

The article is devoted to the development of the system and structure of Russian legislation in the space-time continuum. The determining role of economic, and more broadly - social factors, ultimately determining the vector of development of law, is shown. The idea of the alleged self-sufficiency of law, which develops according to its own laws, is being questioned. This point of view has become dominant in the domestic legal science in recent years. It has existed for a long time in the Western scientific tradition. Such a methodological platform fits into the general context of postmodernism, within which objective reality is replaced by ideas about it. In this regard, the need to prove any views disappears by itself, because any opinions are declared equal. The thesis about the need to study law in the context of causal relationships between legal and social factors is argued. An attempt is made to substantiate the position that the economic reform carried out in our country through privatization and loans-for-shares auctions, its immediate goal was not economic growth, but the redistribution of property, which became the basis of first oligarchic and then bureaucratic Russian capitalism, which is equally hopeless in the present and foreseeable the future. Under this task, that is, the redistribution of property, the system of legislation was formed under the direct supervision of Western, mainly American, think tanks. The natural result of this policy was the raw materials, moreover, the offshore nature of the economy. It is noted that the pandemic has seriously affected the system of values and guidelines for social development. Because of this, the question of changing the paradigm of social development will inevitably arise. Former economic, political, social and legal doctrines, which were perceived mostly uncritically, will lose their validity and will never be the intellectual basis of evolution. The orientation of national states is predicted to maximize the demand of the domestic market. The integration of Russia into the world economic system, the idea of which dominated in our country, turned out to be completely untenable, like the myths about globalization in general. In this regard, a transformation of the system and structure of Russian legislation is inevitable. The development of the Russian legal system should be aimed at solving internal problems, which, of course, does not mean the country's isolation.

At the present stage, 3D printing is one of the markers of the ongoing technological revolution. The development of additive manufacturing poses the task of legal science to find an adequate legal regulation of relations on the use of 3D printing, including in the treatment of a person. At the present stage, it is necessary to resolve not only the problems of regulating property relations arising in connection with bioprinting, but also the problems of regulating personal non-property relations. The implementation of activities for 3D printing of human organs is inevitably associated with interference in the exercise of personal moral rights. The development of new technologies requires the resolution of the issue of the content of the right to health, duties and responsibilities of persons who create a file for 3D-printing (CAD-files), medical organizations. The need to address bioethical problems is a new challenge for all of humanity. In connection with the emergence of the possibility of creating human organs, it is artificially important to determine the limits of the exercise of personal non-property rights. Are there limits to the improvement of the human body? Can a person freely dispose of his body, his organs, individual cells of his body? Is it possible to consider the human body, its individual cells as a material for bioprinting, giving it all the properties of material objects that have the mark of marketability? On the other hand, when creating bioprint bodies, the problem of protecting a person's personal data, information about his health, and other personal data that can become available to third parties and used by them against the interests of a person arises. Can an appropriate biomaterial or a model of a printed unique human organ be used by third parties in their activities? How does the exercise of property and intellectual rights relate to the exercise of personal non-property rights within the framework of personal non-property relations not related to property relations? The present study is devoted to finding answers to the questions posed.

The article deals with the problems of interpreting the results of sequencing of an individual genome as prognostically probabilistic information.

The main issues related to the legal sphere within the framework of self-regulatory organizations uniting subjects of professional activity (professional associations) are formulated.

The features of risk perception (negative probability) are also analyzed. Such information is especially difficult for the consumer, since the risk assessment is difficult for everyday perception. It is concluded that it is necessary to train all participants - geneticists, doctors - clinicians of various specialties, general practitioners, nurses and potential consumers of services.

The fundamental conclusion was made: the integration of genomic research into the science and practice of public health can contribute to an increase in the level of public health, a change in the lifestyle of the population, implementing the recommendations of specialists on the correction of genetic risks identified by testing.

When analyzing the main features of self-regulation of genomic research, we came to the conclusion that in order to correct their lifestyle and health, society faces the question of a competent attitude to the results of genomic research and their use. Moreover, this competence concerns not only the consumers of genomic testing services, but also the specialists themselves, who are obliged to correctly and clearly present the test results.

On the shoulders of the self-regulatory organizations that are being created that unite subjects of professional activity, the task of carrying out educational activities and additional professional education should lie.

This task can be solved by the forces of a competent professional community on the basis of self-regulatory organizations that unite subjects of professional activity (professional associations).

The article is devoted to the analysis of current trends and prospects for the development of the legislation of the Russian Federation on environmental, biological and social security. Based on the results of the study of the mechanisms of action of modern legal systems in the context of exponentially growing threats and risks, an overall assessment of the ability of emergency legislation to respond to modern challenges was given, and factors that could have a decisive impact on the formation of new legislation on environmental and biological safety were identified.

The conclusion is proved that since any extreme situation of an ecological and biological nature is sudden, fleeting, and quickly turns from local to global, legislation on emergency situations should be as specific, understandable, logical as possible, correspond to the goals and objectives of preventing damage to life and health of people. In this regard, it should be revised, first of all, from the standpoint of subjecting concepts, variability of consequences, establishing cause-and-effect relationships, describing the main options for decisions and responsibility. It is fundamentally necessary to change the paradigm from the elimination of accidents, catastrophes, fires and other man-made accidents, to the presentation of emergency situations as a systemic crisis of management and law. Special acts should clarify the criteria for "danger and safety" taking into account the socio-economic and environmental consequences, the competence of the governing bodies, the economics of ensuring security, permissible risks and losses, mechanisms and protocols for the operation of the entire state and public mechanism in emergency situations.

In addition, legislation on the health care system needs to be improved, which should have sufficient reserves of capacities and resources in case of emergencies, legislation on financial reserves in terms of creating special accounts and mechanisms for financing measures in emergency situations, as well as information legislation in emergency situations.

Conducting genomic research in relation to athletes can potentially contribute to the improvement of state policy in the field of sports, including in terms of countering the use of gene doping, as well as the development of the system of sports training. As part of the study, the issues of the validity and necessity of carrying out genomic studies in sports were studied in detail, in particular, it is indicated that despite the impossibility of determining the exact degree of influence of genetic parameters on the process of athletes' achievement of sports results, it is noted that the presence of certain gene variations determines the values of such characteristics like speed, endurance, muscle strength, and control over emotions. The development of scientific knowledge about such parameters in relation to the field of sports and physical culture will increase the safety and efficiency of the training process, and at the same time will increase the threat of the use of gene doping. At the same time, at the moment, science has not formed a consolidated approach to the methodology for detecting the use of gene doping. Within the framework of this article, various approaches to its identification are presented, as well as potential problems of legal support in the field of genomic research, associated with the complexity of the affected public interests, are considered. In this work, a special emphasis is placed on the study of domestic and foreign approaches to the formation of state policy to ensure the confidentiality of genomic research data, including the features associated with their storage and use, considered on the example of legal regulation of measures aimed at ensuring full confidentiality of such information. and circumstances suggesting the possibility of providing other persons with access to such information together with identifying data. As a result of the work carried out, potential directions for the development of regulation of the collection, use and storage of genomic data of athletes, as well as the features of their regulatory support, have been identified.

The article examines the features of the legal regulation of the implementation of genetic research in the Commonwealth of Australia, taking into account the state structure, national, ethical and other factors. An interesting fact is that the main sources of law in Australia are common law formulated in judicial precedents, which has recently been supplemented by legislative acts. The specifics of storage, access and protection of full genome sequencing data are described in detail. The article analyzes the features of the functioning of the Australian judicial system.

The existing experience of normative consolidation of informed consent for conducting genetic research, ensuring the confidentiality of the information received, strategic priorities in the implementation of the integration of the results of genetic research into the Australian health care system is investigated. The list of documents containing instructions on cases in which medical organizations should not collect confidential information about a person is considered and analyzed. Certain gaps in the normative legal regulation of genetic research, as well as some inconsistencies and contradictions of certain normative legal acts to each other have been identified. The specificity of the implementation of genetic research with the participation of the indigenous aboriginal population of Australia has been studied, which, in turn, will help in the formation of an appropriate legal framework in the Russian Federation.

As a conclusion, the authors note that in the field of legal regulation of the storage, access and protection of genetic information in Australia, there is a tendency towards the use of regulatory regulators in the described area. Particular attention is paid to the normative consolidation of the priority of public interests over private ones, and its reflection, not only in quite numerous reservations and exceptions, but also within the framework of universally significant strategic priorities. Presuming the formation of an appropriate legal framework in the Russian Federation, and taking into account the multiethnicity of the population, the experience of Australia

in carrying out genetic research with the participation of the indigenous aboriginal population deserves attention.

In the presented article, the author points out that humanity has passed into the era of the information society, the era of digitalization, when the digitalization of all socio-economic relations becomes an inevitable global process that radically changes the existence of a person and even a person himself. In the economic sphere, the traditional boundaries between the manufacturer, the trader (intermediary) and the consumer of goods are being erased, the phenomenon of the sharing economy is coming to replace the traditional channels and supply chains, radically transforming socio-economic relations. New forms of collaboration are emerging between manufacturers, wholesalers, retailers and consumers, and a new technological infrastructure for such collaboration is actively developing - digital online platforms that act as one of the drivers of the fourth industrial revolution. The development of 3D printing technology creates an opportunity for any individual to participate in the creation of various material goods (goods). Material objects are printed on the basis of a three-dimensional digital model, the digital equivalent of its physical embodiment. A serious legal challenge is the regulation of relations associated with the circulation and use of three-dimensional models of objects of the material world, as well as liability for damage caused by a defect in the three-dimensional digital model, which led to the subsequent defectiveness of the printed object.

The article formulates a number of prognostic conclusions. If a defective three-dimensional digital model was purchased for a fee as a product (digital content) on an appropriate online platform, then tort liability may be imposed on both the contractor under the contract and the platform operator. Such responsibility must be strict (innocent) and joint and several. A strict and solidary model of responsibility will act as an incentive to ensure transparency in the field of digital

circulation, as well as have a preventive effect, curbing illegal behavior. If the identity of the digital content seller is not identified, only the platform operator will be held liable.

If a defective three-dimensional digital model was posted free of charge on a hosting site, then the responsibility of the developer of such a digital model will be guilty. The responsibility of a hosting provider providing only a technical service in hosting content should be subject to the rules on information intermediary liability.

In the presented article, the author notes that the development of modern technologies, including artificial intelligence, unmanned vehicles, robotics, portable and embedded digital devices, already has a great impact on human everyday life and is capable of fundamentally changing the existing social order in the near future.

The author notes that virtual reality as a technology originated from research in the field of three-dimensional computer graphics and human-machine interaction. The mixed reality spectrum includes the real world directly, the one that is in front of our eyes, the world of augmented reality - an improved reality, which is a consequence of the introduction of sensory data into the field of perception in order to supplement information about the surrounding world and improve the perception of information; the world of virtual reality, which is created using technologies that provide full immersion in the environment. In a number of studies, the spectrum also includes augmented virtuality, which implies the addition of virtual reality with elements of the real world, thus uniting the virtual and real worlds.

The article substantiates the conclusion that in the near future both the legislator and judicial practice will have to seek a balance between the interests, on the one hand, of the creators of virtual worlds and virtual artists for exclusive control over their virtual works, and on the other hand, society in the use of these



virtual works and their development. in order to enable users to participate, interact and create new forms of creative expression in a virtual environment.

The author concludes that a broader interpretation of the fair use doctrine should be applied in this area, especially for those virtual worlds and virtual objects that imitate the real world and reality. However, it is necessary to distinguish between those cases when the protection of such objects justifies licensing, and those when it is advisable to stimulate the unlimited use of the results for the further development of new technologies.

This article is devoted to the study of law and computer algorithms as a means of regulating social and technical processes. The aim of the work is to study the possibilities of using computer code to regulate public relations, as well as the impact of this process on traditionally used legislative procedures.

The article puts forward the thesis that the computer code regulating technical processes can be used to a certain extent in the legal field of activity. To use computer code in lawmaking, it is necessary to determine the areas of legal regulation, develop an appropriate programming language and adopt a system of measures for internal and external code audit, which will ensure transparency, legality of the code and, as a result, public confidence in the adopted regulatory legal acts.

One example is smart contracts in specific areas. The authors studied various approaches to the definition of the term "smart contract" and formulated an integrative definition of this concept. When using a smart contract in the legal field, this term should be understood as a legally binding contract, drawn up in the form of computer code and supported by appropriate legal remedies.

In this work, the authors investigated the possible consequences of the use of computer code in lawmaking and proposed a number of additional measures

(requirements) to the procedure for adopting regulatory legal acts. The author summarizes that law is to a certain extent an algorithm, and therefore the same methods can be used to regulate social relations that are used in the technical sphere to consolidate the sequence of various operations.

Today, humanity has witnessed an extremely complex historical event. The head of the World Health Organization, Tedros Adhanom Ghebreyesus, said that the spread of the new coronavirus is in the nature of a pandemic - this happened for the first time in several decades. "In the coming days and weeks, we expect the number of cases, deaths and the number of affected countries to increase," said the organization's CEO . Humanity is faced with a coronavirus infection, which has grown into a rare and dangerous phenomenon - a pandemic. The newest threat, with which the entire planet is fighting, has set before each country, without exception, special tasks to find and develop new methods to combat the spread of the virus and effective methods of its treatment. New legal norms are necessary to introduce innovative technologies - to create conditions for the most effective use of the capabilities of artificial intelligence (AI) to combat the spread of COVID - 19. World experience also indicates to us the need to apply the latest technologies to defeat a new infection. Only in this way can the struggle be effective. This article broadly presents and classifies the global experience in the use of AI to combat coronavirus , as well as analyzes the strategies of innovative legal regulation in the context of a pandemic. This is a valuable platform for a constructive study of the identified problem in the field of law, and also contributes to the creation of reliable legal conditions for the use of artificial intelligence technologies to resolve the situation with coronavirus infection.

In the modern realities of the transfer of document flow to the digital plane, the issues of the validity of contracts concluded in electronic form, as well as the conditions for the recognition of an electronic signature, acquire special significance. In this regard, the authors refer to the study of the provisions of the New York UNCITRAL Convention "On the Use of Electronic Communications in International Contracts" 2005 , as well as other international trade agreements to clarify the issue of their applicability to cross-border contracts concluded in electronic form.

In the article, the authors raise a question regarding the validity of an electronic cross-border transaction that falls under the regulation of the Vienna Convention on Contracts for the International Sale of Goods of 1980, the clause to which on the inadmissibility of concluding an agreement not in writing, but in any form, made by the USSR, continues to operate. In this regard, the authors investigate the possibility of interpreting Article 13 of the 1980 Vienna Convention, which contains the definition of the concept of "writing", outside the general rule of interpretation of the provisions of the 1980 Vienna Convention provided for in Article 7.

As a result of a comparative analysis of national and international legal norms, as well as the norms of "soft law" regulating electronic document flow, the authors identify a number of problems arising from the lack of specification of the mechanism for recognizing a foreign electronic signature in the Russian Federation, and also put forward proposals for their solution.

For this purpose, the authors investigate the possibilities of developing international standards for the compatibility of technological algorithms for electronic digital signatures using an asymmetric scheme, on the basis of which the recognition of foreign certificates of electronic signature keys can be carried out .

We are currently experiencing a new revolution related to the Internet, nanotechnology, biotechnology and robotics. Artificial intelligence is based on intelligent algorithms or learning algorithms similar to human intelligence, technologies allow computer systems to acquire independence, self-adaptive reconfiguration. The more autonomy AI, robots and androids have, the less they depend on manufacturers, owners and users.

The fact that the new generation of robots will coexist with humans must be taken into account in legislation, it must adapt and regulate issues of great legal importance, namely: who takes responsibility for the actions or inaction of intelligent robots? What is their legal status? Should they have a special regime of rights and responsibilities? How to resolve ethical conflicts related to their behavior?

Analysis of the legislation and doctrine of Latin American countries has revealed some trends in the use of AI.

1) The use of AI in various spheres of public life raises legal problems in terms of guaranteeing human rights, as evidenced by the analysis of the constitutions of Brazil, Mexico and Argentina. For example, Article 8 of the American Convention on Human Rights states: "Everyone has the right to be heard with adequate safeguards and within a reasonable period of time before a competent, independent and impartial tribunal convened in advance by law to substantiate any criminal charge brought against him or to determine his rights or obligations of a civil, labor, financial or any other nature. "

2) The similarity between AI and human intelligence raises the question of the legal personality of AI, endowing AI with rights. The Civil and Commercial Code of the Argentine Nation departs from the category of "human personality" and establishes the term legal entities - "all persons to whom the legal system grants the ability to acquire rights are legal entities to fulfill their mission and obligations."

The border between things and people is becoming more and more blurred, technology, on the one hand, and a more sensitive look at other living things lead to doubt whether a person is the only subject of law.

The article discusses the rights and obligations of participants in mega-science projects in relation to individual projects being implemented or being prepared for implementation. Particular attention is paid to the role of the state in organizing the work of unique scientific installations of the "megascience" class and the implementation of interaction of various subjects of scientific collaborations. It has been substantiated that in the process of the functioning of scientific collaborations, various aspects of the legal personality of the collaborations themselves, as well as their individual elements, are actualized, in particular, the issues of freedom to join scientific mega-science projects, the legal consolidation of the rights and obligations of subjects, the combination of public and private interests in the implementation of activities within the framework of scientific collaborations. At present, states participate in mega-science projects through the transfer of significant public powers to specially established non-profit organizations - state corporations, as well as through the establishment of international intergovernmental research organizations, endowed with the rights of legal entities. The legal personality of public and private subjects of mega-science projects, formalized by a normative act or agreement, denotes a rigid framework of proper and possible behavior and gives rise to the need to use coordination tools based on the principles of reciprocity and common interests of the participants. The practice of legal regulation of interaction between the state and private entities in the creation of mega-science projects in Brazil is investigated, where the legal entities responsible for the creation of the project, on the basis of the law, are recognized as a subject bearing public responsibilities, and are subordinate to public authorities on

the basis of the so-called management contract. The parties to such agreements do not have opposing interests, their interests coincide and are aimed at achieving public goals. By means of these agreements, different entities structure obligations and rights in the common interest and receive mutual benefit, provided that the actions stipulated in the agreement are effectively performed. An organization that has entered into such a contract is obliged to properly perform certain tasks assigned to it. To the extent that it performs these actions properly, it will have the right to require the State to fulfill its respective responsibilities. Consequently, the management contract allows you to change the structure of the legal personality of not only individuals, but also the state.

This article examines the legal regulation of scientific research in professional sports using the example of Formula 1. The great importance of the process of searching for new engineering and design solutions for the performance of athletes is emphasized, as well as its continuous nature. It is noted that at present this kind of sport is in the process of transition to a new cycle of legal acts, including the Technical Regulations, which just makes the basic requirements for the results of scientific research. Analysis of the provisions of the Technical Regulations shows that the activities of engineers and designers are largely limited. For clarity, specific norms are given that fix either the exact indicator that the result of scientific research should achieve, or a certain range within which fluctuations are allowed. At the same time, it is noted that there are still rules that are not formulated in the most obvious way (the so-called "gray areas"). It is stipulated that the specifics of scientific research in these areas will be the subject of a separate analysis. Particular attention is paid to the requirements for a minimum degree of independence of scientific research in the development of a car and the possibility of using the results of competitors, examples of the interaction of Formula 1 teams in terms of the application of one team of engineering solutions of rivals are given. In addition, the

importance of research and development of Formula 1 engineers and designers is emphasized not only in the field of sports or the automotive industry, but also in everyday life, especially in the context of the coronavirus infection (COVID-19) pandemic . Specific examples of the contribution of racing teams to the global fight against the virus are given, including cooperation with medical centers and laboratories in the framework of the Project Pitlane project, which unites most of the Formula 1 teams.