Public Administration as the Field of Scientific Activity: Social and Legal Aspects

Liubov Bila-Tiunova¹, Tetiana Bilous-Osin², Natalia Vladimirovna Tomchuk-Ponomarenko³, Ganna Matveevna Lozova⁴, Lesia Olegovna Pashniuk⁵

¹Professor of the Department of Administrative and Financial Law, National University «Odessa Academy of Law»», Odessa, Ukraine, bilatiunova@gmail.com
²Associate Professor of the Department of Administrative and Financial Law, National University «Odesa Law Academy», Odessa, Ukraine, bilous200@ukr.net
³PhD in Economics, Associate Professor in the Department of Economic Theory, macro- and microeconomics Taras Shevchenko National University of Kyiv, Kyiv, Ukraine, tomchuk@knu.ua
⁴PhD in Economics, Associate Professor in the Department of Economic Theory, macro- and microeconomics Taras Shevchenko National University of Kyiv, Kyiv, Ukraine, lozova@knu.ua
⁵PhD in Economics, Deputy Director for Economics of Selyshchansky Granite Quarry, Ltd, Kyiv, Ukraine, Lesya_zh@ukr.net

Abstract

The national model of administrative and legal regulation of public relations occupies the stage of reform in accordance with generally accepted international standards and represents the field of scientific activity. The state represented by authorized entities should implement policy and specific measures aimed at creating favourable conditions for scientific activity, including proper material support of scientists and transparent financing procedures.

The aim of the study was to explore the state of legal and institutional regulation of public relations in the field of scientific activity by determining the tendency of transformation the concept of “state governance” in “public administration”; to highlight the scientific activity as an object of public administration; to substantiate the influence of socio-economic factors on public administration in the field of scientific activity in Ukraine and to articulate specific recommendations for reforming the management mechanism applied in the field of scientific activity.
Material and methods. Systematic analysis method, dialectical method, formal-logical method, structural-functional method and empirical methods were used in the study.

Results. The study showed, there is no legal determination of the concept “field of science” in Ukraine. This concept means the scientific activity. Nowadays, the Ministry of Education and Science of Ukraine works both in the field of science and in the field of scientific activity, but they are not essentially different from 1991-2010 years, when the field of science was not singled out as an object of regulation of this authorized entity of public administration. Tendency to increase the role of public administration in the field of scientific activity occurred due to a combination of public factors, including the low wage level of scientific and pedagogical employees. At the same time, the practical implementation of managerial influence on the field of scientific activity partially corresponds to the concept “state governance and regulation” due to the lack of proper legal status of scientific activity entities and the discrepancy between the implemented reforms in the field of science and the national archetypes of scientific activity.

The findings may be useful for practitioners and theorists, whose activity with regard to public administration and scientific field is updated by the actualization of democratization tendency in governance.

The subject of the study has been investigated for the first time in Ukraine and needs further investigation.

Keywords: administration, science, legacy, pedagogy, wage.

INTRODUCTION

The national state of regulation of public relations in Ukraine is being reformed in the direction of implementation of the European concept of administrative and legal regulation of public relations, that is the foundation for revising the basic theoretical postulates of state government and regulation. At the same time, one of the central categories, that is used to explain the managerial influence and the way of regulation public relations is the category of “public administration”.

Without focusing on the contradictions between the desired and current state of legal reality, the theory and practice of administrative law, international standards and national archetypes of management reality, the study of the features of public administration in various areas of public life is important. The field of scientific activity and public administration needs to be investigated, namely qualitative and substantive characteristics of the concept, institutional mechanism and regulating tools.
In the theory of administrative law the terms “state governance” and “state regulation” have lost their original meaning, they were changed by the concept of “public administration” [1, 2, 3]. Since the signing of the Association Agreement between Ukraine and the EU in 2014, Ukraine’s policy has followed the European course, which defines the idea of anthropocentrism in law as the foundation for the functioning of any rule of law state. Therefore, the theory of administrative law has undergone essential changes.

The issue concerning the practical implementation of the administrative law concept generally accepted by the international community and the exercise of public administration by authorized entities, rather than state governance or regulation in certain areas of public relations has not been resolved yet due to the fact that the ideal functioning model of public power in Ukraine is partly pragmatic, that should be achieved in practical dimension.

Thus, there is a necessity to establish characterizing features and to choose a category to denote the external reflection of managerial, organizational and regulatory influence on public relations with regard to the field of scientific activity.

The legislator used the term “state governance and regulation” to denote the regulation of public relations with regard to scientific activity in the Law of Ukraine [4, 5]. However, assuming the expediency of using the category of “public administration” to denote the regulation of the field of science, the external reflection of managerial, organizational and regulatory influence on public relations with regard to the field of scientific activity should be characterized, first of all, with the following features:

1) the presence of the influence of the state represented by authorized entities on public relations in such a way, that is effective, for the person. The present realities of administrative and legal regulation of scientific activity in Ukraine are not fully aimed at providing intellectual creativity, which is aimed at obtaining new knowledge and finding ways of their applying and creating appropriate working conditions for scientific and pedagogical employees, postgraduate students, doctoral students and other scientists;

2) the possibility to be carried out in order to serve the nation. At the same time, the adaptation of present scientific activity model to the EU standards, without taking into account the current national archetypes of scientific activity, devalues certain scientific achievements due to their break with the realities of Ukrainian statehood;

3) the possibility to be carried out by public authorities, that, in addition to state executive authorities, include local governments, organizations endowed with delegated powers (institutional-subjective dimension). The scientific institutions (including private scientific institutions) have
the right to carry out publishing activities of scientific, educational and enlightening nature, to act in the prescribed manner as founders of print mass media, scientific publishing house, scientific journals and scientific editions; to place structural departments (laboratories) carrying out scientific and scientific-technical activities on the basis of this scientific institution or such educational institution, taking into account educational programs and topics of scientific research, etc., financing of the scientific activities may be carried out at the expense of institutions, organizations and enterprises, domestic and foreign customers, grants and other sources according to the law [5]. Thus, delegation of state powers in the field of state governance and regulation of scientific activity to other entities should be discussed;

4) to ensure the public interest, to guarantee the common good of civil society, sustainable development, combined with the maintenance of effective institutions of self-regulation: directing governance to fulfill the needs of society and state due to the interaction of science, business and government in the conditions of technological development; legal support of partial autonomy of scientific institutions, universities, academies, institutes, other legal entities irrespective of the ownership form, having the relevant scientific departments in the field of scientific activity.

Thus, the field of science is regulated with regard to the categories of: “public administration”, substantiated by institutional-subjective dimension and aimed at ensuring the public interest; “state governance and regulation” (substantiated by the lack of proper legal status of scientific activity entities and presence of discrepancies between the implemented reforms in the field of science and the national archetypes of scientific activity). Thus, qualitative and substantive characteristics and institutional mechanism of public administration in the field of scientific activity are necessary to determine.

MATERIAL AND METHODS

Compliance and practical implementation of public administration in the field of scientific activity stays relevant, but currently there are few studies aimed at the relationship between science and research as certain objects of public administration. With use of the results of such comparison to establish the specifics of public administration in the field of scientific activity in Ukraine may be possible.

At the legislative level, the concepts of “field of science” and “field of scientific activity” are used simultaneously as regulation objects of the Ministry of Education and Science of Ukraine [10] as different fields of public relations due to the fact that certain powers of this executive power body are exercised in the field of science and in the field of scientific activity. For example, the Regulations on the Ministry of
Education and Science of Ukraine highlight the implementation of measures for a unified scientific, technical and innovation policy in the fields of education and science, scientific, scientific and technical activities [6] organization and coordination of innovative activities in the fields of education and science, scientific and technical activities [6]. However, the field of science and how the scientific activity is substantiated are not highlighted. Due to the lack of normative details in the field of science, at certain stages of Ukraine’s independence, the legislation on scientific activity contained reference to the field of science [5] and might be an issue of semantics and legal technique rather than of quality and content.

In this regard, it is interesting to highlight the retrospective of the legal regulation of the field of scientific activity and the field of science as objects of legal regulation (Table 1).

**Table 1. Retrospective of the legal regulation of the field of science and / or the field of scientific activity.**

<table>
<thead>
<tr>
<th>Period</th>
<th>The object of legal regulation</th>
<th>1)</th>
<th>2)</th>
<th>3)</th>
<th>4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991-1996</td>
<td></td>
<td>1)</td>
<td>2)</td>
<td>3)</td>
<td>4)</td>
</tr>
<tr>
<td></td>
<td>The object of legal regulation</td>
<td>1)</td>
<td>2)</td>
<td>3)</td>
<td>4)</td>
</tr>
<tr>
<td></td>
<td>[7, 8]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1) the field of science and the field of scientific and technical activity are singled out as objects of legal regulation;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) the definition of “field of science” is absent, despite the name of the relevant law; the concept of “scientific and technical field” is interpreted as public relations formed in the process of scientific and technical activity, in order to obtain new knowledge and use it to create and improve tools, things, work conditions and human life, spiritual and cultural development of society;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) prevalent is the use of: a) the phrase “field of science and technology”; b) the adjective “scientific and technical”;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) the definition of “scientific activity” is absent, but scientific and technical activity means activity that includes basic and applied researches, as well as bringing their results to the stage of practical use.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996-2010</td>
<td></td>
<td>1)</td>
<td>2)</td>
<td>3)</td>
<td>4)</td>
</tr>
<tr>
<td></td>
<td>The object of legal regulation</td>
<td>1)</td>
<td>2)</td>
<td>3)</td>
<td>4)</td>
</tr>
<tr>
<td></td>
<td>[9, 10, 11, 12]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1) for the first time “scientific activity” and “scientific and technical activity” are singled out as objects of legal regulation (based on the name of legal and regulatory act – “On scientific and scientific-technical activities”);</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) the scientific and technical field, scientific activity, scientific and technical activity are essentially separated;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) the definition of “scientific field” is still absent, but the concept of “scientific and technical field” - is deleted;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) the concept of “scientific activity” (1) and “scientific and technical activity” (2) are</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4356
defined almost equally: “... is an intellectual creative activity aimed at obtaining new knowledge”. Therefore, 2) concerns new knowledge in all branches of technics and technologies. The difference between them lies in the fact, that the forms of the technics are basic and applied researches, and the technologies - scientific and research, research and design, design and engineering, technological, design and exploratory works, production of prototypes or batches of scientific and technical products, as well as other work with regard to bringing scientific and technical knowledge to the stage of their practical use;

5) the purpose of the profile Law is clearly formed and aims to the regulate public relations with regard to scientific and technical activities.

<table>
<thead>
<tr>
<th>2010-2013</th>
<th>The object of legal regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1) scientific and technical field, scientific activity, scientific and technical activity are objects of legal regulation;</td>
</tr>
<tr>
<td></td>
<td>2) the concept of “scientific field” is not used;</td>
</tr>
<tr>
<td></td>
<td>3) the structurally profile law, which regulates scientific and scientific-technical activities, has not undergone significant changes with regard to the field of science.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2014 – present days</th>
<th>The object of legal regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1) scientific and technical field is not defined as a separate object of legal regulation of the profile law. Scientific and technical activities are singled out as objects of legal regulation, what corresponds to the name of the legal and regulatory act – “On scientific and scientific-technical activities”;</td>
</tr>
<tr>
<td></td>
<td>2) the concept of “scientific activity” is defined as intellectual creative activity aimed at obtaining new knowledge and finding ways to apply them. The main types of scientific activity are basic and applied researches;</td>
</tr>
<tr>
<td></td>
<td>3) scientific and technical activity belongs to scientific activity. Such types of scientific activity as scientific-organizational and scientific-pedagogical are also singled out.</td>
</tr>
<tr>
<td></td>
<td>5) the purpose of the profile Law is clearly formed and aims to regulate public relations with regard to scientific and technical activities.</td>
</tr>
</tbody>
</table>

Thus, there is no legal determination of the concept “field of science” in Ukraine, but mentioning of this concept in previous editions of relevant legislation meant scientific activity irrespective of central executive person, that regulates scientific activity, the qualitative and meaningful content of the competence in the field of science may not be detailed only through the provisions of scientific activity. Nowadays, the Ministry of Education and Science of Ukraine has powers both in the field of science and with the field of scientific activity, but they are not essentially different from 1991-2010 years, when the field of science
was not singled out as an object of regulation of this authorized entity of public administration.

Therefore, the field of science and the field of scientific activity are closely interrelated; the concept of “scientific activity” a priori reflects the procedural aspect as a type of activity; the content of public administration in the field of science should deal with the choice of content of scientific research, priorities of scientific search and compliance with the requirements of globalization, and the content of public administration in the field of scientific activity should deal with ensuring proper regulating and creating conditions for intellectual creativity aimed at obtaining new knowledge and investigating the ways to apply them.

RESULTS AND DISCUSSION

Qualitative and substantive characteristics of public administration in the field of scientific activity

Public administration is the activity of authorized entities of public power, aimed at regulating the specific public relations through the use of specific methods, techniques, forms to ensure the public interest. The specificity of public administration in the field of scientific activity is due to the peculiarities of this area of public relations. Based on current legislation [18, 22], public administration in the field of scientific activity should deal with regulating public relations, which can be subjected to managerial influence and differentiated into:

1) public relations with regard to scientific activity, that is intellectual and creative activity, aimed at obtaining new knowledge and searching ways to apply them. The main types of scientific activity include basic and applied researches. An authorized entity of public administration is not endowed to regulate these relations, namely, the choice of research methods or the obligation to conduct research for specific researchers. It is possible to regulate the aspects of scientific activity, such as determining the order of scientific institutions functioning, the procedure for conducting state certification of scientific institutions, highlighting the formation and activity principles of the Academic (scientific, scientific-technical, technical) Council of scientific institutions, determining the procedure for granting the status of a national research center; regulating the publishing activities of scientific, educational and enlightening nature, establishment of essential provisions for the training of scientific personnel and their professional development, defining the procedure for awarding scientific degrees and scientific titles, determination of the procedure for conducting scientific and scientific-technical examination is possible.
2) public relations with regard of improving the efficiency of scientific researches and using their results to ensure the development of all spheres of public life. Irrespective of a broad interpretation of ways to “improve efficiency”, it is reasonable to assume that they include: defining the procedure for protection of intellectual property rights to scientific results; determination of the formation and functioning principles of state key laboratories as entities whose activities are aimed at the development of basic researches at the global level, new promising interdisciplinary areas of researches and scientific-technical developments, coordination of joint activities, etc.; defining the procedure for functioning of the State Register of scientific objects that constitutes the national heritage; determining the principles of ensuring an effective interaction of scientific community representatives, authorized entities of executive power 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 activities;

3) public relations with regard to implementation of scientific activity: the implementation of state support and targeted subsidies for production-oriented research institutions; formation of the State Register of scientific institutions, provided with state support; determination of general principles of the status of the National Academy of Sciences of Ukraine and the National branch academies of sciences; establishment of norms, that deals with a) wage and stimulation of work or study of the scientists; b) pension provision of scientific and pedagogical employees; c) social protection of scientific employees; implementation of grant support for scientific activities at the expense of the state budget.

Irrespective of public relations type in the field of scientific activity, the purpose of public administration in this area will be their proper regulation in accordance with the present model of scientific activity and generally accepted international standards to guarantee the common good of civil society, sustainable development, combined with the maintenance of effective institutions of self-regulation, that manifests in directing governance to fulfill the needs of society and state due to the interaction of science, business and government in the conditions of technological development; legal support of partial autonomy of scientific institutions, universities, academies, institutes, other legal entities of different ownership forms, having the relevant scientific departments in the field of scientific activity.

The tools used by the authorized entities of public administration in the field of scientific activity are specified in accordance with the purpose of legal regulation and regulation of a specific group of public relations. To substantiate the following tools is necessary in the field of scientific activity: adoption of legal and regulatory acts (for example, Resolution of the Cabinet of Ministers of Ukraine [23, 24] adoption of individual
Institutional mechanism of public administration in the field of scientific activity

The institutional mechanism of public administration in the field of scientific activity is characterized by the specifics of authorized entities endowed with powers with regard to: executive and administrative activities; provision of administrative services; bringing to administrative liability; ensuring the rights and freedoms of citizens; governance of state and communal property used for scientific activities.

In the theory of administrative law, authorized entities endowed with mentioned powers are called “authorized entities of public administration” [1, 25]. Public administration is an organically unified and effective system of authorized entities of public administration, primarily state executive authorities and local governments, their officials and employees, as well as institutions, organizations, individual non-governmental organizations, that in accordance with law deals with public managerial functions to ensure public interest. Thus, authorized entities of public administration may include: state executive authorities, local governments; state bodies that do not belong to any branch of power (for example, national commissions for the regulation of natural monopolies, the National Bank of Ukraine, the Security Service of Ukraine) [26]. As authorized entities of public administration, in turn, may also be recognized: other authorized entities in the exercise of their power managerial functions on the basis of legislation, in particular for the exercise of delegated powers; other entities endowed with different content and level of administrative powers (Verkhovna Rada of Ukraine, Accounting Chamber of Ukraine, Verkhovna Rada Commissioner for Human Rights, President of Ukraine, etc.) [2].

The attention is drawn to the classification of authorized entities of public administration depending on their competence, that consists of: authorized entities of public power of national importance; authorized entities of public power of local importance; legal entities, irrespective of the ownership, organizational and legal forms or structural department, carrying out public administration; public associations that act as authorized entities of delegated powers and as a full-fledged entity of public administration [3, 27].

The field of scientific activity is regulated in a standardized way at the national level. A significant part of the authority with regard to ensuring
scientific activity is delegated to the scientific institutions and scientific self-governing organizations. Therefore, the authorized entities of public administration in the field of scientific activity consist of:

1) state executive authorities: The Cabinet of Ministers of Ukraine and advisory bodies established under it (the National Council of Ukraine for Science and Technology Development is a permanent advisory body, the Identification Committee for Science), the Ministry of Education and Science of Ukraine, other central executive authorities, local executive authorities;

2) authorized entities of delegated powers: scientific institutions, academic (scientific, scientific-technical, technical) council of a scientific institution, expert group for evaluating the effectiveness of scientific institutions, scientific self-governing organizations (National Academy of Sciences of Ukraine, National Branch Academies of Sciences), public scientific organizations, regional research centers;

3) local governments;

4) other entities that are not belonged to public authorities, for example, the President of Ukraine.

Socio-economic factors of public administration in the field of scientific activity

The issue of social protection of the rights of the main participants in public relations in the field of scientific activity - scientific and pedagogical employees is of special interest, since of the fragmentary nature due to the lack of a proper wage.

The tariff grid of monthly wages of scientific employees of scientific and research institutions and organizations of the National Academy of Sciences of Ukraine needs to be explored. Accordingly, they are set in the following range: director of the scientific and research institute - UAH 12984–13198; head of the scientific and research department - UAH 11,585–12,263; leading researcher - UAH 11585–11834; junior researcher - 7963 - 8434 UAH, etc. [28, 29].

As for scientific and scientific-pedagogical employees, the attempt to increase wages in 2019 was unsuccessful. The Resolution of the Cabinet of Ministers of Ukraine “On remuneration of pedagogical, scientific-pedagogical and scientific employees of educational and scientific institutions” (2019) approved the scheme of wages of scientific and pedagogical employees until 2023, according to which a differentiated wage rate was established depending on the position and minimum subsistence level, for example: for associate professor - 4.38 (equal to UAH 10.420 based on the established subsistence level for July 2021); for professor - 6.31 (equal to 15011 UAH based on the established subsistence level for July 2021); for head of the department, dean - 11.36 (equal to 27025 UAH based on the established subsistence level
for July 2021) [30, 31]. These coefficients are a moderate increase of a wage, but they did not enter into force due to the suspension of the provisions of the Resolution of the Cabinet of Ministers of Ukraine until December 31, 2021. By analogy, in Germany, the position of professor is paid in the range of 73,000 euros per year with an average annual wage in the country of about 18,000 euros, and scientific employees, in scientific and research institutions about 41,500 euros per year [32].

Due to the insufficient level of payment for scientific activity in Ukraine, the qualitative and quantitative indicators of persons interested in this profession are decreasing. The unattractiveness of the scientific career in Ukraine clearly demonstrates the low level of public administration in the field of scientific activity and contributes to the reduction of the scientific potential of Ukrainian state. Thus, to adopt the Concept on social security of scientific-pedagogical and scientific employees, that should identify the main problems and ways to solve the problem of ensuring a decent standard of living for scholars is necessary.

In 2017 in Ukraine a new scientific specialty "Public Administration" was created [33] and main areas of the study were reported in new scientific works [34].

Modern researches were devoted to the problems of public management of the economy, regulation of the economy and macroeconomic forecasting. The novelty reflects understanding of trends in social development and formation of practical recommendations to ensure macroeconomic stability, economic growth and welfare. The results of scientific research are reflected in numerous scientific publications of Vadym Hetman Kyiv National Economics University [35].

The lack of scientific substantiation for improving public management in science points to the necessity to explore this problem [36].

Thus, the present study highlighted the possibilities of improving the state regional policy in the scientific sphere, creating conditions and eliminating internal and external threats to the scientific development, improvement of wages level of scientific workers.

CONCLUSIONS

The study identified the specifics of public administration in the field of scientific activity by determining, the public relations in the field of scientific activity as the object of public administration; the targets of public administration in the field of scientific activity; the authorized entities endowed with powers in the field of scientific activity; a list of public administration tools used to regulate scientific activity. The study showed, that public administration in the field of scientific activity should be considered as the authorized entities of public power, aimed
at regulating specific public relations with regard to scientific activity, improving the efficiency of scientific researches and using their results to ensure the development of all spheres of public life.

The analysis demonstrated, public administration in the field of scientific activity should deal with regulating of public relations, that can be subjected to managerial influence and differentiated as follows: 1) public relations with regard to scientific activity, that is intellectual creative activity, aimed at obtaining new knowledge and searching ways to apply them; 2) public relations with regard of improving the efficiency of scientific researches and using their results to ensure the development of all spheres of public life; 3) public relations with regard of implementation of scientific activity. The authorized entities of public administration in the field of scientific activity consist of state executive authorities; authorized entities of delegated powers; local governments and other entities, that are not belonged to public authorities.

Emphasis is placed on the lack of proper social security for scientific, scientific and pedagogical employees due to the low level of wages. The adoption of the Concept on social security of scientific-pedagogical and scientific employees is offered.

Bibliography


28. On Amendments to the Order of the Presidium of the NAS of Ukraine “On Terms of Remuneration of Employees of Budget Scientific and Research Institutions and Organizations and Other Scientific Institutions of the National Academy of Sciences of Ukraine”: Order of the Presidium of the NAS of Ukraine dated 21.01.2021 № 37. URL: https://www.nas.gov.ua/tradeunion/news/Documents/%D0%A0%D0%BE%D0%B7 %D0%BF%D0%BE%D1%80%D1%8F%D0%B4%D0%B6.6% 20% E2% 84% 96% 2037% 20% D0% B2% D1% 96% D0% B4% 2021.01.21.pdf (access date: 04.07.2021).

29. On remuneration of pedagogical, scientific-pedagogical and scientific employees of educational and scientific institutions: Resolution of the Cabinet of Ministers of 10.07.2019 № 822. URL: https:


