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LEGAL REGIME FOR SCIENTIFIC WORKS IN THE DIGITAL AGE

Abstract

The modern technological age dictates a fundamental reconstruction of almost all spheres of public life, where new problems and difficulties are added to the existing ones. Such volumes of information innovation imply a fundamental reconstruction of social life, as the latter has a significant impact on all spheres of human activity.

The article is devoted to topical issues of legal regulation of scientific works copyright protection in the Russian Federation and the Republic of Armenia in the era of the development of digital technologies. At the current stage of the development of digital technologies, a unique environment has been formed, which implies over-concentration in the fields of economy, politics, propaganda, science, law.

Modern trends in the development of science and technology dictate the practice of applying new digital technologies, not only in various fields of activity but also in the field of copyright, where one of the key objects are works of science. The article presents some aspects of the legal regulation of the use of digital technologies in the field of copyright in order to create new mechanisms for the protection of scientific works.

Keywords: science, copyright, scientific works, digital technologies, legal regulation, digital economy, “blockchain” technology.

Introduction

Modern trends in the development of science and technology, as well as information technologies, have led to a noticeable increase in the number of published scientific works. However, on the creative path of creating scientific works, there are frequent cases of partial (and sometimes complete) reprints of the works of other authors, especially in cases of the existence of an exclusively paper form of the tangible medium. For quite a long time, such phenomena were outside the scope of the legislation, which cannot be said today.

In other words, in modern society, information has such a crucial role that it has become a

precondition for a new type of society. Quantitative flows of information lead not only to qualitative but also to a change in lifestyle and rhythm. Such volumes of information innovation imply a fundamental reconstruction of almost all spheres of society - social, political, legal, etc.

Comparative Analysis of Legal Regulation of Philosophical Scientific Works in the RF and the RA

The digital age presupposes that the acquisition, processing, storage, transmission, dissemination and use of knowledge and information, which requires legal regulation, are essential in both Russia and Armenia.

From the point of view of legal regulation of scientific works, first of all, mention should be made of the Berne Convention for the Protection of Literary and Artistic Works (1886), according to which the objects of copyright are works of science, literature and art. The same reference exists in paragraph 1 of Art. 1259 of the Civil Code of the Russian Federation (Civil Code of the Russian Federation, part four, 2018, hereinafter - the CC of the RF) and in paragraph 1 of Article. 1111 of the Civil Code of the Republic of Armenia (1998, amended 2022) (hereinafter - the CC of the RA).

Regardless of the type, the scientific works are created to be used not only by a narrow circle of people - scientists of the academic environment but also in order to make them available to wider areas of the public. Unlike literary and artistic works, the specificity of scientific works is the fact that they are subject to publication or other communication to the public more often than other works. For example, in the Russian Federation, the writing of a scientific article or monograph is carried out in compliance with the requirements of scientific publications, and dissertations for scientific degrees (candidate or doctor of sciences) must meet the criteria established by law, namely, the requirements of the Government of the RF of 09.24.2013 N 842 "On the procedure for awarding academic degrees (Decision of the Government of the Russian Federation, 2013, amended 2021) "On the procedure for awarding academic degrees" (together with the "Regulations on awarding academic degrees") and in the RA - the Regulation (1997, amended 2019). On the order of academic degrees adopted in 1997.

When publishing a scientific work, the relationship between the author and the publisher is regulated, as a rule, by an agreement; however, the existence of an agreement is not always a guarantee that this work will not be available in the information and telecommunication network "Internet" (for example, the world's first project

that opened a public and mass access to primary scientific sources¹).

Due to the new technological advances, not only information products are created, but also new types of information services, in the presence of which all means of digital data collection begin to complement each other. The development of digital media is leading to major qualitative changes in almost all areas of society (Bell, 2002, p. 85).

This is especially true today, when, due to the Covid-19 pandemic, a lot of educational programs with distance and e-learning technologies have spread through the Internet, which makes it possible for everyone to use it without regard to citation rules. Such actions are a clear violation of the copyright of the creator of this work, including many cases of selling such works on the Internet for a certain amount (payment). An example is the site <https://www.academia.edu/>, where you can find freely available many books, articles, monographs of authors without their consent, and even more so without paying remuneration.

If earlier the copyright holders could get rich through the creation and sale of tangible media, and copyright, mainly, stood at the junction of protecting the interests of one entrepreneur from the encroachments of another, then in the digital era, users were able to cheaply (and sometimes free) copy information and exchange it with each other over long distances and in large volumes (Dmitrieva, Savel'ev, Cvetkova, & Chernysh, 2011, p. 3).

It is impossible not to recognize the fact that among the objects of copyright specified in Art. 1259 of the CC of the RF (Article 1111 of the CC of the RA), there is a significant difference between works of science and works of literature and art, it is not in vain that in most countries of the world, special requirements are imposed on works of science, taking into account the sectoral characteristics of these objects. It is difficult to imagine the level of development of this or that

¹ See <https://sci-hub.se/>.

state in isolation from the development of science, scientific and technological progress. This is revealed in the very concept of scientific work, stated in clause 3.3. Art. 3 of the National Standard GOST R 55385-2012 “Intellectual Property. Scientific works” (hereinafter referred to as the National Standard of RF), according to which a scientific work (work of science) is a protected result of intellectual activity obtained in the course of independent creative work of an individual (a group of persons) in the field of science, expressed in any objective form and containing new scientific knowledge. The types of scientific works are a scientific monograph, a scientific report, a scientific and technical report, a report on research, development, experimental and technological work, a report on patent research, a scientific article, a dissertation for the degree of doctor or candidate of science, a lecture, derivatives and composite scientific works.

In contrast to the RF, in the RA, although there is no legislative consolidation of the concept and types of scientific works, however, the analysis of “Scientific and scientific-technical activity” and “On scientific and scientific-technical expertise” stated in the laws of the RA, concepts “scientific and scientific-technical activity”, “scientific and scientific-technical result”, “a scientist” allowed us to formulate a new author concept of “*work of science as a result of scientific, research activities in a particular area, containing new knowledge, provisions based on the analysis and synthesis of already existing knowledge, the solution of certain tasks fixed on any information medium meeting the criteria of scientific protection of copyright objects*”. In our opinion, it is required to make changes and additions to clause 1 of Art. 4 of the RA Draft Law “On Copyright and Related Rights” (n.d.), fixing in it a new concept of scientific works, and we also consider it necessary to fix the types of scientific works, taking into account the draft law on Amendments to the RA Law “On copyright and related rights” (United Website For Publication of Legal Acts’ Drafts), where in paragraph 2

of Art. 4 the following types of scientific works were proposed as works protected by copyright: scientific article, report, monograph, lecture, etc. We appropriate to amend this list and publish it in the following edition: “The types of scientific works comprise a scientific article; a scientific monograph; scientific, educational and research report; a lecture; a research work (labour); dissertations for scientific degrees of candidate and doctor of sciences; master’s theses, etc.”.

The legal and regulatory framework for regulating intellectual property is an extensive system including acts that are different in legal force, the territory to which they apply, and the circle of persons. In its most general form, it can be represented as follows: *international legal acts, agreements between individual states, national legislation* (Curikov, 2009, pp. 13-18). Among such agreements, we would like to highlight the “Treaty on the Eurasian Economic Union” (“Agreement on the Eurasian Economic Union”) of 2014, to which the RA and the RF are parties, Section XXIII of which is devoted to intellectual property, and the clause 1 of Art. 89 refers to the granting of national treatment to persons of one member state on the territory of another member state with regard to the legal regime of intellectual property objects.

Among the bilateral agreements in the field of copyright, one can mention the “Agreement between the Government of the Russian Federation and the Government of the Republic of Armenia on the mutual protection of copyright” (Agreement between the Government of the Russian Federation and the Government of the Republic of Armenia on the mutual protection of copyrights, 1993), which is aimed at expanding cooperation in the field of mutual exchange of cultural values through the use of works of science, literature and art.

On the basis of existing international legal treaties and agreements between states in the field of copyright, published scientific works of citizens enjoy legal protection, however, the existing protection mechanisms are insufficiently

developed and require additional regulation in order to bring them into line with modern requirements of technological development of the world.

Depending on the types of scientific works, in certain countries, there are special procedures not only for the creation but also for the official recognition by the competent authority (Haritonova, 2018, pp. 15-21) of such works, which from time to time are subject to changes based on the norms of local legislation, which do not always follow the constitutional framework. Thus, the security seems to be rather shaky.

It is worth mentioning that nowadays already “the recognition of certain scientific works” falls under “the recognition of the presence or absence of scientific degrees, titles, etc.”, which, in our opinion, contradicts the nature of copyright, since, in this case, scientific works should be protected upon creation, which does not require additional recognition procedures. In the field of science, the works of various authors are used primarily for comparative analysis, which in no way can depend on the recognition of the author himself. Article 1259 of the CC of the RF (Article 1111 of the CC of the RA) presumes the protection of scientific works *regardless of the merits and purpose of the work*. Establishing restrictions on the general regime of scientific works, depending on the “awarding or not awarding scientific degrees” to the author, is unacceptable since even if the author is not awarded one or another scientific degree, the dissertation research is protected as scientific monographs (and this is already a scientific work). Such an approach would contradict not only the norms of the Civil Code but also the provisions of paragraph 1 of Art. 44 of the Constitution of the Russian Federation and Art. 43 of the RA Constitution (2015), according to which everyone is guaranteed freedom of literary, artistic, scientific, technical and other types of creativity teaching. This norm establishes a prohibition on any discrimination in the scope of their rights among authors of scientific works.

This discrimination is not only in the field of law but in almost all spheres of society. In other words, the improvement of the information environment is mostly an external criterion, and in reality, digital civilization has polished the surface but modified or distorted the raw materials (Galbraith, 2004, p. 96). As digital data has expanded, the human being has become increasingly dependent on it, becoming such an attachment to technology, an easily changing screw, which casts doubt on his former creative activity.

Conclusion

One of the fundamental features of the digital age is its global nature, the formation of which also changes the nature of the world economy, making the market incomparably dynamic and competitive. The dynamics of such development dictates the creation of national information infrastructures for each state, which will allow it to be involved in the global information network.

The digital economy can be defined as a system of economic relations in which digital data is a key factor of production in all its areas. In the digital economy, economic activity is carried out using electronic or digital technologies (Vajpan, 2018, p. 12). One of the modern digital technologies can be called a technology “blockchain” (Bulgakov, 2016, pp. 80-88), which is a distributed database consisting of blocks of information and containing records of all transactions made by participants in this system, which was created to make payments between parties without the involvement of intermediaries (financial institutions or states) to eliminate the problem of double debiting of funds from accounts and their possible theft (Stepanyan, 2016, pp. 80-88).

The “blockchain” technology can be considered as one of the modern technical means of protecting scientific works in any placement of scientific works in the information and telecommunication network “Internet” by both publishers and editors.

As Vajpan V. A. rightly notes in his scientific

article, for the development of the digital economy in the Russian Federation, priority measures are needed to create a legal environment for the development of the digital economy. From this point of view, the introduction of the electronic (digital) residence of legal entities seems to be very promising (Vajpan, 2018, p. 13). This example represents the introduction of new mechanisms for the protection of scientific works from illegal uses without citation, applying new digital technology. Legislation should ensure the possibility of identifying subject-users of scientific works, as well as equipment, means of communication and other machines with which the work can be used in any technically possible way. In her scientific work, Haritonova Yu. S. (2018, pp. 15-21) also mentions the absence of mechanisms for fixing intellectual rights with the help of new digital technologies.

Thus, the need for the legal regulation of scientific works in the challenging digital era stems from the urgent need to ensure adequate copyright protection for a serious scientific community, especially taking into consideration the presence of a legislative gap in the regulation of both the concept and types of scientific works. This is the reason the authors of this work developed a proposal on amendments and additions to the current law of the RA “On Copyright and Related Rights”, taking into account the comparative analysis of the legislative framework for the regulation of scientific works in the RA and the RF, taking into consideration the existing ties of active cooperation in the field of copyright on the example of concluded international agreements. And the turnover of the results of intellectual property, namely scientific works in the era of the digital economy, will significantly reduce the volume of their illegal use.

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