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DIGITALIZATION OF LEGAL POLICY OR LEGAL POLICY OF DIGITALIZATION: STATE OF IMPLEMENTATION AND PROSPECTS FOR IMPROVEMENT

It is established that the technologies of artificial intelligence determine the state of implementation of digitalization and socio-economic development of the state. In view of this, it is proved that it is necessary to study the peculiarities of the legal regulation of digitalization and the state of public policy. With this in mind, the greatest attention is paid to the analysis of the provisions of the Concept of Artificial Intelligence Development in Ukraine (2020). It was found that the Concept contains a number of terms that require clarification, namely: "artificial intelligence industry", "state policy in the field of legal regulation of artificial intelligence industry", "public administration" and so on. It is reasonable to consider "industry" in the context of "sphere", and "public policy" as a component of "public administration". In addition, it is recommended to bring the legal terminology (defined in the Concept) in line with its scientific and theoretical characteristics.

Key words: *public policy, mechanisms, digitalization, legal regulation.*

Problem setting. Artificial intelligence technologies ensure the state of implementation of digitalization and socio-economic development of the state. In view of this, it is important to study the peculiarities of the legal regulation of digitalization and

the state of public policy within which it is implemented. Of particular relevance in this context is the Concept of Artificial Intelligence in Ukraine.

Analysis of recent research and publications. Consideration of the problem of digitalization (digitalization) is carried out in the works of a large number of domestic and foreign scientists, namely: L. Gren, S. Dombrovskaya, O. Durman, D. Elkington, O. Karpenko, A. Carroll, S. Master , O. Orlov, G. Ortina, O. Simson and others [5; 6; 8–9]. At the same time, we emphasize that in domestic science the topic of digitalization (digitalization) in the field of public administration, legal regulation and ethics is gaining importance. Evidence of this is the work of L. Antonova, K. Lobodenko, L. Novak-Kalyaeva and others. [3–4]. Given the urgency of this problem, there is a need to deepen research on the above issues.

Paper objective. The purpose of the research is to analyze the state of implementation and improvement of state policy in the field of digitalization and its legal regulation in Ukraine.

Paper main body. In December 2020, Ukraine approved the Concept for the Development of Artificial Intelligence [1] (hereinafter - the Concept), as well as a number of legal documents designed to improve information protection, as well as the development of information technology and regulation of the information sphere in general and other related public life (Fig. 1).
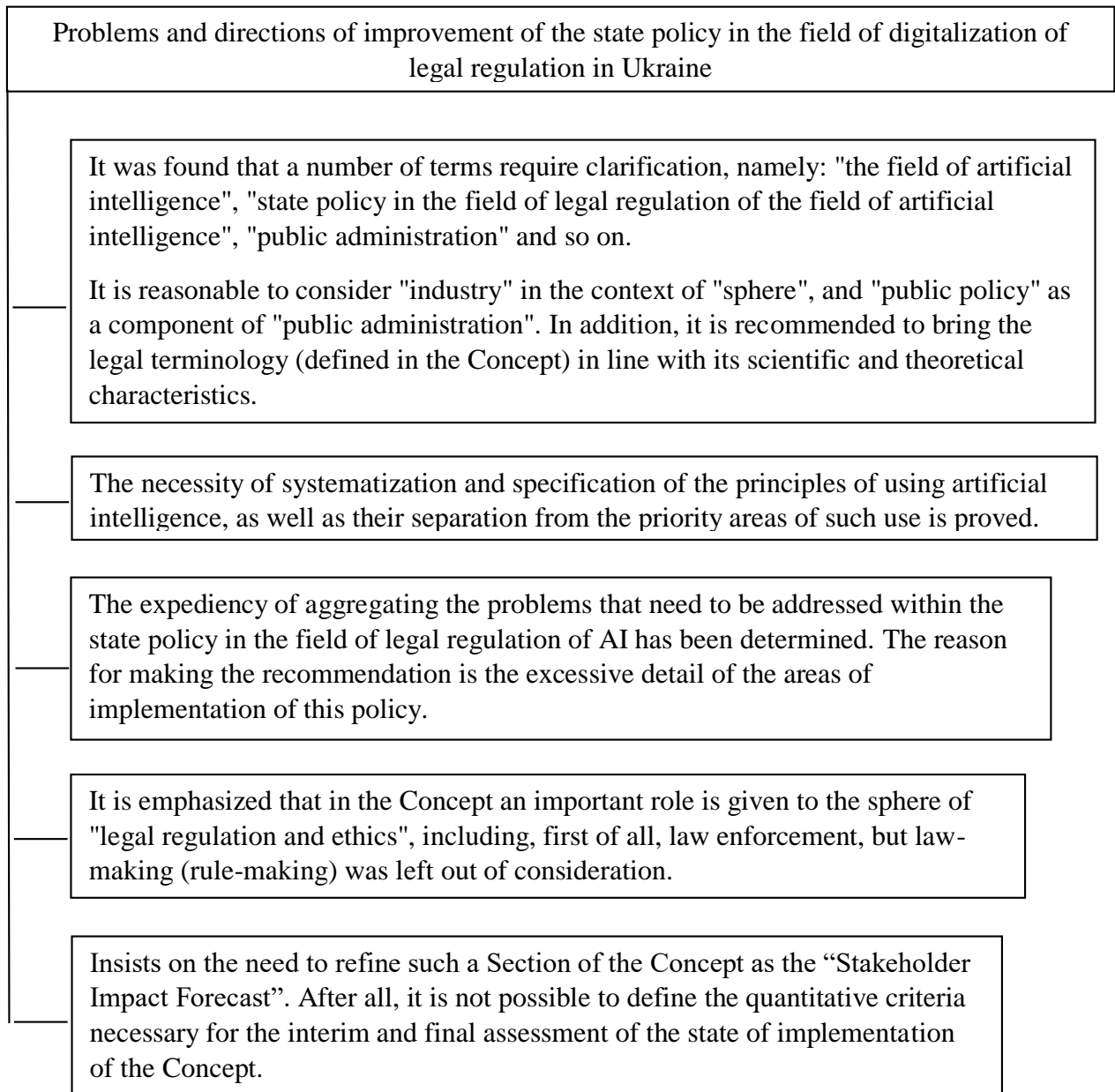
Problems and directions of improvement of the state policy in the field of digitalization of legal regulation in Ukraine
It was found that a number of terms require clarification, namely: "the field of artificial intelligence", "state policy in the field of legal regulation of the field of artificial intelligence", "public administration" and so on.
It is reasonable to consider "industry" in the context of "sphere", and "public policy" as a component of "public administration". In addition, it is recommended to bring the legal terminology (defined in the Concept) in line with its scientific and theoretical characteristics.
The necessity of systematization and specification of the principles of using artificial intelligence, as well as their separation from the priority areas of such use is proved.
The expediency of aggregating the problems that need to be addressed within the state policy in the field of legal regulation of AI has been determined. The reason for making the recommendation is the excessive detail of the areas of implementation of this policy.
It is emphasized that in the Concept an important role is given to the sphere of "legal regulation and ethics", including, first of all, law enforcement, but law-making (rule-making) was left out of consideration.
Insists on the need to refine such a Section of the Concept as the "Stakeholder Impact Forecast". After all, it is not possible to define the quantitative criteria necessary for the interim and final assessment of the state of implementation of the Concept.

Fig. 1. Problems and directions of improvement of the state policy in the field of digitalization of legal regulation in Ukraine.

Source: compiled on the basis of [1]

The concept contains the definition of two concepts, namely:

1) artificial intelligence (hereinafter - AI) - is an organized set of information technologies, using which it is possible to perform complex complex tasks using a system of scientific research methods and algorithms for processing information obtained or independently created during work, as well as create and use their own databases

knowledge, decision-making models, algorithms for working with information and identify ways to achieve goals;

2) the field of artificial intelligence - the direction of activity in the field of information technology, which provides the creation, implementation and use of artificial intelligence technologies [ibid].

The analysis of these concepts allows us to state the following:

I. The developers of the Concept distinguish between the concept of AI and the field of its use. However, it is not clear why the term "scope" is used - state policy in the field of legal regulation (see the section of the Concept "Ways and means of solving the problem in key areas of public policy"). This makes it difficult to interpret these concepts as to whether the field is broader in content, in contrast to the field, which relates to "education", "legal regulation and ethics" and other areas with the concept of "AI industry". This question arises given its scope. Thus, in the preamble of the Concept Section "Ways and means of solving the problem in key areas of public policy" contains the wording: , information security, defense, public administration, legal regulation and ethics, justice "[ibid.]. As you know, if it is not an administrative area, you should use the equivalent "sphere" or "industry" [7].

In continuation, we note that theorists and practitioners who apply economic and legal approaches to the definition of the terms "industry" and "sphere", rightly point out that "industries and human activities constitute the sphere of the economy" [5; 6], "an industry is a set of all production units that carry out mainly the same or similar types of economic activity" (see Article 260 of the Commercial Code of Ukraine [1]. and secondly, in general, it is necessary to ensure the unification of the terms "digitalization" and "digitalization", which is possible on the basis of the application of relevant foreign experience.

II. The use of the terms "public administration" and "state policy in the field of legal regulation of AI" is also unclear. In our opinion, it is worth emphasizing the scope of application of these concepts, because public administration is broader in relation to the concept of "public policy". Given the general concept of the sciences of public

administration, we can insist that it includes public policy, as well as provides for the activities of non-governmental institutions (local governments, public councils, associations of citizens, etc.).

Thus, the Concept needs terminological and stylistic improvement. Regarding the last moment, it is a question of inconsistency in the definition of the subject-search field of the Concept: "problems" or "problem" of AI use are considered. Yes, the Concept specifies both terms:

- Section I of the Concept is entitled "Problems that need to be solved";

- Section III of the Concept is called "Ways and means to solve the problem in key areas of public policy" [1].

Therefore, it is unclear that one problem or a number should be solved. In our opinion, the list of problems in the field of AI is even more confusing. Among them are identified the following (we consider it appropriate to indicate them all in the version in which they are listed in the Concept):

1) low level of digital literacy, public awareness of general aspects, opportunities, risks and safety of artificial intelligence;

2) the absence or imperfection of the legal regulation of artificial intelligence (including in the fields of education, economics, public administration, cybersecurity, defense), as well as the imperfection of legislation on personal data protection;

3) low level of investment in the development of artificial intelligence technologies;

4) low level of implementation and realization by economic entities of innovative projects with the use of artificial intelligence technologies in comparison with the leading countries of the world, which leads to a decrease in labor productivity and the emergence of a large percentage of jobs that need to be automated;

5) low level of mathematical competence of graduates of general secondary education, necessary for the development and research in the field of artificial intelligence;

6) insufficient level of quality of higher education and educational programs aimed at training specialists in the field of artificial intelligence in higher education institutions;

7) lack of modern advanced training programs for teachers of higher education institutions in the field of artificial intelligence;

8) low level of investment in research on artificial intelligence in higher education institutions;

9) lack of grant funding for scientific activities in the field of artificial intelligence;

10) a small number of publications in the publications of leading industry conferences (CVPR \ ICCV \ ECCV - for computer vision, NeurIPS, ICML, ICLR - for machine learning, etc.) and leading peer-reviewed publications;

11) insufficient level of information security and data protection in information and telecommunication systems of state bodies due to the obsolescence of automatic systems for detecting and assessing information threats, failure to use the potential for forecasting and forecasting threats in order to prepare the system for a possible attack;

12) increase in the number of attempts of unauthorized interference in the work of automated systems, computer networks;

13) imperfection of management decisions in the public sphere, over-bureaucratization of the system of administrative services, limited access to information and its low quality, insufficient level of implementation of electronic document management between government agencies, as well as low digitization of data owned by government agencies;

14) the complexity of verifying the compliance of artificial intelligence systems with legislation and existing ethical principles;

15) the lack of common approaches used in determining the criteria of ethics in the development and use of artificial intelligence technologies for different industries, activities and areas of the national economy;

16) the presence of risks of rising unemployment due to the use of artificial intelligence technologies;

17) the lack of application of artificial intelligence technologies in judicial practice [1].

The study of these problems of AI use in Ukraine gives grounds to assert that during their definition scientific-theoretical and scientific-practical approaches were not properly applied, namely: systemic and synergetic. As a result, we can observe such differences in the definition of problems in the use of AI, and in some cases their excessive detail. Given that we believe that it is appropriate to reduce to one denominator the problems of AI use in Ukraine. Moreover, the developers of the Concept themselves have defined this denominator - AI technologies should contribute to the transformation of the economy, labor market, government institutions and society as a whole. This will help reduce costs, increase production efficiency, quality of goods and services [Section III of the Concept is called "Ways and means to solve the problem in key areas of public policy"].

III. Attention should be drawn to the principles of development and use of AI technologies, compliance with which (the authors of the Concept insist) fully complies with the principles of the Organization for Economic Cooperation and Development on artificial intelligence. These principles include the following:

a) promoting inclusive growth, sustainable development and prosperity;

b) development and use of artificial intelligence systems only subject to the rule of law, fundamental human and civil rights and freedoms, democratic values, as well as the provision of appropriate guarantees in the use of such technologies;

c) compliance of the activity and algorithm of solutions of artificial intelligence systems with the requirements of the legislation on personal data protection, as well as observance of the constitutional right of everyone to non-interference in personal and family life in connection with personal data processing;

d) ensuring transparency and responsible disclosure of information about artificial intelligence systems;

e) reliable and safe operation of artificial intelligence systems throughout their life cycle and implementation on an ongoing basis of their assessment and management of potential risks;

f) placing on organizations and individuals who develop, implement or use artificial intelligence systems, responsibility for their proper functioning in accordance with these principles [1].

We believe that the wording of the above principles should be more comprehensive, as well as the problems in the field of AI. In addition, some principles can be considered from the standpoint of orientation, ie they rather indicate the vector of AI use. These are the principles of "a", "b", "e", which indicate not an indisputable static fact, but the dynamics of certain processes that depend on the use of AI. In addition, we propose to combine the principles of "b" and "c", as they relate to the principles of the rule of law and legality. Therefore, the question rightly arises: how do the principles of AI use differ from the following priority areas for its implementation in the Concept. It is expedient to solve this question from the position of systematization of principles and directions of application of AI.

IV. Note that in the Concept [1] an important role is given to the field of "legal regulation and ethics". Consideration of the Concept allows us to state that this area includes, first of all, law enforcement. However, law-making (rule-making) was left out of consideration. Justice is defined as a separate area for the introduction of artificial intelligence technologies. In confirmation, we can cite the tasks that should be addressed within the field of "legal regulation and ethics", namely:

- implementation of the norms enshrined in the "Recommendations on Artificial Intelligence" adopted in June 2019 by the Organization for Economic Cooperation and Development (OECD / LEGAL / 0449), subject to the ethical standards set out in Recommendations CM / Rec (2020) 1, approved April 8, 2020 by the Committee of Ministers of the Council of Europe for member states on the impact of algorithmic systems on human rights in the legislation of Ukraine;

- elaboration of the issue of compliance of the legislation of Ukraine with the guiding principles established by the Council of Europe on the development and use of artificial intelligence technologies and its harmonization with the European one;

- assessment of the possibility and determination of the limits (ethical, legal) application of artificial intelligence systems for the purposes of providing professional legal assistance;

- ensuring the functioning and operation of technical committees of standardization in accordance with the requirements of 7.1.5 DSTU 1.14: 2015 "National standardization. Procedures for creation, activity and termination of activity of technical committees of standardization "in the direction of artificial intelligence;

- ensuring cooperation between the relevant Technical Committees of Ukraine and international subcommittees of standardization ISO / IEC JTC 1 / SC 42 Artificial Intelligence on the joint development of standards in the field of artificial intelligence;

- support for initiatives to create organizational forms of cooperation between interested legal entities and individuals in the field of artificial intelligence;

- development of a Code of Ethics for artificial intelligence with the participation of a wide range of stakeholders [1].

V. In our opinion, Section IV of the Concept "Forecast of Impact on Key Stakeholder Interests" needs to be revised [ibid.]. This section does not provide a proper forecast of the implementation of state policy in the field of artificial intelligence. It is not enough to indicate that "implementation of the Concept of Artificial Intelligence Development in Ukraine will have a positive impact on Ukrainian business, public authorities, local governments and citizens in terms of creating a legal basis for artificial intelligence technologies, defining their main areas of application, development directions and rules. in each area… Implementation of the Concept will also contribute to the development of scientific and technical components of domestic developments in artificial intelligence, and, consequently, increase the number of Ukrainian technologies in the field of artificial intelligence, their entry into foreign markets "[ibid.]. In our opinion, the forecast should contain both qualitative indicators for evaluation and quantitative ones, especially since the Concept defines the areas of its application, which are not possible without quantitative development (economy, business, etc.). On this basis, we can offer

to take into account the principles of effectiveness and efficiency when updating the Concept of AI development in Ukraine.

Conclusions of the research. Thus, the review of the Concept allows us to argue about the need to clarify the mechanisms of state policy on the use of legal means and technologies such as legal monitoring, digitization of legal facts, as it is not enough to indicate the need to solve a problem without disclosing its mechanisms. On this basis, it is proposed to improve the mechanisms of state policy in the field of digitalization of legal regulation in Ukraine, which (improvement) should take into account the general and special public administration principles (system, effectiveness, efficiency, legality, publicity, predictability, etc.).

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