

DOI <https://doi.org/10.30525/2592-8813-2024-4-6>

## USE OF ARTIFICIAL INTELLIGENCE IN ADOPTION OF AN ADMINISTRATIVE ACT

**Larisa Kovalenko,**

*Doctor of Law, Professor, Associate Professor at the Department of Administrative Law  
and Administrative Activity, Yaroslav Mudryi National Law University (Kharkiv, Ukraine)*  
ORCID ID: 0000-0001-8788-4002  
*kovalenkolar2@gmail.com*

**Valeria Melnyk,**

*Student, Yaroslav Mudryi National Law University (Kharkiv, Ukraine)*  
ORCID ID: 0009-0008-7637-0776  
*lera.melnyk.24@gmail.com*

**Daryna Tsendrova,**

*Student, Yaroslav Mudryi National Law University (Kharkiv, Ukraine)*  
ORCID ID: 0009-0007-7058-4741  
*dasacendrova@gmail.com*

**Kyrylo Myroshnichenko,**

*Student, Yaroslav Mudryi National Law University (Kharkiv, Ukraine)*  
ORCID ID: 0009-0001-9921-680X  
*k.s.myroshnichenko@nlu.edu.ua*

**Abstract.** The article is devoted to the study of the role of information technologies in the adoption of administrative acts, in particular when they are used in the administrative process. The subject of the study. Various scientific approaches to defining the concept and functions of AI are analyzed, in particular as a computer program for data analysis, an intellectual system that surpasses human capabilities, and a cybernetic approach that encompasses an algorithmic model of cognitive functions. The legal status of AI in Ukraine is studied, the features of its regulation within the framework of national legislation, as well as problems associated with legal adaptation to international standards. Methodology. The research methodology is an analysis of modern approaches to defining the concept of artificial intelligence in the legal sphere, studying its legal status and identifying prospects for its implementation in the process of drawing up administrative acts. Purpose. To assess scientific approaches to defining the concept and functions of artificial intelligence, in particular in the context of legal regulation. To identify the main problems of the legal status of AI in Ukraine and the need to adapt national legislation to international standards. To analyze the possibilities of introducing AI into the process of drawing up administrative acts, in particular in the field of automation of decision-making and improving the motivational part of acts. To assess the risks and benefits of using AI in the legal sphere, in particular for identifying errors in administrative acts and reducing the human factor. To identify ways to improve legislative regulation regarding the use of AI in legal processes to ensure the efficiency and transparency of administrative procedures. Conclusions. The article also discusses the prospects for using AI to automate administrative processes, in particular in drawing up administrative acts, improving the motivational part and checking documents for errors. The authors emphasize the need to improve legislation and technical support to minimize the risks associated with the use of AI. The introduction of AI into administrative procedures, according to the study, has significant potential to increase efficiency, transparency and reduce administrative burdens on public authorities.

**Key words:** administrative process, artificial intelligence, administrative act, administrative justice.

**Introduction.** Recent research in the field of artificial intelligence in the legal sphere provides diverse views on its nature, functions and legal status. AI continues to be the subject of active scientific debate, in particular regarding its impact on legal processes and legal regulation. In the context of administrative proceedings, not to mention the sphere of administrative act registration, the introduction of artificial intelligence is not a very discussed topic. Therefore, the study of the advantages and disadvantages of implementing AI in the registration of an administrative act is being conducted for the first time.

In addition, today in Ukraine there are no clearly defined norms regulating the legal status of AI in the context of interaction with other legal institutions, such as human rights, personal data protection, liability for AI errors, etc. The problem is complicated by the need to adapt Ukrainian legislation to international standards, in particular to EU norms, which creates additional difficulties in the process of implementing technologies and their legal regulation.

In view of this, there is a need to develop a new approach to the legal regulation of AI, which would take into account the rapid development of technologies, as well as ensure the protection of human rights and increase the efficiency of the legal process. It is important to consider not only the theoretical aspects of the functioning of AI, but also the practical mechanisms of its integration into the state administration system, in particular, into the processes related to the drafting of administrative acts.

Thus, the main problem is the lack of a clear legal definition of AI and the need to develop an effective system of legal regulation that would ensure the consistency of the technological capabilities of AI with ethical norms and principles of legal regulation in Ukraine.

**Research materials and methods.** The purpose of the study is the analysis of modern approaches to the definition of the concept of artificial intelligence in the legal sphere, the study of its legal status and the identification of prospects for its implementation in the process of drawing up administrative acts. In particular, the emphasis is on the role of AI in increasing the efficiency of legal procedures, automating decision-making and improving the process of formulating administrative acts, taking into account possible legal and ethical risks. The tasks of the research are as follows:

1. Evaluate scientific approaches to defining the concept and functions of artificial intelligence, in particular in the context of legal regulation.
2. Identify the main problems of the legal status of AI in Ukraine and the need to adapt national legislation to international standards.
3. To analyze the possibilities of implementing AI in the process of drawing up administrative acts, in particular in the field of automation of decision-making and improvement of the motivational part of acts.
4. To assess the risks and benefits of using AI in the legal sphere, in particular for detecting errors in administrative acts and reducing the human factor.
5. To identify ways to improve legislative regulation regarding the use of AI in legal processes to ensure the efficiency and transparency of administrative procedures.

Main text. There are a significant number of definitions of AI, which vary from perceiving it as part of robotics to understanding AI as an independent direction of development of science and technology. Analyzing the above scientific approaches to defining the concept and functions of artificial intelligence (AI) in the legal sphere, several main directions can be distinguished that reflect the specifics of understanding AI and its functioning:

1. AI as a computer program for data analysis – Varava I.P. and Paramonova Yu.O. focus on the functionality of AI as a computer program that analyzes and processes data, creating the illusion of intellectual processes similar to human ones (Paramonova, 2023: 21).
2. AI as an intelligent system that exceeds human capabilities – Mahind Rupali and Patil Amit describe AI as intelligence that surpasses human in many areas (Rupali, 2017: 79). They differentiate

between weak and strong AI, focusing on the ability of AI to learn, adapt, solve complex problems and linguistic logic.

3. Cybernetic approach – Baranov O.A. considers AI through the prism of a cybernetic approach that focuses on information processing, storage, transmission, and transformation in complex dynamic systems (Baranov, 2023: 32). AI is defined as an algorithmic model of human cognitive functions. This approach is theoretically supported by the works of Norbert Wiener and became the basis for the principle of technological neutrality. It is this approach, from our point of view, that is more comprehensive, since it clearly outlines the nature of the functioning of AI. It is cybernetics that studies the processes of information management and processing regardless of the material nature of the system, and the processing, analysis, and transformation of information are the basis for the operation of modern AI systems, including those that are used in the legal field. It is this approach that takes into account not only current achievements, but also potential opportunities for the development of AI, including the principle of technological neutrality. Moreover, in a world dominated by integrative systems, an approach that combines philosophical, mathematical and applied aspects is most relevant.

The concept of AI is also enshrined in national legislation, namely in the Concept of the Development of Artificial Intelligence in Ukraine, where AI is defined as an organized set of information technologies that allows you to perform complex tasks through the use of scientific methods, information processing algorithms, the creation and use of knowledge bases, decision-making models, and determination of ways to achieve the set goals (Verkhovna Rada of Ukraine, 2020). In this case, AI is considered as a set of information technologies, the main focus is the ability to perform complex tasks using scientific methods and algorithms. This definition has the merits of its simplicity and application orientation, but it is limited in that it does not consider aspects of the ethics, legal status, autonomy, or cognitive nature of AI. Returning to the cybernetic approach of O.A. Baranov, he offers a more complex approach. Therefore, normative anchoring is suitable for the formation of normative acts, but does not take into account the complex nature of AI, as Baranov's cybernetic approach does.

However, in modern scientific discussions, the problem arises not only of defining the essence of AI, but also of its legal status. In Ukraine, according to the Concept for the Development of Artificial Intelligence (hereinafter – the Concept), approved by the Cabinet of Ministers, the need to create a state policy that regulates the development and implementation of AI is recognized. The central issue is the determination of the legal status of AI, which involves the analysis of its legal personality, responsibility, norms of use and protection of human rights. The legal status of AI can be defined as a set of ethical norms that regulate its creation, use and impact on legal relations. Key aspects include:

- lack of AI subjectivity, as it does not have legal personality or the ability to independently participate in legal relations. All actions of AI systems are considered to be carried out by its developers, operators or owners;
- principles of legal regulation, including the compliance of AI activities with the principles of the rule of law and respect for human rights and the protection of personal data during AI processing and ensuring the right to privacy;
- ethical norms, meaning the implementation of the principles of transparency, ethics and responsibility during the creation and use of AI and the creation of mechanisms for assessing the compliance of AI systems with ethical standards and legislation;
- responsibility for damages caused by AI systems rests with individuals or legal entities who develop or use it (Verkhovna Rada of Ukraine, 2020).

During the analysis of the mentioned Concept, several problems related to the determination of the legal status of AI were revealed. First, AI is currently regulated by analogy with computer programs, which in Ukraine are equated to literary works. However, AI has a much wider functionality, which raises questions about its adequate legal regulation, since, in our opinion, the Concept does not clearly outline the legal status of AI. Secondly, the Concept itself states that Ukrainian legislation needs to be

adapted to international standards, such as OECD and Council of Europe Recommendations. Although Ukraine seeks integration with the EU, difficulties arise with the implementation of European norms into Ukrainian legislation, as they may be contradictory or do not correspond to the Ukrainian context. This can create confusion for both regulators and developers, especially those targeting the EU market. O.O. Tymoshenko agrees with this point of view, and also points out that Ukraine can borrow rules from other countries, which may sometimes not meet EU standards and create difficulties for their implementation in practice. Thirdly Thus, artificial intelligence is a challenge for modern legal science, as it requires a new approach to its legal regulation. Given the rapid development of technology, it is important to ensure balanced legislation that promotes innovation and at the same time protects human rights. Solving this problem is possible only under the conditions of cooperation between scientists, lawyers, AI developers and government bodies.

Having considered the legal nature of AI, let's move on to the study of the prospects for its implementation during the execution of an administrative act, which is the result of a decision on a case. To begin with, we will consider the legal regulation of the execution of an administrative act and its procedure in order to establish exactly where AI capabilities can improve and facilitate this process.

The Law of Ukraine "On Administrative Procedure" (hereinafter referred to as the Law) regulates the issue of drafting and adoption of an administrative act, namely, Art. 69-73. The process of drawing up an administrative act in accordance with the legislation is a clearly regulated procedure that covers several key stages and provides for specific requirements for the form, content and order of adoption of such acts. First of all, an administrative act is issued by an administrative body within the limits of its authority based on the results of the case review. In some cases, defined by law, the adoption of the act is possible in automatic mode, which emphasizes the integration of digital technologies into the administrative process. The main form of the act is written, but under certain circumstances (for example, to prevent threats to life or safety), an oral form is allowed, with subsequent written confirmation at the request of the participants in the proceedings. In the case of an electronic form, the administrative act must comply with the requirements of the legislation on electronic document flow. An administrative act consists of four parts (introductory, motivational, resolute, final), each of which performs a specific function. The act must contain information about the administrative body, the essence of the decision, legal justification, terms of validity and the possibility of appeal (Tymoshenko, 2023: 12).

Having analyzed the process of drawing up an administrative act, we can propose the introduction of AI in the following areas:

1. Automation of decision-making using AI;
2. Improvement of the motivational part;
3. Checking acts for errors.

More details about each area:

1. AI can be used to automatically make decisions in standard cases that have clearly defined legal norms and solution algorithms. For example, in situations where data analysis of national electronic information resources is sufficient, AI is able to quickly assess the situation, apply the relevant legal norms and issue decisions without human intervention. This will reduce the time for considering typical cases and reduce the burden on administrative bodies. Additionally, automation of the process frees employees of administrative bodies from routine work, allowing them to focus on more complex and non-standard tasks. At the same time, the significant risks that may be encountered will be the following:

- in non-standard situations, AI may mistakenly apply a template approach, which will lead to an unfair decision;
- uncertainty about who is responsible for AI errors (developer, operator or administrative body as specified in the Convention);

- citizens may be cautious about automated decisions, especially if they do not understand the principles of AI;
- there may also be errors in algorithms or lack of updates, which can lead to mass erroneous decisions.

In our opinion, the prospects for using AI in this direction have more advantages. All the problematic issues mentioned above have a fairly simple and logical solution: regarding the first question, the benefit of AI will be greatest when solving standard cases, while more complex cases will be dealt with by professional specialists, which, on the contrary, will facilitate their work, and the work itself will not be routine and uninteresting. As for the second issue, it is acute not only in the field of administrative justice, but also in other areas, and therefore it is logical to improve the legislation, which will be aimed at resolving this issue. Regarding the last two risks, these responsibilities for improving the AI system will be assigned to technical workers, and regarding ordinary employees of administrative bodies, in our opinion, in connection with the digital transformation that makes “amendments” to our legislation every year, they should be able to adapt to such innovations. Every day, many new inventions appear in the world, and if they help to specify and improve any process of human life, then they are not what is needed, they must be implemented in national systems.

2. AI can analyze legal norms and case law to automatically formulate the motivational part of an administrative act. This will ensure the accuracy of legal reasoning, avoid logical errors and reduce the subjective factor. In our opinion, if AI is given access to the necessary database, it will be able to find relevant legal norms, case law and logically justify decisions. Another positive point in this context is that the exclusion of the human factor reduces the likelihood of biased or insufficiently reasoned decisions, which is very relevant in connection with the level of corruption in the country. Considering the risks that may arise here, we emphasize that the text of the motivational part may be formulated too “technically”, which will be difficult to understand, and the incompleteness or inaccuracy of the data analyzed by AI may lead to erroneous conclusions. In this case, the human factor comes to the rescue, but then the question arises: why introduce it if, in the end, it is the person who will form the final result? We look at it from the point of view of the time used. Checking a document will take much less time than creating it “from scratch”. Again, AI relieves the workload of employees.

3. Using AI to check administrative acts will help to identify and correct grammatical, stylistic, legal or arithmetic errors even before their approval. This minimizes the risk of appealing decisions due to technical inaccuracies. The advantages of such an introduction will be the rapid processing of huge amounts of information and making a decision much faster than a person. Analyzing the problematic aspects of such an innovation, we came to the conclusion that in some cases AI may not recognize errors that are not foreseen by the algorithm, or correct something that is not an error (for example, specific terminology), or software flaws may cause additional errors instead of eliminating them. To solve this problem, it is necessary to attract experienced specialists in the field of technical support, which will contribute to the emergence of new jobs and the emergence of new areas of professional activity. Despite the existing risks, the benefits of introducing AI in the administrative process outweigh the potential negative consequences. In particular, the use of AI in automating decision-making, improving the motivational part and checking acts for errors will significantly increase the efficiency of administrative bodies. To minimize risks, it is necessary to improve legislative regulation, provide constant technical support and training of specialists for adaptation to new technologies. Thus, the introduction of AI is a necessary stage of the digital transformation of state bodies, which will help improve the quality and transparency of administrative procedures in Ukraine.

**Results and discussion.** Currently, in Ukraine, despite the existence of the Concept of the Development of Artificial Intelligence, there is an incomplete and uncoordinated regulation of the legal status of AI, which is the subject of intense scientific and practical discussions. The problem is not only how to correctly classify and define AI, but also how to integrate it into the legal system,

where the issues of ethics, legal personality and responsibility for the actions carried out by such systems are important aspects.

**Conclusion.** As a result of the research, the main approaches to defining the concept and functions of artificial intelligence in the legal sphere were analyzed, as well as the challenges that arise in connection with its legal status and use. Various theoretical approaches are considered, including especially the cybernetic approach of O.A. Baranov stands out, which provides the most comprehensive picture of the functioning of AI, in particular in the context of its application in legal processes. Problems that arise in the way of legal regulation of AI include the need to adapt national legislation to international standards, in particular to EU norms, as well as clarifying the legal status and subjectivity of AI in Ukraine.

The main problems are the incompleteness of legislative initiatives to clearly define the legal nature of AI and its legal status, as well as the need to integrate new technologies into existing legal norms. In particular, the issue of responsibility for the actions of AI systems, ethical standards and ensuring human rights in the process of their use requires attention.

Ways to solve these problems involve the development of interdisciplinary research that combines legal, technical and ethical aspects, improving legislation and constantly adapting norms to the latest technological trends. Therefore, scientists should more actively investigate the application of AI in the administrative process, in particular from the point of view of legal support and integration of these technologies into the administrative justice system. Such research will allow not only to effectively solve theoretical problems associated with the use of AI, but also to provide the necessary legal regulation, which will avoid possible negative consequences and errors. Scientists should actively study and develop methods that will help improve judicial practice, as well as determine the criteria and limits of the use of AI in the administrative process. In addition, an important step is the introduction of AI into administrative processes, in particular into the automation of decision-making, which will reduce the burden on authorities, improve the quality of decisions and increase the transparency of administrative procedures.

Thus, the introduction of AI into legal practice is necessary to ensure innovative and effective solutions in modern legal systems. To do this, it is necessary to provide national legislation with modern tools that will meet both national and international requirements.

#### References:

1. Baranov, O. AND. (2023). Definition of the term "artificial intelligence". *Information and Law*, 1(44), 32–49. URL: <http://il.ippi.org.ua/article/view/287537>.
2. Paramonova, O. Yu., & Varava, I. P. (2023). The place of artificial intelligence in the legal system. URL: <https://er.nau.edu.ua/bitstream/NAU/61750/1/%d0%bf%d0%b0% d1%80%d0%b0%d0%b-c%d0%be% d0%bd%d0%be%d0%b2%d0% b0%20%d0%b2%d0%b0d1%80%d0%b0%d0%b2 %d0%b0.pdf>.
3. On the approval of the Concept of the development of artificial intelligence in Ukraine: Decree of the Cabinet of Ministers of Ukraine; Concept No. 1556 dated 02.12.2020. URL: <https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#Text>.
4. On administrative procedure: Law of Ukraine dated February 17, 2022 No. 2073-IX. URL: <https://zakon.rada.gov.ua/laws/show/2073-20#Text>.
5. Rupali, M., & Amit, P. (2017). A review paper on general concepts of artificial intelligence and machine learning. *International Advanced Research Journal in Science, Engineering and Technology*, 4(4), 79–82. URL: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=deb44af9d65763af055ec66b29e9b12f9b80f564>.
6. Tymoshenko, O. AT. (2023). Legal status of artificial intelligence in Ukraine and Latvia. *Galician Studies: Legal Sciences*, 4, 12–18. URL: <https://journals.gi.ternopil.ua/index.php/law/article/view/37/34>.