

INSTITUTIONAL SUPPORT FOR THE REGULATION OF SCIENTIFIC ACTIVITY IN THE CONTEXT OF DIGITALIZATION

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Abstract. *The subject of the study* is the principles of the use of information and telecommunication technologies in the regulation of public relations in the field of scientific activity in terms of institutional support. *Methodology.* General scientific methods were used in the research process. The method of comparison was used in the selection and grouping of international standards related to the field of digital transformation. The *analysis* identified quantitative and qualitative parameters that characterize the specifics of the management activities of the Cabinet of Ministers of Ukraine, the Ministry of Science and Education of Ukraine, the Ministry of Digital Transformation of Ukraine in modern conditions. Induction and deduction were used to determine approaches to the main dominants of the main areas of activity of central executive bodies in the field of scientific activity. The *results* of the study showed that the introduction and use of digital technologies in the field of scientific activity is a natural and necessary phenomenon, which is an integral element of the functioning of public authorities, creates conditions for the effective exercise of their powers, and contributes to the public interest in general. *Conclusion.* The characteristic of the state of provision of the sphere of scientific activity in terms of digitization in the existing institutional mechanism is established. The system of entities that are empowered in the field of scientific activity and / or authorized to use information and telecommunication means in the field of scientific activity is distinguished. The formation of science that stimulates the socio-economic development of the state was defined, achieved and tested through: the launch of the Telegram-bot "Info Science Bot", conducting free webinars in Ukrainian by Clarivate, opening of the ERA4Ukraine portal to provide information and support services to Ukrainian scientists, Ukraine's membership in the COST Association for the Financing of Innovation and Research Networks, implementation of the project "Advisory Fund to Support the EU-Ukraine Association", etc.

Key words: the field of science, legal influence, public administration, digital technologies, institutional support, management entities, "E-Science" project.

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1. Introduction

Regardless of the sphere of social relations subject to legal influence, the choice of measures and areas of regulation will depend on existing globalization trends and international standards. One of such areas is digitalization, which transforms the usual ways of influence of power entities, methods of their activities, forms of consolidation of decisions. This thesis will be confirmed by international standards in the field of digitalization in the public sector, namely: the provisions of the Okinawa Charter on the Global Information Society (2000), the Declaration on European Policy on New Information Technologies (1999), the European Code of Electronic Communications (2018), the European

Union Directive "On Measures for a High Common Level of Security of Network and Information Systems in the Union" (2016), etc. The sphere of scientific activity and its regulation, including the institutional level of support, has undergone appropriate adjustments, which is partly due to the inclusion of the scientific environment of Ukraine in the single European space. At the same time, any applied innovations are implemented against the background of revision of the initial theoretical postulates of public administration and regulation. At the same time, one of the central categories by which the managerial influence and the way of organizing social relations is interpreted is the category of "institutional support".

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Given the challenges of today, it is important to identify the possibilities of using digital tools for the organization of scientific activities. Thus, the key problems in the field of scientific activity, which can be solved with the help of digital tools, and which were identified by the Ministry of Education and Science of Ukraine (hereinafter – the Ministry of Education and Science of Ukraine), are as follows: lack of up-to-date and reliable information about scientific and pedagogical and scientific workers for making managerial decisions; bureaucratization of internal document flow processes of institutions and educational and scientific institutions; insufficient transparency in the distribution of research funding for Ukrainian scientists; inaccessibility of scientific resources and digital infrastructures; absence of effective electronic reporting systems in educational and scientific institutions (*Project Concept of Digital Transformation of Education and Science for the period until 2026, 2022*).

At the same time, the phenomenon of outflow of scientific potential abroad has become permanent. This is, among other things, due to the level of provision of the material and technical base of scientific institutions and higher education institutions. Thus, over the past five years, the number of researchers in Ukraine has almost halved: from 101,440 people in 2014 to 51,121 people in 2019. In the total number of employed population in 2018, the share of scientists was 0.54 percent, including researchers – 0.35 percent (*On Approval of the Concept of the State Target Program for the Development of Research Infrastructures in Ukraine for the period up to 2026 2021*).

Therefore, the purpose of the study is to determine the state of institutional support for the regulation of scientific activity, taking into account the capabilities of digitalization tools by analyzing: a) the role of information and telecommunication technologies in the field of scientific activity; b) the status of the Cabinet of Ministers of Ukraine, individual ministries and other authorized entities that regulate the sphere of scientific activity.

2. Information and telecommunication technologies in the field of scientific activity and their institutional support

Regardless of the type of social relations in the field of scientific activity, public administration in this area should be carried out taking into account the concept of digitalization. The idea of using information and telecommunication technologies in the sphere of scientific activity streamlining became vividly expressed with the adoption of the Resolution of the Cabinet of Ministers of Ukraine "Some issues of digital transformation" (2021). Accordingly, the

idea of digital transformation in the chosen field is reflected through: a) the creation of an information system designed for competitive funding of scientific research; b) the creation of an electronic system of access to existing scientific information resources, an electronic scientific information system; c) creation of a register of Ukrainian research infrastructures; d) development of the Ukrainian Science Citation Index; e) creation of an electronic system for awarding academic degrees and academic titles; f) modernization of the systems of submission of documents and state certification of scientific institutions and higher education institutions in terms of their scientific activities; g) ensuring the development of the repository of academic texts and connecting local repositories to it.

Analysis of the report of the Ministry of Education and Culture for 2020 shows the urgency of increasing public investment in research and innovation and creating demand for innovation (*Pysarenko, Kuranda, Kvasha, 2021: 33*). The idea of using information and telecommunication technologies in the field of streamlining scientific activities has received a vivid expression with the adoption of the Resolution of the Cabinet of Ministers of Ukraine "Some Issues of Digital Transformation" dated February 17, 2021 No. 365. Accordingly, the idea of digital transformation in the field of science is reflected in: 1) automation of the admission campaign; organization of recruitment and training (internships) of foreigners and stateless persons; ordering educational documents and annexes to them of the European standard; introduction of electronic licensing; modernization of the Unified State Electronic Database on Education; creation and modernization of a unified electronic system for monitoring the employment of graduates; 2) creation of an information system designed for competitive funding of scientific research; creation of an electronic system of access to existing scientific information resources, an electronic system of scientific information; creation of a register of Ukrainian research infrastructures; development of the Ukrainian scientific citation index; creation of an electronic system for awarding academic degrees and academic titles; modernization of the systems of submission of documents and state certification of scientific institutions and higher education institutions in terms of their scientific activities; ensuring the development of the repository of academic texts and connecting local repositories to it.

It should be noted that the use of information and telecommunication technologies in the regulation of social relations in the field of education indirectly affects the implementation of scientific activities. However, such aspects as: automation of the admission campaign, organization of recruitment

and training (internships) of foreigners and stateless persons, ordering of educational documents and annexes to them of the European standard, modernization of the Unified State Electronic Database on Education, creation and modernization of a unified electronic system for monitoring the employment of graduates (in the future this direction will be called "E-University"), will not apply to the digitalization of public administration in the field of scientific activity.

Establishing the state of provision of the sphere of scientific activity in terms of digitization should be based on the existing institutional mechanism and administrative tools used by authorized entities.

The entities authorized in the field of scientific activity and / or allowed to use information and telecommunication means in the field of scientific activity are proposed to include the following:

- 1) state executive authorities: Cabinet of Ministers of Ukraine and its advisory bodies (National Council of Ukraine for the Development of Science and Technology), Ministry of Education and Science of Ukraine, Ministry of Digital Transformation of Ukraine, other central executive authorities, local executive authorities;
- 2) subjects of delegated powers: scientific institutions, scientific (scientific, scientific-technical, technical) council of a scientific institution, expert group for evaluation of the effectiveness of scientific institutions, scientific self-governing organizations (National Academy of Sciences of Ukraine, national branch academies of sciences), public scientific organizations, regional scientific centers;
- 3) local self-government bodies;
- 4) other entities that are not classified as public authorities (for example, the President of Ukraine, the educational ombudsman).

Consider separately the applied role of some subjects in the introduction of the latest technologies in scientific activity, which is reflected in certain legal forms (doctrinally can be used as a synonym for the concepts of "form of public administration", "instrument of public administration"). It is an external expression of homogeneous in nature and legal nature groups of actions of public administration entities, which are implemented within the competence defined by law in order to achieve the desired legally significant result (Averyanov, 2004: 169).

3. The Cabinet of Ministers of Ukraine as a subject of regulation of the sphere of scientific activity

The Cabinet of Ministers of Ukraine is a subject of general competence, which ensures the implementation of state policy in the relevant spheres of public and state life, the implementation of the Constitution

and laws of Ukraine, acts of the President of Ukraine, observance of human and civil rights and freedoms (*About the Cabinet of Ministers of Ukraine, 2014*). The sphere of scientific activity is no exception. In detail, the powers of the highest central executive body in the field of scientific activity are contained in Article 41 of the Law of Ukraine "On Scientific and Scientific-Technical Activity" (2015). It seems possible to group the powers of the Cabinet of Ministers of Ukraine in the following areas: 1) political (implementation of the state scientific and technical policy, development and strengthening of the scientific and technical potential of Ukraine); 2) organizational (ensuring the development and implementation of state targeted scientific and scientific-technical programs, ensuring the interaction of central executive bodies with the National Council of Ukraine for the Development of Science and Technology); 3) regulatory and legal (approval of state target scientific and scientific-technical programs, adoption of normative acts related to the use of digital technologies); 4) personnel (approval of the personnel of the National Council of Ukraine for the Development of Science and Technology, which is approved by the Chairman of the National Research Foundation of Ukraine); 5) representative (negotiating and signing international treaties of Ukraine, in accordance with the powers granted). In addition, the Cabinet of Ministers of Ukraine exercises constant control over the implementation of the Constitution of Ukraine and other acts of legislation of Ukraine by executive bodies, takes measures to eliminate shortcomings in the work of these bodies.

With regard to the introduction of the latest technologies in scientific activities, within the powers available to the Cabinet of Ministers of Ukraine, the main role is assigned to the adoption of regulatory legal acts on: a) the use of digital technologies of a general nature; b) the use of digital technologies directly in the field of scientific activity.

In the first case, for example, we are talking about: approval of the Concept for the Development of e-Governance in Ukraine (2017), intensification of the activities of units for digital development, digital transformation and digitalization operating at central and local executive authorities, Kyiv and Sevastopol city state administrations (*Some issues of the activities of units for digital development, digital transformation and digitalization of central and local executive authorities and deputy heads of central executive authorities, regional, Kyiv and Sevastopol city state administrations on digital development, digital transformation and digitalization, 2020*), application of the principles of the state policy of digital development by executive authorities in the process of preparing drafts of new regulatory legal acts and exercising official powers through the use of

digital technologies (*Some issues of digital development, 2019*), the allocation of digital competencies and their implementation in the educational process in order to improve the quality and development of all spheres of public life, etc. (*Concept of development of digital competences, 2021*)

Regarding the introduction of digital technologies directly into the sphere of scientific activity, the Cabinet of Ministers of Ukraine approved a number of progressive changes. For example, the relevant resolution of the Cabinet of Ministers of Ukraine provides for the use of information and telecommunication means when holding a competition for vacant scientific positions in a state scientific institution: the announcement of the competition with information on the conditions of its holding is placed on specialized Internet resources, published on the official website of the state scientific institution; documents for the competition can be submitted by e-mail; information on the results of the competition is subject to mandatory publication on the official website of the state scientific institution (*On Approval of the Standard Regulation on the Procedure of Competition for Vacant Scientific Positions of the State Scientific Institution, 2018*). A similar conclusion can be drawn in the aspect of analysis of the regulation of the mechanism of formation and use of funds provided for the National Research Fund in the state budget under the program "Ensuring the activities of the National Research Fund, grant support for scientific research and scientific and technical (experimental) developments". Accordingly, the budget funds are envisaged, among other things, for the purchase, creation, operation and technical support of the official website of the Fund, software for the formation of an electronic database of experts who carry out the examination of projects submitted for the competition, an electronic information system for the submission and processing of such projects, an electronic database of research and development funded or financed by the Fund (*On Approval of the Procedure for Formation and Use of Funds of the National Research Fund of Ukraine, 2019*).

The influence of the Cabinet of Ministers of Ukraine on the reform of public relations in the field of scientific activity in the direction of digitalization is expressed in the relevant draft legal acts. For example, the Government of Ukraine has developed a draft resolution "On Approval of the Regulation on the National Electronic System of Scientific Information" (2021), which was submitted for public discussion on October 22, 2021. In general, the national electronic scientific and information system is a multifunctional tool for organizing scientific activities based on the use of information and telecommunication technologies, which will ensure the collection, formation, processing,

storage, use of data and information on: registration procedures of scientific institutions supported by the state and scientific objects of national heritage; procedures for state accreditation of individuals and legal entities for the right to conduct scientific and scientific-technical expertise; electronic catalogues of scientific libraries; procedures for certification of researchers and state certification of higher education institutions in terms of their scientific (scientific and technical) activities; registration of scientific and scientific-practical events; registration of professional publications, etc. However, as of today, these provisions have not become binding. First of all, this is due to the fact that some of the above-mentioned registers are not available in paper form, and given the digitalization of certain aspects of scientific activity, there are no comprehensive requirements for their standardization.

It is appropriate to pay attention to the draft decree of the Cabinet of Ministers of Ukraine "On Approval of the National Action Plan for the Implementation of the Principles of Open Science for the Period up to 2030" (2022), which outlines the following areas of science development in Ukraine:

- 1) ensuring open access to scientific results and scientific and technical information by implementing the following measures: placing in the public domain scientific results and scientific and technical information obtained during the implementation of fundamental and applied scientific research funded from the budget; regulating the mechanisms of registration and accounting of research, development and dissertations using an electronic system with remote access; implementation of the strategy for the implementation of open access; ensuring access of higher education institutions and scientific institutions to international electronic databases of scientific information at the expense of the budget; development of mechanisms to stimulate the registration of Ukrainian scientific publications (journals) in international databases of open access journals; conducting a comprehensive analysis of the legal basis for placing monographs in open access;
- 2) ensuring open access to research infrastructure, which is ensured, among other things, by approving the concept of state policy for the development of e-infrastructures;
- 3) creation of conditions for effective work with scientific and technical information and objects of research infrastructure that are in the public domain, which should be achieved in the following ways: by improving legislation in accordance with the standards and norms of the European Union in terms of applying the principles of good management of scientific data (FAIR principles) and the use of optimized scientific data (FAIR data); ensuring standardization and certification of data warehouses

in international data storage systems; ensuring data exchange with EU countries, in particular through integration into European data spaces; creation of a single database on the results of scientific and scientific-technical activities;

4) popularization of science, dissemination of scientific knowledge and involvement of citizens in scientific and scientific-technical activities by conducting information and communication campaigns to promote scientific achievements among the population, informing about the possibilities of using scientific achievements in professional activities and everyday life, etc.

The proposals contained in the draft order are progressive and cover all priority areas of scientific activity development in terms of the use of digital technologies. Therefore, their regulatory approval as mandatory seems urgent.

Special attention should be paid to the entity that promotes the introduction of the latest technologies in scientific activities – the National Council of Ukraine for the Development of Science and Technology, which is at the same time a permanent advisory body established under the Cabinet of Ministers of Ukraine to ensure effective interaction of representatives of the scientific community, executive authorities and the real sector of the economy in the formation and implementation of a unified state policy in the field of scientific and scientific-technical activity (*Regulations on the National Council of Ukraine on Science and Technology Development, 2017*).

At first glance, the optional nature of this body does not have a pronounced practical significance, but the involvement of experts in the scientific field and practitioners in solving the problems of the scientific sector creates a flexible mechanism for implementing urgent changes. Among such priority innovations should be the dissemination of the practice of using digital technologies in scientific activities through 1) preparation and submission of proposals for the formation of the principles of state policy in the field of scientific and scientific-technical activity, determination of priority areas of science development and measures for their implementation; 2) preparation of proposals for the integration of national science into the world scientific space and the European research area, taking into account national interests; 3) providing conclusions on draft concepts of state target scientific and scientific-technical programs and projects of such programs; 4) providing recommendations on the formation of the state budget in terms of determining the total amount of funding for scientific activities; 5) preparation of an annual report on the state and prospects of development of the sphere of scientific activity, as well as on the state of implementation by Ukraine of the priorities of the European Research Area and

submission of proposals for their implementation plan for the next year; 6) initiation and ordering of forecast and analytical studies in the field of science and scientific expertise of decisions of central executive authorities related to the scientific sphere; 7) development of proposals for the creation of mechanisms for commercialization of research results, etc. Analytical reporting on the activities of the National Council of Ukraine on the Development of Science and Technology shows that this body pays attention to the importance of using digital technologies in the field of scientific activity. In particular, this concerns the recommendations on Ukraine's accession to the European Research Area, namely the European Open Science Cloud, participation in the EU program for research and innovation "Horizon Europe", creation of a legal framework for Ukraine's participation in the European Research Infrastructure Consortia (ERIC), recognition of priority areas for Ukraine and joining the EU program "COST" (*Minutes No. 3 of the meeting of the National Council of Ukraine on Science and Technology Development, 2019*).

4. The role of individual ministries as subjects of regulation of the sphere of scientific activity

The legal status of the Ministry of Education and Science of Ukraine (hereinafter – the Ministry of Education and Science of Ukraine) is a multidimensional characteristic of the position occupied by this central body of state executive power in the organization of regulation of public relations and in the system of state authorities as a whole. The functioning of the Ministry of Education and Culture of Ukraine in the field of science is aimed at the proper regulation of social relations related to scientific activity, which is achieved by performing such tasks as: formation and ensuring the implementation of state policy in the field of science, scientific and scientific-technical activity, innovative activity in these areas, transfer (transfer) of technologies, as well as ensuring the formation and implementation of state policy in the field of state supervision (control) over the activities of entities engaged in activities related to the provision of services in the field of science, regardless of their subordination and forms of ownership (*On Approval of the Regulation on the Ministry of Education and Science of Ukraine, 2014*).

The powers of the Ministry of Education and Science of Ukraine in the field of scientific activity, depending on their content, should be classified as follows (*On Scientific and Scientific-Technical Activity, 2015*):

– organizational and administrative (e.g., ensuring the development of the national system of scientific and technical information, management of the

system of scientific and scientific-technical expertise, management of the system of state certification of scientific institutions on the basis of the principles developed by the National Council of Ukraine for the Development of Science and Technology);

– coordination (e.g., elaboration of the principles of scientific and scientific-technical development of Ukraine and submission of relevant proposals to the Cabinet of Ministers of Ukraine and the President of Ukraine, interaction with the National Council of Ukraine for the Development of Science and Technology, coordination of implementation by other central executive authorities, the National Academy of Sciences of Ukraine and national branch academies of sciences of the state policy in the field of scientific and scientific-technical activity, development together with the National Council of Ukraine for the Development of Science and Technology of the state policy in the field of scientific and scientific-technical activity);

– globalization-oriented (for example, ensuring the integration of national science into the world scientific space and the European research space with the preservation and protection of national priorities, coordination of international scientific and technical cooperation, development of draft interstate programs to ensure the implementation of international agreements in the field of scientific and scientific-technical activities);

– auxiliary (for example, the formation of the subject of the state order for the most important scientific and technical (experimental) developments and scientific and technical products, financial support for the implementation of the state order for the most important scientific and technical (experimental) developments and scientific and technical products, financial support for scientific and scientific and technical activities of higher education institutions that belong to the sphere of its management);

– control and supervision (for example, approval of the procedure for the formation of the list of scientific professional publications of Ukraine, approval and cancellation of the decision of specialized academic councils on awarding a degree to an applicant.

Institutionalization as a priority goal – the use of digital technologies in the field of science – is of great importance in the activities of the Ministry of Education and Culture of Ukraine. Currently, this goal is achieved through the recognition of the main goals in the field of regulation of scientific activity – the formation of science that stimulates the socio-economic development of the state (*Action plan of the Ministry of Education and Science of Ukraine for 2021, 2021*). Under such conditions, the Directorate of Digital Transformation, which is an independent structural unit of the Ministry of Education and Culture of Ukraine, will need to reformulate a number

of established principles of work, which is a practical basis for further research on the selected issues. Among the priority tasks of the Digital Transformation Directorate, for example, is to ensure the formation of state policy based on a constant analysis of the state of affairs in the field of digital transformation and digital development of science by finding alternative solutions to existing problems; monitoring and evaluation of the results of the implementation of state policy in the field of digital transformation and digital development of science, etc. (*Bilous-Osin, 2021: 26*)

Institutionalization as a priority goal – the use of digital technologies in the field of science – is of great importance in the activities of the Ministry of Education and Culture of Ukraine. Currently, this goal is achieved through the recognition of the main goals in the field of regulation of scientific activity – the formation of science that stimulates the socio-economic development of the state (*On Approval of the Decree of the President of Ukraine "On the Introduction of Martial Law in Ukraine", 2022; On the Legal Regime of Martial Law, 2015*). Projects and initiatives of the Ministry of Education and Culture of Ukraine aimed at supporting science in these conditions are positive. However, most of these innovations are based on the use of, for example, digital technologies:

– the Telegram-bot "Info Science Bot" was launched, which provides: prompt informing of scientists, innovators about modern opportunities for scientists, current news and diplomatic steps of the authorities and the scientific community to counter Russian aggression, as well as sanctions against the Russian Federation imposed by our international partners; information on opportunities for scientists from foreign universities in scientific institutions regarding grant support, mobility and temporary employment (*Official website of the Ministry of Education and Science*);

– free webinars in Ukrainian were held by Clarivate on scientometrics and bibliometrics, which will consider the peculiarities of publishing the results of scientific activities of scientists in publications indexed by the Web of Science database, the possibility of using Web of Science and platform tools (*Official website of the Ministry of Education and Science*);

– The European Commission has launched the ERA4Ukraine portal to provide information and support services to Ukrainian researchers who are forced to go abroad due to the war. The portal brings together initiatives at the level of the EU, individual countries and non-governmental institutions. The portal contains information on: recognition of diplomas, current vacancies, social assistance, housing offers for scientists and their families (*Official website of the Ministry of Education and Science*);

– Ukraine became a member of the COST Association of Innovation Funding and Research Networks. Among the strategic priorities of COST are the following: promoting and disseminating cutting-edge science and best practices, empowering and supporting young innovators and researchers, promoting interdisciplinary research for breakthrough science. In addition, membership in this organization provides an opportunity to join COST Actions research networks, which offer an open space for international cooperation of scientists, as well as give impetus to the progress of innovation and research (*Official website of the Ministry of Education and Science*);

– the project "Advisory Fund to Support the EU-Ukraine Association", which is implemented in Ukraine by the federal company Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), has started its work. In general, it is an online platform for communication and effective interaction between representatives of business and the scientific community, which aims to achieve scientific results by business and realize the potential of scientists (*Project "Advisory Fund to Support the EU-Ukraine Association"*).

Thus, the Ministry of Education and Culture of Ukraine is a specially authorized entity that has the necessary powers to regulate the sphere of scientific activity, taking into account the spread of digital technologies.

Particular attention should be paid to the Ministry of Digital Transformation of Ukraine, whose competence is primarily aimed at digital development of regulation of public relations, dissemination of the latest technologies in various spheres of public relations, formation of the state policy of digitalization in general and digital development (with an emphasis on the formation of digital skills and digital rights of citizens). Among the priority tasks of the Ministry of Digital Transformation, a prominent place is given to the implementation of measures aimed at forming high-quality methods of electronic interaction of state electronic information resources and an integrated approach to electronic identification; preparation of the legal framework for digital transformation; formation of the state policy of cryptographic and technical protection of information, cybersecurity; ensuring the introduction of virtual assets, blockchain and tokenization, artificial intelligence, etc. (*Questions of the Ministry of Digital Transformation, 2019*)

The adaptation of digital tools to the sphere of scientific activity is relatively slow. The project "Digital Transformation of Funding and Services in Science (E-science)" announced by the Ministry of Digital Transformation of Ukraine aims to: create

electronic systems that will reflect the funding of scientific research; providing access to scientific digital services; introduction of a register of research infrastructures; formation of an electronic system for awarding degrees and academic titles; creation of an electronic mechanism for certification of scientific institutions, as well as the formation of a repository of academic texts (*Projects of digital transformation*). To implement the E-Science project, the Ministry of Digital Transformation of Ukraine cooperates with the Ministry of Education and Science of Ukraine, which is a sustainable approach to the work of the relevant central executive authorities.

5. Conclusions

The study found that the state of provision of the sphere of scientific activity in the conditions of digitalization should be based on the existing institutional mechanism and administrative tools used by authorized entities. The system of entities that are empowered in the field of scientific activity and/or authorized to use information and telecommunication means in the field of scientific activity is distinguished. These include state executive authorities: Cabinet of Ministers of Ukraine and its advisory bodies (National Council of Ukraine for the Development of Science and Technology), Ministry of Education and Science of Ukraine, Ministry of Digital Transformation of Ukraine, other central executive authorities, local executive authorities; Subjects of delegated powers: scientific institutions, scientific (scientific, scientific-technical, technical) council of a scientific institution, expert group for evaluation of the effectiveness of scientific institutions, scientific self-governing organizations (National Academy of Sciences of Ukraine, national branch academies of sciences), public scientific organizations, regional scientific centers; local self-government bodies; other entities that are not attributed to public authorities (for example, the President of Ukraine, the educational ombudsman).

The importance of adopting regulatory legal acts on: a) the use of digital technologies of a general nature; b) the use of digital technologies directly in the field of scientific activity, as tools for introducing the latest technologies into scientific activity within the powers of the Cabinet of Ministers of Ukraine. Attention was drawn to the need for urgent regulatory approval as mandatory proposals contained in the draft acts of the Cabinet of Ministers of Ukraine.

The praxeological significance of the use of digital technologies in the field of science in the activities of the Ministry of Education and Science is determined. Today, this goal is achieved through the recognition of the main goals in the field of regulation

of scientific activity – the formation of science that stimulates the socio-economic development of the state, which has been tested in practice: launching of the Telegram-bot "Info Science Bot", conducting of free webinars in Ukrainian by Clarivate on scientometrics and bibliometrics, opening of the

ERA4Ukraine portal to provide information and support services to Ukrainian scientists, Ukraine's membership in the COST Association for Financing Innovation and Research Networks, implementation of the project "Advisory Fund for the Support of the EU-Ukraine Association", etc.

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