analysis, only official and verified information sources were used. The data underwent validation for internal consistency and logical coherence, while calculations were performed using multiple methods, including the computation of both absolute and relative indicators. Additionally, the analysis results were cross-referenced with trends documented in academic publications in the field of tourism. Based on the applied methods and processed data, findings were obtained that allow for a comprehensive assessment of the state and dynamics of tourism sector development in Ukraine over the past decade.

## Results and Discussion

Statistical data highlights the significant role of tourism development. In 2019, before the COVID-19 pandemic, travel and tourism accounted for 10.5% of all jobs (334 million) and 10.4% of global GDP ($10.3 trillion). Meanwhile, international visitor spending in 2019 totaled $1.8 trillion, representing 6.8% of total exports. Following a loss of nearly $4.9 trillion in 2020 (a decline of -50.4%), the contribution of travel and tourism to GDP increased by $1 trillion (a growth of +21.7%) in 2021. In 2019, the travel and tourism sector comprised 10.3% of global GDP, a share that dropped to 5.3% in 2020 due to ongoing mobility restrictions. By 2021, it had rebounded to 6.1%. Additionally, 18.2 million jobs were restored in 2021, representing a 6.7% increase compared to 2020. The establishment of tourism as a powerful cross-sectoral complex within the global economy, which is closely interconnected with key economic sectors (such as transport and communications, trade, construction, agriculture, and consumer goods production) and significantly influences their development, is reflected in the following statistical data: in 2023, the tourism sector accounted for 9.1% of global GDP, having increased by 23.2% compared to 2022 and only by 4.1% below the 2019 level; in 2023, 27 million new jobs were created, which is 9.1% higher than in 2022 and only 1.4% below the 2019 level (Travel & Tourism Economic..., 2024).

The author agrees with researchers K.F. Teliuk *et al*. (2016) that nowadays, tourism is transforming into a mass phenomenon and is becoming one of the most highly profitable and dynamic sectors of the global economy. Both the COVID-19 pandemic and the full-scale war with russia have significantly impacted Ukraine's tourism sector, but neither of these crises has been fatal. Despite the challenges of recent years, Ukrainian tour operators demonstrate a desire for recovery and development (Ukrainian tourism market..., 2024). In the first three quarters of 2024, representatives of Ukraine's tourism industry paid 42% more in taxes (UAH 2,061,976,000) than during the corresponding period in 2023, when the budget received UAH 1,455,317,000. Compared to the same period in 2021, the tax revenue increased by 16% (In the first 9 months of 2024..., 2024) (Fig. 1).
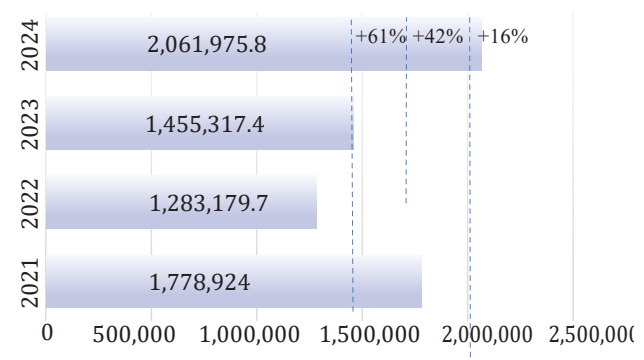


**Figure 1.** Dynamics of tax revenues in Ukraine's tourism sector for the 9 months of the respective year, in thousands of UAH

**Source:** In the first 9 months of 2024... (2024)

In the first nine months of 2023, the total number of taxpayers operating in the tourism sector increased by 8% compared to the same period in 2022. This growth was driven by a 10% rise in individual entrepreneurs and a modest 1% increase in legal entities. However,

when compared to the corresponding period in 2021, the sector experienced an overall decline of 31%, with the number of legal entities dropping by 51% and individuals by 22% (In the first 9 months of 2024…, 2024) (Fig. 2).
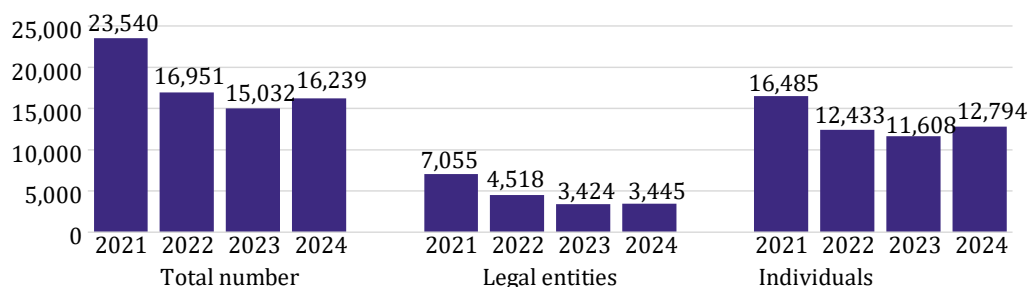


**Figure 2.** Dynamics of the number of taxpayers in Ukraine engaged in tourism activities for the 9 months of the respective year, in units

**Source:** In the first 9 months of 2024… (2024)

The largest share of state budget revenues, 64.5%, was contributed by hotels over the first 9 months of 2024. In 2023, hotels paid UAH 916,648,000, compared to UAH 1,031,472,000 during the same period in 2021. Over the first nine months of 2024, there was an increase in the share of taxes paid from the operations of tourism bases and children's recreational camps. The tax revenue from campgrounds and motorhome parking areas over the first three quarters of 2024 more than doubled compared to the same period in 2023. However, compared to 2021, when UAH 2.7 million was paid, tax revenues from these types of accommodations have decreased (In the first 9 months of 2024…, 2024).

The analysis of tourism sector development dynamics in Ukraine, based on tax revenue trends and the number of registered taxpayers, revealed several important patterns that align with findings from other scholarly studies. For instance, research conducted by Yu.M. Tiutiunnyk *et al.* (2024) demonstrated that tourism-related tax revenues in Ukraine over the past decade have followed an uneven trajectory, largely influenced by economic instability, the COVID-19 pandemic, and the onset of full-scale war. The authors emphasise a notable decline in the number of taxpayers in the tourism sector during crisis periods, followed by a gradual recovery as the situation stabilises. Similarly, the study by A. Shot (2018) confirmed a strong correlation between the level of tourism business activity and local budget revenues. According to the researcher, a reduction in the number of active tourism enterprises directly affects the decline in municipal income, underscoring the strategic importance of regional support for the industry. Another group of scholars, V.V. Papp & N.V. Boshota (2018), highlighted the fiscal significance of the tourism fee. Their analysis suggests that even amid a general economic downturn, the tourism sector retains the potential to contribute to local budgets, particularly through the development of domestic tourism. The most recent data presented by N. Valinkevych & A. Osipchuk (2024) emphasised the resilience of certain segments of tourism infrastructure, even under martial law. While the overall number of active tourism enterprises has declined substantially, a portion of businesses has adapted to the new conditions, enabling relatively stable tax revenues in specific regions of Ukraine.

Ukrainian Hotel & Resort Association President Iryna Sidletska highlights that prior to the full-scale war, Ukraine's tourism sector was experiencing steady growth, contributing $1.6 billion to the national economy and supporting 1.2 million jobs. Although this progress has been significantly disrupted by the war, she emphasised that with coordinated recovery initiatives and targeted international investment, the sector holds strong potential to rebound and once again become a key driver of Ukraine's economic revitalisation (The war shortened…, 2024). According to the former head of the State Tourism Development Agency of Ukraine, Maryana Oleskiv, the tourism sector demonstrates resilience and growth and, in the future, could become a reliable source of financial revenues for both the regions and the country as a whole (In the first 9 months of 2024…, 2024).

The social and political upheavals following the Revolution of Dignity, primarily driven by the annexation of Crimea and the prolonged military conflict in the east, have led to significant changes in the social and economic development of Ukraine's regions and communities (Pavliuk *et al.*, 2025). This situation necessitates the search for avenues to enhance state regional policy and to improve regional development. In this context, the application of tools that contribute to the improvement of the investment climate occupies a central role. The low investment potential of territorial communities requires increased attention from both local and state institutions in developing mechanisms capable of stimulating stable and long-term investment inflows while diversifying their sources (Kulyniak *et al.*, 2022; Merylova, 2024).

Ukraine's leading position in terms of natural and historical and cultural resource endowment serves as

a foundation for considering tourism as a significant source of revenue for the budgetary system. However, the existing potential of domestic regions is not being utilised effectively due to factors such as the underdevelopment of tourism infrastructure, the lack of qualified personnel, the presence of ecological and criminal risks, low standards of living comfort, high service prices, the absence of established cooperation between private business and government agencies, as well as the underutilisation of the existing potential of industry enterprises (Frolova & Frolova, 2016; Myskiv & Nycz-Wojtan, 2022). As a result, an imbalance emerges between Ukraine's level of tourism resource endowment and its global position in terms of the development of the tourism and hospitality industry. While in 2019 Ukraine ranked 78th in the Tourism Competitiveness Index (The Travel & Tourism Competitiveness Report 2019, 2019), it was not included in this ranking in 2021 (Travel & Tourism Development Index 2021, 2022) and 2023 (Travel & Tourism Development Index 2024, 2024). Therefore, it is timely to focus on the necessity of creating a positive tourism image for the country and its regions.

A distinctive feature of Ukraine's tourism and recreation sector is its integration with over 50 related industries, such as culture, art, science, education, sports, hotel business, healthcare, trade, food services, transportation, etc (Teliuk *et al.*, 2016; Order of the Cabinet of Ministers of Ukraine No. 168-p, 2017). The statistics on tourism supply, provided by the State Statistics Service of Ukraine, are represented by a set of indicators categorised by economic activity codes that, to varying extents, represent the tourism sector. The most directly related economic activity classes to tourism are:

▲ 55 Temporary accommodations (which includes 55.1 Hotel and similar accommodation activities; 55.2 Accommodation activities for vacation and other temporary residence; 55.3 Provision of camping places and parking for motorhomes and caravans; 55.9 Other temporary accommodation activities);

▲ 79 Activities of travel agencies and tour operators, as well as the provision of other booking services and related activities (which includes 79.11 Activities of travel agencies; 79.12 Activities of tour operators; 79.90 Provision of other booking services and related activities).

Figure 3 provides a graphical representation of the dynamics in the number of active business entities in Ukraine engaged in economic activities classified under codes 55 and 79 for the period 2013-2023.
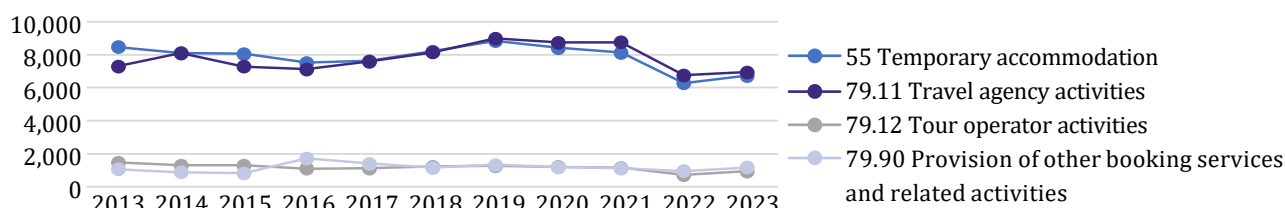


**Figure 3.** Dynamics of the number of active business entities in Ukraine
by economic activity classes 55 and 79, in units
**Source:** compiled based on State Statistics Service of Ukraine (2024a)

According to Figure 3, there was a decline in the number of business entities in 2022, which is connected to the start of the full-scale war in Ukraine. The most significant drop occurred in the temporary accommodation sector (55) and travel agency activities (79.11). In 2023, there was a partial recovery, although activity levels remain below pre-war figures (with the exception of other booking services and related activities). Figure 4 graphically illustrates the dynamics of the volume of goods and services sold by business entities in Ukraine classified under economic activity codes 55 and 79 over the period 2013-2023.
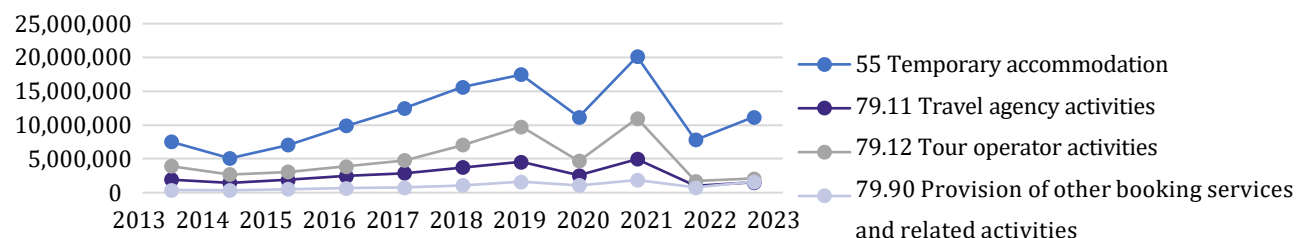


**Figure 4.** Dynamics of the volume of goods and services sold by business entities in Ukraine
by economic activity classes 55 and 79, in thousand UAH
**Source:** compiled based on State Statistics Service of Ukraine (2024b)

According to Figure 4, it can be concluded that the volume of goods and services sold by business entities in the accommodation and tourism sector has been significantly affected by the Russian and Ukrainian war

(the 2014 Crimean occupation and Eastern Ukraine invasion, and the full-scale invasion in 2022) as well as by the spread of the COVID-19 pandemic in 2020. In 2023, a recovery is evident, although the level of product realisation has not yet returned to pre-war figures. Recovery is particularly slow among tour operators (79.12), whereas the reservation sector (79.90) exhibits a rapid positive trend. Despite the consequences of military actions and other restraining economic and political factors, especially the COVID-19 pandemic, Ukraine's tourism sector continues to strive for recovery by increasing tourist inflows, indicating promising prospects for future development.

Statistical data indicate that the operational performance of business entities in the accommodation and tourism sector is currently unsatisfactory, particularly following the impacts of COVID-19 and the Russian invasion. This underscores the need for the implementation of more effective development strategies, leveraging the advantages of high-technology solutions, highly skilled personnel, innovative activity,

and modern management concepts. It is necessary to integrate technical factors, substantial intellectual resources, contemporary innovative mechanisms, the benefits of e-business, tourism clustering, and the development of promising tourism segments such as green, rural, and cultural tourism. Enhanced cooperation both at the industry level and among individual tourism enterprises produces positive outcomes through a synergistic effect, yielding economic and resource advantages at the enterprise level and systematically contributing to the comprehensive development of tourism in specific regions.

It's considered the previously analysed performance indicators of business entities characterising the tourism industries (Fig. 5), taking into account the approach set out in Regulation (EU) № 2020/1197 of 30 July 2020 on European business statistics regarding grouping by special aggregations. According to this approach, the following KVED-2010 codes are attributed to the tourism industries: 49.1 + 49.32 + 49.39 + 50.1 + 50.3 + + 51.1 + 55.1 + 55.2 + 55.3 + 56.1 + 56.3 + 77.1 + 77.21 + 79.
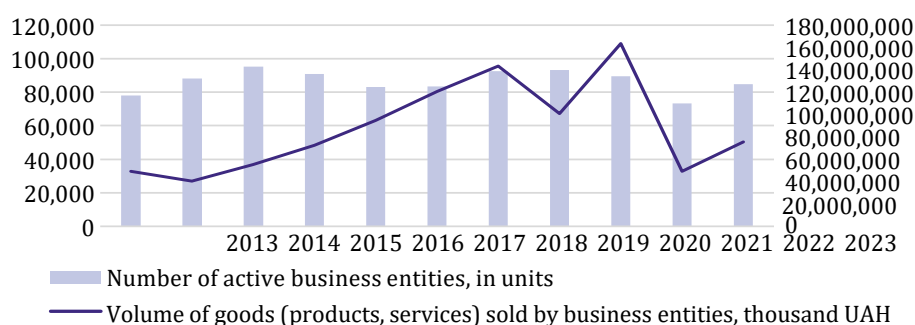


**Figure 5.** Dynamics of the number of active business entities and the volume of goods (products, services) sold by business entities in Ukraine, aggregated under tourism industries
**Source:** compiled based on State Statistics Service of Ukraine (2024c)

The following conclusions can be drawn regarding the development of Ukraine's tourism industry, based on the indicators of the number of active business entities and the volume of goods and services sold:

▲ upward trend until 2019 in the volume of goods and services sold by tourism industry entities;

▲ despite the number of entities remaining almost unchanged in 2020 due to the pandemic, the volume of goods and services sold dropped by nearly 30%;

▲ sales volume in 2021 increased by a record high, the highest figure in the entire period under analysis. This phenomenon can be explained because of pent-up demand after the pandemic, the revitalisation of domestic tourism, and the gradual reopening of international borders;

▲ in 2022, there was a sharp 18% decline in the number of business entities and more than a threefold reduction in the volume of goods/services sold, due to the full-scale war, loss of tourist flows, destruction of infrastructure, and reduced purchasing power;

▲ in 2023, partial recovery occurred. The number of entities grew by 15.3%, and the volume of goods/services sold increased by 54% compared to 2022. However, these figures remain significantly below pre-war levels.

In the broader context, the observed trends confirm the influence of both economic crises and public policies that either stimulate or constrain the development of tourism-related industries. In particular, the study conducted by Yu.M. Tiutiunnyk *et al.* (2024) indicates that major shocks such as geopolitical disruptions and epidemics have a direct impact on the operations of tourism infrastructure entities, often leading to temporary declines in the number of active enterprises. At the same time, periods of economic recovery (notably after 2015 and in 2021) have been accompanied by a gradual increase in the number of businesses in the hotel sector, signaling a degree of adaptation to new conditions. N. Valinkevych & A. Osipchuk (2024) also emphasised that economic crises significantly

influence the dynamics of enterprise formation in the tourism industry. However, it is important to note that post-crisis recovery tends to occur gradually, with the development of domestic tourism serving as a key contributing factor. N.M. Chorna (2023) reported that the most substantial decline in the number of tourism enterprises occurred in 2020-2021 because of the COVID-19 pandemic, which severely limited demand for tourism services. This finding is supported by the research of O. Ivanenko & V. Yakymchuk (2023), who pointed to a significant decline in service volumes due to the implementation of quarantine restrictions. Nevertheless, following the downturn, a gradual recovery in the number of active business entities has been observed. As noted by O.I. Yudina *et al.* (2023), this recovery can be attributed to both internal factors, such as improved conditions for the development of small and medium-sized enterprises in tourism, and global trends, including the resumption of international travel. In particular, the restaurant and hotel industries have demonstrated relatively faster recovery, driven by shifts in consumer preferences and the need for businesses to adapt to new market realities (Havryliuk *et al.*, 2022).

A study conducted by I. Yerko *et al.* (2024) within the framework of analysing the development of Ukraine's tourism industry under the conditions of the Russian and Ukrainian war also indicates that the sector has suffered substantial losses. Specifically, in 2022-2023, the number of hotels in Ukraine declined significantly, reflecting the adverse impact of the war on businesses operating in the accommodation sector. However, it is important to note that although the recovery dynamics of business entities in the tourism sector are generally positive, the level of development and resilience remains highly dependent on external factors such as geopolitical instability and economic disruptions. As highlighted in the research by N. Yakymenko-Tereshchenko *et al.* (2022), new technologies and strategic innovations play a critical role in the recovery of the industry, particularly the digitalisation of tourism services and the transformation of tourism business management practices.

The analysis of the dynamics in the number of business entities and the volume of goods and services sold has shown that the tourism industry is highly sensitive to fluctuations in the economic environment. Both the number of active enterprises and the volume of sales decline significantly during periods of crisis; however, recovery in the post-crisis phase is a natural process that requires time. A key factor facilitating this recovery is the development of domestic tourism, as confirmed by the findings of this study and supported by the theoretical and empirical work of other scholars (Kampo *et al.*, 2024; Tsviliy *et al.*, 2024).

In conclusion, the data obtained through the analysis of business activity and sales volumes underscores the importance of a stable economic environment and favorable conditions for the growth of small and medium-sized enterprises in the tourism sector. At the same time, it is essential to consider additional influencing factors, both internal and external, that may affect the pace and effectiveness of the industry's recovery.

## Conclusions

A decade-long analysis of Ukraine's tourism sector has uncovered key trends and factors shaping its current state. Examination of tax revenues from 2021 to 2024 reveals significant financial volatility driven by external challenges, including military conflicts, COVID-19 pandemic, and broader economic instability, as well as internal regulatory changes. The data on the number of taxpayers involved in tourism shows periods of decline during crises followed by gradual recovery as economic conditions stabilise. Similarly, an evaluation of business entities under economic activity codes 55 and 79 indicates an overall reduction in the number of enterprises under the influence of crises, while the volume of goods and services sold reflects some adaptability to new market conditions.

The research also confirmed that Ukraine's tourism sector has significant development potential but requires comprehensive state-level support, particularly through investment stimulation, improvement of the legislative framework, and promotion of international cooperation. Analysis revealed regional disparities in tourism recovery rates, with some areas demonstrating higher resilience due to diversified service offerings and local initiatives. This suggests the need for differentiated policy approaches that consider regional specificities and local capacities to foster more balanced tourism development across the country.

The study confirmed that although Ukraine's tourism sector possesses considerable growth potential, it requires comprehensive state support, particularly through investment stimulation, legislative improvements, and enhanced international cooperation. Future growth prospects will depend on the overall economic environment, political stability, and the successful implementation of government support programs. Further research should conduct a more in-depth analysis of the influence of macroeconomic factors on the development of Ukraine's tourism sector and examine potential recovery and growth scenarios in the context of ongoing challenges.

## Conflict of Interest
The author declares no conflict of interest.

# References

[1] Chorna, N.M. (2023). State and main trends of development of the tourism industry of Ukraine in the conditions of current challenges. *Tourism and Hospitality Industry in Central and Eastern Europe*, 8, 72-78. doi: 10.32782/tourismhospcee-8-10.

[2] Dashchuk, Y., Matviichuk, L., & Zubekhina, T. (2024). Glamping as a tool for sustainable tourism development of protected areas: Ukraine's experience. *Tourism and Recreation*, 7(3), 113-132. doi: 10.16926/sit.2024.03.07.

[3] Eurostat. (2024). *Tourism statistics at regional level*. Retrieved from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Tourism_statistics_at_regional_level.

[4] Frolova, H.I., & Frolova, V.Yu. (2016). Strategic priorities for tourism development at the regional level. *Bulletin of the Berdyansk University of Management and Business*, 1(33), 80-86

[5] Havryliuk, S.P., Sokol, T.H., Mikho, O.I., & Khorosheniuk, A.P. (2022). Trends in the development of operational activities of tourism enterprises in Ukraine. *Academic Notes of the University "KROK". Series: Economics*, 2(66), 96-106. doi: 10.31732/2663-2209-2022-66-96-106.

[6] In the first 9 months of 2024, the state budget received more than UAH 2 billion from the tourism industry. (2024). Retrieved from https://www.tourism.gov.ua/blog/za-9-misyaciv-2024-roku-do-derzhavnogo-byudzhetu-vid-turistichnoyi-galuzi-nadiyshlo-ponad-2-mlrd-grn.

[7] Ivanenko, O., & Yakymchuk, V. (2023). Structural and dynamic analysis of activities in the tourism services sector in Ukraine. *Scientific Perspectives*, 2(32), 259-271. doi: 10.52058/2708-7530-2023-2(32)- 259-271.

[8] Kampo, I., Kulinich, T., Ivanov, A., Biletska, N., & Mashika, H. (2024). Financial and credit regulation as a tool for attracting investments in tourism and the hotel and restaurant business of Ukraine. *International Journal of Economics and Financial Issues*, 14(4), 66-76. doi: 10.32479/ijefi.16203.

[9] Kulyniak, I., Novakivskyi, I., Karyy, O., Halkiv, L., & Ohinok, S. (2022). Cluster analysis as an assessment tool of the impact of the COVID-19 pandemic on the development of tourism in the regions of Ukraine. In *2022 IEEE 17th International conference on computer sciences and information technologies (CSIT)* (pp. 305-308). Lviv: Institute of Electrical and Electronics Engineers. doi: 10.1109/CSIT56902.2022.10000534.

[10] Liubarets, V., Zinkova, I., Zemlina, Y., Voroshylova, H., & Tymeichuk, A. (2022). The development of creative tourism in Ukraine and globally during the COVID-19 pandemic. *Turyzm/Tourism*, 32(2), 145-161. doi: 10.18778/0867-5856.32.2.08.

[11] Merylova, I. (2024). Revitalizing industrial territories in Ukraine: Spatial model of the tourism cluster in the Prydniprovsk region. *Frontiers of Architectural Research*, 13(6), 134-1362. doi: 10.1016/j.foar.2024.03.015.

[12] Myskiv, G., & Nycz-Wojtan, S. (2022). Reservation systems as a tool of tourist services marketing. *Economics, Entrepreneurship, Management*, 9(2), 7-18. doi: 10.56318/eem2022.02.007.

[13] Order of the Cabinet of Ministers of Ukraine No. 168-p "On Approval of the Strategy for the Development of Tourism and Resorts for the Period up to 2026". (2017, March). Retrieved from https://zakon.rada.gov.ua/laws/show/168-2017-p.

[14] Papp, V.V., & Boshota, N.V. (2018). Fiscal role of tax revenues of tourism enterprises of the country. *Scientific Bulletin of Uzhgorod University: Series: Economics*, 1(51), 370-374. doi: 10.24144/2409-6857.2018.1(51).370-374.

[15] Pavliuk, S., Mirzayev, N., & Ungalov, S. (2025). The tourism industry as a tool for local economic development of the territorial communities of the Carpathian Region of Ukraine. *BIO Web of Conferences*, 151, article number 03010. doi: 10.1051/bioconf/202515103010.

[16] Prokopenko, O., Larina, Y., Chetveryk, O., Kravtsov, S., Rozhko, N., & Lorvi, I. (2019). Digital-toolkit for promoting tourist destinations. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), 4982-4987. doi: 10.35940/ijitee.L3745.1081219.

[17] Rutynskyi, M., & Kushniruk, H. (2020). The impact of quarantine due to COVID-19 pandemic on the tourism industry in Lviv (Ukraine). *Problems and Perspectives in Management*, 18(2), 194-205. doi: 10.21511/ppm.18(2).2020.17.

[18] Shot, A.P. (2018). Analysis of the impact of tourism business activities on local budget revenues. *Scientific Bulletin of Uzhgorod University: Series: Economics*, 1(51), 393-400. doi: 10.24144/2409-6857.2018.1(51).393-400.

[19] Shpak, N., Kulyniak, I., Novakivskyi, I., & Oleksiv, I. (2023). Clusterization in tourism development level's assessment of regions: Example of Ukraine. *Journal of Tourism and Services*, 14(26), 45-56. doi: 10.29036/jots.v14i26.444.

[20] State Statistics Service of Ukraine (2024b). Retrieved from https://www.ukrstat.gov.ua/operativ/menu/menu_u/sze_20.htm.

[21] State Statistics Service of Ukraine. (2024c). *Indicators of activity of business entities, grouped by special aggregations (2010-2023)*. Retrieved from https://www.ukrstat.gov.ua/operativ/menu/menu_u/sze_20.htm.

[22] State Statistics Service of Ukraine. (2024a). Retrieved from https://www.ukrstat.gov.ua/operativ/menu/menu_u/sze_20.htm.

[23] Tan, J., & Cheng, M. (2024). Tourism, war, and media: The Russia-Ukraine war narrative. *Journal of Travel Research*, 64(5), 1031-1044. doi: 10.1177/00472875241245047.

[24] Teliuk, K.F., Hnatyshyn, M.S., & Hrynchuk, N.V. (2016). Development of the tourism industry of Lviv Region as a component of the tourism sector of Ukraine. *Scientific Bulletin of the National Forestry and Technical University of Ukraine*, 26.6, 175-184

[25] The Travel & Tourism Competitiveness Report 2019. (2019). Retrieved from https://www3.weforum.org/docs/WEF_TTCR_2019.pdf.

[26] The war shortened immersive tourism by 85%, losses will exceed $1 billion in 2024 – UHRA. (2024). Retrieved from https://open4business.com.ua/vijna-skorotyla-vyiznyj-turyzm-na-85-vtraty-perevyshhat-1-mlrd-u-2024-roczi-uhra.

[27] Tiutiunnyk, Yu.M., Dorohan-Pysarenko, L.O., & Doroshenko, O.O. (2024). Trends in tax revenues from tourism activities in Ukraine. *Market Infrastructure*, 78, 188-193. doi: 10.32782/infrastruct78-35.

[28] Tomej, K., & Bilynets, I. (2024). Large-scale tourism transformations through regeneration: A living systems perspective on tourism developments in Ukraine during the war. *Annals of Tourism Research*, 109, article number 103856. doi: 10.1016/j.annals.2024.103856.

[29] Travel & Tourism Development Index 2021. (2022). Retrieved from https://www3.weforum.org/docs/WEF_Travel_Tourism_Development_2021.pdf.

[30] Travel & Tourism Development Index 2024. (2024). Retrieved from https://www3.weforum.org/docs/WEF_Travel_and_Tourism_Development_Index_2024.pdf.

[31] Travel & Tourism Economic Impact Research (EIR). (2024). Retrieved from https://wttc.org/Research/Economic-Impact.

[32] Tsviliy, S.M., Mykhailyk, D.P., Gurova, D.D., Ogloblina, V.O., & Korniienko, O.M. (2024). Strategy for the development of the investment potential of the tourism industry of Ukraine in the international economic system. *Theoretical and Practical Research in the Economic Fields*, 15(3), 601-619. doi: 10.14505/tpref.v15.3(31).08.

[33] Ukrainian tourism market: Restoration of the industry in 2024. (2024). Retrieved from https://life.comments.ua/ua/article/travels/rinok-ukrainskogo-turizmu-vidnovlennya-galuzi-u-2024-roci-732519.html.

[34] Valinkevych, N., & Osipchuk, A. (2024). Economic analysis of the activities of tourism infrastructure enterprises during martial law in Ukraine. *Economy and Society*, 69. doi: 10.32782/2524-0072/2024-69-153.

[35] Yakymenko-Tereshchenko, N., Koriuhin, A., & Bykova, M. (2022). Prospects for restoring the economic potential of tourism and hospitality industry entities in Ukraine. *Economy and Society*, 35. doi: 10.32782/2524-0072/2022-35-40.

[36] Yasnolob, I., Demianenko, N., Galych, O., Gorb, O., Yehorova, O., Lipskyi, R., Borovyk, T., Mykolenko, I., & Protsiuk, N. (2023). Tourism of Ukraine as a type of business before and during the war. *Journal of Environmental Management and Tourism*, 14(2), 417-424. doi: 10.14505/jemt.v14.2(66).11.

[37] Yerko, I., Melnyk, N., & Demchuk, O. (2024). Analysis and dynamics of the development of hotel and restaurant enterprises. *Economy and Society*, 63. doi: 10.32782/2524-0072/2024-63-77.

[38] Yudina, O.I., Kornieiev, M.V., Stebliuk, N.F., Razinkova, M.Yu., & Mishyna, Ye.S. (2023). Hotel services market in Ukraine: Assessment of the current state and dynamics of development. *Systems and Technologies*, 66(2), 140-150. doi: 10.32782/2521-6643-2023.2-66.16.

[39] Zavidna, L., Kolesnikova, K., Barna, M., Shelemetieva, T., & Lanytsia, I. (2025). Strategic concept for the revitalization of Ukraine's hospitality and tourism industry in the post-war era. *Journal of Lifestyle and SDG'S Review*, 5, 1-17. doi: 10.47172/2965-730X.SDGsReview.v5.n01.pe03867.

# Оцінювання стану і тенденцій розвитку сфери туризму в Україні

Ігор Кулиняк

Кандидат економічних наук, доцент
Національний університет «Львівська політехніка»
79013, вул. Степана Бандери, 12, м. Львів, Україна
https://orcid.org/0000-0002-8135-4614

**Анотація.** Туризм є однією з найбільш динамічних сфер світової економіки, яка відіграє важливу роль у створенні робочих місць, розвитку інфраструктури та збільшенні бюджетних надходжень. В Україні туристична сфера має значний потенціал, оскільки сприяє регіональному розвитку, активізації підприємницької діяльності та інтеграції країни у міжнародний туристичний ринок. Метою даного дослідження було оцінювання сучасного стану сфери туризму в Україні, аналіз основних тенденцій її розвитку та визначення перспектив подальшого зростання. У процесі дослідження були використані такі методи наукового пізнання, як аналіз і синтез, порівняльний метод, індукція та дедукція, економіко-статистичні методи та графічний метод. Аналіз податкових надходжень у туристичній сфері за 2021-2024 рр. свідчить про суттєві коливання, спричинені як зовнішніми, так і внутрішніми чинниками, зокрема впливом пандемії, воєнних дій та змін у державній політиці. Дослідження динаміки кількості платників податків, які займаються туристичною діяльністю, показало тенденцію до скорочення у кризові періоди та поступове відновлення після 2023 року. Розглянуто динаміку кількості діючих суб'єктів господарювання за класами економічної діяльності 55 (тимчасове розміщування) та 79 (діяльність туристичних агентств, туристичних операторів, надання інших послуг із бронювання та пов'язана з цим діяльність) у 2013-2023 рр. Встановлено, що кількість підприємств у цих сферах значною мірою залежить від економічних та соціально-політичних чинників. Подібні тенденції простежувались і в аналізі обсягу реалізованої продукції (товарів, послуг) зазначених суб'єктів господарювання. Також розглянуто сукупну динаміку кількості діючих суб'єктів господарювання та обсягу реалізованої продукції за агрегацією «туристичні індустрії» у 2013-2023 рр. Дослідження підтвердило, що туристична сфера України має значний потенціал розвитку, однак її стабільність та ефективність значною мірою залежать від макроекономічної ситуації та державної підтримки. Результати дослідження можуть бути використані для формування ефективної державної політики щодо підтримки та розвитку туристичної індустрії, а також для стратегічного планування діяльності підприємств у цій сфері

**Ключові слова:** економічні чинники; бюджетна система; туристична індустрія, туристична діяльність, податкові надходження, платники податків, криза, війна

# Institutional and financial mechanisms of the European Green Deal in the processes of early recovery and post-war transformation of Ukraine

## Kateryna Leshchenko*

PhD in Economic Sciences, Associate Professor
Kyiv National Economic University named after Vadym Hetman
03057, 54/1 Beresteiskyi Ave., Kyiv, Ukraine
https://orcid.org/0000-0001-8467-5141

**Abstract.** The research relevance is determined by the need for environmental integration into national policies for the reconstruction of Ukraine in the context of a full-scale war and European integration within the framework of the European Green Deal. The study aimed to analyse the institutional and financial mechanisms for implementing the principles of the European Green Deal in the processes of early recovery and post-war transformation of Ukraine. The research methodology was based on an interdisciplinary approach that combined quantitative analysis of environmental finance, case studies of post-crisis countries, and a comparative assessment of institutional compatibility. As a result, the institutional architecture of the European Green Deal was systematised, emphasising key executive and financial actors, and the mechanisms of their interaction with the Ukrainian authorities were identified. The study analysed the chronology of political decisions in 2020-2023 on decarbonisation, energy efficiency and the development of renewable energy sources. In particular, by 2023, Ukraine increased the share of renewable energy to 22% in its generation structure, and reduced $CO_2$ emissions per capita from 4.6 tonnes (2020) to 3.6 tonnes (2023), but maintained uneven integration of environmental criteria into recovery plans. A comparative analysis of the experience of Croatia (renewable energy sources 70%, share of green projects in national programmes over 35%) and Georgia (renewable energy sources 80.3%) identified effective models of institutional coordination, including the creation of a single body for environmental management. Key barriers have been identified: dispersed responsibilities, poor coordination between ministries, an unstable regulatory framework, and limited access to climate finance. The study emphasised that effective green recovery in Ukraine requires improved mechanisms of financial involvement and adaptation of the regulatory framework to EU standards. The practical significance of the study was to formulate recommendations for the modernisation of institutions. The findings can be used in the development of a national green recovery strategy and the process of approval by international donors, considering the criteria of long-term environmental sustainability

**Keywords:** integration; monitoring; strategy; energy efficiency; decarbonisation; climate

## Introduction

Ukraine's recovery from protracted military aggression is emerging as a political and economic process that integrates security, environmental and financial dimensions. In the context of the post-war transformation, the EU's role as the main normative and resource partner capable of shaping the strategic framework for reconstruction through the mechanisms of conditionality, institutional partnership and climate finance is growing. At the same time, the implementation of the European Green Deal (EGD) in Ukraine is accompanied by tensions between short-term recovery needs and long-term sustainable

*\*Corresponding author*

development goals. This requires a critical rethinking of the relationship between geopolitical priorities, environmental transformation, and regulatory integration into the European space.

The emphasis on the strategic importance of EGD in the processes of post-war transformation of Ukraine was analysed in a study by H. Shevchenko *et al.* (2021), where the EGD was considered a key regulatory benchmark for the integration of environmental standards into the reconstruction architecture. The study emphasised that the EU used the green conditionality policy to formulate new rules for access to finance, combining support for reconstruction with the implementation of climate policy. This approach simultaneously expanded the EU's regulatory influence and created preconditions for deeper institutional convergence. The comparative emphasis on the conditionality of financial flows was highlighted in the study by I. Chugunov *et al.* (2023), arguing that the joint development of framework mechanisms between Ukraine and the EU changed the balance of responsibility between national and supranational actors. At the same time, the authors highlighted the predominantly reactive nature of Ukrainian climate initiatives, which, in their opinion, reduced the effectiveness of regulatory adaptation.

The issue of interaction between sectoral priorities and environmental goals was analysed in the study by S.P. Ivanyuta & L.M. Yakushenko (2022), who described the conflict between the security and climate dimensions of policy. This tension, as shown by the experience of Ukraine, was manifested in the prioritisation of short-term recovery tasks, which was accompanied by the marginalisation of the environmental agenda. In contrast to the authors' general conclusion about the universal nature of such challenges. The institutional limitations of implementing green policies in transition economies were highlighted by Y. Aleksyeyeva & A. Pintsch (2025), emphasising the gap between formal regulatory alignment and actual administrative capacity. The study noted that adaptation to the EGD was often fragmented due to the lack of a holistic institutional design.

The problem of the lack of integrated financial strategies within the framework of environmental restoration was raised by I. Boiarko & N. Trushkina (2024), analysing the role of the state in directing investment flows into long-term transformational projects. The study argued that only the active development of missionary instruments could overcome market inertia in the climate transition. A constructive approach to the interaction between international financial institutions and Ukraine on environmental investments was presented in the study by V.G. Krasovsky (2024). The study examined the role of the European Bank for Reconstruction and Development as an intermediary between market expectations and the EU regulatory framework. The study emphasised that the effectiveness of projects depended on the ability to synchronise financial criteria with climate goals.

The importance of the local dimension of environmental transformation was highlighted by N. Vasilyeva *et al.* (2024), who emphasised that centralised climate policy without the involvement of local institutions risked losing effectiveness. The analysis showed that decentralisation was critical for the implementation of adaptation measures. A different perspective was presented by R. Sørly *et al.* (2021), who analysed the risks of environmental colonialism in reconstruction processes. In their opinion, the dominance of Western standards and financial conditions could lead to a loss of national sovereignty in environmental policy. In this context, the issue of the inclusiveness of EGD mechanisms became particularly important.

Research on the implementation of EGD in the EU partner countries is dominated by general overviews of political declarations and financial instruments without proper analysis of how these mechanisms are transformed in the post-crisis recovery. The academic discourse has not sufficiently explored how EU regulatory requirements are adapted to the local context of countries with high levels of infrastructure destruction, political instability and limited administrative capacity. The impact of geopolitical risks and sectoral competition on the ability to achieve sustainable development goals in recovery policies also remains understudied.

The study aimed to examine how EGD institutional and financial instruments influence the processes of early recovery and post-war transformation of Ukraine within the framework of its strategic partnership with the EU. To achieve this goal, the study formulated the following objectives: to analyse the legal framework for Ukraine's environmental restoration in the context of its European integration course; to analyse the experience of the Nordic countries in integrating environmental criteria; to characterise the key environmental financing instruments; and to provide practical recommendations for modernising the restoration policy.

## Materials and Methods

The study used an interdisciplinary approach to examine the implementation of the EGD in Ukraine under martial law and the initial stage of post-war recovery (2022-2025). The analysis covered policy decisions, institutional mechanisms, financial instruments, and external coordination that accompanied the process of transformational adaptation of the country to EU environmental legislation as part of early recovery and post-war planning strategies. The study was conducted in three stages between November 2024 and May 2025.

The source base of the study included official strategies and programme documents of the European Commission: European Green Deal (2024), Finance and the Green Deal (n.d.), Chapters of the Acquis (n.d.), European Bank for Reconstruction and

Development (n.d.), European Investment Bank (Funds under EIB's..., 2024). The provisions of the Association Agreement between the European Union and Ukraine (2014), the Paris Climate Agreement (2015), Directive of the European Parliament and the Council No. 2004/35/EC (2004) and Directive of the European Parliament and the Council No. 2010/75/EU (2010) were also used. National policies were considered: the National Energy and Climate Plan for the Period up to 2030 (2024), the National Renewable Energy Action Plan in Ukraine (2024), conceptual documents on waste management and electric transport, as well as Georgia's 2030 Climate Change Strategy (2021), Croatia (Climate Action, 2023), Sweden (Sweden's Climate Action..., 2024), and Finland (Carbon Gap, n.d.). The indicators of Ukraine's participation in EU programmes were analysed, including the amount of funding for decarbonisation (European Commission, n.d.), energy efficiency and renewable energy development (UkraineInvest, 2023). Ukrainian statistics on implemented green projects in the period 2022-2024 were also considered (United Nations, 2024). The selected documents met the following criteria: official publication in the period 2014-2025, focus on the implementation or financing of green approaches in Ukraine, availability of verified implementation indicators, and mention of Ukraine's institutional cooperation with European structures or international financial institutions. The type of sampling is targeted, with an emphasis on policy documents, donor reports, analytical reviews, and international legal acts.

The research methodology was based on a combination of qualitative content analysis, institutional analysis, and a comparative approach. The content analysis reconstructed the structure of environmental priorities in the strategic documents of the EU and Ukraine and identified the political dynamics of the Green Deal implementation process during the military conflict. Institutional analysis was used to study the mechanisms of interagency coordination and interaction between national and European actors. A comparative approach was used to compare the experience of countries that have implemented green transformation after armed conflict (Croatia, Georgia) with the Ukrainian context. Additionally, the models of Sweden and Finland were analysed as examples of highly developed countries that have successfully integrated environmental criteria into public policy, including public procurement, budget planning, and reconstruction investments. Drawing on this experience, the study identified institutional and regulatory mechanisms that may be relevant for implementation in the process of Ukraine's strategic recovery in line with the EGD principles.

The first stage involved systematising the regulatory and policy sources that defined the EGD framework in Ukraine. The second stage included an empirical analysis of projects, funding structures, and policy decisions that influenced the integration of the environmental component into recovery efforts. The third stage was devoted to a comparative analysis of post-crisis environmental modernisation practices in other countries and the identification of relevant models for the Ukrainian situation.

## Results and Discussion

The EGD is not only an environmental strategy but also a complex political and economic instrument that redefines the principles of development within the European integration discourse. In the context of post-crisis restructuring, the EGD reveals the potential for deep economic modernisation through environmental innovation, digital transformation, and integration of sustainable policy principles into financial mechanisms. This strategy is especially important in countries that are in the process of recovering from large-scale destructive events, including armed conflicts. As an EU candidate country, Ukraine has faced an unprecedented need to combine environmental governance functions with the tasks of security and economic recovery. In this configuration, the EGD is seen as a vector for consolidating institutional efforts and a platform for accumulating international assistance. The issue of effective implementation of green mechanisms in the early recovery and post-war planning phases has become particularly relevant after 2022. At the same time, the role of financial and regulatory decisions is growing to ensure that Ukrainian policy is in line with the EGD strategic framework. Initiatives aimed at energy efficiency, decarbonisation and renewable energy development require high institutional capacity and adaptability of national legislation. Given these challenges, it is necessary to analyse how the EGD is becoming an instrument for Ukraine's transformational recovery.

In the context of Ukraine, EGD is transforming into a mechanism of strategic integration into EU policy with the prospect of modernising economic sectors per European standards. After the signing of the Association Agreement between the European Union and Ukraine (2014), environmental adaptation issues were gradually integrated into the strategic agenda. At the same time, the full-scale invasion of the Russian Federation in 2022 created unique challenges for the recovery management system, transforming EGD from a pure climate strategy to a potentially comprehensive tool for Ukraine's transformational recovery. Amidst the destruction of infrastructure, destabilisation of the energy system, and threats to environmental standards, EGD was viewed as a strategic guideline for sustainable recovery. Since 2022, Ukraine has intensified its cooperation with several key European institutions, including the European Commission, the European Investment Bank, the European Bank for Reconstruction and Development, and international bodies such as the Ukraine Support Group. One of the most significant steps was

the signing of the Memorandum of Understanding between the European Commission and Ukraine (2022), which provided for the integration of environmental principles into the reconstruction framework. In 2023, the official Recovery Plan of Ukraine formalised environmental transformation as a priority for the first time, especially in sectors such as energy, construction, transport and industry (United Nations, 2024). As a result, inter-ministerial coordination between the Ministry of Environmental Protection and Natural Resources of Ukraine, the Ministry of Economy, the Ministry of Finance, and the Office of the President has become particularly important for the development of a unified approach to green recovery. At the same time, there is still fragmentation in the distribution of powers between executive authorities, a lack of a unified mechanism for implementing EGD principles at the national level, and a lack of a single "green coordinating body", which significantly slows down the process of adaptation to the EU acquis (i.e., the set of EU rights and obligations) and reduces the effectiveness of attracting relevant climate finance (Chapters of the..., n.d.).

In terms of quantitative participation, Ukraine has demonstrated a gradual, albeit asymmetric, increase in its involvement in international green initiatives, even in the context of the ongoing war. Between February 2022 and the end of 2024, Ukraine implemented projects worth more than 6.2 billion EUR from the European Bank for Reconstruction and Development (2025), of which about half were aimed at improving the energy efficiency of public buildings, modernising district heating systems, and introducing technologies to reduce primary energy consumption.

To visualise the scale and priorities of green investments in Ukraine in 2022-2025, it is useful to analyse the generalised quantitative indicators of projects implemented with the support of international donors. Table 1 shows the structure of funding for key environmental initiatives, including the distribution of funds by area (energy efficiency, transport decarbonisation, climate change adaptation, etc.), sources of funding, and the share of projects that were accompanied by emissions monitoring or had clearly defined climate indicators. This approach improves the assessment of the actual level of integration of EGD principles into Ukraine's recovery system and the identification of key imbalances, particularly in the areas of regulatory support and verification of results.

**Table 1.** EGD financial mechanisms and funding allocation for Ukraine (2022-2025)

| Funding mechanism/ programme | Managing institution | Total amount of funds allocated | Priority areas in the field of environmental protection | Implementation schedule |
|---|---|---|---|---|
| Ukraine Facility Plan | European Commission | 50 billion EUR | Restoration, reconstruction, modernisation | 2024-2027 |
| Direct investment | European Bank for Reconstruction and Development | 6-7 billion EUR | Green economy, stable infrastructure | 2022-permanent |
| Macro-financial assistance | European Commission | 18 billion EUR | Economic stabilisation with environmental conditions | 2023 |
| Ukraine's recovery programme | European Investment Bank | 100 million EUR | Critical infrastructure, hospitals, social housing | 2024 |
| Green Deal Investment Plan | European Commission | 1 trillion EUR (EU-wide, the share for Ukraine will be announced later) | Climate neutrality, sustainable investments | 2020-2050 |

**Source:** compiled by the author based on Finance and the Green Deal (n.d.), Funds under EIB's Ukraine Recovery Programme will be distributed using DREAM (2024), European Commission (n.d.), European Bank for Reconstruction and Development (n.d.), Ukraine Facility Plan (2025)

The analysis of Table 1 demonstrates the trend towards the formation of a systemic and multi-level financial environment aimed at ensuring the environmental modernisation of Ukraine following the EGD principles. The total amount of declared and available funds for Ukraine under the mechanisms listed in the table exceeds 75 billion EUR (excluding Ukraine's share of the pan-European Green Deal Investment Plan), which indicates an unprecedented concentration of resources in the period from 2022 to 2027. The involvement of a wide range of financial instruments and programmes indicates a shift from fragmented support to an integrated financial and institutional model that combines both short-term stabilisation mechanisms (e.g. 18 billion EUR of macro-financial assistance in 2023) and long-term sustainable development

strategies (e.g. the Ukraine Facility Plan (2025) for 50 billion EUR by 2027). It is worth noting that the largest amount of funds in the medium term is envisaged under the Ukraine Facility Plan, which not only focuses on reconstruction and modernisation but also contains targeted green components. Such a financial state shows a clear trend towards the transversal inclusion of the environmental component in all areas of assistance. Macro-financial assistance is also accompanied by green conditionality, which indicates an increasing regulatory burden in the context of environmental compliance. The Green Deal Investment Plan, although it does not currently have a defined Ukrainian share, is estimated at 1 trillion EUR on an EU-wide scale, which opens space for Ukraine's long-term involvement in pan-European climate investments.

According to the positions expressed by V. Hermoso *et al.* (2022) and J. Cifuentes-Faura (2022), EU environmental policy after 2020 is acquiring the features of a multi-level governance system, in which not only governmental but also financial and infrastructure institutions play an important role. These conclusions correlate with the pan-European trend towards strengthening institutional cooperation between national governments and supranational structures. At the same time, this study of Ukraine has shown a more complex nature of the institutional intertwining: although the implementation of the EGD does involve the Ministry of Ecology, international financial institutions and the European Commission, the coordination mechanisms remain less systematic. This discrepancy may be due to a fragmented regulatory framework, institutional instability, and limited integration of internal procedures with European governance standards. Despite formal compliance with the general model of multi-level governance, national conditions significantly modify its practical implementation.

Ukraine's regulatory and institutional integration of EGD principles also demonstrates certain dynamics. In 2024, the updated National Energy and Climate Plan for the Period up to 2030 (2024) was adopted, which envisages a 22% reduction in primary energy consumption compared to the 2020 baseline. In addition, the Climate Change Adaptation Strategy until 2030 was approved and the National Platform for Industrial Decarbonisation was established, coordinated by the Ministry of Energy with the participation of EU4Energy. In 2024, Ukraine also joined the EU Mission on Adaptation to Climate Change (2024) initiative, which includes pilot activities in 12 regions to assess vulnerability to climate risks and develop local climate strategies.

These peculiarities of EGD implementation in wartime directly affect the institutional division of roles between Ukrainian and European actors that determine the architecture of environmental policy. The predominance of external funding leads to an increased role of European institutions as the main drivers of initiatives, while Ukrainian authorities mostly perform implementation functions without systematic involvement of civil society or academic expertise. This asymmetry in the implementation of green policies leads to limited institutional synergies and weak horizontal integration within domestic environmental governance (Pavlović *et al.*, 2021). On the other hand, Ukraine's participation in formal European instruments, such as the Ukraine Facility Plan (2025), creates the potential for increased accountability and transparency in the implementation of environmental projects.

The coherence between the Ukrainian government and European institutions on environmental recovery instruments was analysed in K. Shyrokykh & O. Melen-Zabramna (2025), which noted that the joint development of climate change frameworks changes the balance of responsibility between national and supranational actors. The study emphasises the reactive nature of Ukraine's adaptation initiatives, which contrasts with the proactive approach of the European Commission, which uses conditional funding as a tool for political integration. However, the analysis shows that such a dichotomy does not consider the specifics of post-war governance, where reactivity may be caused not so much by weak institutions as by pragmatic resource allocation in a crisis. The conclusions of this study are relevant in the context of stable political regimes but need to be clarified when applied to post-conflict transformation, where normative synchronisation is more likely to be gradual and evolutionary rather than conditional.

National and European actors play complementary yet asymmetric roles in shaping Ukraine's green recovery policy. On the Ukrainian side, the main strategic planning is carried out by the Cabinet of Ministers of Ukraine and line ministries. However, these bodies often do so without mandatory coordination with independent think tanks, academic institutions or civil society platforms, making it difficult to implement an inclusive and evidence-based policy-making process. There is currently no established procedure for coordinating national strategies with expert structures such as the National Recovery Council, which limits horizontal coherence. On the EU side, the European Commission, the European Investment Bank, the European Bank for Reconstruction and Development, and the Directorate-General for the Environment (DG ENV) are central (Alves, 2023). Funding decisions are made based on the level of project readiness, transparency of procurement and management procedures, and alignment with EGD priorities. The Ukraine Facility Plan (2025) is the platform for such coordination, which provides for an ex-ante assessment of the effectiveness of the use of funds, the presence of environmental, social, and governance (ESG) criteria in projects, as well as periodic reviews with the participation of independent auditors and structured monitoring groups.

In the context of multi-level governance, it is of particular importance to establish coordination between central government bodies, regional administrations (regional military administrations, territorial communities) and international partners. Despite the existence of platforms such as the Congress of Local and Regional Authorities or U-LEAD with Europe, there is still a lack of institutionalised procedures for community participation in local decision-making on resource allocation. This lack of transparency, along with the low level of public reporting on green spending, reduces the legitimacy of policies and increases the risk of politicisation of priorities. Implementation of the EGD in times of war is accompanied by several systemic risks. First, there is institutional fragmentation, which is manifested in the duplication of functions between ministries, the absence of a single body to coordinate the green transformation and the weak integration of environmental criteria into sectoral programmes. The instability of regulatory integration is caused by both political turbulence and technical insufficiency of the procedures for transposition of EU directives (in particular, in the areas of waste management, industrial emissions, and biodiversity) (Cifuentes-Faura, 2022). On the financing side, there remains a high risk of inaccessibility to climate finance instruments due to limited project capacity, the lack of certified green bonds, and Ukraine's high political and macro-financial risk, which discourages private investors.

In addition, the existing competition between sectoral priorities of military spending, humanitarian needs, and infrastructure reconstruction leads to the marginalisation of the environmental component. Duplication of functions between donors is also a significant obstacle, in particular the lack of coordinated work between the European Investment Bank and the European Bank for Reconstruction and Development in the areas of decarbonisation, which creates risks of parallel funding for the same initiatives. Another factor of destabilisation is the uncertainty of the legal framework, concerning the application of the European Taxonomy of Sustainable Investments, which makes it impossible to assess the greenness of projects in a standardised way and undermines market confidence (Hatipoglu *et al.*, 2023). Together, these challenges create a complex configuration of green policy that requires comprehensive institutional capacity building, new coordination mechanisms, and transparent governance.

In response to the challenges posed by fragmented policies, poor coordination of donor support, and an unstable regulatory environment, the Ukrainian state has begun to gradually move towards more holistic green transformation planning. In particular, the new generation of strategic recovery documents increasingly accounts for EU requirements to integrate environmental criteria into all stages of reconstruction (Hermoso *et al.*, 2022). This shift towards the structural greening of sectoral policies is not only a response to external expectations but also an attempt to compensate for the loss of trust on the part of donors and the private sector caused by previous inconsistencies in approaches. The formation of a renewed recovery architecture with an environmental core is seen as a tool to increase strategic predictability, mobilise funding, and ensure compliance with the course of European integration.

The national plans for early recovery and postwar transformation of Ukraine show the integration of specific environmental benchmarks, such as prioritising decarbonisation, improving energy efficiency and expanding the share of renewable energy sources, which is consistent with the strategic course towards European integration, fulfilling commitments under the Paris Climate Agreement (2015) and implementing the provisions of the EGD. In this context, a new policy and institutional framework is being developed that envisages the integration of environmental requirements into traditionally carbon-intensive sectors, including energy, transport, infrastructure and housing. Such integration is viewed not only as a tool for decarbonising the economy but also as a key condition for access to external financing, technological assistance and market convergence with the EU.

The systematic institutionalisation of environmental goals in sectoral planning was first introduced in the preparation of the Ukraine Recovery Plan in 2022, where the section on the green transition outlined three strategic directions: modernisation of the energy sector with priority to renewable energy sources, decarbonisation of industrial production, and greening of infrastructure (Reconstruction of everything..., 2024). In the energy sector, it is envisaged to develop decentralised generation capacities, introduce smart grid technologies, and energy storage systems and increase the resilience of power grids. At the same time, the actual implementation of these measures faces several constraints, ranging from a shortage of equipment and logistics chains to the predominance of critical infrastructure in resource allocation. In the transport sector, the electrification of public transport and railways, as well as the creation of a network of charging stations, have been recognised as priorities. However, the implementation phase is dominated by declarative measures: there is a lack of quantitative decarbonisation indicators and an assessment of emission reduction potential. Similarly, the construction sector is introducing the concept of "green reconstruction", which involves the use of energy-efficient technologies, environmentally friendly materials and compliance with ESG standards. However, the implementation of these standards remains fragmented due to the lack of an updated regulatory framework and national technical regulations harmonised with European directives.

In the context of sectoral integration of environmental goals, the energy sector is particularly illustrative.

According to W. Przychodzen & J. Przychodzen (2020) and T.S. Genc & S. Kosempel (2023), renewable energy in transition economies performs not only an environmental but also a geopolitical function, in the post-conflict recovery phase. This is consistent with the findings of this study: the increase in the share of renewable energy sources in Ukraine in 2023-2024 is accompanied by an increased emphasis on energy independence and diversification of supply sources. At the same time, there is a shift in emphasis: while the above-mentioned studies focus on the strategic positioning of renewable energy as a tool for strengthening sovereignty, the data obtained indicate the prevalence of technological and infrastructural logic, which forms a new trajectory of energy security through the adaptation of local capacities to European technical standards. The reason for this discrepancy is possibly in the differences between the conceptual frameworks of analysis: the macro-level approach prevails in these studies, while the current analysis demonstrates the importance of the subnational dimension of transformation.

The analysis of sectoral policies showed that they formally comply with the Green Deal principles, but there is a lack of detail at the operational level. The concept of climate neutrality, despite its presence in strategic documents, is not accompanied by specific target indicators for the medium or long term (2030-2050). The commitments under the Nationally Determined Contribution remain poorly institutionalised, with no fully-fledged systems for monitoring, verification and reporting on the achievement of targets. In the area of the circular economy, there are declarations on recycling construction waste and creating closed chains, but no concrete roadmap (Nygaard, 2023).

The energy component of the National Renewable Energy Action Plan in Ukraine (2024) is characterised by relative maturity, which is manifested in the presence of specific implementation indicators, detailed roadmaps for the development of renewable energy sources (including the goal of reaching 25% of the generation structure by 2030), approved programmes for the phased decommissioning of coal-fired thermal power plants, and systemic energy efficiency measures supported by donor and international financial institutions. However, transport and industrial policies are characterised by declarative approaches without quantitative specification. For instance, references to the electrification of railways are not accompanied by an assessment of the potential reduction of the carbon footprint, and the construction policy does not contain systematic measures to update state building codes, introduce eco-certification or financial incentives for energy-efficient technologies.

The integration of environmental principles into Ukraine's national plans for early recovery and post-war transformation is taking place in the context of significant challenges caused by hostilities and limited resources. Under the Ukraine Facility Plan (2025) programme, which provides EUR 50 billion in funding for the period 2024-2027, the share of projects aimed at green transformation is approximately 12-17% of the total budget of the initiatives. This includes funding from the European Investment Bank, the European Bank for Reconstruction and Development, and other international partners. In the field of renewable energy, the Ukrainian government has approved an investment plan worth USD 20 billion by 2030, with the aim of increasing the share of renewable energy sources to 27% in the country's overall energy balance (National Energy and..., 2024). However, it is worth noting the current situation in this area. Due to the full-scale aggression of the Russian Federation, several green energy facilities have been damaged or are in the occupied territories. As of the beginning of 2022, the total capacity of facilities operating under the feed-in tariff exceeded 9.5 GW, but about a quarter of this capacity was lost due to the occupation. Wind farms suffered the greatest losses: about three-quarters of their capacity was in the combat zone or under enemy control, which is especially true for the Kherson and Zaporizhzhia regions. Also, some solar power plants, more than half a gigawatt, have ceased to function due to the occupation. Nevertheless, the share of electricity generated from renewable sources remains significant: in 2023, almost 10% of electricity was generated from solar and wind energy, and together with hydroelectric power plants, this figure exceeded 20% (National Renewable Energy..., 2024).

A. Sikora (2021) and J.M. Alves (2023) emphasised that EU partner countries face barriers to accessing innovative green financing mechanisms, particularly those that require mandatory compliance with ESG criteria. A similar trend can be seen in the Ukrainian context, where only a limited number of EIB-supported projects meet such requirements. These conclusions are quite appropriate, as they are confirmed by the results of this study, which indicate insufficient harmonisation of the national regulatory environment with EU financial standards. At the same time, it is worth noting that the interpretation of ESG criteria remains heterogeneous even within the EU, which, in turn, may affect the interpretation of the level of compliance by partner states. The reason for the different interpretations may lie in the differences between the formal criteria for evaluating projects and the political feasibility of funding them in the context of post-war recovery. The need to adapt legislation to EU standards should be seen not only as a technical task but as part of a broader process of harmonising approaches to defining sustainability in cross-border finance.

Access to climate finance, as noted by S. Minas (2022) and N. Křemečková & S.S. Šreflová (2024), is determined not only by political declarations but also by the availability of technical expertise. This approach is also confirmed in the case of Ukraine, where the limited number of projects approved under the

Neighbourhood, Development and International Cooperation Instrument is due to the lack of capacity to prepare applications following EU standards. However, the analysis shows that the problem is not limited to technical aspects. N. Křemečková & S.S. Šreflová emphasised that the complexity of procedures and requirements is sometimes excessive for countries in post-conflict contexts, which complicates project implementation and creates additional barriers. Claims of technical inability seem debatable, as they do not incorporate the impact of institutional and political factors that also have a significant impact on access to finance.

In the construction sector, the implementation of green standards remains limited. As of 2024, there were less than 10 buildings in Ukraine certified to international standards such as the Building Research Establishment Environmental Assessment Method and Leadership Energy and Environmental Design (Yarosh, 2024). This indicates the low level of implementation of environmental standards in construction and the need to stimulate such initiatives. The reasons for this situation are the lack of clear regulatory requirements for mandatory environmental certification, as well as limited access to finance for developers wishing to use energy-efficient technologies. Some pilot projects are being implemented with the support of international donors, but their scale remains insignificant in the overall market structure. At the same time, there is potential for expanding the use of green standards in post-war reconstruction, in the reconstruction of critical infrastructure (European Commission, n.d.). A prerequisite for this is the introduction of a system of government incentives, including tax breaks and preferences in public procurement. It is also necessary to raise awareness of the benefits of green construction as an element of sustainable development among construction sector participants.

In the transport sector, projects to electrify public transport are being implemented slowly. The Electric Public Transport Reform in Ukraine project, launched in August 2024, aims to support cities in developing electric transport, but its impact has been limited so far. Import dependence on electric vehicles and components, as well as insufficient development of charging infrastructure, remain the main obstacles. In addition, logistical challenges related to supply and maintenance slow down the scaling of projects. The absence of a comprehensive government strategy that would integrate electric transport into the overall urban mobility system also reduces the effectiveness of measures. Nevertheless, the number of electric buses in major cities is growing, albeit at a slow pace, which indicates the potential for development. An important task is to stimulate investment in charging infrastructure and develop preferences for utilities.

To summarise, the integration of environmental principles into Ukraine's recovery strategies is an important step towards achieving climate neutrality, but without further detail, regulatory specification and institutionalisation, these goals remain in the realm of strategic rhetoric. The slow dynamics of transformation are largely due to the prioritisation of security needs and administrative resources in the context of a full-scale war, which significantly limits the state's ability to comprehensively plan and implement long-term climate policies. The transition from declaration to implementation requires strengthening horizontal coordination between sectors, developing a climate efficiency assessment system, harmonising the regulatory framework with the EU, and actively engaging regional and municipal institutions in planning and implementing green initiatives. Without a systematic integration of the environmental dimension into the post-war reconstruction process, there is a risk of reproducing non-environmental development models with low resource efficiency. Only with such changes can the green component become a systemic element of post-war reconstruction and the long-term transformation of Ukraine as an EU candidate country.

J.B. Skjærseth (2021) and M.E. Kraft (2021) emphasised that the effectiveness of environmental strategies in the post-crisis environment is largely determined by the ability to ensure vertical coordination between central and regional authorities. The analysis confirms the relevance of this thesis, given the existing limitations in the Ukrainian decentralisation model, in terms of the transfer of environmental powers to the local level. This complicates the uniform implementation of green practices in the regions and reduces the effectiveness of achieving the Green Deal goals. However, in contrast to the studies cited, which regard vertical coordination as a functional governance mechanism, the results obtained indicate that institutional fragmentation in the post-crisis reconstruction may be the result not only of a lack of administrative coherence but also of competition for access to external resources. The reason for this discrepancy could be determined by the difference between stable democratic systems, on which the conclusions of J.B. Skjærseth and M.E. Kraft are based, and the context of countries recovering from systemic shocks, where coordination mechanisms are still in the process of formation.

Croatia, which suffered large-scale destruction as a result of the 1991-1995 war, demonstrated an example of gradual integration of the environmental component into the reconstruction process, primarily through decentralised development models. Immediately after the end of hostilities, the focus of state policy was on restoring infrastructure, but since the late 1990s, national strategies have begun to articulate priorities for environmental protection, climate change adaptation and energy efficiency (Croatia's National Environmental..., 2005). One of the key factors was the accession to EU funding instruments even before the accession,

through the European Commission (2009) programmes aimed at modernising water treatment facilities, waste management, reducing pollutant emissions and sustainable rural development. Through participation in these programmes, Croatia not only gained access to financial support but also built technical and managerial capacity to implement environmental projects.

In the process of preparing for EU accession, Croatia reformed its environmental policy in line with the acquis, introducing institutional mechanisms for strategic environmental assessment, environmental impact assessment, integrated water management, and industrial emission control mechanisms (Chapters of the..., n.d.). A significant role in this process was played by Croatia's National Environmental Action Plan (2005), which became a tool for integrating environmental objectives into all sectors of public policy. These reforms were accompanied by the intensification of the activities of environmental non-government organisations, which became important actors in public monitoring, participated in consultations on major infrastructure projects, and acted as intermediaries between central authorities and local communities in setting green priorities. Of particular importance was the inclusion of environmental standards in the regional recovery plans funded under EU structural assistance, which ensured a close link between local development and European sustainability goals.

The efficiency of these efforts is confirmed by specific indicators. For example, between 1990 and 2022, Croatia reduced greenhouse gas emissions by 29.9% (Climate Action, 2023). At the same time, the country has reached a high level of renewable energy development: by 2025, it is planned to install an additional 1,500 MW of solar and wind power capacity, which will provide more than 80% of electricity generation from renewable sources (Croatia to add..., 2021). In addition, Croatia is actively developing its environmental infrastructure: the Natura 2000 network covers 36.5% of its territory, one of the highest rates among EU countries (Green Infrastructure in..., 2020). Croatia's experience illustrates the importance of early institutional alignment with European norms, synergy between government and civil society, access to financial instruments, and proper monitoring of environmental outcomes as prerequisites for effective and systematic green reconstruction.

The comparison with the Croatian experience in this study correlates with the findings of A. Pavlović *et al.* (2021) and J. Švarc (2022), emphasise the importance of including an environmental component in all stages of post-conflict reconstruction. In the Croatian case, the integration of environmental criteria into reconstruction programmes helped to attract additional EU financial resources. However, this model of post-conflict planning was implemented in a politically stable context and with structural support from European institutions. This demonstrates the differences with the Ukrainian situation, where the lack of a sustainable system for assessing the green component in reconstruction projects indicates not only a technical lag but also a different logic of management priorities in a crisis. The conclusions of these authors are relevant as guidelines for long-term environmental adaptation but need to be revised when applied to emergency planning conditions accompanied by a high level of uncertainty and limited management resources.

In Georgia, the green aspects of post-crisis development began to gain importance after the Rose Revolution of 2003, which marked a turning point in public administration, including environmental policy. Until then, the country had been experiencing serious environmental degradation due to the ineffectiveness of state environmental supervision in the 1990s, the collapse of institutional infrastructure, uncontrolled urbanisation and widespread illegal economic activity. After the change of political course, the government began to reconsider its approach to environmental protection, although, for a long time, the environmental component remained secondary to the reconstruction process, which focused mainly on stabilising the economy and strengthening state institutions (Akhvlediani, 2023). Georgia received a real impetus for approximation to European environmental policy with the signing of the Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Georgia, of the other part (2014). This document envisaged the gradual implementation of EU directives in the areas of air quality, waste management, water protection and climate adaptation. One of the important steps was the adoption of Georgia's 2030 Climate Change Strategy (2021), which included specific targets for reducing emissions, managing ecosystems and strengthening control over industrial pollution.

Despite these efforts, Georgia encountered a range of challenges. These include a constant lack of funding for large infrastructure projects, institutional fragmentation, insufficient coordination between agencies, limited technical resources at the local level, and a weak level of integration of environmental assessment into planning processes. This has made it difficult to build a green component into recovery projects, especially after the 2008 armed conflict, when resources were channelled mainly into emergency housing and road reconstruction without proper strategic planning (Akhvlediani, 2023). Some of Georgia's successes are related to its participation in regional initiatives of the Eastern Partnership. Key instruments have been programmes funded through the European Neighbourhood Instrument (n.d.). For example, in the conflict-affected regions of Shida Kartli and Samtskhe-Javakheti, which have suffered severe soil erosion, pilot projects were implemented to reduce vulnerability to

floods and landslides. These initiatives combined the restoration of infrastructure (dams, roads, canals) with ecosystem-based approaches: reforestation, riverbed cleaning, and bank reinforcement with live plantings. Such projects ensured not only technical but also environmental sustainability and created conditions for the development of local communities through involvement in environmental monitoring and educational programmes (World Bank, 2015).

Since 2016, Georgia has been actively cooperating with the International Renewable Energy Agency (2025), which initiated several investment projects in the hydro and solar energy sectors. The government has initiated licensing reform in the renewable energy sector, including by simplifying access to technical specifications and providing tax incentives for investors. At the same time, according to the energy consulting company OMNIA, renewable energy sources accounted for 80.3% of Georgia's energy balance as of 2025 (Taktakishvili, 2025), with hydropower accounting for the lion's share. Georgia's renewable energy potential is one of the highest in the region, but it is only using 19% of this potential. Georgia has a total installed capacity of 4,632.3 MW. Of this capacity, 3,551.2 MW (77%) is from renewable energy sources, consisting mainly of hydropower plants. Despite the electricity production figures, the national overall energy balance, including transport, heating and industry, shows lower results: by 2023, only approximately 26% of energy needs were covered by renewable sources, indicating an uneven transformation of different sectors.

The Georgian experience described in T. Akhvlediani (2023) and N. Tsikoridze (2024) demonstrates the benefits of targeted institutional approximation to the EU climate acquis (Chapters of the..., n.d.). The analysis of these studies demonstrated that the creation of a national green investment fund has helped to avoid fragmentation of funding and increase transparency in the use of funds. These conclusions are quite relevant, as

they confirm the effectiveness of a centralised approach to climate finance management in a resource-limited environment. However, the above analysis shows a different picture in the case of Ukraine, where the existing administrative decentralisation, the continuity of cross-sectoral responsibilities and the complex structure of post-war aid distribution make it difficult to implement a similar model. The reason for the different approaches is likely to lie in the differences in the starting conditions and the extent of institutional support from the EU. Although the Georgian case serves as a valuable example, its application in the Ukrainian context requires adaptation to the political and institutional specifics of the transition period.

Georgia's experience shows the potential for combining reconstruction with green approaches, especially using ecosystem-based solutions and international technical assistance. At the same time, fragmented environmental policies, limited institutional coordination, and a lack of systemic climate strategies remain key barriers to achieving long-term sustainability goals. A solution could be to strengthen the integration of environmental dimensions into national recovery planning, develop partnerships between central government, regions and the public sector, and establish transparent mechanisms for financing green transformations.

A comparative analysis of the approaches to green transformation in Ukraine, Croatia and Georgia shows that there are common structural factors, but the level of institutional compatibility with the EU acquis, the effectiveness of regulatory implementation and the functioning of financial and administrative mechanisms shows significant variability. Ukraine has a relative advantage in terms of larger human capital, research infrastructure, and a legally defined climate policy. At the same time, internal institutional fragmentation, lack of interagency coordination, and limited fiscal space significantly complicate the implementation of an integrated environmental policy (Table 2).

**Table 2.** Green transformation performance indicators

| Metric | Croatia (status in 2020 – states in 2023) | Georgia (status in 2020 – states in 2023) | Ukraine (state in 2020 – state in 2023) | European standard |
|---|---|---|---|---|
| $CO_2$ emissions (t/person) | 4.3 – 4.5 | 2.8 – 3.1 | 4.6 – 3.6 | < 4.0 |
| Share of renewable energy sources (%) | 31% – 70% | 19.5% – 80.3% | 11% – 22% | 32% before 2030 |
| Waste recycling (%) | 34% – 36% | 5% – 5% | 5% – 7% | 65% before 2035 |

**Source:** compiled by the author based on International Energy Agency (2023), North-West Croatia Regional Energy Agency (2023), UkraineInvest (2023), I. Rassadina & I. Sadovskyi (2023), H. Ritchie & M. Roser (2025), European Environment Agency (2025)

The data analysis identified key trends in the implementation of green transformation strategies in Croatia, Georgia and Ukraine, considering the target

parameters set out in European regulations. All three countries demonstrate positive dynamics in expanding the share of renewable energy sources: Croatia

increased this figure from 31% to 70%, Georgia from 19.5% to 80.3%, and Ukraine from 11% to 22%. This growth, especially in the case of Georgia, exceeds the EU target of 32% by 2030, which indicates the active implementation of energy sector decarbonisation mechanisms and a certain adaptation of national strategies to the EGD requirements. However, an analysis of $CO_2$ emissions per capita reveals a more complex picture. While Croatia shows a slight increase from 4.3 to 4.5 t/person and Georgia an increase from 2.8 to 3.1 t/person, Ukraine, on the contrary, shows a decrease from 4.6 to 3.6 t/person. This indicates significant structural changes in Ukraine's carbon balance, which may be related to the post-crisis decline in industrial production and the beginning of the transformation of the energy sector. However, only Ukraine currently fits into the EU's target standard of below 4 tonnes per person, which highlights both the potential and vulnerability of the national green transformation path. There is a significant disparity in waste management. Croatia has slightly improved its waste recycling rate from 34% to 36% in three years, remaining far from the European standard of 65% by 2035. Ukraine has increased its recycling rate from 5% to 7%, while Georgia has shown no dynamics, maintaining its 5% level. These indicators show a weak institutional integration of circular economy principles and point to a lack of environmental infrastructure and financing, especially in countries that are not fully aligned with the acquis communautaire.

Since the data above demonstrate significant differences between countries in terms of integration of environmental goals, it is worth analysing the examples of the Nordic countries, which are considered exemplary in implementing green transformation. The high level of achievement of climate and resource efficiency goals in Sweden and Finland is explained not only by the long period of green policy development but also by the systematic integration of environmental criteria into all levels of government. These countries demonstrate not only a steady increase in the share of renewable energy sources but also the successful implementation of circular economy models and integrated approaches to waste management. This experience is particularly important for the analysis, as it demonstrates how, given a stable policy environment, effective administration and technological innovation, significant progress can be made in environmental transformation, which remains a challenge for countries in transition or post-crisis development.

In the Nordic countries, the regulatory integration of environmental criteria into public procurement, strategic budgeting, and planning of reconstruction projects is one of the main indicators of their institutional capacity for sustainable development. Countries have developed a comprehensive legal and regulatory architecture that ensures climate neutrality, energy efficiency, and resource circularity in all public investment decisions. In Sweden, for example, these approaches focus on the introduction of mandatory "environmental minimums" in tender specifications, including criteria for $CO_2$ emissions, environmental labelling, and material recycling (Naturvårdsverket, 2025). The share of renewable energy sources in final energy consumption reached 66.4% in 2023, the highest among EU countries (Eurostat, 2024). Importantly, environmental criteria are not limited to procurement in Sweden; they are enshrined in the climate neutrality strategy, which obliges the country to review investment priorities based on the carbon cost of each project (Sweden's Climate Action..., 2024). "Environmental mainstreaming" approaches include regular assessment of policies of all ministries against climate criteria. In Finland, where the share of renewable energy sources in 2023 was 50.8%, a unique tool called Carbon Footprint Budgeting (Carbon Gap, n.d.) was introduced, which integrates climate parameters into the budget process. Each ministry is obliged to calculate the carbon footprint of proposed projects and correlate it with the approved national climate budget. This model avoids environmentally inefficient investments and ensures long-term synergies between financial and climate planning.

Sweden and Finland are actively developing cross-sectoral coalitions for green transformation, which include government agencies, academia, business and civil society. Sweden has a Sustainable Procurement Advisory Committee, which includes representatives of 12 key sectors. The Sustainable Procurement Advisory Committee developed annual recommendations that are binding for updating public procedures. Finland has a Sustainable Investment Centre that develops standard contracts for energy-efficient housing retrofits, transport infrastructure, and digital environmental monitoring projects. The systematic integration of environmental requirements into all phases of management decisions, supported by political consensus and technical support, makes the experience of Sweden and Finland relevant to countries seeking to implement EGD principles. These models ensure not only compliance with the climate neutrality goals but also increase the transparency and efficiency of the budget process in the context of environmental modernisation. Therefore, the experience of these countries can serve as a basis for creating a system of "green budget monitoring" in Ukraine as part of the strategic recovery mechanisms.

All these practices are directly relevant for Ukraine in the context of post-war transformation and integration into EGD policies. The Northern European experience proves that effective environmental integration in public procurement is impossible without establishing mandatory minimum criteria at the legislative level that cannot be cancelled due to budgetary or administrative constraints. A key condition is the creation of mechanisms for horizontal coordination and

continuous updating of standards, which involves not only government institutions but also think tanks, public platforms and environmental businesses. The experience of Sweden and Finland shows that environmental criteria can become not only a tool for cost control, but also a basis for innovative development by encouraging local producers to meet environmental requirements. Thus, adapting such models to the Ukrainian context could become part of a green recovery strategy, while increasing the transparency, efficiency and environmental sustainability of public policy.

In general, the asymmetry in environmental indicators highlights the fragmentation of the green transformation policy. Even with the formal implementation of certain directives or plans, the practical achievement of targets remains uneven. This necessitates strengthening institutional support and establishing sustainable mechanisms for monitoring progress, particularly in the areas of waste management and greenhouse gas emissions. At the same time, the existing differences between countries largely reflect the degree of regulatory convergence with the European legal framework. Croatia, as an EU member state, has a better starting point due to direct access to funding from the European Commission, through the Just Transition fund, and integrated obligations under the EGD (Regulation of the..., 2021). As associate partners, Ukraine and Georgia rely on more flexible regulatory approximation instruments, which, however, do not guarantee the same results. In the context of post-crisis recovery, the strategic integration of the environmental vector into reconstruction programmes is of particular importance. Ukraine's progress in reducing $CO_2$ and increasing renewable energy sources, despite the war, demonstrates the potential for modernising the energy system in line with environmental criteria. Therefore, not only the strengthening of climate but also overall economic resilience is notable. Further progress in green transformation will directly depend on the effectiveness of a multi-level environmental policy. The progress not only aligned national strategies with European benchmarks but also created capacities at the level of local institutions such as local governments, environmental protection agencies, and non-government organisations. Successful implementation of long-term climate commitments requires a holistic approach that combines financial resources, regulatory adaptation and institutional sustainability.

Important in this context is the position of M.-G. Ciot (2022) and K. Zimmermann *et al.* (2024), consider the Green Deal as a mechanism for external transformation of neighbourhood policies. Their statement about "Europeanisation through climate" is confirmed by the Ukrainian case, in updating the 2030 Climate Strategy. As the study shows, the incorporation of emission reduction indicators into the National Recovery Plan is not only the result of internal reforms but also a

response to the external requirement to participate in financial instruments. However, this understanding of Europeanisation as a largely external process does not fully consider internal political dynamics, particularly the evolution of climate discourse in Ukrainian political elites after 2022. The reason for the different interpretations may lie in the focus on regulatory mechanisms, while the context of post-crisis recovery requires consideration of pragmatic adaptation practices.

All three recipients of EU financial assistance had access to pre-approved approximation programmes, such as the European Neighbourhood Programme for Agriculture and Rural Development (2013), before gaining official candidate status. However, unlike Croatia, which has been pursuing consistent institutional and financial integration since 2007, Ukraine gained candidate status in the context of a full-scale armed conflict, which led to a reorientation of resources towards short-term stabilisation measures, complicating strategic planning in green transformation. From the perspective of the relevance of adaptation models, the Croatian integration scenario demonstrates normative compatibility with Ukrainian challenges. Since the end of the military conflict, Croatia has implemented a comprehensive strategy for gradual approximation to the EU acquis communautaire, particularly in the areas of environmental protection, energy, and spatial planning. An important institutional prerequisite was the functioning of the Central Finance and Contracting Agency, a specialised body responsible for coordinating projects financed by EU funds. At the same time, municipal decentralisation has ensured effective policy implementation through local administrative units, contributing to the formation of sustainable environmental practices. The Georgian model, on the other hand, represents a context of limited institutional capacity, in which environmental transformation was implemented mainly through donor programming and technical assistance Technical Assistance and Information Exchange (n.d.), EaP Green. New financial instruments are opening for Ukraine, under the Ukraine Facility Plan (2025) and future access to funds related to the EGD implementation. However, the effective attraction and utilisation of these resources requires the creation of a coordination mechanism for integrating environmental goals into medium- and long-term state planning, which involves not only regulatory alignment but also institutional consolidation.

In the Croatian case, the systematic implementation of Directive of the European Parliament and the Council No. 2004/35/EC (2004), Directive of the European Parliament and the Council No. 2010/75/EU (2010), as well as the national implementation of waste management policies, ensured a high degree of compliance with the acquis, which was reflected in the official assessment of the European Commission (2023): 96% of Croatian environmental legislation was harmonised with the EU acquis.

In the process of implementing Ukraine's green transformation in the early recovery and post-war planning phases, several systemic barriers are being identified that significantly limit the effectiveness of climate-oriented strategies. One of the key challenges is insufficient institutional capacity, including weak coordination between central and local governments, the lack of an integrated environmental policy in the national planning system, and fragmented mandates between responsible institutions (Yukhymenko *et al.*, 2024). Mechanisms for interagency cooperation remain underdeveloped, making it impossible to systematically integrate climate priorities into the recovery process. An additional barrier is the complicated access to international climate finance, which is caused by both security threats and procedural uncertainty, in particular, the lack of accredited institutions capable of administering funds from the Global Environment Facility or the Green Climate Fund. Ukraine still does not have a consolidated financial architecture for implementing climate projects that would align donor programmes with national priorities. In wartime, there is a lack of mechanisms for environmental assessment of reconstruction projects, which creates risks for reconstruction based on outdated, high-carbon models. In the post-war planning phase, an important challenge will be the need for regulatory redesign of many building standards, logistics schemes, and energy supply systems, which requires not only political will but also a high degree of technical and expert support (Brenner, 2022). A poor culture of environmental management and the absence of mandatory environmental criteria, such as energy efficiency, reduced carbon footprint, environmental certification of materials or product life cycle assessment, in public procurement procedures further complicate the transition to a sustainable reconstruction model

According to the findings of C.E. Hoicka *et al.* (2021) and J.E. Teixeira & A.T. Tavares-Lehmann (2022), the process of transposition of EU environmental legislation in third countries that have Association Agreements with the EU and are obliged to harmonise national legislation with the acquis communautaire in the field of the environment (Georgia, Moldova, Ukraine) faces difficulties in enforcement and administrative implementation. The Ukrainian case confirms this observation: the implementation of energy efficiency and circular economy directives remains limited due to the lack of regulations and effective control mechanisms. However, these studies focus mainly on general institutional barriers, while the analysis of the Ukrainian context reveals additional specifics of fragmented interagency coordination and the priority of short-term recovery responses. The reason for the differences in interpretation may lie in the different scope of the study: while comparative works focus on general patterns of EU-associated countries, the analysis of Ukrainian data shows that the key factor of ineffective implementation is not only the lack of resources but also weak procedural coherence between the stages of adoption, interpretation and implementation of norms.

The geopolitical risks of influencing recovery priorities were highlighted by S. Wolf *et al.* (2021), A. Nygaard (2023) and E. Hatipoglu *et al.* (2023), emphasising the competition between sectoral goals in the face of limited resources. A similar dynamic is evident in Ukraine, where the priority of security and defence often prevails over the environmental agenda. However, the above analysis shows a different picture, as the emphasis on security in the Ukrainian context does not always contradict environmental transformation but rather is determined by the specifics of post-conflict recovery. The assertions are debatable, as they do not address that the strategic postponement of environmental initiatives may be due to the need to ensure basic stability. This is inconsistent with the analysis above, which indicates that the integration of security and environmental priorities can in some cases enhance long-term resilience. The reason for the different interpretations may lie in the different methodologies for assessing priorities and the time horizons of the studies. The conclusions drawn by the researchers are quite appropriate for the general geopolitical context but require further refinement given the specifics of the Ukrainian case.

Compared to other countries that have experienced armed conflict, such as Croatia and Georgia, Ukraine lacks a unified mechanism for environmental assessment as part of reconstruction programmes. The green transformation is being treated as an additional rather than an integrated element of recovery. The need for a comprehensive revision of environmental legislation and procedures is particularly relevant in the context of Ukraine's future integration into European environmental markets. However, this requires a stable institutional infrastructure capable of ensuring predictable and transparent implementation of climate policy. Thus, the barriers faced by Ukraine are complex and require concerted efforts at both the national and international levels. A successful green transformation in the post-crisis development environment requires not only resources but also the formation of a sustainable institutional architecture aligned with European standards, as well as the inclusive participation of local governments and civil society institutions. For Ukraine, the adaptation of elements of the Croatian model, including the creation of a central environmental investment management body, regulatory harmonisation with the acquis communautaire, and institutionalisation of cross-sectoral coordination, seems to be a relevant strategy in the process of post-war recovery and environmental modernisation. Compared to Croatia and Georgia, which implemented their transformation strategies in the context of post-crisis recovery from armed conflicts, Ukraine faces a fundamentally more

difficult challenge of structural modernisation in the active phase of the war. This limits the horizon of strategic planning, disintegrates the institutional vertical and increases the risk of fragmentation of public policy. At the same time, the presence of an active civil society, mobilised international support, and large-scale digitalisation creates favourable conditions for the development of an innovative model of environmental restoration. Ukraine is similar to Croatia in key respects: it has significant military experience, needs a decentralised model of reconstruction, and is focused on regulatory convergence with the EU.

At the same time, in contrast to Georgia, Ukrainian climate change policy has clearer strategic guidelines and is supported by existing political declarations on integration into the EGD. However, the effective implementation of this policy is hindered by systemic problems, including the lack of a single coordinating body, legal uncertainty of environmental financing mechanisms, and a lack of professional staff at the regional level. In addition, the military context pushes climate issues to the back burner, which may lead to a recovery based on the traditional, carbon-intensive model. One of Ukraine's key advantages is its strong scientific and technical potential to ensure a science-based transformation of environmental policy. Ukrainian local governments, which have gained autonomy through decentralisation, also have the potential to localise environmental solutions, similar to the Croatian experience (Yukhymenko *et al.*, 2024). However, without an effective mechanism for integrating environmental priorities into the public administration and public finance system, this potential advantage may remain unrealised.

An effective green reconstruction policy for Ukraine requires systemic changes in approaches to planning, coordination, financing and regulatory support. A positive example in this area is shown by Croatia, which, in the process of post-conflict reconstruction, created an independent Environmental Protection Agency responsible for integrating environmental standards into reconstruction plans. It was the basis for the environmental monitoring system, which was later adapted to EU standards (Climate Action, 2023). For Ukraine, this means ensuring that the newly created body is empowered to approve reconstruction projects inter-agency based on sustainability assessment. Synergies between sectoral policies, in the areas of energy, transport, construction, and waste management, can be achieved through the development of common environmental standards for reconstruction. An effective tool for this is an ex-ante environmental impact assessment of all investments financed from the state or international budget, as is practised in Georgia in support of projects with international technical assistance.

Additionally, the establishment of regional offices or platforms for the decentralised implementation of environmental governance policies with a focus on community needs should be envisaged. This approach correlates with the Croatian model of green local government development, where municipalities were empowered to implement environmental mitigation measures, which ensured the adaptation of sustainability policies to regional contexts. In addition, it is important to include in the mandate of the newly created body the authority to develop green footprint indicators for restoration projects. This will help to build an evidence base for further performance analysis. A public register of environmentally significant projects will promote transparency and public involvement in monitoring. At the same time, given Georgia's experience in creating integrated geographic information systems, it is advisable to develop a digital platform integrating data from state cadastres, pollution and land use registers. In the area of financing, the key is to intensify efforts to involve Ukraine in the Just Transition Mechanism, which will provide access to EU structural funds (Regulation of the..., 2021). Following the example of Croatia, which received funding for the restructuring of the energy sector under the Just Transition Mechanism, Ukraine should develop a domestic national plan for a just transition. An important element of this plan is the social adaptation of regions dependent on the carbon-intensive economy, including the creation of retraining programmes, stimulating green employment, and supporting environmental entrepreneurship.

Another promising area is the development of green banking pilot projects. Georgia's experience in cooperation with the European Bank for Reconstruction and Development demonstrates the success of models that introduce environmental scoring to finance small businesses focused on energy efficiency. Ukraine can scale up these approaches by creating guarantee mechanisms for environmentally oriented SMEs, using green bonds at the municipal level, and attracting private capital through blended finance models. At the same time, financial institutions should be adapted to the requirements of the InvestEU, which provides for the support of sustainable investments (Regulation of the..., 2021). This includes the creation of a national contact point, accreditation of banks as financial intermediaries, and the development of criteria for "environmental added value".

In the regulatory sphere, the priority remains the harmonisation of environmental legislation with the EU acquis, especially in terms of air protection, climate change adaptation, pollution prevention and natural resource management. Establishing a system of mandatory monitoring of the green footprint of reconstruction, covering all stages of the project cycle from planning to operation, will avoid point-in-time inefficient solutions. Given the need to address climate risks in long-term planning, it is advisable to include a mandatory analysis of these risks in national and regional development strategies. The Georgian example demonstrates

the effectiveness of the climate screening methodology, which is being integrated into municipal strategic planning with the support of international partners. The political prerequisites for green recovery should be consolidated through the institutionalisation of public participation. Updating the procedures for strategic environmental assessment should include not only formal information but also mandatory consideration of the results of public consultations.

To sum up, modernising Ukraine's green recovery policy requires institutional maturity, adapted financial mechanisms, an effective regulatory environment, and a sustainable political consensus. The experience of Croatia and Georgia confirms that even in the context of post-crisis recovery, it is possible to develop environmentally friendly policies if they are based on transparency, decentralisation, public participation and flexible integration into European mechanisms.

## Conclusions

The study provides a comprehensive analysis of the EGD implementation process in Ukraine in the context of a full-scale war, early recovery and post-war transformation. EGD was seen as a tool for the structural modernisation of the Ukrainian economy, important for ensuring sustainable recovery and strategic rapprochement with the EU. The study established that in the context of the armed conflict, EGD acquired a transformational content, combining environmental goals with the priorities of energy security, economic sustainability and institutional restoration. The study revealed the fragmentation of the implementation process, which was largely due to the instability of regulatory integration, limited national institutional resources and difficulties in cross-sectoral coordination. At the same time, there was a gradual increase in Ukraine's participation in EU green initiatives, especially in the areas of energy efficiency, decarbonisation and renewable energy development. The integration of EGD principles into national early recovery plans and post-war reconstruction strategies was analysed.

A comparative analysis of the experience of Croatia and Georgia was conducted, which demonstrated the relevance of certain institutional and financial models for application in the Ukrainian context. Comparison with Croatia (increase in the share of renewable energy sources from 31% to 70%) and Georgia (from 19.5% to 80.3%) showed the potential for adapting institutional models, provided that national capacity is built. Barriers were identified: lack of environmental statistics, competition between donors, and the absence of a single coordinating body.

Based on the analysis, several recommendations for strengthening the green transformation policy are formulated. It is proposed to adapt the regulatory framework to the principles of EGD and develop a system for monitoring the green footprint of projects. Attention is drawn to the need to ensure political conditions for transparency, public participation, and alignment of environmental goals with strategic planning. Promising areas for further research include quantifying the impact of environmental investments on the structure of post-war recovery, studying sectoral efficiency in the context of the Green Deal, and analysing donor interaction in climate finance.

## Conflict of Interest
None.

## References

[1] Akhvlediani, T. (2023). Georgia: It is time to address the devastating effects of climate change. In M. Kaeding, J. Pollak & P. Schmidt (Eds.), *Climate change and the future of Europe* (pp. 133-137). Cham: Springer. doi: 10.1007/978-3-031-23328-9_30.

[2] Aleksyeyeva, Y., & Pintsch, A. (2025). Ukraine's compliance with norms of environmental democracy: Between wartime restrictions, EU standards and green reconstruction. In M. Rabinovych & A. Pintsch (Eds.), *Ukraine's thorny path to the EU. Palgrave studies in European Union politics* (pp. 223-246). Cham: Palgrave Macmillan. doi: 10.1007/978-3-031-69154-6_10.

[3] Alves, J.M. (2023). *European sustainable finance: Introductory notes on the EU green deal and new green finance perspectives*. Lisboa: Research Centre for the Future of Law. doi: 10.34632/9789725409640.

[4] Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Georgia, of the other part. (2014, August). Retrieved from http://data.europa.eu/eli/agree_internation/2014/494/2023-03-06.

[5] Association Agreement between the European Union and Ukraine. (2014, June). Retrieved from https://www.kmu.gov.ua/en/yevropejska-integraciya/ugoda-pro-asociacyu.

[6] Boiarko, I., & Trushkina, H. (2024). Financing types in the sustainable development economy. *Society. Economy. Digitalization*, 2(2), 34-49. doi: 10.31379/sed.2.2.2024.1.

[7] Brenner, J. (2022). Some ideas for a post-war recovery of Ukrainian cities. *Urban Research & Practice*, 16(2), 294-300. doi: 10.1080/17535069.2022.2097646.

[8] Carbon Gap. (n.d.). *Finland*. Retrieved from https://tracker.carbongap.org/regional-analysis/national/finland/.

[9] Chapters of the Acquis. (n.d.). Retrieved from https://enlargement.ec.europa.eu/enlargement-policy/conditions-membership/chapters-acquis_en.

[10] Chugunov, I., Kanyeva, T., & Lyubchak, I. (2023). Financial instruments for implementing the European Green Deal in Ukraine. *Economics and Society*, 56. doi: 10.32782/2524-0072/2023-56-141.

[11] Cifuentes-Faura, J. (2022). European Union policies and their role in combating climate change over the years. *Air Quality, Atmosphere & Health*, 15, 1333-1340. doi: 10.1007/s11869-022-01156-5.

[12] Ciot, M.-G. (2022). Implementation perspectives for the European Green Deal in Central and Eastern Europe. *Sustainability*, 14(7), article number 3947. doi: 10.3390/su14073947.

[13] Climate Action. (2023). *Progress Report 2023. Country profile Croatia*. Retrieved from https://climate.ec.europa.eu/document/download/45a31742-0262-46d8-9e0a-c5803e3b860a_en?filename=hr_2023_factsheet_en.pdf.

[14] Croatia to add 1.5 GW of renewables by 2025. (2021). Retrieved from https://balkangreenenergynews.com/croatia-to-add-1-5-gw-of-renewables-by-2025/.

[15] Croatia's National Environmental Action Plan. (2005). Retrieved from https://unfccc.int/resource/docs/natc/pam/cromapn1.pdf.

[16] Directive of the European Parliament and of the Council No. 2004/35/EC "On Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage". (2004, April). Retrieved from http://data.europa.eu/eli/dir/2004/35/oj.

[17] Directive of the European Parliament and of the Council No. 2010/75/EU "On Industrial Emissions (Integrated Pollution Prevention and Control)". (2010, November). Retrieved from http://data.europa.eu/eli/dir/2010/75/oj.

[18] EU Mission: Adaptation to Climate Change. (2024). Retrieved from https://horizon-europe.org.ua/en/structure/missions/climate-change-adaptation/.

[19] European Bank for Reconstruction and Development. (2025). *EBRD deploys record €2.4 billion in Ukraine in 2024*. Retrieved from https://www.ebrd.com/home/news-and-events/news/2025/EBRD-deploys-record--2-4-billion-in-Ukraine-in-2024.html.

[20] European Bank for Reconstruction and Development. (n.d.). *The EBRD in Ukraine*. Retrieved from https://www.ebrd.com/home/what-we-do/where-we-invest/ukraine.html#customtab-d38dc075f6-item-7e0c372c38-tab.

[21] European Commission. (2009). *Instrument for structural policy for pre-accession – report 2008*. Retrieved from https://ec.europa.eu/regional_policy/en/information/publications/reports/2009/instrument-for-structural-policy-for-pre-accession-ispa-report-2008.

[22] European Commission. (2023). *2023 Country Report – Croatia*. Retrieved from https://economy-finance.ec.europa.eu/publications/2023-country-report-croatia_en.

[23] European Commission. (n.d.). *EU financial support to Ukraine*. Retrieved from https://commission.europa.eu/topics/eu-solidarity-ukraine/eu-assistance-ukraine/eu-financial-support-ukraine_en.

[24] European Environment Agency. (2025). *Croatia profile on municipal and packaging waste management – 2025*. Retrieved from https://www.eea.europa.eu/en/topics/in-depth/waste-and-recycling/municipal-and-packaging-waste-management-country-profiles-2025/hr-municipal-waste-factsheet.pdf.

[25] European Green Deal. (2024, June). Retrieved from https://www.consilium.europa.eu/en/policies/european-green-deal/.

[26] European Neighbourhood Instrument. (n.d.). Retrieved from https://south.euneighbours.eu/the-european-neighbourhood-instrument-eni/.

[27] European Neighbourhood Program for Agriculture and Rural Development. (2013). Retrieved from https://www.eeas.europa.eu/eeas/european-neighbourhood-program-agriculture-and-rural-development_en.

[28] Eurostat. (2024). *Renewables Account for 24.5% of EU Energy Use in 2023*. Retrieved from https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20241219-3.

[29] Finance and the Green Deal. (n.d.). Retrieved from https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal_en#documents.

[30] Funds under EIB's Ukraine Recovery Programme will be distributed using DREAM. (2024). Retrieved from https://www.dream.gov.ua/news/article-75.

[31] Genc, T.S., & Kosempel, S. (2023). Energy transition and the economy: A review article. *Energies*, 16(7), article number 2965. doi: 10.3390/en16072965.

[32] Georgia's 2030 Climate Change Strategy. (2021). Retrieved from https://faolex.fao.org/docs/pdf/geo209870.pdf.

[33] Green Infrastructure in Croatia. (2020). Retrieved from https://biodiversity.europa.eu/countries/croatia/green-infrastructure.

[34] Hatipoglu, E., Soytas, M.A., & Belaïd, F. (2023). Environmental consequences of geopolitical crises: The case of economic sanctions and emissions. *Resources Policy*, 85, article number 104011. doi: 10.1016/j.resourpol.2023.104011.

[35] Hermoso, V., *et al.* (2022). The EU Biodiversity Strategy for 2030: Opportunities and challenges on the path towards biodiversity recovery. *Environmental Science & Policy*, 127, 263-271. doi: 10.1016/j.envsci.2021.10.028.

[36] Hoicka, C.E., Lowitzsch, J., Brisbois, M.C., Kumar, A., & Camargo, L.R. (2021). Implementing a just renewable energy transition: Policy advice for transposing the new European rules for renewable energy communities. *Energy Policy*, 156, article number 112435. doi: 10.1016/j.enpol.2021.112435.

[37] International Energy Agency. (2023). *Georgia energy profile*. Retrieved from https://iea.blob.core.windows.net/assets/eb7ac3b7-929b-4360-ac91-ae5b8e02be3e/GeorgiaEnergyProfile.pdf.

[38] International Renewable Energy Agency. (2025). *Energy transition assessment: Georgia*. Retrieved from https://www.irena.org/Publications/2025/Apr/Energy-transition-assessment-Georgia.

[39] Ivanyuta, S.P., & Yakushenko, L.M. (2022). *The European Green Deal and Ukraine's climate policy*. Kyiv: National Institute for Strategic Studies. doi: 10.53679/NISS-analytrep.2022.12.

[40] Kraft, M.E. (2021). *Environmental policy and politics*. New York: Routledge. doi: 10.4324/9781003106265.

[41] Krasovsky, V.G. (2024). Some legal aspects of implementing the European Green Deal in the context of the transition to renewable energy sources in Ukraine. *Rule of Law*, 55, 155-163. doi: 10.18524/2411-2054.2024.55.311968.

[42] Křemečková, N., & Šreflová, S.S. (2024). The green deal in the context of sustainable finance. *Gdańskie Studia Prawnicze*, 62(1), 68-81. doi: 10.26881/gsp.2024.1.05.

[43] Memorandum of Understanding between the European Commission and Ukraine. (2022, September). Retrieved from https://economy-finance.ec.europa.eu/system/files/2022-11/Memorandum%20of%20Understanding%20-%20EUR%205%20billion%20exceptional%20MFA%20to%20Ukraine.pdf.

[44] Minas, S. (2022). Financing climate justice in the European Union and China: Common mechanisms, different perspectives. *Asia Europe Journal*, 20, 377-401. doi: 10.1007/s10308-021-00644-0.

[45] National Energy and Climate Plan for the Period up to 2030. (2024). Retrieved from https://me.gov.ua/view/bb0b9ef5-ea96-4b8a-8f2f-471faf32c9df.

[46] National Renewable Energy Action Plan in Ukraine. (2024). Retrieved from https://dlf.ua/ua/natsionalnij-plan-dij-z-vidnovlyuvanoyi-energetiki-v-ukrayini/.

[47] Naturvårdsverket. (2025). *Environmental requirements in public procurement*. Retrieved from https://www.naturvardsverket.se/data-och-statistik/miljoledning/miljokrav-i-myndigheters-upphandlingar/.

[48] North-West Croatia Regional Energy Agency. (2023). *Croatia renewable energy trends in 2023 (Faster, higher, stronger)*. Retrieved from https://regea.org/croatia-renewable-energy-trends-in-2023-faster-higher-stronger-2/.

[49] Nygaard, A. (2023). The geopolitical risk and strategic uncertainty of green growth after the Ukraine invasion: How the circular economy can decrease the market power of and resource dependency on critical minerals. *Circular Economy and Sustainability*, 3, 1099-1126. doi: 10.1007/s43615-022-00181-x.

[50] Paris Climate Agreement. (2015, December). Retrieved from https://unfccc.int/sites/default/files/english_paris_agreement.pdf.

[51] Pavlović, A., Njegovan, M., Ivanišević, A., Radišić, M., Takači, A., Lošonc, A., & Kot, S. (2021). The impact of foreign direct investments and economic growth on environmental degradation: The case of the Balkans. *Energies*, 14(3), article number 566. doi: 10.3390/en14030566.

[52] Przychodzen, W., & Przychodzen, J. (2020). Determinants of renewable energy production in transition economies: A panel data approach. *Energy*, 191, article number 116583. doi: 10.1016/j.energy.2019.116583.

[53] Rassadina, I., & Sadovskyi, I. (2023). Height of spring barley plants depending on root nutrition. In E. Pluzhnik *et al.* (Eds.), *Proceedings of the XIII international scientific and practical conference* (pp. 17-18). Edmonton: ISG. doi: 10.46299/ISG.2023.1.13.

[54] Reconstruction of everything that was destroyed. (2024). Retrieved from https://www.kmu.gov.ua/en/the-government-priorities/reconstruction-of-everything-that-was-destroyed.

[55] Regulation of the European Parliament and of the Council No. 2021/1056 "Establishing the Just Transition Fund". (2021, June). Retrieved from http://data.europa.eu/eli/reg/2021/1056/oj.

[56] Regulation of the European Parliament and of the Council No. 2021/523 "Establishing the InvestEU Programme and amending Regulation (EU) 2015/1017". (2021, March). Retrieved from http://data.europa.eu/eli/reg/2021/523/oj.

[57] Ritchie, H., & Roser, M. (2025). *Ukraine: CO$_2$ country profile.* Retrieved from https://ourworldindata.org/co2/country/ukraine?country=UKR~HRV~GEO.

[58] Shevchenko, H., Petrushenko, M., Burkynskyi, B., & Khumarova, N. (2021). SDGs and the ability to manage change within the European Green Deal: The case of Ukraine. *Problems and Perspectives in Management*, 19(1), article number 53. doi: 10.21511/ppm.19(1).2021.05.

[59] Shyrokykh, K., & Melen-Zabramna, O. (2025). Europeanisation of Ukraine's policy on environment and climate: Instrumental and anticipatory compliance. In M. Rabinovych & A. Pintsch (Eds.), *Ukraine's thorny path to the EU* (pp. 247-277). Cham: Palgrave Macmillan. doi: 10.1007/978-3-031-69154-6_11.

[60] Sikora, A. (2021). European Green Deal – legal and financial challenges of the climate change. *ERA Forum*, 21, 681-697. doi: 10.1007/s12027-020-00637-3.

[61] Skjærseth, J.B. (2021). Towards a European Green Deal: The evolution of EU climate and energy policy mixes. *International Environmental Agreements: Politics, Law and Economics*, 21, 25-41. doi: 10.1007/s10784-021-09529-4.

[62] Sørly, R., Ghaye, T., & Kårtveit, B. (2021). *Stories of change and sustainability in the arctic regions: The interdependence of local and global*. London: Routledge. doi: 10.4324/9781003118633.

[63] Švarc, J. (2022). Policy framework for implementation of a circular economy in Croatia: Past, present, and future. *Socijalna Ekologija*, 31(2), 199-226. doi: 10.17234/SocEkol.31.2.3.

[64] Sweden's Climate Action Strategy. (2024). Retrieved from https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/767174/EPRS_BRI(2024)767174_EN.pdf.

[65] Taktakishvili, N. (2025). *The share of renewable energy in Georgia's power generation made up 80.3% – OMNIA.* Retrieved from https://bm.ge/en/news/the-share-of-renewable-energy-in-georgias-power-generation-made-up-803-omnia.

[66] Technical Assistance and Information Exchange. (n.d.). Retrieved from https://enlargement.ec.europa.eu/funding-technical-assistance/taiex_en.

[67] Teixeira, J.E., & Tavares-Lehmann, A.T. (2022). Industry 4.0 in the European Union: Policies and national strategies. *Technological Forecasting and Social Change*, 180, article number 121664. doi: 10.1016/j.techfore.2022.121664.

[68] Tsikoridze, N. (2024). Aspects of green transition in Georgia. *Journal of Development Studies*, 3(3), 58-64. doi: 10.52340/jds.2022.03.03.06.

[69] Ukraine Facility Plan. (2025). Retrieved from https://enlargement.ec.europa.eu/funding-technical-assistance/ukraine-facility_en.

[70] UkraineInvest. (2023). *Renewable energy*. Retrieved from https://ukraineinvest.gov.ua/en/industries/energy/renewable-energy/.

[71] United Nations. (2024). *Updated Ukraine recovery and reconstruction needs assessment released.* Retrieved from https://ukraine.un.org/en/260785-updated-ukraine-recovery-and-reconstruction-needs-assessment-released.

[72] Vasilyeva, N., Prilipko, S., Vasilyeva, O., & Shevchenko, N. (2024). Priority areas of post-war environmental recovery as a component of sustainable development of Ukrainian territories. *Scientific Bulletin: Public Administration*, 15(1), 133-145. doi: 10.33269/2618-0065-2024-1(15)-133-145.

[73] Wolf, S., Teitge, J., Mielke, J., Schütze, F., & Jaeger, C. (2021). The European Green Deal – more than climate neutrality. *Intereconomics*, 56, 99-107. doi: 10.1007/s10272-021-0963-z.

[74] World Bank. (2015). *Georgia: Country environmental analysis – institutional, economic and poverty aspects of Georgia's road to environmental sustainability*. Retrieved from https://documents1.worldbank.org/curated/en/293731468001755898/pdf/ACS13945-WP-P147475-Box391501B-PUBLIC-6-26-15.pdf.

[75] Yarosh, A. (2024). *LEED and BREEAM standard.* Retrieved from https://nerukhomi.ua/ukr/news/leed-ta-breeam-standart.htm.

[76] Yukhymenko, P., Batazhok, S., Rybak, N., Tkachenko, O., Bilyk, O., Panasiuk, V., & Prykhodko, T. (2024). Problems of the transition of the Ukrainian economy to a "green economy" based on sustainable technological change. *Journal of Infrastructure, Policy and Development*, 8(5), article number 3561. doi: 10.24294/jipd.v8i5.3561.

[77] Zimmermann, K., Mandelli, M., & Gerstenberg, A. (2024). Eco-social policies in a multilevel setup: From Brussels to Berlin. *Journal for Political Science*, 34, 255-271. doi: 10.1007/s41358-024-00381-x.

# Інституційні та фінансові механізми Європейського зеленого курсу в процесах раннього відновлення та повоєнної трансформації України

**Катерина Лещенко**

Кандидат економічних наук, доцент
Київський національний економічний університет імені Вадима Гетьмана
03057, просп. Берестейський, 54/1, м. Київ, Україна
https://orcid.org/0000-0001-8467-5141

**Анотація.** Актуальність дослідження полягала у необхідності екологічної інтеграції в національні політики відбудови України в умовах повномасштабної війни та євроінтеграції в межах Європейського зеленого курсу. Метою дослідження було проаналізувати інституційні та фінансові механізми реалізації принципів Європейського зеленого курсу у процесах раннього відновлення та післявоєнної трансформації України. Методологія дослідження ґрунтувалася на міждисциплінарному підході, що поєднував кількісний аналіз екологічного фінансування, кейс-стаді посткризових країн, порівняльну оцінку інституційної сумісності. У результаті було систематизовано інституційну архітектуру Європейського зеленого курсу з акцентом на ключових виконавчих і фінансових суб'єктах та визначено механізми їх взаємодії з українськими органами влади. Проаналізовано хронологію політичних рішень у 2020-2023 роках щодо декарбонізації, енергоефективності та розвитку відновлюваних джерел енергії. Зокрема, до 2023 року Україна збільшила частку відновлюваної енергії до 22 % у структурі генерації, зменшила викиди $CO_2$ на душу населення з 4,6 т (2020) до 3,6 т (2023), але зберігала нерівномірну інтеграцію екологічних критеріїв у плани відновлення. Порівняльний аналіз досвіду Хорватії (відновлювані джерела енергії – 70 %, частка «зелених» проєктів у національних програмах – понад 35 %) та Грузії (відновлювані джерела енергії – 80,3 %) дозволив виокремити ефективні моделі інституційної координації, зокрема створення єдиного органу для екологічного управління. Ідентифіковано ключові бар'єри: розпорошеність повноважень, слабка координація між міністерствами, нестабільна регуляторна база та обмежений доступ до кліматичного фінансування. У дослідженні було підкреслено, що ефективна зелена відбудова України потребує удосконалення механізмів фінансового залучення та адаптації регуляторної бази до стандартів ЄС. Практичне значення дослідження полягало у формулюванні чітких рекомендацій щодо модернізації інституцій. Отримані результати можуть бути використані при розробці національної стратегії зеленої відбудови та в процесі погодження з міжнародними донорами, з урахуванням критеріїв довгострокової екологічної стійкості

**Ключові слова:** інтеграція; моніторинг; стратегія; енергоефективність; декарбонізація; клімат

# Legal regulation of the use of social media for marketing purposes: Aspects of human rights and constitutional guarantees

**Bohdan Krytskyi**[*]

Postgraduate Student
Scientific Institute of Public Law
03035, 2a H. Kirpa Str., Kyiv, Ukraine
https://orcid.org/0009-0007-1816-7588

**Abstract.** This study aimed to develop recommendations for enhancing the protection of user rights in the digital environment by implementing transparent mechanisms for monitoring compliance with human rights and optimising regulatory acts. The study included a comprehensive analysis of the legal regulation of the use of social media for marketing purposes, the specifics of user data processing and their impact on privacy, personal autonomy and freedom of choice. The analysis found that existing mechanisms for protecting personal data on social networks are insufficient, and current regulatory acts do not fully ensure transparency in information processing. In particular, users are often unaware of the scope of the data being collected and processed by social platforms, indicating a problem of insufficient awareness and the complexity of obtaining consent for data processing. It was found that social networks use personalised content algorithms, which not only aim to optimise advertising but can also shape users' digital behaviour by restricting their access to alternative information. The study also showed that Ukraine's current legislation contains significant gaps in the area of digital privacy, particularly concerning the consent of users for personal data processing, the responsibility of platforms for confidentiality breaches, and the regulation of automated decision-making systems in marketing strategies. An analysis of international standards, notably the General Data Protection Regulation, revealed substantial differences between the European and Ukrainian models of personal data protection. Based on the identified shortcomings, the study formulated recommendations for improving personal data protection mechanisms, including strengthening the responsibility of technology companies for confidentiality breaches, including imposing significant fines for the unlawful collection and use of personal data

**Keywords:** confidential information; digitalisation; ethical standards; commercial strategies; information privacy; digital ethics

## Introduction

In modern world, social media has become an integral part of everyday life, actively influencing various aspects of social, economic and political activities. However, along with the growing influence of social media, an important issue arises regarding the legal regulation of their use, in particular in the context of marketing activities. One of the main problems is the balance between the economic interests of businesses that use social media as an effective tool for promoting goods and services and human rights, in particular the right to privacy, protection of personal data and freedom of speech. The problems of legal regulation of the use of personal data in social media, as well as the issue of achieving constitutional guarantees of human rights in the context of digitalisation, are becoming more important in the context of globalisation and rapid technological development.

Social media has become an integral part of the modern digital environment, radically transforming communication methods, information consumption, and business operations. They have impacted not only social interactions but also economic processes,

*\*Corresponding author*

opening new opportunities for brand development and customer engagement. M. Shmatok (2024) notes that these platforms play a key role in shaping consumer preferences by offering businesses effective mechanisms for targeted advertising and personalised marketing. Since 2014, the Ukrainian market has shown significant growth, reflected in the increasing number of companies using social media as a marketing tool to enhance brand recognition and boost sales volumes. According to a study conducted by the East-West Digital News (EWDN) portal in 2021, about 90% of Ukrainian businesses use social media for marketing purposes, with 35% considering these platforms the most effective way to engage customers (Gyzhko & Montrin, 2023; Farmkhaus, 2023). At the same time, the active use of digital platforms creates new challenges for legal regulation. The protection of personal data in the context of online sales and marketing is an extremely complex issue, as it combines both legal and technical aspects. For example, R.Yu. Kravets (2021) pointed out that the practice of targeted advertising, which is based on the collection of data without users' explicit consent, has sparked debates among lawyers and public figures.

Despite the existence of pan-European standards for personal data protection, the practice of compliance remains a challenge even for the largest technology corporations. In several cases, companies have violated established rules, causing significant public outcry and intensifying discussions about the effectiveness of current regulatory mechanisms. This is particularly evident in high-profile scandals involving data leaks and the unauthorised use of personal information. Among the most well-known of these are the Facebook and data leaks from major technology companies. One of the most resonant scandals in the field of digital marketing was the data leak from Facebook in 2018. The British analytics firm Cambridge Analytica (2018) unlawfully gained access to the data of over 87 million users, using it to create targeted political campaigns, notably during the 2016 US elections and the Brexit referendum. This was made possible due to weak personal data protection mechanisms on Facebook: the company allowed app developers to collect data not only from their users but also from their friends on the social network. The scandal caused significant global outrage and led to the tightening of legislative requirements concerning personal data processing. Facebook founder Mark Zuckerberg was forced to testify before the US Congress, and the company was fined USD 5 billion by the Federal Trade Commission (FTC). As a result, Facebook changed its privacy policy, restricted third-party app access to data, and implemented new control mechanisms.

In addition to Facebook, several other technology companies have also been involved in scandals related to data breaches. One of the largest incidents was the Yahoo data leak in 2013-2014, when hackers gained access to 3 billion accounts, marking the largest breach in digital security. This not only led to significant financial losses for the company due to multi-billion-dollar fines but also severely undermined users' trust in online service confidentiality (Svitlyk, 2023). A similar incident occurred with LinkedIn in 2021, when information about 700 million users was made publicly available. This raised concerns about data security in professional social networks and demonstrated the vulnerability even of platforms aimed at business audiences (Tidy, 2021).

The aim of the study was to analyse the legal regulation of the use of social media in marketing, considering human rights and constitutional guarantees. The task of the work was to develop proposals for enhancing the protection of user rights in the digital environment, formulating recommendations for improving mechanisms for monitoring compliance with human rights in the online space, and exploring the possibilities of harmonising Ukrainian legislation with international standards, such as the General Data Protection Regulation.

## Materials and Methods

The study was based on an interdisciplinary approach that combines legal, social, and technical aspects of analysing the use of personal data in social media for marketing purposes. This approach allows for a comprehensive evaluation of the effectiveness of existing legal norms, the impact of personalised marketing on users' rights, and potential threats associated with the use of large volumes of data. Special attention is given to analysing cases that illustrate violations of user rights in social media. Specifically, the Google scandal regarding illegal tracking of users' locations without their consent is examined, as well as the TikTok case, where the company was accused of collecting personal data of children without parental consent (Mori, 2021; Google to pay..., 2022).

The analysis of regulatory documents involved studying international and national legislation regulating the use of personal data. Specifically, documents such as the General Data Protection Regulation (GDPR), the European Convention on Human Rights (1950), the Law of Ukraine No. 2297-VI (2010), and the Law of Ukraine No. 675-VIII (2015) were examined. Special emphasis is placed on analysing provisions that define the rights and duties of social networks regarding the processing of personal data, as well as mechanisms for control by state regulators. A comparative analysis of legislative regulation of personal data in social media was carried out for the EU, the USA, and Ukraine. The EU is governed by Regulation of the European Parliament and of the Council No. 2016/679 (2016), the primary legislative act in the USA is the California Consumer Privacy Act (2018), and in Ukraine, it is governed by the Law of Ukraine No. 2297-VI (2010). The analysis considered the specific approaches to user confidentiality, legal control mechanisms, and corporate responsibility for violations.

A sociological approach was used to study the impact of personalised marketing strategies on user behaviour and rights. Statistical analysis was employed to illustrate the scale of personal data use in social media. Notably, the Pew Research Center (n.d.) study on excessive data collection by companies on customers, and research on the growth of the social media market and personalised advertising (Kubay *et al.*, 2016) were examined.

## Results

The foundation of personal data protection systems lies in the European Convention on Human Rights (1950), particularly Article 8, which stipulates those public authorities shall not interfere with citizens' private life except when such interference is legally justified, necessary for a democratic society, and carried out for the purpose of ensuring national security, public order, or protecting the rights and freedoms of others. Regulatory control over personal data protection is based on international human rights treaties that view this as an integral part of the right to privacy. The Directive of the European Parliament and of the Council No. 95/46/EC (1995) became the cornerstone for national regulatory acts, including the Law of Ukraine No. 2297-VI (2010).

National legislation in Ukraine also provides for the regulatory protection of personal data. This is enshrined in Article 32 of the Constitution of Ukraine (1996), which prohibits the collection, storage, and use of confidential information without the person's consent, except in cases provided by law. The Law of Ukraine No. 2297-VI (2010) contains provisions regarding the protection of information, which are clarified by secondary legislation, such as the Typical Procedure for the Processing of Personal Data and other regulatory documents that establish the rules and conditions for processing personal information. The growing popularity of social networks and personalised advertising creates new challenges regarding confidentiality. Targeted advertising, based on the analysis of user behaviour, allows companies to create detailed consumer profiles using parameters such as preferences, geolocation, financial status, and even emotional state (Baruh & Popescu, 2017).

On the one hand, personalised advertising improves the user experience, but on the other, it may restrict freedom of choice and privacy. For example, social media algorithms can manipulate consumer preferences, creating imposed needs and stimulating the purchase of goods or services that users did not plan to buy (Chirak, 2023). Moreover, data collection models often lack sufficient transparency. Many users do not read or understand privacy policies, depriving them of the opportunity to make an informed decision regarding the use of their personal data (Solove, 2007).

Personal data refers to any information that allows identification among other individuals (Tymoshenko, 2023). According to the Law of Ukraine No. 2297-VI (2010), personal data is understood as information or a set of information about a natural person who is identified or can be specifically identified. Personal data is classified into general and sensitive categories. In Ukraine, sensitive data includes information about racial or ethnic origin, political, religious, or philosophical beliefs, membership in political parties or trade unions, criminal records, as well as data related to health, sexual life, biometric or genetic data. The practice of using personal data, especially sensitive data, for advertising purposes often leads to violations of legislation (How personal data…, 2021). The use of personal data for marketing purposes significantly impacts users' personal autonomy and privacy. On the one hand, personalised advertising creates a more relevant experience for consumers, but on the other, it breaches the boundaries of private life and limits freedom of choice.

The collection and analysis of user data allow companies to create detailed profiles that include information about preferences, habits, financial status, location, and sometimes even emotional state. These data are used to predict behaviour and influence consumer decision-making. For example, targeted advertising can create a sense of urgency for users to purchase products or services they had not intended to buy, thus restricting their personal autonomy. Many platforms gain access to data through hidden mechanisms, such as background activity tracking or reading metadata, without users' direct consent. The loss of privacy becomes one of the greatest concerns in this context. The collected data is often not only used for marketing purposes but may also be shared with third parties without users' knowledge. This creates a risk of misuse, such as data leaks or unauthorised use (Baruh & Popescu, 2017).

The "notice and choice" model, which dominates privacy regulation, requires individuals to be responsible for managing their private data. On the one hand, users can opt out of services that do not provide adequate privacy protection. On the other hand, according to marketing experts, if consumers overcome their concerns about potential data misuse and carefully assess available protection options, they can fully engage in the mutually beneficial exchange of personal information. This model is widely supported by government policies and industry standards, such as the "privacy by design" approach implemented in the USA and EU. It is expected that after being informed, consumers will take responsibility for their decisions regarding privacy and the consequences of those decisions (Solove, 2007).

However, studies showed that people are very concerned about the use of their data but often lack the knowledge or tools to effectively protect their privacy. Many users do not read or understand privacy policies and cannot predict how their data will be used in the future. This problem arises not only from personal shortcomings but also from structural barriers created by

the modern big data environment. The digital economy focuses on integrating people into its ecosystem rather than genuinely raising awareness about privacy risks (Solove, 2007). Moreover, the individually orientated "notice and choice" model may not only fail to protect privacy but also negatively affect overall public privacy standards. When decisions about privacy are left entirely to individuals, collective privacy values may decline. The reliance either on opting out of the digital economy as a form of resistance or on market tools for managing privacy does not address systemic problems. A collective understanding of privacy, considering its broader social aspects and strengthening protection for everyone, is necessary (Westin, 2003).

Thus, the use of user data for marketing purposes presents significant challenges to personal autonomy and privacy protection. To minimise the negative impact, stricter data processing regulation mechanisms need to be implemented, privacy policy transparency should be enhanced, and user awareness about their rights should be increased. An important international document in this field is the GDPR, adopted in the EU in 2016. This regulation establishes high standards for data protection that apply not only to EU member states but also to individuals and legal entities from other countries in certain cases. The GDPR defines key principles of personal data processing, such as legality, transparency, relevance, security, and data retention limitations.

It also strengthens individuals' rights, including the right to access their data, the right to delete information, and the right to informed consent. Although Ukraine is not an EU member, the provisions of the GDPR can affect entities under Ukrainian jurisdiction in cases of cross-border processing of personal data. This further highlights the importance of aligning national legislation with international standards for data protection (Ovcharenko, 2018). The EU, through the GDPR, has implemented one of the strictest and most comprehensive personal data protection systems in the world. The GDPR not only sets high standards for the processing and storage of personal information but also applies to all organisations that handle the data of EU citizens, regardless of their geographic location. This ensures the extraterritorial application of the regulation, forcing companies from other countries to adapt their processes to meet European requirements (Lehka, 2021).

Importantly, the GDPR introduces stringent requirements for transparency, informed consent, and the protection of users' rights, such as the right to access, the right to correct data, and the right to "be forgotten". This approach guarantees not only the security of personal data but also enhances companies' accountability for any violations, imposing significant fines for non-compliance. A landmark case in this regard was that of Mario Costeja González, who demanded that Google remove information about his settled debts, which remained accessible online and harmed his reputation.

Costeja initially approached the newspaper "La Vanguardia", which refused to comply with his request. He then submitted a complaint to Google, which also did not comply. As a result, the Spanish Agency for the Protection of Data (AEPD) ordered Google to remove the links, but the company appealed to the Spanish court. The case was referred to the Court of the EU, which confirmed the right to remove outdated data from search results (Sukhorolsky, 2016). The GDPR came into effect the very next day, and the first complaints about its violations were filed the very next day. They concerned companies like Facebook, Instagram, WhatsApp, Google, and Android and related to the absence of users' voluntary consent for the processing of their data.

One well-known example is the scandal involving Google tracking users' locations. The company received numerous complaints in this case because its services collected geolocation data even after the tracking feature was turned off. This sparked public outrage and attracted the attention of regulators to issues of data collection transparency and users' rights to control their data (Google to pay…, 2022). Another example is the issue of storing children's data on TikTok. This platform was criticised for failing to comply with legislation regarding the protection of children's data. Regulators found that the company did not sufficiently inform parents and children about the collection of their data, which led to fines and demands for the platform to change its approach to processing minors' information (Mori, 2021).

In September 2018, the Portuguese regulator CNPD imposed a fine of EUR 400,000 on a local clinic for allowing employees to access patients' personal data using improperly created accounts. In March 2019, a company in Poland was fined EUR 220,000 for processing data on over 7 million people from public registers without properly informing those citizens (Lehka, 2021). Ukraine also took action. In 2020, the National Coordination Centre for Cybersecurity (NCCS) under the National Security and Defence Council (NSDC) of Ukraine recorded a personal data breach from one of the leading medical institutions in Dnipro. Personal data of employees and clients, including names, birthdates, addresses, phone numbers, emails, diagnoses, test results, and lists of people infected with COVID-19, were exposed. The incident was caused by errors in the configuration of information systems and databases that had internet access. This not only allowed unauthorised access to the data but also created risks of data modification, including changes to medical prescriptions, test results, and examination records (A leak of…, 2020).

"Big data" is associated with vast amounts of information generated by the informatisation of economic activities and everyday life. In the context of social media, it includes large volumes of structured data, which are often automatically filled through sensors, mobile devices, or platforms (Khrupovych & Borysova, 2021).

Statistics show a rapid growth of the social media market, accompanied by large-scale collection of personal information. Social networks like Facebook, Instagram, and TikTok generate enormous volumes of data about their users, including timestamps, geographical markers, interaction history, and personalised information (Fig. 1).
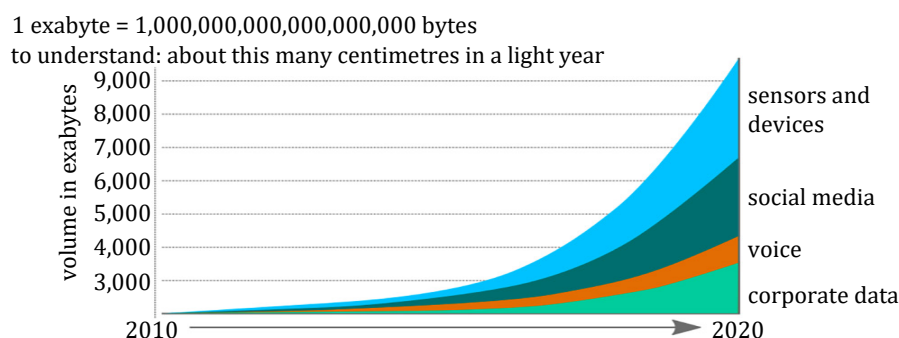
1 exabyte = 1,000,000,000,000,000,000 bytes
to understand: about this many centimetres in a light year



**Figure 1.** Dynamics of data volume growth by categories from 2010 to 2020
**Source:** K. Kubay *et al.* (2016)

The rapid increase in data volumes, especially in social networks, shows their key role not only in everyday life but also in business activity. Structured information generated in social media platforms becomes the basis for effectively using these platforms for marketing purposes (Marynin, 2024). In modern competitive environment, using social media has become an essential part of successful business operations. Through these channels, businesses can not only maintain their market positions but also actively grow. Having social media accounts allows businesses to increase the number of potential customers, improve sales, and simplify customer interactions. This enables providing personalised services, meeting the needs of each customer, and responding more quickly to their requests (Maksymova *et al.*, 2023).

A key element of a successful marketing strategy is a clear understanding of one's target audience. The portrait of the target audience helps identify the key characteristics of potential clients, allowing for optimised marketing campaigns, reducing unsuccessful contacts, and enhancing advertising effectiveness. A detailed portrait of the target client helps to understand the needs, motivations, and problems of buyers that the business can solve with its products or services. This allows businesses to create unique offers that precisely meet customers' expectations, thereby increasing sales and profits. Understanding the target audience also helps determine through which channels clients learn about the product and which devices they use. This information can be used to strengthen existing promotion channels or launch new ones (Khadzhiradieva *et al.*, 2024).

To create a portrait of the target audience, businesses analyse various characteristics, including geographic, demographic, social, and behavioural features (Jansen *et al.*, 2024). Particular attention is paid to clients' interests and their current needs, helping to demonstrate an understanding of consumer problems and offer solutions. Various methods are used to gather such data, including personal communication, online surveys, social media data analysis, and the use of analytics tools such as Google Analytics. These tools help track client behaviour, their location, the devices they use, and other details (Levinson, 2010).

Using social media for marketing purposes often raises questions about consumer freedom of choice and may shape imposed preferences. Due to content personalisation algorithms, users are shown products and services that match their previous search queries or online behaviour. This can limit access to alternative information, narrowing the choice to only those goods or services that the system deems relevant (Arrigo *et al.*, 2021). As a result, consumers are influenced by advertising strategies that can manipulate their needs and decisions, reducing them to pre-determined business goals. This approach not only affects consumer behaviour but also creates dependency on the algorithms that dictate what to buy or be interested in (Chirak, 2023).

The informational influence of social networks can reach significant scales and even impact society through information wars. In this context, influence is defined as the process aimed at changing the behaviour, thoughts, or decisions of an individual or group under the influence of another. It can be directed when the goal is to achieve a specific outcome or indirect, occurring unintentionally through external circumstances. Directed influence aims to change beliefs or behaviour; for example, convincing someone to take certain actions or make specific decisions. Indirect influence occurs without a clear goal as a result of random circumstances or actions. Social networks, due to their communication capabilities, have become a powerful tool of influence, connecting people and helping them achieve common goals. They provide links between individuals and groups exchanging information, influencing decisions, and coordinating actions (Chirak, 2023).

Protecting personal data on social networks at the individual level is a critical aspect of online security,

as evidenced by numerous empirical studies. For instance, the results of the national survey "Online Security" show that fraudulent activities related to personal data are widespread in Ukraine. According to the study, 30% of respondents have fallen victim to various forms of online fraud. This indicates that many social media users in Ukraine are insufficiently aware of proper security measures, leaving them vulnerable to various types of fraudulent activities, such as phishing, malware distribution, identity theft, and financial fraud (Kravchuk, 2024a).

One of the main elements of individual protection is privacy settings on social media (Kroll & Stieglitz, 2021). Popular platforms like Facebook, Instagram, and Twitter allow users to control access to their personal data and adjust relevant settings. For example, users can limit the number of people who have access to their personal data, photos, and posts. It is also important to be cautious when sharing personal data on social media. Users should avoid publishing excessive information such as credit card numbers, passport details, or home addresses that could be exploited by malicious actors. Instead, it is recommended to provide only the minimum personal data necessary for normal social media use (Kravchuk, 2024b; Humenyuk, 2024).

It is also important to consider how Ukrainian legislation aligns with the EU GDPR, the California Consumer Privacy Act (2018), and the regulations of EU countries. The GDPR, adopted in the EU, sets high standards for personal data protection. Key principles include legality, transparency, and fairness in processing, data minimisation, and ensuring the rights of data subjects. For example, the GDPR guarantees users' rights to access, correct, delete ("right to be forgotten"), and transfer their data. The regulation also has extraterritorial application: it applies to all companies processing data of EU citizens, regardless of their geographic location. The California Consumer Privacy Act (2018), effective in California (USA), is focused on protecting consumer rights in the digital environment. Its key provisions include the right for consumers to know what data is being collected about them, request its deletion, or prohibit its sale. Although the California Consumer Privacy Act does not have extraterritorial application like the GDPR, its provisions still influence the business practices of many companies operating in the US (Dyakovsky, 2023).

At the same time, Ukraine's legislation in the field of personal data protection is based on the Law of Ukraine No. 2297-VI (2010). While this law incorporates some GDPR provisions, it has certain limitations. For instance, data subjects' rights, such as the "right to be forgotten" or the right to data portability, are underdeveloped. Additionally, fines for violations are much lower than those in the GDPR, which does not always motivate companies to comply with confidentiality standards. Ukrainian legislation also lacks extraterritorial

application, making it difficult to protect citizens' data in the international context (Dyakovsky, 2023).

With the development of the digital economy, personal data has become an important resource for business, particularly in marketing. Through the analysis of behavioural patterns, preferences, and personal characteristics, companies can form personalised advertising offers, optimise customer acquisition strategies, and enhance sales efficiency. However, this approach raises significant ethical questions, particularly regarding data collection transparency, informed consent from consumers, the line between legal targeting and manipulation, and companies' responsibility for data security. One of the key ethical dilemmas is the issue of obtaining user consent for processing their personal data (Nicholls *et al.*, 2016). Many companies use complex and unclear privacy policies that make it difficult for consumers to understand the extent of data being collected and how it will be used. This creates a situation where users formally agree to data processing without fully understanding all the consequences.

Moreover, consent is often obtained through mechanisms of "covert data collection", where information is gathered in the background without active interaction with the user (Zhang & Rodgers, 2023). For instance, mobile apps may track geolocation or access contacts without explicit notification (Ylitalo, 2024). Such practices contradict the principle of "transparency and control", which requires that users have a real opportunity to manage their personal information (Krat, 2020). Marketing strategies based on personalised advertising allow companies to significantly improve the quality of the user experience. For example, instead of random ads, users receive offers that match their interests (Tucker, 2014). However, this approach can have a reverse effect – the formation of a so-called filter bubble, where the user is limited to only the content the system deems relevant. This narrows access to alternative information, reducing the possibilities for independent choice (Dahlgren, 2021).

Another important ethical issue is the use of personal data to influence consumer decisions. A vivid example is "emotional artificial intelligence" technologies, which analyse users' mood through facial expressions, voice tone, or behaviour patterns. Protecting collected personal data is another significant ethical challenge. Many companies store vast amounts of sensitive information but do not always ensure its proper security. Frequent data leaks, hacker attacks, and unauthorised sales of information to third parties indicate flaws in the protection of user privacy. Adhering to ethical principles not only helps companies avoid reputational risks but also becomes an important strategic factor for long-term success. Investments in ethical marketing should be considered not as a cost but as an investment in brand sustainability and competitiveness in the future. Only those companies that ensure

a high ethical culture in their activities can maintain consumer trust, uphold their reputation, and remain market leaders (Rayko *et al.*, 2024).

To minimise ethical risks in digital marketing, it is essential to adhere to the principles of responsible use of personal information. Companies should ensure transparency by clearly informing users about the collection and use of their data. An important aspect is voluntary and informed consent, which implies that users have the right to decide what data they are willing to provide and receive clear conditions for its processing. To protect privacy, the amount of collected information should be limited to the minimum necessary level, and proper security measures should be guaranteed to prevent unauthorised access and data leaks (Rayko *et al.*, 2024). When comparing the approaches of different EU countries, one can see how national laws adapt to the requirements of the GDPR. For example, Germany has introduced strict rules for processing medical data, France has strengthened child protection in the digital environment, and Italy has created detailed regulations for processing financial information. Ukrainian legislation currently lacks such detail, making it less effective in specific areas (Bryntsev, 2021).

Under the GDPR provisions, significant administrative fines are imposed for violations of personal data processing rules. For less serious violations, the fine can be up to EUR 10 million or 2% of the company's total annual turnover from the previous financial year, whichever is higher. In cases of more serious violations, fines can reach EUR 20 million or 4% of the company's total annual turnover from the previous year, depending on which sum is higher. Meanwhile, Ukrainian legislation provides for significantly lower fines for similar violations. For example, late reporting or providing false data to the Ombudsman of the Verkhovna Rada of Ukraine results in administrative liability. The fine typically amounts to around UAH 5,100, which is much lower than the European sanctions. Similar liability is also imposed for non-compliance with the Ombudsman's lawful requests (Dyakovsky, 2023).

It is also important to note the structural differences between the GDPR and the California Consumer Privacy Act (2018). While the GDPR has a global nature and focuses on protecting the rights of data subjects, the California Consumer Privacy Act is more focused on regulating relationships between consumers and companies, particularly on the ability to prohibit the sale of data. To ensure Ukrainian legislation meets modern challenges, several changes need to be made. First, align the norms with the GDPR by expanding the rights of data subjects and introducing extraterritorial applicability. Second, strengthen companies' liability for violations, including increasing the size of fines. Third, develop specific rules for sectors such as healthcare and finance, similar to the practices of EU countries (Bryntsev, 2021).

Research results showed that the issue of protecting personal data in social networks remains one of the most pressing problems in the digital environment. The use of personal information for marketing purposes creates significant legal and ethical challenges, particularly regarding confidentiality, user consent, and data processing transparency. Analysing international and national legal norms highlights the need for stronger control over the use of personal data in commercial practices. Thus, harmonising Ukrainian legislation with international standards such as the GDPR and California Consumer Privacy Act (2018) is an essential step to ensure effective protection of citizens' personal data. This will not only strengthen legal protection but also align Ukraine with modern international standards in the field of privacy.

## Discussion

The results of the study confirmed that the issue of protecting personal data in social networks is highly relevant in the modern digital environment. Significant legal and ethical challenges have been identified regarding the use of personal information for marketing purposes. The main aspects are confidentiality, user consent, and data processing transparency. These problems are confirmed by numerous international studies, which emphasise the need to strengthen control over commercial practices that involve the use of personal data (Havur *et al.*, 2020).

Research into international legal norms indicates that the issue of privacy is not unique to Ukraine. The GDPR, adopted by the EU in 2016, sets high data protection standards that apply to all organisations handling information about EU citizens. D.J. Solove (2007) notes that the "notice and choice" system is inadequate to ensure transparency in the use of personal data, as users often do not fully realise the extent of the information being collected. This aligns with the results of this study, which showed that most users do not read or understand the privacy policies of social networks. Studies by L. Baruh & M. Popescu (2017) demonstrated that personalised advertising can not only improve users' experiences but also limit their personal autonomy by creating an artificial need for products or services they initially did not plan to purchase. These findings correlate with the research of P.M. Dahlgren (2021), who revealed the concept of the "digital cocoon", which forms users' preferences, limiting their access to alternative information.

A significant contribution to the discussion of privacy issues was made by A.F. Westin (2003), who emphasised the need for a collective approach to ensuring the security of personal data. He argued that shifting responsibility solely to users does not resolve the issue of effectively protecting information. J. Levinson (2010) also supported this position, emphasising that businesses that implement ethical standards in using

personal data have competitive advantages and higher levels of trust from clients. The findings of this research indicated that the use of personal data for marketing purposes creates numerous risks. A low level of user awareness is a significant issue, as the Pew Research Centre (n.d.) showed that 72% of respondents believe companies collect excessive information about them, and 65% are concerned about potential data leaks. The lack of transparency in data collection is confirmed by a case with Google, where the company continued to collect location data from users even after the tracking feature was disabled, demonstrating the need for stronger regulatory oversight (Google to pay…, 2022). The manipulative impact of personalised advertising is another serious challenge, as research by D.V. Rayko *et al.* (2024) showed that using artificial intelligence (AI) to analyse users' emotional states can lead to "emotional marketing", which significantly influences consumer decision-making and may limit users' autonomy.

Furthermore, the results confirmed the critical role of social networks in shaping the digital public space. J.M. Balkin (2021) argued that social network regulation should focus on creating reliable intermediary institutions that ensure the sustainable development of the digital environment and uphold the principles of free speech, political democracy, and cultural diversity. Regulation approaches to social networks differ significantly depending on the national context. K.A. Andresen (2011) emphasised the need to implement policies to reduce business and legal risks, such as the loss of trade secrets, violations of intellectual property rights, and failure to meet confidentiality obligations. R.E. Ennan (2024) examined the issue in the context of digital law, emphasising the need for its digitalisation and adaptation of traditional legal mechanisms to the digital economy. This aligns with the results of this study, which showed the importance of harmonising the legal regulation of digital rights and digital information circulation. D.V. Rayko *et al.* (2024) highlighted the risks of personalised advertising and its potential impact on users' autonomy through AI usage.

When comparing Ukrainian legislation with international standards, it is worth noting several key aspects: the GDPR imposes significantly stricter sanctions for violations of personal data processing than the Law of Ukraine No. 2297-VI (2010). In Ukraine, fines for privacy violations are much lower than in the EU, which reduces the responsibility of companies for failing to meet data security standards (Dyakovsky, 2023). To improve personal data protection in Ukraine, it is necessary to improve the legal framework according to international standards, strengthen companies' liability for personal data processing, and implement educational initiatives to raise users' digital literacy. Thus, harmonising Ukrainian legislation with GDPR norms will help enhance personal data protection and ensure greater transparency in the digital environment. Research

findings from H. Felzmann *et al.* (2019), C. Santos *et al.* (2021), and D. Almeida *et al.* (2022) confirmed that privacy and transparency in social networks are highly relevant. The use of personal data for marketing purposes creates significant challenges, as users often do not understand how their data is used.

One possible solution is the implementation of data usage control architectures, which include semantic information management, automated compliance with pivacy policies, and digital signatures for data authenticity verification (Felzmann *et al.*, 2019). These technologies can enhance the transparency of information processing on social networks and minimise the risks of data breaches or unauthorised use. Research by C. Santos *et al.* (2021) emphasised that consent management platforms (CMPs) used in social networks may violate the principles of transparency and user control over their data. They often act not as neutral intermediaries but as full-fledged personal data controllers, responsible for additional processing, sorting trackers, and automatically embedding third-party advertisers. This means that Ukrainian legislation needs to strengthen regulatory mechanisms to control such platforms to ensure user rights protection.

Another critical challenge is the development of facial recognition technology (FRT) in social networks. D. Almeida *et al.* (2022) noted that uncontrolled implementation of FRT could lead to privacy violations, biometric data collection without consent, and even human rights abuses. The introduction of regulatory standards should include not only the GDPR but also an impact assessment on human rights (HRIA), which will help avoid the opaque use of biometric technologies. Additionally, it is necessary to reconsider automated advertising algorithms that could manipulate users' choices. H. Felzmann *et al.* (2019) highlighted that transparency in the use of AI should not only comply with legal norms but also consider users' real perceptions of how their data is collected and analysed. Implementing such measures will minimise the risks of data breaches, ensure transparency in information processing, and increase user trust in the digital environment.

## Conclusions

Data protection is an essential aspect of safeguarding human rights in the digital age. A comparison of Ukrainian national legislation with international standards, such as the GDPR and the California Consumer Privacy Act, reveals significant gaps that need to be addressed. Aligning these norms will allow Ukrainian legislation to adapt to contemporary international challenges in the field of privacy. In summary, it can be said that Ukraine is in the process of forming national awareness, which requires improving the legal regulation of information relations according to modern challenges. One of the key tasks of the state in this regard is to determine strategic priorities for legal regulation

and create proper guarantees to ensure citizens' rights in the information sphere.

To achieve this goal, it is necessary to bring national legislation in line with European norms and international standards, as well as develop a unified legislative act regulating the processes of collecting, processing, protecting, and transferring personal data similar to the GDPR. An important aspect is also the harmonisation of the terminology with international normative documents, the implementation of mandatory certification to ensure information security, the development of modern cryptographic and encryption technologies, as well as strengthening liability for violations of personal data protection norms. Moreover, a significant role in enhancing personal data protection is played by citizens' awareness of their rights and how to protect their privacy. To this end, it is necessary to expand educational initiatives that promote increased digital literacy among the population, as well as introduce mandatory training programmes for companies working with personal data.

It is also worth considering the creation of an independent state authority or agency to oversee the processing of personal data, which would monitor companies' activities in this field, provide recommendations for improving legislation, and respond to citizens' complaints in cases of rights violations. Such a practice is already effectively implemented in many European countries, ensuring better protection of users' personal information. Further scientific research should be directed towards a deeper study of international experience to improve the Ukrainian personal data protection system and enhance its alignment with contemporary challenges. In the future, it is worth researching the effectiveness of different approaches to regulating privacy and personalised advertising in various countries, as well as evaluating the impact of new technologies such as artificial intelligence and blockchain on personal data protection.

## Conflict of Interest
None.

## References

[1] A leak of personal data of patients was revealed in one of the largest private clinics in Dnipro. (2020). Retrieved from https://interfax.com.ua/news/general/692349.html.

[2] Almeida, D., Shmarko, K., & Lomas, E. (2022). The ethics of facial recognition technologies, surveillance, and accountability in an age of artificial intelligence: A comparative analysis of US, EU, and UK regulatory frameworks. *AI and Ethics*, 2(3), 377-387. doi: 10.1007/s43681-021-00077-w.

[3] Andresen, K.A. (2011). Marketing through social networks: Business considerations-from brand to privacy. *William Mitchell Law Review*, 38(1), article number 10.

[4] Arrigo, E., Liberati, C., & Mariani, P. (2021). Social media data and users' preferences: A statistical analysis to support marketing communication. *Big Data Research*, 24, article number 100189. doi: 10.1016/j.bdr.2021.100189.

[5] Balkin, J.M. (2021). How to regulate (and not regulate) social media. *Journal of Free Speech Law,* 1(1), 71-96.

[6] Baruh, L., & Popescu, M. (2017). Big data analytics and the limits of privacy self-management. *New Media & Society*, 19(4), 579-596. doi: 10.1177/1461444815614001.

[7] Bryntsev, O. (2021). Actual problems of personal data protection in Ukraine. In S.V. Glibko & K.V. Efremova (Eds.), *Collection of scientific works Research Institute of Legal Support for Innovative Development of the National Academy of Legal Sciences of Ukraine* (pp. 43-48). Kharkiv: Research Institute of Legal Support for Innovative Development of the National Academy of Legal Sciences of Ukraine.

[8] California Consumer Privacy Act. (2018, June). Retrieved from https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?division=3.&part=4.&lawCode=CIV&title=1.81.5.

[9] Cambridge Analytica. (2018). *Facebook data-harvest firm to shut.* Retrieved from https://www.bbc.com/news/business-43983958.

[10] Chirak, I.M. (2023). *The economics of social media.* Ternopil: Western Ukrainian National University.

[11] Constitution of Ukraine. (1996, June). Retrieved from https://zakon.rada.gov.ua/laws/show/en/254%D0%BA/96-%D0%B2%D1%80#Text.

[12] Dahlgren, P.M. (2021). A critical review of filter bubbles and a comparison with selective exposure. *Nordicom Review*, 42(1), 15-33. doi: 10.2478/nor-2021-0002.

[13] Directive of the European Parliament and of the Council No. 95/46/EC "On the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data". (1995, October). Retrieved from https://eur-lex.europa.eu/eli/dir/1995/46/oj/eng.

[14] Directive of the European Parliament and of the Council No. 97/66/EC "Concerning the processing of personal data and the protection of privacy in the telecommunications sector". (1997, December). Retrieved from https://eur-lex.europa.eu/eli/dir/1997/66/oj/eng.

[15] Dyakovsky, O. (2023). Comparative characteristics of personal data protection under national and european legislation. *Juridical Scientific and Electronic Journal,* 8, 278-280. doi: 10.32782/2524-0374/2023-8/64.

[16] Ennan, R.E. (2024). Digitalization of law and formation of digital law. *Uzhhorod National University Herald Series Law*, 1(83), 200-205. doi: 10.24144/2307-3322.2024.83.1.29.

[17] European Convention on Human Rights. (1950, November). Retrieved from https://www.echr.coe.int/european-convention-on-human-rights.

[18] Farmkhaus, P. (2023). Social networks as a tool for state communication with citizens: Analysis of problems and paths for optimization. *Scientific Notes of Taurida V I Vernadsky University Series Public Administration*, 6, 169-174. doi: 10.32782/tnu-2663-6468/2023.6/27.

[19] Felzmann, H., Villaronga, E.F., Lutz, C., & Tamò-Larrieux, A. (2019). Transparency you can trust: Transparency requirements for artificial intelligence between legal norms and contextual concerns. *Big Data & Society*, 6(1). doi: 10.1177/2053951719860542.

[20] Google to pay $391.5 million for secretly tracking users' location history. (2022). Retrieved from https://interfax.com.ua/news/telecom/872134.html.

[21] Gyzhko, M., & Montrin, I. (2023). Theoretical foundations of marketing in social networks. In A.A. Mazaraki (Ed.), *Brand management: Marketing technologies: Abstracts of the 5th international scientific and practical conference* (pp. 300-301). Kyiv: State Trade and Economic University.

[22] Havur, G., Sande, M.V., & Kirrane, S. (2020). Greater control and transparency in personal data processing. In S. Furnell, P. Mori, E. Weippl & O. Camp (Eds.), *Proceedings of the 6th international conference on information systems security and privacy* (pp. 655-662). Valletta: SciTePress. doi: 10.5220/0009143206550662.

[23] How personal data became a bargaining chip for political forces in elections. (2021). Retrieved from https://cedem.org.ua/analytics/personalni-dani-vybory/.

[24] Humenyuk, V. (2024). *Legal regulation of facial recognition technologies in the EU, the USA and Ukraine: Private and public law aspects*. Kyiv: National University "Kyiv-Mohyla Academy".

[25] Jansen, B.J., Aldous, K.K., Salminen, J., Almerekhi, H., & Jung, S.G. (2024). *Understanding audiences, customers, and users via analytics: An introduction to the employment of web, social, and other types of digital people data.* Cham: Springer. doi: 10.1007/978-3-031-41933-1.

[26] Khadzhiradieva, S., Bezverkhniuk, T., Nazarenko, O., Bazyka, S., & Dotsenko, T. (2024). Personal data protection: Between human rights protection and national security. *Social and Legal Studios*, 7(3), 245-256. doi: 10.32518/sals3.2024.245.

[27] Khrupovych, S.E., & Borysova, T.M. (2021). Using artificial intelligence in marketing analysis of unstructured data. *Marketing and Digital Technologies*, 5(1), 17-26. doi: 10.15276/mdt.5.1.2021.2.

[28] Krat, O.O. (2020). *Organization of marketing activities in social networks*. Poltava: Poltava University of Economics and Trade.

[29] Kravchuk, V.O. (2024a). Administrative-legal protection tasks of personal data in social networks. *Precarpathian Legal Bulletin*, 2(55), 65-68. doi: 10.32782/pyuv.v2.2024.14.

[30] Kravchuk, V.O. (2024b). Personal data protection in social networks in the EU, the USA and China. In I.V. Zhukova & E.O. Romanenko (Eds.), *Modern aspects of science modernization: Status, problems, development trends: Materials of the XXXV international scientific and practical conference* (pp. 90-96). Istanbul: Public Scientific Organization "All-Ukrainian Assembly of Doctors of Science in Public Administration".

[31] Kravets, R.Yu. (2021). *Use of personal data in advertising and sales.* Retrieved from http://protocol.ua/ua/vikoristannya_personalnih_danih_v_reklami_ta_prodagah/#google_vignette.

[32] Kroll, T., & Stieglitz, S. (2021). Digital nudging and privacy: Improving decisions about self-disclosure in social networks. *Behaviour and Information Technology*, 40(1), 1-19. doi: 10.1080/0144929x.2019.1584644.

[33] Kubay, K., Gazin, A., Horbal, A., Shulga, E., & Shapovalenko, E. (2016). *Open data open guide*. Retrieved from https://socialdata.org.ua/manual/.

[34] Law of Ukraine No. 2297-VI "On Personal Data Protection". (2010, June). Retrieved from https://zakon.rada.gov.ua/laws/show/en/2297-17#Text.

[35] Law of Ukraine No. 675-VIII "On Electronic Commerce (E-Commerce)". (2015, September). Retrieved from https://zakon.rada.gov.ua/laws/show/en/675-19#Text.

[36] Lehka, O.V. (2021). Current issues of personal data protection: Domestic and international experience. *Legal Position*, 2(31), 74-79. doi: 10.32836/2521-6473.2021-2.15.

[37] Levinson, J. (2010). *Guerrilla marketing for nonprofits.* Irvine: Entrepreneur Press.

[38] Maksymova, J., Rudyk, O., & Zaletska, I. (2023). Use of social media for effective activities of modern enterprises. *Economy and Society*, 47. doi: 10.32782/2524-0072/2023-47-75.

[39] Marynin, D.L. (2024). Big data collection and processing methods used in modern systems. *Scientific Notes of Taurida National V.I. Vernadsky University Series Technical Sciences,* 35(74(2)), 369-375. doi: 10.32782/2663-5941/2024.2/51.

[40] Mori, Y. (2021). *TikTok accused of illegally collecting personal data of underage users.* Retrieved from https://suspilne.media/culture/124635-tiktok-zvinuvaucut-u-nezakonnomu-zbori-osobistih-danih-nepovnolitnih-koristuvaciv/.

[41] Nicholls, S.G., Langan, S.M., & Benchimol, E.I. (2016). Reporting and transparency in big data: The nexus of ethics and methodology. In B.D. Mittelstadt & L. Floridi (Eds.), *The ethics of biomedical big data* (pp. 339-365). Cham: Springer. doi: 10.1007/978-3-319-33525-4_15.

[42] Ovcharenko, Ya.O. (2018). General data protection regulation aand possibility to apply it in Ukraine. *Legal Scientific Electronic Journal,* 3, 236-239.

[43] Pew Research Center. (n.d.). Retrieved from https://www.pewresearch.org/.

[44] Rayko, D.V., Masalab, O.V., & Alekseev, O.S. (2024). Ethical aspects of digital marketing and their impact on consumers and society. In E.I. Sokol (Ed.), *Information technologies: Science, engineering, technology, education, health: Abstracts of the 32nd international scientific and practical conference.* Kharkiv: National Technical University "Kharkiv Polytechnic Institute".

[45] Regulation of the European Parliament and of the Council No. 2016/679 "On the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data, and Repealing Directive 95/46/EC (General Data Protection Regulation)". (2016, April). Retrieved from https://eur-lex.europa.eu/eli/reg/2016/679/oj/eng.

[46] Santos, C., Nouwens, M., Toth, M., Bielova, N., & Roca, V. (2021). Consent management platforms under the GDPR: Processors and/or controllers? In N. Gruschka, L.F.C. Antunes, K. Rannenberg & P. Drogkaris (Eds.), *9th Annual privacy forum: Proceedings: Privacy technologies and policy* (pp. 47-69). Cham: Springer. doi: 10.1007/978-3-030-76663-4_3.

[47] Shmatok, M. (2024). The role of social media in creating and naging the brand image of a small business. *Scientific View: Economics and Management,* 1(85), 91-97 doi: 10.32782/2521-666X/2024-85-14.

[48] Solove, D.J. (2007). *The future of reputation: Gossip, rumor, and privacy on the internet.* New Haven, London: Yale University Press.

[49] Sukhorolsky, P. (2016). The right to be forgotten in the legal system of the European Union: Realities, problems and prospects. In *The science of international law at the turn of the century. Trends in development and transformation: A special edition of scientific articles* (pp. 90-101). Lviv: Ivan Franko National University of Lviv.

[50] Svitlyk, Y. (2023). *The most famous hacker attacks that hit the whole world.* Retrieved from https://root-nation.com/en/articles-en/tech-en/en-most-famous-hacker-attacks/.

[51] Tidy, J. (2021). *How your personal data is being scraped from social media.* Retrieved from https://www.bbc.com/news/business-57841239.

[52] Tucker, C.E. (2014). Social networks, personalized advertising, and privacy controls. *Journal of Marketing Research,* 51(5), 546-562. doi: 10.1509/jmr.10.0355.

[53] Tymoshenko, O. (2023). Protection of personal data in civil legal relations: National legal provision through the prism of the practice of the European Court of Human Rights. *Analytical and Comparative Jurisprudence,* 4, 165-172. doi: 10.24144/2788-6018.2023.04.27.

[54] Westin, A.F. (2003). Social and political dimensions of privacy. *Journal of Social Issues,* 59(2), 431-453. doi: 10.1111/1540-4560.00072.

[55] Ylitalo, J. (2024). *Smart phones and data collection: Autonomous agency in everyday experience.* Espoo: Aalto University.

[56] Zhang, W., & Rodgers, S. (2023). Linking ethnicity targeting with artificial intelligence and data collection: Perceptions and behavioral responses of black consumers. *Journal of Current Issues & Research in Advertising,* 44(3), 37-391. doi: 10.1080/10641734.2023.2212022.

# Правове регулювання використання соціальних медіа в маркетингових цілях: аспекти прав людини та конституційні гарантії

Богдан Крицький

Аспірант
Науково-дослідний інститут публічного права
03035, вул. Г. Кірпи, 2а, м. Київ, Україна
https://orcid.org/0009-0007-1816-7588

**Анотація.** Метою роботи було вироблення рекомендацій для підвищення захисту прав користувачів у цифровому середовищі шляхом впровадження прозорих механізмів контролю за дотриманням прав людини та оптимізації нормативних актів. Дослідження охопило комплексний аналіз правового регулювання використання соціальних медіа в маркетингових цілях, особливості обробки персональних даних користувачів та їхній вплив на приватність, особисту автономію і свободу вибору. За результатами аналізу встановлено, що існуючі механізми захисту персональних даних у соціальних мережах є недостатніми, а чинні нормативні акти не повною мірою забезпечують прозорість обробки інформації. Зокрема, користувачі часто не усвідомлюють обсягу даних, які збираються та обробляються соціальними платформами, що свідчить про проблему недостатньої інформованості та складність процесу отримання згоди на обробку даних. Виявлено, що соціальні мережі використовують алгоритми персоналізованого контенту, які не лише спрямовані на оптимізацію реклами, а й можуть формувати цифрову поведінку користувачів, обмежуючи їхній доступ до альтернативної інформації. Дослідження також показало, що поточне законодавство України містить значні прогалини у сфері цифрової приватності, зокрема в аспектах отримання згоди користувачів на обробку персональних даних, відповідальності платформ за порушення конфіденційності та регулювання використання автоматизованих систем ухвалення рішень у маркетингових стратегіях. Аналіз міжнародних стандартів, зокрема Загальний регламент про захист даних, показав суттєві відмінності між європейською та українською моделями захисту персональних даних. З огляду на виявлені недоліки, у роботі сформульовано рекомендації щодо удосконалення механізмів захисту персональних даних, зокрема посилення відповідальності технологічних компаній за порушення конфіденційності, включно з введенням суттєвих штрафів за незаконне збирання та використання персональних даних

**Ключові слова:** конфіденційна інформація; цифровізація; етичні стандарти; комерційні стратегії; інформаційна приватність; цифрова етика

# Analysis of the factors influencing the activities of public associations on the political component of Ukraine's national security: Current state and prospects

**Volodymyr Pivnenko**\*

Postgraduate Student
Cherkasy State Technological University
18006, 460 Shevchenko Blvd., Cherkasy, Ukraine
https://orcid.org/0000-0003-4930-1288

**Abstract.** In modern conditions of geopolitical challenges and internal transformations, the role of public associations in ensuring the national security of Ukraine is of particular relevance. The purpose of this study was to analyse the effects of public associations on the political component of national security and to identify factors that facilitate or impede this activity. For this, the study employed the methods of analysis, synthesis, comparison, and systematisation of data. The findings of the study showed that public associations are significant subjects of public life, which actively influence decision-making processes and contribute to the democratic development of the state. It was found that the activities of these organisations ensure transparency, accountability of the authorities, and promote pluralism, which are necessary conditions for effective governance and social stability. It was found that public associations perform a series of functions, including representative, mobilisation, controlling and communicative ones, which enables them to effectively interact with both the authorities and citizens. The analysis of Ukrainian and international practices revealed that the successful functioning of public associations depends on the level of civic activity, regulatory support for their activities, and support from the state. At the same time, the study identified the risks associated with politicisation of public associations, fragmentation of society, and possible external influence which may adversely affect national security. The study suggested ways to minimise these risks, specifically by improving legislation, raising the level of civic education and strengthening the mechanisms of interaction between civil society and state institutions. Such an approach will contribute to the development of a sustainable and inclusive civil society capable of responding effectively to the challenges of the modern time. The practical significance of this study is to use its findings to improve the interaction between the state and civil society, as well as to strengthen the effects of public associations on national security and minimise risks

**Keywords:** agents of influence; trade unions; charities; civil society; state security

## Introduction

In the context of modern geopolitical challenges and internal transformations of Ukrainian society, the issue of the effects of public associations on the political component of national security is of particular relevance and requires a thorough scientific and philosophical understanding. Considering the current geopolitical challenges and internal transformations of Ukrainian society, national security is of paramount significance.

The role of civil society in ensuring political stability and democratic development of the state is of particular interest. Public associations are not only active participants in socio-political life, but also indispensable tools for shaping security policy. Their influence on political processes is becoming increasingly significant, especially in the context of hybrid threats, European integration reforms and the need to strengthen state

*\*Corresponding author*

resilience. Therefore, a comprehensive study of the effects of civil society organisations on the political component of national security is crucial.

The issue of interaction between civil society and the state in the context of national security has been studied by many researchers. V.P. Horbulin & A.B. Kachynskyi (2021) analysed the participation of NGOs in overcoming crises and ensuring national security. The study showed that civil society plays a significant role in strengthening state institutions, especially during political and social transformations. Analysing the legal regulation of NGOs, H.M. Markovych (2023) emphasised the need to improve the legislative framework to create an effective mechanism of interaction between the state and civil society in the security sector. S.A. Sencha (2020) emphasised that civil society organisations act as a catalyst for democratic development, which is an essential factor in ensuring political stability and the state's resilience to internal and external threats. It should be emphasised that the same act also defines the term "state security". Having conducted an extensive study of the correlation between the terms "state security" and "national security", O. Turchenko & Yu. Hrutsenko (2024) concluded as follows: "The terms "national security", "state security", and "security of the state" are semantically related but not identical, the term "national security" is broader than the term "state security" and they are correlated as a whole and a component". G.P. Sytnyk (2022) concluded that "civil society is not an end in itself: it is a means of achieving a decent quality of life in a society where all conditions for self-realisation of the individual are created; it is a form of human community that is at a certain stage of development and meets the needs of individuals through work; it is a voluntarily formed association of individuals; it is a space of free individual communication protected by the necessary laws, where the values of citizens are respected". B. Hrushetskyi (2024) noted that "civil society is a set of non-governmental organisations that represent the will and interests of citizens". It includes the family and the private sphere, i.e., the "third sector" of society, along with the state and business. One of the key conditions for ensuring social and political stability is the proper development of civil society. That is why, according to the Law of Ukraine "On the Fundamentals of National Security of Ukraine", the creation of civil society is classified as a priority national interest.

Thus, the analysis of scientific sources showed the multidimensional effects of public associations on the political component of national security. However, questions persist regarding the effectiveness of interaction between the state and civil society, as well as the need to adapt international practices to Ukrainian context. The purpose of this study was to analyse the content, role, and mechanisms of influence of public associations on the political component of the national security of Ukraine, as well as to develop recommendations for improving their interaction with state institutions to strengthen the state's resilience.

## Materials and Methods

The study of the effects of public associations on the political component of Ukraine's national security was conducted based on an integrated approach that included qualitative and quantitative methods of analysis. The study employed general scientific methods, such as analysis and synthesis, which were used to identify the key factors of influence of public associations on the political component of national security; systematisation and generalisation, which were used to classify the principal trends in the development of civil society and mechanisms of its interaction with the state. Empirical methods in the form of content analysis of regulations and official documents helped to assess the current legislative framework for the activities of public associations in the field of national security.

Comparative analysis was employed to investigate the experience of the European Union, the United States and Canada in the context of involving civil society organisations in decision-making processes in the security sector. This study analysed a series of official documents, academic publications, and analytical reports covering the issues of civil society and national security. Specifically, the Law of Ukraine No. 2469-VIII (2024) and Decree of the President of Ukraine No. 392/2020 (2020), which play a key role in shaping the state security policy, were considered. Furthermore, the study used scientific monographs and articles in professional journals that analyse the relationship between civil society and national security. Official documents and analytical reports of Ukrainian and international organisations, including the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine, the UN, NATO, and the EU, were also considered. Sociological surveys on the level of trust in civil society organisations and their influence on political processes also formed a significant part of this analysis. The comparative analysis was conducted on the examples of Ukraine, Poland, Germany, the USA, and Canada. These countries were selected based on the following criteria:

▲ Elevated level of civil society development (USA, Canada, Germany).

▲ Similarity in transformation processes and experience of reforming the security sector (Ukraine, Poland).

▲ Existence of institutional mechanisms for interaction between civil society organisations and the authorities in the field of national security.

The applied methods and stages of the study allowed for a comprehensive assessment of the role of public associations in national security and formulation of practical recommendations for improving the state policy in this area.

## Results and Discussion

As of 2024, according to Article 1 of the Law of Ukraine No. 3257-IX (2023), the legislator defined public associations as follows: "A public association is a type of public self-organisation (of citizens and/or legal entities) that is created to implement public interests in the area defined by the charter, the direction of its activities, as well as to satisfy and protect the legitimate common interests of its members" (Law of Ukraine No. 3257-IX, 2023). Furthermore, it is determined that the forms of implementation of public associations can be public organisations – associations of individuals and public unions – associations of individuals and/or legal entities. Such organisations can exist both with and without the status of a legal entity. They may have diverse specifics in terms of scope of activity, geography of operation, and other factors. Article 2 of the Law of Ukraine No. 3257-IX (2023) makes provision that the scope of this Law does not apply to the activities of: "political parties; religious organisations; non-entrepreneurial companies established by acts of public authorities, other state bodies, authorities of the Autonomous Republic of Crimea, local self-government bodies; associations of local self-government bodies and their voluntary associations; self-regulatory organisations, professional self-government organisations; non-entrepreneurial companies (not being public associations) established based on other laws". At the same time, the relevant laws define, specifically, political parties and religious organisations as other forms of voluntary public associations, but they are regulated by separate legislative acts, and accordingly, by their form they cannot be directly perceived as public associations (Law of Ukraine No. 3894-IX, 2024; Law of Ukraine No. 4017-IX, 2024; Law of Ukraine No. 2365-III, 2024). This is mainly due to aspects related to the specifics of the activities of such associations.

But no less significant is not only the formal attempt to understand the content of the activities of public associations, but also their content. All the above types of organisations are aimed at satisfying the rights and interests of their members according to their statutory objectives. From the formal legal standpoint, such organisations will be distinguished by the area related to satisfaction of their members' interests. Special attention should be paid to the activities of public associations that, considering the specifics of their activities, have acquired a special status and even have specialised legislation regulating their activities. These include the Ukrainian National Bar Association and Law of Ukraine No. 5076-VI (2024).

At the same time, the areas of activity and involvement where public associations can influence the processes related to the activities of already state institutions are extremely extensive. Specifically, by taking part in public control councils, supervisory boards, advisory bodies, anti-corruption councils, and other collective bodies at various state-owned enterprises, institutions, organisations, and bodies, goals that are essential for the whole society, and not only for the categories of persons united within such a public association, can be achieved. What is equally relevant is that by taking part in other forms of civic associations, such as trade unions, individuals involved in the activities of such organisations acquire a wide range of powers and opportunities related to the exercise of the rights of the group they represent (Confidence in the state, 2022). Such opportunities are presented both in the ability to influence the activities of individual enterprises, institutions, and organisations, as well as to influence the adoption or non-adoption of decisions within them, and at the national level through participation in the lawmaking process.

Hence, an interim conclusion can be drawn that despite the narrow legislative wording regarding the types of organisations that are considered public associations, in fact, such associations are a broad category that will be primarily determined by the ability to carry out activities related to the protection of the rights and interests of members of such a community. Accordingly, it can be further assumed that a public association is a conditionally voluntary association whose main purpose is to perform actions aimed at protecting the rights and interests of such an association. It is vital to highlight the conditional voluntariness of such associations, since in the context of closed social groups, where not everyone can join them, there may be social, political, and economic factors that will be associated with the possibility of obtaining more preferences with the maximum involvement of all possible persons in such an association. It follows that, despite the absence of direct coercion to join such an association, there will still be factors of indirect coercion, which may take the form of restriction of access to additional preferences, various forms of mobilisation, etc. This requires a more in-depth study but will be most representative in forms related to the activities of political parties, religious organisations, and trade unions. If an individual is not a representative of any of the majority communities, but represents a minority community, it is more likely that the rest of the community will disassociate itself from such a person (Law of Ukraine No. 1045-XIV, 2023).

In terms of national security, the legislator defines it in Item 9, Part 1, Article 1 of the Law of Ukraine No. 3858-IX (2024) as "protection of state sovereignty, territorial integrity, democratic constitutional order, and other national interests of Ukraine from real and potential threats". Item 10 of Part 1 of Article 1 of the same Law defines the national interests of Ukraine as follows: "the vital interests of a person, society, and the state, the fulfilment of which ensures the state sovereignty of Ukraine, its progressive democratic development, as well as safe living conditions and the well-being of its citizens" (Law of Ukraine No. 3494-IX, 2023).

It follows that the term "national security" itself is broader and covers areas and issues that are not covered by state security, because, as described earlier, national security concerns not only institutional capacity, but also more general and significant categories and areas for the general public than the activities of institutions alone. The issue of national security was addressed in greater detail in terms of regulatory framework in the Decree of the President of Ukraine No. 392/2020 (2020). The Strategy, on the one hand, tries to provide answers to the most diverse sets of questions that may arise, considering the set of components of national security defined by the legislator, namely: state sovereignty, territorial integrity, democratic constitutional order, and other national interests. It is in the context of national security that the issue of protection of the above categories from real and potential threats is considered. In turn, threats, on the one hand, are factors, phenomena, trends that may make it impossible and/or challenging to implement national values and interests, as follows from the provisions of the Law on National Security.

On the other hand, the threats identified in Decree of the President of Ukraine No. 392/2020 (2020), the Law of Ukraine No. 3858-IX (2024), there is a wide range, including climate change and the effects on the natural environment; inequality and imbalance of development; rapid technological change; the spread of international terrorism and organised criminal groups, religious and ideological fundamentalism, and related phenomena; problems in a series of essential areas of state activity (information, healthcare, social protection); global uncertainty and unpredictability; new forms of global "polarity"; escalation by the Russian Federation (the aggressor state); hybrid forms of aggression against Ukraine; violations of human rights and freedoms; inefficiency of state bodies, as well as many other factors defined in Decree of the President of Ukraine No. 392/2020 (2020). Notably, both the Law of Ukraine No. 3858-IX (2024) and the Decree of the President of Ukraine No. 392/2020 (2020) allocate a crucial place in the national security system to an individual, their well-being and interests. Together with other things, it is assumed that it is the context of a person's perception of the state and society as an indisputable factor in ensuring their existence in the context of the ability to exercise rights and interests that can be considered a sign aimed at strengthening national security.

V.M. Shamrayeva (2018) summarised the common approaches and understanding of the security category as follows: "If we systematise the existing definitions of security, one can distinguish three key approaches to understanding the essence of this phenomenon. The first approach implies understanding security as a multidimensional state. This understanding of security is typical for most modern researchers and implies a refusal to consider it only as the absence of external threats to the state from other states. The second area involves considering security as an idea of what such a state should be and what it actually is. For example, security is a state of stable functioning and reproduction of a social object/subject, which is supported by a special institutional environment. Therewith, "reproduction" means the repetition in time and space, in the sequence of generations, of the structural, functional, and semantic characteristics of a social object/subject, taken in their dynamic relations with the environment. The third area lies in defining the essence of the phenomenon of security involves the allocation of mechanisms to ensure it" (Law of Ukraine No. 3858-IX, 2024).

The current state of influence of public associations on the political component of Ukraine's national security is characterised by a dialectical unity of opportunities and challenges. On the one hand, there is a strengthening of democratic control over the security sector, promotion of Ukraine's Euro-Atlantic integration, and increase of society's resilience to hybrid threats. On the other hand, there are risks of politicisation and radicalisation of certain public associations, the possibility of using public structures to promote external interests, and the potential fragmentation of society along ideological lines (Yevdokymenko, 2021). When considering development prospects, several key trends should be considered. Deepening digitalisation of civic activity expands opportunities for influence but also creates new challenges for cybersecurity. The strengthening of transnational ties of Ukrainian NGOs contributes to Ukraine's integration into the global democratic space. The growing role of think tanks in shaping national security policy improves the quality of decision-making. The development of mechanisms of state-public partnership in the field of national security optimises the use of public resources. The effects of NGOs on the political component of Ukraine's national security is a complex phenomenon characterised by multidimensionality and dynamism. Effective use of the positive potential of this influence while minimising risks requires the development of adaptive public administration strategies based on the principles of openness, inclusiveness, and strategic partnership between the state and civil society.

Furthermore, the Law of Ukraine No. 2469-VIII (2024) regulating the foundations of national security prescribes a significant role of civil society in strengthening the security of the state. Within the framework of this law, civil society organisations can become not only active participants in formulation of security policy, but also valuable tools for monitoring and public control over its implementation. The law stipulates that the security of the state depends on the active participation of society in discussing strategic issues such as defence, state security, and protection of citizens' rights and freedoms. The Law of Ukraine No. 4572-VI (2024) addresses the mechanisms of

legitimisation and functioning of public associations in Ukraine. The law guarantees the right of citizens to establish organisations that can influence various spheres of life, including the political component of national security. The legislative definition of the functions of CSOs enables them to act as partners of the state, but in practice it is vital to strike a balance between the rights of CSOs and the need to control them in the face of threats to national security. The Law of Ukraine No. 987-XII (2024) is significant in the context of the influence of religious and other public associations on political processes. The components of this law, specifically, relate to the rights of citizens to freedom of conscience, which underlies the activities of religious and non-governmental organisations. At the same time, the law introduces restrictions on the political activities of religious organisations to prevent them from undermining national security through their overly active participation in political processes. In the case of the involvement of religious associations in political activities, the law defines clear boundaries to ensure the stability and integrity of national security policy. The Resolution of the Cabinet of Ministers of Ukraine No. 996 (2023) is an important instrument for ensuring the participation of public associations in the formulation of policies related to national security. According to this resolution, the executive authorities are obliged to conduct a dialogue with the public, specifically through consultations with organisations representing the interests of the general public. This allows considering the opinions and proposals of public associations when making decisions on major national security issues and contributes to the development of policies that meet the interests of all citizens.

Thus, the legal framework governing the activities of public associations in Ukraine defines their role in shaping the political component of national security. However, the exercise of these rights in the context of security requires not only legal support, but also clear monitoring and control by the state to avoid potential threats that may arise from underestimating the influence of CSOs on political processes in the country. After analysing the legislative acts of Ukraine that regulate the activities of civil society organisations in the field of national security, it is advisable to consider concrete examples of such organisations, their role in the political process and the current state of functioning.

One of the most influential civic associations that has a significant political effect on the national security of Ukraine is the CHESNO Movement. Its activities are aimed at monitoring political integrity, fighting corruption, and increasing transparency in public administration. CHESNO actively influences the political discourse, contributing to the formation of public demand for fair elections and good governance. Another example is the Anti-Corruption Action Centre (AntAC), which plays a key role in exposing corruption schemes in the

highest echelons of power. Through its active advocacy, the AntAC manages to influence the legislative process, specifically, the adoption of anti-corruption laws and mechanisms for monitoring their implementation. The Centre for Defence Reforms is particularly significant in security policy. The organisation develops strategic approaches to strengthening Ukraine's defence capabilities, promotes the implementation of NATO standards, and generates public demand for security sector reform.

Civil society in Ukraine demonstrates a prominent level of activity, especially in the context of a full-scale war. Not only do civil society organisations take part in political control and the development of legislative initiatives, but they also act as a mobilising factor in crisis situations. The war has led to increased self-organisation of the population, which has manifested itself in the creation of volunteer movements, such as Come Back Alive and the Serhiy Prytula Foundation, which not only support the Armed Forces of Ukraine but also influence political decisions on military aid. At the same time, there are challenges, including the risk of politicisation of NGOs and their use in internal political struggles, as well as the threat of external influence through funding of certain organisations by pro-Russian entities. In the long term, further strengthening of the role of civil society can be expected in the national security sector. The key trends include:

▲ Strengthening the digital interaction between civil society and the state, which will facilitate the rapid exchange of information and control over the authorities.

▲ Increased international support for Ukrainian civil society organisations, which opens opportunities for training, exchange of practices, and resource mobilisation for the development of democratic institutions.

▲ Deepening public-private partnerships in defence and security, which will enable better coordination between the government and an active civil society.

▲ Prior to the outbreak of full-scale war, civil society organisations mainly focused on public administration reform, fighting corruption, and promoting democratic standards. During the period of martial law, their focus shifted considerably towards the security and defence sector. There has been an active involvement of civic initiatives in supporting the army, information warfare, countering propaganda, and helping internally displaced persons.

Thus, modern public associations play a significant role in ensuring the political component of Ukraine's national security. Their activities form an integral part of democratic processes, contribute to the strengthening of state institutions, and increase the resilience of society to internal and external threats. To summarise, the concept of national security is multifaceted and, specifically, considering the context of Ukraine, it involves a response to security threats. In other words, national security can be viewed as the absence of threats to state sovereignty, territorial integrity,

democratic constitutional order, vital interests of a person, society, and the state, which, specifically, will be expressed through welfare and sufficient conditions for a comfortable existence.

The above suggests that the perception of a certain factor as one that can affect a certain group of people and, accordingly, society can already be considered a factor of national security. Equally significant is what can be considered the political component of national security. The authors were unable to find any studies that would define the political component of national security among others. At the same time, the available sources allowed formulating the following. Considering the circles of actors available in the Law of Ukraine No. 3858-IX (2024) and Decree of the President of Ukraine No. 392/2020 (2020), as well as the already studied understanding of national security itself, it can be assumed that the political component of national security is a set of actions, processes, and mechanisms related to decision-making necessary to achieve the goals of national security, i.e., to meet the security needs of a person, society, and the state. In the context of the subject under study, let the focus be on the contexts of interaction between public associations and government institutions to formulate and implement such actions, decisions, and policies aimed at achieving the stated goals. At the same time, it is equally significant to consider how the activities of various forms of civic associations can affect aspects of both the political component of national security and the national security overall.

A separate aspect of the issue under study is the role of civil society in the context of influencing the state, and hence another question is whether civil society includes public associations. Based on the above, it can be concluded that civil society is more a form of achieving the goals and interests of representatives of this society, citizens, specifically, through the formation of ties and which can be represented through various organisations whose activities may be related to the interests and rights of their members. Other approaches to understanding civil society may also involve presenting it in the context of a social network of active society actors, an environment of people interested in change, etc. Accordingly, public associations are, arguably, a more institutionalised form of achieving the interests and exercising the rights of persons who are representatives of such associations, but it cannot be argued that the terms "civil society" and "public associations" are identical. However, public associations are a component of civil society. That is, the one where citizens can and should influence decisions, policies, and processes in the state.

This suggests that the mere existence of public associations will not mean the existence of civil society. At the same time, independent civic associations can be called an institutionalised form of civil society. Civil societies themselves may well be distinguished from a set of other entities that are interested in certain results

of the activities of certain authorities, enterprises, institutions, and organisations. The basic advantage of civic associations over such entities may be more extensive rights and powers; greater efficiency is possible due to the synergy of activities of a larger number of entities within one organisation that are interested in the same result. First of all, in essence, civil society will consist of the same actors that already influence the formation of policies, strategies, and laws within the state in other ways. As such, almost every citizen who, in theory, can invest their time and efforts to promote and fulfil their interests can be considered a civil society actor. The only way to influence other branches of power is through periodic involvement, namely through the electoral process, and, accordingly, delegation of their rights to govern the state to representatives.

The problematic point of this issue is that during the inter-election period, direct participation of citizens in decision-making processes is severely minimised, and, accordingly, another question arises, namely, the quality of actions or decision-making by elected representatives. The role of civil society in the period not related to the expression of citizens' will may consist in prompt intervention in decision-making processes and certain actions, providing their personal assessments. In other words, it can perform an auxiliary, monitoring function, which, first of all, enables a more transparent decision-making processes related to mechanisms and processes at the state level. Previously, the study typologised civic associations by type, but their specificity is extremely multifaceted and requires an even broader typology than presented previously. The following studies will try to understand more specifically the typology and categorisation of such associations.

Currently, according to the State Statistics Service of Ukraine as of 1 January 2023 and Detector Media, there are 99,556 public organisations; 28,757 trade unions; 27,091 religious organisations; 26,846 charitable organisations; 2,212 associations of public associations (public unions); 1,762 bodies of self-organisation of the population, 318 creative unions (2022 Sustainability index..., 2023). According to the Ministry of Justice of Ukraine, 365 political parties are currently registered (The Ministry of Justice of Ukraine, 2021).

To summarise all the above, public associations, by their very nature, act as mediators between the state and society, and individual components of this society – social groups and people. Notably, there are many forms of influence on political security. Both through the direct activities of public associations according to their statutory objectives and by joining bodies that can develop policies and strategies, rules, and provide their assessment of the events taking place. These bodies include those already mentioned above: advisory and consultative bodies, public control councils, anti-corruption councils, supervisory boards, etc. In turn, the influence of civil society organisations on the political

component of national security can be extremely multifaceted and expressed through positive, neutral, and negative factors. Positive factors include:

*Strengthening democracy and civil society*. This feature can be expressed in more active participation of civil society organisations and, accordingly, their involvement in decision-making processes, development of policies and strategies. Taken together, the involvement of representatives of civil society organisations in more complex processes can contribute to the formation of relevant values of a democratic society, which largely depends on the perception of the rest of society, as well as to a deeper understanding (awareness) of the processes taking place in the state, as well as to the acquisition of new knowledge and skills by representatives of such organisations. If the processes associated with such participation are sufficiently publicised, the formation of political culture and consciousness among citizens both associated with such associations and those operating outside such associations may take place.

*Accountability and publicity, control over government activities*. The involvement of public associations directly or indirectly in the processes related to the development or implementation of political initiatives will primarily mean systematic monitoring of such activities, and, accordingly, control over the correctness and impartiality of such processes. In some cases, this applies to both monitoring and follow-up actions related to compliance with the established rules, countering fraud with taxpayer funds, preventing the emergence or disclosure of conflicts of interest and corruption. Systematic monitoring and, as a result, publicity of political processes leads to an increase in the level of transparency and accountability of government authorities, enterprises, institutions, and organisations, regardless of the will of their management.

*Inclusion and articulation of interests of different social groups*. Through the participation of civic associations in such processes, various social groups that may not otherwise be represented are represented. Another side of the issue is the possibility of an easier form of communication on issues that may concern individuals directly with representatives of such public associations, and as a result, the ability to take actions aimed at realising the interests of formally unrepresented categories of people. Furthermore, in this way, a more objective form of pluralism can be achieved in discussions, decision-making, and implementation.

*Expert engagement.* Considering a series of restrictions related to the civil service, specifically, those determined by the anti-corruption legislation, there is a question of motivation to take part in political processes. Involvement of public associations and civil society can create conditions under which experts from different fields can join such processes without being subject to the duties and restrictions imposed by the civil service and representative mandate. Furthermore, it is the expertise in such processes that allows considering other, alternative ways to resolve complex or ambiguous situations that may affect various categories of the population in some way.

*Political mobilisation of citizens*. The active role of civil society and public associations in the processes under study can draw citizens' attention to possible problems or extraordinary situations more quickly in times of crisis. Furthermore, the speed of bringing people together and creating a public outcry on problematic issues is a crucial factor in the context of society's resilience to possible external threats.

Neutral factors include the following:

*Issues of motivation of public associations*. It is impossible to predict the purpose and goals, motivation, and possible consequences of engaging in processes and institutions that have the authority to make decisions, develop policies, and control them. There can be both extremely idealised ideas about the purpose and role of a particular civic association in a certain process, and extremely pragmatic ones, specifically, in terms of gaining political points or promoting the interests of certain groups with major restrictions on the interests of other groups.

*Financing the activities of public associations*. In most cases, civic associations carry out their activities on their personal initiative and without sufficient or no funding for their activities. Accordingly, the issue of remuneration and reimbursement of expenses of representatives of such organisations may not be raised at all, and the necessary needs may be covered by their own income. Although this is not a problem in individual cases, the presence of such a factor may serve as a corruption risk associated with the possibility of influencing the ability to take part in certain processes objectively and impartially, which will primarily depend on the donors of such an organisation and such representatives.

*Cyclical activity of public associations*. Considering, specifically, the above factor, it is essential to focus on the cyclical nature of the activity of civic associations. Some issues may arouse more interest, while at the same time, if there is an excessive saturation of same-type issues, a certain tolerance to them will be formed, and, accordingly, the desire to resolve such issues. Moreover, it is noticeable that activity is usually associated with electoral or crisis processes. Specifically, the increase in the activity of public associations in the period after 2014, as well as on 24 February 2022 in Ukraine, is associated with crisis moments.

The negative factors include the following:

1. Manipulation and abuse. In some cases, public associations can use their status and involvement in certain mechanisms of public control to create a more positive image for themselves and destroy the reputation of other individuals and institutions. A separate risk may be the ability to influence the adoption of certain decisions, which ultimately creates the basis for corruption risks.

2. External influence. It is often impossible to trace the influence on the activities of individual public associations. However, financing of the activities of such associations or other possible forms of dependence on a beneficiary who is not a resident of Ukraine or certain groups of influence within the territory of Ukraine will considerably affect both the values and goals of such an association and possible actions or inaction.

3. Conflicts and paralysis of government institutions. Currently, national legislation provides for a series of possibilities that can be used to paralyse the activities of individual enterprises, institutions, and organisations. Specifically, by organising strikes, submitting multiple appeals and inquiries, forcing them to focus on certain issues, etc.

4. Radicalisation and fragmentation of society. Dividing society into right and wrong groups, calling for something to be done in a more or less correct manner, and trying to distinguish between friends and foes. This example can also be viewed through the lens of the activities of already banned political parties and religious organisations.

Notably, the presence of certain factors of influence of civic associations on political security cannot be decisive in the shaping of policies aimed at restricting the activities or, on the contrary, expanding the powers of such associations. For instance, most of the surveyed associations may have the status of non-profit organisations. In the context of national legislation, there is no specific reporting or control over the activities of most types of associations. On the one hand, one can see unambiguous advantages: the absence of factors that would determine the ability of the state or its individual representatives to influence the activities of such associations through regulatory or monitoring actions. A conditional trade union or religious organisation will not be legally liable for the fact that it has committed an act related to its statutory purpose. At the same time, there are also disadvantages, as the lack of control as such leads to the possibility of certain fraud.

But here, most importantly, it is essential to emphasise that public associations are only a tool that can be used more or less successfully to achieve the goals set by the community of such an association. In some cases, a community, in some parishes, in some labour collectives, or a hundred other variations. In recent years, there have been a series of successful examples where public associations have significantly positively influenced the development of civil society in Ukraine, and, accordingly, the involvement of the population in state-building processes. It is worth highlighting the experience of the Civil Oversight Council at the National Anti-Corruption Bureau of Ukraine (COC NABU), which demonstrates an effective model of interaction between civil society and the state in the field of combating corruption. This practice contributes to increasing the transparency, accountability, and efficiency of

the anti-corruption agency, as well as strengthening public trust in state institutions. The COC model can be adapted and applied to other state bodies, which will contribute to the development of democracy and civil society in Ukraine.

Other equally successful examples are the activities of the Chesno movement in the context of ensuring transparency in political processes or the Committee of Voters of Ukraine, which has been conducting monitoring and analytical activities to assess the political process for decades. In the context of historical retrospective, it can be noted that at the beginning of their formation, civic associations could face criticism and threatening perception from the current government. In the context of further historical development, it was the high-quality advocacy of the interests of representatives of such groups that enabled considerable changes in political processes, but later this was also expressed in a broader unification around new social norms. For example, let us consider the path to eliminating racial segregation in American society.

Public associations as institutional agents of social transformations represent a complex system of collective action characterised by the ability to reconfigure the socio-political space through a targeted communication strategy and mobilisation of collective resources (Lipkan, 2006). Their evolutionary trajectory is determined by a set of internal and external factors, among which the socio-cultural context, the level of institutional capacity and the nature of the political regime are dominant. Empirical cases of social movements demonstrate the multivariate nature of the mechanisms of influence of public associations on social transformations. Specifically, the historical examples of the anti-colonial movement in India, the civil rights movement in the United States, and the trade union movement in Poland illustrate the potential of collective action in dismantling discriminatory institutional practices and legitimising new social norms. The defining attributes of such movements are strategic communication, the ability to mobilise horizontally and produce an alternative social narrative.

The study of this issue requires the integration of different methodological approaches, including systemic analysis to understand the relationship between civil society and state institutions, institutional approach to study formal and informal rules of interaction, and social constructivist approach to study the formation of identities and narratives in the public sector (Korniyevskyi, 2008). At the same time, it is critical to understand the international context of interaction between civil society organisations and the authorities, as well as the effects of such associations on the formation of national security in different countries. Perhaps the first thing to be noted is the traditions of functioning of various political parties and movements in 'old' democracies. Specifically, the most frequently mentioned

examples are those of the United States of America (the USA), the United Kingdom of Great Britain and Northern Ireland (the UK), France, Germany, and Poland as representatives of integrated liberal democracies. At the same time, one should not forget about other countries where pluralism of political opinion is widespread.

In the USA, civil society exerts a significant influence on security policy through an extensive network of think tanks, human rights organisations, and social movements (Political Parties in America, n.d.). Heritage Foundation, Brookings Institution, RAND Corporation – think tanks that develop national security strategies, analyse military threats and assess geopolitical challenges. National Endowment for Democracy (NED) – supports democratic movements around the world, which contributes to strengthening US security through the spread of democratic values. Electronic Frontier Foundation (EFF) – protects cybersecurity, civil liberties on the Internet, and fights against state and corporate control over the digital space.

In the UK, civil society organisations actively engage with government institutions in the areas of defence, information security, and counter-extremism. Chatham House (Royal Institute of International Affairs) is an influential think tank that studies global challenges, including hybrid threats and foreign policy. Institute for Strategic Dialogue (ISD) – specialises in combating disinformation and radicalisation and works on counter-terrorism programmes. Privacy International – an organisation that protects citizens from excessive government and corporate surveillance, promotes human rights in the field of cybersecurity.

French NGOs have traditionally worked on human rights issues, fighting corruption, and increasing society's resilience to security threats. Institut Montaigne is a think tank that develops strategies for national security, counter-terrorism and defence policy. Reporters Without Borders (RSF) is an international organisation that ensures freedom of speech, fights censorship, and disinformation, which is significant for the country's information security. SOS Racisme is an international organisation that fights against the radicalisation of young people, preventing social conflicts that could destabilise the internal situation in France.

German civil society has a strong influence on public policy through think tanks, anti-corruption initiatives, and social movements. The Stiftung Wissenschaft und Politik (SWP) is one of the leading think tanks dealing with defence, international security and geopolitical challenges. Transparency International (TI) is a global anti-corruption organisation based in Berlin that influences the development of transparency and anti-corruption policies in government. Friedrich Ebert Stiftung (FES) and Konrad Adenauer Stiftung (KAS) are political foundations that support democratic processes and political system stability through expert activities and international cooperation.

Poland, having a comparable transformation experience to Ukraine, is actively developing civil society, which greatly influences the country's security policy. National Freedom Institute is a research centre that analyses threats to national security and develops strategies to strengthen Poland's defence capabilities. Fundacja Panoptykon – an organisation dealing with cybersecurity, human rights in the digital space and personal data protection. Centrum Analiz Strategicznych (CAS) is a think tank specialising in defence policy, energy security and countering hybrid threats.

Civil society plays a key role in ensuring the national security of democratic states, performing the functions of public control, fighting corruption, protecting human rights, and countering hybrid threats. Overall, civil society in liberal democracies is an essential element of the political component of national security, ensuring its stability by controlling the government, promoting transparency of political processes, and countering internal and external threats (Kopan & Melnyk, 2024). There is a widespread perception that only two political forces – the Republican and Democratic parties – are involved in the political process and, accordingly, in decision-making in the United States. At the same time, there are a series of conventional 'third' parties, including the Green Party, Libertarians, the Constitution Party, and the Natural Rights Party. The US political system is largely based on aspects related to compromise and the ability to negotiate and cooperate. Specifically, decision-making processes involve the involvement of supporters of different ideas, but with the purpose of achieving more meaningful outcomes in each situation. As such, in a particular component of socio-political issues, both opportunities and threats, Republicans and libertarians may have a shared vision of how to resolve situations.

A series of civic and charitable organisations should be singled out, which, despite fulfilling the direct statutory objectives of the organisations, such as Feeding America (n.d.) or Human Rights Watch (HRW), are associated with the immediate context of humanitarian and human rights missions, there is also a context of political inclusion of such organisations. Specifically, the processes aimed at communication between the population and such organisations allow for a more qualitative study of the level of satisfaction with the situation depending on the specifics of the organisation's activities. The research of HRW allows further identifying trends inherent in different territories where human rights violations are committed. It is in the context of this organisation's activities that the ability of non-governmental organisations to influence not only the decision-making process in a particular country, but also the formation of international security policies can be emphasised. Thanks to HRW's activities, many cases of violence and impunity become known to the world, which allows for policy changes and justice to be achieved. HRW protects human rights in 100 countries

by investigating human rights violations, publicising them, and putting pressure on governments and international organisations to hold perpetrators accountable (Human Rights Watch..., 2024). The principal areas of HRW's activities are as follows:

1. Monitoring and investigation. Documentation of war crimes, torture, censorship, political persecution. Use of satellite imagery, interviews with eyewitnesses, and forensic examinations to collect evidence.

2. Publicity and international pressure. Publication of reports and analyses on human rights violations. Interacting with the UN, EU, International Criminal Court and governments to implement sanctions or reforms.

3. Legal accountability of the perpetrators. Preparing the evidence base for trials of war criminals and dictators. Promoting the adoption of resolutions and legislative initiatives to strengthen legal protection of people.

Feeding America is one of the largest charitable organisations operating in the United States. Its primary mission is to fight hunger. In its turn, the organisation's activities are not limited to providing food to the population but also manifest themselves in the form of advocacy for legislative changes and research to identify trends. Taken together, this enables the US government to develop more effective programmes to support the population. At the same time, the specifics of the activities of such organisations will also largely depend on who creates the organisation's resource base. More grassroots organisations can use the financial and human resources that are generated by the will of a wider mass of supporters of the organisation. In turn, the activities of organisations with a more expert orientation will largely depend either on the will of the experts involved in the activities of such organisations or on the resources provided by individual donors. As such, in both contexts, there are both advantages and risks associated with the functioning of such organisations and the influence they can exert on policy and decision-making.

In the UK, civil society organisations and initiatives play an equally significant role in ensuring aspects of national security. Organisations such as Amnesty International UK, specifically, are actively engaged in human rights activities and campaigns aimed at violations of human and civil rights, both domestically and internationally, which to some extent defines a common range of interests with HRW. Other human rights organisations, such as Liberty, are no less significant in the context of the specifics of the lawmaking process in the UK. Specifically, this organisation focuses its activities on the protection of individual human rights and freedoms. Since 1934, its campaigns have often been of an advocacy nature, aimed at preventing the adoption or demand for amendments to legislation that, in the opinion of the organisation's functionaries, is associated with threats to the enjoyment of human rights and freedoms (Liberty, n.d.). Another type of organisations that significantly influence not only aspects related to

the decision-making process or policies, but also directly interact with employers are independent trade unions. In the UK, for instance, this is the Unison trade union, which protects the rights of employees in the public sector and provides advocacy for the interests of union members (Kikinchuk, 2017).

In Canada, civil society exercises major influence on security policy through an extensive network of think tanks, human rights organisations and social movements. The Canadian Global Affairs Institute (CGAI) is one of the leading think tanks dealing with defence policy, international security, and geopolitical challenges. Macdonald-Laurier Institute is a research organisation that analyses national security strategies, hybrid threats, and international relations. CIGI (Centre for International Governance Innovation) is a think tank that develops policy in the areas of global governance, cybersecurity, and international law. Canadian human rights organisations also actively contribute to national security through advocacy for human rights, cybersecurity, and transparency in government processes. Canadian Civil Liberties Association (CCLA) defends civil liberties, including freedom of speech, personal data protection and digital rights. OpenMedia is a civil society organisation that fights for internet freedom, data privacy, and protection from excessive government surveillance. Amnesty International Canada works to protect human rights, counteract censorship, and authoritarian tendencies in the field of information security.

Canadian civil society organisations also play a role in combating disinformation and the influence of external threats. DisinfoWatch is an initiative that analyses information manipulation, identifies fake news, and promotes media literacy. The Munk School of Global Affairs & Public Policy is a research centre that studies information security, global conflicts, and strategies for responding to hybrid threats. Canada is also known for its charitable organisations that influence social security and stability of society. Canadian Red Cross provides humanitarian assistance, responds to crisis situations and promotes social resilience. The Canadian Foodgrains Bank is a charity that fights hunger and develops food security strategies. Canadian labour unions also play a vital role in protecting workers' rights and maintaining the stability of society. The Canadian Labour Congress (CLC) is the country's largest trade union organisation, working on social issues, labour rights and economic security. Unifor is an independent trade union representing workers in various sectors of the economy, including defence and energy.

Canada's civil society plays a key role in ensuring national security by performing the functions of public oversight, fighting corruption, protecting human rights, and countering hybrid threats. An essential aspect is its ability to influence political processes, promote transparency, and strengthen democratic institutions. The findings of the study confirmed the considerable

influence of civil society organisations on the political component of Ukraine's national security, which is consistent with the findings of other researchers who examined analogous aspects. Specifically, it was found that civil society plays a catalytic role in democratic processes, promotes transparency in decision-making, and strengthens the state's resilience to hybrid threats. After the Revolution of Dignity in 2014, Ukrainian civil society organisations greatly intensified their activities in the field of political control, influencing legislative initiatives and anti-corruption policy mechanisms. This study also confirmed this trend, specifically, through the example of organisations such as the Anti-Corruption Action Centre and the CHESNO Movement. Civil society organisations in Central and Eastern European countries, including Poland, play a key role in shaping anti-corruption policy and promoting European integration processes. The present findings confirmed this trend, as the activities of CSOs in Ukraine are also aimed at increasing government transparency and fighting corruption, which is an essential aspect of Euro-Atlantic integration. The analysis in this study has revealed similar risks, especially in the context of martial law, when civic initiatives can be used for external influence through disinformation campaigns or funding of individual organisations. Thus, the findings of the study are consistent with the general trends in the development of civil society organisations in democratic countries but point to specific challenges for Ukraine.

To summarise the above, it is worth noting that in their totality, public associations are a rather broad concept that essentially covers the interests of citizens in all sectors of the economy. It is also undeniable that the organised activities of public associations have quite considerable prospects for the ability to influence decision-making processes, as well as in cases related to changes in policies in force in a concrete country or region. There are still risks associated with possible politicisation of certain types of CSOs, fragmentation of society, or external influence. At the same time, the trends related to the promotion of democratic values, transparency and accountability, influence on policy-making and representation of different social groups are extremely positive, allowing for closer to pluralism and inclusiveness in the decision-making process.

## Conclusions

The study analysed mainly how and on what grounds different types of public associations function in Ukraine, although the topic is extremely broad in scope, it can be noted that the topic has prospects for further research in the context of a clearer definition of the risks associated with interaction or lack of interaction between public associations and the authorities, as well as ways to prevent the fragmentation of society or the spread of influence through the so-called "agents of influence".

The study identified key aspects of the effects of public associations on the political component of Ukraine's national security. The study analysed the legislative regulation of their activities, the mechanisms of interaction with the authorities, and the key challenges that arise during this interaction. It was found that public associations play a vital role in shaping public policy, democratic control over the activities of the authorities, and increasing the level of transparency of management processes. Particular attention was paid to the analysis of specific NGOs, such as the CHESNO Movement, the Anti-Corruption Action Centre, the Centre for Defence Reforms, and the Reanimation Package of Reforms, which influence political processes through monitoring, advocacy, and the development of analytical recommendations. The study also emphasised the role of volunteer initiatives (Come Back Alive, Serhiy Prytula Foundation), which, under martial law, have substantially increased the influence of civil society on decision-making in the security and defence sector.

It was found that the current state of public associations in Ukraine is characterised by a prominent level of activity, especially during martial law. However, there are risks of politicisation, external influence, and fragmentation of society, which requires the development of effective mechanisms of state regulation and partnership between the government and civil society. Promising areas of research are also the development of mechanisms to prevent social polarisation, strengthen protection against external influence, and improve the regulatory framework for the activities of public associations in the field of national security.

## Conflict of Interest

The author of this study declares no conflict of interest.

## References

[1]  2022 Sustainability index for civil society organisations. (2023). Retrieved from https://ucipr.org.ua/images/files/1864/1864_file.pdf.

[2]  Amnesty International UK. (n.d.). Retrieved from https://www.amnesty.org.uk.

[3]  Confidence in the state: How to preserve national unity for the sake of victory. (2022). Retrieved from https://dif.org.ua/article/dovira-do-derzhavi-yak-zberegti-natsionalnu-ednist-zaradi-peremogi?fbclid=IwAR3w6VYPYWk6n6Iy9Rowdr-vRM9ApV4zNp-hk7D622No4Kj196LxPF_QEaw.

[4] Decree of the President of Ukraine No. 392/2020 "On the Decision of the National Security and Defence Council of Ukraine". (2020, September). Retrieved from https://www.president.gov.ua/documents/3922020-35037.

[5] Feeding America. (n.d.). Retrieved from https://www.feedingamerica.org.

[6] Horbulin, V.P., & Kachynskyi, A.B. (2021). *Strategic planning: Addressing national security challenges*. Kyiv: NISD.

[7] Hrushetskyi, B. (2024). Retrospective and prospects of the legal framework for European Integration in security and defence. *Scientific Journal of the National Academy of Internal Affairs*, 29(4), 35-46. doi: 10.56215/naia-herald/4.2024.35.

[8] Human Rights Watch defends the rights of people in 100 countries worldwide, spotlighting abuses and bringing perpetrators to justice. (n.d.). Retrieved from https://www.hrw.org.

[9] Kikinchuk, V.Y. (2017). The role and features of the activities of civil society organizations in ensuring the economic security of the state. *European Perspectives*, 1, 150-153.

[10] Kopan, O., & Melnyk, V. (2024). International experience in mobilising mechanisms to combat organised crime. *Law Journal of the National Academy of Internal Affairs*, 14(4), 9-22. doi: 10.56215/naia-chasopis/4.2024.09.

[11] Korniyevskyi, O.A. (2008). Non-governmental system of national security provision: Conceptual principles. *Scientific Notes of the I.F. Kuras Institute of Pedagogical Sciences of the National Academy of Sciences of Ukraine*, 42, 231-240.

[12] Law of Ukraine No. 1045-XIV "On Trade Unions, Their Rights and Guarantees of Activity". (2023, December). Retrieved from https://zakon.rada.gov.ua/laws/show/1045-14#Text.

[13] Law of Ukraine No. 2365-III "On Political Parties in Ukraine". (2024, December). Retrieved from https://zakon.rada.gov.ua/laws/show/2365-14#Text3.

[14] Law of Ukraine No. 2469-VIII "On National Security of Ukraine". (2024, August). Retrieved from https://zakon.rada.gov.ua/laws/show/2469-19#Text.

[15] Law of Ukraine No. 3858-IX "On Amendments to the Law of Ukraine "On National Security of Ukraine" on the Strategic Framework for Integrated Management of the State Border of Ukraine". (2024, July). Retrieved from https://zakon.rada.gov.ua/laws/show/3858-20#top.

[16] Law of Ukraine No. 3894-IX "On the Protection of the Constitutional Order in the Field of Religious Organisations". (2024, August). Retrieved from https://zakon.rada.gov.ua/laws/show/3894-20#Text.

[17] Law of Ukraine No. 4017-IX "On Amendments to Certain Legislative Acts of Ukraine in connection with the adoption of the Law of Ukraine "On Administrative Procedure"". (2024, October). Retrieved from https://zakon.rada.gov.ua/laws/show/4017-20#Text.

[18] Law of Ukraine No. 4572-VI "On Public Associations". (2024, September). Retrieved from https://zakon.rada.gov.ua/laws/show/4572-17#Text.

[19] Law of Ukraine No. 5076-VI "On Advocacy and Legal Practice". (2024, July). Retrieved from https://zakon.rada.gov.ua/laws/show/5076-17#Text.

[20] Law of Ukraine No. 987-XII "On Freedom of Conscience and Religious Organizations". (2024, September). Retrieved from https://zakon.rada.gov.ua/laws/show/987-12#Text.

[21] Liberty. (n.d.). Retrieved from https://www.libertyhumanrights.org.uk.

[22] Lipkan, V.A. (2006). *National security of Ukraine*. Kyiv: Condor.

[23] Markovych, H.M. (2023). National security of Ukraine: Conceptual and categorical understanding. *Scientific Notes of Lviv University of Business and Law*, 38, 10-15. doi: 10.5281/zenodo.8163881.

[24] Ministry of Justice of Ukraine. (2021). Retrieved from https://minjust.gov.ua/m/4561.

[25] Political Parties in America. (n.d.). Retrieved from https://dk.usembassy.gov/usa-i-skolen/presidential-elections-and-the-american-political-system/.

[26] Resolution of the Cabinet of Ministers of Ukraine No. 996 "On the Procedure for Conducting Consultations with the Public on the Formation and Implementation of State Policy". (2023, June). Retrieved from https://zakon.rada.gov.ua/laws/show/996-2010-%D0%BF#n30.

[27] Sencha, S.A. (2020). Analysis of the possibility of adapting the experience of foreign countries to stimulate the development of civil society in Ukraine. *Law and Public Administration*, 2(1), 170-177. doi: 10.32840/pdu.2020.1-2.26.

[28] Shamrayeva, V.M. (2018). The main theoretical approaches to the study of the evolution of the concept of international security. *Bulletin of V.N. Karazin Kharkiv National University. Series: International Relations, Economics, Local History, Tourism*, 8, 88-95. doi: 10.26565/2310-9513-2018-8-09.

[29] Sytnyk, G.P. (2010). *Conceptual principles of ensuring national security Ukraine*. Kyiv: National Academy of Public Administration under the President of Ukraine.

[30] Turchenko, O., & Grutsenko, Yu. (2024). National security and state security: Multivariate definition and correlation. *Vasyl Stus Donetsk National University Law Journal*, 2, 66-74. doi: 0.31558/2786-5835.2023.2.8.

[31] Yevdokymenko, Y.Y. (2021). The current state of determining civil security and its impact on national security. *European Perspectives*, 2, 175-180. doi: 10.32782/ep.2021.2.28.

# Аналіз факторів впливу діяльності громадських об'єднань на політичну складову національної безпеки України: сучасний стан та перспективи

**Володимир Півненко**

*Аспірант*
Черкаський державний технологічний університет
18006, бульв. Шевченка, 460, м. Черкаси, Україна
https://orcid.org/0000-0003-4930-1288

**Анотація.** У сучасних умовах геополітичних викликів та внутрішніх трансформацій роль громадських об'єднань у забезпеченні національної безпеки України набуває особливої актуальності. Метою дослідження був аналіз впливу громадських об'єднань на політичну складову національної безпеки та виявлення чинників, що сприяють або перешкоджають цій діяльності. Для досягнення мети використано методи аналізу, синтезу, порівняння та систематизації даних. Результати дослідження свідчать, що громадські об'єднання є важливими суб'єктами суспільного життя, які активно впливають на процеси прийняття рішень та сприяють демократичному розвитку держави. З'ясовано, що діяльність цих організацій забезпечує прозорість, підзвітність влади та сприяє плюралізму, що є необхідними умовами для ефективного управління та соціальної стабільності. Встановлено, що громадські об'єднання виконують низку функцій, зокрема представницьку, мобілізаційну, контролюючу та комунікативну, що дозволяє їм ефективно взаємодіяти як із владою, так і з громадянами. Аналіз українського та міжнародного досвіду засвідчив, що успішне функціонування громадських об'єднань залежить від рівня громадянської активності, нормативно-правового забезпечення їхньої діяльності та підтримки з боку держави. Водночас, виявлено ризики, пов'язані з політизацією громадських об'єднань, фрагментацією суспільства та можливим зовнішнім впливом, що може негативно впливати на національну безпеку. Запропоновано шляхи мінімізації зазначених ризиків, зокрема через удосконалення законодавства, підвищення рівня громадянської освіти та зміцнення механізмів взаємодії між громадянським суспільством і державними інституціями. Такий підхід сприятиме формуванню стійкого та інклюзивного громадянського суспільства, здатного ефективно реагувати на виклики сучасності. Практичне значення роботи полягає у використанні її результатів для вдосконалення взаємодії між державою та громадянським суспільством, а також посилення впливу громадських об'єднань на національну безпеку та мінімізації ризиків

**Ключові слова:** агенти впливу; профспілки; благодійні організації; громадянське суспільство; державна безпека

# Administrative and legal regulation of the use of radio frequency resources for UAVs under martial law

## Maryna Larchenko*

PhD in Law, Associate Professor
Chernihiv Polytechnic National University
14035, 95 Shevchenka Str., Chernihiv, Ukraine;
Mykola Gogol Nizhyn State University
16602, 2 Grafska Str., Nizhyn, Ukraine
https://orcid.org/0000-0002-2643-980X

**Abstract.** Given the growing significance of unmanned aerial vehicles in modern conflicts, the issue of legal regulation of their use under martial law is becoming increasingly relevant. The aim of this article was to identify the specific features of the administrative and legal approach to managing the radio frequency resource for unmanned aerial vehicles (UAVs) in the context of armed conflict and heightened threats of electronic warfare. To achieve this aim, methods of legal framework analysis, comparative legal approach, and systemic analysis of security challenges in frequency regulation were employed. The article provided a comprehensive study of the administrative and legal aspects of regulating the use of the radio frequency resource for UAVs under the legal regime of martial law in Ukraine. The author highlighted the strategic importance of unmanned platforms for ensuring national security and defence, and draws attention to the specific features of the legal status of UAVs in both military and civilian sectors. The study analysed the existing regulatory acts of Ukraine governing access to the radio frequency spectrum and identifies gaps that limit the effective deployment of drones in combat conditions. Particular attention was paid to the issue of protecting communication channels from enemy electronic warfare, the necessity of implementing cryptographic protection, and the creation of specialised military frequencies for UAVs. Based on an analysis of the practices of NATO, the European Union, and Israel, proposals were formulated to improve the Ukrainian model of administrative control over radio frequency use. The author emphasised the advisability of introducing licensing for civilian UAV operators in combat zones, strengthening coordination between military and civilian authorities in the field of frequency planning, and adapting international standards to the national legal framework. The article proposed a comprehensive approach to forming a frequency security strategy, taking into account the requirements of the digital transformation of the defence sector. The results of the study may be used for the further development of draft regulatory acts and in shaping national policy on UAV usage in the context of cyber and radio frequency threat environments

**Keywords:** unmanned aerial vehicles; electronic warfare; radio frequency resource; cryptographic protection; frequency regulation; national security

## Introduction

The Russian-Ukrainian war has become one of the most prominent examples of the combat use of drones, which has influenced the tactics of warfare and the security of the state. The Armed Forces of Ukraine actively use various types of unmanned aerial vehicles (UAVs) to perform combat missions, including 1) reconnaissance drones, which provide surveillance of enemy positions, intelligence gathering and adjustment of artillery fire; 2) strike drones, which deliver high-precision strikes on enemy military targets, significantly increasing the effectiveness of operations; 3) kamikaze drones, which are cheap and effective means of destruction capable of inflicting significant losses on enemy forces; 4) logistics drones, which are used to deliver ammunition and

*\*Corresponding author*

other resources to the front line. The issue of using the radio frequency resource for UAVs in wartime is extremely relevant. The absence of a clear strategy can lead to significant losses of equipment, intelligence information and combat effectiveness of the Armed Forces of Ukraine. Therefore, it is necessary to develop a comprehensive administrative and legal regulatory system that takes into account both domestic challenges and international experience.

Existing studies and publications showed that the use of radio frequencies for UAVs is currently relevant due to the high level of risks associated with electronic warfare (EW). Thus, according to S.M. Sholokhov *et al.* (2021), the proportion of electronic warfare forces and means used in wars and armed conflicts is constantly increasing due to the growing role of electronic means in enhancing the combat capabilities of troops. The prospects for the development of unmanned systems and the main challenges in the context of increasing the effectiveness of combat operations and the priority of preserving the lives of the military are discussed by O.O. Sapelnykov *et al.* (2024).

The problems of ensuring the security of radio communications and protection against electronic interference were considered in the works of Ukrainian and foreign authors, among which it is worth mentioning the work of V.P. Zaslavets *et al.* (2020), who emphasised the need to develop regulations to ensure stable communications during wartime. A number of authors, including L. Hlivinska *et al.* (2024) and V. Matniak (2024), pointed out critical issues related to the lack of clearly defined legal regulations for the allocation of frequency bands during martial law.

International practice in regulating the use of frequencies for UAVs, especially in martial law, demonstrates some success in ensuring reliable and secure communications. The experience of NATO countries and the United States, in particular, shows the use of encrypted communication channels for military drones and frequency allocation, which avoids the use of civilian frequencies that can be intercepted or jammed by the enemy (Pysarenko *et al.*, 2021). In the work of A. Onofriychuk (2024), the experience of NATO countries in the use of secure frequencies and data encryption in military missions was considered. According to the analysis, NATO countries are actively working to improve the frequency spectrum and develop new military frequencies for UAVs, which is a guarantee of safety and efficiency of their use. Special studies on reforming the administrative and legal regulation of UAV frequencies in Ukraine show that existing regulations need to be adapted to modern conditions. As noted by S.I. Bohdan *et al.* (2024), it is necessary to develop clear mechanisms for controlling the use of frequency bands, taking into account the specifics of martial law and the need to create specialised military frequencies for drones.

Particular attention should be paid to the practical aspects of integrating international experience into Ukrainian legislation, as well as the development of licensing procedures for UAV operators operating in combat zones, as emphasised by A.A. Sakovskyi (2022). Proposals in this regard include the creation of separate frequency bands for military UAVs, as well as the introduction of mandatory communication encryption for all unmanned systems operating in Ukraine under martial law.

Also, according to H.A. Zmiivskyi *et al.* (2024), the armed forces of the world's leading countries pay great attention to the development of mobile radio networks using airborne repeaters placed on telecommunications unmanned aerial platforms and the creation of wireless self-organised networks Flying Ad-hoc networks (FANET) Their use provides interconnection between remote units, increases network performance, communication reliability, quality of user service and enables operational redeployment. These networks can be restored and ensure rapid deployment of the communication system within the coverage area.

A review of the available literature confirmed the importance of developing and improving the administrative and legal regulation of the use of radio frequency resources for UAVs in Ukraine under martial law. It is necessary to take into account international experience and technological innovations in the field of electronic warfare, cryptography and frequency regulation to achieve the maximum effect of using drones in military operations.

The purpose of the article was to analyse the administrative and legal regulation of the use of radio frequency resources for UAVs under martial law. Attention was paid to both military and civilian aspects of the use of drones, in particular, legal support for their operation, countering electronic warfare and ensuring effective management of the frequency spectrum in the interests of national security. To achieve this goal, the following key tasks have been identified:

1) to study the administrative and legal aspects of regulating the radio frequency spectrum for UAVs in wartime;

2) to identify problems of the current legislation and prospects for its improvement;

3) to analyse international experience and the possibilities of its implementation in Ukraine.

## Materials and Methods

The study was carried out in several successive stages: collection and analysis of current Ukrainian regulations and international documents governing the use of the radio frequency spectrum; study of current international experience (NATO, EU, USA, Israel) in the field of frequency policy for UAVs; identification of the main problems related to regulatory support during the Russian-Ukrainian war; analysis of the potential

of current legislation to adapt to new wartime conditions; systematisation of the results obtained and identification of key trends and gaps in legal regulation; identification of areas for further research and current challenges for legal support of the use of radio frequency spectrum in times of war.

The study focused on the issues of delineating the frequency resource between military and civilian drones, protecting signals from enemy electronic warfare, analysing the restrictions imposed by NATO countries, and assessing the ability of national legislation to respond to cyber and radio frequency threats. The information was collected by analysing open state registers, official websites of government agencies of Ukraine and other countries, databases of regulatory acts, as well as specialised analytical reports published by research centres, defence companies and non-governmental organisations. It was also analysed the technical characteristics of anti-drone systems used in Ukraine and instructions for their use published on the manufacturers' official web resources. The study used an interdisciplinary approach that combined elements of law, information security, telecommunications and military affairs, which allowed us to assess the problem in its entirety. The choice of research methodology was based on the need for a comprehensive analysis of the legal regulation of the use of the radio frequency spectrum for UAVs under martial law. Given the complexity and multifaceted nature of this issue, the following methods were used:

1. Analysis of Ukrainian regulations and international standards, which is key to the study of administrative and legal regulation of the radio frequency resource for UAVs. This method made it possible to assess the current legal framework for the use of the frequency spectrum, identify its shortcomings and outline possible areas for improvement. The basis for the legal regulation of the use of radio frequency resources in Ukraine is a number of legal acts, which, in particular, helped in conducting the study. Among them are Order of the Ministry of Defence of Ukraine No. 661 (2016) and Law of Ukraine No. 1089-IX (2020). Also, the Resolution of the Cabinet of Ministers of Ukraine No. 1340 (2023), which was recently adopted, is of particular importance for the purpose of this study.

2. Comparative legal method (experience of NATO, the USA, the EU, Israel) used to analyse international experience in frequency spectrum regulation, as Ukraine can use proven practices of its Western partners in times of war.

3. The method of systematic analysis of problems and challenges in the regulation of the frequency spectrum for UAVs allowed for a comprehensive assessment of all aspects of administrative and legal regulation of the use of the radio frequency spectrum under martial law. The application of this method made it possible to obtain a holistic picture of the problem and develop comprehensive solutions to overcome it.

## Results and Discussion

In addition to military drones, civilian drones are actively used in warfare, performing important auxiliary functions. Volunteer and non-governmental organisations use them to take aerial photographs, search for victims, deliver humanitarian aid, etc. The role of UAVs in the current conflict is constantly growing, and their effective use is becoming a strategic advantage for Ukraine. However, with the development of technology, a number of problems arise, in particular in the field of radio frequency regulation, which is critical for UAV management, as the radio frequency spectrum is a limited resource used for communication and navigation. Military and civilian drones operate in different frequency bands, which creates additional challenges for their coordination and protection.

The importance of effective radio frequency resource management is explained by the following factors: the need to ensure uninterrupted communication between the operator and the UAV, as the drone must be in stable communication with the operator to perform combat and reconnaissance missions, and the use of encrypted communication channels is critical to preventing enemy interception of signals (Zyhrii *et al.*, 2023). Steady-state navigation and positioning means that UAVs use GNSS (Global Navigation Satellite System) for spatial orientation, but satellite navigation signals are jammed by EW on the front line. The use of alternative navigation methods, such as inertial systems or radar technologies, requires appropriate frequency coverage. Enemy forces are actively using jammers to suppress drone control signals. Ukraine needs to develop strategies for frequency distribution and create backup communication channels to ensure the sustainability of UAVs. The use of drones in wartime requires a clear delineation of the frequency spectrum between military and civilian users, and the uncontrolled use of civilian drones can pose risks to the operations of the Armed Forces, which requires appropriate regulation.

Electronic warfare has become an integral part of modern military conflicts, especially in the fight against UAVs. Russia is actively using electronic warfare to suppress Ukrainian drones, which poses serious challenges to the Ukrainian Armed Forces. The main threats posed by electronic warfare equipment are primarily related to jamming communications between the operator and the UAV. The enemy uses powerful jammers to block control signals, forcing the drone to either return to its starting point or crash. This is particularly dangerous for reconnaissance drones, which lose the ability to transmit intelligence. Another danger is the suppression of GNSS signals. Electronic warfare devices can distort or completely block the satellite signal, making it impossible for drones to navigate. The loss of navigation forces operators to look for alternative methods of orientation, which often makes it difficult to complete tasks. That is why, in the war of 2025,

GPS navigation near the front line is almost not used for UAVs (Balan *et al.*, 2025).

Another problem is the interception and hacking of control channels. The enemy can not only suppress the signal but also hack into the control channels of drones. This allows them to change the UAV's route or even use it against their own forces. Finally, physical destruction of UAVs through electronic warfare can occur, as in addition to electronic effects, cyberattacks are used to infect drone software or change their control algorithms. Some electronic warfare systems use directed microwave pulses to 'disable' UAV electronics. In view of these threats, administrative and legal regulation of the use of radio frequency resources should include: 1) identification of strategically important frequencies that must be protected from enemy attacks; 2) introduction of a system of backup frequencies and multi-level encryption of UAV control signals; 3) creation of a regulatory framework for state control over the allocation of frequencies for military purposes.

### Regulatory and legal framework for the use of radio frequency spectrum for UAVs in Ukraine

*1.1 Main regulatory acts governing the use of radio frequency resource*

Ensuring efficient use of the radio frequency resource under martial law is critical for military and civilian UAVs. In Ukraine, this area is regulated by a number of legislative and subordinate acts that define the procedure for the allocation, management and control of the radio frequency spectrum.

The Law of Ukraine No. 1089-IX (2020) is the main regulatory act governing the use of radio frequency spectrum. Its key provisions are: 1) creation of the basis for efficient and harmonised use of the radio frequency spectrum to ensure economic, social, information and cultural development, state security, defence capability, fulfilment of international obligations, as well as to ensure and protect the interests of the state and users of the radio frequency spectrum (Article 4); 2) distribution of powers of state bodies in the areas of electronic communications and radio frequency spectrum (Articles 5-7); 3) introduction of an electronic regulatory platform, which is an automated information and analytical system of the regulatory authority used to perform its powers under this Law and to provide administrative services in electronic form, electronic exchange of information, documents and interaction with providers of electronic communication networks and/or services, suppliers of radio equipment, users of radio frequency spectrum and numbering resources, and users of services (Article 8); 4) provides for state supervision (control) over compliance with the legislation on electronic communications and the radio frequency spectrum (Article 10); 5) establishes the procedure for licensing and issuing permits for the use of frequencies, the procedure for obtaining and conditions for licensing the use of the radio frequency spectrum (Articles 48-51).

The Law of Ukraine No. 1089-IX (2020) defines the legal framework for the operation of electronic communication networks, including those used to control UAVs. Its key aspects are: 1) the legal regime of the radio frequency spectrum as a limited resource; 2) ensuring national security through the regulation of electronic communications; 3) the possibility of temporary restriction or redistribution of frequencies in a state of emergency or martial law; 4) setting standards for the protection of radio frequencies from external interference and cyberattacks. It is worth noting that the radio frequency resource is managed in accordance with international standards, and its use should be consistent with the needs of the defence sector, which is especially important in the context of war. However, it does not fully take into account the current challenges of electronic warfare and the need to quickly reallocate frequencies for military purposes, which necessitates its revision.

It is advisable to propose a number of changes that would allow for more flexible and efficient management of the radio frequency resource to meet the needs of the security and defence sector. First, it is necessary to enshrine in the law a separate special regime for the use of the radio frequency spectrum under martial law or in times of threat of armed aggression. Such a regime would provide for priority allocation of frequencies to military formations, automated temporary disconnection/restriction of commercial access to frequencies in designated combat zones, and a mechanism for emergency reallocation of spectrum without the need to go through a full administrative procedure.

Secondly, it is necessary to introduce a provision on the establishment of a Single Coordination Centre for Frequency Management in the Defence Sector, which would function on the basis of the General Staff of the Armed Forces of Ukraine in cooperation with the National Commission for the State Regulation of Electronic Communications, Radio Frequency Spectrum and Postal Services (NCEC). This centre would be empowered to coordinate strategic frequency planning, conduct frequency testing for new weapon systems, and implement operational reconfiguration of spectrum to meet the needs of electronic warfare and cyber threats.

Thirdly, it is advisable to provide for the creation of a register of crypto-secure UAV control channels, within which entities using drones in the interests of defence would be able to access licensed frequencies with an increased level of protection. At the same time, a mechanism for simplified licensing and registration of military drones should be defined, which would allow them to be quickly included in the general contingent of military equipment without delays from civilian spectrum management authorities.

Special attention should be paid to expanding the powers of the NCEC to block or restrict the operation

of drones in prohibited frequency bands, in particular through the creation of technological solutions in the field of electronic scanning and detection of third-party control signals of UAVs used by the enemy. The introduction of these changes will allow for a more rapid response to the dynamics of hostilities, reduce the risk of losing control of UAVs in conditions of active electronic interference, and increase the overall efficiency of drone use in the Armed Forces of Ukraine.

The Government of Ukraine also plays an important role in regulating the allocation of spectrum. Relevant resolutions of the Cabinet of Ministers of Ukraine (CMU) regulate: 1) the allocation of radio frequency spectrum between public and private users; 2) the procedure for granting permits for the use of frequencies; 3) the definition of frequency bands for special use, including military purposes; 4) restrictions or adaptation of frequency use during martial law.

One of the key ones is the Resolution of the Cabinet of Ministers of Ukraine No. 1340 (2023), which contains a list of frequency bands and their purpose. In times of war, this plan must be adapted to ensure the effective operation of military UAVs and minimise threats from electronic warfare. In addition, the Cabinet of Ministers may decide to restrict the use of certain frequencies to prevent their use by the enemy, which is an important element of protecting the country's information space. These issues are regulated by Resolution of the Cabinet of Ministers of Ukraine No. 1459 (2022). As well as Resolution of the Cabinet of Ministers of Ukraine No. 1118 (2022).

The NCEC carries out state regulation in the specified area and is a key body in the field of radio frequency resource management. According to Law of Ukraine No. 1971-IX (2021), its powers include: 1) allocation of the frequency spectrum and issuance of licences for its use; 2) control over compliance with radio frequency legislation; 3) development of regulations and technical requirements for the use of frequencies; 4) ensuring harmonisation of the national frequency policy with international standards; 5) cooperation with the Ministry of Defence on the allocation of frequencies for military purposes.

Given the conditions of martial law, the NCEC plays a critically important role in the rapid reallocation of frequencies for the needs of military drones. It also oversees the blocking of frequencies that may be used by the adversary and enforces control over bands vulnerable to interception or jamming. In cooperation with the Ministry of Digital Transformation and the Ministry of Defence, the NCEC is developing mechanisms to protect critical frequencies from electronic warfare attacks.

The radio frequency resource in Ukraine is regulated by a set of laws and regulations. However, in times of war, new challenges arise that the current legislation does not always take into account, including: 1) the need for prompt reallocation of the frequency spectrum for

military purposes; 2) protection of military frequencies from enemy electronic attacks; 3) regulation of the use of frequencies for drones in the combat zone. Further improvements to the legislation should include more flexible mechanisms for adapting frequency regulation to wartime conditions, which will allow for more efficient use of UAVs in military operations and minimise the threat of jamming or interception by the enemy. In this context, it is advisable to introduce a simplified procedure for temporary military access to the radio frequency spectrum, which would provide for the issuance of permits for the use of frequencies on a 'fast track' basis through an electronic system without the need to go through a full licensing cycle. Such a mechanism could be based on pre-approved bands reserved for the Armed Forces and other law enforcement agencies, with the right to use them promptly upon request from an authorised unit.

In addition, it is proposed to develop and legislate an adaptive frequency map of the combat zone, which will be updated in real time and will allow direct UAV operators to avoid frequency conflicts and reduce the risk of interference. This map should be integrated into the digital management system of military operations. It is also advisable to introduce an experimental legal regime for innovative UAV control technologies (regulatory sandbox), within which the military and drone manufacturers will be able to test new ways of transmitting commands and signals within certain ranges with minimal administrative barriers. This will accelerate the introduction of modern solutions in the field of frequency management and increase the effectiveness of combat use of drones.

*1.2 Frequency allocation for civil and military UAVs*

The radio frequency resource is a strategic resource of the state, especially in times of war. The use of the frequency spectrum for UAVs depends on their purpose - civilian or military. In Ukraine, frequencies are allocated in accordance with national legislation and international standards. However, war requires adaptation of the frequency policy to ensure the effective operation of military drones and protection against electronic warfare. According to the recommendations of the Centre for Operational Standards... (2019), it is important to ensure that communications are protected from interference caused by jamming systems. Frequency regulation in combat requires clear guidelines for the use of specialised frequencies for civilian and military UAVs, as well as the creation of new frequency bands that could provide reliable communication even in the face of active EW.

Civil UAVs in Ukraine use standard frequency bands permitted for wireless communication and control of electronic devices. These bands are permitted for use in accordance with the provisions of the International Telecommunication Union (ITU-R) (2020), in particular Articles 5.138, 5.150, 5.280 and Annex 1, which

establish global frequency allocations for short-range radio services, including UAVs.

Ukraine has adapted these standards through a number of regulatory acts, including the Technical Regulations for Radio Equipment (approved by Resolution of the Cabinet of Ministers of Ukraine No. 355 (2017) and the National Table of Radio Frequency Allocation of Ukraine, approved by Resolution of the Cabinet of Ministers of Ukraine No. 1340 (2023). These documents specify the permitted bands for wireless communication and determine that UAV equipment can use the relevant bands without licensing, subject to compliance with the technical characteristics and standards of electromagnetic compatibility. Main permitted frequency bands for civil UAVs:

▲ 2.4 GHz – widely used for Wi-Fi, Bluetooth, wireless controllers and drone communications;

▲ 5.8 GHz – used for video broadcasting and short-range communication with UAVs;

▲ 433 MHz – used for radio control of model aircraft;

▲ 868-915 MHz – used for telemetry and long-term communication between UAVs and ground stations.

Civil UAVs are subject to certain restrictions. In particular, the power of transmitters is limited by law (for example, for 2.4 GHz, usually no more than 100 mW). In case of interference or frequency band congestion, the state may impose temporary restrictions on the use of civilian frequencies. Some frequencies may be blocked in a war zone to prevent unauthorised use. Also, due to the widespread use of civilian frequencies by adversaries, including reconnaissance and commercial drones, these bands are often targeted by electronic warfare equipment, making them difficult to use in combat. Military drones use closed or specially reserved frequency bands to ensure communication security and counter electronic attacks. Taking into account the Resolution of the Cabinet of Ministers of Ukraine No. 1340 (2023), the main military frequency bands (may vary depending on operational needs) are as follows:

▲ L-band (1-2 GHz) – used for drone control and secure satellite communications;

▲ S-band (2-4 GHz) – used for communication between UAVs and command centres;

▲ C-band (4-8 GHz) – used for military aviation and satellite communications;

▲ X-band (8-12 GHz) – provides high-speed secure communication between military UAVs;

▲ Ku-band (12-18 GHz) – used to transmit data from drones over long distances via satellite channels;

▲ VHF/UHF (30 MHz-3 GHz) – used for military communications and special missions.

The peculiarities of military use of frequencies are that cryptographic protection of communications is widely used. Thus, military UAVs use encrypted channels to prevent signal interception. To counter electronic warfare, some drones can automatically change frequencies or use adaptive technologies (frequency hopping) to avoid jamming. Reserving frequencies for uninterrupted communication is critical during combat operations, as it is necessary to maintain UAV control even in the face of electronic attacks. In 2025, more and more UAVs will be used for short distances on fibre optics, which are not afraid of electronic warfare, but this technology also has its drawbacks, namely, limited range due to the length of the cable (the coil is placed inside the UAV), difficulty in deploying in the field, and vulnerability of the fibre optic line to physical damage. The prolonged use of fibre-optic UAVs in a certain area of the territory leads to the creation of a "spider web" that prevents further flights of both enemy and friendly UAVs. Therefore, frequency spectrum regulation remains relevant.

War creates new challenges for frequency spectrum management, as civilian and military frequencies may overlap. In such circumstances, the state must effectively manage the frequency resource to ensure reliable communication for its own forces and prevent the enemy from using the frequencies. That is why there is a group of so-called licensed frequencies. These are frequencies that have been officially allocated by government agencies and require special permission to use. Military UAVs, government agencies, and some telecoms operators use licensed frequencies, which are protected from outside interference. In times of war, licensed frequencies may be reallocated for defence purposes and military UAVs may receive priority access to certain bands (Resolution of the Cabinet of Ministers of Ukraine No. 1459, 2022). The state can also restrict or block the use of licensed frequencies by civilians, especially in combat zones (Resolution of the Cabinet of Ministers of Ukraine No. 1118, 2022).

In peacetime, unlicensed frequencies can be used without special permission, such as 2.4 GHz and 5.8 GHz, which are used for commercial drones. In times of war, the military may use civilian frequencies for covert operations to make it more difficult for the enemy to detect drones. The enemy may use the same frequencies, which creates a risk of control override or jamming of signals. Therefore, to protect critical frequencies, jamming systems can be used to block the operation of vulnerable frequencies in certain areas.

Thus, frequency spectrum allocation for UAVs in wartime is a complex and dynamic process. The main challenges are jamming of civilian frequencies by electronic warfare, which complicates the use of drones, the need to adapt the frequency plan for military operations, and the protection of critical military frequencies from interception and attacks. Therefore, further improvements to the legislation should take into account flexible mechanisms for reallocating frequencies in emergency situations, the use of dynamic frequency spectrum management to avoid jamming, and the introduction

of secure communication and cryptographic protection technologies for military UAVs. Implementation of these measures will make it possible to use unmanned systems more effectively in combat situations and increase Ukraine's resilience to electronic threats.

*1.3. Legal restrictions and liability for violation of frequency regulation*

Regulation of the radio frequency spectrum is an important component of national security, especially in times of war. States impose strict restrictions on the use of frequencies and introduce liability for their violation to avoid chaos in communications and prevent potential threats. For example, in the United States, the use of radio frequencies is regulated by the Federal Communications Commission (FCC) under Title 47 of the Code of Federal Regulations (CFR) (1997), and in the European Union – on the basis of Directive of the European Parliament and of the Council No. 2018/1972 (2018), which provides for a permissive procedure for access to spectrum and criminal liability for violation of the terms of use. In the context of martial law, control over the use of frequencies is significantly enhanced, which requires clear legislative regulation and an effective enforcement mechanism. Unauthorised use of the radio frequency spectrum can pose a threat to military operations, lead to information leakage or facilitate enemy activities. Therefore, the legislation provides for administrative and criminal liability for violation of the rules for the use of radio frequencies.

For example, under the Code of Ukraine on Administrative Offences (1984), Article 145 provides for fines for operating radio electronic equipment without a permit, while Article 188-7 establishes penalties for violating the procedure for using radio frequency resources, specifically for failure to comply with the lawful requirements of the National Commission for the State Regulation of Communications and Informatization. The amount of such fines depends on the severity of the violation and may reach tens of thousands of hryvnias. During wartime, actions that may undermine the state's defence capabilities pose a particular threat – including the unauthorised use of frequencies that interfere with military communications, the malicious jamming of military or critical infrastructure signals, and the transmission of information about military frequencies to the enemy.

According to the Criminal Code of Ukraine (2001), Article 361 provides for liability for unauthorised interference with electronic computer systems (may include radio frequency attacks); Article 361-1 for the creation of software or hardware to interfere with communication networks; and Article 114-2 for the unauthorised dissemination of information on the movement of military formations. Such actions are punishable by imprisonment for a term of several years to life imprisonment (depending on the consequences of the offence).

In times of war, a state may restrict or prohibit the use of certain frequencies by civilians to prevent them from being used by the enemy or to avoid interfering with military communications. The main legal restrictions may include: temporary disconnection or blocking of certain frequency bands in combat areas, a ban on the use of civilian drones without permission from military administrations, and the transition to centralised state management of the frequency spectrum. These restrictions are set by the General Staff, the National Commission in cooperation with the Ministry of Defence and other security agencies. Examples of prohibitions during the war in Ukraine include restrictions on the use of drones in combat zones without the approval of the military; blocking dangerous frequency bands that could be used to target enemy missiles or drones; and criminalising the illegal use of drones in wartime, especially in frontline regions. Such measures, according to S. Truxal & B. Scott (2024), as well as F. Borsari & G.B., Jr. Davis (2023), are being introduced not only in Ukraine, but also in NATO, the United States and EU countries, which also restrict the use of civilian radio frequency spectrum during wartime or emergency situations.

The state control over the use of radio frequencies is carried out to prevent unlawful interference, interference and threats to the security of communications. The main controlling bodies are the NCEC, which regulates frequency allocation, issues licences and imposes sanctions, the Ukrainian State Centre of Radio Frequencies (USCRF), which monitors the frequency spectrum, records violations and coordinates with other services (Ukrainian State Centre of Radio Frequencies, n.d.), the Security Service of Ukraine (SSU), which investigates cases of unauthorised use of frequencies, especially in the context of espionage or sabotage, and the Ministry of Defence of Ukraine, which ensures military control over frequencies required for defence purposes.

They use automated monitoring of the radio frequency spectrum to detect unauthorised activity. They may also use specialised equipment to identify radio signal sources and implement technologies to jam and neutralise unauthorised signals. Countermeasures may include detecting and blocking enemy drones using civilian frequencies, as well as tightening control over licensing and registration of unmanned aerial vehicles. In some cases, operational measures are taken to identify individuals using illegal frequencies.

Thus, the regulation of the radio frequency resource is an important element of Ukraine's cybersecurity and defence in time of war. The main aspects that require attention are: increased liability for unauthorised use of frequencies, especially in times of war; stricter restrictions on civilian frequencies to avoid threats to military operations; and strengthening state control over the frequency spectrum, in particular through modern systems for monitoring and blocking unwanted signals. Further improvement of administrative legislation in this area should help to increase the effectiveness of

military communications and minimise the risks of enemy electronic interference.

## Challenges of regulating the frequency resource for UAVs in wartime

*2.1. Electronic warfare threats and their impact on UAVs*

Electronic warfare plays a crucial role in modern conflicts, including the Russian-Ukrainian war, where drones have become key reconnaissance, artillery and strike assets. The enemy's electronic warfare capabilities can significantly reduce the effectiveness of UAVs or disable them completely. The main electronic warfare threats to UAVs include jamming of communication and navigation signals (GPS/GNSS), radio frequency interception and spoofing of control commands, and the use of enemy drones controlled via open frequencies. In particular, the suppression of navigation signals and communication channels renders the drone uncontrollable or forces it into emergency mode. The enemy uses powerful transmitters that generate interference in the GPS/GNSS band, which causes the drone to lose its orientation in space because it has no coordinates for flight, cannot adjust the route or complete the task, and therefore automatically returns to the take-off area or crashes due to loss of communication. Examples of hostile systems are: Zhitel, a Russian satellite jamming system; Pole-21, a GPS/GNSS jamming system with a radius of up to 50 km; Tirada-2S, a strategic-level satellite jamming system (3GIMBALS, 2023).

If an adversary jams the frequencies used by the operator to control the drone, this may result in a loss of communication between the operator and the UAV. Consequently, the drone may automatically switch to return-to-home (RTH) mode or initiate a forced landing. A complete loss of control renders the UAV vulnerable to hijacking or destruction. To achieve this, stationary and mobile electronic warfare (EW) systems are employed to jam the command frequencies of drones (2.4 GHz, 5.8 GHz).

In addition to jamming, the enemy may intercept UAV control signals, which allows access to drone commands, enables route manipulation, or interception of the video feed, with the aim of capturing the drone and using it for their own purposes. Such actions are called spoofing. This is an attack in which the enemy replaces the GPS signal with false coordinates, causing the drone to fly in the wrong direction or, for example, land in enemy-controlled territory. The drone can also lose its orientation, which leads to a crash. Such attacks are carried out using special transmitters that mimic satellite signals.

If a drone transmits unencrypted data, the adversary may also intercept the video feed and target coordinates, or even hack the control system to force the UAV to alter its course. The intercepted information can be used for counterattacks (for example, to determine the position of Ukrainian forces). The aggressor state actively employs counter-drone systems, including the Krasukha-4 and Leer-3 complexes, which are capable of simulating communication signals and distorting UAV data (3GIMBALS, 2023). The enemy also makes extensive use of loitering munitions (kamikaze drones) that are operated via open or poorly protected communication channels. This poses new challenges for Ukrainian defence. According to a joint Ukrainian-Romanian study by M. Samus (2024), the main types of enemy loitering munitions include the Shahed-136 (Geran-2) – Iranian-manufactured loitering munitions that strike targets using GPS coordinates; the Lancet – a Russian kamikaze drone guided by an operator in real time; and the Kub-UAV – a small strike drone that operates on open frequencies.

If unmanned aerial vehicles (UAVs) are controlled via unencrypted communication channels, this creates risks of interception and course deviation due to jamming or command distortion. There is also the possibility of using enemy drones against themselves (through reverse engineering). Ukrainian specialists are developing anti-drone systems capable of intercepting and blocking control signals of hostile UAVs, allowing for more effective countermeasures against such threats. One example is the Ukrainian system KVS ANTIDRON G-6 (Fig. 1), which, according to the manufacturer QUADRO.UA (n.d.), effectively suppresses drone control and navigation channels, causing them to lose connection with the operator and land.



**Figure 1.** Portable anti-drone system KVS ANTIDRON G-6

**Source:** QUADRO.UA (n.d.)

The Ukrainian system Bukovel-AD (Fig. 2) is capable of detecting UAVs at a distance of up to 100 km and jamming their control and navigation signals at a range of up to 20 km.



**Figure 2.** Electronic warfare system Bukovel-AD

**Source:** Spetstechnoexport (n.d.)

These systems demonstrate a high level of effectiveness and adaptability in the context of modern warfare, providing reliable protection against threats associated with the use of enemy UAVs. Electronic warfare tools are actively deployed on the battlefield, and to mitigate their impact, it is essential to employ encrypted communication channels for military drones, develop domestic technologies for intercepting hostile signals, and enhance counter-drone systems that operate across unsecured frequencies. Therefore, further research should focus on developing UAV platforms resistant to EW, as well as improving the legal framework for protecting the radio frequency spectrum in Ukraine.

*2.2. Restrictions on the use of civilian frequencies for UAVs during wartime*

Civilian drones are actively used in combat zones for reconnaissance, fire correction, and cargo delivery. However, the open frequencies used by civilian UAVs are easily jammed by EW systems. The enemy may also detect the operator's location, putting them at risk. Uncontrolled use of drones can additionally interfere with military operations. In light of these threats, restrictions or even complete bans on the use of civilian drones may be enforced in military zones. In the United States and other NATO countries, according to S. Truxal & B. Scott (2024), strict regulations govern civilian UAV flights near military facilities. In Israel, as noted by P. Schwennesen (2024), civilian drones are prohibited in combat areas unless coordinated with the military. Therefore, the deployment of civilian UAVs in military zones must be strictly regulated to avoid security threats.

The use of unsecured civilian frequencies during wartime can be dangerous, as the adversary may jam the signals of civilian drones. EW systems can easily block the 2.4 GHz and 5.8 GHz frequencies used by commercial UAVs. If a drone does not use signal encryption, the adversary may intercept control and redirect it elsewhere. In addition, the enemy may capture civilian drones and use them for reconnaissance. Hackers aligned with the adversary may remotely access drone video feeds by exploiting software vulnerabilities. These risks demonstrate the necessity of restricting open frequencies during wartime and strengthening flight security requirements.

Since February 2022, several significant legislative initiatives concerning the use of the radio frequency spectrum for UAVs have been introduced in Ukraine. During 2022-2023, flight bans for civilian UAVs without special permits were imposed in certain regions. Under decisions made by military administrations, the operation of drones must be coordinated with military authorities. Discussions are also underway regarding the transfer of military UAVs to secure frequency bands. A proposal has been made to establish a separate registry for civilian drone operators operating in military zones. As part of efforts to strengthen frequency control, government authorities have been granted expanded powers to monitor and regulate spectrum usage, while the NCEC coordinates frequency regulation measures for drones during wartime. It has also been proposed to implement encryption standards for military and critically important civilian drones, and to introduce licensing requirements for drone operations under martial law.

Civilian drones may be used in military zones, but their use must be regulated by state authorities. Open frequencies pose security risks, as they may be exploited by the enemy to intercept or jam signals. It is necessary to implement legislative mechanisms to restrict the use of civilian frequencies during wartime and to ensure their proper allocation is controlled. Further research should focus on developing regulatory acts to protect the frequency resource, establishing a system for the identification and monitoring of civilian UAVs, and enhancing protection against electronic warfare threats through the implementation of encrypted

communication channels. Thus, the effective regulation of radio frequency spectrum usage is a critically important element in ensuring the security and effectiveness of military operations involving UAVs.

*2.3. Challenges of secure communication for military unmanned aerial vehicles*

In the context of modern combat operations, ensuring reliable and secure communication is critically important for the effective use of UAVs. The lack of adequate communication protection poses significant risks, including signal jamming, control interception, and the compromise of intelligence data. For this reason, states actively employing UAVs in military operations are implementing advanced cryptographic protection technologies, secure data transmission standards, and specialised military communication frequencies. One of the main challenges for military UAVs is the need to effectively protect communication channels from enemy electronic warfare systems.

The following technological solutions are used for this purpose, such as real-time data encryption. Control commands and telemetry data are transmitted via secure communication channels. Robust cryptographic algorithms are employed, including AES-256 (symmetric encryption), RSA-4096, and ECC (asymmetric encryption). Encryption ensures the confidentiality of the data, even if it is intercepted by the enemy (Navrotskyi, 2014).

Another technological solution is frequency hopping spread spectrum (FHSS). The use of dynamic frequency hopping technology makes it possible to minimise the risk of signal jamming. The UAV and the ground control station switch operating frequencies thousands of times per second according to a pre-agreed algorithm. Satellite communication can also be used as a backup communication channel. The use of encrypted satellite communication (SATCOM) ensures stable control over UAVs even in the event of radio frequency jamming. The Armed Forces of Ukraine actively use Starlink terminals as a means of communication. In the future, it is necessary to develop domestic military satellite communication systems to minimise dependence on foreign operators.

The reliable protection of communication channels for military unmanned aerial vehicles must comply with international security standards and take into account emerging threats. The main requirements for cryptographic protection include the use of certified cryptographic algorithms that meet the requirements of international standards (Committee on National Security…, 2016, which regulates encryption policy in the United States, and the National Institute of Standards…, 2020). For instance, NIST recommendations define requirements for key lifecycle management, cryptographic algorithms, and their administration in high-security systems. Meanwhile, CNSSP-15 policy regulates the use of open standards for information exchange between U.S. national security systems, including

encryption, authentication, and data integrity protection. AES-256 encryption algorithms are used to protect control commands, while RSA-4096 or ECC are used for authentication. The integrity of transmitted data is ensured using the SHA-3 algorithm. In view of future threats, the implementation of post-quantum cryptographic solutions must be considered (Rohde & Schwarz, 2024).

To protect against Man-in-the-Middle attacks, all control commands must have a cryptographic signature that makes their forgery impossible. Each UAV must contain a unique encrypted identifier that confirms the authenticity of received commands. The regular rotation of cryptographic keys increases the system's resilience. Quantum-resistant key exchange protocols are used to mitigate future threats posed by quantum computing. In the event of unauthorised interference or loss of communication, the UAV must automatically destroy critical data and either switch to autonomous mode or return to a controlled area.

The use of publicly accessible civilian frequencies for military UAVs poses a threat of signal jamming and interception. In this regard, a priority direction for the development of radio frequency policy in Ukraine should be the establishment of specialised military frequencies for unmanned aerial vehicles. The advantages of introducing military frequencies in Ukraine include increased resilience to EW systems through the use of protected bands; integration of UAVs with existing military communication systems (such as tactical radios and satellite systems); and the elimination of conflicts between civilian and military UAV usage. Potential frequency bands for military UAVs include: 1) L-band (1-2 GHz) – used for satellite communication and military aviation systems; 2) S-band (2-4 GHz) – potentially adaptable for medium-range military drones; 3) X-band (8-12 GHz) – promising for long-range tactical UAVs.

It is also necessary to study international experience in regulating military frequencies for UAVs. In the United States, military drones operate on specialised frequency bands that are protected against unauthorised access. More broadly, NATO countries adhere to unified standards for secure communication in UAV military operations. For implementation in Ukraine, it is essential to develop new regulatory acts to allocate military frequencies. Further modernisation of EW systems is also required to effectively counter hostile UAVs, along with the development of new, more efficient types of UAVs, the creation of a unified register of Ukrainian military drones, and their integration with NATO-protected communication systems.

Thus, the development of secure communication channels for military UAVs is a strategic objective for Ukraine. The implementation of modern cryptographic mechanisms, the use of dynamic frequency management, and the allocation of specialised military bands will significantly increase the resilience of UAVs to enemy EW systems. At the same time, further development

of national communication security standards and the reduction of dependence on foreign technologies in this field are necessary.

**International experience in UAV spectrum regulation and its potential adaptation in Ukraine**

*3.1. Radio frequency regulation of UAVs in NATO and EU countries*

Ensuring the effective use of the radio frequency resource for UAVs is an important task for NATO and European Union countries. The operation of both military and civilian drones requires a clear allocation of the frequency spectrum, particularly taking into account security needs, protection against EW, and the integration of UAVs into the overall air traffic management system.

The United States, the United Kingdom, and Germany apply different approaches to UAV frequency regulation; however, the general principles are similar – they involve the allocation of specialised bands, the integration of UAVs into the military aviation network, and protection against electronic attacks. In the United States, spectrum regulation is carried out by the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA). Military UAVs operate within specialised frequency bands in the L- and Ku-bands, which provide stable and secure communication. According to M.A. Jasim *et al.* (2022), the U.S. Army actively uses satellite communication to control drones, which reduces the risk of enemy interference.

In the United Kingdom, responsibility for frequency allocation lies with Ofcom (the Office of Communications) and the UK Ministry of Defence. Military UAVs operate within designated frequency bands that are compatible with NATO communication systems. Considerable attention is given to frequency hopping technologies and encrypted communication to reduce the risk of signal jamming by the adversary (GOV.UK, 2023).

In Germany, regulation is carried out by the Federal Network Agency (Bundesnetzagentur). Military UAVs operate on protected frequencies that do not overlap with civilian usage. Additionally, the country is actively implementing the concept of integrating military drones into the overall air traffic management system, which requires the harmonisation of the frequency spectrum in line with EU and NATO standards (Bundesnetzagentur, 2024). The European Union Aviation Safety Agency (EASA) is the key body responsible for developing recommendations for the integration of UAVs into European airspace. One of the agency's main areas of activity is the unification of frequency regulation for both civilian and military drones.

Within the European Union, the use of frequencies for UAVs is regulated in accordance with Directive of the European Parliament and of the Council No. 2018/1972 (2018), which sets out the general rules for radio spectrum allocation. The main focus is on: 1) the harmonisation of frequencies for drones in the 2.4 GHz and 5.8 GHz bands for civilian use; 2) the introduction of a unified standard for communication between UAVs and control stations; and 3) the implementation of safe frequency usage principles under the SESAR (Single European Sky ATM Research) programme (European Commission, n.d.). It is important to note that at the European Union level, in line with Decision of the European Parliament and of the Council No. 676/2002/EC (2002), the creation of a dedicated frequency band for military UAVs is being considered – one that would be protected from unauthorised use and jamming.

NATO and EU experience in UAV frequency regulation highlights the importance of clear coordination between military and civilian authorities to ensure the safe and efficient use of drones across various sectors. Ukraine should take these approaches into account to improve its own frequency management system and enhance the country's defence capabilities.

*3.2. Frequency regulation and UAV communication security in combat conditions (the case of Israel)*

Israel's experience in the use of UAVs is among the most advanced in the world. Faced with constant military threats and a high probability of enemy EW activity, the Israel Defense Forces (IDF) have developed a comprehensive communication protection system for their military drones. The core elements of this system include strict spectrum control, the use of cryptographic protection, and the deployment of advanced communication technologies.

One of the key challenges in combat operations involving UAVs is the threat of electronic jamming. To counter this, the Israeli military applies an integrated approach to frequency protection. This includes the use of narrow-beam antennas and directional signals, which significantly reduce the likelihood of detection and jamming of communication channels. Another method involves dynamic frequency switching (FHSS), as previously mentioned. A distributed UAV control architecture also helps to minimise the risk of vulnerabilities associated with centralised communication channels.

Moreover, Israel's military drones are equipped with autonomous control systems, enabling them to continue carrying out missions even if communication with the operator is lost. This significantly enhances their resilience to enemy EW measures. One of the key innovations in the field of military communications being implemented by Israel is the use of decentralised networks (Mesh Network) for unmanned aerial vehicles. According to G. Kedar (2024), this technology enables the creation of a robust communication system even under conditions of intense electronic warfare.

The main advantages of Mesh Network for UAVs lie in the absence of a single point of failure. Drones can transmit information through multiple nodes, making the network highly resilient to attacks. UAVs can

dynamically change data transmission routes, bypassing areas where the enemy is conducting jamming. The drones are capable of relaying signals through one another, creating an extended communication network without the need for centralised towers or satellites. According to the analysis by L. Oleksiuk (n.d.), in combat operations, Israeli forces actively employ Mesh Network to facilitate interaction between reconnaissance UAVs, strike drones, and ground command posts. This system enables rapid acquisition of information about battlefield changes and swift adaptation of combat tactics.

Israel's experience in frequency regulation and communication protection for military UAVs demonstrates the importance of a comprehensive approach to security. The combination of protected frequencies, cryptography, frequency hopping spread spectrum (FHSS), and decentralised Mesh Networks significantly enhances the effectiveness of unmanned operations even under challenging combat conditions. Ukraine would benefit from taking these developments into account to improve its own system for the military use of UAVs.

*3.3. Recommendations for improving the administrative and legal regulation of UAV frequencies in Ukraine?*

Taking into account the current challenges related to the use of unmanned aerial vehicles (UAVs) under martial law, it is particularly important to develop an effective system for regulating the radio frequency spectrum. Insufficient legal clarity and the absence of clear control mechanisms pose risks both to the military use of UAVs and to the safety of civil aviation and state communication systems.

One of the most important areas for improving regulation is the strengthening of state control over the use of the radio frequency spectrum. This would reduce the risks of unauthorised frequency usage and enhance the effectiveness of EW measures. To achieve this, it is necessary to implement automated spectrum monitoring systems capable of detecting and locating unauthorised transmissions in real time. Furthermore, it is important to strengthen the powers of the NCEC regarding frequency allocation oversight and coordination with military authorities, as well as to expand legal liability for the unauthorised use of military or strategically significant frequencies during wartime. One of the key current issues is that military UAVs often operate on frequencies that may also be used by civilian operators or even by the adversary, which poses a threat to the effective deployment of unmanned systems in combat environments. The recommended measures can be summarised as follows:

1) the allocation of dedicated frequency bands exclusively for military UAVs, which will enhance the protection of communication channels from unauthorised interference;

2) the implementation of Dynamic Spectrum Access (DSA) technologies, enabling adaptive frequency changes based on threat levels;

3) the use of encrypted and frequency hopping communication channels, which complicate signal interception and jamming.

The introduction of dedicated military frequencies would significantly reduce the likelihood of successful EW deployment by the adversary and ensure stable communication between operators and UAVs even under challenging combat conditions. In the current context, civilian drones are actively used for reconnaissance, fire adjustment, search operations, and humanitarian tasks. However, the lack of proper regulation of their use during wartime may lead to information leaks, accidental interference with military systems, or even the enemy's exploitation of such drones.

It is therefore advisable to introduce a special licensing system for civilian UAV operators working in combat zones. The main requirements for this process may include: 1) preliminary checks on operators regarding their qualifications and compliance with information security measures; 2) defining clear zones where the use of civilian drones is permitted to avoid conflicts with military operations; 3) creating a unified register of authorised UAV operators, which would prevent chaotic use of the frequency spectrum. Introducing licensing would not only improve the safety of drone operations in combat areas but also contribute to more effective coordination between military and civilian entities.

Thus, in the context of modern warfare, the administrative and legal regulation of the frequency spectrum for UAVs must become one of the key priorities of state policy. Strengthening control over frequency usage, establishing dedicated military bands, and introducing licensing for civilian operators will enhance the effectiveness of unmanned operations, ensure reliable protection of communication channels, and minimise threats from the enemy. The development of a comprehensive frequency regulation strategy in Ukraine should be based on the best international practices, particularly the experiences of NATO, the EU, and Israel, which have successfully implemented similar mechanisms under combat conditions.

## Conclusions

The use of UAVs for military and civilian purposes requires clearly defined regulation of the radio frequency spectrum. In the context of the Russian-Ukrainian war, the effective management of frequency resources directly affects the success of combat operations and the state's information security. Based on the conducted research, a number of issues were identified that complicate the efficient use of the frequency spectrum in Ukraine: insufficient legal clarity regarding the allocation of frequencies between civilian and military UAVs; EW threats, particularly GPS/GNSS jamming and radio frequency interception; the absence of dedicated military frequencies for UAVs; the lack of mechanisms to

control the use of civilian drones in combat zones; and a low level of coordination among state authorities responsible for frequency regulation.

The current legislation requires substantial improvement in light of new challenges in the field of security and defence. The experience of NATO, EU countries, and Israel demonstrates effective approaches to regulating the frequency spectrum for UAVs. Based on this experience, it is advisable for Ukraine to allocate frequencies into separate military bands for drones, ensuring their protection through encryption and frequency hopping technologies. It is also important to introduce automated frequency spectrum monitoring systems, which would allow for prompt detection of violations and unauthorised frequency usage, and to strengthen control over the use of civilian UAVs in combat zones by implementing mandatory drone operator licensing and defining regulated usage zones. The improvement of administrative and legal regulation of the frequency resource will contribute to enhancing the efficiency of UAV use in military operations, ensuring their protection from EW systems, and strengthening Ukraine's overall defence capability in wartime conditions.

A promising direction for further research may be the development of an adaptive model for frequency resource management and the advancement of Mesh Network technology for military drones, which would enable the creation of autonomous and secure communication channels independent of centralised transmitters.

## References

[1] 3GIMBALS. (2023). *Russian electronic warfare systems: Analytic insight report*. Retrieved from https://sprotyvg7.com.ua/wp-content/uploads/2023/11/COGINT_Analytic_Insight_Report_Russian_EW_Systems_231119_114942.pdf.

[2] Balan, S., Balan, L., Vorotynskyy, V., Rybak, I., & Tarasiuk, V. (2025). State information policy in the context of hybrid threats: Legal and political aspects. *Social and Legal Studios*, 8(1), 165-178. doi: 10.32518/sals1.2025.165.

[3] Bohdan, S.I., Porynos, Ye.O., Shendryk, V.I., & Dmytriienko, O.A. (2024). Testing of unmanned aerial vehicles of the copter type (FPV) in conditions of active action of enemy electronic warfare means. In *XXIV Scientific and technical conference of the state research institute for testing and certification of military equipment* (pp. 326-328).

[4] Borsari, F., & Davis, G.B., Jr. (2023). *An urgent matter of drones*. Retrieved from https://cepa.org/comprehensive-reports/an-urgent-matter-of-drones/.

[5] Bundesnetzagentur. (2024). *Administrative regulations on the assignment of frequencies for satellite communications (VV SatFu)*. Retrieved from https://www.bundesnetzagentur.de/SharedDocs/Downloads/DE/Sachgebiete/Telekommunikation/Unternehmen_Institutionen/Frequenzen/SpezielleAnwendungen/Satellitenfunk/VVSatFu_EN.pdf?__blob=publicationFile&v=3.

[6] Center for Operational Standards and Methods of Preparation of the Armed Forces of Ukraine jointly with the Main Directorate of Preparation of the Armed Forces of Ukraine. (2019). *Methodological recommendations "Fighting against unmanned aerial vehicles" (based on the experience of conducting the Joint Operational Operation (formerly the ATO))*. Retrieved from https://surl.lu/uirmel.

[7] Code of Federal Regulations. (1997, January). Retrieved from https://www.govinfo.gov/help/cfr.

[8] Code of Ukraine on Administrative Offenses No. 8073-1-X. (1984, April). Retrieved from https://zakon.rada.gov.ua/laws/show/80731-10#Text.

[9] Committee on National Security Systems. (2016). *Use of public standards for secure sharing of information among national security systems*. Retrieved from https://imlive.s3.amazonaws.com/Federal%20Government/ID15183034696552921558719522610265670631/CNSSP15.pdf.

[10] Criminal Code of Ukraine. (2001, January). Retrieved from https://zakon.rada.gov.ua/laws/show/2341-14#Text.

[11] Decision of the European Parliament and of the Council No. 676/2002/EC "On a Regulatory Framework for Radio Spectrum Policy in the European Community (Radio Spectrum Decision)". (March 2002). Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32002D0676.

[12] Directive of the European Parliament and Council of the European Union No. 2018/1972 "On Establishing the European Electronic Communications Code". (2018, December). Retrieved from https://zakon.rada.gov.ua/laws/show/984_013-18#Text.

[13] European Commission. (n.d.). Retrieved from https://transport.ec.europa.eu/transport-modes/air/single-european-sky/sesar-project_en.

[14] GOV.UK (2023). *Policy paper: Spectrum statement*. Retrieved from https://www.gov.uk/government/publications/spectrum-statement/spectrum-statement.

[15] Hlivinska, L., Nikolaienko, K., & Vychavka, V. (2024). Current problems of legal support for national security and defense. In *III International scientific and practical conference "The security and defense sector of Ukraine in the protection of national interests: Current problems and tasks in the conditions of martial law"* (pp. 866-868). Khmelnytskyi: NADPSU.

[16] International Telecommunication Union. (2020). *Radio regulations 2020*. Geneva: ITU.

[17] Jasim, M.A., Shakhatreh, H., Siasi, N., Sawalmeh, A.H., Aldalbahi, A., & Al-Fuqaha, A. (2022). A survey on spectrum management for unmanned aerial vehicles (UAVs). *IEEE Access*, 10, 11443-11499. doi: 10.1109/ACCESS.2021.3138048.

[18] Kedar, G. (2024). *Nomadic networks: Wireless connectivity for defense and public safety field operations*. Retrieved from https://www.ceragon.com/blog/nomadic-networks-wireless-connectivity-for-defense-and-public-safety-field-operations

[19] Law of Ukraine No. 1089-IX "On Electronic Communications". (2020, April). Retrieved from https://zakon.rada.gov.ua/laws/show/1089-20#Text.

[20] Law of Ukraine No. 1971-IX "On the National Commission for State Regulation in the Spheres of Electronic Communications, Radio Frequency Spectrum and Provision of Postal Services". (2021, April). Retrieved from https://zakon.rada.gov.ua/laws/show/1971-20#Text.

[21] Matniak, V. (2024). Legal support for national security of Ukraine: Current problems and ways to solve them. In *III International scientific and practical conference "The security and defense sector of Ukraine in the protection of national interests: Current problems and tasks in the conditions of martial law"* (pp. 956-957). Khmelnytskyi: NADPSU.

[22] National Institute of Standards and Technology. (2020). Retrieved from https://nvlpubs.nist.gov/nistpubs/specialpublications/nist.sp.800-57pt1r5.pdf.

[23] Navrotskyi, D. (2014). Cryptographic system for protecting UAV radio channels from unauthorized interference. *Ukrainian Scientific Journal of Information Security*, 20(3), 248-252.

[24] Oleksiuk, L. (n.d.). *Cybersecurity management best practices*. Retrieved from https://www.undp.org/sites/g/files/zskgke326/files/migration/ua/Report_on_Cybersecurity_04.pdf.

[25] Onofriychuk, A. (2024). NATO and EU experience in building national resilience in the security sector. *Journal of Scientific Papers Social development & Security*, 14(1), 138-149. doi: 10.33445/sds.2024.14.1.12.

[26] Order of the Ministry of Defense of Ukraine No. 661 "On Approval of the Rules for Flights by Unmanned Aircraft Complexes of the State Aviation of Ukraine". (2016, December). Retrieved from https://zakon.rada.gov.ua/laws/show/z0031-17#Text.

[27] Pysarenko, T., Kvasha, T., Havrys, T., Paladchenko, O.F., Molchanova, I.V., Shabranska, N.I., Osadcha, A.B., & Kochetkova, O.P. (2021). In T.V. Pysarenko (Ed.), *Analysis of global technological trends in the military sphere*. Kyiv: UkrINTEI.

[28] QUADRO.UA. (n.d.). Retrieved from https://store.quadro.ua/ru/antidron-portativniy-kvs-antidron-g-6.

[29] Resolution of the Cabinet of Ministers of Ukraine No. 1118 "On Approval of the Procedure for Using the Radio Frequency Spectrum During a Special Period and in Conditions of Emergency or Martial Law". (2022, October). Retrieved from https://zakon.rada.gov.ua/laws/show/1118-2022-%D0%BF#Text.

[30] Resolution of the Cabinet of Ministers of Ukraine No. 1340 "On Approval of the Plan for the Allocation and Use of the Radio Frequency Spectrum in Ukraine". (2023, December). Retrieved from https://zakon.rada.gov.ua/laws/show/1340-2023-%D0%BF#Text.

[31] Resolution of the Cabinet of Ministers of Ukraine No. 1459 "On Approval of the Procedure for Introducing Temporary Restrictions on the Use of Radio Equipment, Radiating Devices, Radio Electronic Means And Special-Purpose Radiating Devices in the Event of a State of Emergency or Martial Law Throughout the Territory of Ukraine or in its Individual Regions". (2022). Retrieved from https://zakon.rada.gov.ua/laws/show/1459-2022-%D0%BF#n8.

[32] Resolution of the Cabinet of Ministers of Ukraine No. 355 "On Approval of the Technical Regulations for Radio Equipment". (2017, May). Retrieved from https://zakon.rada.gov.ua/laws/show/355-2017-%D0%BF#Text.

[33] Rohde & Schwarz (2024). *What are frequency-agile short-time signals?*. Retrieved from https://surl.li/shbtgt.

[34] Sakovskyi, A.A. (Ed.). (2022). *Features of the use of unmanned aerial vehicles by police agencies and units: Methodological recommendations*. Kyiv: NAVS.

[35] Samus, M. (2024). *Lessons learned from the war in Ukraine. The impact of drones*. Retrieved from https://newstrategycenter.ro/wp-content/uploads/2024/02/Lessons-Learned-from-the-War-in-Ukraine.-The-impact-of-Drones-2.pdf.

[36] Sapelnykov, O.O., Kaluhin, D.S., Kotliar, M.O., Maksymov, M.O., Ovcharenko, Ye.I., & Tymoshenko, P.V. (2024). Prospects for the development of unmanned systems and their impact on the course of hostilities during the large-scale invasion of the Russian Federation into Ukraine. *Science and Technology of the Air Force of the Armed Forces of Ukraine*, 3(56), 7-15. doi: 10.30748/nitps.2024.56.10.

[37] Schwennesen, P. (2024). *Drones and asymmetric warfare in Ukraine and Israel. Attack drones are transforming modern battlefield operations, with today's conflicts serving as laboratories for rapid innovation*. Retrieved from https://www.gisreportsonline.com/r/drones-ukraine-israel/.

[38] Sholokhov, S.M., Samborskyi, I.I., Vakulenko, O.V., & Nikolaienko, B.A. (2021). *Interference protection of radio electronic devices*. Kyiv: Igor Sikorsky Kyiv Polytechnic Institute.

[39] Spetstechnoexport. (n.d.). Retrieved from https://spetstechnoexport.com/uk/product/bukovel-ad.

[40] Truxal, S., & Scott, B. (2024). The regulation of unmanned aircraft systems in the European Union. In *Civil regulation of autonomous unmanned aircraft systems in Europe* (pp. 31-63). Cheltenham: Edward Elgar Publishing. doi: 10.4337/9781035312344.00008.

[41] Ukrainian State Centre of Radio Frequencies. (n.d.). Retrieved from https://www.ucrf.gov.ua/.

[42] Zaslavets, V.P., Dolyna, M.P., & Chechui, O.V. (2020). Features of calculating the interference immunity of radio communication lines in conditions of radio suppression (radioelectronic conflict). *Weapons Systems and Military Equipment*, 1(61), 7-12. doi: 10.30748/soivt.2020.61.01 .

[43] Zmiivskyi, H.A., Puhach, V.V., Morokhovskyi, M.L., & Horbunov, V.I. (2024). Analysis of the experience of using communication repeaters based on unmanned aerial platforms when performing tactical tasks by units of the Armed Forces of Ukraine, other military formations and law enforcement agencies. *Legal Scientific Electronic Journal*, 11, 550-554. doi: 10.32782/2524-0374/2024-11/129.

[44] Zyhrii, O., Trufanova, Yu., Parashchuk, L., Sampara, N., & Tsvigun, I. (2023). Law and technology: The impact of innovations on the legal system and its regulation. *Social and Legal Studios*, 6(4), 267-275. doi: 10.32518/sals4.2023.267.

# Адміністративно-правове регулювання використання радіочастотного ресурсу для БПЛА в умовах воєнного стану

**Марина Ларченко**

Кандидат юридичних наук, доцент

Національний університет «Чернігівська політехніка»

14035, вул. Шевченка, 95, м. Чернігів, Україна;

Ніжинський державний університет імені Миколи Гоголя

16602, вул. Графська, 2, м. Ніжин, Україна

https://orcid.org/0000-0002-2643-980X

**Анотація.** З огляду на зростаюче значення безпілотних літальних апаратів у сучасних конфліктах, питання правового регулювання їх використання в умовах воєнного стану набуває особливої актуальності. Метою статті було визначення особливостей адміністративно-правового підходу до управління радіочастотним ресурсом для безпілотних літальних апаратів (БПЛА) в умовах збройного конфлікту та посиленої загрози радіоелектронного впливу. Для досягнення поставленої мети використано методи аналізу нормативно-правової бази, порівняльно-правовий підхід і системний аналіз безпекових викликів у сфері частотного регулювання. У статті здійснено комплексне дослідження адміністративно-правових аспектів регулювання використання радіочастотного ресурсу для БПЛА в умовах дії правового режиму воєнного стану в Україні. Автор підкреслив стратегічне значення безпілотних платформ для забезпечення національної безпеки та оборони, а також звернув увагу на особливості правового статусу БПЛА у військовому та цивільному сегментах. У роботі проаналізовано існуючі нормативно-правові акти України, які регулюють доступ до радіочастотного спектра, виявлено прогалини, що обмежують ефективність застосування дронів у бойових умовах. Окрему увагу приділено проблематиці захисту каналів зв'язку від радіоелектронного впливу противника, необхідності впровадження криптографічного захисту та створення спеціалізованих військових частот для БПЛА. На основі аналізу практик країн НАТО, Європейського Союзу та Ізраїлю сформульовано пропозиції щодо удосконалення української моделі адміністративного контролю за використанням радіочастот. Автор наголосив на доцільності запровадження ліцензування операторів цивільних БПЛА для роботи у зонах бойових дій, посиленні координації між військовими та цивільними органами управління у сфері частотного планування, а також адаптації міжнародних стандартів до національного правового поля. У статті запропоновано комплексний підхід до формування стратегії частотної безпеки з урахуванням вимог цифрової трансформації оборонного сектору. Результати дослідження можуть бути використані для подальшої розробки проєктів нормативно-правових актів, а також у процесі формування національної політики у сфері використання БПЛА в умовах загроз кібер- та радіочастотного втручання

**Ключові слова:** безпілотні літальні апарати; радіоелектронна боротьба; радіочастотний ресурс; криптографічний захист; частотне регулювання; національна безпека

# Cultural monuments in the conditions of war in Ukraine: Philosophical and legal challenges

## Anzhelika Holub*

Postgraduate Student, Assistant of the Department of History, Law and Teaching Methods
Oleksandr Dovzhenko Hlukhiv National Pedagogical University
41400, 24 Kyivska Str., Hlukhiv, Ukraine
https://orcid.org/0009-0008-5366-8561

**Abstract.** The relevance of the topic is due to the need to understand not only the physical consequences of the Russian-Ukrainian war, but also the impact on the identity, memory and cultural heritage of Ukraine. The purpose of the article was to comprehensively analyse the legal and philosophical challenges that Ukraine faces in the process of protecting material heritage during the armed conflict, to search for specific recommendations on effective mechanisms for its protection. Culture is considered as a system of moral values, a specific form of human existence. The relationship with the definition of "mentality" is highlighted. The concepts of "cultural heritage", "cultural values", and the connection between them are revealed. The formation of the norms of the international legal system regarding the issues of protecting monuments in historical retrospect is concisely explained. The legal and philosophical challenges in this regard that face society in the current realities are analysed. Attention is drawn to some regulatory documentation on the regulation of this issue in our country and abroad. The article examined the philosophical aspects of the protection of cultural monuments, in particular, raises issues of identity, memory and responsibility to future generations. The importance of integrating cultural values into the national consciousness is emphasised. The impact of globalisation on local cultural objects is considered, that is, the need for a balance between international standards of their protection and own traditions is noted. The problems of destruction of monuments of the Chernihiv-Siver region, the border region in relation to the Russian Federation, are emphasised. The results of the study can be used by specialists in the fields of philosophy and law to develop effective strategies for protecting cultural monuments in times of war, as well as to form philosophical approaches to their preservation

**Keywords:** values; values; national consciousness; heritage protection; local history of the Chernihovo-Sivershchyna region; the concept of "memory" in philosophy

## Introduction

Cultural monuments are an integral part of the national identity and historical heritage of each country. In Ukraine, with its multifaceted history and diverse ancient traditions, all this not only reflects aesthetic values, but also carries deep philosophical meanings. However, in the context of the Russian-Ukrainian war, which has been going on since 2014, the heritage has been under constant threat, which poses a number of philosophical and legal challenges to society. The protection of cultural monuments in times of war is one of the most pressing problems of our time, which arouses considerable interest both in the scientific community

and among the general public. Armed conflicts cause enormous damage not only to the physical objects of such heritage, but also violate the identity of peoples, destroying their architectural heritage, various types of historical artifacts. The relevance of this problem is due not only to current events in Ukraine, but also to global trends in the protection of cultural monuments in times of war around the world.

Culture as a system of moral values was considered by Ukrainian philosophers V.V. Hotynian-Zhuravlova & I.V. Sumchenko (2024), who noted that this definition is explained as a measure of the embodiment of the

*Corresponding author

human in the framework of nature and at the same time is a measure of the development of people as individuals. They concluded that culture not only remains a creative activity, but is a carrier of universal human values, which are aimed at transforming human history into the inner wealth of individuals, into the world of their values, such as goodness, mercy, friendship, love, truth, justice, and diligence. L.M. Taranhul *et al.* (2024) traced the logic of the relationship between cultural and personal values, investigated the aspect of preserving the historical and cultural heritage of Ukraine as a factor of national identity, and concluded that the values of an individual accumulate the main content of the spiritual world inherent in him and at the same time ensure involvement in social interaction. A.A. Koliienko (2023) analysed the concept of historical local history as a means of forming the historical memory and spirituality of the Ukrainian people. The philosophical and ethical challenges of the mass destruction of cultural monuments have been considered by a few researchers, in particular M.H. Novosad *et al.* (2022) (preservation of cultural identity, ethical consequences for future generations, impact on collective memory, moral obligation to restore destroyed monuments).

The problem of protecting cultural heritage during wars has become the subject of numerous studies by both foreign and Ukrainian scientists. Scientists emphasised the importance of international law and the experience of protecting monuments during armed conflicts, in particular O. Rishniak (2022) and N. Kushakova-Kostytska & A. Ohanov (2024). They noted that the uniqueness and originality of cultures prompts additional philosophical and legal understanding of approaches to choosing ways to preserve and protect it. Recently, publications have also appeared that analyse some examples and legislative aspects of heritage protection in Ukraine (Kalishchuk, 2025). The researcher drew attention to the problems of this field, namely the need to improve the regulatory and legal support for the protection of cultural heritage sites. Recommendations for the restoration of cultural monuments damaged by wars were provided by T.V. Mazur (2020) (documentation of damage and destruction; assessment of the scale of destruction; development of restoration plans; cooperation with international organisations, etc.). M. Rohozha (2023) drew attention to the practice of international cooperation on this issue.

In general, the results of the scientists' research indicated that the protection of cultural heritage in Ukraine in times of war requires a comprehensive approach. This includes improving legal mechanisms, developing philosophical concepts of cultural sustainability, and active cooperation with international organisations. The challenges facing Ukraine in this area require not only theoretical understanding, but also practical actions to ensure the preservation of cultural heritage. The purpose of the article was to study the philosophical and legal challenges that arose in our country in the process of protecting cultural monuments during the Russian-Ukrainian war, and ways to solve them. The author sought to implement the following research objectives: to consider the philosophical aspects of the preservation of material heritage, such as cultural identity, spiritual stability of society in conditions of armed conflict; to assess the effectiveness of current Ukrainian legislation on this problem, and to propose strategies for international cooperation.

## Materials and Methods

The article used methods of historical and cultural analysis to study the impact of the Russian-Ukrainian war on the preservation of cultural monuments, as well as legal analysis to assess the effectiveness of current legislation in protecting these objects. Additionally, a philosophical approach was used to consider the ethical aspects of heritage preservation in conflict conditions.

The research methods were structured into several stages, which allowed for a comprehensive coverage of the problem. The first stage was to identify the main philosophical and legal aspects related to the protection of cultural monuments during armed conflicts. For this purpose, an analysis of the literature on the philosophy of culture and law was conducted, which concerns international humanitarian law, in particular UNESCO regulatory documents on the protection of cultural heritage (Pilkevych, 2016; Kashaba *et al.*, 2024). The second stage involved an analysis of regulatory acts that regulate the protection of cultural monuments in Ukraine. The laws of Ukraine were analysed, such as the Law of Ukraine No. 1805-III (2000), as well as international documents related to the protection of cultural heritage, in particular the Convention for the Protection of Cultural Property... (1954) on the protection of cultural property during armed conflicts. The third stage included studying the experience of other countries that have experienced military conflicts, in particular, examples from Bosnia and Herzegovina and Iraq were analysed, where the destruction of cultural monuments has become a serious problem. Studying their example allowed to identify effective methods of responding to such challenges. Several specific cases of destruction or damage to cultural monuments of Ukraine were selected, in particular the Chernihovo-Sivershchyna region (Sumy, Chernihiv), such as historical buildings, museums and archaeological sites. The last stage was the formulation of conclusions and recommendations on improving the legal protection of cultural monuments in Ukraine in war conditions. This included proposals for strengthening international cooperation, improving national legislation and involving the public in the process of protecting cultural heritage.

Such methods allowed for a comprehensive approach to the study of the problem of the protection of cultural monuments in Ukraine, taking into account

both the legal and philosophical aspects of this important topic. The importance of the scientific work lied in the fact that it emphasises the need to integrate cultural policy into the strategy of national security and the country's recovery after the conflict.

## Results and Discussion

Culture is a complex system of moral values that forms a specific form of human existence in society. It encompasses not only traditions, customs and art, but also deep beliefs, norms of behavior and ethical principles that determine the interaction of individuals with each other and with the world around them. Culture influences the ways of thinking, perception of reality and formation of the identity of individuals. The relationship of this term with the concept of "mentality" is key to understanding how social and historical contexts affect people's worldviews. Mentality, in turn, reflects a set of mental attitudes, stereotypes and values that are inherent in certain groups of individuals. It turns out that culture shapes mentality, and mentality, in turn, influences the development of culture. This interrelationship demonstrates how moral values embedded in culture itself become the basis for the formation of ideas about good and evil, justice and injustice, which influence the behavior of individuals and social groups. Understanding this system allows for a deeper understanding of the dynamics of social change and the evolution of human relations in the context of globalisation and cultural exchange (Andrushchenko, 2014; Sysliuk *et al.*, 2016; Hotynian-Zhuravlova & Sumchenko, 2024).

Cultural heritage and cultural values are two interrelated concepts that play an important role in shaping the identity of peoples and societies. The first definition encompasses all tangible and intangible elements that are passed down from generation to generation, including traditions, customs, art, language, architecture, rituals and other aspects of life. It is evidence of the historical development of society, reflects its uniqueness and diversity, and also serves as the basis for the nation's self-awareness. Cultural heritage not only preserves the memory of the past, but also shapes the prospects for the future, as it influences the present. In turn, cultural values are the basic principles and beliefs that determine the behavior of people in society, and may include ethical norms, aesthetic preferences, social traditions, and ideals that shape perceptions of goodness, justice, and harmony. Values are the result of long-term historical development and interaction of various cultural influences, provide the basis for social cohesion and identity, and contribute to the formation of common goals and aspirations within certain groups (Tepliuk & Khudolei, 2018; Chorna, 2021).

There is actually a close connection between the concepts under consideration, namely, cultural heritage forms cultural values, and the latter, in turn, ensure the preservation and development of the previous ones. For example, traditional rituals can be part of the cultural heritage of a certain people, which not only demonstrates its history, but also transmits important values, such as respect for family and nature. Therefore, it turns out that cultural heritage is a carrier of cultural values, and cultural values give meaning and significance to cultural heritage. This interdependent relationship emphasises the importance of preserving both material and non-material aspects of culture to maintain social stability and the development of society as a whole (Zaredinova, 2017; Horbul, 2023).

The formation of norms of the international legal system for the protection of cultural monuments is an important aspect of the development of international law, which reflects the growing awareness of the importance of such heritage for humanity. Historically, the issue of the protection of cultural objects began to gain relevance after two world wars, when the destruction of such values became an obvious consequence of military conflicts. The first steps in this area were taken at the level of international agreements aimed at ensuring the protection of cultural monuments during war. One of the first important initiatives was the Convention for the Protection of Cultural Property... (1954), which established the basic principles of the protection of cultural heritage and called on states to take all appropriate measures to prevent its destruction.

Subsequently, the development of international norms continued through various agreements and declarations that emphasised the importance of the protection of monuments. Convention Concerning the... (1972) became a landmark document that established the principles of preserving not only tangible but also intangible types of such objects. This convention defined the mechanisms of international cooperation in the field of monument protection, and also created the first list of world heritage in need of special protection.

It should be noted that increasing globalisation and technological development have also influenced the formation of international law in this area. The emergence of new threats, such as terrorism and illicit trade in cultural property, required the adaptation of existing mechanisms to new realities. In response to these challenges, measures were taken to strengthen international cooperation and information exchange between states, and new legal instruments were developed, such as the Convention on the Means of... (1970), which still helps to prevent the illicit export and trade of monuments, which can be especially aggravated during armed conflicts (Pilkevych, 2016; Mazur, 2020; Rishniak, 2022).

The protection of national cultural heritage in the context of the Russian-Ukrainian war has become an extremely urgent problem, causing concern not only in Ukraine, but also at the international level. The war, which has been going on since 2014 and has gained new intensity since February 2022, has led to significant destruction of cultural sites, historical monuments, and ar-

chitectural ensembles. These attacks on cultural heritage are not accidental; are systemic in nature and are part of the strategy of the aggressor state aimed at destabilising Ukrainian identity and undermining national consciousness. Another reason for the frequent attacks on Ukrainian cultural sites is the desire of the Russian Federation to destroy symbols of Ukrainian history and identity, demoralise the population, cause a sense of hopelessness and loss of connection with their own roots. Attacks on cultural sites are often used as a means of propaganda. The aggressor state seeks to present itself as a "liberator", but at the same time, the destruction of Ukrainian heritage demonstrates its true intentions. In times of war, cultural sites become targets for information campaigns that try to convince the world of the "legitimacy" of Russian aggression (Kryvolapov, 2018).

It is important to note that frequent attacks on monuments occur in the context of general disregard for international norms and rules of warfare (Convention on the Protection of the World…, 1988). Despite numerous international agreements that strictly prohibit all this, attacks on cultural heritage during the war in Ukraine continue (Protocol for the Protection of Cultural Property in the Event of Armed Conflict, 1954; Second Protocol to the…, 1999; Convention on the Protection and Promotion of…, 2005). The aggressor state openly ignores these norms, which indicates a lack of respect for international law and human dignity. It is necessary to increase international pressure on the Russian Federation as soon as possible and provide real mechanisms for protecting cultural heritage, because its preservation is an important task for future generations of Ukraine.

In the modern realities of Ukrainian society, numerous legal and philosophical challenges arise related to the protection of monuments that require a deep rethinking. In conditions of armed conflict and aggression by the Russian Federation, the issue of protecting such objects acquires special importance, because their destruction becomes not only an act of vandalism, but also part of a systemic strategy for the destruction of Ukrainian national identity. In this context, it is important to pay attention to the current regulatory documentation that regulates the protection of cultural heritage both in our country and abroad. One of the key international documents today is the Convention on the Protection of the World Cultural and Natural Heritage (1988). This document defines the basic principles of protecting cultural and natural objects that have universal value, and calls on the participating states to cooperate in their protection. The national legislation of Ukraine also contains important norms, in particular the Law of Ukraine No. 1805-III (2000), which establishes the legal basis for the preservation, use and popularisation of cultural monuments. This law defines the mechanisms for protecting such heritage, as well as responsibility for its destruction or damage. The Code

of Ukraine on Administrative Offenses (1984) contains articles that also provide for responsibility for damage/destruction of cultural monuments. It can be argued that the formation of the domestic legal system in the field of cultural heritage protection during the Russian-Ukrainian war took place in conditions of threat of destruction and damage to cultural objects. In response to the aggression, Ukraine has intensified legislative initiatives aimed at preserving cultural heritage, including strengthening control over the protection of monuments, updating the norms for their protection (Law of Ukraine No. 1805-III, 2000) and cooperation with international organisations. However, despite the presence of these regulatory acts, the challenges facing society require not only legal regulation, but also a philosophical understanding of the value of cultural heritage. Society must realise that the protection of cultural objects is not only a legal obligation, but also a moral obligation to future generations. It is also important to involve the international community in the issue of protecting cultural heritage in the context of war in Ukraine, because the global responsibility for the preservation of cultural values is a common cause of all peoples star border. The reconstruction process in Ukraine includes several key aspects: financial support provided by many international organisations, such as UNESCO and the European Union, as well as various non-governmental organisations that offer grants, loans and other forms of assistance. In addition, international experts in restoration and protection of cultural heritage are working together with Ukrainian specialists to assess the damage and develop restoration plans, involving architects, art historians and restorers. An important stage is the documentation of damaged objects to create a database that will help preserve historical memory and cultural identity. Many international volunteer organisations are also involved in restoration projects, providing their resources and assistance on the ground (Arkhypova & Klevchuk, 2021). It should be noted that the international community is already involved in the restoration of cultural heritage sites destroyed as a result of the Russian-Ukrainian war. Restoration work has affected many cultural sites, including historical buildings, museums and churches, which have suffered significant damage. For example, as part of the Polish initiative, some architectural monuments in Kyiv and other cities have been restored. Countries such as Germany, France and the United States also played an important role, providing financial and technical assistance for the restoration of our country's cultural heritage in various settlements. The restoration process is ongoing, and the international community continues to support Ukraine in preserving its cultural identity. For example, Italy allocated 500 thousand euros for the restoration of the Transfiguration Cathedral in Odessa, and quite recently, conservation and reconstruction work was carried out in St. Sophia Cathedral in Kyiv. This was made possible

thanks to the support of UNESCO. It should be noted that international organisations involved in the restoration of cultural heritage sites in Ukraine include not only UNESCO, but also the International Committee for the Protection of Cultural Heritage (ICOMOS), the UN Foundation for Culture and the Arts, the European Union, the International Council of Museums (ICOM), the World Monuments Fund, the Heritage Emergency National Task Force, as well as numerous non-governmental organisations and charitable foundations, such as the Global Heritage Fund and Culture in Crisis (Novosad *et al.*, 2022; Kalishchuk, 2025).

In the modern world, movable and immovable monuments face numerous threats that require the development of new approaches to their protection. Here are the main ones: firstly, legislative regulation, which involves the development and implementation of new laws and regulations to ensure the effective protection of cultural heritage, in particular, strengthening administrative and criminal liability for crimes against such values (following the example of the Federal Republic of Germany, where there is strict legislation that provides for significant fines and criminal penalties for the illegal export of cultural property outside the country (Legislation of the Federal Republic of Germany..., 2005); secondly, information campaigns, which include conducting educational programs and campaigns to raise public awareness of the importance of preserving cultural objects and the threats that threaten them, which involves local communities in the protection of historical objects through educational initiatives); thirdly, technological solutions that involve the use of modern technologies, such as 3D scanning and geographic information systems (GIS), etc., to monitor the condition of heritage sites and their protection (in Ukraine, 3D scanning is actively used to document damaged monuments, while in the United States of America, GIS technologies are used to map cultural resources and assess risks); fourthly, international cooperation, which includes participation in programs and agreements on the protection of monuments, which allows receiving support from other countries and organisations (the French Republic actively involves international organisations for the restoration of its historical buildings, for example, after the fire in Notre Dame); fifthly, financial support for the initiatives of scientific staff of historical and cultural reserves for the purpose of constant monitoring, protection and restoration of such sites, as well as for rapid response to threats (Rohozha, 2023).

Globalisation, although it opens up new opportunities for the exchange of cultural values, also threatens local cultural objects. In the context of global influence, it is important to find a balance between international standards for the protection of cultural heritage and our own traditions. Every culture has the right to express itself and preserve its unique features that shape its identity. That is why the integration of cultural values into the national consciousness becomes a key aspect in the process of their protection. Only by realising our responsibility to future generations can we ensure the preservation of our cultural heritage in all its diversity and multifacetedness (Prytuliuk, 2022; Taranhul *et al.*, 2024).

One of the Ukrainian regions where many cultural monuments were destroyed as a result of the Russian-Ukrainian war is Chernihovo-Sivershchyna. This is a border territory of Ukraine in relation to the Russian Federation, which is under constant threat from the aggressor state. This region is famous for its rich cultural heritage, which includes numerous architectural monuments, historical sites and natural landscapes that are of great importance for national identity and history as a whole. However, with the beginning of hostilities, many of these monuments were under threat of destruction, serious damage. Destruction occurs both as a result of direct hostilities and due to insufficient protection of cultural objects during periods of instability. This leads to the loss of not only material evidence of the past, but also to the destruction of cultural memory, which is an integral part of the history of the Ukrainian people (Convention on the Protection of the World Cultural..., 1988; Law of Ukraine No. 1805-III, 2000).

For example, one of the last settlements in the Chernihovo-Sivershchyny region to be shelled, with numerous casualties and destruction of cultural heritage was the city of Sumy. On April 13, 2025, one of the buildings of Sumy State University and the Institute of Physics were damaged. These are notable architectural monuments. One of these historical estates suffered extensive damage, namely the Institute of Applied Physics of the National Academy of Sciences. It was the house of the Sukhanovykh-Sumovskykh family of philanthropists and entrepreneurs, built in 1895. In the premises of the Ukrainian Academy of Banking of the National Bank of Ukraine, the tower was destroyed by debris and windows were broken. The Sumy Regional Philharmonic is also located nearby. From here is the exit to Theater Square, where the Shchepkin Theater and two museums – local lore and art – stand. Windows were broken everywhere here by the blast wave. The total number of monuments that were destroyed that day was 8. Earlier, on August 19, 2023, the Chernihov Regional Academic Music and Drama Theater named after T. Shevchenko was partially destroyed as a result of a missile strike in Chernihov. The missile hit the roof, and the foyer, auditorium, and part of the windows were also damaged. The restoration of the Chernihiv Drama Theater is financed exclusively by donors, that is, without the use of budget funds. In particular, the French agency Expertise France provided 300 thousand euros for the conservation of the roof, and the International Fund "Partnership for a Strong Ukraine" (Great Britain and 8 other partner countries) allocated 92 thousand pounds sterling for the restoration of the building. The German

Center for Assistance to the Arts of Ukraine provided 50 thousand euros for the repair of the entrance doors and galleries. In general, all crimes of Russian vandalism against Ukrainian cultural heritage are recorded on the Map of Destruction and Restoration (n.d.).

It is important to pay attention to the need to protect these monuments, because their preservation is a matter not only of national security, but also of cultural heritage, which must be passed on to future generations (Lisovska, 2016). It is important to note that war often becomes a catalyst for intensifying efforts to protect cultural sites, as societies become aware of the value of their history and identity. For example, in the Republic of Bosna and Hercegovina, after the conflict of the 1990s, numerous projects were implemented to restore historical monuments that had been destroyed. The involvement of international organisations such as UNESCO became an important factor in the processes of restoration and preservation of cultural heritage. A similar situation occurred in the Republic of Iraq, where after prolonged hostilities, initiatives were launched to document and restore monuments, which allowed not only to preserve material heritage, but also to restore national pride (Kharkovenko, 2022).

It should be noted that the Russian Federation, like most other countries in the world, has signed and ratified numerous Hague Conventions, in particular the one concerning the protection of cultural property in the event of armed conflict. However, it is worth noting that the aggressor state has not yet signed the Second Protocol to this convention, which clarifies additional mechanisms for the protection of cultural property and bringing perpetrators to justice. All this greatly complicates the prosecution of Russian servicemen for crimes against cultural monuments. It follows that international law on the protection of cultural objects is not fully functioning. It should be noted that Ukraine became a signatory to the Hague Convention only on April 30, 2020. In addition, Ukraine ratified the Rome Statute (signed on January 20, 2000) only on August 21, 2024.

Gaps and challenges of international law in the context of the Russian Federation's aggression against Ukraine are manifested in the insufficient effectiveness of mechanisms for protecting the sovereignty of states, as well as in the difficulties of holding aggressors accountable for various types of crimes against humanity. Despite the existence of international norms, such as the UN Charter, which prohibit aggression, their implementation is often complicated by the political will of world leaders and the lack of effective sanctions. In addition, there is a problem with proving crimes related to the violation of international humanitarian law, since the collection of evidence can be complicated in conditions of active hostilities. Another important challenge is the insufficient support from the international community to ensure justice and compensation for damages, which undermines trust in international institutions. All this indicates the need to reform international law to more effectively respond to aggression, protect people's rights, and preserve cultural values in conflict situations. Be that as it may, international support for Ukraine is manifested through various forms of assistance. First, the countries of the European Union and the United States provide financial assistance, in particular in the form of grants to restore the economy and culture of our state (Republic of Poland, Federal Republic of Germany, French Republic, Italian Republic, Kingdom of Sweden, etc.) (From museum collections to architectural monuments: how the EU helps save Ukraine's cultural heritage) Second, the supply of military equipment and weapons, including air defense systems, helped strengthen Ukraine's defense capabilities and prevent the aggressor from advancing. Third, international organisations such as the UN and UNESCO are actively working to protect cultural heritage and provide humanitarian support. his comprehensive assistance demonstrates global solidarity with Ukraine in its struggle for independence and territorial integrity. State and international funding for cultural reconstruction are important aspects of the restoration of cultural heritage destroyed as a result of the Russian-Ukrainian war. State funding includes the allocation of budget funds for the restoration of monuments, support for museums and cultural institutions, as well as the implementation of projects to protect cultural heritage (digitisation, evacuation). Cooperation with foreign investors allows pooling resources, which contributes to more effective implementation of reconstruction projects. Another important aspect is ensuring the participation of local communities in the restoration processes, which helps to preserve the authenticity of cultural heritage and contributes to the socio-economic development of regions.

Having analysed a lot of literature and regulatory documentation, in particular the article by O. Kashaba *et al*. (2024), it is worth noting that for the effective protection of cultural monuments in war conditions it is necessary to implement a number of mechanisms, in particular: monitoring and documentation (recording damage and destruction, assessing the extent of destruction, planning restoration); cooperation with international organisations (involving UNESCO, ICCROM and other international structures can provide technical and financial support for the restoration of such objects); legal assistance and advocacy (providing legal support on this issue through judicial authorities and organisations dealing with human rights). All of these are real important steps for those countries that find themselves in similar situations. At present, in Ukraine, despite the difficult conditions, projects aimed at protecting cultural objects have already begun to develop, in particular, "Save Ukrainian Culture" with the support of Vodafone, "Cultural Heritage Protection Network" (a state project in the context of

European integration), "Ark" – an international project (initiated by the Czech Republic). Preserving cultural heritage contributes to a country's faster recovery after war, as such values play a key role in social cohesion. International support and the active work of national organisations are critically important in this context during these difficult times.

## Conclusions

Awareness of the culture of one's own people, acceptance of the mentality and experience of previous generations contributes to patriotic education, national awareness of individuals, and consolidation of the people. The protection of cultural monuments in times of war in Ukraine is a complex and multifaceted process that requires the integration of philosophical, legal, and social aspects. In times of armed conflict, such values become not only objects of national identity, but also targets for destruction. Legal challenges, such as insufficient legislative support, lack of proper control and coordination between state bodies, complicate the situation. The philosophical aspects of the protection of cultural heritage indicated the importance of preserving memory and history for future generations, as well as the need to form public awareness of their significance. In times of war, it is especially important to ensure not only the physical protection of monuments, but also their cultural and spiritual value. This requires the active participation of the state, international organisations, and the public in the formation of effective mechanisms for their protection.

Important conclusion of the study is the realisation that cultural heritage protection should be approached not only from a legal or institutional perspective, but also from the point of view of long-term societal development. Cultural values serve as the foundation for social resilience, local identity, and the unification of communities around shared history and values. Projects such as "Save Ukrainian Culture" and "Cultural Heritage Protection Network" show the potential of public-private and international cooperation in the field of heritage protection. Thus, the protection of cultural heritage under conditions of armed conflict is not only a matter of national security and legal regulation, but also of civilisational responsibility. It is necessary to form a national culture of memory, engage youth and local communities in protective initiatives, and build a broad dialogue between the state, society, and global partners on preserving Ukrainian cultural identity.

Prospects for further research may include: proposals for improving the current national legislation on the protection of cultural heritage in the context of the war in Ukraine; studying the possibilities of using the latest technologies for documenting and protecting monuments in wartime conditions; understanding the philosophical aspects of the protection of cultural heritage, which is necessary for the formation of new approaches to understanding its value in the context of armed conflicts and subsequent restorations.

## Conflict of Interest
None.

## References

[1] Andrushchenko, V. (2014). The concept of culture: Philosophical discourse at the turn of the century. *Bulletin of the Institute of Child Development. Series: Philosophy, pedagogy, psychology,* 33, 5-9.

[2] Arkhypova, Ye.O., & Klevchuk, O.O. (2021). State regulation in the sphere of cultural heritage protection of Ukraine. *Investments: Practice and Experience,* 13-14, 51-57. doi: 10.32702/23066814.2021.13—14.51.

[3] Chorna, N. (2021). Cultural heritage of Ukraine: Problems of study, preservation and use. *Scientific Notes of the Mykhailo Kotsiubynskiy VDPU. Series: History*, 36, 67-74. doi: 10.31652/2411-2143-2021-36-67-74.

[4] Convention Concerning the Protection of the World Cultural and Natural Heritage. (1972, November). Retrieved from https://whc.unesco.org/en/conventiontext/.

[5] Convention for the Protection of Cultural Property in the Event of Armed Conflict with Regulations for the Execution of the Convention. (1954, May). Retrieved from https://www.unesco.org/en/legal-affairs/convention-protection-cultural-property-event-armed-conflict-regulations-execution-convention.

[6] Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property. (1970, November). Retrieved from https://www.unesco.org/en/legal-affairs/convention-means-prohibiting-and-preventing-illicit-import-export-and-transfer-ownership-cultural.

[7] Convention on the Protection and Promotion of the Diversity of Cultural Expressions. (2005, October). Retrieved from https://zakon.rada.gov.ua/laws/show/952_008#Text.

[8] Convention on the Protection of the World Cultural and Natural Heritage. (1988, October). Retrieved from https://zakon.rada.gov.ua/laws/show/995_089#Text.

[9] From museum collections to architectural monuments: How the EU helps save Ukraine's cultural heritage. (2024). Retrieved from https://novynar.city/articles/390549/vid-muzejnih-kolekcij-do-arhitekturnih-pamyatok-yak-yes-dopomagaye-ryatuvati-kulturnu-spadschinu-ukraini.

[10] Horbul, T.O. (2023). The evolution of the concept of "cultural heritage": Theoretical and methodological aspect. *Culturological Thought*, 23, 178-187. doi: 10.37627/2311-9489-23-2023-1.178-187.

[11] Hotynian-Zhuravlova, V.V., & Sumchenko, I.V. (2024). Culture as a system of moral values: Analysis of the causes of its emergence. *Culturological Almanac*, 1(9), 310-316. doi: 10.31392/cult.alm.2024.1.40.

[12] Kalishchuk, O.M. (2025). Protection of cultural heritage in Ukraine and Poland: Basic concepts and terms. *Culturological Almanac*, 1(13), 316-325. doi: 10.31392/cult.alm.2025.1.36.

[13] Kashaba, O.Iu., Tavshunskyi, O.M., & Shcherbyna, I.V. (2024). International experience in preserving cultural heritage in conditions of military conflict. *Scientific Notes of the V.I. Vernadskoho TNU. Series: Historical Sciences*, 35(74(4)), 199-204.  doi: 10.32782/2663-5984.2024/4.29.

[14] Kharkovenko, R. (2022). Comparative analysis of monument protection legislation of Poland and Ukraine. *Ukrainian Historical Journal*, 3, 205-218. doi: 10.15407/10.15407/uhj2022.03.205.

[15] Koliienko, A.A. (2023). Historical local history: Concepts, functions, scientific basis. In *Development of modern education and science: Results , problems, prospects. Vol. 15: Scientific research in the context of challenges and conflicts* (pp. 26-27). Konin-Uzhhorod-Przemysl: Posvit.

[16] Kryvolapov, V.M. (2018). Protection of cultural values during the conflict in the south-east of Ukraine. *Studies of Young Scientists*, 1, 274-279.

[17] Kushakova-Kostytska, N., & Ohanov, A. (2024). International legal approaches to the protection of cultural heritage. *Philosophical and Methodological Problems*, 2(28), 39-47. doi: 10.33270/02242802.39.

[18] Law of Ukraine No. 1805-III "On the Protection of Cultural Heritage". (2000, June). Retrieved from https://zakon.rada.gov.ua/laws/show/1805-14#Text.

[19] Legislation of the Federal Republic of Germany on the Protection of Cultural Monuments. (2005). Retrieved from http://www.denkmalliste.org/denkmalschutzgesetze.html.

[20] Lisovska, O.V. (2016). Historical local history as a means of forming historical memory and spirituality of the Ukrainian people. *Uman Antiquity*, 2, 125-130.

[21] Map of Destruction and Restoration. (n.d.). Retrieved from https://reukraine.shtab.net

[22] Mazur, T.V. (2020). Normative activities of the International Council on Monuments and Sites in the field of protection of world cultural heritage. *Academic Notes of the V.I. Vernadsky TNU. Series: Legal Sciences*, 31(70(1)), 32-36. doi: 10.32838/2707-0581/2020.1/06.

[23] Novosad, M.H., Bilous, S.I., Tereshkun, O.F., & Borysevych, L.V. (2022). Destruction of the cultural heritage of Ukraine in wartime as a problem: Philosophical and pedagogical aspect. *Educational Discourse: Collection of Scientific Works*, 39(1-3), 62-76. doi: 10.33930/ed.2019.5007.39(1-3)-5.

[24] Perov, D.A. (2024). Cultural heritage and national identity: Counteraction to the lost in the conditions of military conflict. *Culturological Almanac*, 3(11), 235-240.  doi: 10.31392/cult.alm.2024.3.27.

[25] Pilkevych, V. (2016). UNESCO activities in the field of world cultural heritage preservation. *Bulletin of the T. Shevchenko National University of Kyiv*, 4(131), 50-52.

[26] Protocol for the Protection of Cultural Property in the Event of Armed Conflict. (1954, May). Retrieved from https://zakon.rada.gov.ua/laws/show/995_722#Text.

[27] Prytuliuk, V. (2022). State policy in the field of cultural heritage protection (on the example of monument protection activities in Volyn). *Volyn Chronicle: All-Ukrainian Scientific Journal*, 26, 37-41. doi: 10.32782/2305-9389/2022.26.06.

[28] Rishniak, O. (2022). Cultural heritage in military conflict: International experience of the second half of the 20th – early 21st centuries and Ukrainian reality. *Ukrainian Historical Journal*, 4, 159-173. doi: 10.15407/uhj2022.04.159.

[29] Rohozha, M. (2023). Preservation of cultural heritage in Ukraine in times of war: Practices of international cooperation. *Ukrainian Cultural Studies*, 1(12), 10-14.  doi: 10.17721/UCS.2023.1(12).02.

[30] Second Protocol to the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict of 1954. (1999, March). Retrieved from https://zakon.rada.gov.ua/laws/show/995_001-99#Text.

[31] Sysliuk, Ya.H., Dubyk, V.Ia., & Sysliuk, I.P. (2016). Philosophy of culture – subject-objective reflection of the development of civilization. *Bulletin of the Lviv University of Trade and Economics. Humanities*, 4, 128-135.

[32] Taranhul, L.M., Chernikova, I.V., & Drohomyretska, L.R. (2024). Preservation of the historical and cultural heritage of Ukraine as a factor of national identity. *Culturological Almanac*, 1(9), 147-159. doi: 10.31392/cult.alm.2024.1.18.

[33] Tepliuk, L.M., & Khudolei, O.S. (2018). Definition of the concept of cultural heritage in modern Ukrainian legislation. *Humanitarian Bulletin. Series: Historical Sciences*, 13, 114-120.

[34] The Code of Ukraine on Administrative Offenses. (1984, December). Retrieved from https://zakon.rada.gov.ua/laws/show/80731-10#top.

[35] Zaredinova, E. (2017). Cultural and personal values: The logic of interconnection. *Scientific Bulletin of the MNU named after V.O. Sukhomlynsky*. *Pedagogical Sciences*, 2(57), 197-201.

# Культурні пам'ятки в умовах війни в Україні: філософські та правові виклики

Анжеліка Голуб

Аспірант, асистент кафедри історії, правознавства та методики навчання
Глухівський національний педагогічний університет імені Олександра Довженка
41400, вул. Київська, 24, м. Глухів, Україна
https://orcid.org/0009-0008-5366-8561

**Анотація.** Актуальність теми зумовлена необхідністю зрозуміти не лише фізичні наслідки російсько-української війни, але й вплив на ідентичність, пам'ять і культурну спадщину України. Мета статті полягала в комплексному аналіз правових і філософських викликів, із якими стикається Україна в процесі захисту матеріальної спадщини під час збройного конфлікту, пошуку конкретних рекомендацій щодо ефективних механізмів її захисту. Розглянуто культуру як систему моральних цінностей, специфічну форму буття людей. Висвітлено взаємозв'язок із дефініцією «менталітет». Окреслено поняття «культурна спадщина», «культурні цінності», розкрито дотичність між ними. Осмислено становлення норм міжнародної правової системи щодо питань убезпечення пам'яток у історичній ретроспективі. Проаналізовано правові та філософські виклики щодо цього, що постають перед суспільством у нинішніх реаліях. Звернуто увагу на деяку нормативну документацію з урегулювання питання на теренах України та в інших країнах.. У статті досліджено філософські аспекти охорони культурних пам'яток, зокрема, підняті питання ідентичності, пам'яті та відповідальності перед наступними поколіннями. Підкреслено важливість інтеграції культурних цінностей в національну свідомість. Осмислено вплив глобалізації на локальні культурні об'єкти, тобто відмічено на необхідності балансу між міжнародними стандартами їх охорони та власними традиціями. Наголошено на проблемах руйнувань пам'яток Чернігово-Сіверщини, прикордонного регіону по відношенню до Російської Федерації. Результати дослідження можуть бути використані фахівцями галузей філософії та права для розробки ефективних стратегій захисту культурних надбань у умовах війни, а також для формування філософських підходів до їх збереження

**Ключові слова:** цінності; національна свідомість; охорона спадщини; краєзнавство Чернігово-Сіверщини; концепція «пам'яті» в філософії

# JOURNAL
# «PHILOSOPHY, ECONOMICS AND LAW REVIEW»

*Науковий журнал*

Том 5, № 1, 2025